



सावित्रीबाई फुले पुणे विद्यापीठ
॥ यः क्रियावान् स पाण्डितः ॥

Savitribai Phule Pune University, Pune



Faculty of Commerce and Management

Curriculum 2024 Pattern Master of Business Administration (MBA)

**Revised 2-year, 4 Semester Full time Programme
Choice Based Credit System (CBCS) and Grading System
Outcome Based Education Pattern
Aligned with National Education Policy (NEP) 2020**

MBA 1st year effective from AY 2024 - 25

MBA 2nd year effective from AY 2025 - 26

**Master of Business Administration (MBA) - Revised Curriculum
2024 Pattern**

**2-year, 4 Semester Full time Programme
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Outcome Based Education Pattern

Aligned with NEP

MBA I effective from AY 2024 - 25

MBA II effective from AY 2025 - 26

1.0 Preamble: The revised MBA Curriculum 2024 integrates the National Education Policy, 2020 ethos with the Choice Based Credit System (CBCS) and Grading System and Outcomes Based Education (OBE)

2.0 Credit: *In terms of credits, for a period of one semester of 15 weeks:*

- every ONE-hour session per week of L amounts to 1 credit per semester*
- a minimum of TWO hours per week of T amounts to 1 credit per semester,*
- a minimum of TWO hours per week of P amounts to 1 credit per semester,*

Each credit is a combination of 3 components viz. Lecture (L) + Tutorials (T) + Practice (Practical / Project Work / Self Study) (P) i.e. LTP Pattern. Indicative LTP, for each course, is documented in the syllabus.

The course teacher may, with the consent of the Director / Head of the Department / Designated academic authority of the Institute, modify the LTP of the course in view of the course requirements, nature of the course, the level of learners and the type of pedagogy and assessment tools proposed.

2.1 Session: Each teaching-learning, evaluation session shall be of 60 minutes. However, institutes shall have the flexibility to define their time slots in a manner as to use their faculty and infrastructure resources in the best possible way and ensure effective learning & comply with the credit structure of the respective courses

2.2 Course Announcement: The institute shall announce the elective courses and specializations it proposes to offer the students out of the wider course basket. It is not mandatory to offer all the specializations and all the electives. However, in the spirit of Choice Based Credit System, institutes should offer choices to the students for the elective courses and not offer only the minimum number of electives.

2.3 Course Registration: It is mandatory for every student, to register every semester, for the courses opted for that semester. Each student, on admission shall be assigned to a Faculty Advisor who shall advise her/him about the academic programs and counsel on the choice of courses considering the student's profile, career goals and courses taken in the earlier semesters. With the advice and consent of the Faculty Advisor, the student shall register for a set of courses he/she plans to take up for the Semester. Students shall have to register for the courses for the semester within first week of Semester I and immediately after conclusion of the preceding term for subsequent Semesters II, III and IV.

3.0 MBA Programme Focus:

3.1 Programme Educational Objectives (PEOs):

- PEO1:** Graduates of the MBA program will *successfully integrate core, cross-functional and inter-disciplinary aspects of management theories, models and frameworks with the real-world practices and the sector specific nuances to provide solutions to real world business, policy and social issues in a dynamic and complex world.*
- PEO2:** Graduates of the MBA program will possess excellent *communication skills*, excel in *cross-functional, multi-disciplinary, multi-cultural teams*, and have an appreciation for *local, domestic and global contexts* so as to manage *continuity, change, risk, ambiguity and complexity.*
- PEO3:** Graduates of the MBA program will be appreciative of the significance of *Indian ethos and values in managerial decision making* and exhibit *value centered leadership.*
- PEO4:** Graduates of the MBA program will be ready to *engage in successful career pursuits* covering a broad spectrum of areas in *corporate, non-profit organizations, public policy, entrepreneurial ventures* and engage in *life-long learning.*
- PEO5:** Graduates of the MBA program will be recognized in their chosen fields for their *managerial competence, creativity & innovation, integrity & sensitivity* to local and global issues of social relevance and

earn the *trust & respect* of others as *inspiring, effective and ethical leaders, managers, entrepreneurs, intrapreneurs* and change agents.

3.2 Programme Outcomes (POs): At the end of the MBA programme the learner will possess the

1. **Generic and Domain Knowledge** - Ability to articulate, illustrate, analyze, synthesize and apply the knowledge of principles and frameworks of management and allied domains to the solutions of real-world complex business issues
2. **Problem Solving & Innovation** - Ability to Identify, formulate and provide innovative solution frameworks to real world complex business and social problems by systematically applying modern quantitative and qualitative problem-solving tools and techniques.
3. **Critical Thinking** - Ability to conduct investigation of multidimensional business problems using research based knowledge and research methods to arrive at data driven decisions
4. **Effective Communication** - Ability to effectively communicate in cross-cultural settings, in technology mediated environments, especially in the business context and with society at large
5. **Leadership and Team Work** - Ability to collaborate in an organizational context and across organizational boundaries and lead themselves and others in the achievement of organizational goals and optimize outcomes for all stakeholders.
6. **Global Orientation and Cross-Cultural Appreciation:** Ability to approach any relevant business issues from a global perspective and exhibit an appreciation of Cross Cultural aspects of business and management.
7. **Entrepreneurship** - Ability to identify entrepreneurial opportunities and leverage managerial & leadership skills for founding, leading & managing startups as well as professionalizing and growing family businesses.
8. **Environment and Sustainability** - Ability to demonstrate knowledge of and need for sustainable development and assess the impact of managerial decisions and business priorities on the societal, economic and environmental aspects.
9. **Social Responsiveness and Ethics** - Ability to exhibit a broad appreciation of the ethical and value underpinnings of managerial choices in a political, cross-cultural, globalized, digitized, socio-economic environment and distinguish between ethical and unethical behaviors & act with integrity.
10. **LifeLong Learning** – Ability to operate independently in new environment, acquire new knowledge and skills and assimilate them into the internalized knowledge and skills.

3.3 Programme Specific Outcomes (PSOs):

A] MARKETING MANAGEMENT

PSO MKT1: Strategic Marketing Analysis and Decision Making: *Graduates specializing in Marketing Management for the MBA programme will be able to* Analyze market opportunities and challenges using advanced marketing research tools and techniques. They will develop strategic marketing plans that align with organizational objectives and respond effectively to dynamic market conditions.

PSO MKT2: Digital and Social Media Marketing Proficiency: *Graduates specializing in Marketing Management for the MBA programme will be able to demonstrate* proficiency in leveraging digital and social media platforms to enhance brand visibility and customer engagement. They will design and execute integrated digital marketing campaigns that drive business growth.

PSO MKT3: Customer Relationship Management and Service Excellence: *Graduates specializing in Marketing Management for the MBA programme will be able to excel* in building and maintaining strong customer relationships through effective communication, personalized marketing, and superior customer service. They will implement CRM systems to enhance customer loyalty and satisfaction.

PSO MKT4: Innovative Product and Brand Management: *Graduates specializing in Marketing Management for the MBA programme will be able to* develop innovative product and brand management strategies that address consumer needs and preferences. They will manage product lifecycles, brand portfolios, and execute branding initiatives that strengthen brand equity.

B| FINANCIAL MANAGEMENT

PSO FIN1: Financial Analysis and Reporting: *Graduates specializing in Financial Management for the MBA programme will be able to demonstrate the ability to analyze and interpret financial statements, conduct financial ratio analysis, and prepare comprehensive financial reports to support decision-making processes.*

PSO FIN2: Investment and Portfolio Management: *Graduates specializing in Financial Management for the MBA programme will be able to Apply knowledge of investment theories, financial instruments, and portfolio management techniques to construct and manage investment portfolios aimed at achieving specific financial goals.*

PSO FIN3: Corporate Finance and Risk Management: *Graduates specializing in Financial Management for the MBA programme will be able to Develop expertise in corporate finance principles, including capital structure, cost of capital, and capital budgeting, while effectively managing financial risks using various risk management tools and techniques.*

PSO FIN4: Financial Technology and Innovation: *Graduates specializing in Financial Management for the MBA programme will be able to Leverage emerging financial technologies (FinTech) and innovative financial solutions to improve financial services delivery, enhance operational efficiency, and support strategic financial planning.*

C| HUMAN RESOURCE MANAGEMENT

PSO HRM1: Strategic HR Planning and Implementation: *Graduates specializing in Human Resource Management for the MBA programme will be able to Demonstrate the ability to develop and implement strategic human resource plans that align with organizational goals, ensuring optimal utilization of human capital.*

PSO HRM2: Talent Acquisition and Development: *Graduates specializing in Human Resource Management for the MBA programme will be able to Apply advanced techniques and methodologies for effective talent acquisition, development, and retention, fostering a culture of continuous learning and professional growth.*

PSO HRM3: Employee Relations and Legal Compliances: *Graduates specializing in Human Resource Management for the MBA programme will be able to Ensure compliance with labor laws and ethical standards while managing employee relations, promoting a positive and legally compliant work environment.*

PSO HRM4: HR Analytics and Performance Management: *Graduates specializing in Human Resource Management for the MBA programme will be able to Utilize HR analytics and performance management systems to drive data-driven decisions, enhance employee performance, and achieve organizational excellence.*

D| OPERATIONS & SUPPLY CHAIN MANAGEMENT

PSO OSCM1: Operations Strategy and Process Improvement: *Graduates specializing in Operations and Supply Chain Management for the MBA programme will be able to Develop and implement effective operations strategies to enhance process efficiency, reduce waste, and improve overall productivity within organizations.*

PSO OSCM2: Supply Chain Design and Management: *Graduates specializing in Operations and Supply Chain Management for the MBA programme will be able to Design, analyze, and manage end-to-end supply chains to ensure the seamless flow of goods, services, and information, while minimizing costs and meeting customer demands.*

PSO OSCM3: Data-Driven Decision Making in Operations: *Graduates specializing in Operations and Supply Chain Management for the MBA programme will be able to Utilize quantitative and qualitative data analysis techniques to make informed decisions in operations and supply chain management, ensuring alignment with business goals and customer requirements.*

PSO OSCM4: Sustainable and Ethical Supply Chain Practices: *Graduates specializing in Operations and Supply Chain Management for the MBA programme will be able to* Promote and implement sustainable and ethical practices within operations and supply chain management to support environmental sustainability, social responsibility, and ethical governance.

E| BUSINESS ANALYTICS

PSO BA1: Data-Driven Decision Making: *Graduates specializing in Business Analytics for the MBA programme will be able to* apply advanced analytical techniques and tools to collect, process, and interpret large datasets, enabling data-driven decision making in various business functions such as marketing, finance, operations, and human resources.

PSO BA2: Business Intelligence and Reporting: *Graduates specializing in Business Analytics for the MBA programme will be able to* Demonstrate proficiency in using business intelligence tools and software to create comprehensive reports and dashboards that effectively communicate insights and support business strategies.

PSO BA3: Application of Business Analytics: *Graduates specializing in Business Analytics for the MBA programme will be able to* Apply business analytics methodologies to various functional areas such as marketing, finance, operations, and human resources.

PSO BA4: Integration of Analytics in Business Strategy: *Graduates specializing in Business Analytics for the MBA programme will be able to* Integrate business analytics methodologies with strategic management practices to drive organizational growth and competitive advantage.

F| AGRI-BUSINESS MANAGEMENT

PSO ABM1: Agribusiness Management Expertise: *Graduates specializing in Agri-Business Management for the MBA programme will be able to* Demonstrate comprehensive knowledge and understanding of the principles, practices, and challenges in agribusiness management, including supply chain management, agricultural marketing, and financial management

PSO ABM2: Sustainable Agricultural Practices: *Graduates specializing in Agri-Business Management for the MBA programme will be able to* Apply sustainable agricultural practices and strategies to enhance productivity and profitability while ensuring environmental sustainability and social responsibility in agribusiness operations.

PSO ABM3: Innovative Solutions and Technology Integration: *Graduates specializing in Agri-Business Management for the MBA programme will be able to* Utilize modern technologies and innovative solutions to optimize agribusiness processes, data analytics, and digital marketing, to improve efficiency and competitiveness.

PSO ABM4: Leadership and Entrepreneurial Skills: *Graduates specializing in Agri-Business Management for the MBA programme will be able to* Exhibit strong leadership and entrepreneurial skills to effectively lead teams, manage projects, and launch and grow agribusiness ventures, fostering innovation and driving economic development in the agricultural sector.

G| PHARMA & HEALTHCARE MANAGEMENT
PSO PHCM1: Pharma & Healthcare Strategy Development: *Graduates specializing in Pharma & Health Care Management for the MBA programme will be able to* Develop and implement strategic plans for pharmaceutical and healthcare organizations that align with industry regulations, market trends, and organizational goals.

PSO PHCM2: Operational Excellence in Pharma & Healthcare: *Graduates specializing in Pharma & Health Care Management for the MBA programme will be able to* Apply best practices in operations management to optimize processes, enhance efficiency, and ensure quality in pharmaceutical manufacturing and healthcare delivery systems.

PSO PHCM3: Regulatory and Compliance Expertise: *Graduates specializing in Pharma & Health Care Management for the MBA programme will be able to Understand and navigate the regulatory environment of the pharmaceutical and healthcare industries to ensure compliance with national and international standards.*

PSO PHCM4: Healthcare Innovation and Technology Integration: *Graduates specializing in Pharma & Health Care Management for the MBA programme will be able to Assess and leverage emerging technologies and innovations to drive advancements in healthcare delivery and pharmaceutical research, enhancing patient care and operational efficiency.*

3.4 Graduate Attributes (GAs): At the end of the MBA programme the learner shall exhibit:

GA1: Managerial competence

GA2: Proficiency in Communication, Collaboration, Teamwork and Leadership

GA3: Competence in Creativity & Innovation

GA4: Research Aptitude, Scholarship & Enquiry

GA5: Global Orientation

GA6: Proficiency in ICT & Digital Literacy

GA7: Entrepreneurship & Intrapreneurship Orientation

GA8: Cross-functional & Inter-disciplinary Orientation

GA9: Results Orientation

GA10: Professionalism, Ethical, Values Oriented & Socially Responsible behaviour

GA11: Life-Long Learning Orientation

4.0 PG Diploma and PG Degree (MBA) Programme Structure as per NEP

Year	Level	Semester (2 Year)	Major		RM	OJT / FP	RP	Cumulati ve	Degree
			Mandatory	Electives					
I	6.0	Semester I	22 credits	4	-	-	-	26	
		Semester II	14 credits	4	4	4 FP	-	26	
Cumulativen Credits for PG Diploma			36	8	4	4	-	52	PG Diploma (after 3 Year Degree)
Exit option: PG Diploma 52 Credits after Three Year UG Degree (with additional 4 credits of OJT)									
II	6.5	Semester III	6	12	-	8 OJT	-	26	
		Semester IV	8	12	-	-	6RP	26	
			14	24	-	08	06	52	PG Degree (after 4-Years UG)
Cum. Cr. for 2 Year PG Degree			50	32	4	12	6	104	PG Degree (after 3 - Years UG)

PG Diploma Programme Structure as per NEP									
Type	Semester	Course Type	Number of Courses	Credits	Total Credits	FA	SA	Total	
Mandatory	I	Generic Core	6	3	18	300	300	600	
Mandatory	I	Generic Core	2	2	4	0	100	100	
Elective	I	Generic Elective	2	2	4	100	0	100	

		TOTAL	10	-	26	400	400	800
Mandatory	II	Generic Core	4	3	12	200	200	400
Mandatory	II	Generic Core	1	2	2	0	50	50
Mandatory	II	Business Research Methods	1	2	2	-	50	50
Mandatory	II	Desk Research	1	2	2	50	0	50
Mandatory	II	Field Project	1	4	4	50	100	150
Elective	II	Generic Elective	2	2	4	100	0	100
		TOTAL	10	-	26	400	400	800
PG Diploma in Management after Three Year UG Degree (with additional 4 credits of OJT for Exit option)			20	-	52	800	800	1600

- The students can exit the Programme after one year of MBA, but he has to take additional 4 Credits of On- job Training. To get **PG Diploma after Three Year UG Degree, he should earn total 52+ 4= 56 Credits**
- Re-entry to complete the PG degree, after taking the exit option, will be permissible up to 05 years from the date of admission to the PG program
- The institute may conduct bridge courses for the respective students at the discretion of Director/ Head of the institutions

PG Degree Programme (MBA) Structure as per NEP								
Type	Semester	Course Type	Number of Courses	Credits	Total Credits	FA	SA	Total
Mandatory	III	Generic Core	1	3	3	50	50	100
Mandatory	III	Subject Core	1	3	3	50	50	100
Mandatory	III	OJT (SIP)	1	8	8	100	100	200
Elective	III	Subject Elective	4	3	12	200	200	400
		TOTAL	7	-	26	400	400	800
Mandatory	IV	Generic Core	1	3	3	50	50	100
Mandatory	IV	Generic Core	1	2	2	0	50	50
Mandatory	IV	Subject Core	1	3	3	50	50	100
Mandatory	IV	Research Project	1	6	6	100	50	150
Elective	IV	Subject Elective	4	3	12	200	200	400
		TOTAL	8		26	400	400	800
PG Degree (MBA) after Four-year UG Degree (Lateral Entry)			15		52	800	800	1600
PG Degree(MBA) after Three years UG Degree			35		104	1600	1600	3200

4.1 Course Types

- 4.1.1 **Core courses** are the compulsory courses for all the students. Core courses are of two types: Generic Core & Subject Core.
- 4.1.2 **Generic Core:** This is the course which should compulsorily be studied by a candidate as a core requirement to complete the requirement of a degree in a said discipline of study. Therefore, Generic Core courses are mandatory and fundamental in nature. These courses cannot be substituted by any other courses. Such courses are also known as Hard Core Courses.
- 4.1.3 **Subject Core:** A Core course may be a Subject Core if there is a choice or an option for the candidate to choose from a broad category (grouping) of subjects (specializations).
- 4.1.4 **Elective Course:** Elective course is a course which can be chosen from a pool of courses. It may be:
- Very Specialized or advanced course focusing on a specific aspect
 - Supportive to the discipline of study
 - Providing an extended scope
 - Enabling an exposure to some other discipline/domain
 - Nurturing candidate's proficiency/skills.
- 4.1.5 **Generic Elective:** An elective course which is common across disciplines / subjects is called a generic elective. 'Generic Elective' courses develop generic proficiencies amongst the students.
- 4.1.6 **Subject Elective:** A 'Discipline (specialization) centric' elective is called 'Subject Elective.' Subject Elective courses, in the Semester II, III and IV are focused on a specialization.
- 4.1.7 **Research Methodology Courses:** These courses are focused on various aspects of Research. They include – Business Research Methods, Desk Research (DR) and Field Project (FP) in Semester II, On The Job Training (OJT) in Semester III and Research Project (RP) in Semester IV. ***DR, FP, OJT and RP shall be specialization specific compulsory courses (subject core). BRM shall be a generic compulsory course.***
- 4.1.8 **Massive Open Online Courses (MOOCs)¹:** Massive Open Online Courses (MOOCs) are such online courses which are developed as per the pedagogy stated in the AICTE regulation (2016) or equivalent; following the four-quadrant approach and made available on the SWAYAM platform of Government of India. **Upto 40% credits are permitted through MOOCs. Any Course of 2 Credits can be taken in the form of SWAYAM / NPTEL MOOCs provided the student secures the certificate from SWAYAM / NPTEL. MOOCs from other platforms shall not be considered valid. MOOCs cannot be opted for in case of a 3-credit course.**

5.0 Specializations offered: The following specializations shall be offered:

- Marketing Management (MKT)
- Financial Management (FIN)
- Human Resources Management (HRM)
- Operations & Supply Chain Management (OSCM)
- Business Analytics (BA)
- Agri -Business Management (ABM)
- Pharma & Healthcare Management (PHM)

Note:

- There is no provision for MAJOR and MINOR Specialization Combination.
- Specialization shall be chosen at the BEGINNING of SEM III.
- Desk Research, Field Project, On-the Job Training & Research Project shall be in the area of specialization only. i.e. these courses are SUBJECT CORE COURSES.**
- Institutes may offer ONLY SELECT specializations based on industry needs, faculty strength & competencies, student demands, employability potential, etc.
- Institutes MAY NOT offer a specialization if a **minimum of 20% of students** are not registered for that specialization.
- The Institute MAY NOT offer an elective course if a **minimum of 20% of students** are not registered for that elective course.

6.0 Open Elective(s):

¹ AICTE (Credit Framework for online learning course through SWAYAM) Regulations, 2016

1. There is no provision for Open Electives. Students may pursue additional specializations as per the relevant provisions.

7.1 Formative Assessment (FA) / Comprehensive Concurrent Evaluation (CCE)

The course teacher shall prepare the scheme of Comprehensive Concurrent Evaluation (Formative Assessment) before commencement of the term.

1. The scheme of Comprehensive Concurrent Evaluation shall explicitly state the linkages of each FA/ CCE with the Course Outcomes and define the targeted attainment levels for each CO. Graduate Attributes may also be considered during the design of CCE scheme.
2. The Director / Head of the Department / designated academic authority shall approve the scheme of Formative Assessment (FA) Comprehensive Concurrent Evaluation with or without modifications.
3. The course teacher shall communicate to the students, the approved FA/ CCE scheme of the course and the same shall also be hosted on the Institute's website, not later than the first week of the term.
4. *Each FA/ CCE item shall be of minimum 25 marks.*
5. *For a 3 Credit Course there shall be a MINIMUM of three FA/CCE items. The final scores shall be converted to 50, using an average or best two out of three formula.*
6. *For 2 Credit Course there shall be a MINIMUM of two CCE items. The final scores shall be converted to 50.*
7. FA/ CCE shall be spread through the duration of course and shall be conceptualized, executed, assessed and documented by the course teacher along with student-wise and class-wise attainment levels of the COs and the attainment levels of the course.
8. The assessment outcome of each FA/CCE shall be duly signed by the course teacher, programme coordinator / academic head and the Director / Head of the Department / designated academic authority of the Institute.
9. A copy of the duly signed FA/CCE *outcome* shall be communicated to the students, within a week of the assessment and course teachers shall guide the students on a need basis.
10. Institute may conduct additional make up / remedial FA/CCE items at its discretion.
11. At the end of the term aggregate FA/CCE scores / grades shall be calculated and the CO attainment levels shall be calculated by the course teacher. The same shall be communicated to the students within a week.

7.1 Formative Assessment (FA) / Comprehensive Concurrent Evaluation Methods: Course teachers shall opt for a combination of one or more CCE methods listed below.

Group A (Individual Assessment) – Not more than 1 per course

1. Class Test
2. Open Book Test
3. Written Home Assignment
4. In-depth Viva-Voce

Group B (Individual Assessment) – Atleast 1 per course

5. Case Study
6. Caselet
7. Situation Analysis
8. Presentations

Group C (Group Assessment) – Not more than 1 per course

9. Field Visit / Study tour and report of the same
10. Small Group Project & Internal Viva-Voce
11. Model Development
12. Role Play
13. Story Telling
14. Fish Bowls

Group D (Creative - Individual Assessment) – Not more than 1 per course

15. Learning Diary
16. Scrap Book / Story of the week / Story of the month
17. Creating a Quiz

18. Designing comic strips
19. Creating Brochures / Bumper Stickers / Fliers
20. Creating Crossword Puzzles
21. Creating and Presenting Posters
22. Writing an Advice Column
23. Library Magazines based assessment
24. Peer assessment
25. Autobiography/Biography
26. Writing a Memo
27. Work Portfolio

Group E (Use of Literature / Research Publications- Individual Assessment) – Not more than 1 per course

28. Book Review
29. Drafting a Policy Brief
30. Drafting an Executive Summary
31. Literature Review
32. Term Paper
33. Thematic Presentation
34. Publishing a Research Paper
35. Annotated Bibliography
36. Creating Taxonomy
37. Creating Concept maps

Group F (Use of Technology - Individual Assessment) – Not more than 1 per course

38. Online Exam
39. Simulation Exercises
40. Gamification Exercises
41. Presentation based on Google Alerts
42. Webinar based assessment
43. Creating Webpage / Website / Blog
44. Creating infographics / infomercial
45. Creating podcasts / Newscast
46. Discussion Boards

7.2 Rubrics: The course teacher shall design Rubrics for each FA/CCE. Rubrics are scoring tools that define performance expectations for learners. The course teacher shall seek approval for the rubrics from the Director / Head of the Department / other designated competent academic authority of the institute. The course teacher shall share the approved Rubrics with the students at the start of the course. The rubric shall detail the following:

1. Linkages of the FA/CCE to COs.
2. A description of the assessment - brief concept note
3. Criteria that will be assessed - the expected learning outcomes.
4. Descriptions of what is expected for each assessment component - the expectations from the student.
5. Substantive description of the expected performance levels indicating mastering of various components - the assessment criteria.
6. The team composition, if applicable.
7. The format and mode of submission, submission timelines
8. Any other relevant details.

7.3 Safeguards for Credibility of FA/CCE: The following practices are encouraged to enhance transparency and authenticity of concurrent evaluation:

1. Involving faculty members from other management institutes.
2. Setting multiple question paper sets and choosing the final question paper in a random manner.
3. One of the internal faculty members (other than the course teacher) acting as jury during activity based evaluations.
4. Involvement of Industry personnel in evaluating projects / field based assignments.
5. Involvement of alumni in evaluating presentations, role plays, etc.
6. 100% moderation of answer sheets, in exceptional cases.

7.4 Retention of FA/CCE Documents: Records of FA/CCE shall be retained for 3 years from the completion of the Academic Year. i.e. **Current Academic Year (CAY) + 3 years.**

8.0 End Semester Evaluation (ESE)/ Summative Assessment (SA)

1. The End Semester Evaluation (Summative Evaluation) shall be conducted by the Savitribai Phule Pune University.
2. The ESE/SA shall have 5 questions each of 10 marks.
3. All questions shall be compulsory with internal choice within the questions.
4. The broad structure of the ESE/SA question paper shall be as follows:

Question Number	COGNITIVE ABILITIES EVALUATED	Nature
Q.1	REMEMBERING	Answer any 5 out of 8 (2 marks each)
Q.2	UNDERSTANDING	Answer any 2 out of 3 (5 marks each)
Q.3	APPLYING	Answer 3 (a) or 3 (b) (10 marks)
Q.4	ANALYSING	Answer 4 (a) or 4 (b) (10 marks)
Q.5	EVALUATING	Answer 5 (a) or 5 (b) (10 marks)
	CREATING	

9.0 Programme Flexibility:

9.1 Dropping an Elective Course:

1. Students who opt for an elective course and fail to earn the credits for the elective course (generic / subject / open) are permitted to opt for another elective course (generic / subject / open) in case they feel to do so.
2. In such a case they shall be said to have dropped the original course and opted for a new one.
3. Generic Core (GC), Subject Core (SC) CANNOT be dropped.
4. Generic Elective & Subject Elective can be dropped and replaced with equivalent alternative courses
5. Not more than four courses can be dropped and replaced with equivalent alternative courses during the entire MBA programme.

9.2 Credit Transfer for MOOCs:

1. Since MOOC is a guided self study course 40 - 45 hours of work shall be equivalent to one credit. The faculty shall oversee the progress of the learner as well as evaluate the learner for 50 marks / 2 credits.
2. Students shall apply to the Director / Head of the Department / other designated competent academic authority of the institute in advance and seek permission for seeking credit transfer for the proposed MOOCs, he/she wishes to pursue.
3. For claiming these credits - SWAYAM / NPTEL course / MOOC completion certificate submission to the institute shall be mandatory

10.0 Additional Specialization:

1. A student who has completed the MBA programme under this pattern may enroll for additional specialization after passing out the regular MBA programme.
2. Such students will be exempted from appearing for all the generic core and generic elective courses.

3. Such students shall have to appear for the subject core, subject elective courses, DR, FP, OJT and RP of the additional specialization that they have opted for.

11.0 Passing Standards:

1. A student shall be said to have earned the credits for a course if he/she earns minimum 40% marks.
2. Formative Evaluation and Summative Evaluation shall be separate heads of passing.
3. To progress to the next academic year, a student must earn at least 50% of the total credits.

12.0 Grading System: The Indirect and Absolute Grading System shall be used, i.e. the assessment of individual Courses in the concerned examinations will be on the basis of marks. However, the marks shall later be converted into Grades by a defined mechanism wherein the overall performance of the learners can be reflected after considering the Credit Points for any given course. The overall evaluation shall be designated in terms of Grade. The 10-point standard scale mandated by UGC shall be used.

The performance of a student will be evaluated in terms of two indices, viz.

- (a) Semester Grade Point Average (SGPA) which is the Grade Point Average for a semester.
- (b) Cumulative Grade Point Average (CGPA) which is the Grade Point Average for all the completed semesters at any point in time.

13 Miscellaneous

13.1 Scaling Down of CCE/FA Scores: The marks obtained by the student for the CCE/FA SHALL BE SCALED DOWN, to the required extent, if percentage of the marks of CCE/FA exceeds the percentage of marks scored in the ESE (End Semester University Examination) by 25% for the respective course.

13.2 Degree Requirements: The degree requirements for the MBA programme are completion of minimum 104 credits.

13.3 Maximum Attempts per Course:

1. A student shall earn the credits for a given course in maximum FOUR attempts.

13.4 Maximum Duration for completion of the Programme: The candidates shall complete the MBA Programme within 4 years from the date of admission.

13.5 Attendance: The student must meet the requirement of **75% attendance per semester per course** for grant of the term. The institute may condone the shortage in attendance in exceptional circumstances, up to a maximum of 10%. The institute shall have the right to withhold the student from appearing for examination of a specific course if the above requirement is not fulfilled.

13.6 Text Books and Reference Books refer to the latest edition.

13.7 Medium of Instruction: The medium of Instruction & Evaluation shall be English.

13.8 Grade Improvement:

1. A Candidate who has secured any grade other than F (i.e. passed the MBA programme) and desires to avail the Grade Improvement option, may apply under Grade Improvement Scheme within five years from passing that Examination.
2. He/she can avail not more than three attempts, according to the syllabus in existence, for grade improvement.
3. He /she shall appear for University Evaluation of **at least 1/3rd** of the Generic Core / Subject Core Courses (except SIP) for the purpose of Grade Improvement.

Annexures:

Annexure I – Semester wise Course List.

Annexure II - Detailed syllabus.

**Annexure I – LIST OF COURSES
OFFERED IN EACH SEMESTER**

SEMESTER I							
Type	Sem Code	Course Code	Course	Credits	FA	SA	Marks
Mandatory	101	GC – 01	Managerial Accounting	3	50	50	100
Mandatory	102	GC – 02	Organizational Behaviour	3	50	50	100
Mandatory	103	GC – 03	Economic Analysis for Business Decisions	3	50	50	100
Mandatory	104	GC – 04	Basics of Marketing	3	50	50	100
Mandatory	105	GC – 05	Business Analytics	3	50	50	100
Mandatory	106	GC – 06	Decision Science	3	50	50	100
Mandatory	107	GC – 07	Management Fundamentals	2	0	50	50
Mandatory	108	GC – 08	Indian Knowledge Systems	2	0	50	50
		CORE TOTAL	8	22	300	400	700
Semester I Generic Electives - Any 2 Courses to be Opted from the following list							
Elective	109	GE 01	Business Communication-I	2	50	0	50
Elective	110	GE 02	Technology Tools in Business Management -I	2	50	0	50
Elective	111	GE 03	Environmental, Social, and Governance (ESG)	2	50	0	50
Elective	112	GE 04	Demand Analysis & Forecasting	2	50	0	50
Elective	113	GE 05	Geopolitics & World Economic Systems	2	50	0	50
Elective	114	GE 06	Contemporary Frameworks in Management	2	50	0	50
Elective	115	GE 07	Essentials of Psychology for Managers	2	50	0	50
		ELECTIVE TOTAL	2	4	100	0	100
		SEMESTER TOTAL	10	26	400	400	800

SEMESTER II							
Type	Sem Code	Course Code	Course	Credits	FA	SA	Marks
Mandatory	201	GC – 09	Marketing Management	3	50	50	100
Mandatory	202	GC – 10	Financial Management	3	50	50	100
Mandatory	203	GC – 11	Human Resources Management	3	50	50	100
Mandatory	204	GC – 12	Operations & Supply Chain Management	3	50	50	100
Mandatory	205	GC - 13	Legal Aspects of Business	2	0	50	50
CORE TOTAL			5	14	200	250	450
Mandatory	206	RM - 01	BRM	2	-	50	50
Mandatory	207	RM - 02	Desk Research	2	50	0	50
Mandatory	208	RM - 03	Field Project	4	50	100	150
RESEARCH TOTAL			3	8	100	150	250
Semester II Generic Electives - Any 2 Courses to be Opted from the respective elective list							
Elective	209	GE 08	Business Communication-II	2	50	0	50
Elective	210	GE 09	Technology Tools in Business Management -II	2	50	0	50
Elective	211	GE 10	Sustainable Development Goals	2	50	0	50
Elective	212	GE 11	Selling & Negotiation Skills Lab	2	50	0	50
Elective	213	GE 12	Indian Economy	2	50	0	50
Elective	214	GE 13	International Business Environment	2	50	0	50
Elective	215	GE 14	Business Ethics	2	50	0	50
ELECTIVE TOTAL			2	4	100	0	100
SEMESTER TOTAL			10	26	400	400	800

SEMESTER III							
	Sem Code	Course Code	Course	Credits	FA	SA	Marks
Mandatory	301	GC – 14	Strategic Management	3	50	50	100
Mandatory	302	SC - 01		3	50	50	100
	CORE TOTAL		2	6	100	100	200
Mandatory	303	OJT (SC)	On the Job Training	8	100	100	200
	SIP TOTAL		1	8	100	100	200
Semester III Specialization Electives - Any 4 Courses to be Opted from the respective elective list							
Elective	304	SE 01		3	50	50	100
Elective	305	SE 02		3	50	50	100
Elective	306	SE 03		3	50	50	100
Elective	307	SE 04		3	50	50	100
Elective	308	SE 05		3	50	50	100
Elective	309	SE 06		3	50	50	100
Elective	310	SE 07		3	50	50	100
Elective	311	SE 08		3	50	50	100
	ELECTIVE TOTAL		4	12	200	200	400
	SEMESTER TOTAL		7	26	400	400	800
SEMESTER IV							
	Sem Code	Course Code	Course	Credits	FA	SA	Marks
Mandatory	401	GC – 15	Entrepreneurship, Innovation and Design Thinking	3	50	50	100
Mandatory	402	GC - 16	Enterprise Performance Management	2	0	50	50
Mandatory	403	SC - 02		3	50	50	100
	CORE TOTAL		3	8	100	150	250
Mandatory	404	RP	Research Project	6	100	50	150
	RESEARCH PROJECT TOTAL		1	6	100	50	150
Semester IV Specialization Electives - Any 4 Courses to be Opted from the following list							
Elective	405	SE 09		3	50	50	100
Elective	406	SE 10		3	50	50	100
Elective	407	SE 11		3	50	50	100
Elective	408	SE 12		3	50	50	100
Elective	409	SE 13		3	50	50	100
Elective	410	SE 14		3	50	50	100
Elective	411	SE 15		3	50	50	100
Elective	412	SE 16		3	50	50	100
	ELECTIVE TOTAL		4	12	200	200	400
	SEMESTER TOTAL		8	26	400	400	800
	PROGRAMME TOTAL		35	104	1600	1600	3200

MARKETING MANAGEMENT							
Specialization Core Courses							
Sem Code	Course Code	Course	Semester	Credits	FA	SA	Total Marks
302	SC MKT- 01	Services Marketing	III	3	50	50	100
403	SC MKT- 02	Marketing Strategy	IV	3	50	50	100
				6	100	100	200
Specialization Elective Courses - Semester III (Any 4 to be opted for)							
304	SE MKT- 01	Consumer Behaviour	III	3	50	50	100
305	SE MKT- 02	Product & Brand Management	III	3	50	50	100
306	SE MKT- 03	Sales & Distribution Management	III	3	50	50	100
307	SE MKT- 04	Digital Marketing-I	III	3	50	50	100
308	SE MKT- 05	International Marketing	III	3	50	50	100
309	SE MKT- 06	Business to Business Marketing	III	3	50	50	100
310	SE MKT- 07	Marketing Analytics	III	3	50	50	100
311	SE MKT- 08	Marketing 5.0	III	3	50	50	100
				12	200	200	400
Specialization Elective Courses - Semester IV (Any 4 to be opted for)							
405	SE MKT- 09	Integrated Marketing Communication	IV	3	50	50	100
406	SE MKT- 10	Rural & Agriculture Marketing	IV	3	50	50	100
407	SE MKT- 11	Tourism & Hospitality Marketing	IV	3	50	50	100
408	SE MKT- 12	Digital Marketing-II	IV	3	50	50	100
409	SE MKT- 13	Retail Marketing	IV	3	50	50	100
410	SE MKT- 14	Marketing of Financial Services	IV	3	50	50	100
411	SE MKT- 15	Recent trends in Marketing	IV	3	50	50	100
412	SE MKT- 16	Marketing 6.0	IV	3	50	50	100
				12	200	200	400
				30	500	500	1000

FINANCIAL MANAGEMENT							
Specialization Core Courses							
Sem Code	Course Code	Course	Semester	Credits	FA	SA	Total Marks
302	SC FIN- 01	Advanced Financial Management	III	3	50	50	100
403	SC FIN - 02	Financial Markets and Banking Operations	IV	3	50	50	100
				6	100	100	200
Specialization Elective Courses - Semester III (Any 4 to be opted for)							
304	SE FIN - 01	Fixed Income Securities	III	3	50	50	100
305	SE FIN - 02	Personal Financial Planning	III	3	50	50	100
306	SE FIN - 03	Security Analysis and Portfolio Management	III	3	50	50	100
307	SE FIN - 04	Fundamentals of Life Insurance - Products and Underwriting	III	3	50	50	100
308	SE FIN - 05	Digital Banking	III	3	50	50	100
309	SE FIN - 06	Direct Taxation	III	3	50	50	100
310	SE FIN - 07	Financial Reporting	III	3	50	50	100
311	SE FIN - 08	International Finance	III	3	50	50	100
				12	200	200	400
Specialization Elective Courses - Semester IV (Any 4 to be opted for)							
405	SE FIN - 09	Behavioural Finance	IV	3	50	50	100
406	SE FIN - 10	Business Valuation	IV	3	50	50	100
407	SE FIN - 11	Technical Analysis of Financial Markets	IV	3	50	50	100
408	SE FIN - 12	Risk Management	IV	3	50	50	100
409	SE FIN - 13	Rural and Micro Finance	IV	3	50	50	100
410	SE FIN - 14	Indirect Taxation	IV	3	50	50	100
411	SE FIN - 15	Corporate Financial Restructuring	IV	3	50	50	100
412	SE FIN - 16	Commodities Market	IV	3	50	50	100
				12	200	200	400
				30	500	500	1000

HUMAN RESOURCE MANAGEMENT							
Specialization Core Courses							
Sem Code	Course Code	Course	Semester	Credits	FA	SA	Total Marks
302	SC HRM- 01	Strategic Human Resource Management	III	3	50	50	100
403	SC HRM - 02	Employee Relations & Labour Legislation	IV	3	50	50	100
				6	100	100	200
Specialization Elective Courses - Semester III (Any 4 to be opted for)							
304	SE HRM - 01	Competency Based HRM	III	3	50	50	100
305	SE HRM - 02	Conflict management and Negotiation Skills	III	3	50	50	100
306	SE HRM - 03	HR Analytics	III	3	50	50	100
307	SE HRM - 04	Diversity & Inclusion	III	3	50	50	100
308	SE HRM - 05	HR Perspective in Merger & Acquisition	III	3	50	50	100
309	SE HRM - 06	Labour Economics & Costing	III	3	50	50	100
310	SE HRM - 07	Organization Diagnosis and Development	III	3	50	50	100
311	SE HRM - 08	HR Operations	III	3	50	50	100
				12	200	200	400
Specialization Elective Courses - Semester IV (Any 4 to be opted for)							
405	SE HRM - 09	Compensation & Reward Management	IV	3	50	50	100
406	SE HRM - 10	Employee Engagement	IV	3	50	50	100
407	SE HRM - 11	Designing HR Policies	IV	3	50	50	100
408	SE HRM - 12	Performance Management System	IV	3	50	50	100
409	SE HRM - 13	Change Management & New Technologies in HRM	IV	3	50	50	100
410	SE HRM - 14	Global HR Practices	IV	3	50	50	100
411	SE HRM - 15	Mentoring & Coaching	IV	3	50	50	100
412	SE HRM - 16	Labour Welfare	IV	3	50	50	100
				12	200	200	400
				30	500	500	1000

OPERATIONS & SUPPLY CHAIN MANAGEMENT							
Specialization Core Courses							
Sem Code	Course Code	Course	Semester	Credits	FA	SA	Total Marks
302	SC OSCM- 01	Services Operations Management	III	3	50	50	100
403	SC OSCM- 02	Supply Chain Management	IV	3	50	50	100
				6	100	100	200
Specialization Elective Courses - Semester III (Any 4 to be opted for)							
304	SE OSCM- 01	Planning & Control of Operations	III	3	50	50	100
305	SE OSCM- 02	Productivity Management	III	3	50	50	100
306	SE OSCM- 03	Theory of Constraints	III	3	50	50	100
307	SE OSCM- 04	Manufacturing Resource Planning	III	3	50	50	100
308	SE OSCM- 05	Quality Management Standards	III	3	50	50	100
309	SE OSCM- 06	Strategic Supply Chain Management	III	3	50	50	100
310	SE OSCM- 07	Business Excellence	III	3	50	50	100
311	SE OSCM- 08	Service Value Chain Management	III	3	50	50	100
				12	200	200	400
Specialization Elective Courses - Semester IV (Any 4 to be opted for)							
405	SE OSCM- 09	Industry 4.0	IV	3	50	50	100
406	SE OSCM- 10	Six Sigma for Operations	IV	3	50	50	100
407	SE OSCM- 11	Toyota Production System	IV	3	50	50	100
408	SE OSCM- 12	World Class Manufacturing	IV	3	50	50	100
409	SE OSCM- 13	Supply Chain Strategy	IV	3	50	50	100
410	SE OSCM- 14	Financial Perspectives in Operations Management	IV	3	50	50	100
411	SE OSCM- 15	Facilities Planning	IV	3	50	50	100
412	SE OSCM- 16	Sustainable Supply Chains	IV	3	50	50	100
				12	200	200	400
				30	500	500	1000

BUSINESS ANALYTICS							
Specialization Core Courses							
Sem Code	Course Code	Course	Semester	Credits	FA	SA	Total Marks
302	SC BA - 01	Python	III	3	50	50	100
403	SC BA- 02	Data Mining	IV	3	50	50	100
				6	100	100	200
Specialization Elective Courses - Semester III (Any 4 to be opted for)							
304	SE BA- 01	Advanced Statistical Methods	III	3	50	50	100
305	SE BA- 02	Data Visualization and storytelling	III	3	50	50	100
306	SE BA- 03	Marketing Analytics	III	3	50	50	100
307	SE BA- 04	Financial Analytics	III	3	50	50	100
308	SE BA- 05	Workforce Analytics	III	3	50	50	100
309	SE BA- 06	Big Data Analytics	III	3	50	50	100
310	SE BA- 07	Supply & Operation Chain Analytics	III	3	50	50	100
311	SE BA- 08	Marketing Intelligence	III	3	50	50	100
				12	200	200	400
Specialization Elective Courses - Semester IV (Any 4 to be opted for)							
405	SE BA- 09	Time Series Analysis and Forecasting	IV	3	50	50	100
406	SE BA - 10	Strategic Management and Business Analytics	IV	3	50	50	100
407	SE BA - 11	Retail and E-Commerce Analytics	IV	3	50	50	100
408	SE BA - 12	Generative AI for Business Applications	IV	3	50	50	100
409	SE BA - 13	Healthcare Analytics	IV	3	50	50	100
410	SE BA - 14	Predictive Analytics and Machine learning using Python	IV	3	50	50	100
411	SE BA - 15	Sports Analytics	IV	3	50	50	100
412	SE BA - 16	Business applications of Blockchain technologies	IV	3	50	50	100
				12	200	200	400
				30	500	500	1000

AGRI BUSINESS MANAGEMENT							
Specialization Core Courses							
Sem Code	Course Code	Course	Semester	Credits	FA	SA	Total Marks
302	SC ABM- 01	Agriculture and Indian Economy	III	3	50	50	100
403	SC ABM- 02	ICT for Agriculture	IV	3	50	50	100
				6	100	100	200
Specialization Elective Courses - Semester III (Any 4 to be opted for)							
304	SE ABM- 01	Agricultural Marketing Management	III	3	50	50	100
305	SE ABM- 02	Rural Marketing	III	3	50	50	100
306	SE ABM- 03	Rural Banking	III	3	50	50	100
307	SE ABM- 04	Agri- Insurance	III	3	50	50	100
308	SE ABM- 05	Agri- Supply Chain Management	III	3	50	50	100
309	SE ABM- 06	Agricultural Import Export	III	3	50	50	100
310	SE ABM- 07	Current trends in Agriculture	III	3	50	50	100
311	SE ABM- 08	Agri- Entrepreneurship & Startup Management	III	3	50	50	100
				12	200	200	400
Specialization Elective Courses - Semester IV (Any 4 to be opted for)							
405	SE ABM- 09	Food Retail management	IV	3	50	50	100
406	SE ABM- 10	Agri- Input Marketing	IV	3	50	50	100
407	SE ABM- 11	Microfinance	IV	3	50	50	100
408	SE ABM- 12	Commodity derivatives and Risk Management	IV	3	50	50	100
409	SE ABM- 13	Procurement Management	IV	3	50	50	100
410	SE ABM- 14	Agri- Production, Planning and Control	IV	3	50	50	100
411	SE ABM- 15	Management of Allied Agro Industries	IV	3	50	50	100
412	SE ABM- 16	Agri- Cooperative Management	IV	3	50	50	100
				12	200	200	400
				30	500	500	1000

PHARMA & HEALTHCARE MANAGEMENT							
Specialization Core Courses							
Sem Code	Course Code	Course	Semester	Credits	FA	SA	Total Marks
302	SCPHM-01	Fundamentals of Pharma and Healthcare Management	III	3	50	50	100
403	SCPHM-02	Regulatory laws in Indian Pharmaceutical & healthcare Industry	IV	3	50	50	100
				6	100	100	200
Specialization Elective Courses-Semester III(Any4 to be opted for)							
304	SEPHM-01	Healthcare management	III	3	50	50	100
305	SEPHM-02	Pharmaceutical Marketing Management	III	3	50	50	100
306	SEPHM-03	Digital marketing in Pharma & Healthcare	III	3	50	50	100
307	SEPHM-04	Supply Chain Management in Pharmaceutical Sector	III	3	50	50	100
308	SEPHM-05	Pharmaceutical Production Management	III	3	50	50	100
309	SEPHM- 06	Compensation Management and Performance Appraisal in Pharma and healthcare	III	3	50	50	100
310	SEPHM- 07	Health Insurance	III	3	50	50	100
311	SEPHM- 08	Entrepreneurship in Pharma and Healthcare	III	3	50	50	100
				12	200	200	400
Specialization Elective Courses-Semester IV(Any 4 to be opted for)							
405	SEPHM- 09	Ethics and Legal aspects of Pharmaceutical and Healthcare Business	IV	3	50	50	100
406	SEPHM- 10	Clinical Data Management	IV	3	50	50	100
407	SEPHM- 11	Regulatory affairs in pharmaceuticals	IV	3	50	50	100
408	SEPHM- 12	International Pharma marketing	IV	3	50	50	100
409	SEPHM- 13	Marketing of Medical Devices and Diagnostics	IV	3	50	50	100
410	SEPHM- 14	Quality Assurance and Control Management in Pharma	IV	3	50	50	100
411	SEPHM-15	Pharmaceutical advanced Human Resource Management	IV	3	50	50	100
412	SEPHM-16	Healthcare Analytics	IV	3	50	50	100
				12	200	200	400
				30	500	500	1000

Annexure II – COURSE WISE DETAILED SYLLABUS**Semester I**

Semester I	101	GC 01 – Managerial Accounting
3 Credits	LTP: 2:1:1	Compulsory Generic Core Course

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 101.1	REMEMBERING	DESCRIBE the basic concepts related to Accounting, Financial Statements, Cost Accounting, Marginal Costing, Budgetary Control and Standard Costing
CO 101.2	UNDERSTANDING	EXPLAIN in detail, all the theoretical concepts taught through the syllabus.
CO 101.3	APPLYING	PERFORM all the necessary calculations through the relevant numerical problems.
CO 101.4	ANALYSING	ANALYSE the situation and decide the key financial as well as non-financial elements involved in the situation.
CO 101.5	EVALUATING	EVALUATE the financial impact of the decision.
CO 101.6	CREATING	CREATE the Financial Statement of Sole Proprietor, Cost Sheet and Budgets

- 1 Basic Concepts:** Forms of Business Organization. Meaning and Importance of Accounting in Business Organization, Basic concepts and terms used in accounting, Capital & Revenue Expenditure, Capital & Revenue Receipts, Users of Accounting Information. Accounting Concepts and Conventions, Fundamental Accounting Equation, Ancient Indian / Mahajani Accounting System – history, Bahi – Khata, advantages & Limitations, Indian Accounting System v/s Modern Accounting System, Journal, Ledger and Trial Balance. **(4+2)**
- 2. Financial Statements:** Meaning of Financial Statements, Importance and Objectives of Financial Statements. Preparation of Final Accounts of sole proprietary firm. **(7 + 2)**
- 3. Cost Accounting:** Basic Concepts of Cost Accounting, Objectives, Importance and Advantages of Cost Accounting, Cost Centre, Cost Unit, Types of Cost, Elements of Cost, Classification and Analysis of Costs, Preparation of Cost Sheet. **(8 + 2)**
- 4. Marginal Costing:** Meaning, Principles, Advantages and Limitations, Contribution, P/V Ratio, Break-Even Point (BEP), Cost Volume Profit (CVP) Analysis **(8 + 2)**
- 5. Cost Control Techniques: Budgetary Control & Standard Costing: Budgetary Control:** Meaning of Budget and Budgeting, Importance, Advantages and Disadvantages, Cash Budget and Flexible Budget, **Standard Costing:** Meaning, Importance, Advantages and Disadvantages, Cost Variance Analysis. Material Variances– Material Cost Variance, Material Rate Variance, Material Usage Variance, Material Mix Variance and Material Yield Variance. **(8 + 2)**

Note: Numerical Problems will be asked on the following –

1. Final Accounts of Sole Proprietary Firm
2. Preparation of Cost Sheet
3. Marginal Costing
4. Cash Budget, Flexible Budget
5. Material Variances

Suggested Books:

1. Management Accounting- Khan and Jain, Tata McGraw Hill
2. Fundamentals of Management Accounting - H. V. Jhamb
3. Managerial Accounting - Dr. Mahesh Abale and Dr. Shriprakash Soni
4. Management Accounting - Dr. Mahesh Kulkarni
5. Bahi – Khata: The Traditional Accounting System of India – A. N. Aggarwal
6. Ancient India Accountancy: A Study – Krishna Mohan Tummala

Suggested Reference Books:

1. Financial Cost and Management Accounting, P. Periasamy

2. Financial Accounting for Management, Shankarnarayanan Ramanath, CENGAGE Learning
3. Accounting for Management, S. N. Maheshwari
4. Management Accounting, MadhuVij
5. Fundamentals of Management Accounting, H. V. Jhamb
6. Cost and Management Accounting, M. N. Arora
7. Financial Accounting for Managers, Sanjay Dhmiya, Pearson Publications
8. Management Accounting, Mr. Anthony Atkinson, Robert Kaplan, Pearson
9. Accounting For Management, Jawarhar Lal
10. Accounting, Shukla Grewal
11. Management Accounting, Ravi Kishore
12. Accounting for Managers, Dearden and Bhattacharya
13. The Arthashastra: Selections from the Classic Indian Work on Statecraft – Kautilya (Edited by Patrick Olivelle)
14. Kautilya's Arthashastra – Translated into English by R. Shamasastry

Semester I	102	GC 02 - Organizational Behaviour
3 Credits	LTP: 2:1:1	Compulsory Generic Core Course

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 102.1	REMEMBERING	Describe complexities of individual and group behavior in the organizations
CO 102.2	UNDERSTANDING	Explain the implications of organizational behavior from the perspectives of employees, managers, leaders and the organization.
CO 102.3	APPLYING	APPLY Theories, Models, Principles and Frameworks of organizational behavior in specific organizational settings
CO 102.4	ANALYSING	ANALYZE human behavioural problems like conflict, low motivational levels, politics, attitudinal issues etc. and develop solutions to these problems.
CO 102.5	EVALUATING	FORMULATE approaches to reorient individual, team, managerial and leadership behavior in order to achieve organizational goals.
CO 102.6	CREATING	DEVELOP strategies for challenges faced during shaping organizational behavior, organizational culture and organizational change.

1. **Fundamentals of OB:** Definition, scope and importance of OB, Relationship between OB and the individual, Evolution of OB, Models of OB (Autocratic, Custodial, Supportive, Collegial & SOBC). **Personality:** Definition- Personality, importance of personality in Performance, The Myers-Briggs Type Indicator and The Big Five personality model, Johari Window. Relevant case studies on personality (7+2)
2. **Perception:** Meaning and concept of perception, Factors influencing perception, Perceptual process, social perception (stereotyping and halo effect) Relevant case studies on Perception (7+2)
3. **Motivation:** Definition & Concept of Motive & Motivation, The Content Theories of Motivation (Maslow's Need Hierarchy & Herzberg's Two Factor Model Theory), The Process Theories (Vroom's expectancy Theory & Porter Lawler model), Contemporary Theories- Equity Theory of Work Motivation. Relevant case studies on Motivation (7+2)
4. **Group and Team Dynamics:** The Meaning of Group, Group behaviour & Group Dynamics, Types of Groups, The Five -Stage Model of Group Development, Team Effectiveness & Team Building. **Leadership:** Introduction, Managers V/s Leaders. Overview of Leadership- Traits and Types, leadership principles from Indian epics and scriptures (e.q. Ramayana and Mahabharata), Managerial Grid Theory of Leadership, Path Goal Theory of leadership and Situational Leadership (Hersey-Blanchard) Model. Relevant case studies on Group dynamics and Leadership (8+2)
5. **Stress at workplace:** Work Stressors – Prevention and Management of stress – counselling, Importance of Yoga in Stress Management, Balancing work and Life, causes of work stress. **Organizational Change:** Meaning, definition & Nature of Organizational Change, Types of Organizational change, Forces that acts as stimulants to change. Kurt Lewin's- Three step model, How to overcome the Resistance to Change, Methods of Implementing Organizational Change. Relevant case studies on stress management and organizational change (6+2)

Suggested Text Books:

1. Organizational Behaviour, Robins.
2. Organizational Behaviour, Nelson & Quick.
3. Organizational Behaviour, Fred Luthans.
4. Organizational Behaviour, Stephen Robins, Timothy Judge, Neharika Vohra.
5. Organizational Behaviour, M N Mishra.
6. Organizational Behaviour, K Ashwathappa

Suggested Reference Books

1. Understanding OB, Uday Pareek.
2. Change & Knowledge Management, Janakiram, Ravindra and Shubha Murlidhar.
3. Human Resource Management, Nkomo, CENGAGE Learning

Semester I	103	GC 03 – Economic Analysis For Business Decisions
3 Credits	LTP: 2:1:1	Compulsory Generic Core Course

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 103.1	REMEMBERING	DEFINE the key terms in micro-economics.
CO 103.2	UNDERSTANDING	EXPLAIN the key terms in micro-economics, from a managerial perspective.
CO 103.3	APPLYING	IDENTIFY the various issues in an economics context and DEMONSTRATE their significance from the perspective of business decision making.
CO 103.4	ANALYSING	EXAMINE the inter-relationships between various facets of micro-economics from the perspective of a consumer, firm, industry, market, competition and business cycles.
CO 103.5	EVALUATING	DEVELOP critical thinking based on principles of micro-economics for informed business decision making.
CO 103.6	CREATING	ANTICIPATE how other firms in an industry and consumers will respond to economic decisions made by a business, and how to incorporate these responses into their own decisions.

1. **Managerial Economics:** Concept of Economy, Economics, Microeconomics, Macroeconomics. Nature and Scope of Managerial Economics, Managerial Economics and decision-making. Concept of Firm, Market, Objectives of Firm: Profit Maximization Model, Economist Theory of the Firm, Cyert and March's Behavior Theory, Marris' Growth Maximisation Model, Baumol's Static and Dynamic Models, Williamson's Managerial Discretionary Theory. **(6+1)**
2. **Utility & Demand Analysis:** Utility – Meaning, Utility analysis, Measurement of utility, Law of diminishing marginal utility, Indifference curve, Consumer's equilibrium - Budget line and Consumer surplus. Demand - Concept of Demand, Types of Demand, Determinants of Demand, Law of Demand, Elasticity of Demand, Exceptions to Law of Demand. Uses of the concept of elasticity. Forecasting: Introduction, Meaning and Forecasting, Level of Demand Forecasting, Criteria for Good Demand Forecasting, Methods of Demand Forecasting, Survey Methods, Statistical Methods, Qualitative Methods, Demand Forecasting for a New Products. (Demand Forecasting methods - Conceptual treatment only numericals not expected) **(8+1)**
3. **Supply & Market Equilibrium:** Introduction, Meaning of Supply and Law of Supply, Exceptions to the Law of Supply, Changes or Shifts in Supply. Elasticity of supply, Factors Determining Elasticity of Supply, Practical Importance, Market Equilibrium and Changes in Market Equilibrium. Production Analysis: Introduction, Meaning of Production and Production Function, Cost of Production. Cost Analysis: Private costs and Social Costs, Accounting Costs and Economic costs, Short run and Long Run costs, Economies of scale, Cost-Output Relationship - Cost Function, Cost-Output Relationships in the Short Run, and Cost-Output Relationships in the Long Run. **(8+1)**
4. **Revenue Analysis and Pricing Policies:** Introduction, Revenue: Meaning and Types, Relationship between Revenues and Price Elasticity of Demand, Pricing Policies, Objectives of Pricing Policies, Cost plus pricing. Marginal cost pricing. Cyclical pricing. Penetration Pricing. Price Leadership, Price Skimming. Transfer pricing. Price Determination under Perfect Competition- Introduction, Market and Market Structure, Perfect Competition, Price-Output Determination under Perfect Competition, Short-run Industry Equilibrium under Perfect

Competition, Short-run Firm Equilibrium under Perfect Competition, Long-run Industry Equilibrium under Perfect Competition, Long-run Firm Equilibrium under Perfect Competition. Pricing Under Imperfect Competition- Introduction, Monopoly, Price Discrimination under Monopoly, Bilateral Monopoly, Monopolistic Competition, Oligopoly, Collusive Oligopoly and Price Leadership, Pricing Power, Duopoly, Industry Analysis. Profit Policy: Break Even analysis. Profit Forecasting. Need for Government Intervention in Markets. Price Controls. Support Price. Preventions and Control of Monopolies. System of Dual Price. (11+1)

5. **Consumption Function and Investment Function:** Introduction, Consumption Function, Investment Function, Marginal efficiency of capital and business expectations, Multiplier, Accelerator. Business Cycle: Introduction, Meaning and Features, Theories of Business Cycles, Measures to Control Business Cycles, Business Cycles and Business Decisions. (7+1)

Suggested Text Books:

1. Managerial Economics, Peterson, Lewis, Sudhir Jain, Pearson, Prentice Hall
2. Managerial Economics, D. Salvatore, McGraw Hill, New Delhi.
3. Managerial Economics, Pearson and Lewis, Prentice Hall, New Delhi
4. Managerial Economics, G.S. Gupta, T M H, New Delhi.
5. Managerial Economics, Mote, Paul and Gupta, T M H, New Delhi.

Suggested Reference Books:

1. Managerial Economics, Homas and Maurice, Tata McGraw Hill
2. Managerial Economics - Analysis, Problems and Cases, P.L. Mehta, Sultan Chand Sons, New Delhi.
3. Managerial Economics, Varshney and Maheshwari, Sultan Chand and Sons, New Delhi.
4. Managerial Economics, D.M.Mithani
5. Managerial Economics, Joel Dean, Prentice Hall, USA.
6. Managerial Economics by H L Ahuja, S Chand & Co. New Delhi.

Semester I	104	GC 04 – Basics Of Marketing
3 Credits	LTP: 2:0:2	Compulsory Generic Core Course

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO104.1	REMEMBERING	RECALL and REPRODUCE the various concepts, principles, frameworks and terms related to the function and role of marketing.
CO104.2	UNDERSTANDING	DEMONSTRATE the relevance of marketing management concepts and frameworks to a new or existing business across wide variety of sectors and ILLUSTRATE the role that marketing plays in the ‘tool kit’ of every organizational leader and manager.
CO104.3	APPLYING	APPLY marketing principles and theories to the demands of marketing function and practice in contemporary real-world scenarios.
CO104.4	ANALYSING	EXAMINE and LIST marketing issues pertaining to segmentation, targeting and positioning, marketing environmental forces, consumer buying behavior, marketing mix and Product Life Cycle in the context of real-world marketing offering (commodities, goods, services, e-products/ e-services).
CO104.5	EVALUATING	EXPLAIN the interrelationships between segmentation, targeting and positioning, marketing environment, consumer buying behavior, marketing mix and Product Life Cycle with real world examples.
CO104.6	CREATING	DISCUSS alternative approaches to segmentation, targeting and positioning, the marketing environment, consumer buying behavior, marketing mix and Product Life Cycle in the context of real-world marketing offering (commodities, goods, services, e-products/ e-services.).

1. **Introduction to Marketing:** Evolution of marketing in India from ancient times to the present day. Definition & Functions of Marketing- Scope of Marketing, Core concepts of marketing –Customer Delight, Customer loyalty, Concepts of Markets, Marketing V/S Market, Competition, Key customer markets, Brick & Click Model,

Functions of Marketing Manager, Linkage of Marketing functions with all functions in the organization, Company orientation towards market place: Production - Sales – Product-Marketing – Societal – Relational, Holistic Marketing Orientation, Selling versus marketing, Marketing 1.0 to Marketing 6.0, Concept of Marketing Myopia, Digital Natives, informed Vs Distracted customers, Integrating Traditional Marketing, digital Marketing and Sustainable Marketing, Digital Transformation in Marketing: AI, big data, and machine learning transforming marketing strategies, Customer Experience (CX), Sustainable Marketing (6+6)

2. **Consumer Behavior:** Meaning & importance of consumer behavior, Comparison between Organizational Buying behavior and consumer buying behavior, Buying roles, Five steps consumer buyer decision process – Problem Recognition, Information Search, Evaluation of Alternatives, Purchase Decision, Post Purchase behavior. Moment of Truth, Zero Moment of Truth, ZMOT, Moderating effects on consumer behavior, Neuromarketing, Omnichannel Consumer Behaviour, Behavioral Economics. How People buy Online, Adoption process- Awareness to Advocacy –Aware, Appeal, Ask, Act, Advocate (5As) and The O Zone (O3) Own, Outer and Other influence, Show rooming and Web rooming, Consumerization (6+6)
3. **Marketing Environment:** Concept of Environment, Macro Environment & Micro Environment – Components and characteristics, Needs & Trends, Major forces impacting the Macro Environment & Micro Environment, Need for analyzing the Marketing Environment. Analyzing the Political, Economic, Socio-cultural, Technical and Legal Environment. Demographics, Environmental, Social, and Governance (ESG) Factors, Technological Innovations, Regulatory Changes, role of joint families, community networks, and local influencers in marketing, impact of Indian festivals (e.g., Diwali, Holi, Eid) and cultural events (e.g., Kumbh Mela, local fairs) on consumer spending and marketing strategies (6+6)
4. **Segmentation, Target Marketing & Positioning:** Segmentation - Concept, Need & Benefits. Geographic, Demographic, Psychographic, Behavioural bases of segmentation for consumer goods and services. Bases for segmentation for business markets. Levels of segmentation, Criteria for effective segmentation. Market Potential & Market Share. Target Market - Concept of Target Markets and criteria for selection. Segment Marketing, Niche & Local Marketing, Mass marketing, Long Tail Marketing. Positioning - Concept of differentiation & positioning, Value Proposition & Unique Selling Proposition, Influencer Marketing, Forrester's Social Technographics segmentation (6+6)
5. **Marketing Mix:** Origin & Concept of Marketing Mix, 7P's - Product, Price, Place, Promotion, People, Process, Physical evidence. Product Life Cycle: Concept & characteristics of Product Life Cycle (PLC), Relevance of PLC, Types of PLC and Strategies across stages of the PLC. Digital Marketing Mix, Customer Journey Mapping, Service-Dominant Logic, Connected Marketing Mix -four C's (co-creation, currency, communal activation, and Conversation). (6+6)

Note: Real world examples / cases are expected to be analyzed in the class as well as included in the examination

Suggested Text Books:

1. Marketing Management, Philip Kotler, Kevin Lane Keller, Abraham Koshy, Mithileshwar Jha, Pearson
2. Marketing Management, Rajan Saxena, TMGH
3. Marketing, Lamb Hair Sharma, Mc Daniel, Cengage Learning

Suggested Reference Books:

1. Principles of Marketing, Philip Kotler, Gary Armstrong, Prafulla Agnihotri, Ehasan Haque, Pearson
2. Marketing Management- Text and Cases, Tapan K Panda, Excel Books
3. Marketing Management, Ramaswamy & Namakumari, Macmillan.
4. Marketing Whitebook
5. "Indian Marketing: Cases and Concepts" by S. Neelamegham
6. "Marketing in India: Text and Cases" by S. Ramesh Kumar

Semester I	105	GC 05 - Business Analytics
3 Credits	LTP: 2:1:1	Compulsory Generic Core Course

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 105.1	REMEMBERING	Recall the fundamental concepts and terminologies in business analytics

CO 105.2	UNDERSTANDING	Explain the differences between business analytics and related fields (e.g., business analysis, business intelligence, data science), as well as the ethical considerations and quality of data in business analytics and key applications of business analytics.
CO 105.3	APPLYING	Utilize basic tools of business analytics, such as data exploration and visualization tools, to perform basic exploratory data analysis and data cleaning tasks.
CO 105.4	ANALYSING	Break down business problems into key questions and analyze data to derive meaningful insights for decision-making in various business domains like marketing, finance, HR, operations, health care, and agri-business
CO 105.5	EVALUATING	Assess the effectiveness of different data-driven strategies and analytical techniques in improving business performance across different sectors through case studies
CO 105.6	CREATING	Design and propose data-driven solutions and strategies to address complex business challenges, integrating knowledge from marketing, finance, HR, operations, health care, and agri-business analytics.

- 1. Business Analytics Basics:** Definition of analytics, Evolution of analytics, The Growing Role of Business Analytics, Business analytics vs business analysis, Business intelligence vs Data Science, Data Analyst Vs Business Analyst, Types of Analytics - Descriptive, Diagnostic, Predictive, Prescriptive, Concept of insights. Importance of data in business analytics, Differences between data, information and knowledge, Quality of data, 5Vs of Big Data, Big Data Collection and Ethics, Data sources and collection methods, Data privacy, security, and ethical considerations. (7+2)
- 2. Analytical decision-making:** Analytical decision-making process, characteristics of the analytical decision-making process. Breaking down a business problem into key questions that can be answered through analytics, Characteristics of good questions, Skills of a good business analyst, The Basic Tools of Business Analytics - Data exploration and visualization (using tools like Excel, Tableau, or Power BI), Concept of Statistical analysis and hypothesis testing (Hypothesis testing numerical / tests not expected) Data Visualization: Concept of Data Visualization, Popular Data Visualization tools, Exploratory Data Analysis(EDA), Data Cleaning, Data Inspection. (7+2)
- 3. Business Analytics in Marketing and Finance:** Marketing Analytics, Customer segmentation, targeting, and positioning, Campaign management and ROI measurement, Data-driven marketing strategies. Financial Analytics - Risk management and credit scoring, Financial forecasting and planning, Case studies: Financial performance improvement through analytics (Non-Statistical - Conceptual Treatment only). (7+2)
- 4. Business Analytics in HR and Operations:** HR Analytics, Workforce planning and talent management, Employee engagement and performance measurement, Case studies: Enhancing HR practices with analytics. Operations Analytics - Process optimization and efficiency improvement, Supply chain analytics and logistics management, Case studies: Operational excellence through analytics Non-Statistical - Conceptual Treatment only). (7+2)
- 5. Business Analytics in Health Care and Agri Business:** Health Care Analytics - Patient care optimization and resource management, Predictive analytics for health outcomes, Case studies: Improving health care delivery with analytics. Agri Business Management Analytics - Crop yield prediction and supply chain management, Market analysis and risk management in agriculture, Case studies: Enhancing agricultural productivity with analytics Non-Statistical - Conceptual Treatment only). (7+2)

Suggested Text Books:

1. Davenport, T. H., & Harris, J. G. (2007). "Competing on analytics: The new science of winning". Harvard Business School Press.
2. Provost, F., & Fawcett, T. (2013). "Data science for business: What you need to know about data mining and data-analytic thinking". O'Reilly Media.
3. Sharda, R., Delen, D., & Turban, E. (2019). "Business intelligence, analytics, and data science: A managerial perspective" (4th ed.). Pearson.
4. Hastie, T., Tibshirani, R., & Friedman, J. (2009). "The elements of statistical learning: Data mining, inference, and prediction" (2nd ed.). Springer.

5. Knaflig, C. N. (2015). "Storytelling with data: A data visualization guide for business professionals". Wiley.
6. Pearl, J., & Mackenzie, D. (2018). "The book of why: The new science of cause and effect". Basic Books.
7. Lewis, M. (2016). "Marketing data science: Modeling techniques in predictive analytics with R and Python". Pearson FT Press.
8. Siegel, E. (2016). "Predictive analytics: The power to predict who will click, buy, lie, or die". Wiley.
9. Winston, W. L. (2014). "Marketing analytics: Data-driven techniques with Microsoft Excel". Wiley.
10. Narayanan, A., & Bhattacharya, A. (2023). "Big data in finance: Data analytics in financial services and banking". Wiley.
11. Fitz-enz, J. (2010). "The new HR analytics: Predicting the economic value of your company's human capital investments". AMACOM.
12. Raghupathi, W., & Raghupathi, V. (2014). "Big data analytics in healthcare: Promise and potential". Health Information Science and Systems, 2(1), 1-10.
13. Simchi-Levi, D., Kaminsky, P., & Simchi-Levi, E. (2007). "Designing and managing the supply chain: Concepts, strategies, and case studies" (3rd ed.). McGraw-Hill/Irwin.

Semester I	106	GC 06 – Decision Science
3 Credits	LTP: 2:1:1	Compulsory Generic Core Course

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 106.1	REMEMBERING	DESCRIBE the concepts and models associated with Decision Science.
CO 106.2	UNDERSTANDING	UNDERSTAND the different decision-making tools required to achieve optimization in business processes.
CO 106.3	APPLYING	APPLY appropriate decision-making approach and tools to be used in business environment.
CO 106.4	ANALYSING	ANALYSE real life situation with constraints and examine the problems using different decision-making tools
CO 106.5	EVALUATING	EVALUATE the various facets of a business problem and develop problem solving ability
CO 106.6	CREATING	DISCUSS & propose the various applications of decision tools in the present business scenario.

1. **Introduction:** Importance of Decision Sciences & role of quantitative techniques in decision making. **Linear Programming:** Concept, Formulation & Graphical Solution. Applications related to management functional areas, Formulation of L.P. Problems, Graphical Solutions (Special cases: Multiple optimal solution, infeasibility, unbounded solution). (7+2)
2. **Transportation Problems:** Concept, formulation, Basic initial solution using North West Corner rule, Least Cost method & Vogel's Approximation Method (VAM), Optimal solution using Modified Distribution Method (Special cases: balanced, unbalanced, restriction, prohibited routes and maximization). Concept of degeneracy. (7+2)
3. **Assignment Problems:** Concept, Flood's Technique/ Hungarian method, (Special cases: multiple solutions, maximization case, unbalanced case, restrictions on assignment) (7+2)
4. **Decision Theory:** Concept, Decision making under uncertainty (Maximin, Maximax, Minimax regret, Hurwicz & Laplace principles), Decision making under risk (EMV, EVPI) for items with and without salvage value. Game Theory: Concept, two-person Zero-Sum games, Maximin Minimax Principle, Games without Saddle point- Mixed strategy, Dominance Rule- Reduction of $m \times n$ game and solution of 2×2 . (7+2)
5. **PERT & CPM:** Concept, Drawing network diagram, identifying critical path, Network calculations- calculating EST, LST, EFT, LFT, Slack, floats. Programme evaluation and review technique (PERT). (7+2)

Note:

1. In each unit caselet related to management situation in various functional domains shall be discussed by the subject teacher.
2. Numerical based on functional areas of business are expected on each unit

Suggested Text Books:

1. Quantitative Techniques in Management by N.D. Vohra Tata, McGraw Hill Publications (latest Edition)
2. Operations Research by Hamdy A. Taha, Pearson Publication (latest edition)
3. Operations research by Hira Gupta, S. Chand Publication (latest Edition)
4. Operations Research Theory & Applications by J K Sharma- MacMillan Publishers India Ltd. (latest Edition)
5. Statistical Methods by S.C. Gupta S. Chand Publication (latest edition)
6. Comprehensive Statistical Methods by P.N. Arora, Sumeet Arora, S. Arora S. Chand Publication

Suggested Reference Books:

1. Quantitative techniques & statistics By K L Sehgal Himalaya Publications (latest edition)
2. An introduction to management science: Quantitative approach for decision making- Cengage Learning- Anderson (latest edition)
3. Introduction to Operations Research by Billie E. Gilett, TMGH (latest edition)
4. Operations Research by Nita Shah, Ravi Gor, Hardik Soni, PHI (latest Edition).
5. Operations Research by R. Pannarselvam, Prentice Hall India

Semester I	107	GC 07 – Management Fundamentals
2 Credits	LTP: 1:1:1	Compulsory Generic Core Course

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 107.1	REMEMBERING	ENUMERATE various managerial competencies and approaches to management.
CO 107.2	UNDERSTANDING	EXPLAIN the role and need of Planning, Organizing, Decision Making and Controlling.
CO 107.3	APPLYING	MAKE USE OF the principles of goal setting and planning for simple as well as complex tasks and small projects.
CO 107.4	ANALYSING	COMPARE and CONTRAST various organizational structures of variety of business and not-for-profit entities in a real-world context.
CO 107.5	EVALUATING	BUILD a list of the decision-making criteria used by practicing managers, leaders and entrepreneurs in routine and non-routine decision-making situations and EVALUATE and EXPLAIN the same.
CO 107.6	CREATING	FORMULATE and DISCUSS a basic controlling model in a real life business, start-up and not-for-profit organizational context.

1. **Basic Concepts:** Manager, Managing, Workplace, Organization, Management Functions, Mintzberg's Managerial Roles, The Universality of Management, Approaches to Management - Early Management, Classical Approach, Behavioral Approach, Quantitative Approach, Contemporary Approaches. Managerial Competencies: Communication, team work, planning and administrative, strategic and global competencies; Managerial Skills; How Is the Manager's Job Changing? Importance of Customers to the Manager's Job, Importance of Innovation to the Manager's Job, Importance of Sustainability to the Manager's Job. **(6)**
2. **Planning:** Concept, need, nature, Management By Objectives (MBO) - Process of MBO - Benefits of MBO, Planning and Performance, Goals and Plans, Types of Goals, Types of Plans, Setting Goals and Developing Plans, Approaches to Setting Goals, Developing Plans, Approaches to Planning, Planning Effectively in Dynamic Environments. **(6)**
3. **Organizing:** Organization, Organizing, Organizational Structures, Principles of Work Specialization, Departmentalization, Chain of Command, Span of Control, Centralization and Decentralization, Formalization. Mechanistic and Organic Structures, Factors Affecting Structural Choice - Strategy, Size, Technology, Environmental Uncertainty. Traditional Organizational Designs - Simple Structure, Functional Structure, Divisional Structure, Matrix Structure, Team Structures, Project Structure, Adaptive Organizations – Boundary

less Organization, Virtual Organizations, Learning Organization, Flexi Work, Tele-working, Global Organizations. (6)

4. **Decision Making:** The Decision-Making Process - Identifying a Problem - Identifying Decision Criteria - Allocating Weights to the Criteria - Developing Alternatives - Analyzing Alternatives - Selecting an Alternative - Implementing the Alternative - Evaluating Decision Effectiveness. Making Decisions: Rationality, Bounded Rationality, The Role of Intuition, The Role of Evidence-Based Management. Types of Decisions & Decision-Making Conditions. Decision-Making approaches - Quantitative approach, Environmental Approach, System Approach, Ethical Approach, Intuitive Approach, Case Study Approach Decision-Making Styles - Linear–Nonlinear Thinking Style Profile, Decision-Making Biases and Errors. Effective Decision Making in Today's World - Correctness of decision, Decision environment, Timing of decision, Effective communication of Decision, Participation in decision Making-Implementation of decision. (7)
5. **Controlling:** Controlling, Definition, need and Importance, The Control Process, Managerial Decisions in Controlling, Feed-forward / Concurrent / Feedback Controls. Financial Controls, Information Controls, Benchmarking of Best Practices. (5)

Suggested Text Books:

1. Fundamentals of Management by Robbins, S.P. and Decenzo, D.A., Pearson Education Asia, New Delhi.
2. Management, Koontz and Wechrich, TMGH
3. Management, Stoner, et. al., Prentice Hall of India, New Delhi.

Suggested Reference Books:

1. Management, Hellregel, Thomson Learning, Bombay
2. Management, Robbins & Coulter, Prentice Hall of Hall of India, New Delhi.
3. Management - Text & Cases, Satya Raju, PHI, New Delhi.
4. Management, Richard L. Draft, Thomson South-Western

Semester I	108	GC 08 – Indian Knowledge Systems
2 Credits	LTP: 2:0:0	Compulsory Generic Core Course

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 108.1	REMEMBERING	RECALL key teachings and themes from the Bhagavad Gita, and identify significant events and principles from the life of Shivaji Maharaj.
CO 108.2	UNDERSTANDING	EXPLAIN the role of values, ethics, and spirituality in leadership and organizational culture as taught in the Bhagavad Gita, and summarize Shivaji Maharaj's leadership qualities.
CO 108.3	APPLYING	APPLY principles of self-awareness, self-management, and emotional intelligence from the Bhagavad Gita to real-world leadership scenarios.
CO 108.4	ANALYSING	COMPARE and contrast Indian Knowledge Systems (IKS) with Western Management Theories (WMT), particularly in terms of leadership styles, decision-making frameworks, and ethical considerations. Life lessons by great preachers.
CO 108.5	EVALUATING	EVALUATE the effectiveness of Jugaad innovations in various sectors and assess the impact of family and community roles in Indian business practices
CO 108.6	CREATING	DESIGN strategic leadership plans that integrate the principles of the Bhagavad Gita and Shivaji Maharaj's governance strategies to address contemporary organizational challenges

1. **Leadership and Organizational Behavior from Bhagavad Gita:** Overview of the Bhagavad Gita, Historical and cultural context, Key themes and teachings, Role of values, ethics and spirituality in leadership and organizational culture, Motivation, Self-awareness and self-management principles, Developing resilience and emotional intelligence, Inspiring and motivating teams, Team dynamics and conflict resolution in Indian traditions,

- Gita-based decision-making frameworks, Conflict resolution strategies, Servant leadership principles, Building high-performance teams, Ethical dilemmas and decision-making, Reflection and personal growth exercises **(5+1)**
2. **Insights and Lessons from the life of Shivaji Maharaj:** Overview of Shivaji Maharaj's life, historical context, Dharma, Raj Dharma, and Artha, Leadership qualities of Shivaji Maharaj - Leadership in adversity, Leadership styles and effectiveness in different contexts, Shivaji Maharaj's strategic vision and planning, Innovative strategies in warfare and governance, Principles of governance in Shivaji's kingdom, Administration structures and decision-making processes, Efficient and ethical governance, Shivaji Maharaj as an entrepreneur and nation-builder, Economic policies and trade strategies, Cultural values in Shivaji's leadership, Balancing tradition with modernity in leadership, Relevance of Shivaji Maharaj's leadership in contemporary management and leadership. **(5+1)**
 3. **Comparative Analysis of Indian Knowledge Systems and Western Management Theories:** Overview of IKS: Vedas, Upanishads, Darshanas, Overview of Western management theories (WMT), Philosophical foundations and cultural contexts; Individualism (IKS) vs. Collectivism (WMT), Hierarchical structures (IKS) vs. egalitarianism (WMT), Holistic decision-making (IKS) vs. analytical approaches (WMT), Intuition and gut feelings (IKS) vs. data-driven decision-making (WMT), Work-life balance: Concepts of Karma and Dharma vs. Western work ethic, IKS emphasis on sustainability vs. Western focus on short-term gains, Strategic alignment with societal goals: IKS principles vs. shareholder value maximization in the West, Synergies and integration of IKS and Western management practices. Life lessons by preachers- Gautam Buddha, Mahavir Jain, Sant Kabir **(5+1)**
 4. **Indigenous Management Practices and Frameworks – Jugaad:** Jugaad - Definition and Principles, Key principles of frugal innovation, Historical context and cultural significance in India; The Jugaad Mindset, Characteristics of a Jugaad innovator, Comparison with conventional innovation models, Importance of resourcefulness and creativity, Case Studies of Jugaad Innovation, Analysis of successful Jugaad innovations in India, impact on communities and industries, Sector-Specific Case Studies – Healthcare, Agriculture, Automobiles, Education, etc., Scaling Jugaad Innovations, Sustaining Jugaad Innovations, Frugal innovation in other countries, Emerging trends and technologies in frugal innovation. **(5+1)**
 5. **Indigenous Management Practices and Frameworks - The role of family and community in Indian business:** Historical context of family and community roles in Indian business, Joint family systems, Community Networks, Characteristics of family-owned businesses, Leadership styles, Cooperative movements in India, Social enterprises and their impact on local communities, Role of community support in business sustainability, Cultural values and their influence on business ethics, Role of traditional values in contemporary business practices, Ethical decision-making influenced by family and community, Corporate Social Responsibility in the Indian context, Community engagement strategies, Challenges faced by family and community businesses, Succession planning, leadership transition, Conflict resolution, Opportunities for growth and innovation, Adapting traditional practices to modern business environments, Emerging trends and their impact on family and community roles, Technology and globalization's influence on traditional practices. **(5+1)**

Suggested Text Books:

1. "The Bhagavad Gita: A New Translation" by Stephen Mitchell
2. "The Essence of the Bhagavad Gita: Explained by Paramhansa Yogananda" by Swami Kriyananda
3. "The Bhagavad Gita: A New Commentary" by Swami Sivananda
4. "Bhagavad Gita: A New Translation" by Swami Satchidananda
5. "The Bhagavad Gita for Executives" by Swami Parthasarathy
6. "Bhagavad Gita: A New Interpretation for Modern Times" by Stephen Cope
7. "Shivaji: The Great Maratha" by Ranjit Desai
8. "Shivaji and His Times" by Jadunath Sarkar
9. "The Life and Times of Shivaji Maharaj" by Kalpana Roy
10. "Chhatrapati Shivaji Maharaj" by A.K. Priolkar
11. "Leadership Lessons from the Life of Shivaji Maharaj" by Shubhada Joshi
12. "Management Insights from Indian Spirituality" by A.V. Narasimha Murthy
13. "Western and Indian Management: Exploring Synergies" by Vipin Gupta
14. "Ancient Indian Wisdom for Self-Development" by Pradip N. Khandwalla
15. "Indian Ethos and Values in Management" by Sankar
16. "East Meets West: Asian Management Approaches" by Kimio Kase
17. "Comparative Management: A Cultural Perspective" by Malcolm Warner
18. "Jugaad Innovation: Think Frugal, Be Flexible, Generate Breakthrough Growth" by Navi Radjou, Jaideep Prabhu, and Simone Ahuja
19. "Frugal Innovation: How to Do More with Less" by Navi Radjou and Jaideep Prabhu

20. "Reverse Innovation in Healthcare: How to Make Value-Based Delivery Work" by Vijay Govindarajan and Ravi Ramamurti
21. "The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail" by Clayton Christensen
22. "Frugal Innovation: How to Do More with Less" by Navi Radjou and Jaideep Prabhu
23. "Jugaad: A New Growth Formula for Corporate India" by Sangeeta Talwar
24. "Family Business in India" by R.G. Verma
25. "Business Maharajas" by Gita Piramal
26. "The Indian Family Business Mantra" by D.N. Ghosh
27. "The Spirit of Indian Business" by Elst W. Koenraad
28. "Family Business in India: A Historical and Socio-cultural Perspective" by Dev Nathan
29. "The Indian Family Business" by Frank K. Gunderson and Bruce R. Kunkel
30. "The Tata Group: From Torchbearers to Trailblazers" by Shashank Shah
31. "The Z Factor: My Journey as the Wrong Man at the Right Time" by Subhash Chandra
32. "Dabbawalas: Lessons for Building Lasting Success Based on Values" by Shrinivas Pandit

Indicative Case Studies

1. Amul: The Cooperative Movement - Focus: Cooperative model, rural empowerment, supply chain management.
2. The Dabbawalas of Mumbai - Focus: Operational excellence, Six Sigma, traditional logistics systems, Supply chain efficiency, customer satisfaction.
3. Fabindia: Crafting Success- Focus: Handicrafts, sustainable sourcing, social entrepreneurship.
4. Tata Group: Pioneering Corporate Social Responsibility- Focus: CSR practices, ethical business, community development.
5. Jaipur Foot: Affordable Prosthetics - Focus: Social innovation, frugal engineering, inclusive growth.
6. Patanjali: Revolutionizing FMCG - Focus: Ayurvedic products, brand positioning, market disruption.
7. SEWA (Self-Employed Women's Association): Empowering Women - Focus: Women empowerment, microfinance, cooperative movement.
8. ITC's e-Choupal: Digitizing Rural India - Focus: E-commerce, rural development, supply chain integration.
9. Lijjat Papad: Women's Cooperative - Focus: Women entrepreneurship, cooperative model, business sustainability.
10. Haldiram's: Traditional Snacks, Modern Business - Focus: Brand evolution, quality management, market expansion.
11. Reliance Jio: Disrupting Telecom - Focus: Market disruption, technology adoption, customer acquisition.
12. Tata Nano: The World's Cheapest Car - Focus: Frugal innovation, product development, market challenges.
13. Biocon: Building a Global Biotech Company - Focus: Research and development, strategic alliances, global expansion.
14. Shahnaz Husain: Globalizing Ayurveda - Focus: Brand building, international marketing, traditional knowledge.
15. Cafe Coffee Day: Creating a Coffee Culture - Focus: Brand positioning, customer experience, market expansion.
16. Mahindra & Mahindra: Driving Innovation - Focus: Product diversification, innovation strategies, global expansion.
17. Godrej: From Locks to Consumer Goods - Focus: Diversification, brand evolution, sustainability practices.
18. Infosys: Leadership and Growth - Focus: Corporate governance, employee empowerment, innovation.
19. Tata Steel: Global Expansion and CSR - Focus: Globalization, corporate social responsibility, sustainable practices.
20. Zomato: Revolutionizing Food Delivery in India - Focus: Technology integration, customer engagement, market expansion.

Semester I	109	GE 01 – Business Communication -I
2 Credits	LTP: 0:2:2	Generic Elective

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 109.1	REMEMBERING	RECOGNIZE the various elements of communication, channels of communication and barriers to effective communication.
CO 109.2	UNDERSTANDING	EXPRESS themselves effectively in routine and special real world business interactions.
CO 109.3	APPLYING	DEMONSTRATE appropriate use of body language.
CO 109.4	ANALYSING	TAKE PART IN professional meetings, group discussions, telephonic calls, elementary interviews and public speaking activities.
CO 109.5	EVALUATING	APPRAISE the pros and cons of sample recorded verbal communications in a business context.
CO 109.6	CREATING	CREATE and DELIVER effective business presentations, using appropriate technology tools, for common business situations.

1. **Basics of Communication:** Communication elements and process, Need of Communication Skills for Managers, Channels, forms and dimensions of communication, Verbal and non-verbal communication, Principles of nonverbal communication - through clothes and body language, Persuasive communication: the process of persuasion, formal and informal persuasion, Barriers to communication and how to overcome the barriers, Principles of effective communication. (5)
2. **Speaking:** Characteristics of effective speech, voice quality, rate of speaking, clear articulation, eye contact, use of expressions, and gestures and posture; Types of managerial speeches: speech of introduction, speech of vote of thanks, occasional speech, theme speech, formal speeches during meetings. (5)
3. **Soft skills:** How communication skills and soft skills are inter-related, Body language-posture, eye-contact, handling hand movements, gait - Voice and tone, Meeting and Boardroom Protocol - Guidelines for planning a meeting, Before the meeting, On the day of the Meeting, Guidelines for Attending the meeting, For the Chairperson, For attendees, For Presenters, Telephone Etiquette, Cell phone etiquette, Telephone etiquette guidelines, Mastering the telephone courtesy, Active listening, Putting callers on hold, Transferring a call, Screening calls, Taking a message, Voice Mail, Closing the call, When Making calls, Closing the call, Handling rude or impatient clients, Cross-cultural communication, cultural sensitivity, Cross-cultural issues which affect Communication across different Cultures, Culture and non-verbal communication, Effective intercultural communication, Business and social etiquette. (7)
4. **Presentation skills:** Principles of Effective Presentations, Planning, Structure and Delivery, Principles governing the use of audiovisual media, Time management - Slide design and transition: representation of textual information into visuals for effectiveness of communication - Style and persuasiveness of the message - Adherence to the number of slides, Dynamics of group presentation and individual presentation. (5)
5. **Interviews:** Essentials of placement interviews, web /video conferencing, tele-meeting. Impression Formation, Tactics, The Self-presentational Motive, The Compass Qualities; First and Lasting Impressions; Magic Pills; Toxic Traits; The Social Context: Norms and Roles, The Target's Values, Physical Appearance; Communication Style; Content of Communication; Actions; The Environment; Success; Changing from the Outside-in, Current Social Image, The Private Self, Worrying about Impressions. (5)

Note:

1. The entire course should be delivered with a skills development focus.
2. Video recordings of student's performances (speaking tasks) should be carried out and used for intensive reviews for performance improvement.

Suggested Text Books:

1. Business Communication Today, Bovee C L et. al., Pearson Education
2. Business Communication, P.D. Chaturvedi, Pearson Education
3. Business Communication, T N Chhabra, Bhanu Ranjan, Sun India
4. Verbal and Non-Verbal Reasoning, Prakash, P, Macmillan India Ltd., New Delhi
5. Objective English, Thorpe, E, and Thorpe, S, Pearson Education, New Delhi

Suggested Reference Books:

1. Communication Skills for Effective Management, Hargie et. al., Palgrave
2. Communication for Business, Tayler Shinley, Pearson Education

3. Technical Communication, Anderson, P.V, Thomson Wadsworth, New Delhi
4. The Oxford Guide to Writing and Speaking, John Seely, Oxford University Press, New Delhi
5. Dictionary of Common Errors, Turton, N.D and Heaton, J.B, Addison Wesley Longman Ltd.

Semester I	110	GE 02 – Technology Tools in Business Management-I
2 Credits	LTP: 0:0:4	Generic Elective

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 110.1	REMEMBERING	Recall the basic functions and features of MS Word, MS PowerPoint, and MS Excel.
CO 110.2	UNDERSTANDING	Explain the purpose and use of different tools and functions in MS Word, MS PowerPoint, and MS Excel.
CO 110.3	APPLYING	Utilize the basic features of these tools to create business documents, presentations, and spreadsheets.
CO 110.4	ANALYSING	Examine the interrelationships between different tools and their applications in business scenarios
CO 110.5	EVALUATING	Assess the effectiveness of various formatting and data management techniques in real-world tasks.
CO 110.6	CREATING	Develop comprehensive business reports, presentations, and data analysis projects using the integrated features of MS Word, MS PowerPoint, and MS Excel.

1. **MS-Word & MS PowerPoint: MS Word:** Interface and navigation, creating and saving documents, formatting text and paragraphs, page layout and sections, headers, footers, and page numbering, border, watermark, adding fonts, line spacing, page break, table splits, references, use of AI, spell checks, mail merge, track changes and comments, creating tables and charts.
MS PowerPoint: Interface and navigation, creating and saving presentations, slide design and layout, adding text, images, and videos, using SmartArt and charts, designing custom animations and transitions, presenter view and notes, creating interactive presentations, exporting and sharing presentations, converting PPT into JPEG/PDF, slide master, free templates, corporate presentations.
2. **Basics of Excel (Part 1):** Introduction to spreadsheets, understanding Microsoft Excel, Excel workbook windows, basic spreadsheet skills, Excel help system, opening and closing workbooks, understanding workbook file formats, creating new workbooks, selecting cells, auto sum and auto fill function, cell referencing and request, formatting cells, formatting numbers, placing cell alignment, cell, rows, and columns, understanding worksheets, editing, copying, and moving cells, page layouts in Excel, proofing workbooks, basic options, ribbons, and toolbar.
3. **Basics of Excel (Part 2):** Defining names in Excel, sorting data, using Excel tables, filtering data in Excel, understanding charts, chart design options and tools, chart format tools, combo charts, functions within Excel, understanding date function, information functions, logical functions, find and replace, headers and footers, adding comments, conditional formatting.
4. **Customer Relationship Management (CRM) and Communication Tools: Salesforce:** Introduction to Salesforce CRM, managing customer relationships, sales tracking, automation of sales processes, customer service, creating dashboards, generating reports, using Salesforce Trailhead for hands-on practice. **HubSpot:** Overview of HubSpot CRM, inbound marketing strategies, managing contacts and deals, email marketing, sales automation, analytics and reporting, utilizing HubSpot Academy for practical knowledge. **Slack:** Understanding Slack interface, creating channels, managing teams, integrating apps and services, communication best practices, using Slack for project collaboration, exploring Slack resources. **Microsoft Teams:** Navigating Microsoft Teams, creating teams and channels, managing conversations and meetings, file sharing and collaboration, integrating Office 365 applications, using Microsoft Teams for remote work.
5. **Artificial Intelligence, Project Management and Marketing Tools**
AI Tools: Introduction to AI and Chat GPT, Applications in Business, Saving work time through AI Tools, setting up and using Chat GPT, Paid Chat GPT Features, How to input the information for better results, integrating Chat GPT with business processes, introduction to machine learning tools, natural language processing applications, AI-driven business insights, ethical considerations

Asana: Project and task management fundamentals, creating and managing projects, assigning tasks, setting deadlines, tracking progress, using Asana boards and timelines, collaboration features, Asana Academy resources.
Trello: Visual project management with Trello, creating boards, lists, and cards, managing workflows, collaboration and team management, integrating power-ups and automation, using Trello for personal and professional projects.

Hootsuite: Social media management basics, connecting social media accounts, scheduling and publishing posts, monitoring social media engagement, analyzing performance metrics, using Hootsuite for social media campaigns, Hootsuite Academy resources.

Suggested Book References

1. "Microsoft Office 365 For Dummies" by Wallace Wang
2. "MOS Study Guide for Microsoft Word Exam MO-100" by Joan Lambert
3. "MOS Study Guide for Microsoft PowerPoint Exam MO-300" by Joan Lambert
4. "Excel 2019 Bible" by Michael Alexander, Richard Kusleika, and John Walkenbach
5. "Microsoft Excel 2019 Step by Step" by Curtis Frye

Online Free Courses

1. **Microsoft Office Training Center:** Free training resources for Microsoft Word, PowerPoint, and Excel.
<https://support.microsoft.com/en-us/training>
2. **GCF Global - Microsoft Office Tutorials:** Free tutorials for Word, PowerPoint, and Excel.
<https://edu.gcfglobal.org/en/subjects/office/>
3. Coursera - AI For Everyone by Andrew Ng: Free trial and financial aid options available.
<https://www.coursera.org/learn/ai-for-everyone>
4. DeepLearning.AI - Introduction to TensorFlow for Artificial Intelligence, Machine Learning, and Deep Learning: Free trial and financial aid options available.
<https://www.coursera.org/learn/introduction-tensorflow>

Semester I	111	GE 03 - Environmental, Social, and Governance (ESG)
2 Credits	LTP: 2:0:0	Generic Elective

Course Outcomes: Upon successful completion of the course, learners will be able to:

CO#	Cognitive Abilities	Course Outcomes
CO 111.1	Remembering	Identify key concepts and terminology related to Environmental, Social, and Governance (ESG) principles.
CO 111.2	Understanding	Explain the importance and impact of ESG factors on business and society.
CO 111.3	Applying	Apply ESG criteria in assessing business practices and strategies.
CO 111.4	Analyzing	Analyze the role of ESG in risk management and value creation.
CO 111.5	Evaluating	Evaluate the effectiveness of ESG practices in different industries.
CO 111.6	Creating	Develop strategies to improve ESG performance in organizations.

1. **Introduction to ESG:** Definition and scope of ESG, Historical development of ESG principles, Importance of ESG in modern business, Key stakeholders and their roles in ESG, Overview of global ESG standards and frameworks (e.g., UN SDGs, GRI, SASB), Case studies on the impact of ESG on business performance. (6)
2. **Environmental Sustainability:** Environmental issues and challenges, Corporate environmental responsibility, Strategies for reducing environmental impact, Environmental risk management, Sustainability reporting and metrics, Case studies on successful environmental sustainability initiatives. (6)
3. **Social Responsibility:** Definition and scope of social responsibility, Corporate social responsibility (CSR) practices, Human rights and labor standards, Diversity, equity, and inclusion (DEI) in the workplace, Community engagement and philanthropy, Case studies on effective social responsibility programs (6)
4. **Governance and Ethical Practices:** Principles of good corporate governance, Board structure and responsibilities, Executive compensation and incentives, Transparency and accountability, Ethical decision-making in business, Case studies on governance failures and successes (6)
5. **ESG Integration and Reporting:** Integrating ESG into business strategy, ESG risk assessment and management, ESG performance measurement and reporting, Role of technology in ESG data management, Investor perspectives on ESG, Case studies on comprehensive ESG integration (6)

Suggested Book References:

1. "Sustainable Investing: Revolutions in Theory and Practice" by Cary Krosinsky and Nick Robins
2. "Principles for Responsible Investment: An ESG Framework for Decision Making" by Gero Jung
3. "Corporate Governance and Ethics: An Aristotelian Perspective" by Alejo G. Sison
4. "The Sustainable MBA: A Business Guide to Sustainability" by Giselle Weybrecht
5. "Environmental, Social, and Governance (ESG) Investing: A Balanced Analysis of the Theory and Practice of a Sustainable Portfolio" by John Hill

Online Free Courses and Resources:

1. Coursera - "Introduction to ESG: Environmental, Social and Governance"
Link: <https://www.coursera.org/learn/esg-investing>
2. edX - "Sustainable Development: The Post-Capitalist Order"
Link: <https://www.edx.org/course/sustainable-development-the-post-capitalist-order>
3. FutureLearn - "Sustainable Business: Big Issues, Big Changes"
Link: <https://www.futurelearn.com/courses/sustainable-business>
4. UNPRI - Principles for Responsible Investment Academy
Link: <https://www.unpri.org/pri-academy>
5. GRI - Global Reporting Initiative Training and Resources
Link: <https://www.globalreporting.org/standards/training-and-resources/>

Semester I	112	GE 04 – Demand Analysis And Forecasting
2 Credits	LTP: 2:0:0	Generic Elective

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 112.1	REMEMBERING	DESCRIBE the key terms associated with demand analysis, demand estimation and demand forecasting.
CO 112.2	UNDERSTANDING	SUMMARIZE the use of demand forecasting in various functions of management.
CO 112.3	APPLYING	IDENTIFY the pros and cons of various forecasting methods
CO 112.4	ANALYSING	DECONSTRUCT a forecast into its various components
CO 112.5	EVALUATING	BUILD a forecast for common products and services using time-series data.

1. **Demand Analysis:** An Overview, Significance of Demand Analysis and Forecasting, How Predictable Is the Future? Some Causes of Forecast Error, Myths versus Reality of Forecasting, Data Collection, Storage, and Processing Reality, Art-of-Forecasting, Reality of Judgmental Overrides, Reality of Unconstrained Forecasts, Constrained Forecasts, and Plans, Accuracy of Forecast, Short Run Forecast, Long Term Forecast. Applications of Forecasting – Forecasting economic trends, Sales Forecasts, Staffing forecasts, budgeting, revenue and tax planning, cash flows forecasting, raw material planning, inventory planning, etc. **(5+1)**
2. **Estimation of Demand** - Marketing Research Techniques - Consumer Surveys, Consumer Clinics and Focus Groups, Market Experiments in Test Stores. Statistical Estimation, Variable Identification, Time Series and Cross-Sectional Data Collection, Specification of the Model, Estimation of the Parameters, Interpretation of Regression Statistics. **(5+1)**
3. **Forecasting Demand:** Overview of Forecasting Methods, Selecting a Forecasting Technique, Purpose of Forecast, Type of Users, Patterns in the Data Series, Lead Time, Minimum Data Requirement, Desired Accuracy, Cost of forecasting, Qualitative Forecasting Techniques - Survey and Opinion Polling Techniques, Delphi Method, Cross Impact Analysis, Historical Analogy. **(5+1)**
4. **Quantitative Forecasting Methods Using Time Series Data:** Time Series Analysis - Trend Analysis, Cyclical Variations, Seasonal Effects, Random Fluctuations, Smoothing Techniques, Moving Averages, Exponential Smoothing, Single Exponential Smoothing, Holt's Two-Parameter Method, Holt's-Winters' Method, Winters' Additive Seasonality Standard Statistical Error Terms, Specific Measures of Forecast Error, Out-of-Sample Measurement, Forecast Value Added. Barometric Techniques - Leading, Lagging and Coincident Economic

Indicators, Diffusion and Composite Indexes, Choose the Appropriate Forecasting Method Use of Software Packages for Forecasting such as EXCEL. (5+1)

5. **New Product Forecasting:** Using Structured Judgment, Differences between Evolutionary and Revolutionary New Products, General Feeling about New Product Forecasting, New Product Forecasting Overview, What Is a Candidate Product? New Product Forecasting Process, Structured Judgment Analysis, Structured Process Steps, Statistical Filter Step, Model Step, Forecast Step. (5+1)

Suggested Text Books:

1. Demand-Driven Forecasting: A Structured Approach to Forecasting, Charles W. Chase
2. Demand Forecasting for Managers, Stephan Kolassa
3. Forecasting: Principles and Practice, George Athanasopoulos and Rob J. Hyndman

Suggested Reference Books:

1. Fundamentals of Demand Planning and Forecasting - Forecasting & Planning, Chaman L. Jain and Jack Malheron

Semester I	113	GE 05- Geopolitics & World Economic Systems
2 Credits	LTP: 2:0:0	Generic Elective

Course Outcomes: At the end of this course, the learner shall be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 113.1	REMEMBERING	ENUMERATE the various elements of global economic system.
CO 113.2	UNDERSTANDING	EXPLAIN the role of key trade organizations in the global economic system.
CO 113.3	APPLYING	IDENTIFY the crucial elements of international trade laws.
CO 113.4	ANALYSING	ANALYSE the forces that work for and against globalization.
CO 113.5	EVALUATING	ASSESS the impact of the elements of the Global Economic System on the India Economy.

1. **Introduction to Global Economic & political Systems:** Meaning of Global Economy and its History Structure and Components of Global Economy, Theory of Hegemonic Stability, Differences among National Economies, Market Oriented Capitalism, Developmental Capitalism, Social Market Capitalism, Comparative Analysis, Effects of Globalization on Indian Economy. (6)
2. **The Trading System:** Debate over Free Trade – Functions of GATT and WTO, The Uruguay Round and World Trade Organization, Trade Blocs – EU, OECD, OPEC, SAARC, ASEAN, NAFTA, Threats to Open Trading System, Developments in International Trade Theory, Bi-lateral, Multilateral Trade Agreements, Impact of Trade wars in liberalized economy. (6)
3. **International Trade Laws:** International Contracts of Sale of Goods Transactions, International Trade Insurance, Patents, Trademarks, Copyright and Neighboring Rights. Intellectual property Rights, Dispute settlement Procedures under GATT & WTO, Payment systems in International Trade, International Labour Organization and International Labour Laws. (6)
4. **International Monetary System:** The International Financial System - Reform of International Monetary Affairs - The Bretton Wood System and the International Monetary Fund, Controversy over Regulation of International Finance, Developing Countries' Concerns, Exchange Rate Policy of Developing Economies. (6)
5. **Contemporary issues and Challenges in Global Economic Environment - Indian perspective:** Globalization and its Advocacy, Globalization and its Impact on India, Fair Globalization and the Need for Policy Framework, Globalization in Reverse Gear-The Threatened Re-emergence of Protectionism. Euro zone Crisis and its impact on India, Issues in Brexit, World recession, inflationary trends, impact of fluctuating prices of crude oil, gold etc. (6)

Suggested Text Books:

1. Global Political Economy, Robert Gilpin, Princeton University Press
2. International Trade Law An Interdisciplinary, Raj Bhala, Non-Western Textbook
3. International Trade Law, Indira Carr and Peter Stone

4. Development and Sustainability: India in a Global Perspective edited by Sarmila Banerjee, Anjan Chakrabarty

Suggested Reference Books:

1. International Economics, Paul Krugman, Maurice Obstfeld and Marc Melitz, Pearson, Global Edition
2. Globalizing Capital, A history of the International Monetary system, Barry Eichengreen, Princeton University Press.

Semester I	114	GE 06 – Contemporary Frameworks in Management
2 Credits	LTP: 1:1:1	Generic Elective

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 114.1	REMEMBERING	DEFINE Emotional Intelligence (EQ), IDENTIFY the benefits of emotional intelligence and RELATE the 5 Dimensions of Trait EI Model to the practice of emotional intelligence.
CO 114.2	UNDERSTANDING	DESCRIBE how companies achieve transition from being good companies to great companies, and DISCUSS why and how most companies fail to make the transition.
CO 114.3	APPLYING	APPLY the 21 laws that make leadership work successfully to improve your leadership ability and ILLUSTRATE its positive impact on the whole organization.
CO 114.4	ANALYSING	EXAMINE the fundamental causes of organizational politics and team failure.
CO 114.5	EVALUATING	EXPLAIN the approach to being effective in attaining goals by aligning oneself to the "true north" principles based on a universal and timeless character ethic.

1. **Emotional Intelligence :** What is Emotional Intelligence, Benefits of EI, Understand the difference between Trait EI and Ability EI, 5 Dimensions of Trait EI Model - Self Awareness (SA), Managing Emotions (ME), Motivation (M), Empathy (E), Social Skills (SS) - Self awareness (SA) - Self Awareness, Seeing the other side, Giving in without giving up, Life Positions – you and only you can choose your mindset, Managing Emotions (ME) - Self-Regulation, Managing Emotions, The ‘EQ brain’ and how it works, The science of emotions, Understanding Emotions, Find your self-control, Using Coping Thoughts, Using Relaxation Techniques, Self-Motivation (M) – Optimism, Pessimism, The balance between optimism and pessimism, The power of re-framing, Empathy (E) – Empathy, Barriers to empathy, Developing your empathy, Social Skills (SS) - Social skills, Making an impact, Creating a powerful first impression, Assessing a situation, Being zealous without being offensive, Traits of a person with high social skills. Determine your EQ
2. **The 7 habits of highly effective people:** Paradigms and principles, Inside-out, The seven habits - an overview - Private victory Habit 1. Be proactive: principles of personal vision, Habit 2. Begin with the end in mind: principles of personal leadership, Habit 3. Put first things first: principles of personal management, Public victory. Paradigms of interdependence. Habit 4. Think win/win: principles of interpersonal leadership, Habit 5: Seek first to understand, then to be understood: principles of empathetic communication, Habit 6. Synergize: principles of creative cooperation, Renewal. Habit 7. Sharpen the sword: principles of balanced self-renewal
3. **Five dysfunctions of a team:** Absence of trust—unwilling to be vulnerable within the group, Fear of conflict—seeking artificial harmony over constructive passionate debate, Lack of commitment—feigning buy-in for group decisions creates ambiguity throughout the organization, Avoidance of accountability—ducking the responsibility to call peers on counterproductive behavior which sets low standards, Inattention to results—focusing on personal success, status and ego before team success
4. **The 21 irrefutable laws of leadership:** The law of the lid, The law of influence, The law of process, The law of navigation, The law of addition, The law of solid ground, The law of respect, The law of intuition, The law of magnetism, The law of connection, The law of the inner circle, The law of empowerment, The law of the

picture, The law of buy-in, The law of victory, The law of the big mo, The law of priorities, The law of sacrifice, The law of timing, The law of explosive growth, The law of legacy.

5. **Good to Great:** Level 5 Leadership - Leaders who are humble, but driven to do what's best for the company, First Who, Then What: Get the right people on the bus, then figure out where to go. Find the right people and try them out in different seats on the bus (different positions in the company), Confront the Brutal Facts: The Stockdale paradox, Hedgehog Concept: Three overlapping circles: What lights your fire ("passion")? What could you be best in the world at ("best at")? What makes you money ("driving resource")? Culture of Discipline: Rinsing the cottage cheese, Technology Accelerators: Using technology to accelerate growth, within the three circles of the hedgehog concept, The Flywheel: The additive effect of many small initiatives.

Suggested Reference Books:

1. Emotional Intelligence, Daniel Goleman
2. The 7 Habits of Highly Effective People: Powerful Lessons in Personal Change, Stephen R. Covey
3. The Five Dysfunctions of a Team: A Leadership Fable, Patrick M. Lencioni
4. The 21 Irrefutable Law of Leadership-John C. Maxwell
5. Good to Great, Jim Collins

Semester I	115	GE 07 – Essentials Of Psychology for Managers
2 Credits	LTP: 1:1:1	Generic Elective

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 115.1	REMEMBERING	DEFINE the basic concepts of psychology.
CO 115.2	UNDERSTANDING	EXPLAIN the sensing and perceiving processes.
CO 115.3	APPLYING	APPLY principles of learning and conditioning to human behavior.
CO 115.4	ANALYSING	ILLUSTRATE the linkages between learning, memory and information processing.
CO 115.5	EVALUATING	EXPLAIN the basic intrapersonal processes that influence social perception.

1. **Basic Concepts:** Introduction to Psychology, Definitions of Psychology, Goals of Psychology, History of Psychology, Modern Psychology, Psychology: Its Grand Issues and Key Perspectives, Psychology - Trends for the New Millennium. Biological Bases of Behavior: Neurons - Building Blocks of the Nervous System, The Nervous System - its Basic Structure and Functions, The Brain and Consciousness – states of consciousness, dreams, hallucinations, The Brain and Human Behavior, Heredity and Behavior - Genetics and Evolutionary Psychology. (6)
2. **Sensation and Perception:** Sensing and perceiving, Sensory Thresholds, Sensory Adaptation, The Senses - Hearing, Vision, Perceptual Processes, Information Processing – Bottom Up Processing, Top Down processing, Bottom Up and Top Down (together) processing, Culture, Experience & Perception, Perceptual Constancy, Perceptual Expectations, Perceptual illusions, Gestalt Theory, Perceptual Development and Learning. (6)
3. **Learning and Conditioning:** A Definition of Learning, Classical Conditioning, Instrumental Conditioning, Classical and Instrumental Conditioning Compared: Biofeedback and Reinforcement, Verbal Learning, Basic Conditioning and Learning Phenomena, Reinforcement, Schedules of reinforcement, role of reinforcement in developing subordinate Social Behavior, Transfer of Training, Learning by Observing Models, Biological Limits. (6)
4. **Memory:** Learning and Memory as Intertwined Processes, Kinds of Information Stored in Memory, Measures of Retention, The Three Components of Memory – Encoding, Storage, Retrieval, Interference Theory, Decay Theory, Information Processing I: Separate-Store Models, Information Processing II: Levels of Processing, Issues in Memory. (6)
5. **Cognition:** Thinking - Mental Imagery, Problem Solving, Decision Making. Concept Formation, Language development. Relationship between language and thinking. **Emotion:** Definition of Emotion, the Physiology of Emotion, Emotional Expression - Verbal & Non Verbal, Labelling Emotions, Theories of Emotion – Common sense theory of emotion, James Lang theory of emotion, Cannon Bard Theory of Emotion, Cognitive Arousal Theory of Emotion (6)

Suggested Text Books:

1. Psychology Ciccarelli, S. K & Meyer, G.E Pearson Education Ltd.
2. Introduction to Psychology, Clifford T. Morgan, Richard A King, John R Weisz and John Schopler, Indian Edition

Suggested Reference Books:

1. Essentials of understanding psychology, Feldman. S. R, Tata Mc Graw Hill.
2. Psychology, Baron, R.A and Misra, G. Pearson Education Ltd.

SPPU MBA 2024 NEP Syllabus

SEMESTER II							
	Sem Code	Course Code	Course	Credits	FA	SA	Marks
Mandatory	201	GC – 09	Marketing Management	3	50	50	100
Mandatory	202	GC – 10	Financial Management	3	50	50	100
Mandatory	203	GC – 11	Human Resources Management	3	50	50	100
Mandatory	204	GC – 12	Operations & Supply Chain Management	3	50	50	100
Mandatory	205	GC - 13	Legal Aspects of Business	2	0	50	50
		CORE TOTAL	5	14	200	250	450
Mandatory	206	RM - 01	Business Research Methods	2	-	50	50
Mandatory	207	RM - 02	Desk Research	2	50	0	50
Mandatory	208	RM - 03	Field Project	4	50	100	150
		RESEARCH TOTAL	3	8	100	150	250
Semester II Generic Electives - Any 2 Courses to be Opted from the respective elective list							
Elective	209	GE 08	Business Communication-II	2	50	0	50
Elective	210	GE 09	Technology Tools in Business Management -II	2	50	0	50
Elective	211	GE 10	Sustainable Development Goals				
Elective	212	GE 11	Selling & Negotiation Skills Lab				
Elective	213	GE 12	Indian Economy				
Elective	214	GE 13	International Business Environment				
Elective	215	GE 14	Business Ethics				
		ELECTIVE TOTAL	2	4	100	0	100
		SEMESTER TOTAL	10	26	400	400	800

Semester II

Semester II	201	GC 09– Marketing Management
3 Credits	LTP: 2:1:1	Compulsory Generic Core Course

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 201.1	REMEMBERING	DESCRIBE the key terms associated with the 4 Ps of marketing and Marketing Planning & Control for a real world marketing offering (commodities, goods, services, e-products/ e-services.)
CO 201.2	UNDERSTANDING	DEMONSTRATE the relevance of marketing mix concepts and Planning & Control frameworks for a real-world marketing offering (commodities, goods, services, e-products/ e-services.)
CO 201.3	APPLYING	APPLY marketing Mix and Planning & Control decisions for a real world marketing offering (commodities, goods, services, e-products/ e-Services.)
CO 201.4	ANALYSING	EXAMINE marketing issues pertaining to Marketing Mix and Marketing Plan in the context of real-world marketing offering (commodities, goods, services, e-products/ e-services)
CO 201.5	EVALUATING	EXPLAIN the interrelationships between various elements of Marketing mix and Planning & Control in the context of real-world marketing offering (commodities, goods, services, e-products/ e-services)
CO 201.6	CREATING	DESIGN a Marketing Mix and Marketing Plan for a real-world marketing offering (commodities, goods, services, e-products/ e-services.)

- 1. Product:** Meaning, The Role of Product as a market offering, Goods & Services Continuum Classification of Consumer products- convenience, shopping, shopping, unsought goods. Classification of industrial products materials and parts, capital items, supplies and services. Product Levels: The Product Hierarchy, Product Systems and Mixes, Product Line Analysis, Product Line Length, the Customer Value Hierarchy. New Product Development - Need, Booz Allen & Hamilton Classification Scheme for New Products, New Product Development Process – Idea Generation to commercialization. Sustainable practices in Product Design, Go-to-market strategy, Branding: Concept, Definition and Commodity vs. Brand, Product Vs Brand, and And Concept of Brand equity. Packaging & Labeling: Meaning & role, Types of Packaging, Sustainable practices in packaging and Labeling, (7 + 2)
- 2. Pricing:** Meaning, The Role of Pricing, Importance and Factors influencing pricing decisions. Setting the Price: Setting pricing objectives, determining demand, estimating costs, analyzing competitors' pricing, Selecting Pricing method, selecting final price. Adapting the Price: Geographical pricing, Price discounts & allowances, Promotional pricing, Differentiated pricing, concept of transfer pricing, Dynamic pricing (surge pricing, auction Pricing), Pricing in online marketing (free, premium, freemium). Token based pricing. Price Change: Initiating & responding to price Changes. Use of Big Data and Generative AI in pricing decisions (7 + 2)
- 3. Place:** Meaning, The Role of Marketing Channels, Channel functions & flows, Channel Levels, Channel Design Decisions - Analyzing customers' desired service output levels, establishing objectives & constraints, Identifying & evaluating major channel alternatives. Channel Options - Introduction to Wholesaling, Retailing, Franchising, Direct marketing, Introduction to Channels in international Market, Online Interaction versus Offline Interaction -Introduction to Omni channel & hybrid channel options, Phygital Channels. Show rooming and Web rooming, Market Logistics Decisions – Order Processing, Warehousing, Customer Fulfilment Center, Dark stores, Inventory, and Logistics. Last-mile logistics, Role of IOT and Block chains in Market Logistics decisions (7 + 2)
- 4. Promotion:** Meaning, The role of marketing communications in marketing effort. Communication Mix Elements, Introduction to Advertising, 5Ms of Advertising, Sales Promotion, Personal Selling, Public Relations, Word of Mouth (WOM), Direct Marketing, Traditional to Digital Promotion =Contextual Marketing, Permission Marketing, Data driven marketing ,Attention, Interest, Desire, Action (AIDA) to 5A (Aware, Appeal, Ask, Act, and Advocate), Concept of Integrated Marketing Communications (IMC), Developing Effective Communication -Communication Process, Steps in developing effective marketing communication - identifying target audience, Determining communication objectives, designing a message, choosing media, Selecting message source,

Collecting feedback. Shaping the overall promotion mix: promotional mix strategy, push-pull strategies. Role of Generative AI in Promotion decisions (7 + 2)

- 5. Product Level Planning:** Preparation & evaluation of a product level marketing plan, Nature & contents of Marketing Plans - Executive Summary, Situation Analysis, Marketing Strategy, Financials, and Control. Marketing Evaluation & Control - Concept, Process & types of control - Annual Plan Control, Profitability Control, Efficiency Control, Strategic Control, Marketing Audit, Impact of Technology on Marketing Planning and Control = Connected Marketing Mix -four C's (co-creation, currency, communal activation, and Conversation). Application of Agile marketing Practices in Marketing Planning and control, Use of Immersive Marketing for Marketing Planning and control decisions. (7 + 2)

Note: Real world examples / cases in domestic and international context for commodities, goods, services, e-products/ e-services in terms of Traditional as well as contemporary Marketing Practices are expected to be analyzed in the class as well as included in the Examination.

Suggested Text Books:

1. Marketing Management: A South Asian Perspective Kotler, Keller, Koshy& Jha, 14 th edition, Pearson Education,2018.
2. Marketing Management, Rajan Saxena, TMGH,6th Edition ,2019
3. Marketing, Lamb Hair Sharma, Mc Daniel, Cengage Learning,1st Edition ,2016
4. Marketing Management - RamaswamyV. S. &Namakumar S, 4/e, Macmillan Publishers, 2014.
5. Marketing Management -Arun Kumar& Meenakshi N, 2/e, Vikas publications, 2013
6. Marketing Management- Text and Cases, Tapan K Panda, Excel Books, 2008
7. Marketing 4.0: Moving from Traditional to Digital, Philip Kotler, Hermawan Kartajaya, Iwan Seiwan, 2017
8. Marketing 5.0: Technology for Humanity by Philip Kotler, Hermawan Kartajaya, Wiley .2021
9. Marketing 6.0: The Future Is Immersive : Philip Kotler, Hermawan Kartajaya,2023

Suggested References:

1. Marketing Grewal, Levy, Tata McGraw-Hill,7th Edition,2021
2. Marketing, Asian Edition, Paul Bainer, Chris Fill, Kelly Page, Oxford University Press.2013
3. Principles of Marketing, Philip Kotler, Gary Armstrong, Prafulla Agnihotri, Ehasan Haque, Pearson,13th Edition
4. Brand Equity Supplement of the Economic Times
5. Brand Wagon Supplement of the Financial Express
6. Strategist Supplement of Business Standard
7. Marketing White book, latest edition
8. <https://www.togai.com/blog/generative-ai-pricing-strategies/>, accessed on 20th June 2024, at 12 .02 am.
9. Generative AI: The Insights You Need from Harvard Business Review (HBR Insights Series), Harvard Business Review, Randye Kaye, et al., on 20th June 2024, at 12 .02 am.
10. <https://revenue.ml.com/insights/articles/potential-generative-artificial-intelligence-pricing>, accessed on 20th June 2024, at 12 .02 am.
11. <https://www.forbes.com/sites/derekcrucker/2021/06/16/the-evolution-of-marketing-a-candid-conversation-with-the-father-of-modern-marketing/>, accessed on 20th June 2024, at 12 .02 am

Semester II	202	GC 10– Financial Management
3 Credits	LTP: 2:1:1	Compulsory Generic Core Course

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 202.1	REMEMBERING	DESCRIBE the basic concepts related to Financial Management, Various techniques of Financial Statement Analysis, Working Capital, Capital Structure, Leverages and Capital Budgeting.
CO 202.2	UNDERSTANDING	EXPLAIN in detail all theoretical concepts throughout the syllabus
CO 202.3	APPLYING	PERFORM all the required calculations through relevant numerical problems
CO 202.4	ANALYSING	ANALYZE the situation and - comment on financial position of the firm - estimate working capital required - decide ideal capital structure - evaluate various project proposals
CO 202.5	EVALUATING	EVALUATE impact of business decisions on Financial Statements, Working Capital, Capital Structure and Capital Budgeting of the firm
CO 202.6	CREATING	CREATE Common Size Comparative Statements, Comparative Financial Statements using Ratio Analysis (Year-wise, Industry – wise), Comparative Proposals using Capital Budgeting Techniques

- 1. Introduction:** Introduction to Finance, Meaning and Definition of Financial Management, Objectives of Financial Management- (Profit Maximization and Wealth Maximization), Modern Approach to Financial Management- (Investment Decision, Financing Decision, Dividend Policy Decision), Finance and its relation with other disciplines, Functions of Finance Manager **(3 + 2)**
- 2. Techniques of Financial Statement Analysis:** Introduction, Objectives of financial statement analysis, various techniques of analysis viz Common Size Statements, Comparative Statements, Trend Analysis, Ratio Analysis **(10 + 2)**
- 3. Working Capital Management:** Meaning of Working Capital, its components & types, Operating Cycle, Factors affecting working capital, Estimation of working capital requirement. (Total Cost Method & Cash Cost Method) **(8 + 2)**
- 4. Capital Structure:** Meaning and Factors affecting Capital Structure, Different sources of finance. Concept and measurement of Cost of Capital (measurement of Specific Cost and WACC), Trading on Equity, Concept of Leverages and its types. **(7 + 2)**
- 5. Capital Budgeting:** Meaning, Definition of Capital Budgeting, Time value of money. Tools of evaluation of the project based on traditional techniques and modern techniques - ARR, Payback Period, Discounted Payback Period, NPV, PI & IRR **(7 + 2)**

Note: Numerical Problems will be asked on following topics only—

1. Common Size Statements
2. Comparative Statements
3. Ratio Analysis (Calculation of ratios plus its interpretation)
4. Estimation of working capital requirement (Total Cost Method & Cash Cost Method)
5. Measurement of Specific Cost (Cost of Equity, Preference, Retained Earnings and Debt) and WACC
6. Capital Structure
7. Leverages
8. Capital Budgeting (ARR, Payback Period, Discounted Payback Period, NPV, PI & IRR)

Suggested Books:

1. Financial Management, Shashi K. Gupta and R.K. Sharma (Kalyani Publication)
2. Basics of Financial Management, V.K. Saxena and C. D. Vashist (Sultan Chand & Sons)
3. Financial Management, A Contemporary Approach, Rajesh Kothari (SAGE)
4. Financial Management, Dr. Mahesh Abale & Dr. Shriprakash Soni (Himalaya Publishing House Pvt. Ltd.)

5. Working Capital Management, Theory and Practice, Dr. P. Periasamy (Himalaya Publishing House)
6. Financial Management, I M Pandey (Vikas Publishing House Pvt. Ltd)
7. Fundamentals of Financial Management, A. P. Rao (Everest Publishing House)
8. Advanced Financial management, N.M. Vechalekar

Suggested Reference Books:

1. Financial Management, Rajiv Srivastava and Anil Misra (OXFORD University Press)
2. Financial Management, Ravi Kishore (Taxmann)
3. Financial management, V.K. Bhalla (S. Chand)
4. Financial Management, Jonathan Berk, Peter DeMarzo and Ashok Thampy (Pearson Publication)

**** Note: The Financial Management syllabus focuses on the techniques used for financial decision making at the organisational level. The origin of the same is observed to be seen in the 20th century. Hence, the IKS element seems to be difficult to be included in the Financial Management syllabus.**

Semester II	203	GC 11 – Human Resource Management
3 Credits	LTP: 2:1:1	Compulsory Generic Core Course

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 203.1	REMEMBERING	DEFINE the role of Human Resource Functions in an Organization
CO 203.2	UNDERSTANDING	UNDERSTAND the emerging trends and practices in HRM.
CO 203.3	APPLYING	UTILIZE the different methods of HRM in an organization
CO 203.4	ANALYSING	EXAMINE the use of different HRM Practices in an organization.
CO 203.5	EVALUATING	ASSESS the outcome of different HRM functions in an organization.
CO 203.6	CREATING	DESIGN the HR manual and compensation policy of the organization

1. **Human Resource Management:** Concept and Challenges - Introduction, Objectives, Scope, Features of HRM, Role of HRM, Importance of HRM, Policies and Practices of HRM, Functions of HRM, Challenges of HRM. (6+2)
2. **Human Resource Planning:** Human Resource Planning: Definition, Objectives, Need and Importance, HRP Process, Barriers to HRP. Job Analysis Process – Contents of Job Description & Job Specification, Job design, Factors affecting Job design, Job enrichment Vs job enlargement. (7+2)
3. **Recruitment and Retention:** Recruitment Introduction, Sources of Recruitment, Difference between recruitment and selection. Applying IKS principles to recruitment, Process- Recruitment and Selection, concept- Induction and Orientation. Career Planning-Process of career planning, Succession Planning- Process of succession planning, Transfer and Promotion. **Retention of Employees:** Importance of retention, strategies of retention. (7+2)
4. **Managing Employee Performance and Training:** Performance Appraisal & Performance Management – Definition, Objectives, Importance, Applying IKS principles to Performance and rewards, Appraisal Process and Appraisal Methods. **Training and Development** - Definition – Scope, Role of Training in an Organizations, Objectives, Applying IKS principles to Training, Training and Development Process, Training Need Assessment, Types of training, Difference between training and development, E-Learning. Benefits of training, Evaluation of Training Effectiveness: Kirkpatrick model. (8+2)
5. **Compensation Management:** Concept, Objectives, Importance of Compensation Management, Process, Current Trends in Compensation. Components of salary. Incentives and Benefits – Financial & Nonfinancial Incentive, Fringe Benefits. Employees Separation - Retirement, Termination, VRS, Suspension. Concept- Grievance and grievance redressal procedure. (7+2)

Suggested Text Books:

1. Human Resource Management, Dr. S.S. Khanka, Sultan Chanda, Delhi.
2. Human Resource Management, Deepak Bhattacharya, Sage Publishing Ltd.
3. Human Resource Management, Arun Monppa, Tata McGraw Hill Publishing Company
4. Human Resource Management, Mirza & Zaiyaddin
5. Human Resource Management, Dr. P. C. Pardeshi, Niramli Publication.
6. Human Resource Management, R.S. Dwiwedi, Vikas Publishing House.
7. Human Resource Management, C.B. Mamoria, Himalaya Publishing House

8. Human Resource Management, Gary Dessler Dorling Kindersley Pvt Ltd.
9. Human Resource Management: Text and Cases, K Aswathappa, Tata McGraw Hill Publishing Company.
10. Performance Appraisal and Management, Himalaya Publishing House.
11. Human Resource Management- Dr. B.M. Londhe and Dr. Shital Deshmukh (Himalaya Publishing House Pvt Ltd.)

Suggested Reference Books:

1. Human Resource Management in Organizations, Izabela Robinson, Jaico Publishing House.
2. Armstrong's Essential Human Resource Management Practice - A guide to people management, Michael Armstrong, Koganpage.
3. Applied Psychology in Human Resource Management, Cascio & Aguins, PHI.

Semester II	204	GC 12 – Operations & Supply Chain Management
3 Credits	LTP: 2:1:1	Compulsory Generic Core Course

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 204.1	REMEMBERING	DEFINE basic terms and concepts related to Production, Operations, Services, Supply Chain and Quality Management.
CO 204.2	UNDERSTANDING	EXPLAIN the process characteristics and their linkages with process-product matrix in a real-world context.
CO 204.3	APPLYING	DESCRIBE the various dimensions of production planning and control and their inter-linkages with forecasting.
CO 204.4	ANALYSING	CALCULATE inventory levels and order quantities and MAKE USE OF various inventory classification methods.
CO 204.5	EVALUATING	OUTLINE a typical Supply Chain Model for a product / service and ILLUSTRATE the linkages with Customer Issues, Logistic and Business Issues in a real-world context.
CO 204.6	CREATING	ELABORATE upon different operational issues in manufacturing and services organisations where the decision-making element is emphasized.

- 1. Introduction to Operations and Supply Chain Management:** Definition, Concept, Significance and Functions of Operations and SCM. Evolution from manufacturing to operations management, Physical distribution to Logistics to SCM, Physical Goods and Services Perspectives. **Quality:** Definitions from various Perspectives, Customers view and Manufacturer's view, Concept of Internal Customer, Overview of TQM and LEAN Management, Impact of Global Competition, Technological Change, Ethical and Environmental Issues on Operations and Supply Chain functions. **(7+2)**
- 2. Operations Processes: Process Characteristics in Operations:** Volume Variety and Flow. Types of Processes and Operations Systems - Continuous Flow system and intermittent flow systems. **Process Product Matrix:** Job Production, Batch Production, Assembly line and Continuous Flow, Process and Product Layout. **Service System Design Matrix:** Design of Service Systems, Service Blueprinting. **(6+2)**
- 3. Production Planning & Control (PPC):** Role and Functions of PPC **Demand Forecasting:** Forecasting as a Planning Tool, Forecasting Time Horizon, Sources of Data for forecasting, Accuracy of Forecast, Capacity Planning. **Production Planning:** Aggregate production Planning, Alternatives for Managing Demand and Supply, Master Production Schedule, Capacity Planning - Overview of MRP, CRP, DRP, MRP II. **Production Control:** Scheduling, Loading, Scheduling of Job Shops and Floor Shops, Gantt Charts. **(8+2)**
- 4. Inventory Planning and Control:** Continuous and intermittent demand system, concept of inventory, need for inventory, types of inventory - seasonal, decoupling, and cyclic, pipeline, safety - Implications for Inventory Control Methods. Inventory Costs - Concept and behavior of ordering cost, carrying cost, and shortage cost. **EOQ** – definition, basic EOQ Model, EOQ with discounts. Inventory control - Classification of material - ABC Analysis -VED, HML, FSN, GOLF, SOS. (Numericals expected on Basic EOQ, EOQ with discounts & ABC), Inventory turns ratios, Fixed Order quantity Model - Periodic Review and Re-order Point. **(8+2)**
- 5. Supply Chain Management:** Supply chain concept, Generalized Supply Chain Management Model - Key Issues in SCM – Collaboration, Enterprise Extension, responsiveness, Cash-to-Cash Conversion. **Customer Service:**

Supply Chain Management and customer service linkages, Availability service reliability perfect order, customer satisfaction. Enablers of SCM - Facilities, Inventory, Transportation, Information, sourcing, Pricing. **(6+2)**

Suggested Text Books:

1. Operations Management Theory & Practice, B. Mahadevan, Pearson.
2. Operations Now - Supply Chain Profitability & Performance, Byron J. Finch, McGraw Hill.
3. Production and Operations Management, R B Khanna, PHI, New Delhi.
4. Production & Operations Management, S N Chary, McGraw Hill.
5. Supply Chain Management - Strategy, Planning & Operation, Sunil Chopra, Peter Meindl, D. V. Kalra, Pearson Education.
6. Decoding Success – Indian Business Management Cases -Kelkar Girish, Ed. Kulkarni Abhay, Orange Books
7. Operations and Supply chain Management - Dr. Abhay Kulkarni, Dr. Sudhir Hasamnis, Dr. Amitabh Patnaik, Mr. Harshal Patil(Himalaya Publishing House)

Suggested Reference Books:

1. Supply Chain Logistics Management, Donald Bowersox, David Closs, M Bixby Cooper, Tata McGraw Hill.
2. Operations Management, William J. Stevenson, TMGH.
3. Operations Management, Lee Krajewski, Larry Ritzman, Manoj Malhotra, Pearson Education.
4. Introduction to Materials Management, J.R. Tony Arnold, Stephen Chapman, Ramakrishnan, Pearson.

Semester II	205	GC 13- Legal Aspects Of Business
2 Credits	LTP: 2:0:0	Compulsory Generic Core Course

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 205.1	REMEMBERING	DESCRIBE the key terms involved in each Act.
CO 205.2	UNDERSTANDING	SUMMARIZE the key legal provisions of each Act.
CO 205.3	APPLYING	ILLUSTRATE the use of the Acts in common business situations.
CO 205.4	ANALYSING	OUTLINE the various facets of basic case laws of each Act from a legal and managerial perspective.
CO 205.5	EVALUATING	DEVELOP critical thinking by making judgments related to use of various provisions of the Acts in business situations

1. **The Indian Contract Act 1872:** Meaning and Essentials of contract; Kinds of contract based on validity, formation of contract- law relating to offer and acceptance, consideration, competency to contract, free consent, void agreements, Wagering Agreement and Its Essentials, Exceptions to wager, performance of contracts, Contingent Contract, Quasi Contract, Discharge of contract, Breach of contract-Meaning & remedies; Special contracts-contract of indemnity and guarantee, Contract of Agency - Creation of Agency – Agent and Principal (Relationship/rights). **(5+1)**
2. **Sale of Goods Act, 1930:** Contract of sale of goods, Sale and agreement to sell, Caveat emptor, Conditions & warranties, Transfer of property or ownership, Performance of the Contract of Sale-delivery of goods by seller and acceptance of delivery of goods and payment for the same by buyer, Unpaid Seller-Rights of unpaid seller, Sale by Auction. **(5+1)**
3. **The Negotiable Instrument Act, 1881:** Negotiable Instruments – Meaning, Characteristics, Types. Parties, Holder and holder in due course, Negotiation and Types of Endorsements, Dishonor of Negotiable Instrument – Noting and Protest. **(5+1)**
4. **The Companies (Amendment) Act, 2015:** Company – Definition, Meaning, Features and Types- Private, public, One Person Company, Incorporation of Company – Memorandum of Association (MOA), Articles of Association (AOA), Prospectus, share capital and types of shares & Debentures, buy back of shares, Acceptance of deposits, Appointment of director including woman Director. **(5+1)**
5. **The Consumer Protection Act, 2019:** Definition of Consumer w.r.t goods & services, Dispute Redressal Forums – District, State & National Forum, Composition, Jurisdiction, Powers, Appellate Authority, Unfair & Restrictive Trade Practices, **(5+1)**

Suggested Text books:

1. Business Legislations for Management, M.C. Kuchhal
2. Elements of Mercantile Law, N. D. Kapoor
3. Business and Corporate Laws, Dr. P.C. Tulsian

Suggested Reference Books:

1. Legal Aspects of Business, Ravinder Kumar
2. Business Laws, S. D. Geet
3. Business Laws, S.S. Gulshan
4. Legal Aspects of Business, Akhileshwar Pathak

Semester II	206	RM 01- Business Research Methods
2 Credits	LTP: 1:1:1	Compulsory Generic Core Course

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 206.1	REMEMBERING	DEFINE various concepts & terms associated with scientific business research.
CO 206.2	UNDERSTANDING	EXPLAIN the terms and concepts used in all aspects of scientific business research.
CO 206.3	APPLYING	MAKE USE OF scientific principles of research to SOLVE contemporary business research problems.
CO 206.4	ANALYSING	EXAMINE the various facets of a research problem and ILLUSTRATE the relevant aspects of the research process from a data driven decision perspective.
CO 206.5	EVALUATING	JUDGE the suitability of alternative research designs, sampling designs, data collection instruments and data analysis options in the context of a given real-life business research problem from a data driven decision perspective.
CO 206.6	CREATING	FORMULATE alternative research designs, sampling designs, data collection instruments, testable hypotheses, data analysis strategies and research reports to address real-life business research problems.

1. Foundations of Research: Definition of Research, Need of business research, Characteristics of scientific research method, Typical Research applications in business and management. **Questions in Research:** Formulation of Research Problem – Management Question – Research Question – Investigation Question. **The process of business research:** Literature review - Concepts and theories - Research questions - Sampling - Data Collection - Data analysis - Writing up - The iterative nature of business research process, Elements of a Research Proposal. **Practical considerations:** Values – researcher & organization. Ethical principles - Harm to participants, Lack of informed consent, Invasion of privacy, Deception, Reciprocity and trust, Affiliation and conflicts of interest. Legal considerations - Data management, Copyright. (3+6)

2. Research Design: Concept, Features of a robust research design. Exploratory, Descriptive, Quasi Experimental, Experimental research designs, Concept of Cause and Effect, Difference between Correlation and causation. Types of Variables – Independent, Dependent, concomitant, mediating, moderating, extraneous variables, Basic knowledge of Treatment & Control group, Case study design. Cross-sectional and Longitudinal designs, Qualitative and Quantitative research approaches, Pros and Cons of various designs, choice of a research design. **Hypothesis:** Definition, research Hypothesis, Statistical hypothesis, Null hypothesis, Alternative Hypothesis, Directional Hypothesis, Non-directional hypothesis. Qualities of a good Hypothesis, Framing Null Hypothesis & Alternative Hypothesis. Concept of Hypothesis Testing - Logic & Importance. (3+6)

3. Data & Measurement: Meaning of data, Need for data. **Secondary Data:** Definition, Sources, Characteristics, Advantages and disadvantages over primary data, Quality of secondary data - Sufficiency, adequacy, reliability and consistency. **Primary Data:** Definition, Advantages and disadvantages over secondary data. **Measurement:** Concept of measurement, What is measured? Problems in measurement in management research - Validity and Reliability, Levels of measurement - Nominal, Ordinal, Interval, Ratio. **Attitude Scaling Techniques:** Concept of Scale – Rating Scales viz. Likert Scales, Semantic Differential Scales, Constant Sum Scales, Graphic Rating Scales

– Ranking Scales – Paired Comparison & Forced Ranking - Concept and Application. **Questionnaire:** Questionnaire Construction - Personal Interviews, Telephonic survey Interviewing, Online questionnaire tools. (3+6)

4. Sampling: Basic Concepts: Defining the Universe, Concepts of Statistical Population, Sample, Characteristics of a good sample. Sampling Frame, determining the sample frame, Sampling errors, Non-Sampling errors, Methods to reduce the errors, Sample Size constraints, Non-Response. **Probability Sample:** Simple Random Sample, Systematic Sample, Stratified Random Sample, Area Sampling & Cluster Sampling. **Non-Probability Sample:** Judgment Sampling, Convenience Sampling, Purposive Sampling, Quota Sampling & Snowballing Sampling methods. **Determining size of the sample:** Practical considerations in sampling and sample size, (sample size determination formulae and numericals not expected) (3+6)

5. Data Analysis & Report Writing: Data Analysis: Cleaning of Data, Editing, Coding, Tabular representation of data, frequency tables, Univariate analysis - Interpretation of Mean, Median Mode; Standard deviation, Coefficient of Variation. **Graphical Representation of Data:** Appropriate Usage of Bar charts, Pie charts, Line charts, Histograms. **Bivariate Analysis:** Cross tabulations, Bivariate Correlation Analysis - meaning & types of correlation, Karl Person's coefficient of correlation and spearman's rank correlation. Chi-square test including testing hypothesis of association, association of attributes. **Linear Regression Analysis:** Meaning of regression, Purpose and use, Linear regression; Interpretation of regression co-efficient, Applications in business scenarios. **Test of Significance:** Small sample tests: t (Mean, proportion) and F tests, Z test. Non-parametric tests: Binomial test of proportion, Randomness test. Analysis of Variance: One way and two-way Classifications. **Research Reports:** Structure of Research report, Report writing and Presentation. (3+6)

Note:

1. It is desirable to use MS Excel / SPSS / Systat for delivery of unit 5.
2. For unit 5, Formulae and calculations are not expected. Interpretation of the given data/test outcomes is expected for appropriate managerial decisions / inferences.

Suggested Text Books:

1. Business Research Methods, Donald Cooper & Pamela Schindler, TMGH.
2. Business Research Methods, Alan Bryman & Emma Bell, Oxford University Press
3. Research Methods for Social Work, Allen, Earl R. Babbie, Cengage
4. Research Methods in Business Studies: A Practical Guide, Pervez Ghauri, Dr Kjell Gronhaug, FT Prentice Hall
5. Business Research Methods, J.K.Sachdeva, Dhananjay Mandlik, Mahesh Shitole, Himalaya Publishing House

Suggested Reference Books:

1. Business Research Methods, William G. Zikmund, Barry J. Babin, Jon C. Carr, Mitch Griffin, Cengage Learning
2. Approaches to social research, Royce Singleton, Bruce C. Straits, Margaret Miller Straits, Oxford University Press
3. Research Methods: The Basics, Nicholas S. R. Walliman, Nicholas Walliman, Routledge,
4. Research Methodology In Management, Dr.V.P. Michael
5. Advanced Research Methodologies and Practices, Dhananjay Mandlik, Parag Kalkar, Chandrani Singh, Routledge Publication

Semester II	207	RM 02- Desk Research (DR)
2 Credits	LTP: 0:1:3	Subject Core Course – Research (Specialization Specific)

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO207.1	REMEMBERING	DESCRIBE the key historical, organizational, market related, financial, governance, leadership and social responsibility dimensions of a real-world business organization and the relevant industry
CO207.2	UNDERSTANDING	SUMMARIZE the regional, national and global footprint of a real-world business organization and the relevant industry
CO207.3	APPLYING	DEMONSTRATE an understanding of the regulatory forces acting on a real-world business organization and the relevant industry
CO207.4	ANALYSING	COMPARE and CONTRAST, using tables and charts, the market and financial performance of a real-world business organization and the players in an industry

CO207.5	EVALUATING	COMPOSE a succinct summary of future plans of a real-world business organization and the relevant industry the company website, shareholders reports and other information available in the public domain.
CO207.6	CREATING	IMAGINE the key challenges and opportunities for a real-world business organization and the relevant industry in the immediate future (1 to 3 years).

- 1. Industry Analysis – the Basics:** Nature of the Industry, Players in the industry, Nature of competition, Market shares of top 5 & bottom 5 players, Possible Classification of players into Leaders, Challengers, Followers, Nichers, Positioning & Differentiation strategies of key players. Branding strategies, Pricing Policies, Cartelization if any and comments thereon, Capacity analysis – total capacity of the industry and break up capacity amongst key players, Current Capacity Utilization rates, Planned future capacity additions, Geographical spread of plants/facilities/ capacities (Domestics as well as Global), Demand Supply balance in the industry – at global, national and regional level, Key factors affecting demand, Key supply side constraints, Professional Trade bodies of the Industry, Business Functions carried out Online by the key players. Online presence of the players, Incremental Innovations in the industry, Disruptive Innovations in the industry. (5)
- 2. Promoters & Management Ethos:** Background of promoter groups of top 5 and bottom 5 players in the industry, Management ethos and philosophy, Brief profiles of CMDs, CEOs, and key top management personnel with their career highlights, Detailed profile of one distinguished top management personnel each from any two players in the Industry, CSR policy, Corporate Governance Initiatives, Initiatives towards social inclusion, Initiatives towards environment conservation. (5)
- 3. External Environment:** Controlling ministry and / or regulator if any for the Industry, Regulatory Policies at the state, national and global level and their impact on the industry as a whole with analysis of impact on top 5 players and bottom 5 players, Key National and Global issues affecting the industry, Key initiatives by the Government to promote the industry, Environmental issues, CSR initiatives, Regulatory actions against the players for e.g. Action by SEBI, Competition Commission of India, MTRP Commission, FDA, etc. against irregularities , legal violations if any. (5)
- 4. Financials:** Profitability, Revenues, Margins of top 5 & bottom 5 players over the last 5 years and trends/changes therein, Sick players if any and their turnaround strategies, if any, Key factors contributing to costs, Ratio analysis of financial data for last 5 years for top 5 and bottom 5 companies in the industry. (5)
- 5. Recent Developments:** Impact of key relevant provisions of the latest Fiscal policy on the industry and various players therein, Analysis of Key relevant provisions of latest Exim Policy in case of industries that are focused on Global Markets for exports or industries that have significant import components, Key Alliances in the past 5 years and their performance & impact on other players in the industry, Mergers & Acquisitions, if any. Technological developments, Labour unrest if any – reasons thereof and impact on the particular player and the industry as a whole, emerging first generation entrepreneurs, if any, in the industry, Corporate wars & feuds in the industry, if any. (5)

Note:

1. Students working in groups of 3 to 5 each shall select of any TWO industries of their choice, under the guidance of a faculty.
2. The indepth analysis of the industry shall be carried out jointly by the students
3. Every student shall study one company within this industry independently.
4. Industries selected should be distinct from each other.
5. Students shall submit a structured detailed report.

Suggested Text Books:

1. No text books are prescribed.
2. The course has to be taught using the company annual reports and other publications, company website, social media feeds, business newspapers and business data bases such as ACE equity, CRISIL / CMIE / ACE Equity / Money Control / ET / BS database, etc.

Semester II	208	RM 03 - Field Project (FP)
4 Credits	LTP: 0:0:4	Subject Core Course – Research (Specialization Specific)

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 208.1	REMEMBERING	Recall and list key management concepts and frameworks relevant to their specialization specific field project.
CO 208.2	UNDERSTANDING	Demonstrate an understanding of the specific management theories and frameworks to real-world business issues.
CO 208.3	APPLYING	Apply theoretical knowledge to practical situations in their chosen field of specialization and demonstrate data driven decision making approach.
CO 208.4	ANALYSING	Analyze quantitative and qualitative data collected from the field to identify patterns, trends, and insights relevant to their specialization.
CO 208.5	EVALUATING	Evaluate the effectiveness of different management strategies and approaches by comparing their field project findings with existing literature and industry practices from the respective specialization / domain.
CO 208.6	CREATING	Create a comprehensive field project report and presentation that integrates their findings, analysis, and recommendations, demonstrating a professional and result-oriented approach.

A] Preamble:

1. To integrate theory and practice by providing students with the opportunity to work on real-world issues.
2. To provide experiential learning opportunities that go beyond traditional textbooks and classroom learning.
3. To provide a platform to explore the functional aspects of each specialization.
4. To deepen students' understanding of management concepts and frameworks.
5. To develop application-oriented approach by bridging the gap between theory and practice.
6. To foster the development of critical skills, a professional mindset, and a result-oriented approach.
7. To highlight the insights from the business environment of the geographical region.

B] Guidelines for the Field Projects**B - 1] Nature of the Field Project:**

1. **Field project must be related to the intended specialization of the student.**
2. Field projects must be done individually. Group projects are not permitted.
3. The project should involve fieldwork; **online projects are not permitted.**
4. Primary data collection is mandatory.
5. Field projects can be quantitative / qualitative in nature or even use mixed approaches.
6. Field projects can involve surveys, interviews, case studies, visits or observation studies.
7. For surveys, the sample size should be between more than or equal to 100 participants.
8. For in-depth interviews (lasting at least 45-60 minutes), the sample size should be a minimum of 25 participants.
9. **Total Hours of Effort Expected:** 160 Hours, (This can be completed during the Semester, Saturdays, Sundays, Public holidays, Winter vacation in between Sem-I and Sem-II)

B - 2] Permissible Partner Organizations:

Students have the flexibility to conduct their field projects with any of the following organizations:

- a) Companies listed on either NSE or BSE in India /abroad
- b) Unlisted subsidiaries of Listed Companies.
- c) Government / Semi-Government Undertaking / PSU
- d) Government Offices
- e) Consultancy Firms
- f) Start Ups with an existence of 3 years or more and manpower more than 25.
- g) Family managed businesses with an existence of 5 years or more and manpower more than 25.
- h) Cooperative Societies

NOTE: Students can also carry out the Field Work without being associated to a specific organization. Such projects may involve **quantitative / qualitative fieldwork** related to

- a) Contemporary issues of businesses
- b) Specialization specific concepts
- c) Local or regional concerns

- d) Matters of national importance.

B - 3] Linkage with specialization: The field project topic must be aligned with the specialization chosen and specialization electives offered in Semester II.

It can address local, national, or global issues relevant to the specialization, as guided by the faculty guide / mentor.

B – 4] Selecting a Relevant Topic: Consider current trends, issues, or challenges within the domain / specialization across various business (industry) sectors when conducting their project.

B – 5] Identifying the Scope: Define the project's scope to ensure it is manageable within the given timeframe and resources. Set realistic expectations regarding the project's depth and breadth.

B – 6] Project Objectives - Clearly outline the objectives of your field project.

B – 7] Project Planning and Proposal: Students shall define the scope and objectives of the specialization-specific field project, develop a project proposal, and gain approval from the institute.

B –8] Reporting and Presentation: Prepare a professional report & presentation that outlines your project, methodology, findings, and recommendations as per the outline given below. Your report should be clear, well-structured, visually appealing & the presentation must be delivered professionally.

Presentation could be through any of the enlisted formats: (this is an indicative list and innovative formats if any beyond this list may be adopted) -

1. Traditional Slide Deck Presentation
2. Infographics
3. Video presentation
4. Paper presentation
5. Poster presentation
6. Webinar or online presentation
7. TED-style presentation
8. Storytelling Presentation etc.

B – 10] Indicative break up of hours (160 hours)

1. 120 hours - On fieldwork (The field project shall be spread throughout the second semester, can be start immediately after Sem-I exam Winter vacation)
2. 40 hours – Pre and post-field work including proposal making, analysis, report writing, etc.

C] Field Project Proposal Outline

The Field Project proposal, ranging from three to five pages, outlines the development plan for the project. It includes one or two paragraphs for each of the following components:

1. **Field Project Introduction:** Provide an overview of the project, including its context and scope.
2. **Statement of the Problem:** Clearly define the problem the project aims to address.
3. **Purpose of the Project:** Explain the main objectives and goals of the project.
4. **Significance of the Project:** Discuss the importance and potential impact of the project.
5. **Plan for Developing / Executing the Project:** Describe the approach and steps to be taken in developing / executing the project.
6. **Review of the Literature:** Include an initial literature review of one or two pages.

D] Field Project Report Outline

The field project report includes the components mentioned below.

1. Title Page
2. Declaration by student
3. Acknowledgement by student
4. Certificate by the Guide on Institutional Letter Head
5. Certificate by the Partner Organization on Letter Head (if applicable)
6. Table of Contents
7. List of Tables (if needed)

8. List of Figures (if needed)
9. Abstract

D – 1 | Chapter I - Introduction:

1. Statement of the Problem
2. Purpose /Objectives of the Project
3. Theoretical Framework
4. Significance of the Project
5. Definition of Terms (optional)

D-2| Chapter II - Review of the Literature:

1. Review the existing body of knowledge available on the problem or topic.

D -3 | Chapter III Method:

1. Describes how the study was completed / conducted, including a specific description of subjects, procedures, equipment, materials, and other information pertinent to the study,

D-4| Chapter IV – Data Collection and Analysis:

1. Collecting relevant data from primary and secondary sources.
2. Analyzing data using appropriate analytical tools and techniques.

D – 5| Chapter V – Results / Findings & Suggestions:

1. Identifying key issues, opportunities, trends etc. based on data analysis.
2. Develop / propose feasible solutions or recommendations.
3. Reflect on the experience, lessons learned, and scope for further work / improvement.

D - 6| Annexures

1. Questionnaires
2. Observation Sheets
3. Field Maps
4. Exhibits
5. Geo Tagged Photos with Sample respondents
6. Any other relevant documents

E| Evaluation Pattern:

Total Marks: 150

Formative Assessment: 50 Marks

Summative Assessment: 100 Marks

E – 1| Formative Assessment Weightage (50 marks):

1. Project Proposal - 5 marks
2. Interim Progress review I / Report I - 5 marks
3. Final Project Report - 10 marks
4. Final Presentation (30 marks with break up as indicated below)
 - a) Project Objectives - 5 marks
 - b) Quality of Analysis and Research - 5 marks
 - c) Problem Solving and Decision Making - 5 marks
 - d) Innovation and Impact - 5 marks
 - e) Documentation and Reporting - 5 marks
 - f) Reflection - 5 marks

E – 2| Summative Assessment Weightage (100 marks):

1. There shall be a panel of 2 examiners for the Final Viva-Voce
2. University shall nominate External Examiners
3. Director shall nominate Internal Examiner
4. Presentation by each student along with a spiral bound report is mandatory
5. Students will deliver a 15 minutes presentation about their field project.

6. The panel will evaluate the presentation for 50 marks and the viva-voce shall have a weightage of 50 marks.
7. The presentation & the External viva voce shall evaluate the Field Project on:
 - a) Project Objectives
 - b) Quality of Analysis and Research
 - c) Problem Solving and Decision Making
 - d) Innovation and Impact
 - e) Documentation and Reporting
 - f) Reflection

Semester II	209	GE 08 - Business Communication
2 Credits	LTP: 0:2:2	Generic Elective

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 209.1	REMEMBERING	DESCRIBE stages in a typical communication cycle and the barriers to effective communication.
CO 209.2	UNDERSTANDING	SUMMARIZE long essays and reports into précis and executive summaries.
CO 209.3	APPLYING	USE Dictionary and Thesaurus to draft and edit a variety of business written communication.
CO 209.4	ANALYSING	EXAMINE sample internal communications in a business environment for potential refinements.
CO 209.5	EVALUATING	COMPOSE variety of letters, notices, memos and circulars.

1. **Written Communication:** Different types of communication like letters, memos, reports, fax, email, presentations and multimedia, choosing the means of communication, stages in communication cycle, Barriers to effective communication, communication systems. (5)
2. **Writing Techniques:** Rules of good writing, adaptation and selection of words, masculine words, writing with style- choosing words with right strength and vigor, using a thesaurus, writing effective sentences, developing logical paragraphs, Précis writing, Developing coherent paragraphs, overall tone, drafting, editing and finalizing the business letters. Planning the persuasive message, common types of persuasive requests, principles of persuasive communication. Reformulating and summarizing - What is a summary? Using synonyms & antonyms, reducing phrases, guidelines for writing summaries, business summaries Comprehension: using a dictionary, grammatical precision, (phonetics), contextual clues, guidelines for comprehension. (7)
3. **Recruitment and employment correspondence:** Application letter, curriculum vitae, interview, references, offer of employment, job description, letter of acceptance, letter of resignation, writing routine and persuasive letters. (6)
4. **Internal Communications:** Memoranda, meetings - agenda and minutes, Writing memos, circulars, notices and emails. Positive and negative messages such as Letter of Appreciation, Letter of Congratulations, Warning Letter, Show Case Notice. Writing Follow up letters and reminders, Writing Sales letters, collection letters, Poster Making, Report writing - What is a report, Objectives of report, types of report, Report Planning, Types of Reports, Process, Structure and Layout, planning, Nature of Headings, Ordering of Points, Logical Sequencing, Graphs, Charts, Writing an Executive Summary, List of Illustration, Technique of writing a report, characteristics of business reports. (6)
5. **External Communications:** Public notices, invitations to tender bid, auction, notices, etc. Writing business proposals, Preparing Press Release and Press Notes. (6)

Note:

1. The entire course should be delivered in a workshop and application-oriented manner. It is expected that not more than 10 to 15% of the time should be devoted to the theoretical aspect.
2. Workbooks should be prepared that comprehensively cover major situations of managerial communication and should be handed over to the students right at the beginning of the course.
3. Students should be asked to submit the completed workbooks at the end of the term.

Suggested Text Books:

1. Business Communication Today, Bovee C L et. al., Pearson Education

2. Business Communication, P.D. Chaturvedi, Pearson Education
3. Business Communication, T N Chhabra, Bhanu Ranjan, Sun India
4. Verbal and Non-Verbal Reasoning, Prakash, P, Macmillan India Ltd., New Delhi
5. Objective English, Thorpe, E, and Thorpe, S, Pearson Education, New Delhi

Suggested Reference Books:

1. Communication Skills for Effective Management, Hargie et. al., Palgrave
2. Communication for Business, Tayler Shinley, Pearson Education
3. Technical Communication, Anderson, P.V, Thomson Wadsworth, New Delhi
4. The Oxford Guide to Writing and Speaking, John Seely, Oxford University Press, New Delhi
5. Dictionary of Common Errors, Turton, N.D and Heaton, J.B, Addison Wesley Longman Ltd.

Semester II	210	GE 09 – Technology Tools in Business Management-II
2 Credits	LTP: 0:0:4	Generic Elective

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 210.1	REMEMBERING	Recall advanced functions and features of Excel, Power BI, Tableau, Chat GPT, and other emerging tools.
CO 210.2	UNDERSTANDING	Explain the advanced functionalities and applications of these tools in business contexts.
CO 210.3	APPLYING	Utilize advanced features to perform complex data analysis, create interactive dashboards, and develop AI-driven solutions.
CO 210.4	ANALYSING	Examine the integration and application of advanced tools in real-world business scenarios
CO 210.5	EVALUATING	Assess the effectiveness and efficiency of using advanced tools for business intelligence and decision-making.
CO 210.6	CREATING	Develop sophisticated business intelligence projects, interactive dashboards, and AI-driven solutions using advanced tools.

1. **Advanced Excel (Part 1):** Using text to columns, the paste special function, data validation, subtotals and grouping, consolidating data, scenario analysis, data tables in scenario analysis, what-if analysis, math and trig functions, text functions in Excel, lookup functions (Vlookups, HLookups, Match), statistical functions, database functions, financial functions, formula auditing and error tracing, hyperlinks in Excel, linking data, understanding pivot tables, using pivot charts, workbook properties, protecting and sharing worksheets, data encrypting and finalizing workbooks. (12)
2. **Advanced Excel (Part 2):** Custom number formats in Excel, using custom lists, working with templates, tracking changes in Excel, merging and comparing Excel workbooks, using pivot tables and slicers, report filters for basic analytics, contact management and marketing with Excel, managing customers, vendors, and employees, gaining product and service insights, sales reports using Excel, supervising sales with Excel, preparing invoices, assessing account aging, analyzing demographics, creating scheduling and marketing calendars, creating standard Excel templates for routine business data management and analysis activities. (12)
3. **Power BI and Tableau: Power BI:** Interface and navigation, connecting to data sources, basic data modeling, creating interactive dashboards, using DAX for calculations, sharing and publishing reports, advanced data transformations, custom visuals, integration with other Microsoft tools. **Tableau:** Interface and navigation, connecting to data sources, basic data visualization, creating interactive dashboards, using calculations and parameters, sharing and publishing dashboards, advanced data manipulation, custom geocoding, integration with other tools. (12)
4. **Google Analytics & Financial Tools:** Google Analytics: Setting up Google Analytics accounts, tracking website traffic, understanding key metrics and reports, audience, acquisition, and behavior analysis, conversion tracking, using Google Analytics Academy for hands-on learning, QuickBooks: Introduction to QuickBooks, managing financial transactions, creating and sending invoices, tracking expenses and income, generating financial reports, understanding QuickBooks Online vs Desktop, QuickBooks support resources. (12)

5. **SAP and Cloud Computing Tools:** SAP: Overview of SAP ERP, modules and functionalities, managing business operations, integrating SAP with other business systems, hands-on practice with SAP training modules, using SAP Learning Hub for skill enhancement., Amazon Web Services (AWS): Cloud computing fundamentals, key AWS services (EC2, S3, RDS), setting up AWS accounts, managing cloud resources, understanding AWS pricing models, AWS security best practices, AWS Training and Certification resources., Google Cloud Platform (GCP): Introduction to GCP, key services and tools (Compute Engine, Cloud Storage, Big Query), managing GCP resources, setting up projects and billing, GCP security features, learning resources for GCP, Microsoft Azure: Overview of Microsoft Azure, key services (Virtual Machines, Azure Storage, Azure SQL Database), creating and managing Azure resources, understanding Azure pricing, Azure security best practices, Azure Training and Certification resources. (12)

Suggested Books

1. "Excel 2019 Power Programming with VBA" by Michael Alexander and Dick Kusleika
2. "Advanced Excel Essentials" by Jordan Goldmeier
3. "Microsoft Excel Data Analysis and Business Modeling" by Wayne Winston
4. "Excel 2019 for Business Statistics: A Guide to Solving Practical Business Problems" by Thomas J. Quirk
5. "Introducing Microsoft Power BI" by Alberto Ferrari and Marco Russo
6. "Microsoft Power BI Cookbook" by Greg Deckler and Brett Powell
7. "Mastering Microsoft Power BI: Expert techniques for effective data analytics and business intelligence" by Brett Powell
8. "Learning Tableau 2020: Create effective data visualizations, build interactive visual analytics, and transform your organization" by Joshua N. Milligan
9. "Tableau Your Data!": Fast and Easy Visual Analysis with Tableau Online Free Courses

Online Resources

MS Word, MS PowerPoint, and Basic Excel:

1. Microsoft Office Training Center: Free training resources for Microsoft Word, PowerPoint, and Excel.
<https://support.microsoft.com/en-us/training>
2. GCF Global - Microsoft Office Tutorials: Free tutorials for Word, PowerPoint, and Excel.
<https://edu.gcfglobal.org/en/subjects/office/>

Advanced Excel:

1. Coursera - Excel Skills for Business Specialization: Offers a free trial and financial aid options.
<https://www.coursera.org/specializations/excel>
2. edX - Analyzing and Visualizing Data with Excel: Free access with optional paid certificate.
<https://www.edx.org/course/analyzing-and-visualizing-data-with-excel>

Power BI:

1. Microsoft Learn - Get Started with Power BI: Free, self-paced learning path.
<https://docs.microsoft.com/en-us/learn/paths/get-started-power-bi/>
2. Coursera - Getting Started with Power BI: Free trial available.
<https://www.coursera.org/learn/getting-started-with-power-bi>

Tableau:

1. Tableau Public - Free Training Videos: Free training videos provided by Tableau.
<https://www.tableau.com/learn/training/20201>
2. Coursera - Data Visualization with Tableau: Free trial and financial aid options available.
<https://www.coursera.org/learn/visualization-with-tableau>

Semester -II	211	GE 10 - Sustainable Development Goals (SDG)
2 Credits	LTP: 2:0:0	Generic Elective

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 211.1	REMEMBERING	Recall the 17 Sustainable Development Goals (SDGs) set by the United Nations.

CO 211.2	UNDERSTANDING	Explain the significance and objectives of each SDG.
CO 211.3	APPLYING	Apply the concepts of sustainable development to real-world scenarios.
CO 211.4	ANALYSING	Analyse the interconnections and interdependencies among different SDGs.
CO 211.5	EVALUATING	Evaluate the progress and challenges in achieving the SDGs at local, national, and global levels.
CO 211.6	CREATING	Develop strategies and action plans to contribute to the achievement of the SDGs.

Unit 1: Introduction to Sustainable Development Goals: Overview of the 17 Sustainable Development Goals (SDGs) established by the United Nations in 2015, purpose and significance of the SDGs, global commitment to achieving the SDGs by 2030, historical background leading to the SDGs including the Millennium Development Goals (MDGs), fundamental principles of sustainable development, importance of integrating economic growth, social inclusion, and environmental protection. (6)

Unit 2: Detailed Study of Selected SDGs: Focus on specific goals such as No Poverty (SDG 1), Zero Hunger (SDG 2), Good Health and Well-being (SDG 3), and Quality Education (SDG 4), targets and indicators associated with each goal, initiatives and strategies implemented globally and locally, success stories and best practices, challenges and barriers faced, role of governments, NGOs, and other stakeholders. (6)

Unit 3: Interlinkages and Synergies among SDGs: Analysis of the interconnections between different SDGs, concept of policy coherence for sustainable development, benefits of integrated approaches, case studies and examples of successful synergies, benefits of coordinated efforts and collaborative actions among various sectors and stakeholders. (6)

Unit 4: Monitoring and Evaluation of SDGs: Frameworks and methodologies for monitoring and evaluating progress towards the SDGs, role of data, indicators, and statistical tools, challenges of data collection and reporting, importance of accountability and transparency, role of national and international institutions in monitoring and evaluation. (6)

Unit 5: Strategies and Action Plans for Achieving SDGs: Development of practical strategies and action plans, approaches and tools for planning, implementing, and scaling up sustainable development initiatives, focus on innovation, partnership, and community engagement, designing projects and action plans to address specific SDG-related challenges in communities or professional fields. (6)

Suggested Book References:

1. "Transforming Our World: The 2030 Agenda for Sustainable Development" by United Nations.
2. "The Age of Sustainable Development" by Jeffrey D. Sachs.
3. "Sustainable Development Goals: Harnessing Business to Achieve the SDGs through Finance, Technology and Law Reform" by Julia Walker, Alma Pekmezovic, and Gordon Walker.
4. "Sustainable Development Goals: Understanding the United Nations' 2030 Agenda for Sustainable Development" by Wendy Steele.

Online Free Courses and Resources:

1. Coursera - "The Sustainable Development Goals – A global, transdisciplinary vision for the future"
<https://www.coursera.org/learn/sustainable-development>
2. edX - "Transforming Our World: Achieving the Sustainable Development Goals"
<https://www.edx.org/course/transforming-our-world-achieving-the-sustainable-development-goals>
3. United Nations - Sustainable Development Goals Knowledge Platform
<https://sustainabledevelopment.un.org/sdgs>

Semester -II	212	GE 11 - Selling & Negotiations Skills Lab
2 Credits	LTP: 1:1:1	Generic Elective

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 212.1	REMEMBERING	DESCRIBE the various selling situations and selling types.
CO 212.2	UNDERSTANDING	OUTLINE the pre-sales work to be carried out by a professional salesperson.

CO 212.3	APPLYING	IDENTIFY the key individuals involved in a real-world sales process for a real-world product/ service / e-product / e-service.
CO 212.4	ANALYSING	FORMULATE a sales script for a real-world sales call for a product/ service / e-product / e-service.
CO 212.5	EVALUATING	DECONSTRUCT the pros and cons of sample real world sales calls for a product/ service / e-product / e-service.
CO 212.6	CREATING	DEVELOP a sales proposal for a real-world product/ service / e-product / e-service and for a real-world selling situation.

- 1. Basics of Selling:** Importance of Selling. Role in the context of organization – survival and growth. Types of Selling - Different in selling situations, New business versus service selling, Newton's classification of sales types, McMurtry & Arnold's classification of selling types, Consumer indirect selling, Industrial selling, Missionary, Sales Team/group selling Merchandising, Telesales, Franchise selling, International selling. (5)
- 2. Pre-Selling Work:** Attributes of a Good Salesperson - Personality & physical characteristics, Enthusiasm, Confidence, Intelligence, Self-worth, Knowledge- product, Competition, organization, market, customer, territory; People Buy From People, Communication skills, Persuasive skills, Personal Diary, Time management, Managing Sales Documents and collaterals management. Fear Factor in Sales. Maximising Productivity in a Sales Role, Meetings and Your Time, The Telephone - Social Media & Online Data Bases as a Sales Tools, Developing Your Script, Mailers, Pre-Call Planning, Generating Appointments. (7)
- 3. Selling in Action:** Identifying Key Individuals – Prospecting, Influencers and Decision Makers, Talking to the Right Individuals, Making that Good First Impression, How to Win Friends and Influence People, Dale Carnegies Six Principles of Relationship, What's In It For Me? Honesty and Integrity. (5)
- 4. Objection handling:** Analyzing the Reasons for Objections, Seeing What We Can Do, Listen - Probe - Advise (L-P-A), Exercise: Objection Handling, Uncovering Objections, Seven Types of Objections, Turning Objections into Selling Opportunities. Selling Techniques: Cross Selling, Up Selling, Value Added (Suggestive) Selling, Advancing Opportunity, Exceeding Customer Expectations, Giving Recognition. (6)
- 5. Sales Conversation, Negotiation & Closure:** Starting a Quality Prospecting Conversation, Listeners Control Conversations, Trial Closing, Creating an Opportunity: Situation vs Problem Questions, Difficulty Questions, Negative and Positive Answer Questions, Directive Questions, Rhetorical Questions. Problems with Positional Bargaining, Opening Up the Negotiation, Approaches to Better Negotiation, You Have Alternatives, Reverse Psychology in Negotiation. Sales Proposals: How to Construct a Sales Proposal, Important Factors to Consider, Putting It All Together. (7)

Note:

1. The course should be delivered from a skills building perspective.
2. Principles should be supplemented by live exercises on personal selling

Suggested Text Books:

1. Selling & Sales Management, Geoffrey Lancaster & David Jobber, Macmillan India Ltd.
2. Negotiation: Communication for diverse settings, Michael L Spangle and Myra Isenhardt, Sage South Asia Edition.
3. The Sales Bible: The Ultimate Sales Resource, Jeffrey Gitomer, Wiley India
4. How to win friends and influence People, Dale Carnegie
5. The Art of Closing the Sale, Brian Tracy, Pearson Education.

Suggested Reference Books:

1. Sales Management, Bill Donaldson, Palgrave Publications
2. You can negotiate anything, Herb Cohen
3. Managing Sales Leads, Crocker and Obermayer, American Marketing Association

Semester II	213	GE 12 – Indian Economy
2 Credits	LTP: 2:0:0	Generic Elective

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 213.1	REMEMBERING	DESCRIBE the present state of Indian Economy and LIST major economic policy issues in the current context.
CO 213.2	UNDERSTANDING	EXPLAIN the economic development strategy since Independence and DISCUSS the priorities in the current context.
CO 213.3	APPLYING	ILLUSTRATE the economic impact of Monetary policy and Fiscal Policy, Economic Reforms, Demographic Transition in India, Changing profile of GDP, Growth and Inequality and Trade Policy in the Indian context.
CO 213.4	ANALYSING	EXAMINE the changing profile of human capital, employment, productivity and ILLUSTRATE the linkages with Soft Infrastructure, growth of Start-ups, GDP composition of India.
CO 213.5	EVALUATING	DETERMINE the key priority areas, across various dimensions, for the Indian Economy in the context of current economic environment.
CO 213.6	CREATING	BUILD a case for co-existence of MNCs, Indian Public Sector, Indian Private Sector, SMEs, MSMEs and Start Ups in the Indian Economy.

- 1. Perspective of Indian Economy:** Indian Economy as a Developing Economy, Basic Characteristics Overview of Economic Planning, Role of Monetary policy and Fiscal Policy, Budget terminology, Economic Growth, GDP and GDP Trends, Money Supply & Inflation, Inflation trends, RBI – overview of role and functions, Capital Markets – overview of role and functions, Concept of Poverty, Estimates of Poverty, Poverty Line, Economic Reforms and Reduction of Poverty, Concept of Inclusion, Need of inclusive growth, Financial inclusion. Concept of Hard & Soft Infrastructure. Hard Infrastructure - Transport Infrastructure, Energy Infrastructure, Water management infrastructure, Communication Infrastructure, Solid waste management, Earth monitoring and measuring networks. Soft Infrastructure - Governance Infrastructure, Economic infrastructure, Social infrastructure, Critical Infrastructure, Urban infrastructure, Green infrastructure, Education Infrastructure, Health Infrastructure. (6)
- 2. Human Resources and Economic Development :** The Theory of Demographic Transition, Size and Growth Rate of Population in India, Quantitative Population Growth Differentials in Different Countries, The Sex Composition of Population, Age Composition of Population, Density of Population, Urbanization and Economic Growth in India, The Quality of Population, Population Projections (2001-2026), Demographic Dividend. **Human Development in India** - The Concept and Measures of Human Development, Human development Index for Various States in India, National Human Development Report, Changing profile of GDP and employment in India, GDP, Employment and Productivity per Worker in India, Relative Shift in the Shares of NSDP and Employment in Agriculture, Industry and Services in Different States. (6)
- 3. Sectoral composition of Indian Economy:** Primary, Secondary, Tertiary Sectors, Issues in Agriculture sector in India, land reforms, Green Revolution and agriculture policies of India, Industrial development, small scale and cottage industries, Industrial Policy, Public sector in India, Services sector in India. Areas of Market Failure and Need for State Intervention, Redefining the Role of the State, Liberalization, Privatization and Globalization (LPG) Model of Development, Planning commission v/s NITI Aayog, Public Versus Private Sector Debate, Unorganised Sector and India's Informal Economy. (6)
- 4. Inequality and Economic Power in India:** FDI, Angel Investors and Start-ups, Unicorns, M&A, Investment Models, Role of State, PPP (Public-Private Partnership), Savings and Investment Trends. Growth of Large Industrial Houses Since Independence, Growth of Monopolies and Concentration of Economic Power in India, Competition Policy and Competition Law, Growth and Inequality, India as an Economic Superpower, Growth of the Indian Middle Class, Indian MNCs : Mergers and Acquisitions, Outsourcing, Nationalism and Globalization, Small-scale and Cottage Enterprises, The Role of Small-scale Industries in Indian Economy, Poverty, Vulnerability and Unorganized Sector Employment-The High Degree of Correlation, Estimate of Organized and Unorganized Workers. (6)
- 5. The Foreign Trade of India:** Importance of Foreign Trade for a Developing Economy, Overview of Foreign Trade Since Independence, Composition of India's Foreign Trade, Direction of India's Foreign Trade, India's Balance of Payments on Current Account, Balance of Payments Crisis, Balance of Payments Since the New Economic Reforms of 1991, India's Trade Policy, India's Foreign Trade Policy, An Analysis of Trends in Exports and Imports, Special Economic Zones (SEZs)-An Overview. (6)

Suggested Text Books:

1. Indian Economy, Dutt R and Sundharam K. P. M, S. Chand, Delhi
2. Indian Economy, Agarwal A. N., Vikas Publishing House, Delhi
3. Indian Economy, Misra S.K. and Puri V.K., Himalaya Publishing House, New Delhi
4. Business Environment, Bedi S K, Excel Books
5. Economic Reforms in India - A Critique, Dutt Ruddar, S. Chand, New Delhi.

Suggested Reference Books:

1. Economic Environment of Business, Adhikary, Sultan Chand and Sons
2. Business, Government and Society, George A and Steiner G A, Macmillan
3. Economic Environment of Business, Ghosh, Vikas
4. Business Environment, Francis Cherunilam, Himalaya Publishing House, Bombay
5. Industrial Economy of India, Kuchhal S.C., Chaitanya Publishing House, Allahabad

Semester II	214	GE 13 – International Business Environment
2 Credits	LTP: 2:0:0	Generic Elective

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 214 .1	Remembering	Recall and Describe the key concepts of international Business Environment
CO 214.2	Understanding	Understand the relevance of Multinational Corporations (MNCs) in global trade
CO 214.3	Applying	Demonstrate the significance of FDI and FPI in respect of developing economy
CO 214.4	Analysing	Analyze the issues related to Labor, Environmental and Global Value chain
CO 214.5	Evaluating	Formulate and discuss the case related to various Agreements under WTO and contemporary global business environment.

1. **Introduction to International Business:** Importance, nature and scope of International business; modes of entry into International Business, internationalization process. Globalization: Meaning, Implications, Globalization as a driver of International Business. The Multinational Corporations (MNCs) – evolution, features and dynamics of the Global Enterprises. Consequences of Economic Globalization, Brexit, Reverse globalization. (5+1)
2. **International Business Environment:** Political Economy of International Business, Economic and Political Systems, Legal Environment, Cultural Environment, Ethics and CSR in International Business. (5+1)
3. **International Financial Environment:** Foreign Investments - Pattern, Structure and effects. Theories of Foreign Direct Investment, Traditional and Modern theories of FDI, Modes of FDI - Greenfield, Brownfield Investments, Mergers and Acquisitions, Motives of FDI, FDI contrasted with FPI. Basics of Forex Market. (5+1)
4. **International Economic Institutions and Agreements:** WTO, IMF, World Bank, UNCTAD Tariff and Non-tariff Barriers. Balance of Payment Account: Concept and significance of balance of payments, Current and capital account components. Introduction to Basic Concept of IFRS. (5+1)
5. **Emerging Issues in International Business Environment:** Growing concern for ecology, Digitalisation; Outsourcing and Global Value chains. Labor and other Environmental Issues, Impact of Pandemic COVID-19 on international trade. (5+1)

Suggested Text Books:

1. Global Business Management by Adhikary, Manab, Macmillan Publishers, New Delhi.
2. International Business Environment by Black and Sundaram, Prentice Hall of India, New Delhi
3. Economic Environment Of Business by Gosh, Biswanath, South Asia Book, New Delhi.
4. International Business by Aswathappa Tata Mc Graw Hill publications, New Delhi.
5. International Business by P. Subha Rao

Suggested Reference Books:

1. Going International Response Strategies For Indian Sector by Bhattacharya.B, Wheeler Publishing Co, New Delhi.

2. International Economies by D.N. Krithani.
3. International Business by Roger Bennett
4. Business Environment by C.B. Gupta
5. International Business by Francis Cherunillam

Semester II	215	GE 14 – Business Ethics
2 Credits	LTP: 2:0:0	Generic Elective

On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 215.1	REMEMBERING	Recall the fundamental concepts and principles of business ethics.
CO 215.2	UNDERSTANDING	Explain the importance of ethical behavior in business and its impact on stakeholders.
CO 215.3	APPLYING	Apply ethical theories and frameworks to real-world business situations.
CO 215.4	ANALYSING	Analyse ethical dilemmas and conflicts of interest in business practices.
CO 215.5	EVALUATING	Evaluate the role of corporate governance and corporate social responsibility in promoting ethical business practices.
CO 215.6	CREATING	Develop strategies to foster an ethical culture within an organization.

1. **Introduction to Business Ethics:** Definition and scope of business ethics, importance of ethics in business, historical development of business ethics, key ethical theories and philosophies (utilitarianism, deontology, virtue ethics), distinction between ethics, morals, and values, relevance of ethics in contemporary business environments.
2. **Ethical Decision Making in Business:** Frameworks for ethical decision making, stages of moral development (Kohlberg's theory), factors influencing ethical decision making (individual, organizational, societal), tools and techniques for ethical analysis, role of ethical leadership, ethical issues in various business functions (marketing, finance, HR, operations).
3. **Corporate Governance and Corporate Social Responsibility (CSR):** Concepts and principles of corporate governance, role of boards of directors and executives, importance of transparency and accountability, codes of conduct and ethical guidelines, definition and significance of CSR, approaches to CSR (philanthropy, sustainability, shared value), impact of CSR on business performance and society.
4. **Ethical Issues in Global Business:** Cross-cultural ethical issues and challenges, ethical implications of globalization, international business ethics standards (e.g., UN Global Compact, OECD Guidelines), ethical practices in international trade and investment, role of multinational corporations in promoting ethical practices, case studies of global business ethics issues.
5. **Promoting Ethical Culture in Organizations:** Strategies for fostering an ethical culture, role of ethical training and development, importance of ethical codes and policies, whistleblowing and protection for whistleblowers, methods for monitoring and enforcing ethical standards, case studies of organizations with strong ethical cultures, benefits of maintaining high ethical standards.

Suggested Book References:

1. "Business Ethics: Concepts and Cases" by Manuel G. Velasquez.
2. "Business Ethics: A Textbook with Cases" by William H. Shaw.
3. "The Essentials of Business Ethics" by Denis Collins.
4. "Corporate Governance and Business Ethics" by Alexander Brink.

Online Free Courses and Resources:

1. Coursera - "Business Ethics for the Real World"
<https://www.coursera.org/learn/business-ethics>
2. edX - "Corporate Social Responsibility (CSR): A Strategic Approach"
<https://www.edx.org/course/corporate-social-responsibility-csr-a-strategic-approach>
3. MIT OpenCourseWare - "Business Ethics"
<https://ocw.mit.edu/courses/sloan-school-of-management/15-270-ethical-practice-professionalism-social-responsibility-in-business-spring-2010/index.htm>

Savitribai Phule Pune University, Pune

Curriculum 2024 Pattern

Master of Business Administration (MBA) 2nd Year

Applicable to

The students who have completed MBA first year 2024 NEP
pattern (54 Credits)

or

PG Diploma in Management (56 Credits)

as per MBA NEP 2024 pattern

OR

Direct Second Year Lateral Entry

after Four Years of Graduation

With effect from Academic AY 2025 - 26

Course Structure

SEMESTER III							
Type	Sem Code	Course Code	Course	Credits	FA	SA	Marks
Mandatory	301	GC – 14	Strategic Management	3	50	50	100
Mandatory	302	SC - 01		3	50	50	100
	CORE TOTAL		2	6	100	100	200
Mandatory	303	OJT (SC)	On the Job Training	8	100	100	200
	SIP TOTAL		1	8	100	100	200
Semester III Specialization Electives - Any 4 Courses to be Opted from the respective elective list							
Elective	304	SE 01		3	50	50	100
Elective	305	SE 02		3	50	50	100
Elective	306	SE 03		3	50	50	100
Elective	307	SE 04		3	50	50	100
Elective	308	SE 05		3	50	50	100
Elective	309	SE 06		3	50	50	100
Elective	310	SE 07		3	50	50	100
Elective	311	SE 08		3	50	50	100
	ELECTIVE TOTAL		4	12	200	200	400
	SEMESTER TOTAL		7	26	400	400	800
SEMESTER IV							
Type	Sem Code	Course Code	Course	Credits	FA	SA	Marks
Mandatory	401	GC – 15	Entrepreneurship, Innovation and Design Thinking	3	50	50	100
Mandatory	402	GC - 16	Enterprise Performance Management	2	0	50	50
Mandatory	403	SC - 02		3	50	50	100
	CORE TOTAL		3	8	100	150	250
Mandatory	404	RP	Research Project	6	100	50	150
	RESEARCH PROJECT TOTAL		1	6	100	50	150
Semester IV Specialization Electives - Any 4 Courses to be Opted from the following list							
Elective	405	SE 09		3	50	50	100
Elective	406	SE 10		3	50	50	100
Elective	407	SE 11		3	50	50	100
Elective	408	SE 12		3	50	50	100
Elective	409	SE 13		3	50	50	100
Elective	410	SE 14		3	50	50	100
Elective	411	SE 15		3	50	50	100
Elective	412	SE 16		3	50	50	100
	ELECTIVE TOTAL		4	12	200	200	400
	SEMESTER TOTAL		8	26	400	400	800
	MBA 2 nd Year Lateral Entry		15	54	800	800	1600
	2 Years MBA PROGRAMME TOTAL		35	104	1600	1600	3200

Specializations Offered and course list of Each Specialization

- | | |
|--|---|
| 1. Marketing Management (MKT) | 5. Business Analytics (BA) |
| 2. Financial Management (FIN) | 6. Agri -Business Management (ABM) |
| 3. Human Resources Management (HRM) | 7. Pharma & Healthcare Management (PHM) |
| 4. Operations & Supply Chain Management (OSCM) | |

MARKETING MANAGEMENT							
Specialization Core Courses							
Sem Code	Course Code	Course	Semester	Credits	FA	SA	Total Marks
302	SC MKT- 01	Services Marketing	III	3	50	50	100
403	SC MKT- 02	Marketing Strategy	IV	3	50	50	100
				6	100	100	200
Specialization Elective Courses - Semester III (Any 4 to be opted for)							
304	SE MKT- 01	Consumer Behaviour	III	3	50	50	100
305	SE MKT- 02	Product & Brand Management	III	3	50	50	100
306	SE MKT- 03	Sales & Distribution Management	III	3	50	50	100
307	SE MKT- 04	Digital Marketing-I	III	3	50	50	100
308	SE MKT- 05	International Marketing	III	3	50	50	100
309	SE MKT- 06	Business to Business Marketing	III	3	50	50	100
310	SE MKT- 07	Marketing Analytics	III	3	50	50	100
311	SE MKT- 08	Marketing 5.0	III	3	50	50	100
				12	200	200	400
Specialization Elective Courses - Semester IV (Any 4 to be opted for)							
405	SE MKT- 09	Integrated Marketing Communication	IV	3	50	50	100
406	SE MKT- 10	Rural & Agriculture Marketing	IV	3	50	50	100
407	SE MKT- 11	Tourism & Hospitality Marketing	IV	3	50	50	100
408	SE MKT- 12	Digital Marketing-II	IV	3	50	50	100
409	SE MKT- 13	Retail Marketing	IV	3	50	50	100
410	SE MKT- 14	Marketing of Financial Services	IV	3	50	50	100
411	SE MKT- 15	Recent trends in Marketing	IV	3	50	50	100
412	SE MKT- 16	Marketing 6.0	IV	3	50	50	100
				12	200	200	400
				30	500	500	1000

8.

FINANCIAL MANAGEMENT							
Specialization Core Courses							
Sem Code	Course Code	Course	Semester	Credits	FA	SA	Total Marks
302	SC FIN- 01	Advanced Financial Management	III	3	50	50	100
403	SC FIN - 02	Financial Markets and Banking Operations	IV	3	50	50	100
				6	100	100	200
Specialization Elective Courses - Semester III (Any 4 to be opted for)							
304	SE FIN - 01	Fixed Income Securities	III	3	50	50	100
305	SE FIN - 02	Personal Financial Planning	III	3	50	50	100
306	SE FIN - 03	Security Analysis and Portfolio Management	III	3	50	50	100
307	SE FIN - 04	Fundamentals of Life Insurance - Products and Underwriting	III	3	50	50	100
308	SE FIN - 05	Digital Banking	III	3	50	50	100
309	SE FIN - 06	Direct Taxation	III	3	50	50	100
310	SE FIN - 07	Financial Reporting	III	3	50	50	100
311	SE FIN - 08	International Finance	III	3	50	50	100
				12	200	200	400
Specialization Elective Courses - Semester IV (Any 4 to be opted for)							
405	SE FIN - 09	Behavioural Finance	IV	3	50	50	100
406	SE FIN - 10	Business Valuation	IV	3	50	50	100
407	SE FIN - 11	Technical Analysis of Financial Markets	IV	3	50	50	100
408	SE FIN - 12	Risk Management	IV	3	50	50	100
409	SE FIN - 13	Rural and Micro Finance	IV	3	50	50	100
410	SE FIN - 14	Indirect Taxation	IV	3	50	50	100
411	SE FIN - 15	Corporate Financial Restructuring	IV	3	50	50	100
412	SE FIN - 16	Commodities Market	IV	3	50	50	100
				12	200	200	400
				30	500	500	1000

HUMAN RESOURCE MANAGEMENT							
Specialization Core Courses							
Sem Code	Course Code	Course	Semester	Credits	FA	SA	Total Marks
302	SC HRM- 01	Strategic Human Resource Management	III	3	50	50	100
403	SC HRM - 02	Employee Relations & Labour Legislation	IV	3	50	50	100
				6	100	100	200
Specialization Elective Courses - Semester III (Any 4 to be opted for)							
304	SE HRM - 01	Competency Based HRM	III	3	50	50	100
305	SE HRM - 02	Conflict management and Negotiation Skills	III	3	50	50	100
306	SE HRM - 03	HR Analytics	III	3	50	50	100
307	SE HRM - 04	Diversity & Inclusion	III	3	50	50	100
308	SE HRM - 05	HR Perspective in Merger & Acquisition	III	3	50	50	100
309	SE HRM - 06	Labour Economics & Costing	III	3	50	50	100
310	SE HRM - 07	Organization Diagnosis and Development	III	3	50	50	100
311	SE HRM - 08	HR Operations	III	3	50	50	100
				12	200	200	400
Specialization Elective Courses - Semester IV (Any 4 to be opted for)							
405	SE HRM - 09	Compensation & Reward Management	IV	3	50	50	100
406	SE HRM - 10	Employee Engagement	IV	3	50	50	100
407	SE HRM - 11	Designing HR Policies	IV	3	50	50	100
408	SE HRM - 12	Performance Management System	IV	3	50	50	100
409	SE HRM - 13	Change Management & New Technologies in HRM	IV	3	50	50	100
410	SE HRM - 14	Global HR Practices	IV	3	50	50	100
411	SE HRM - 15	Mentoring & Coaching	IV	3	50	50	100
412	SE HRM - 16	Labour Welfare	IV	3	50	50	100
				12	200	200	400
				30	500	500	1000

OPERATIONS & SUPPLY CHAIN MANAGEMENT							
Specialization Core Courses							
Sem Code	Course Code	Course	Semester	Credits	FA	SA	Total Marks
302	SC OSCM- 01	Services Operations Management	III	3	50	50	100
403	SC OSCM- 02	Supply Chain Management	IV	3	50	50	100
				6	100	100	200
Specialization Elective Courses - Semester III (Any 4 to be opted for)							
304	SE OSCM- 01	Planning & Control of Operations	III	3	50	50	100
305	SE OSCM- 02	Productivity Management	III	3	50	50	100
306	SE OSCM- 03	Theory of Constraints	III	3	50	50	100
307	SE OSCM- 04	Manufacturing Resource Planning	III	3	50	50	100
308	SE OSCM- 05	Quality Management Standards	III	3	50	50	100
309	SE OSCM- 06	Strategic Supply Chain Management	III	3	50	50	100
310	SE OSCM- 07	Business Excellence	III	3	50	50	100
311	SE OSCM- 08	Service Value Chain Management	III	3	50	50	100
				12	200	200	400
Specialization Elective Courses - Semester IV (Any 4 to be opted for)							
405	SE OSCM- 09	Industry 4.0	IV	3	50	50	100
406	SE OSCM- 10	Six Sigma for Operations	IV	3	50	50	100
407	SE OSCM- 11	Toyota Production System	IV	3	50	50	100
408	SE OSCM- 12	World Class Manufacturing	IV	3	50	50	100
409	SE OSCM- 13	Supply Chain Strategy	IV	3	50	50	100
410	SE OSCM- 14	Financial Perspectives in Operations Management	IV	3	50	50	100
411	SE OSCM- 15	Facilities Planning	IV	3	50	50	100
412	SE OSCM- 16	Sustainable Supply Chains	IV	3	50	50	100
				12	200	200	400
				30	500	500	1000

BUSINESS ANALYTICS							
Specialization Core Courses							
Sem Code	Course Code	Course	Semester	Credits	FA	SA	Total Marks
302	SC BA - 01	Python	III	3	50	50	100
403	SC BA- 02	Data Mining	IV	3	50	50	100
				6	100	100	200
Specialization Elective Courses - Semester III (Any 4 to be opted for)							
304	SE BA- 01	Advanced Statistical Methods	III	3	50	50	100
305	SE BA- 02	Data Visualization and storytelling	III	3	50	50	100
306	SE BA- 03	Marketing Analytics	III	3	50	50	100
307	SE BA- 04	Financial Analytics	III	3	50	50	100
308	SE BA- 05	Workforce Analytics	III	3	50	50	100
309	SE BA- 06	Big Data Analytics	III	3	50	50	100
310	SE BA- 07	Supply & Operation Chain Analytics	III	3	50	50	100
311	SE BA- 08	Marketing Intelligence	III	3	50	50	100
				12	200	200	400
Specialization Elective Courses - Semester IV (Any 4 to be opted for)							
405	SE BA- 09	Time Series Analysis and Forecasting	IV	3	50	50	100
406	SE BA - 10	Strategic Management and Business Analytics	IV	3	50	50	100
407	SE BA - 11	Retail and E-Commerce Analytics	IV	3	50	50	100
408	SE BA - 12	Generative AI for Business Applications	IV	3	50	50	100
409	SE BA - 13	Healthcare Analytics	IV	3	50	50	100
410	SE BA - 14	Predictive Analytics and Machine learning using Python	IV	3	50	50	100
411	SE BA - 15	Sports Analytics	IV	3	50	50	100
412	SE BA - 16	Business applications of Blockchain technologies	IV	3	50	50	100
				12	200	200	400
				30	500	500	1000

AGRI BUSINESS MANAGEMENT							
Specialization Core Courses							
Sem Code	Course Code	Course	Semester	Credits	FA	SA	Total Marks
302	SC ABM- 01	Agriculture and Indian Economy	III	3	50	50	100
403	SC ABM- 02	ICT for Agriculture	IV	3	50	50	100
				6	100	100	200
Specialization Elective Courses - Semester III (Any 4 to be opted for)							
304	SE ABM- 01	Agricultural Marketing Management	III	3	50	50	100
305	SE ABM- 02	Rural Marketing	III	3	50	50	100
306	SE ABM- 03	Rural Banking	III	3	50	50	100
307	SE ABM- 04	Agri- Insurance	III	3	50	50	100
308	SE ABM- 05	Agri- Supply Chain Management	III	3	50	50	100
309	SE ABM- 06	Agricultural Import Export	III	3	50	50	100
310	SE ABM- 07	Current trends in Agriculture	III	3	50	50	100
311	SE ABM- 08	Agri- Entrepreneurship & Startup Management	III	3	50	50	100
				12	200	200	400
Specialization Elective Courses - Semester IV (Any 4 to be opted for)							
405	SE ABM- 09	Food Retail management	IV	3	50	50	100
406	SE ABM- 10	Agri- Input Marketing	IV	3	50	50	100
407	SE ABM- 11	Microfinance	IV	3	50	50	100
408	SE ABM- 12	Commodity derivatives and Risk Management	IV	3	50	50	100
409	SE ABM- 13	Procurement Management	IV	3	50	50	100
410	SE ABM- 14	Agri- Production, Planning and Control	IV	3	50	50	100
411	SE ABM- 15	Management of Allied Agro Industries	IV	3	50	50	100
412	SE ABM- 16	Agri- Cooperative Management	IV	3	50	50	100
				12	200	200	400
				30	500	500	1000

PHARMA & HEALTHCARE MANAGEMENT							
Specialization Core Courses							
Sem Code	Course Code	Course	Semester	Credits	FA	SA	Total Marks
302	SCPHM-01	Fundamentals of Pharma and Healthcare Management	III	3	50	50	100
403	SCPHM-02	Regulatory laws in Indian Pharmaceutical & healthcare Industry	IV	3	50	50	100
				6	100	100	200
Specialization Elective Courses-Semester III(Any4 to be opted for)							
304	SEPHM-01	Healthcare management	III	3	50	50	100
305	SEPHM-02	Pharmaceutical Marketing Management	III	3	50	50	100
306	SEPHM-03	Digital marketing in Pharma & Healthcare	III	3	50	50	100
307	SEPHM-04	Supply Chain Management in Pharmaceutical Sector	III	3	50	50	100
308	SEPHM-05	Pharmaceutical Production Management	III	3	50	50	100
309	SEPHM- 06	Compensation Management and Performance Appraisal in Pharma and healthcare	III	3	50	50	100
310	SEPHM- 07	Health Insurance	III	3	50	50	100
311	SEPHM- 08	Entrepreneurship in Pharma and Healthcare	III	3	50	50	100
				12	200	200	400
Specialization Elective Courses-Semester IV(Any 4 to be opted for)							
405	SEPHM- 09	Ethics and Legal aspects of Pharmaceutical and Healthcare Business	IV	3	50	50	100
406	SEPHM- 10	Clinical Data Management	IV	3	50	50	100
407	SEPHM- 11	Regulatory affairs in pharmaceuticals	IV	3	50	50	100
408	SEPHM- 12	International Pharma marketing	IV	3	50	50	100
409	SEPHM- 13	Marketing of Medical Devices and Diagnostics	IV	3	50	50	100
410	SEPHM- 14	Quality Assurance and Control Management in Pharma	IV	3	50	50	100
411	SEPHM-15	Pharmaceutical advanced Human Resource Management	IV	3	50	50	100
412	SEPHM-16	Healthcare Analytics	IV	3	50	50	100
				12	200	200	400
				30	500	500	1000

CURRICULUM 2024 PATTERN

MASTER OF BUSINESS ADMINISTRATION (MBA) 2ND YEAR AND LATERAL WEF A Y 2025-26

Semester III

Semester III	301	301– Strategic Management
3 Credits	LTP: 2:1:1	Compulsory Generic Core Course

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 301.1	REMEMBERING	DESCRIBE the basic terms and concepts in Strategic Management.
CO 301.2	UNDERSTANDING	EXPLAIN the various facets of Strategic Management in a real-world context.
CO 301.3	UNDERSTANDING	DESCRIBE the trade-offs within and across strategy formulation, implementation, appraisal.
CO 301.4	APPLYING	INTEGRATE the aspects of various functional areas of management to develop a strategic perspective.
CO 301.5	ANALYSING	EXPLAIN the nature of the problems and challenges confronted by the top management team and the approaches required to function effectively as strategists.
CO 301.6	CREATING	DEVELOP the capability to view the firm in its totality in the context of its environment.

- Understanding Strategy:** Concept of strategy, Levels of Strategy - Corporate, Business and Functional. Strategic Management - Meaning and Characteristics. Distinction between strategy and tactics, Strategic Management Process, Stakeholders in business, Roles of stakeholder in strategic management. Strategic Intent – Meaning, Hierarchy, Attributes, Concept of Vision & Mission - Process of envisioning, Difference between vision & mission. Characteristics of good mission statements. Business definition using Abell's three dimensions. Objectives and goals, Linking objectives to mission & vision. Critical success factors (CSF), Key Performance Indicators (KPI), Key Result Areas (KRA). Components of a strategic plan, Analyzing Company's External Environment: Environmental appraisal, Scenario planning – Preparing an Environmental Threat and Opportunity Profile (ETOP). Analyzing Industry Environment: Industry Analysis - Porter's Five Forces Model of competition, Entry & Exit Barriers. (7+2)
- Analyzing Company's Internal Environment-** Resource based view of a firm. Analyzing Company's Resources and Competitive Position - meaning, types & sources of competitive advantage, competitive parity & competitive disadvantage. VRIO Framework, Core Competence, characteristics of core competencies, Distinctive competitiveness. Benchmarking as a method of comparative analysis. Value Chain Analysis Using Porter's Model: primary & secondary activities. Organizational Capability Profile: Strategic Advantage Profile, Concepts of stretch, leverage & fit, ways of resource leveraging – concentrating, accumulating, complementing, conserving, recovering. Portfolio Analysis: Business Portfolio Analysis – BCG Matrix – GE 9 Cell Model. (7+2)
- Generic Competitive Strategies–** Meaning of generic competitive strategies, Low cost, Differentiation, Focus – when to use which strategy. Grand Strategies: Stability, Growth (Diversification Strategies, Vertical Integration Strategies, Mergers, Acquisition & Takeover Strategies, Strategic Alliances & Collaborative Partnerships), Retrenchment – Turnaround, Divestment, Liquidation, Outsourcing Strategies. (7+2)
- Strategy Implementation–** Barriers to implementation of strategy, Mintzberg's 5 Ps – Deliberate & Emergent Strategies. Mc Kinsey's 7s Framework. Organization Structures for Strategy Implementation: entrepreneurial, functional, divisional, SBU, Matrix, Network structures, Cellular/ Modular organization, matching structure to strategy, organizational design for stable Vs. turbulent environment, Business Continuity Planning. Changing Structures & Processes: Reengineering & strategy implementation – Principles of Reengineering. Corporate Culture: Building Learning organizations, promoting participation through technique of Management by Objectives (MBO). Strategy Evaluation: Operations Control and Strategic Control - Symptoms of malfunctioning of strategy – Concept of Balanced scorecard for strategy evaluation. (7+2)

5. **Blue Ocean Strategy**- Difference between blue & red ocean strategies, principles of blue ocean strategy, Strategy Canvass & Value Curves, Four Action framework. Business Models: Meaning & components of business models, new business models for Internet Economy– E-Commerce Business Models and Strategies – Internet Strategies for Traditional Business –Virtual Value Chain. Sustainability & Strategic Management: Startups - growth and reasons for decline. Threats to sustainability, Integrating Social & environmental sustainability issues in strategic management, meaning of triple bottom line, people-planet-profits. (7+2)

Suggested Books:

1. Strategic Management and Business Policy by Azhar Kazmi, Tata McGraw-Hill
2. Strategic Management by Ireland, Hoskisson & Hitt, Indian Edition, Cengage Learning
3. Crafting and Executing Strategy- The Quest for Competitive Advantage by Thompson, Strickland, Gamble & Jain, Tata McGraw-Hill
4. Concepts in Strategic Management & Business Policy by Thomas L. Wheelen & J. David Hunger, Pearson

Suggested Reference Books:

1. Strategic Management by Dr. Yogeshwari L. Giri
2. Competitive Strategy: Techniques for Analyzing Industries and Competitors by Michael E. Porter, First Free Press Edition
3. Competing for the Future by Gary Hamel & C.K. Prahalad,
4. Blue Ocean Strategy by Kim & Mauborgne

Semester III	303	On The Job Training (OJT)
8 Credits	LTP: 0:2:14	Subject Core Course – Specialization Specific

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 303.1	REMEMBERING	IDENTIFY and DESCRIBE the fundamental aspects of the organization and industry where the OJT is conducted, including the company's profile, core business activities, and organizational structure.
CO 303.2	UNDERSTANDING	EXPLAIN the relevance and application of theoretical concepts learned in the classroom to real-world business practices observed during the OJT
CO 303.3	APPLYING	UTILIZE relevant theoretical knowledge and technical skills in real-world tasks and projects during the OJT in a professional setting
CO 303.4	ANALYSING	EXAMINE and break down the problems or tasks undertaken during the OJT, identifying the key issues, underlying causes, and possible solutions.
CO 303.5	EVALUATING	ASSESS the effectiveness of the strategies and solutions implemented during the OJT, from the standpoint of utility to the host organization, the feedback from the industry mentor.
CO 303.6	CREATING	DEVELOP a comprehensive OJT report and presentation that integrates the learning experiences, data collected, analysis, and outcomes of the project, demonstrating a clear connection between academic knowledge and practical application.

A] Preamble:

On Job Training (OJT) is an integral component of the MBA program that provides students with a unique opportunity to bridge the gap between theoretical knowledge gained in the classroom and practical application in a real-world environment. This training aims to equip students with both technical and non-technical skills that are essential for success in the industry.

Each student shall undertake an On-the-Job Training (OJT) at the end of Second Semester and complete the same before the commencement of the Third Semester.

B] Guidelines for the On-Job Training (OJT)

B - 1] Nature of the OJT:

1. The On-the-Job Training (OJT) program shall be of 12 weeks (3 months).
2. 8 weeks of training in the organization (industry / bank etc.) with 30 hours of work per week.
3. 4 Weeks of pre and post training work including proposal making, analysis, report preparation and etc.
4. OJT must be conducted outside the academic institution to expose students to real-world work environments.
5. **OJT must be related to the intended specialization of the student.**
6. OJT must be done individually. Group projects are not permitted.
7. OJT may involve actual tasks relevant to the area of specialization of the student and as per the demands of the industry / organization where the student is carrying out the OJT.
8. OJT should involve fieldwork / desk work in the organisation; **online OJT is not permitted.**
9. Primary data collection is mandatory for Research based OJT.
10. Research based OJT can be quantitative / qualitative in nature or even use mixed approaches.
11. Research based OJT can involve surveys, interviews, case studies or observation studies.
12. It is mandatory for the student to seek advance written approval from the faculty mentor and the Director of the Institute about the type of work and organization before commencing the OJT.

B-2] Permissible Partner Organizations:

Students have the flexibility to conduct the OJT with any of the following organizations:

1. Companies listed on either NSE or BSE in India /abroad
2. Unlisted subsidiaries of Listed Companies.
3. Government / Semi-Government Undertaking / PSU
4. Government Offices
5. Start Ups with an existence of 3 years or more and/or manpower more than 10.
6. Family managed businesses with an existence of 10 years or more and manpower more than 100.
7. Large Cooperative Societies / NGOs with an existence of 5 years or more operating in areas such as agriculture, food processing, health care, retail, banking, etc.

B-3] OJT mentors:

- a) Each student shall be assigned two mentors
 - i. a faculty mentor from the institution
 - ii. an industry mentor from the host organization where the student undertakes the OJT.
- b) **Industry Mentor Role:** The industry mentor plays a crucial role in guiding the student during the internship. They ensure that the intern fulfils the requirements of the organization and successfully meets the demands of the assigned project. Through their expertise and experience, industry mentors provide valuable insights into real-world practices and industry expectations.
- c) **Faculty Mentor Role:** The faculty mentor serves as the overall coordinator of the OJT program of the assigned / allotted students. They oversee the entire internship process and evaluate the quality of the OJT in a consistent manner across all the assigned students. The faculty mentor ensures that the OJT aligns with the MBA program's objectives and provides valuable learning opportunities. They also facilitate communication between the institution, industry mentor, and student to ensure a fruitful OJT experience.

B-4] Submission of documentation for OJT:

- a) **OJT Progress diary:** Each student shall maintain an OJT Progress Diary detailing the work carried out and the progress achieved on a daily basis. Daily entry can be of 3- 4 sentences giving a very brief account of the learning/activities/ tasks / interaction taken place. The faculty mentor will be monitoring the entries in the diary regularly. The student shall submit the duly signed and stamped OJT Progress Diary along with the OJT Report. Soft copy diaries (with time stamp) are also permitted.
- b) **Formal Evaluation from the industry mentor:** The students shall also seek a formal evaluation cum feedback of their OJT from the industry mentor. The formal evaluation cum feedback by the industry mentor shall comment on the nature and quantum of work undertaken by the student, the effectiveness and overall professionalism. The learning outcomes of the OJT and utility of the OJT to the host organization must be specifically highlighted in the formal evaluation cum feedback by the industry mentor. The OJT evaluation sheet duly signed and stamped by the industry mentor shall be included in the final OJT report.
- c) **OJT report:** A student is expected to make a report based on the OJT he or she has done in an organization. The student shall submit TWO hard copies & soft copy of the OJT report to the institute. One hard copy of the OJT report is to be returned to the student by the Institute after the External Viva-Voce. In the interest of

environmental considerations, students are encouraged to print their OJT reports on both faces of the paper. Spiral bound copies may be accepted.

B-5] OJT report should contain the following:

The OJT report should be well documented and supported by –

1. Institute's Certificate
2. Certificate by the Company
3. Formal feedback from the company guide
4. Executive Summary
5. Organization profile
6. Outline of the problem/task undertaken
7. Research methodology & data analysis (*in case of research projects only*)
8. Relevant activity charts, tables, graphs, diagrams, pictures, screenshots, AV material, etc.
9. Learning of the student through the OJT
10. Consideration to factors such as environment, safety, ethics, cost, professional (national & international) standards
11. Contribution to the host organization
12. References in appropriate referencing styles. (APA, MLA, Harvard, Chicago Style etc.)

B-6] Interaction between mentors:

It is suggested that a meet-up involving the intern, industry mentor, and the faculty mentor should be done as a mid-term review to ensure the smooth conduct of the OJT. The meeting can preferably be online to save time and resources. The meeting ensures the synergy between all stakeholders of the OJT. A typical meeting can be of around 15 minutes where at the initial stage the intern briefs about the work and interaction goes for about 10 minutes. This can be followed by the interaction of the mentors in the absence of the intern. This ensures that issues between the intern and the organization, if any, are resolved amicably.

B-7] OJT workload for the faculty: Every student is provided with a faculty member as a mentor. So, a faculty mentor will have a few students under him/her. A faculty mentor is the overall in-charge of the OJT of the allocated students. He/she constantly monitors the progress of the OJT by regularly overseeing the diary, interacting with the industry mentor, and guiding on the report writing etc.

B-8] Evaluation Pattern:

Total Marks: 200

Formative Assessment: 100 Marks

Summative Assessment: 100 Marks

1] Formative Assessment Weightage (100 marks):

- | | |
|---|------------|
| 1. Executive Summary | - 05 marks |
| 2. Organization profile | - 05 marks |
| 3. Outline of the problem/task undertaken | - 10 marks |
| 4. Research methodology & data analysis (in case of research projects only) | - 10 marks |

OR

- | | |
|--|------------|
| Relevant activity charts, tables, graphs, diagrams, pictures, screenshots, AV material, etc. | - 10 marks |
| 5. Learning of the student through the OJT | - 10 marks |
| 6. Consideration to factors such as environment, safety, ethics, cost, professional (national & international) standards | - 10 marks |
| 7. Contribution to the host organization | - 10 marks |
| 8. References in appropriate referencing styles. (APA, MLA, Harvard, Chicago Style etc.) | - 10 marks |
| 9. Formal feedback from the company guide | - 05 marks |
| 10. Regularity of interaction with the faculty mentor | - 05 marks |
| 11. Overall quality of the OJT report | - 05 marks |
| 12. Internal Viva-Voce | - 15 marks |

2] Summative Assessment Weightage (100 marks):

1. There shall be a panel of 2 examiners for the Final Viva-Voce
2. University shall nominate External Examiners
3. Director shall nominate Internal Examiners
4. Presentation by each student along with a spiral bound report is mandatory
5. Students will deliver a presentation of 15 minutes about their OJT project.
6. Weightages for summative assessment shall be as follows
 - a) Presentation – 20 marks
 - b) Viva-Voce – 30 marks
 - c) Report – 30 marks
 - d) Ability to connect with the theoretical & conceptual frame work – 20 marks

The Internal & the External viva-voce shall evaluate the candidate based on:

1. Adequacy of work undertaken by the student
2. Application of concepts learned in Sem I and II
3. Understanding of the organization and business environment
4. Analytical capabilities
5. Technical Writing & Documentation Skills
6. Outcome of the project – sense of purpose
7. Utility of the project to the organization
8. Variety and relevance of learning experience

Presentation could be through any of the enlisted formats (this is an indicative list and innovative formats if any beyond this list may be adopted) -

1. Traditional Slide Deck Presentation
2. Infographics
3. Video presentation
4. Paper presentation
5. Poster presentation
6. Webinar or online presentation
7. TED-style presentation
8. Storytelling Presentation etc.

Semester IV

Semester IV	401	GC 01 – Entrepreneurship, Innovation and Design Thinking
3 Credits	LTP: 2:1:1	Compulsory Generic Core Course

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 401.1	REMEMBERING	DESCRIBE the fundamentals of entrepreneurship, innovation and design thinking.
CO 401.2	UNDERSTANDING	UNDERSTAND the prerequisites of entrepreneurship and innovation.
CO 401.3	APPLYING	APPLY the Design Thinking process to real-world challenges.
CO 401.4	ANALYSING	IDENTIFY business opportunities and create viable business models.
CO 401.5	EVALUATING	EVALUATE entrepreneurial ideas and innovation strategies using design thinking principles and business model frameworks to determine their feasibility, viability, and desirability in real-world contexts.
CO 401.6	CREATING	Develop entrepreneurial mindsets and skills and Pitch ideas effectively to stakeholders or investors.

- 1 Entrepreneurship & Innovation** – Definition, Objective and Features: Entrepreneurship; Difference between Entrepreneurship and Traditional Businesses; Entrepreneurs and Intrapreneurs; Corporate Entrepreneurship, Technological Entrepreneurship, Life Cycle of Startup, Focus on Valley of Death, Why Startups Fail?
Innovation: Culture of innovation - process and Types of innovation – Continuous and Disruptive, Radical Innovation, Challenges in innovation, Agile/Lean Innovation, Steps of Innovation Management, Idea Management System, Divergent V/s Convergent Thinking, Design Thinking and Entrepreneurship Creating Value through Innovation. Management of Innovation, Types of IPR (7 + 2)
- 2. Entrepreneurial Theories and Entrepreneurial Environment, Entrepreneurial Development-** Theories of Entrepreneurship; Successful Entrepreneurs and Their Traits; Types of Entrepreneurs; Entrepreneurial Environment- PESTEL and Their Effects; Business Environment Analysis, Business Planning; Mid-career Dilemmas; Entrepreneurial Growth and Competitive Advantage; Changing Role of Entrepreneurs. Women Entrepreneurs, Entrepreneurship Development Institute; Entrepreneurship Development Programs (7 + 2)
- 3. Design Thinking** – Introduction, Definitions and Meaning; Design Thinking –as an Art and Science; Stages of Design Thinking –Empathise, Define, Ideate, Prototype and Test; Entrepreneurship Design Thinking, Need of Design and Design Thinking Writing the Problem Statement; Understanding Stakeholders and Users; Personas, Empathy Maps; Current Scenarios to identify pain points; Ideation and Storyboarding; Deriving Goals from Ideas; Future Scenarios and Moments of Max Impact; Prototyping (7 + 2)
- 4. Design Thinking in Start-Up** – 5 stages integration Empathise–Listening to People involved and the End User Problems Realisation, Understanding User Needs: User Research Techniques, Observation, Interviewing, Surveys, Persona Mapping; Define– Identifying User Problems, Problem Statement Formulation, Reframing Problems; Ideate – Generating Ideas, Brainstorming Techniques, Mind Mapping, Scenarios - Finding the solutions most effectively; Prototype – Making the samples to Launch, Different Types of Prototypes, Testing and Iterating; Test – Evaluating offerings, Usability Testing, User Feedback. Design thinking with AI (7 + 2)
- 5. Opportunity Recognition & Business Models-** Model of opportunity recognition (Corbett, 2005), Identifying opportunities through Design Thinking, Market research basics, Value Proposition Canvas, Business Model Canvas (BMC), Minimum Viable Product (MVP): Lean Startup & Validation- Lean Startup methodology (Eric Ries), Build-Measure-Learn cycle, Customer validation, Metrics and KPIs, Agile iteration. Teamwork and Collaboration. Business Model Failure: Reasons and Remedies. Sustainability Innovation and Entrepreneurship. Emerging technologies such as artificial intelligence, augmented reality, virtual reality . (7 + 2)

Suggested Books:

1. 8 Steps to Innovation: Going from Jugaad to Excellence – Rishikesh T. Krishnan and Vinay Dabholkar
2. Innovation and Entrepreneurship - Peter Drucker
3. Entrepreneurship: Business and Management – Dr. R.C. Bhatia, Sultan Chand & Sons, 2020
4. Entrepreneurship - Robert D. Hisrich, Michael P. Peters, Dean A. Shepherd, Sabyasachi Sinha. 11th Edition
5. The Lean Startup – Eric Ries
6. Creative Confidence – Tom Kelley & David Kelley

Suggested Reference Books:

1. Ten Types of Innovation – Larry Keeley, Helen Walters, Ryan Pikkell & Brian Quinn
2. Design Thinking for Strategic Innovation – Idris Mootee
3. Start with Why – Simon Sinek
4. Business Model Generation – Alexander Osterwalder & Yves Pigneur
5. The Startup Owner's Manual – Steve Blank & Bob Dorf
6. Design a Better Business – Patrick Van Der Pijl, Justin Lokitz & Lisa Kay Solomon

Semester IV	404	Research Project
6 Credits	LTP: 0:2:10	Subject Core Course – Specialization Specific

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 404.1	REMEMBERING	Carry out a substantial research-based project
CO 404.2	UNDERSTANDING	Demonstrate capacity to improve student achievement, engagement and retention
CO 404.3	UNDERSTANDING	An understanding of the ethical issues associated with practitioner research
CO 404.4	APPLYING	Applying domain knowledge and foundational research skills to address a research problem.
CO 404.5	ANALYSING	Analyse data and synthesize research findings.
CO 404.6	CREATING	Report research findings in written and verbal forms and use research findings to advance education theory and practice.

A) Preamble:

A research project is a systematic and organized endeavour undertaken to investigate a specific topic, question, or problem in order to gain new insights, knowledge, or understanding. The objective of the research project is to further develop the student's ability to carry out and contribute to business research. The student should demonstrate, through his/her thesis and orally, an ability to plan, conduct, and present a scientific investigation of relevance to the subject of Business Administration and the student's chosen Master's program. A further aim is to develop skills for the critical examination of investigations and research reports and to provide the student with the opportunity for a deeper level of theoretical study within a chosen area. These projects involve a structured process of inquiry, data collection, analysis, and interpretation to arrive at meaningful conclusions.

Learning Objectives

1. Understand the purpose and significance of research in business management.
2. Develop skills in research methodology, data analysis, and interpretation.
3. Learn to conduct a thorough literature review and critically evaluate existing research.
4. Learn to formulate a clear research question and develop a compelling research proposal.
5. Master the art of writing a well-structured and coherent dissertation.
6. Gain confidence in presenting research findings to an academic audience.

B - 1] Conducting research projects can offer benefit and advantages to the students:

1. **Intellectual Growth:** Engaging in research projects allows students to explore and develop their intellectual curiosity. It encourages critical thinking, problem-solving skills, and the ability to analyse complex issues.
2. **Skill Development:** Research projects help students develop a variety of skills such as information gathering, data analysis, literature review, writing, presentation, and time management. These skills are valuable both academically and in future careers.
- 3.

3. **Deepened Understanding:** Research enables students to delve deeply into a specific topic, gaining a more comprehensive understanding of it beyond what's covered in regular coursework.
4. **Independent Learning:** Research projects encourage self-directed learning. Students learn how to set their own goals, manage their time, and work independently, fostering a sense of responsibility and initiative.
5. **Problem Solving:** Through research, students confront real-world problems and work towards finding innovative solutions. This experience prepares them to tackle challenges in various aspects of their lives.
6. **Personal Growth:** Research projects can boost students' confidence as they overcome obstacles, contribute to knowledge, and present their findings to peers and professors. This can positively impact their self-esteem and personal growth.
7. **Networking:** Engaging in research projects often involves collaboration with professors, peers, and sometimes professionals in the field. This can lead to valuable networking opportunities and connections that might be beneficial for future academic or career pursuits.
8. **Enhanced Resume/CV:** Having research experience on a resume can make students stand out to potential employers or graduate programs. It demonstrates their commitment to learning and their ability to handle complex tasks.
9. **Contribution to Knowledge:** Even in the early stages of their academic careers, students can contribute to the existing body of knowledge. Their research findings might lead to new insights or perspectives in their chosen field.
10. **Preparation for undertaking Research:** For students considering post graduate, engaging in research during their postgraduate years can provide a taste of the kind of work they might encounter at the next academic level PhD.
11. **Career Exploration:** Research projects can help students explore potential career paths within their field of study. They might discover specific areas they are particularly passionate about.
12. **Personal Interest Pursuit:** Research projects often allow students to delve into topics that deeply interest them, providing a fulfilling and enjoyable learning experience.
13. **Exposure to Research Methods:** Students gain exposure to various research methodologies, which can be beneficial not only in academia but also in fields where data analysis and evidence-based decision-making are crucial.
14. **Critical Evaluation:** Research requires students to evaluate existing literature, sources, and information critically. This skill helps them become more discerning consumers of information. **Long-Term Impact:** Some research projects can have lasting impacts beyond the academic realm, contributing to policy changes, technological advancements, or improvements in various industries.

B-2] About Research Project

In Semester IV the student shall work under the supervision of the faculty and carry out a Research Project and submit a structured report in **TWO hard bound copies (Blackbook) & one soft copy (PDF)**. In the interest of environmental considerations, students are encouraged to print their Research Project reports on both faces of the paper. The student is required to conduct advanced research on a topic related to one (or more) of contemporary issues in management. The topic is chosen in consultation with the student's supervisor. The student will prepare and present a detailed research proposal prior to starting the work.

It is mandatory for the student to seek advanced written approval for Research Report Proposal from the faculty Supervisor and the Director of the Institute about the topic before commencing the Research Project work. A Research Project outlining the entire problem, including a survey of literature and the various results obtained along with their solutions, is expected to be produced. The student must submit the completed Research Project and make an oral presentation of the same. Through the Research Project, the student is expected to furnish evidence of competence in understanding varied aspects of the theme/topic selected and a deep understanding of the specialty area. The completion of the Research Project / project shall be certified by the Faculty Supervisor, HOD & approved by the Director of the Institute.

- 1) All sheets are to be A4 size.
- 2) The Text in all the chapters shall be in Times New Roman 12 Font, Regular, justified with line spacing of 1.15.
- 3) The margins shall be as follows: Top & Bottom: 0.8 inches; Left: 1 inch, Right: 0.5 inches
- 4) One extra line spacing should be left in between paragraphs.
- 5) All Chapter headings are to be centred in the Font Times New Roman 14 size Bold.
- 6) All headings of section shall be in Times New Roman 12 Bold
- 7) All sub-section headings shall be in Times New Roman , size, 12, Bold, Italic.
- 8) All minor sub-section headings shall be in Times New Roman , size, 12, Regular.
- 9) It is advised that the sections and sub- sections are to be limited to 3rd level
 - a. Zero Level - Chapter Headings
 - b. First Level - Main sections in each chapter : to be numbered as 1.1, 1.2, 2.1, 3.1 etc.

- c. Second level - Sub- sections in each section : to be numbered as 1.1.1, 1.2.2, 2.1.3, 3.2.1 etc.
 - d. Third level - Minor sub-sections ie., sections in sub-sections. : to be numbered as 1.1.1.1, 1.2.2.1, 2.1.3.2, 3.2.1.4 etc. - to be avoided to the extent possible.
- 10) All the references / Bibliography are to be listed at the end, arranged in the chronological order and are to be numbered 1, 2, 3,.....etc.
 - 11) The reference No. should be given as superscript in the report where ever they appear.
 - 12) All the figures are to be numbered as Fig. 1.1, Fig. 2.3 etc indicating the chapter No and the sl. No. of the figure in that chapter. The title of the figure should at the bottom of the figure and should be numbered as shown below.
Fig. 1.1 Study Area Fig. 2.1 Definition Sketch Fig. 3.2 Experimental Setup etc...
 - 13) All the figures are to be preferably placed at the end of each chapter. Alternatively, they can be placed after the page where they are first referred. Uniformity should be maintained and under no circumstances these two alternatives indicated should be mixed.

Research projects may include:

- Developing a research question or statement
- Finding and evaluating sources
- Conducting research
- Writing a report etc

Students can do-

- Survey based research.
- Secondary data analysis such as decision analysis, cost effectiveness analysis or Meta-analysis.
- Observation based/Interview based research.

Each student must work under the supervision of a faculty mentor. Depending on the area of research interest or the research topic,

B-3] Research Project Process

I. SELECTION OF THE RESEARCH TOPIC:

The first major challenge in conducting research

1. The easiest way is working with a faculty mentor who is active in research and may have defined one or more researchable questions.
2. Consulting with leading faculty in your area of interest and asking for advice on researchable topics is another avenue for research ideas.
3. Developing research ideas from loose ends discovered during:
 - a) desk research/FP/SIP/OJT, b) literature review c) reviewing journal article(s), and d) discussions, critique of research articles in journal club, could be an interesting, and a rewarding experience.

II. DEVELOPING THE RESEARCH PROPOSAL

A research proposal helps to develop research idea into a valid, scientific research project. A general outline of the elements of a Research Proposal is presented. Although the Research Project Outline provides a description of all the elements of a research project, students are required to complete the writing up of the Methodology section before beginning the project implementation. Writing of the research proposal has a twofold purpose:

1. it provides the researcher, with the blueprint for implementing the project, and
2. it has to be submitted to the research supervisor, HOD and Director of the Institute) for securing approval.

III. PROJECT IMPLEMENTATION

In order to conduct a valid, scientific study, it is important that student rigorously follow the study design outlined in your research proposal and approved by the research supervisor. To ensure timely completion of the project, it is important to stay within the framework discussed in the Timeline.

IV. WRITE-UP OF PROJECT RESULTS AND DISCUSSION

This should follow directly from your research proposal. The research project outline provides a 'how to' write-up of the results and discussion sections.

V. RESEARCH PRESENTATION

Once the research project is complete, student have to make a public oral presentation to present the work.

B-4] OUTLINE OF A RESEARCH PROJECT

I. TITLE PAGE (Page 1, DO NOT NUMBER)

- Study Title
- Names of the Supervisor (faculty mentor)
- Discipline
- Name of the Institute
- Date: month and year proposal prepared/submitted

II. SUMMARY (Page2, 1-2 pages; DO NOT NUMBER)

The summary should be brief and include: 1) a few sentences introducing the topic of current study (could include a couple of references); 2) statement of the problem; 3) a brief description of the methodology to be used including duration of study, subject selection criteria, tests to be performed, and/or data to be collected; 4) significance and implications of the study (why is it important to do the study, and what are the benefits: fill in gap in knowledge; develop further understanding of a clinical situation; modify current approach to treatment; cost-benefit analysis etc., etc.).

III. INTRODUCTION (Page 3; up to 2 – 3 pages)

This section consists of an overview of the research question and some indication of the study's worth and the contribution it is apt to make to the field of study. It should include the rationale for the research project.

IV. REVIEW OF THE LITERATURE (Page 4; up to 4 –6 pages; a minimum of 10 references required).

Use references to establish the link between the proposed study and previous work done on the topic, lay the groundwork for the proposed study, and demonstrate why it is important and timely. The literature review is not just a compilation of facts, but a coherent argument that leads to the description of the proposed study.

V. PROBLEM STATEMENT & RESEARCH HYPOTHESES (up to 1/2-1 page)

The problem statement describes the problem posed by the proposed study and specifies it in the form of Research Hypotheses. The research hypotheses should flow logically from the discussion presented in the Review of Literature and the Statement of the Problem. The hypotheses should be very specific in presenting what aspects of the research topic will be studied, and how. The hypotheses (If any) should be optimally clear, concise, meaningful, and typically written in the present tense. One recommended statement of the criteria for a good hypothesis is that is: a) be free of ambiguity, b) express the relationship between two variables or concepts, and c) imply an empirical test. AVOID having more than one hypothesis embedded in a single, complex statement. A conceptual model represents a visual depiction of the relationship between all the variables in your study. It is a good place to start when planning your research project, and also helps in developing your hypotheses.

VI. RESEARCH METHODOLOGY (up to 2-3 pages)

1. Study Duration: Describe the time frame during for which data will be collected (retrospective study; chart reviews), or intervention administered (prospective study; etc). If any
2. Subject Selection: Of particular importance in this section are:
 - a) the sampling procedure to be used – random, stratified, convenience, b) the source of the subjects, c) the criteria for selection – clearly state inclusion/exclusion d) the rationale for determining sample size – use power test to determine sample size for significance; realistic estimates of crossovers, dropouts must be used in calculating sample size
3. Instrumentation or Measures: This section lists all the variables (intervention as well as outcome variables) you would be examining in your study, and describes what particular measures, or forms, or data collection sheets you will be using to measure the variables.
4. Procedures: This section provides a detailed description of the exact steps to be taken to conduct your research. This includes the procedure used to contact subjects, obtaining Informed Consent, and collecting the data.
5. Data Analysis: In this section describe the statistical tests that will be used to address the research hypotheses. Although intimidating, this section forces you to think how you will analyze (or have it analyzed) at the time the proposal is generated rather than after the data are collected. This way, you can avoid wasting time collecting data that are not analysable because they are not in the collected in the correct format.

6. Study Limitations: Describe the shortcomings and weakness of your study most likely to impact the internal validity of your study.

VII. RESULTS

In this section, you present your findings as clearly as possible. The Results section contains JUST THE FACTS: tables, figures, transcript summaries, and your description of what is noteworthy and important about these. Begin with a description of the sample. Simple demographics can be presented in tabular form. Follow with presenting your findings in terms of the research questions/hypotheses tested.

VIII. DISCUSSION

This section typically contains:

- An overview of significant findings
- A consideration of the finding in light of previous research
- A careful examination of findings that fail to support your hypotheses
- Limitations of the study that may affect the generalizability of the results
- Recommendations for further research
- Implications of study for professional practice

IX. REFERENCES

Students must cite all studies referred to in the proposal, using the APA citation method

B-5] Evaluation Pattern:

Total Marks: 150

Formative Assessment: 50 Marks

Summative Assessment: 50 Marks

1] Formative Assessment Weightage 50 marks

1. Project Proposal
2. Three Progress Reports
3. Final Research Project Report
4. Pre- submission Presentation
 - a) Research Project Objectives, Research Question and Hypotheses
 - b) Introduction and literature Review
 - c) Methodology
 - d) Quality of Analysis and Research, discussion and findings
 - e) Documentation and Reporting
 - f) References
 - g) Reflection

2] Summative Assessment Weightage 50 marks

1. There shall be a panel of 2 examiners for the Final Viva-Voce
2. University shall nominate External Examiners
3. Director shall nominate Internal Examiners
4. Presentation by each student along with a spiral bound report is mandatory
5. Students will deliver a presentation of 15 minutes about their OJT project.
6. Weightages for summative assessment shall be as follows
 - a) Presentation – 05 marks
 - b) Viva-Voce – 20 marks
 - c) Report – 15 marks
 - d) Ability to connect with the theoretical & conceptual frame work – 10 marks

The Internal & the External viva-voce shall evaluate the candidate based on:

1. Adequacy of work undertaken by the student
2. Application of concepts learned in Sem I, II and III
3. Analytical capabilities

4. Technical Writing & Documentation Skills
5. Outcome of the project – sense of purpose
6. Utility of the project to the organization
7. Variety and relevance of learning experience

Presentation could be through any of the enlisted formats (this is an indicative list and innovative formats if any beyond this list may be adopted) -

1. Traditional Slide Deck Presentation
2. Infographics
3. Video presentation
4. Paper presentation
5. Poster presentation
6. Webinar or online presentation
7. TED-style presentation
8. Storytelling Presentation etc.

MARKETING MANAGEMENT							
Specialization Core Courses							
Sem_ Splz Code	Course Code	Course	Semester	Credits	FA	SA	Total Marks
302 MKT	SC MKT- 01	Services Marketing	III	3	50	50	100
403 MKT	SC MKT- 02	Marketing Strategy	IV	3	50	50	100
				6	100	100	200
Specialization Elective Courses - Semester III (Any 4 to be opted for)							
304 MKT	SE MKT- 01	Consumer Behaviour	III	3	50	50	100
305 MKT	SE MKT- 02	Product & Brand Management	III	3	50	50	100
306 MKT	SE MKT- 03	Sales & Distribution Management	III	3	50	50	100
307 MKT	SE MKT- 04	Digital Marketing-I	III	3	50	50	100
308 MKT	SE MKT- 05	International Marketing	III	3	50	50	100
309 MKT	SE MKT- 06	Business to Business Marketing	III	3	50	50	100
310 MKT	SE MKT- 07	Marketing Analytics	III	3	50	50	100
311 MKT	SE MKT- 08	Marketing 5.0	III	3	50	50	100
				12	200	200	400
Specialization Elective Courses - Semester IV (Any 4 to be opted for)							
405 MKT	SE MKT- 09	Integrated Marketing Communication	IV	3	50	50	100
406 MKT	SE MKT- 10	Rural & Agriculture Marketing	IV	3	50	50	100
407 MKT	SE MKT- 11	Tourism & Hospitality Marketing	IV	3	50	50	100
408 MKT	SE MKT- 12	Digital Marketing-II	IV	3	50	50	100
409 MKT	SE MKT- 13	Retail Marketing	IV	3	50	50	100
410 MKT	SE MKT- 14	Marketing of Financial Services	IV	3	50	50	100
411 MKT	SE MKT- 15	Recent trends in Marketing	IV	3	50	50	100
412 MKT	SE MKT- 16	Marketing 6.0	IV	3	50	50	100
				12	200	200	400
				30	500	500	1000

Specialization: Marketing Management

Semester III	302MKT	SC – MKT -01: Services Marketing
3 Credits	LTP: 2:0:2	Subject Core (SC) Course – Marketing Management

Course Outcomes: On successful completion of the course, the learner will be able to:

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO302 MKT.1	REMEMBERING	RECALL the key concepts in services marketing
CO302 MKT.2	UNDERSTANDING	DESCRIBE the role of Extended Marketing Mix in Services in managing consumer behavior and in improving service quality.
CO302 MKT.3	APPLYING	IDENTIFY concepts related to service offerings and experience in the context of real world offering.
CO302 MKT.4	ANALYSING	EXAMINE the elements of services marketing and service quality in Contemporary and emerging context.
CO302 MKT.5	EVALUATING	EVALUATE Segmentation, Targeting & Positioning of Services and assess its importance and challenges in the dynamic marketing Environment
CO302 MKT.6	CREATING	DEVELOP marketing mix, service blueprint and services capes for various services offering

Unit 1: Introduction to Services Marketing: Services Marketing: Frontiers of change, service concepts, characteristics and classification of services, services marketing mix – 7 Ps, service marketing triangle, factors responsible for growth of the services sector, challenges faced by the services sector, service and technology, impact of technology on service firms, evolution of services as value contributors, service sector beyond 2020 – Indian, Asian & global perspectives, ethics in services marketing: meaning, importance, ethical practices in the service sector. Caselet: The transformation of Indian Railways with the launch of Vande Bharat Express trains as a blend of services and technology showcases evolution in service delivery, customer focus and infrastructure quality. (6+6)

Unit 2: Role of Process, People & Physical Evidence in Services Marketing : Process – Service system, importance of process in services, service development, service blueprint, mapping the process horizontally and vertically, bottlenecks, delays and process failures, service process – standardization vs. customization, value addition in process. People – The key to service marketing, people dimension in services marketing, service encounters, role of frontline service employees, managing employee behavior and enhancing customer participation, high-contact & low-contact services, emotions in service situations, service profit chain. Physical evidence – Servicescape, designing effective services capes, impact on customer perception and branding, visual merchandising for services, managing the physical evidence in service marketing. **Caselet:** Starbucks' consistent in-store experience across locations highlights how services capes, trained baristas and personalized ordering combine to shape a high-quality service process. [6+6]

Unit 3: Managing Consumer Behavior & Service Quality : Consumer and organizational behavior in services – understanding customers and collaborators in services, service standards – factors and types, TOFU, MOFU, BOFU (Top of Funnel, Middle of Funnel, Bottom of Funnel) – customer buying journey, service quality – levels and dimensions, service quality models – ServQual model, Servuction model, GAP model and critical incident model, relationship between service quality, productivity and profitability, managing demand and capacity – capacity constraints, understanding demand patterns, strategies for matching and adjusting capacity and demand, service recovery, service recovery process, impact of service failures, customer churn. Caselet: Zappos' legendary customer service approach with no time limit on calls and generous return policies exemplifies effective service recovery and loyalty building. (6+6)

Unit 4: Segmentation, Targeting & Positioning of Services and CRM : Service segmentation – bases for segmentation, segmentation in the modern era – geo-demographic segmentation, AI and big data-driven segmentation. Service targeting – selecting target market and approaches in modern era – precision targeting, omni-channel targeting, dynamic targeting, ethical targeting. Service positioning – techniques of positioning, emotional and value-based positioning, digital presence and brand voice, managing relationships in services marketing, importance and challenges for STP of services in the modern era, managing customer expectations and complaints for effective customer relationship management, customer

retention and customer lifetime value. Caselet: Netflix uses big data analytics to segment users and offer hyper-personalized recommendations and content positioning, enhancing CRM and long-term loyalty. (6+6)

Unit 5: Services Marketing Strategies & Emerging Trends: Overview of service marketing strategies for organized retail, healthcare, hospitality, tourism, airlines, banking & financial services (BFSI), telecom, IT & ITES, logistics, education, entertainment, event management. Utilization of e-services in various sectors. Emerging trends in services marketing – innovations in service delivery and technology, automation, self-service, augmented reality and virtual reality in services, Internet of Things (IoT) in service ecosystems, servitization and product-service systems, future prospects and challenges in services marketing. **Caselet:** Domino's Pizza India revamped its app interface and delivery tracking system, combining GPS, self-service options and automation for efficient service delivery. (6+6)

Note: Relevant cases must be discussed for all units.

Suggested Text Books

1. John E.G. Bateson, K. Douglas Hoffman: Services Marketing, Cengage Learning, 4e, 2015
2. Vinnie Jauhari, Kirti Dutta: Services Marketing: Operations and Management, Oxford University Press, 2014
3. Gilmore, Audrey. Services Marketing Management, SAGE Publications, Ltd, 2003
4. Services Marketing: Global Edition by Christopher Lovelock, Jochen Wirtz, Pearson Education
5. Services Marketing – Valarie A. Zeithaml, Mary Jo Bitner, Dwayne D. Gremler, Ajay Pandit, McGraw Hill
6. Service Marketing: Concepts Applications & Cases by M.K. Rampal, S. Gupta, Galgotia Publishing Company
7. Services Marketing: People, Technology, Strategy by Jochen Wirtz, Christopher Lovelock, Jayanta Chatterjee, Pearson Education, 8th Edition

Suggested Reference Books

1. Services Marketing: Concepts and Practices by Ramneek Kapoor, Justin Paul & Biplab Halder, McGraw Hill
2. Services Marketing by Rajendra Nargundkar, McGraw-Hill, 3rd Edition
3. Services Marketing, 2nd Edition by Rao, Pearson
4. Service Marketing by C. Bhattacharya, Excel Books

Suggested Audio-Visual Links

1. <https://www.youtube.com/watch?v=5MBEHY7Q0Ls>
2. <https://www.youtube.com/watch?v=1zYsQSJvbog>
3. <https://www.youtube.com/watch?v=MnsVEKEqVoM>

Suggested Journals

1. Journal of Services Marketing
2. Journal of Services Marketing, Emerald Group Publishing Ltd.
3. International Journal of Service Marketing (IJSMD)
4. HBR articles on service excellence, customer experience
5. Case studies: Southwest Airlines, Zappos, Starbucks (employee-driven service)

Suggested Swayam Courses

1. Services Marketing: A Practical Approach, Indian Institute of Technology, Kharagpur and NPTEL via Swayam
2. Services Marketing – The Next Level via Open Learning
3. Services Marketing: A Practical Approach by Prof. Dr. Biplab Datta
4. Services Marketing: Integrating People, Technology, Strategy by Prof. Zillur Rahman

Semester III	304 MKT	SE MKT 01 – Consumer Behaviour
3 Credits	LTP: 2:1:0	Subject Elective Marketing Management Specialization

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO304MKT.1	REMEMBERING	EXPLAIN the fundamental concepts and scope of consumer & organizational behavior and its relevance to marketing strategy and decision-making
CO304MKT.2	UNDERSTANDING	DEMONSTRATE a clear understanding of the psychological, personal, social, and cultural factors influencing consumer & industrial decision-making.
CO304MKT.3	APPLYING	APPLY consumer decision-making models to real-world scenarios and assess how digital transformation has altered modern buying journeys.
CO304MKT.4	ANALYSING	ANALYSE the influence of social, cultural, and environmental factors on the consumer / industrial decision-making process.
CO304MKT.5	EVALUATING	EVALUATE the evolution of the consumer decision-making process in the context of digitalization, mobile usage, and social media.
CO304MKT.6	CREATING	DESIGN consumer-centric marketing strategies by synthesizing behavioral (consumer & organizational) insights across various customer segments and market environments.

Unit 1: Introduction to Consumer Behaviour

Definition of consumer behaviour, difference between consumers and customers, buyers and users, organizations as buyers, prosumers, role of market segmentation in understanding consumer behaviour, changing patterns of consumer behaviour in the evolving Indian economy, rise of the middle class and aspirational spending, influence of the internet, e-commerce and information technology on the consumer marketplace, new trends in consumer behaviour including artificial intelligence (AI), augmented and virtual reality (AR/VR), hyper-personalization in consumer experience and its application in marketing. Business Caselet: *Nykaa's success through personalized beauty recommendations and understanding of evolving consumer behavior in India.* [6+ 3]

Unit 2: Individual Determinants of Consumer Behaviour

Consumer personality, self-concept and major personality theories, brand personality and the role of emotions in consumer decision-making, consumer perception through exposure to stimuli, distortion factors, price perception, perceived quality and risk perceptions, consumer learning including classical conditioning, behavioural and cognitive theories, components of learning, types of consumer behaviour and cognitive response models, consumer attitudes and their functions, attitude models, the relationship between beliefs, feelings and behaviour, learning and changing attitudes, attitude change strategies, consumer motivation, needs and goals, motivational conflicts, defence mechanisms, motive arousal, and an overview of Maslow's hierarchy of needs. Business Caselet: *Amul's brand personality and the emotional connect with Indian consumers.* [6+ 3]

Unit 3: Environmental Influences on Consumer Behaviour

Cultural influences on consumer behaviour, values and subcultures, impact of Indian cultural diversity on consumer choices, cross-cultural influences, rise of conscious consumerism, social class and money as status symbols, AIO classification, VALS typology, reference groups and their types, group norms, family lifecycle stages, family purchase roles, word-of-mouth communication, opinion leadership, mobile-first and app-based shopping behaviour, characteristics of Indian consumers including BoP, Gen Z and HNI consumers, diffusion of innovation including types, process and influencing factors, the adoption process, and gamification's role in shaping consumer decisions. Business Caselet: *Flipkart's approach to understanding rural vs. urban consumer behaviour through Big Billion Days.* [6+ 3]

Unit 4: Consumer Decision-Making Process

Transformation of decision-making due to the internet, smartphones and digital platforms, types of involvement and decision-making, types of problem recognition and their implications, information search types and sources, experience and credence qualities, situational variables, shopping motivations, in-store and non-store purchasing processes, post-purchase evaluation including satisfaction, delight, dissatisfaction and complaint behaviour, post-purchase dissonance, consumer decision models including Nicosia, Howard-Sheth, Engel-Blackwell-Miniard

model. Business Caselet: *Amazon's use of predictive analytics in influencing every stage of consumer decision-making.* [6+ 3]

Unit 5: Organizational Buying Behaviour

Characteristics of organizational buyers, purchase and demand patterns, behavioural economics in B2B contexts, involvement in decision-making, organizational buying roles, decision-making process in organizational settings, factors influencing business buying, ethical concerns in procurement and supply chain management. Business Caselet: *Tata Steel's ethical procurement and its influence on organizational buying partnerships.* [6+ 3]

Note: Real-world examples and business caselets are to be discussed in class and can be included in the examination.

Suggested Textbooks:

1. Schiffman, L.G., Kanuk, L.L., & Kumar, S.R. (10th Edition). *Consumer Behaviour*, Pearson Education.
2. Hawkins, D., & Mothersbaugh, D. (13th Edition). *Consumer Behaviour*, McGraw Hill.
3. Suja R. Nair. *Consumer Behaviour: In Indian Perspective*, Himalaya Publishing House.
4. Martin Lindstrom. *Buyology: Truth and Lies About Why We Buy*, Doubleday.
5. Paco Underhill. *Why We Buy: The Science of Shopping*, Simon & Schuster.

Reference Books:

1. Rama Bijapurkar. *We Are Like That Only*, Penguin India.
2. Business World. *The Marketing Whitebook*.
3. Articles from Economic Times, Mint, Business Standard (Brand Equity, Brand Wagon).

Online Reference Material:

- McKinsey & Company (2020). *Understanding and shaping consumer behavior in the next normal*. <https://www.mckinsey.com/...>

Semester III	305 MKT	SE MKT- 02 – Product and Brand Management
3 Credits	LTP: 2:0:2	Subject Elective Marketing Management Specialization

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO305MKT.1	REMEMBERING	RECALL foundational concepts of product and brand management, and understand their strategic relevance.
CO305MKT.2	UNDERSTANDING	EXPLAIN key frameworks in branding, customer-based brand equity, and innovation management.
CO305MKT.3	APPLYING	APPLY practical approaches to develop, test, and position products and brands in a competitive market.
CO305MKT.4	ANALYZING	ANALYZE market data, perceptual maps, brand audits, and product portfolios to guide strategic decisions.
CO305MKT.5	EVALUATING	CRITICALLY evaluate brand performance, product success, and campaign effectiveness using modern tools.
CO305MKT.6	CREATING	DESIGN impactful branding and product strategies using digital tools, storytelling, and sustainable practices.

Unit 1: Product and Branding Decisions

Product policy and objectives, product mix and product line decisions, packaging strategies, the concept of branding and brand management, difference between products and brands, brand positioning and repositioning strategies, brand equity and loyalty, contemporary brand management practices in Indian FMCG, D2C and luxury markets. **Caselet:** Analyze Nykaa's approach to branding and packaging innovation across product lines. [6+6]

Unit 2: Product Market Evolution, Strategy and Planning

Introduction to new product development and innovation, models of NPD, generic product development processes, strategies for product growth—intensive, interactive, and diversification, portfolio analysis using BCG matrix, GE model, Shell model, Ad Little matrix, and risk-return analysis. **Caselet:** Application of BCG Matrix in analyzing the product portfolio of Hindustan Unilever Limited (HUL). [6+6]

Unit 3: Product Development and Testing

Idea generation and screening techniques, the role of R&D and cross-functional collaboration, product maps and joint space maps, perceptual mapping, preference segmentation and market structure, BRANDAID and Defender models, behavioral learning curves, innovation diffusion and adoption models, product pre-testing and test marketing, time to market (TTM). **Caselet:** Xiaomi India's approach to TTM and innovation in the smartphone segment. [6+6]

Unit 4: Understanding Brands and Building Brand Equity

Essentials and benefits of branding, attributes of successful brands, significance to consumers and firms, selecting brand names and creating awareness, types of brand associations and images, brand identity and personality, sources of brand equity, customer-based brand equity, brand audit and tracking systems, brand value chain, managing brand equity using Aaker, Keller, and Brand Asset Valuator models, licensing, franchising, and global branding strategies. **Caselet:** Brand equity analysis of Amul using Keller's CBBE model. [6+6]

Unit 5: Strategic Brand Management

Brand building and positioning strategies, designing brand marketing programs, evaluating brand performance using KPIs, branding in retail and digital-first businesses, role of private labels and co-branded ventures, emerging trends in brand management such as sustainability, purpose-driven brands, AI in branding, brand extensions and rebranding, managing brand reputation in the digital age. **Caselet:** How Tata Tea transformed its brand image through the 'Jaago Re' campaign. [6+6]

Note: Real world examples / cases are expected to be analyzed in the class as well as included in the examination

Suggested Text Books:

1. A. K. Chitale, Ravi Gupta, "Product Policy and Brand Management, Text and Cases", Second edition, PHI Learning Private Limited, 2013
2. Kevin Lane Keller, M. G. Parameswaran, Isaac Jacob, "Strategic Brand Management", Third edition, 2011, Pearson
3. Marc. A. Annacchino, P.E. "New Product Development, From Initial idea to product management", 2003, Elsevier
4. U. C. Mathur, Product and Brand Management, First Edition, 2007, Excel Books

Suggested Reference Books:

1. Principles of Marketing, Philip Kotler, Gary Armstrong, Prafulla Agnihotri, EhasanHaque, Pearson
2. Marketing Management- Text and Cases, Tapan K Panda, Excel Books
3. S Ramesh Kumar: Marketing and branding. Pearson publishers "Indian Marketing: Cases and Concepts" by S. Neelamegham
4. Kevin Lane Killer, Strategic Brand Management, Pearson, New Delhi.

Semester III	306 MKT	SE MKT 03 : Sales and Distribution Management
3 Credits	LTP: 2:0:2	Subject Elective Marketing Management Specialization

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO306MKT.1	REMEMBERING	RECALL key concepts, terminology, and theories of sales management, distribution systems, channel structures, and logistics
CO306MKT.2	UNDERSTANDING	EXPLAIN the functions of sales and distribution management in the broader perspective of marketing and business environment, and describe the different types of distribution channels.
CO306MKT.3	APPLYING	APPLY sales management approach & principles to emphasize towards sales forecasts, set sales targets, and design sales territories that align with organizational objectives.

CO306MKT.4	ANALYZING	ANALYZE the performance of distribution channels level by evaluating factors like cost efficiency, reach, and customer satisfaction to determine the best channel strategies for a company.
CO306MKT.5	EVALUATING	ASSESS the effectiveness of sales and distribution strategies and provide recommendations for improvement based on sales performance data, market trends, and customer feedback.
CO306MKT.6	CREATING	DESIGN innovative sales and distribution strategies that integrate technology, market analysis, and customer insights to optimize sales performance and distribution network efficiency.

Unit 1: Introduction to Sales and Distribution Management:

Overview of Sales and Distribution Management; importance, and role in marketing, Evolution, Objectives and functions of sales and distribution management, Emerging trends in Sales Management, Sales Management Concepts, Impact of Technology on Sales: ERP, Social Platforms, Introduction of Sales Force Automation Systems (SFA) and Mobile technology in sales. Sales Process and Techniques: Sales planning, strategy development, Types of selling: B2B, B2C, B2G consultative, relationship selling. Sales forecasting and budgeting, Sales target setting and performance evaluation, Sales territories and quotas. Skills required for Sales Managers, Careers in Sales Management; [6+6]

Unit 2: Sales Force Management:

Organizing the Sales Force: Sales Organization - Objectives & Structures of Sales Organization, Recruitment, selection and training the sales force, motivation to sales force, Compensation and Evaluation of Sales Force. Personal Selling: Personal Selling Process; Relationship selling. Sales Planning and Control: Sales Planning Sales Forecasting & Budgeting, Sales Quotas and Targets.

Sales Control: Reporting Formats for Primary and Secondary Sales, Monthly Sales Plan, Territory Sales and Coverage Plan, Daily Sales Call Report, Expired Goods and Breakage Return Report, Fortnightly Sales Review, Report, Order Booking Report, Monthly and Quarterly Sales Report.

Sales Audit: Sales Force Productivity Indicators (Value and Volume); Territory Productivity, per Person per Month Productivity, Sales to Marketing Expenses Ratio. [6+6]

Unit 3: Distribution Channels and Logistics Management:

Distribution Channels: Types of distribution channels: direct and indirect, Role and functions of intermediaries in distribution channels. Designing and Managing Distribution Channels, Factors influencing channel design decisions, Channel structure and management strategies, Type of channels available for B2B, B2C and services markets, General Trade, Modern trade Institutional Trade, Concept of Vertical Marketing System (VMS) and Horizontal Marketing System (HMS) Conflict resolution and collaboration in channels.

Logistics Management and Supply Chain: Basics of logistics and its role in distribution, Inventory management, warehousing, and transportation, [6+6]

Unit 4: Channel Strategy and Performance:

Evaluating Distribution Channel Performance, Criteria for assessing channel effectiveness (coverage, cost, customer satisfaction), Channel performance analysis and corrective actions, Channel Strategy and Market Coverage, Intensive, selective, and exclusive distribution strategies, Integrated Distribution Systems. Omni-channel distribution strategies Hybrid & Multi-channel distribution, E-commerce and digital distribution channels, Franchising Retailing and Wholesaling in Distribution, Types & Role of retailers and wholesalers in the distribution chain, Retailing strategies and innovations in distribution. [6+6]

Unit 5: Recent trends in Sales and Distribution Management:

Sales and Distribution in a Digital Age, Impact of technology and digital tools on sales and distribution, Role of CRM (Customer Relationship Management) systems, Automation in sales processes; AI, Chatbots, Virtual Assistants & data analytics; Smart Distribution Centers, Demand Forecasting via Smart Shelves & Personalized Marketing (Tailor this to a specific industry FMCG, Pharmacy & Logistics, etc.) Global & International Sales & distribution Management, Managing international sales teams and global distribution channels. Ethical and Legal Issues in Sales and Distribution: Ethical practices in sales and distribution management, Legal regulations governing sales and distribution activities. Trends and Innovations in Sales and Distribution: Emerging trends such as sustainable distribution practices, Integration of Advanced Technologies, data analytics is transforming sales processes. Chabot's etc; [6+6]

Suggested Text Books:

1. Sales and Distribution Management, Havaldar & Cavale, TMGH
2. Sales Management, Still, Cundiff & Govani, Sandeep Puri Pearson Education
3. Sales and Distribution Management, SL Gupta, Excel books
4. Fundamentals of Selling, 12th Ed, Charles Futrell, McGraw Hill Irwin
5. Retail Marketing, Swapna Pradhan TMGH
6. Retailing Management, Michael Levy & Barton Weitz, TMGH
7. Handbook of Logistics & Distribution Management, John L. Gattorna, Jaico Books

Suggested Reference Books:

1. Sales and Distribution Management, Tapan K Panda, Sunil Sahadev, Oxford Higher education.
2. Sales and Distribution Management, A Nag, McGraw Hill Publication
3. Management of Sales Force-Rosann Spiro, William Stanton, Gregory Rich; TMGH
4. Retail Management, Dr. Vishal Gaikwad, Dr. Prashant Kotasthane, AGPH Books
5. Retail Management, Bajaj, Tuli, Shrivastava, Oxford

Semester III	307 MKT	SE MKT 04: Digital Marketing - I
3 Credits	LTP: 1:0:4	Subject Elective Marketing Management Specialization

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO307MKT.1	REMEMBERING	DEFINE various concepts related to Digital Marketing.
CO307MKT.2	UNDERSTANDING	EXPLAIN the role of Facebook, Google Ads, YouTube, and Email in digital marketing.
CO307MKT.3	APPLYING	MAKE USE OF Facebook, Google Ads, YouTube, and Email for carrying out digital marketing of real-life products.
CO307MKT.4	ANALYSING	ILLUSTRATE the use of Facebook, Google Ads, YouTube, and Email in various contexts of digital marketing.
CO307MKT.5	EVALUATING	DESIGN digital media campaigns using appropriate mix of Facebook, Google Ads, YouTube, and Email.
CO307MKT.6	CREATING	CREATE appropriate content for Facebook, Google Ads, YouTube, and Email campaigns.

Unit 1: Digital Marketing and its Role in Global Context

Concept of Digital Marketing, Role and Importance of Digital Marketing, Digital Marketing vs Traditional Marketing, Digital Marketing Process, Phygital Marketing, Omni-channel Marketing, E-commerce and its Impact on Digital Marketing, Current Global Trends, Digital Marketing Environment, Microenvironment and its Elements, Macroenvironment in India, PESTEL Analysis, National and Global Factors, Role of Cyber Policy, Role of Digital Commerce Policy, Global Perspective of Digital Marketing.

Practical Assignment: PREPARE a comparative analysis report of Traditional Marketing vs Digital Marketing with real brand examples and CONDUCT a PESTEL analysis of Digital Marketing in India and one other country. [3+12]

Unit 2: Segmentation, Targeting and Positioning in Digital Marketing

Segmentation Concept, Need and Benefits, Criteria for Segmenting Digital Audience – Geographic, Demographic, Psychographic, Behavioral, Targeting Online Customers – Business, Government and Customer Markets, Product Positioning, Sectoral Perspective in Digital Marketing Applications, Case Studies, Overview of Marketing Mix in Digital Context, AI-Driven Segmentation and Targeting, Customer Journey Mapping, Touchpoint Optimization, Introduction to Neuromarketing, Use of AI to Decode Consumer Behavior.

Practical Assignment: CREATE two digital customer personas (B2C & B2B), MAP their digital journey and touchpoints using free tools, and RECOMMEND targeting strategies using AI. [3+12]

Unit 3: Digital Marketing Planning and Structure

Inbound Marketing, Outbound Marketing, Content Marketing, Strategic Flow for Marketing Activities, Setting Customer Acquisition Goals, Revenue Goals, Cost Per Lead (CPL), Conversion Rate, Lead Goals, Digital Marketing Plan with

Deadlines, Timeframe, Marketing Channels, Result Measurements, Action Plan, Project Status, Team Assignment, Marketing Goals, Key Performance Indicators (KPIs), Target Market, Competitor Analysis, Budget and Review, WWW, Domains, Domain Purchase, Website Language and Technology, Core Objective of Website, One-Page Website Design, Strategic Design of Homepage, Products & Services Page, Pricing Page, Portfolio, Gallery, Contact Us Page, Call to Action (CTA), SEO Overview, Google Analytics Tracking Code, Website Auditing, Designing WordPress/Wix Website. **Practical Assignment:** DESIGN and LAUNCH a one-page website using Wix/WordPress for a real or imaginary brand including homepage, services, CTA, and SEO basics. [3+12]

Unit 4: Search Engine Optimization (SEO) Tools and Techniques

Concept of SEO, Role in Digital Marketing, Features and Significance of SEO, SEO Models – Five Stage AACRO POEM Model, Inverted Pyramid, Content Drilldown, E3 Model, Web and Mobile Marketing Perspective, Key SEO Tools – Google Domain, Google My Business, Google Search Console, Google Trends, Google Tag Manager, SEMrush, Domain Authority Score, Inbound Marketing, Essentials of Inbound Strategy, Website Optimization for Search Engines, Creating Purposeful Content, Lead Generation, Lead Conversion, AI-driven Personalization, Zero-click Search, Voice Search Optimization, Visual Search Optimization.

Practical Assignment: CONDUCT an SEO Audit of a website using tools like Google Search Console or SEMrush and SUGGEST at least five actionable improvements. [3+12]

Unit 5: Search Engine Marketing (SEM) Tools

SEM Concepts, Comparison of SEO and SEM, Social Media Marketing (SMM), Keywords, PPC, CPC, SERP, CTR, Impressions, Google Display Network (GDN), Web and Mobile Marketing Perspective, SEM Tools – Google Ads, Google Analytics, Google AdMob, Google AdSense, Google Marketing Platform, Google Shopping Campaign, WordStream Advisor, Fundamentals of Blogging, Amplifying Content via Social Media, Calls-to-Action (CTA), Landing Page Optimization, Thank You Page Design, Email Targeting, HubSpot Inbound Certification, Website Analytics, Web Analytics Types – Social, Mobile, Traditional.

Practical Assignment: DESIGN a simulated Google Ads campaign including ad groups, keywords, target audience, and estimated budget, and PRESENT the campaign metrics/KPIs. [3+12]

Note:

The teacher shall use more practical assignments for evaluation.

Suggested Textbooks:

1. *Internet Marketing* – Dave Chaffey, Fiona Ellis-Chadwick, Kevin Johnston, Richard Mayer, Pearson Education
2. *Digital Marketing* – Oliver J Rich
3. *Online Marketing* – Gerry T. Warner and Joe Wilson Schaefer

Suggested Reference Books:

1. *Digital Marketing* – Prof. Seema Gupta, McGraw Hill
2. *E-Marketing* – Judy Strauss, Adel Ansary, Raymond Frost, Prentice Hall
3. *Social Media Marketing All-In-One for Dummies* – Jan Zimmerman and Deborah
4. *Google AdWords for Beginners* – Cory Rabazinsky
5. *Email Persuasion* – Ian Brodie

Supplementary Reading Material:

1. Journal of Internet Marketing and Advertising
2. International Journal of Electronic Commerce
3. International Journal of Electronic Retailing and Marketing
4. International Journal of Online Marketing

Websites:

- www.smartinsights.com/digital-marketing-strategy/customer-segmentation-targeting/segmentationtargeting-and-positioning/
- www.ibef.org

- www.salesforce.com/digital/marketing

Suggested MOOCs:

1. [Fundamentals of Digital Marketing – by Google](#)
2. [Google Digital Tools Certification](#)
3. [SWAYAM Digital Marketing Course](#)

Audio Visuals:

1. [YouTube Channel – Digital Marketing](#)
2. [Learn Digital Marketing – Website & YouTube](#)

Semester III	308 MKT	SE MKT - 05: International Marketing
3 Credits	LTP: 3:0:0	Subject Elective Marketing Management Specialization

Course Outcomes: On successful completion of the course, the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO308MKT.1	REMEMBERING	DESCRIBE various terms and key concepts associated with international marketing
CO308MKT.2	UNDERSTANDING	EXPLAIN various key concepts used in all aspects of international marketing
CO308MKT.3	APPLYING	ILLUSTRATE all stages in international marketing management process
CO308MKT.4	ANALYSING	EXAMINE various facets of international marketing environment and the relevant aspects of international marketing management process from a data driven decision perspective
CO308MKT.5	EVALUATING	JUDGE suitability of alternative market segmentation bases, target market selection, market entry strategies, positioning strategies and international marketing mix strategies based on assessment of international marketing environment
CO308MKT.6	CREATING	DESIGN appropriate market segmentation, target market, market entry strategies, positioning strategies and international marketing mix strategies for global business organizations

Unit 1. Introduction: Meaning, Nature, Scope and Importance of International Marketing; Management Orientations in the context of International Marketing EPRG Framework; Overview of International Marketing Management Process; International Marketing Environment and Its Effect on International Marketing–Economic Environment, Trade Environment, Social and Cultural Environment, Political Environment, Legal and Regulatory Environment, Demographic Environment, Natural Environment, Technological Environment.; Sustainability and ESG Trends in International Marketing (9)

Unit 2. Approaching International Marketing: International Marketing Research- International secondary data sources, Primary data collection methods and complexities of data collection; Strategic effects of going international; Strategies employed by Indian companies to sustain globally; Global Market Entry Strategies Export/ Import, International Intermediaries – EMC's, Trading Companies, Licensing, Franchising, FDI, Local presence – Inter firm co-operation, MNC's and Globalisation, Mergers and Acquisitions; International Market Segmentation; Target Market Selection; International Positioning Strategies. (9)

Unit 3. International Marketing Mix:

a)International Product Planning: Major Product Attributes - Design, features, quality, packaging, labelling, Global branding and positioning, Global Vs Local brands, Product Standardization vs. Adaptation; New Product Development; IPR Issues; International Product Life Cycle; Managing Product Mix and Product Line.

b)Pricing for International Markets: Factors affecting International Price Determination; Pricing Strategies for International Markets; Price Quotations and Terms of Sale, Delivery and Payment; Import duties, tariffs, and taxes, Price controls or anti-dumping laws, Competitor pricing in the local market, Gray markets and parallel imports, Transfer Pricing (9)

Unit 4. International Marketing Mix II:

a) Managing International Promotion: International Promotion Mix Decisions: Advertising, Sales Promotion, Public Relations and Publicity, Personal Selling, Direct Marketing; Standardization vs. Adaptation issue; Developing International Promotion Campaign.

b) Managing International Distribution: Designing and Managing International Distribution Channels; Distribution Channel Dynamics: Local Partnerships vs. Global Aggregators; International Logistics Management (9)

Unit 5. Managing International Marketing in 21st Century: Leadership; Digital Marketing's Strategic Role in Internationalization; Cross-Cultural Communication in International Marketing; Developing International Competitiveness; Geopolitical Risks and Global Marketing Strategy, Ethics, CSR and Social Responsiveness in Globalization Era. (9)

Suggested Text Books:

1. Global Marketing Management by Keegan Warren J. and Green M.C. Pearson Education.
2. International Marketing: Analysis and Strategy by SakOnkvisit and John Shaw, Prentice Hall of India.
3. International Marketing by Cateora, Graham and Salwan, McGraw-Hill.
4. International Marketing Management by Subhash Jain, CBS Publishers & Distributors.
5. International Marketing by Rakesh Mohan Joshi, Oxford University Press.
6. International Marketing by Rajgopal, Vikas Publishing House.
7. International Marketing – Text and Cases by Francis Cherunilam, Himalaya Publishing House
8. International Marketing by Philip R. Cateora, Mary C. Gilly, and John L. Graham
9. Global Leadership: Research, Practice, and Development" by Mark E. Mendenhall et al.
10. Marketing Research, G C Beri, TMGH
11. International Marketing by Daniel Baack, Barbara Czarnecka, Donal Baack, Sage

Suggested Reference Books:

1. International Marketing by Czinkota and Ronkainen, Cengage Learning.
2. Global Marketing Management by Kotabe and Helsen, Wiley Publication.
3. International Marketing by Terpstra Vern and Sarathy Ravi, The Dryden Press.
4. Global Marketing by Svend Hollensen, Prentice Hall.
5. International Marketing: An Indian Perspective by Varshney R. L. and Bhattacharya B., Sultan Chand and Sons.
6. International Marketing by PK Vasudeva, Excel Books.

Semester III	309	SE MKT 06: Business to Business Marketing
3 Credits	LTP: 3:0:0	Subject Elective Marketing Management Specialization

Course Outcomes: On successful completion of the course the learner will be able to

CO	COGNITIVE ABILITIES	COURSE OUTCOMES
CO309 MKT.1	REMEMBERING	DEFINE the terms and concepts related to Business to Business
CO309 MKT.2	UNDERSTANDING	EXPLAIN How these terms and concepts apply in real-world B2B contexts, including the roles of relationships, long buying cycles, and organizational decision-making.
CO309 MKT.3	APPLYING	APPLY principles of segmentation, targeting, and positioning (STP) to B2B markets
CO309 MKT.4	ANALYSING	FORMULATE an effective B2B marketing mix (product, price, place, promotion) tailored to institutional or industrial customers.
CO309 MKT.5	EVALUATING	EVALUATE strategic decisions in Business-to-Business (B2B) marketing by critically assessing market segmentation, targeting, positioning, and the effectiveness of marketing mix elements
CO309 MKT.6	CREATING	DESIGN Marketing Mix Strategy tailored for different B to B segments that integrates digital tools, sales force alignment, and customer value propositions.

Unit 1. Overview of Business-to-Business Marketing: Concept of the Business-to-Business (B2B) Marketing, Characteristics of Business Marketing, Classifying goods for the business market, Business market customers, Commercial enterprises, Commercial and institutional customers, B2B vs B2C Marketing, Buying Situations, buy grid

Framework, Role of Buying Centre, Organizational Buying and Buyer Behavior: Organizational buyers' decision process - A Stepwise Model and A Process Flow Model, B2B Marketing Strategy: strategy Formulation and Management Process, Managing Products and Services in Business Markets. [9]

Unit 2. Segmentation, Targeting & Positioning for B2B Markets: Concept of Market Segmentation, basic framework of segmentation, Bases of business-to-business segmentation, Value based segmentation, Macro Variables - Industry Characteristics, Company Size, Customer Location, End User Markets, product Applications. Micro Variables: Customer Interaction needs, Organizational Capabilities, Purchasing Policies, Purchasing Criteria, and Personal Characteristics. Target Markets: Concentrated Marketing, Differentiated Marketing, Undifferentiated Marketing. Criteria used for choosing a target market. Positioning, Issues in Segmentation, Targeting and Positioning. [9]

Unit 3. Product and Pricing Strategy for B2B Markets: Product management: in industrial market, role of product in the industrial market, new product development, industrial product life cycle, product evaluation matrix, techniques for identifying new products, Importance, Use of Innovation, Competitiveness & Technology. role of service and maintenance in industrial marketing, customer experience life cycle, service quality. Pricing: Pricing strategies; Cost Based, Value based, Competitive. The pricing policy, competitive bidding, commercial terms and conditions, role of leasing. Pricing Model in B to Ethical issues in pricing [9]

Unit 4. Business Marketing Communication and Relationship Management

The Role of Business Marketing Communication, Industrial Advertising, Sales Promotion, Public Relations (PR), Trade Shows and Exhibitions, Personal Selling: Role & Characteristics of Personal Selling, Development & Management of Sales Force, Key Account Management - ABC Analysis of Industrial Customers. Buyer seller relationship, types of relationships, transactional and collaborative relationships, influencing industrial customers, role of service in industrial markets. CRM. [9]

Unit 5. Distribution Channels:

Distinctive Nature of B-to-B Distribution Channels, Types of Industrial Middlemen, Channel Flow Design, Formulating Distribution Strategies and Cost Benefit Analysis, Value chain analytics for supply chain integration. Current Trends for B2B Markets: Use of social media for Lead generation and branding, Adoption of Technology (CRM, ERP, E-Commerce Platform), Role of AI in B2B Distribution, Virtual Marts. [6+3+3]

Note: Real world examples / cases are expected to be analyzed in the class as well as included in the examination

Text Books

1. Industrial Marketing: Text and Cases Krishna K. Havaldar Tata McGraw-Hill Education
2. Industrial Marketing By Hill, Alexander and cross, Irwin
3. Industrial Marketing by Mukherjee, Excel Book

Reference Books

Business to Business Marketing by Ross Brennan, Louise Canning, Raymond Macdowell

1. Handbook of Business-to-Business Marketing Gary L. Lilien, J. Andrew Petersen, and Stefan Wuyts, Edward Algar Publication (2022) (2nd Edition)
2. Zimmerman, A. and Blythe, J. (2017), 'Business to Business Marketing Management', 3rd edition, Routledge.
3. Business to Business Marketing Management: A Global Perspective, Alan Zimmerman and Jim Blythe, Routledge Publication, second edition
4. Business Marketing, Concepts and Cases, Sharad Sarin, McGraw Hill, 2013
5. Business to Business Marketing: Analysis and Practice Robert P. Vitale, Joseph Giglierano, Waldemar Pfoertsch, Pearson, 2010
6. B2B Marketing: A South-Asian Perspective by Michael D. Hutt, Dheeraj Sharma & Thomas W. Speh, (Cengage Learning; 11th Edition).

Supplementary Reading Material: -

1. Marketing White Book (Latest edition)

Journals

1. Journal of Business & Industrial Marketing (Emerald Insight)
2. Industrial Marketing Management (Elsevier)

Suggested MOOCs:

1. Business to Business Marketing on Swayam Platform
2. International B2B (Business-to-Business) Marketing on Coursera
3. B2B Marketing Foundations Training (LinkedIn Learning – Lynda)
4. B2B Pricing Strategy Online Program (IMD)

Semester III	310 MKT	SE MKT 07 : Marketing Analytics
3 Credit	LTP: 2:0:2	Subject Elective Marketing Management Specialization

On successful completion of the course, the learner will be able to:

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 310 MKT.1	REMEMBERING	RECALL and describe key concepts, terminologies, and the scope of marketing analytics
CO 310 MKT.2	UNDERSTANDING	EXPLAIN the relevance of marketing analytics in supporting marketing decisions and improving performance
CO 310 MKT.3	APPLYING	APPLY marketing analytics frameworks to interpret customer behaviour and campaign effectiveness
CO 310 MKT.4	ANALYSING	ANALYSE marketing data patterns and performance indicators to draw meaningful insights for business decision-making
CO 310 MKT.5	EVALUATING	EVALUATE the effectiveness of marketing strategies based on analytical insights
CO 310 MKT.6	CREATING	DESIGN basic strategic recommendations using interpreted marketing insights

Unit 1: Foundations of Marketing Analytics: Definition, scope, and significance of marketing analytics, Types of marketing data: internal, external, structured, and unstructured, Role of analytics in marketing decision-making, Key performance metrics and their interpretation: Customer Lifetime Value, Return on Marketing Investment, Net Promoter Score, Customer Churn Rate, Marketing analytics process: from data collection to decision-making, Overview of descriptive, predictive, and prescriptive analytics (conceptual understanding only), Ethics and responsible data use in marketing

Practical Task: Collect marketing data from a simulated business and identify key performance metrics for evaluation [6+6]

Unit 2: Customer and Consumer Analytics : Approaches to customer segmentation: demographic, psychographic, behavioral (conceptual), Customer journey mapping: from awareness to advocacy, Omni-channel attribution and customer persona development, Introduction to customer retention and acquisition analytics, Concepts of Recency-Frequency-Monetary (RFM) analysis and lead scoring (interpretation only, no calculation), Customer churn analysis: metrics and implications (concept only)

Practical Task: Conduct a customer segmentation analysis based on a sample dataset and map customer journeys [6+6]

Unit 3: Retail, Distribution, and Sales Analytics: Retail performance indicators: footfall, dwell time, store layout effectiveness, inventory turnover, Purchase behavior and basket analysis (logic-based understanding), Retail Key Performance Indicators in multi-channel environments, Pricing and promotional effectiveness (elasticity and case-based interpretation), Sales analytics: distributor performance, territory-wise sales patterns, Channel effectiveness and optimization strategies

Practical Task: Interpret retail performance indicators and create a report on channel effectiveness and pricing strategies [6+6]

Unit 4: Digital and Campaign Analytics: Web traffic metrics: sessions, bounce rate, click-through rate, heat maps, Social media metrics: engagement, impressions, reach, virality, sentiment analysis, Funnel analysis using the Attention-Interest-Desire-Action model and conversion metrics, Email and mobile marketing analytics: open rate, click-through rate, unsubscribe rate, Evaluating digital campaigns conceptually (Google Analytics 4 framework overview), Role of content analytics and personalization in digital strategies

Practical Task: Analyze a digital marketing campaign using Google Analytics and create a report on its effectiveness

[6+6]

Unit 5: Strategic Interpretation and Decision-Making Using Analytics: Marketing models and analytics: 4Ps, Segmentation-Targeting-Positioning, brand funnel, flywheel model, A/B testing: applications and interpretation (no calculations), Forecasting using trends and patterns (conceptual only), Data interpretation from dashboards, campaign summaries, and customer reviews, Case-based insight generation and data-driven marketing recommendations

Practical Task: Use A/B testing to evaluate two digital ad strategies and recommend a course of action based on the results [6+6]

Textbooks

1. *Marketing Metrics: The Manager's Guide to Measuring Marketing Performance* – Paul W. Farris et al. (Pearson)
2. *Marketing Analytics: Strategic Models and Metrics* – Stephan Sorger (CreateSpace Independent Publishing)
3. *Digital Marketing Analytics: Making Sense of Consumer Data in a Digital World (Second Edition)* – Chuck Hemann & Ken Burbary (Pearson)

Reference Books

1. *Marketing Analytics: A Practical Guide to Real Marketing Science* – Mike Grigsby (Kogan Page)
2. *Competing on Analytics: The New Science of Winning* – Thomas H. Davenport & Jeanne G. Harris (Harvard Business Review Press)
3. *Marketing Research: An Applied Orientation* – Naresh K. Malhotra (Pearson, 6th or 7th Edition)

Additional Reading and Resources

1. Think with Google – India Section: <https://www.thinkwithgoogle.com/intl/en-apac>
2. McKinsey Marketing & Sales Insights: <https://www.mckinsey.com/business-functions/marketing-and-sales>
3. HubSpot Academy – Marketing Analytics: <https://academy.hubspot.com>
4. YourStory – Indian startup caselets: <https://yourstory.com>
5. Inc42 – Indian business insights: <https://inc42.com>

Semester III	311 MKT	SE MKT-08 – Marketing 5.0
3 Credits	LTP: 2:0:2	Subject Elective Marketing Management Specialization

Course Outcomes:

On successful completion of the course, the learner will be able to:

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO311MKT.1	REMEMBERING	DEFINE the key concepts in Marketing 5.0
CO311MKT.2	UNDERSTANDING	UNDERSTAND various technologies, challenges faced by marketers, application of technology, sustainability development goals, new customer experience (CX), and new tactics leveraging marketing technology
CO311MKT.3	APPLYING	IDENTIFY the components of Marketing 5.0
CO311MKT.4	ANALYSING	OUTLINE challenges faced by marketers in the digital world and ANALYSE new tactics for leveraging marketing technology
CO311MKT.5	EVALUATING	EXAMINE how companies can unleash the power of advanced technologies in their marketing strategies
CO311MKT.6	CREATING	DEVELOP a strategy based on human-centric marketing and technology empowerment of Marketing 5.0, for real-world products, services, e-products, or e-services

Unit 1: Introduction to Marketing 5.0 : Journey from Marketing 4.0 to Marketing 5.0, Components of Marketing 5.0, Technology for Humanity, Challenges faced by marketers in the digital world, Generation Gap, The five Generations, Marketing to Baby Boomers, X, Y, Z, and Alpha, Generations and use of technology, Prosperity Polarization – Market polarization across categories, Corporate Activism, Importance of inclusivity, Importance of sustainability, Creating inclusivity and sustainability for society **Task:** Analyze how different generations interact with technology and develop marketing strategies for each group in the context of Marketing 5.0 [6+6]

Unit 2: Digital-Ready Organization: Impact of Covid-19 and digitalization, Opportunities and challenges of digitalization, Technology aspects, Preparing for a Digital-Ready organization, Moving from physical to digital channels,

Digital capabilities, Digital Readiness Assessment, Digital Leadership, Digital divide, Human-Like Technologies, Enablers of Technology, Bionics **Task:** Conduct a digital readiness assessment for an organization and provide recommendations for a digital transition [6+6]

Unit 3: Leveraging Marketing Technology : Customer experience in the digital world, 5A's customer path, Human and machine in new customer experience (CX), Finding the right balance between technology and humans to improve customer experience, Different trends shaping customer experience (CX), Data-driven marketing, Segments of one, Setting up data-driven marketing, Building data ecosystem, **Task:** Create a customer experience strategy for a product/service using data-driven marketing and new technological tools [6+6]

Unit 4: Predictive and Contextual Marketing: Introduction to predictive marketing, How predictive marketing works, Applications of predictive marketing, Building predictive marketing models, Anticipating market demand with proactive action, Introduction to contextual marketing, Triggers and responses in contextual marketing, Building smart infrastructure, Three levels of personalized experience, Making personalized sense-and-respond experiences **Task:** Design a predictive marketing model for a new product launch and contextual marketing strategies for personalized customer engagement [6+6]

Unit 5: Augmented and Agile Marketing: Introduction to augmented marketing, Building tiered customer interfaces, Digital tools, Delivering tech-empowered human interaction, Examples of augmented marketing, Virtual and augmented reality marketing, Introduction to agile marketing, Need for agile marketing, Executing operations at pace and scale, Blockchain, **Task:** Develop a concept for augmented marketing using virtual reality for an immersive brand experience and propose agile marketing strategies for a campaign [6+6]

Textbooks

1. *Marketing 5.0: Technology for Humanity* – Philip Kotler, Hermawan Kartjaya, Iwan Setiawan (John Wiley & Sons, Hoboken, New Jersey)
2. *Predictive Marketing: Easy Ways Every Marketer Can Use Customer Analytics and Big Data* – Omer Artun, Dominique Levin
3. *The Context Marketing Revolution: How to Motivate Buyers in the Age of Infinite Media* – Mathew Sweezey (Harvard Business Review Press)
4. *Marketing New Realities: An Introduction to Virtual Reality & Augmented Reality Marketing, Branding, & Communications* – Cathy Hackl, Samantha G. Wolfe (Meraki Press)
5. *The Six Disciplines of Agile Marketing: Proven Practices for More Effective Marketing and Better Business Results* – Jim Ewel (Wiley)

Suggested Reference Books

1. *Marketing to Gen Z: The Rules for Reaching This Vast—and Very Different—Generation of Influencers* – Jeff Fromm, Angie Read (Amacon)
2. *Digital Channels: A Complete Guide* – Gerardus Blok Dyk (5starcooks)
3. *The Ten Principles Behind Great Customer Experiences* – Matt Watkinson (Pearson Education)
4. *Foundations of Predictive Analytics* – James Wu, Stephen Coggeshall (Chapman and Hall/CRC)

Semester- IV	403 MKT	SC MKT 02 : Marketing Strategy
3 Credits	LTP: 2:1:0	Subject Core (SC) Course Marketing Management

Course Outcomes: On successful completion of the course, the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO403MKT.1	REMEMBERING	DESCRIBE various concepts of marketing strategies.
CO403MKT.2	UNDERSTANDING	EXPLAIN various marketing strategies to handle marketing circumstances
CO403MKT.3	APPLYING	APPLY the concepts of marketing strategy to solve real-life business problems.
CO403MKT.4	ANALYSING	DISCOVER the suitable competitive advantage useful to design market specific and organization specific marketing strategies.

CO403MKT.5	EVALUATING	ESTIMATE the attractiveness of segment to decide targeting strategy and MONITOR marketing performance using marketing matrices.
CO403MKT.6	CREATING	DESIGN marketing strategies to lead the organization towards sustainable growth.

Unit:1 Introduction to Marketing Strategy:

Introduction to Marketing Strategy: Meaning and Definition of Marketing Strategy, The Role of Marketing strategy in Business, The Evolution of Marketing Strategy. **The Marketing Strategy Process:** Steps in Developing a Marketing Strategy: Environmental Analysis, Setting Marketing Objectives, Identifying Target Markets, Crafting the Marketing Mix (4Ps), Implementing and Monitoring the Strategy. **Business Strategy and Marketing Strategy Alignment:** Corporate and Business-Level Strategies. Marketing Strategies along various stages of PLC, Integrating Marketing Strategy with Overall Business Goals, Case Studies of Successful Strategic Alignment [6+3]

Unit:2 Marketing for Customer Advantage & Value Creation

Definition and Importance: Defining customer value and its significance in marketing and business strategy. Generating and using customer insight to drive strategy, tools for innovating new values for customers, managing customers for experience, managing customers for profit. Customer Value vs. Satisfaction & Loyalty: Difference between customer value, satisfaction, and loyalty. Measuring Customer Value: Exploring qualitative and quantitative methods for measuring customer value. Strategies for innovating new values for customers: proactive, active, reactive and passive. Targeting customers , Cognitive marketing strategy [6+3]

Unit:3 Pricing – The Ultimate Marketing Strategy

Pricing Excellence, Strategic Pricing [4 C's of Pricing - customer, costs, competition, and constraints], Pricing Maturity Model, Transformational Model. Centralized Versus Decentralized Pricing Options for Pricing Organizational Designs, Pricing Capabilities: Pricing Dimensions, Pricing Myths at the Organizational Level. Recent Trends in Pricing (AI & Gen AI, Volatility, Dynamic Pricing, Sustainability, Fairness), competing against low-cost rivals, Pricing during recession [6+3]

Unit:4 Vibrant Scope of Marketing Strategy

Account Based Marketing, Data-Driven Marketing Strategy, Digital Marketing Strategies, Relationship Marketing Strategies, Distribution Strategy, Experiential Marketing, Innovation Marketing, Green Marketing, Retail Marketing Inbound Marketing Strategies – Online Marketing and Offline Marketing, Multilevel Marketing, Strategic marketing in new modern era, Market-Innovation strategy: Pioneering New Markets (type), Customer Centric Approach, Strategy Innovation, Brand Storytelling, Strategy Sustainability and Ethics, Strategy Community engagement Strategies in international markets, emerging and declining markets. [6+3]

Unit:5 Executing Marketing Plan

Formulation, reformulation of marketing strategies, the control process. Implementing and Evaluating Marketing Strategies: Key Performance Indicators (KPIs) and Metrics, Sustainable competitive marketing advantages, Monitoring and Adjusting Marketing Strategies, Real-World Examples of Marketing Strategy Execution. Preparing marketing plan for Ed-tech, Automobile, Banking & Insurance, FMCG, and Food & Beverage. Presenting Marketing Plan, Marketing decision making with reasons, Marketing Strategies to compete globally & matching Recent Trends [6+3]

Suggested Text Books

1. Strategic Marketing by A. Nag, Macmillan Publication
2. The Pricing Journey: The Organizational Transformation Toward Pricing Excellence, Stephan M. Liozu, 2015
3. Marketing Strategy by Walker, Mullins, Boyd & Larreche, McGraw-Hill/Irwin
4. Marketing Strategy and Competitive Positioning by Graham Hooley, Brigitte Nicoulaud, Nigel F. Piercy, Pearson Education, 5th Edition.
5. Strategic Marketing Management-Richard Wilson & Colin Gilligan, Routledge
6. Strategic Marketing: An Introduction by Tony Proctor

Suggested Reference Books:

1. Strategic Marketing David. W. Cravens, Nigel. F. Piercy, Tata MacGraw Hill Publication
2. Marketing Strategy: A Decision-Focused Approach-John W. Mullins, By Felix Mavondo, John Gountas, Orville

- C. Walker; McGraw-Hill Education; 2nd Revised Edition
3. Strategic Marketing Text & Cases-S. Shajahan, Viva Books
4. Strategic Management & Marketing by Narendra Singh, Himalaya Publication
5. Strategic Marketing Management- Text & Cases by UC Mathur, Macmillan
6. Liozu, Stephan M.. *The Pricing Journey: The Organizational Transformation Toward Pricing Excellence*, Redwood City: Stanford University Press,

Supplementary Reading Material:

1. Marketing Warfare: 20th Anniversary Edition By Al Ries, Jack Trout, (McGraw-Hill Education; 2nd edition)
2. Marketing Strategy a Complete Guide-2019 Edition by Gerardus Blokdyk, 5 star cooks
3. Blue Ocean strategy-W Chan Kim and Renee A Mauborgne

Websites:

<https://www.educba.com/pricing-strategies-in-marketing/>

Business Strategy-Business Standards Brand Equity-Economic Times

Course: [Strategic Pricing for Products and Services](https://www.linkedin.com/learning/strategic-pricing-for-products-and-services), <https://www.linkedin.com/learning/strategic-pricing-for-products-and-services>,

Five Trends define Future of Pricing, <https://www.bcg.com/publications/2025/five-trends-define-future-pricing>

Pricing Trends for 2024. <https://paxcom.ai/blog/pricing-trends-for-2024/>

Audio Visuals link:

1. <https://www.youtube.com/watch?v=Fy1pcW9mvNo>
2. <https://www.youtube.com/watch?v=RCHofmkLgzs>
3. https://www.youtube.com/watch?v=jF_MDRMFcPs
4. <https://www.youtube.com/watch?v=cZom3AAOsgs>

Semester IV	405 MKT	SE MKT –09 Integrated Marketing Communication
3 Credits	LTP: 2:0:2	Subject Elective Marketing Management Specialization

Course Outcomes: On successful completion of the course the learner will be able to

CO#	Cognitive Abilities	Course Outcomes
405MKT.1	REMEMBERING	RECALL and describe the Integrated Marketing Communication (IMC) mix and the IMC planning process.
405MKT.2	UNDERSTANDING	EXAMINE the role of IMC in building brand identity, brand equity, and customer engagement.
405MKT.3	APPLYING	APPLY IMC tools in contemporary real-world scenarios to develop cohesive marketing strategies.
405MKT.4	ANALYZING	Analyze and critically evaluate the communication effects and results of IMC campaigns across various brands.
405MKT.5	EVALUATING	EVALUATE the effectiveness of IMC mix components, including advertising, sales promotion, and public relations, using real-world examples.
405MKT.6	CREATING	DEVELOP integrated cross-media strategies and creative messages to effectively reach target audiences and deliver brand promises through IMC campaigns.

Unit 1: Introduction to Integrated Marketing Communication (IMC): Definition, evolution, role of IMC, IMC planning process, promotional mix tools, global IMC concepts, elements and strategies, value of IMC plans, need for consistency and cohesion, benefits of IMC plans, paradigm shift from mass communication to personal communication channels. Practical Task: Analyze a successful global IMC campaign (e.g., Coca-Cola's "Share a Coke") and identify how consistency and cohesion were maintained across various channels. (6+6)

Unit 2: Advertising and Message Strategies: Definition, history, role and functions of advertising, types of advertising, 5 M's of advertising, social, ethical, and regulatory aspects, message strategies and execution frameworks, advertising design and appeals, AIDA model, DAGMAR model, ATRN model, DRIP model, structure of an advertisement, copywriting for various media, advertising ecosystem, advertising in the age of technology (AR, VR), advertising laws, ethics, and intellectual property rights. Case Study: Evaluate the use of AR in IKEA's advertising campaigns and discuss the impact on consumer engagement and brand perception. (6+6)

Unit 3: Media Planning and Digital Strategies: Audio-visual media (television, radio), print and outdoor media (magazines, newspapers, outdoor), support media, internet and interactive media, growth of the internet, social media marketing (definition, history, importance), comparison between social media and traditional media marketing, major social media platforms (Facebook, Instagram, YouTube, LinkedIn, Pinterest), organic vs. paid marketing, influencer marketing, social media marketing plan, ethics in social media marketing. **Practical Task:** Develop a social media marketing plan for a new product launch, incorporating both organic and paid strategies across multiple platforms. [6+6]

Unit 4: Sales Promotion and Direct Marketing: Scope and role of sales promotion, consumer-oriented sales promotion, trade-oriented sales promotion, sales staff-oriented sales promotion, planning and implementing a sales promotion program, growth and applicability of direct marketing, personal selling as a component of IMC. Case Study: Analyze the effectiveness of a recent sales promotion campaign (e.g., Amazon's Prime Day) and its integration with direct marketing efforts. (6+6)

Unit 5: Public Relations and Corporate Communication: Definition, role and functions of public relations (PR) in the digital economy, publicity and corporate advertising in traditional and digital environments, integrated PR strategy, importance of reputation management in the age of virality and cancel culture, difference between public relations and advertising, role of social listening and proactive reputation management, influencer PR and online brand advocacy, 3R approach of crisis communication frameworks, sponsorship and event marketing, role of the internet in public relations and publicity, advantages and disadvantages of publicity. Practical Task: Design a crisis communication plan for a hypothetical brand facing a social media backlash, incorporating the 3R approach (Response, Responsibility, Remediation). (6+6)

Note: Real-world examples and case studies are expected to be analyzed in class and included in examinations to enhance practical understanding.

Suggested Textbooks:

1. Belch, George & Belch, Michael. *Advertising and Promotion*. Tata McGraw Hill, New Delhi.
2. Clow, Kenneth & Black, Donald. *Integrated Advertising, Promotion and Marketing Communication*. Pearson Education, New Delhi.
3. Jethwaney, Jaishree & Jain, Shruti. *Advertising Management*. Oxford University Press, New Delhi.
4. Semenik, Allen. *Advertising and Promotions*. Cengage Learning.
5. Kazmi, SHH & Batra, Satish. *Advertising and Promotion*. Excel Books.
6. Shah, D'Souza. *Advertising and Promotions*. Tata McGraw Hill.

Suggested Reference Books:

1. Duncan, Tom. *Integrated Marketing Communication*. McGraw-Hill.
2. Jain, Shridha. *Integrated Marketing Communication: Trends and Innovations*. Global India Publications.
3. Schultz, Don & Schultz, Heidi. *IMC, The Next Generation*. Tata McGraw Hill, New Delhi.
4. Kamath, K. *Social Media Marketing Essentials You Always Wanted To Know*. Vibrant Publishers, USA.
5. Belch, George E., Belch, Michael A., & Purani, Keyoor. *Advertising and Promotion*, 12th Edition. Tata McGraw Hill.
6. Setiawan, Iwan, Kartajaya, Hermawan, & Kotler, Philip. *Marketing 5.0*. John Wiley & Sons Inc., Hoboken, New Jersey.
7. Tjandra, A. K. *AI for Marketing and Product Innovation*.
8. *Journal of Interactive Marketing, Ad Age Tech Reports, MIT Sloan Management Review*.
9. Industry Blogs: *Think with Google, Meta for Business, Mar Tech Today*.

Semester IV	406 MKT	SE MKT 10: Rural and Agriculture Marketing
3 Credits	LTP: 2:0:2	Subject Elective Marketing Management Specialization

Course Outcomes

CO No.	Cognitive Level	Course Outcome Statement
CO406MKT .1	REMEMBERING	RECALL the concept, scope, and significance of rural marketing and identify key differences between rural and urban markets.

CO406MKT .2	UNDERSTANDING	EXPLAIN the characteristics of rural consumers, their buying behavior, and media habits for market segmentation.
CO406MKT .3	APPLYING	APPLY the concepts of agricultural marketing to real-world scenarios involving market types, channels, and stakeholders.
CO406MKT .4	ANALYZING	ANALYZE the marketing mix strategies suitable for rural and agricultural products including distribution and promotional tools.
CO406MKT .5	EVALUATING	EVALUATE the role of government policies, regulatory frameworks, and institutions in the rural marketing ecosystem.
CO406MKT .6	CREATING	CREATE strategic marketing plans for rural markets by conducting field visits and applying insights from government policies, technological trends, and rural consumer behaviour.

Unit 1: Introduction to Rural Marketing

Definition, Scope, And Significance Of Rural Marketing, Evolution And Nature Of Rural Markets in India, Rural Vs. Urban Markets: A Comparative Study, Understanding The Rural Economy And Its Drivers, Rural Infrastructure and Its Impact on Marketing, Role Of NGOs And SHGs In Rural Development, Contemporary Challenges In Rural Marketing, Field Visit To A Nearby Rural Market Or Interaction With Village Entrepreneurs. [6+6]

Unit 2: Rural Consumer Behavior

Characteristics Of Rural Consumers, Factors Influencing Rural Buying Behavior, Decision-Making Process Of Rural Buyers, Rural Market Research And Segmentation, Media Habits And Communication Preferences In Rural Areas, Caselet On HUL Or ITC Campaign, Psychographics Of Rural Youth, Practical Task – Design A Rural Buyer Persona. [6+6]

Unit 3: Agricultural Marketing System

Concepts And Objectives of Agricultural Marketing, Types Of Agricultural Markets: Primary, Secondary, Regulated, Cooperative, And Private Markets, Marketing Channels For Agricultural Products, Role Of Middlemen, Cooperatives, And Producer Companies, Price Discovery And Risks In Agri-Marketing, Agri Supply Chain Challenges, Visit To A Local Mandi/Market Yard. [6+6]

Unit 4: Marketing Mix For Rural And Agri Products

Product Planning And Development For Rural Markets, Packaging And Size Innovation For Rural India, Pricing Strategies For Rural Affordability, Rural Distribution Models: FMCG And Agri-Inputs, Promotion Tools: Traditional Media, Folk Media, And Digital Marketing In Rural India, Branding In Rural Context, Task – Create A Rural Promotion Campaign For A Product. [6+6]

Unit 5: Government Policies, Innovations, And Case Studies

Government Initiatives: APMC Act, eNAM, MSP, PMFBY, Role Of NABARD, SFAC, FPOs, And Other Institutions, Technological Interventions: Agri-Tech, Mobile Apps, And Digital Platforms, Innovations In Rural Marketing: HUL's Project Shakti, ITC e-Choupal, Patanjali, Mahindra Samriddhi, Case Studies Of Successful Rural/Agri Marketing Campaigns, Policy Analysis Presentation. [6+6]

Textbooks

1. **Pradeep Kashyap** – *Rural Marketing*, Pearson Education
2. **S. S. Acharya & N. L. Agarwal** – *Agricultural Marketing in India*, Oxford & IBH
3. **Balram Dogra & Karminder Ghuman** – *Rural Marketing: Text and Cases*, McGraw Hill

Reference Books

1. **C. S. G. Krishnamacharyulu & Lalitha Ramakrishnan** – *Rural Marketing in India: Challenges and Strategies*, Pearson
2. **T. P. Gopalaswamy** – *Agricultural Marketing*, Vikas Publishing
3. **Sanal Kumar Velayudhan** – *Rural Marketing: Targeting the Non-Urban Consumer*, Sage
4. **Philip Kotler & Kevin Lane Keller** – *Marketing Management*, Pearson
5. **R. V. Badi & N. V. Badi** – *Rural Marketing*, Himalaya Publishing
6. **Ramkishan Y.** – *New Perspectives in Rural and Agricultural Marketing*, Jaico Publishing
7. Reports from **NABARD, Ministry of Agriculture**, and **AgriTech India**

Semester I	407 MKT	SE-MKT-11 – Tourism & Hospitality Marketing
3 Credits	LTP: 2:0:2	Subject Elective Marketing Management Specialization

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO407MKT.1	REMEMBERING	RECALL and REPRODUCE the core concepts, components of Tourism and Hospitality Industry like Marketing mix, STP, CRM, Legal Issues
CO407MKT.2	UNDERSTANDING	DISCUSS and explain aspects of Tourism and Hospitality, that Exemplify the various related terms.
CO407MKT.3	APPLYING	DEMONSTRATE the concepts of marketing mix, STP, Sustainable practices in contemporary context of tourism and hospitality industry.
CO407MKT.4	ANALYSING	EXAMINE and LIST the critical tourism and hospitality marketing challenges concerning segmentation, targeting and positioning, customer relationship management in the new age era, and the changing trends in the industry.
CO407MKT.5	EVALUATING	EVALUATE the marketing mix, STP strategies, CRM of different industry players of the tourism and hospitality industry.
CO407MKT.6	CREATING	FORMULATE the marketing mix, STP strategies and CRM for tourism and hospitality industry players and propose a blend of legal implications. Design customer centric strategies to leverage productivity and customer experience using new age digital tools.

Unit :1 Overview of the Tourism and Hospitality Industry: Introduction to Tourism Industry: Concept, definition, Historical Development, types and characteristics - Domestic, international, adventure, medical, eco-tourism, cultural tourism, Types of Tourists – Components of Tourism Infrastructure –Tourism Products- Scope of Tourism – Motivation for Tourism. Introduction to Hospitality Industry: Concept– Origin and Growth – definition, types and characteristics, Types of hospitality products – Elements and Characteristics of hospitality Products, Components of Hospitality Infrastructure. Industries related to Hospitality, Travel and Transportation. Employment Opportunities in Hospitality. Relation of hospitality industry with Tourism, Factors Affecting Hospitality and Tourism Industry – environmental impacts, Sustainable practices and Role of Government and tourism regulatory authorities. Customer Based Metrics & Product-Market Based Metrics **(6+6)**

Unit:2 Marketing Mix of Tourism and Hospitality marketing: The service culture, Marketing mix of services, 4 ‘I’s and its role in Tourism and Hospitality products. Implications of Marketing Mix on Tourism: Types of Tourism (Entertainment, Medical, Eco, Pilgrimage, Agricultural, sports, Leisure, Theme based, Destination Tourism, Adventure tourism, Space tourism, Political, Domestic and International tourism). Tour Packages – Meaning, Classification of tour packages, Components of Package tours. Components of Tour Pricing, subsidies and booking, Citizen wise allowances, Tour agents and operators, The role of online payment facility in tour pricing. Implications of Marketing Mix on Hospitality: Hotels – Types and Tariffs (Meal Plans), Distribution patterns, promotional strategies. Restaurants – Types, Pricing: Buffet, A-la-carte, etc, Strategies adopted, Price Differentiation, New age promotion strategies. Mode of booking (Personal, Telephonic, Online, App based), Promoting - season wise, festival wise, feature and facility wise and off season promotion. The effectiveness of different communication platforms and the fast changing landscape in digital marketing. Role of Artificial Intelligence, Big data and content Marketing in Tourism and Hospitality Marketing. **(6+6)**

Unit: 3 : Segmentation, Targeting and Positioning of Tourism and Hospitality Industry: Segmentation: Understanding tourism markets & tourists, Types of tourists- Personal, Business, Professional, differently-abled tourist, excursionist, Forms of Tourism – Inbound, Outbound, National, International , Types of tourism in India, Targeting and Positioning: Understanding the marketplace customer needs, wants and demands. Targeting: Target market profiling, Types of targeting strategies (Undifferentiated, Differentiated, Concentrated, Micromarketing), Tangible Products (pick, drop facility, tour guide) Positioning: Locations, Sections and Layout– Room/ table booking availability- Room tariffs and calculation of rates - reservation – registration – Guest services – Check out and settlement – Front office experiences, Positioning: Positioning in the Digital Era – Digital brand positioning, on-line reviews, user generated content, ratings and rankings as instant position indicators, Using travel influencers, storytelling through digital media (Reels, vlogs,

blogs), direct marketing techniques through various apps, Understanding organizational customers and success factors of marketing Meeting, Incentive, Conference, and Exhibition (MICE) business **(6+6)**

Unit: 4: Customer Relationship Management CRM in Tourism and Hospitality Marketing: Data management, Benchmarking; enhanced customer service, personalized experiences and satisfaction. Outsourcing-Value addition in tourism, partnerships, technology integration, and leveraging expertise. Service Quality Control – PMS/QMS (eg. Zoho, TravelPerks, etc), Environmental Analysis & Scanning, Understanding brand development: Tailoring Content to Local and Global Audiences. Best practices for Building customer loyalty and creating a strong brand. Referrals- Managing Service Differentiation, Briefing, Banquets, Conference & Convention Management - Planning for Sustainable Tourism, Formulating Policy to Deal with Crises, Contingency Planning. E-Commerce and CRM impacts in the tourism & hospitality industry. CRM and Sustainability, green practices. **(6+6)**

Unit: 5: Segmentation, Target Marketing & Positioning: Legal Aspects and Future Trends in Hospitality and Tourism: Legal Aspects: Recognition of Travel Agency, Visa and passport procedure, Tour policy of different regions (Europe, US and Gulf region), Tour Operator and Travel Guide License & Permits and Certifications required for Hotels, Awareness about existence of National & International Organization like IATA, PATA, ICAO, WTO, UFTAA, FHRAI, Government regulations and role of various certifications in Food Quality and Food Safety support- Travel and Health Insurance, Forex, Cargo & MICE – Documentation. Prospects, changing trends, and challenges. Future Growth in Tourism: Space tourism, Adventure Tourism, Eco Tourism- Ecotel and Eco resorts, Forces Impacting the future of Tourism: Pollution, Economic, Branding, Terrorism, Conflicts between countries, Technology. Tourist characteristics – Knowledge-Based Society and workforce, Changing Nature of Tourism products.

(6+6)

Note: Real world examples / cases are expected to be analyzed in the class as well as included in the examination

Suggested Text Books:

1. Tourism Development: Principles and Practices – A.K. Bhatia. Sterling Publishers, New Delhi
2. Marketing for Hospitality & Tourism – Philip Kotler, Bowen and Makens, Prentice Hall Inc.
3. Tourism and Hospitality Marketing – S.M. Jha, Himalaya Publishing.
4. Tourism Marketing – Manjula Chaudhary, Oxford University Press.

Suggested Reference Books:

1. Travel Agency operations – Jagmohan Negi
2. Successful Tourism by Pranath Seth
3. Fundamentals of Tourism and Hotel Mgmt by Sudheer Andrews.
4. Cristopher J. Holloway : The Business of Tourism : Macdonald and Evans, 1983.

Semester IV	408MKT	SE MKT 12 : Digital Marketing II
3 Credits	LTP: 1:0:4	Subject Elective Marketing Management Specialization

Course Outcomes: On successful completion of the course the learner will be able to

CO#	Cognitive Ability	Course Outcomes
CO 408MKT.1	REMEMBERING	DEFINE the key terms and concepts related to digital marketing
CO 408MKT.2	UNDERSTANDING	EXPLAIN the role of Facebook, Google Ads, YouTube, Email marketing, and other related tools in digital marketing
CO 408MKT.3	APPLYING	MAKE use of Facebook, Google Ads, YouTube, Email marketing, and other tools for executing digital marketing in a given situation
CO 408MKT.4	ANALYZING	ILLUSTRATE the use of various digital marketing tools for campaign optimization and effectiveness
CO 408MKT.5	EVALUATING	DESIGN a digital media campaign using an appropriate mix of platforms and tools
CO 408MKT.6	CREATING	CREATE relevant and effective content for digital marketing campaigns

Unit 1: Website Development and Analytics : Website planning and development, types of websites, phases of website development, keyword selection process, content management on websites, website audit, types of web analytics – social, mobile, conversion, KPIs, Google Analytics setup, benefits of Google Analytics, Clicky vs Google Analytics, traffic

measurement metrics, bounce rate, session duration, Mobile-first design, Core Web Vitals Task: Create a basic website/blog and integrate Google Analytics (3+12)

Unit 2: Digital Marketing Tools and Platforms : Google Ads overview, types of Google Ads, pricing models, PPC cost formula, ad page rank, Google Ads UI, keyword planning and control, creating text ads and campaigns, linking Google Analytics, designing remarketing creatives, affiliate marketing, influencer marketing, growth marketing, understanding traffic sources, traffic types, tracking with UTM, CPA calculation, UTM Parameters, Responsive Search Ads, AI in Ad Campaigns Task: Run a Google Ad campaign with A/B testing and analyze conversions (3+12)

Unit 4: Social Media Marketing I : Social media evolution, benefits vs traditional marketing, mobile-first strategy, B2B vs B2C usage, role of AI in social, building micro-communities, authentic content, video-first strategy, Facebook Marketing: Ad types, campaign setup, optimization, Meta Business Suite, Facebook Reels, video marketing, Ad Library, AI-based targeting, Conversion API, X (Twitter) Ads: Ad types, real-time marketing, followers growth, X Premium, Twitter Spaces, YouTube Marketing: Strategy planning, competitor research, SEO for YouTube, thumbnails, YouTube Shorts, AI-based transcription, community tab, monetization Task: Plan and run a mock YouTube ad campaign with SEO (3+12)

Unit 5: Social Media Marketing II and Analytics : Instagram Marketing: Business setup, bio optimization, Reels, carousel posts, story highlights, hashtag strategy, growth tips, analytics tools, LinkedIn Ads: Types – sponsored, message, conversation, lead gen forms, analytics, Social Media Analytics: Facebook Insights, Twitter/X analytics, YouTube Studio, Instagram Insights, ROI measurement, goals setup, ecommerce tracking, creating actionable dashboards, avoiding analytics errors, building a data-driven culture, LinkedIn Lead Gen Forms, ROI Dashboards, Data-Driven Decision Making: Task: Create social media performance reports using platform-specific dashboards [3+12]

Suggested Practical Assignments:

- Build and host a website with analytics tools integrated
- Set up and manage a paid campaign using Google Ads
- Design a 3-stage email campaign with segmentation
- Manage and evaluate a Facebook or Instagram ad account
- Record, optimize, and publish a short video on YouTube with proper SEO tags
- Create social media dashboards using data from Facebook, YouTube, and Instagram

Suggested Textbooks:

1. *Internet Marketing* – Dave Chaffey et al., Pearson
2. *Digital Marketing* – Oliver J. Rich
3. *Online Marketing* – Gerry T. Warner, Joe Wilson Schaefer
4. *Quick Win Digital Marketing* – H. Annmarie, A. Joanna

Suggested Reference Books:

1. *Digital Marketing* – Prof. Seema Gupta, McGraw Hill
2. *E-Marketing* – Judy Strauss et al., Prentice Hall
3. *Social Media Marketing All-In-One for Dummies* – Jan Zimmerman, Deborah
4. *Google Ads for Beginners* – Cory Rabazinsky
5. *Email Persuasion* – Ian Brodie
6. *Advanced Web Metrics with Google Analytics* – Brian Clifton

Supplementary Journals:

- *Journal of Internet Marketing and Advertising*
- *International Journal of Online Marketing*
- *International Journal of Electronic Commerce*

Web Resources:

- <https://www.smartinsights.com>
- <https://www.salesforce.com/in/digital/marketing>

- <https://learndigital.withgoogle.com>
- <https://academy.hubspot.com/courses>
- <https://www.wordstream.com/blog>

Recommended MOOCs:

- Google Digital Unlocked – Fundamentals of Digital Marketing
- HubSpot Academy – Email & Social Media Marketing
- SWAYAM – Digital Marketing Courses

A/V Learning Resources:

- YouTube Channel: Learn Digital Marketing by Sorav Jain
- YouTube Channel: Google for Developers

Semester IV	409 MKT	SE MKT-13 Retail Marketing
3 Credits	LTP: 2:1:0	Subject Elective Marketing Management Specialization

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO409.1	REMEMBERING	DEFINE various concepts associated with Retail Marketing
CO409.2	UNDERSTANDING	EXPLAIN the terms and concepts used in Retail Marketing
CO409.3	APPLYING	ILLUSTRATE value Creation & Competitive advantage in Retail Marketing.
CO409.4	ANALYSING	ANALYSE the contemporary issues affecting Retail Marketing decisions
CO409.5	EVALUATING	EVALUATE the effectiveness of Retail Marketing Mix used by different Retail formats
CO409.6	CREATING	FORMULATE effective retail Marketing Strategy

Unit 1: Foundations of Retailing

Introduction to Retailing: Definition, scope, and importance of the retail industry. Functions of retailing in the distribution channel. Evolution of retail formats globally and in India. Trends and challenges in the modern retail landscape (e-commerce, omnichannel, globalization, sustainability). Retail Formats: Classification of retail formats (store-based vs. non-store based, organized vs. unorganized). In-depth analysis of various store formats (department stores, supermarkets, hypermarkets, specialty stores, discount stores, convenience stores). Non-store retailing formats (e-commerce, direct selling, catalogue retailing, vending machines). Emerging retail formats and innovations. Understanding the Retail Consumer: Consumer Buying Behaviour in the retail context. Factors influencing retail purchase decisions (cultural, social, psychological, situational). The consumer decision-making process in retail.

(7 + 2)

Unit 2: Retail Strategy and Planning

Developing a Retail Strategy: The strategic retail planning process. Defining the retail mission, vision, and values. Conducting a situation analysis (SWOT, PESTEL) for retail businesses. Identifying competitive advantages and positioning strategies in retail. Setting retail objectives and goals. Retail Location Strategy: Importance of location in retail success. Factors affecting retail location decisions (market characteristics, site characteristics, trade area analysis). Different types of retail locations (standalone, shopping centers, street retail). Retail Operations and Supply Chain Management: Overview of retail operations management. Inventory management in retail (forecasting, ordering, warehousing). Logistics and distribution in the retail supply chain.

(7 + 2)

Unit 3: Retail Marketing Communication and Pricing

Introduction, Role of Communication in Retailing, Elements and Marketing Communication Tools, Retail Marketing Communication Process, Understanding the components and significance of IMC in retail, Retail Marketing Communication Plan, Implementing and Evaluating the Retail Communication Programs. Retail Pricing- Introduction, Factors Influencing Retail Pricing, Setting the Retail Price, Pricing Objectives, Pricing strategies, Pricing Methods,

Introduction to dynamic and personalized pricing enabled by AI and ML, impact of emerging technologies like Generative AI on Communication and Pricing strategies. (7 + 2)

Unit 4: Customer Relationship Management and Retail Experience

Customer Relationship Management (CRM) in Retail: Importance of customer loyalty in retail. The role of customer service in building loyalty. Loyalty programs and their effectiveness. Strategies for customer acquisition, retention, and development in a retail context. Handling customer complaints and feedback. Enhancing the Retail Customer Experience: Creating a positive store atmosphere and environment. Personalization and customization of the retail experience. (7 + 2)

Unit 5: Emerging Trends and the Future of Retail Marketing

Omnichannel Retailing: Understanding the concept of omnichannel and its importance. Integrating online and offline retail channels. Providing a seamless customer experience across all touchpoints. Challenges and opportunities in implementing omnichannel strategies. Digital Marketing in Retail: The role of the internet and mobile technology in retail marketing. Search engine optimization (SEO) and search engine marketing (SEM) for retailers. Social media marketing for retail engagement and sales. Email marketing and mobile marketing strategies. Utilizing data and analytics in digital retail marketing. Technology and Innovation in Retail: Impact of artificial intelligence (AI) and machine learning (ML) in retail. Mobile payment solutions and their impact. The role of Big Data in understanding retail trends and customer behaviour. (7 + 2)

Text Books

1. Retailing Management by Swapna Pradhan, TMGH Publication
2. Retail Business Management by R. Perumal Samy, Anmol Publications
3. Retailing Management by Arif Sheikh, Himalaya Publication
4. Retail Management: A Strategic Approach by Barry Berman and Joel Evans, Prentice Hall College Publication

Reference Book

1. Retail Marketing Management by David Gilbert, Pearson Publication.
2. Information Technology for retailing by Khurana, McGraw Hill Publication
3. Retail Management by Michael Levy and Barton. A Weitz, McGraw Hill Publication
4. Information Technology for Retail by Giridhar Joshi, Oxford University Press, New Delhi.
5. Retail Management by Ron Hasty and James Reardon, McGraw Hill Publication, International Edition.
6. Retail Management, Text & Cases by Swapna Pradhan, Tata McGraw-Hill Publishing Co, New Delhi.

Websites

1. <http://www.indiaretailing.com> MOOC Courses:
2. Introduction to Retail Management – IIMB (Swayam) 3. Retail Management – CEC (Swayam)

Semester IV	410 MKT	SE MKT- 14 Marketing of Financial Services
3 Credits	LTP: 2:0:2	Subject Elective Marketing Management Specialization

Course Outcomes (COs)

CO No.	Cognitive Abilities	Course Outcomes
CO 410MKT.1	REMEMBERING	RECALL concepts of banking and non-banking financial systems.
CO 410MKT.2	UNDERSTANDING	Demonstrate the relevance of basic concepts related to financial institutions in terms of structure, trading, settlement procedures, processes, and related components.
CO 410MKT.3	APPLYING	Develop FAQs for each type of financial product and service from an investment advisor's perspective.
CO 410MKT.4	ANALYZING	Compare and contrast various types of financial products and services and illustrate their benefits and limitations.
CO 410MKT.5	EVALUATING	Assess customer touchpoints and the customer-buying journey for financial services.
CO 410MKT.6	CREATING	Create a selling strategy for financial products and services by understanding consumer buying behavior.

Unit 1: Concept, Nature, and Scope of the Banking System in India: Regulatory framework of the Indian Banking system, Reserve Bank of India (RBI), Present banking system in India, Role of banks in the development of the Indian

economy, Overview of the banking functions of Indian Banking & Non-Banking Financial Corporations (NBFC), Understanding trends and challenges in the Indian banking system, Cash reserve ratio, statutory liquidity ratio, repo and reverse repo, open market operations, security valuation, NPAs, NPA categories, Overview of KYC & Anti-Money Laundering laws in India, Banking Ombudsman, Importance of E-banking, Traditional Branch Banking vs. E-Banking, Technologies – Phygital Banking, E-banking technologies/electronic delivery channels such as ATM, POS machines, electronic cards, mobile phone banking, electronic transfer methods: IMPS, NEFT, RTGS, Payment Banks, Mobile application Banking, mobile wallets, Payment Mobile Applications, Post office Bank, Phishing attacks and how to be safe from phishing., Case Study: Analyze the digital banking transformation in India and its impact on customer behavior using examples from leading Indian banks. Practical Task: Create a detailed flowchart demonstrating the process of electronic funds transfer using IMPS, NEFT, and RTGS. (6+6)

Unit 2: Introduction to Indian Stock Market: Meaning, nature, functions of the secondary market, Organization and regulatory framework for stock exchanges in India, SEBI: Functions and measures for the secondary market, Overview of major stock exchanges in India, Stock Broking: Functions of stock broking companies and the importance of stock brokers in the Indian Stock Market, Meaning and nature of Portfolio Management System in India, Functions of a portfolio manager, Wealth management for high-net-worth individuals (HNI), Concept of Systematic Investment Plan (SIP). Case Study: Evaluate SEBI's role in regulating stock market practices with real-world examples from Indian stock exchanges, Practical Task: Design a portfolio for a hypothetical high-net-worth individual (HNI) using SIP and analyze its returns over the last 5 years. (6+6)

Unit 3: Mutual Funds: Basic Concepts : Mutual Funds and their importance, Understanding the concept of NAV and calculation of a Fund's NAV, Types of Mutual Funds in India, classified on the basis of structure, investment objective, and investment plan, Relative risks associated with various Mutual Funds in India, Basic understanding of ETFs and their key features, Differences between a Mutual Fund and an ETF, Basic understanding of a 'Hedge Fund' and its key features, Process of Fund Selection and various related measurement parameters, Various expenses incurred by a fund, Investment Advisors: Guidelines for Investment Advisors while selling Mutual Funds to clients.: Case Study: Analyze a mutual fund's performance over the past year, including NAV calculations and risk assessment. Practical Task: Prepare a report comparing two mutual funds (one equity and one debt) in terms of their structure, investment objective, and risk profile. (6+6)

Unit 4: Insurance Sector in India: Basics of Insurance: Types of insurance policies, Role of IRDA (Insurance Regulatory and Development Authority), Insurance industry in India, General Insurance: Types of liabilities covered, extent of insurance value, and conditions, Life Insurance: Basic concept of Life Insurance, its beneficiaries and its types, Concept of Term Insurance and its various types, Traditional Life Insurance vs. Term Insurance, Whole Life Policy and Endowment Policy, ULIP and its comparison with conventional plans and Mutual Funds, Marketing Channels in Insurance Markets: Various channel members in the industry such as Insurance Agents, Distributors, etc., Basic understanding of Property and casualty/liability insurance, Commercial Insurance, Health Insurance, Practical Task: Conduct a survey on customer perceptions of different life insurance policies and create a report. (6+6)

Unit 5: Marketing Strategy & Consumer Behaviour: Objectives of marketing financial products, Marketing mix for financial services, Marketing budget, lead generation, challenges, and opportunities in financial marketing, Adapting to changing market environment, Future potential for growth in financial services marketing, Perception about risk & returns, knowledge about financial products, Touchpoints for buying financial products, choice of distribution channel, customer journey of buying financial services, Basic understanding of Home Loan, Personal Loan, Consumer Loan, Reverse Mortgage Loan. Practical Task/Caselet: Case Study: Analyze a marketing campaign by a financial services provider (e.g., home loan or personal loan), focusing on its impact on consumer behaviour. Practical Task: Develop a marketing plan for a new financial product (e.g., personal loan) based on consumer buying behaviour and financial service marketing principles. (6+6)

Suggested Text Books

1. Tripathi, V. & Pawar, N. (2022). *Investing in Stock Markets*. Taxmann Publications.
2. ICAI, *Financial Services*, The Institute of Chartered Accountants of India, New Delhi.
3. Suresh, P. & Paul, J. (2019). *Management of Banking and Financial Services* (Third Edition). Pearson.

Suggested Reference Books

1. Estelami, H. (2019). *Marketing Financial Services*. Dog Ear Publishing, LLC.
2. Evensky, H., Horan, S. M., & Robinson, T. R. (2020). *The New Wealth Management: The Financial Advisor's Guide to Managing and Investing Client Assets*.

Semester IV	411 MKT	SE MKT-15 Recent Trends in Marketing
3 Credits	LTP: 2:0:2	Subject Elective Marketing Management Specialization

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO411MKT.1	REMEMBERING	DEFINE the new key concepts in Recent Trends in Consumer Behavioural Insights & Marketing Strategies, Product & Brand Strategy, Communication & Engagement, Sales & Business Marketing, Markets & Channels.
CO411MKT.2	UNDERSTANDING	EXPLAIN the new key concepts and Components in Recent Trends in Consumer Behavioral Insights & Marketing Strategies, Product & Brand Strategy, Communication & Engagement, Sales & Business Marketing, Markets & Channels.
CO411MKT.3	APPLYING	APPLY AND MAKE USE OF Recent Trends in Consumer Behavioural Insights & Marketing Strategies, Product & Brand Strategy, Communication & Engagement, Sales & Business Marketing, Markets & Channels in real-life business scenarios.
CO411MKT.4	ANALYSING	EXAMINE various facets of business scenarios and ILLUSTRATE the Recent Trends in Consumer Behavioural Insights & Marketing Strategies, Product & Brand Strategy, Communication & Engagement, Sales & Business Marketing, Markets & Channels.
CO411MKT.5	EVALUATING	ASSESS the key enablers of Recent Trends in Consumer Behavioural Insights & Marketing Strategies, Product & Brand Strategy, Communication & Engagement, Sales & Business Marketing, Markets & Channels.
CO411MKT.6	CREATING	FORMULATE a creative and suitable Marketing Strategy based on Recent Trends in Consumer Behavioural Insights, Product & Branding, Communication & Engagement, Sales & Business Marketing, Markets & Channels in real-life business scenarios.

Unit: 1 Recent Trends in Consumer Behavioural Insights & Marketing Strategies:

The Influential Digital Subcultures: Youth - Acquiring the Mind Share, Women - Growing the Market Share, Netizens - Expanding the Heart Share; Hyper-personalization; Social CRM, Mobile CRM, Six E's of e-CRM; Emotion Analytics & Biometric Testing: Neuromarketing techniques (EEG, eye-tracking), understanding subconscious consumer reactions to ads, packaging, and UX design; Real-time & Predictive Analytics: Predictive modelling, real-time dashboards, anticipate and respond to consumer needs proactively, Self-Service Analytics Solutions, Generative AI, Data Clean Rooms (DCRs) in Retail Analytics, Precise forecasting, Conversion Rate Optimization (CRO), heat maps, Advanced Cross-channel Marketing Analytics AI-based sentiment analysis, GeoSpatial Analytics, Online Quantitative and Qualitative Research: Quantitative research through online platforms, Surveys for online access panels, surveys for client databases, online focus group, Depth interviews via the internet, Viewing focus groups remotely, Virtual words and virtual qualitative, Qualitative explication of online quantitative studies, Accompanied surfing and observational research, Combined audience insights; Ethical & Conscious Consumption: Sustainability, fair trade, environmental impact, Values-driven product choices, The new fortune at the bottom of the pyramid [6+6]

Unit: 2 Recent Trends in Product & Brand Strategy:

Sustainability & Ethical Design: From recyclable packaging to cruelty-free production, brands are innovating to meet ethical and environmental expectations; Product-Led Growth (PLG): Common Characteristics of High Technology, The High-Tech Pricing Environment, Evolution of High-Tech Channels, New-Product Pre-announcements Contingency Model for High-Tech Marketing; Brand Purpose & Activism: Ingredient Branding, Nostalgic design elements, minimalist design principles Brand characters, The O Zone (O3), Understanding Humans Using Digital Anthropology, Building the Six Attributes of Human-Centric Brands, Human-centric design, Experiential branding, Gamification, Brands tap into creator communities, Purpose-driven Branding; Luxury Goes Digital: High-end brands are investing in digital exclusives (e.g., NFTs, AR try-ons), and leveraging influencers for aspirational appeal; Co-Creation & Personalization: Brands invite customers to participate in product creation (custom sneakers, personalized perfumes) enhancing loyalty and uniqueness. [6+6]

Unit: 3 Recent Trends in Communication & Engagement:

Omnichannel Messaging: Integrated campaigns across TV, social media, mobile, in-store, Retail Media Networks (RMN), digital advertisement, Drone advertising, Mobile-First Indexing and Advertising-interactive ads, full-screen videos and instantly loading page, Live-streaming, Overcoming Banner Blindness, Advertisements Based Video on Demand (AVOD), Google's Performance Max campaigns, advertisement on e-commerce sites, Conversational Marketing: Influencer-Led Engagement - Micro and nano-influencers; Short-form & Interactive Content: Reels, polls, quizzes, and filters drive engagement and recall; Behavioural Nudging in Campaigns Social and public interest campaigns using behavioural science; AI-powered Personalization: Deep personalization, AI enabled Campaign Management, image and video-based searches - visual recognition technology, AI Overviews, schema markup and zero-click searches, Featured Snippets, use of AI in creative process, generating tailored ad copy, images, video content, Predictive Audience Targeting and Intent Matching, Shift from Reactive to Proactive Campaigns, Adapt messaging in real-time, YouTube's Demand Generation campaigns, streamlining A/B testing using AI, Focus on Engagement; Decomposing PAR and BAR Driving Up Productivity, Purchase Action Ratio and Brand Advocacy Ratio, Four Major Industry Archetypes. [6+6]

Unit:4 Recent Trends in Sales & Business Marketing:

Virtual Selling & Digital Pitches: video Conferencing Tools, Interactive Sales Decks - Virtual Demos and Product Tours Integration, Data-Driven Pitching, Follow-Up Automation, Digital Body Language Analysis; Account-Based Marketing (ABM): Account Selection, Personalized Content, Sales-Marketing Alignment, Multi-Channel Outreach Technology Stack, ROI Measurement - Customized Value Propositions; AI-Enhanced CRM Systems: Predictive Analytics, Lead Scoring, Chatbots & Virtual Assistants, Natural Language Processing (NLP), Smart Recommendations - Sales Forecasting, Customer Segmentation; Freemium to Premium Funnel: Freemium Product Design - Activation Metrics, In-App Upsell Nudges, E-mail Drip Campaigns, Usage-Based Triggers, Conversion Optimization - Premium Feature Showcases; Tech Evangelism & User Communities: Thought Leadership, Developer Relations (DevRel), Ambassador Programs, User-Generated Content (UGC), Community Platforms, Event Sponsorships & Hackathons, Feedback Loops. [6+6]

Unit:5 Recent Trends in Markets & Channels:

Phygital Retail Experiences: Smart Mirrors & AR Try-Ons, Click & Collect, In-Store App Integration, Contactless Payments & Kiosks, Behavioural Analytics; Glocalization Cultural Customization: Local Sourcing, Language Localization, Multi-language content and interfaces, Regulatory Alignment, Hybrid Marketing Strategies; Retail Marketing; The rise of Quick Commerce, The digital grocery natives, Hybrid shopping, Frictionless delivery, Inspiration-led purchase journeys, Athleisure, Second-hand luxury and dupes, Sustainable shopping, The rise of phygital retail, Retail experience in the metaverse, Sophisticated return process initiatives; Last-Mile Innovations in Rural Areas: Drone & EV Deliveries, Sustainable transport in remote areas, Local Micro-Hubs, Village-based distribution centres or kirana partnerships, Digital Route Optimization - AI-powered logistics planning, Cashless Delivery Options: UPI and QR-code-based rural payments. Community Delivery Agents: Training locals as delivery partners; Digital Marketplaces for Rural & Global Shoppers: Hyperlocal Listings - Farmer & Artisan Portals, Global Logistics Integration; Localized Influencer Collaborations: Regional Micro-Influencers, Language-Driven Content - Festival & Culture-Based Campaigns, Community Co-Creation - Letting influencers design or personalize product lines, Platform-Specific Strategy.[6+6]

Note: Real-life examples / cases are expected to be discussed in the class as well as included in the examination.

Suggested Text Books:

1. Marketing 4.0 by Philip Kotler, Hermawan Kartajaya, and Iwan Setiawan, John Wiley & Sons
2. Marketing Research - An Applied Orientation, Malhotra and Dash, Pearson Education.
3. The Handbook of Online Marketing Research – Knowing your customer using the Net – Joshua Grossnickle and Oliver Raskin - McGraw-Hill Education – 2000
4. Marketing Research Kit for Dummies - Michael R. Hymanand, Jeremy J. Sierra - Wiley Publishing, Inc., Indianapolis, Indiana
5. Marketing of High-Technology Products and Innovations by Jakki Mohr, Sanjit Sengupta, Stanley Slater, 2nd Edition
6. Marketing 6.0, The Future is Immersive, Philip Kotler, Hermawan Kartjaya, and Iwan Setiawan John Wiley & Sons, Inc. Hoboken, New Jersey (2024)
7. Geomarketing: Methods and Strategies in Spatial Marketing (Geographical Information Systems), Gerard

- Cliquet, Wiley-ISTE;(2006)
- Customer Relationship Management – Concepts and Technologies by Francis Buttle, 2nd Edition, Butterworth Heinemann, Elsevier
 - The Rural Marketing: Pradeep Kashyap & Siddhartha Raut

Suggested Reference Books:

- The Handbook of Online and Social Media Research - Tools and Techniques for Market Researchers - Ray Poynter - Wiley Publication - United Kingdom.
- The Fortune at the Bottom of the Pyramid, Prahalad, C.K., Pearson –Singapore.
- Crossing the chasm: Marketing and Selling High Tech Products to Mainstream
- Marketing and Sales in the Metaverse: Understanding and Profiting from the Metaverse: An Introduction for Businesses, [Andreas Kohne](#), [Ralf H Komor](#), Springer 92024)
- Elevate Your brand with Immersive Experiences: Marketing Through AR and VR, Mayank Verma, Notion Press (2023)
- Sensory Marketing, [Bertil Hulten](#), [Niklas Broweus](#), [Marcus Van Dijk](#), Palgrave Macmillan; 2009
- The Business of the Metaverse, How to Maintain the Human Element Within this New Business Reality, [Hemachandran K](#), Rodriguez, Routledge (2024)
- Sensory Marketing in Retail, An Introduction to the Multisensory Nature of Retail Stores, Lindblom, Palgrave Macmillan (2023)
- Doing Business in Emerging Markets: Entry and Negotiation Strategies by S. Tamer Autor Cavusgil, Pervez N. Ghauri, Milind R, Agarwal, Sage Publication.

Semester IV	412 MKT	SE MKT-16 – Marketing 6.0
3 Credits	LTP: 2:0:2	Subject Elective Marketing Management Specialization

Course Outcomes

CO Code	Cognitive Level	Course Outcome Description
CO412MKT.1	REMEMBERING	DEFINE the key concepts in Marketing 6.0.
CO412MKT.2	UNDERSTANDING	UNDERSTAND the journey from Multi-, Omni-, to Meta-Marketing, enablers, environment, and immersive experience of Marketing 6.0.
CO412MKT.3	APPLYING	IDENTIFY the components of Marketing 6.0 including Enabler, Environment, and Experience Layers.
CO412MKT.4	ANALYSING	ANALYSE immersive marketing components and evaluate how emerging technologies are reshaping customer experience and engagement.
CO412MKT.5	EVALUATING	ASSESS key enablers of Marketing 6.0 such as data, intelligent systems, sustainability, and personalization in the immersive context.
CO412MKT.6	CREATING	DEVELOP a marketing strategy using the building blocks of Marketing 6.0 to address real-world business challenges.

Unit 1: Introduction to Marketing 6.0: Marketing 4.0 to 5.0 to 6.0, Immersive Marketing, Meta-Marketing, Enabler Layer, Environment Layer, Experience Layer, Phygital Natives, Generations Z and Alpha, KGOY (Kids Getting Older Younger), Pragmatic Decision-Making, Brand Authenticity, Digital Persona, Digital Twin, Individual Expression Practical Task: Conduct a comparative case study of brands that evolved through Marketing 4.0 to 6.0. Present a Gen Z/Alpha consumer persona using survey tools. (6+6)

Unit 2: Immersive Marketing and Future of Customer Experience: Five Microtrends, Short-Form Video, Community-based Platforms, Interactive E-Commerce, AI in Language, Immersive Wearables, Customer Experience Imperative, Elements of Immersive Experiences, Online vs. Offline Merits, Human Presence in Transactions, Trust Bridging, Experience as the Product Practical Task: Design a customer journey map for an immersive e-commerce brand integrating 5 microtrends. Use Canva, Miro or Figma. (6+6)

Unit 3: The Marketing 6.0 Enabler and Environment: Five Fundamental Technologies (IoT, AI, Spatial Computing, AR/VR, Blockchain), Challenges of Physical-Digital Fusion, Extended Realities, The Third Place, Seamless Transactions, Contextual Recommendations, Pre/Post Experience Engagement, In-Real-Life Experience Components

Practical Task: Design a smart physical-digital space (retail/hospitality) using spatial computing and IoT tools. Simulate using diagrams/software. (6+6)

Unit 4: Multisensory Marketing: Metaverse Types (Centralized & Decentralized), Virtual Assets, Avatars, UX, Creator Economy, Governance, Sensory Marketing (Sight, Sound, Smell, Touch, Taste), Multisensory Touchpoints, Building Immersive Sensory Campaigns Practical Task: Create a multisensory branding campaign for a wellness or food brand using audio-visuals, scent references, and tactile packaging. (6+6)

Unit 5: Spatial Marketing and Metaverse Marketing: Spatial Marketing Concepts, Proximity & Contextual Marketing, Augmented Marketing, Customer Pain Points, Implementation of Spatial Experiences, Metaverse Motivations (Fun, Social, Commerce, Finance), Branded Collectibles, Experiential Ads, O2O Commerce, Gamified Loyalty, Strategy Implementation, Practical Task: Create a launch plan for a brand in the metaverse with spatial and gamified features using platforms like Roblox or Decentral. (6+6)

Note:

Real-world case studies and industry applications must be discussed in classroom sessions and used in exams.

Textbooks:

1. *Marketing 6.0 – The Future is Immersive*, Philip Kotler, Hermawan Kartajaya, Iwan Setiawan, Wiley (2024)
2. *The Metaverse Marketing Book*, Kaden Nathaniel (2022)
3. *Elevate Your Brand with Immersive Experiences*, Mayank Verma, Notion Press (2023)
4. *Sensory Marketing*, Bertil Hultén et al., Palgrave Macmillan (2009)
5. *Geomarketing: Methods and Strategies*, Gerard Cliquet, Wiley-ISTE (2006)

Reference Books:

6. *Marketing and Sales in the Metaverse*, Andreas Kohne & Ralf H. Komor, Springer (2024)
7. *The Business of the Metaverse*, Hemachandran K., Routledge (2024)
8. *Sensory Marketing in Retail*, Lindblom, Palgrave Macmillan (2023)
9. *Meta Marketing Mastery*, Arjun Thakur, Amazon Kindle (2024)
10. *Marketing 4.0: Moving from Traditional to Digital*, Philip Kotler et al., Wiley
11. HBR and McKinsey Insights on Immersive Marketing, Spatial UX, Blockchain Marketing (2023–24)

FINANCIAL MANAGEMENT							
Specialization Core Courses							
Sem Code	Course Code	Course	Semester	Credits	FA	SA	Total Marks
302	SC FIN - 01	Advanced Financial Management	III	3	50	50	100
403	SC FIN - 02	Financial Markets and Banking Operations	IV	3	50	50	100
				6	100	100	200
Specialization Elective Courses - Semester III (Any 4 to be opted for)							
304	SE FIN - 01	Fixed Income Securities	III	3	50	50	100
305	SE FIN - 02	Personal Financial Planning	III	3	50	50	100
306	SE FIN - 03	Securities Analysis & Portfolio Management	III	3	50	50	100
307	SE FIN - 04	Fundamentals of Insurance & Practices	III	3	50	50	100
308	SE FIN - 05	Digital Banking	III	3	50	50	100
309	SE FIN - 06	Direct Taxation	III	3	50	50	100
310	SE FIN - 07	Financial Reporting	III	3	50	50	100
311	SE FIN - 08	International Finance	III	3	50	50	100
				12	200	200	400
Specialization Elective Courses - Semester IV (Any 4 to be opted for)							
405	SE FIN - 09	Behavioural Finance	IV	3	50	50	100
406	SE FIN - 10	Business Valuation	IV	3	50	50	100
407	SE FIN - 11	Technical Analysis of Financial Markets	IV	3	50	50	100
408	SE FIN - 12	Risk Management	IV	3	50	50	100
409	SE FIN - 13	Rural and Micro Finance	IV	3	50	50	100
410	SE FIN - 14	Indirect Taxation	IV	3	50	50	100
411	SE FIN - 15	Corporate Financial Restructuring	IV	3	50	50	100
412	SE FIN - 16	Financial and Commodity Derivatives	IV	3	50	50	100
				12	200	200	400
				30	500	500	1000

Specialization: Financial Management

Semester III	302 FIN (AFM602MM)	SC FIN - 01: Advanced Financial Management
3 Credits	LTP: 2:1:1	Subject Core (SC) Course – Financial Management

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 302FIN.1	REMEMBERING	DESCRIBE the basic concepts in financing, investing and profit distribution in a firm
CO 302FIN.2	UNDERSTANDING	EXPLAIN theoretical concepts related to raising and use of funds and value of firm
CO 302FIN.3	APPLYING	CALCULATE values for making capital structure, investment, liquidity and dividend decisions in the financial management of a firm
CO 302FIN.4	ANALYSING	ANALYZE the Leverage and EBIT EPS Analysis associate with Financial Data in the corporate
CO 302FIN.5	EVALUATING	EVALUATE projects under capital rationing, risk & uncertainty for optimal investment decision
CO 30 FIN.6	CREATING	DESIGN an appropriate financial strategy using any one or multiple concepts/ techniques learned in this course.

1. Corporate Restructuring & Corporate valuation: Background of restructuring and reorganization; Concept of Financial Distress; Financial Statements including Funds Flow and Cash Flow Statements; Importance of Cash Flows; Economic Value Added (EVA): Meaning, Components, Advantages & Drawbacks, Calculating EVA **(6+2)**

2. Capital Structure and Firm Value: Assumptions and Definitions; Net Income Approach; Net Operating Income Approach; Traditional Position; Modigliani and Miller Position Taxation and Capital Structure; Trade-off; Signalling Theory; PBIT - EPS Analysis; ROI - ROE Analysis; Leverage Ratios; Guidelines for Capital Structure Planning **(7+2)**

3. Capital Budgeting: Comparison of Net present value, Internal rate of return, Profitability Index Method. Risk and Uncertainty - sources of risk, reasons for adjusting risk in capital budgeting. Capital Rationing & Project Selection, Certainty Equivalent, Sensitivity analysis and Scenario analysis. Inflation and real discount rate. Role of qualitative factors in the project selection. **(5+2)**

4. Working Capital Management: Determination of level of current assets, working capital financing by banks; Cash and liquidity Management- aspects of cash management, motives for holding cash and marketable securities, Cash Management Models, Strategies for managing surplus funds; Credit Management: Objectives of trade credit, credit policies. Control and collection of accounts receivables, role of factoring in receivables management (No problems on estimation of working capital). **(9+2)**

5. Dividend Policy and Firm Value: Why Firms Pay Dividends; Factors Influencing Dividend Policy; Legal and Procedural Aspects; Bonus Shares and Stock Splits; Share Buybacks and Valuation; Dividend Policies in Practice; Dividend Models: Walter's model, Gordon's model, Modigliani and Miller's Hypothesis; Models in Which Investment and Dividend Decisions are Related **(8+2)**

Note:

- The weightage in the question paper shall be as follows: Numerical problems: 60% & Theory: 40%
- Numerical problems on the following should be taught:
 - Funds Flow Statement and Cash Flow Statement
 - Calculating EVA
 - Firm value (Theories of Capital Structure), PBIT - EPS Analysis
 - Sensitivity analysis and Scenario analysis in risk analysis in Capital budgeting, Capital Rationing
 - Calculation of Optimum Cash Balance using Operating Cycle Model and Inventory Model
 - Receivables Management- calculation of collection period, determining the number of uncollectible Receivables and Bad Debt Expense: Percent of Sales Method, Percent of Receivables Method

- Dividend Models: Walter's model, Gordon's model, Modigliani and Miller's Hypothesis;

Suggested Textbooks:

1. Financial Management: Text and Problems by M Y Khan & P K Jain, Publisher: TMH, New Delhi.
2. Financial Management Theory & Practice by Prasanna Chandra, Publisher: TMH, New Delhi.
3. Financial Management by I M Pandey, Publisher: Vikas Publishing House, New Delhi.
4. Advanced Financial Management by Dr. Mahesh Abale & Dr. Shriprakash Soni, Himalaya Publication House
5. Financial Management by Ravi Kishore, Publisher: Taxman's Publishing House, New Delhi.
6. Financial Management by C. Paramasivan, T. Subramanian, New Age
7. Financial Management by Dr. Anil Kumar Dhagat- Wiley India

Suggested Reading:

1. Financial Management: Theory & Practice by Eugene F. Brigham, Michael C. Ehrhardt
2. Fundamentals of Financial Management by Van Horne, Publisher: Prentice Hall of India.

Semester III	304 FIN (FIS604ME)	SE FIN - 01: Fixed Income Securities
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Financial Management

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 304FIN.1	REMEMBERING	DESCRIBE the basic concepts of Fixed Income Securities.
CO 304FIN.2	UNDERSTANDING	UNDERSTAND the various types of securities traded in the fixed income market
CO 304FIN.3	APPLYING	APPLY the knowledge of fixed income securities for diversifying the portfolio of investments.
CO 304FIN.4	ANALYSING	ANALYSE the economic outlook through yield curve analysis.
CO 304FIN.5	EVALUATING	EVALUATE the risk and returns of different Fixed income securities.
CO 304FIN.6	CREATING	Devise the various investment strategies based on portfolio returns.

1. Introduction of Fixed Income Security and its Markets: Securities, Fixed Income Instruments, Government Securities, Treasury Bills, Money Market Instruments, Corporate Bonds, and Asset Backed Securities, Market Conventions, Market Regulation and the Role of Regulators. Sectoral Reforms and contemporary issues. **(6+2)**

2. Returns, Valuation and Pricing of Fixed Income Securities : Current yield, realized yield, Yield to maturity, Valuation & pricing of Plain Vanilla Bond on coupon date, Valuation & pricing of Plain Vanilla Bond in between coupon dates, Day Count Convention, Clean Price & Dirty Price, Valuation of a zero- coupon Bond, Valuation of Bond with Embedded option. **(9+2)**

3. Risk Identification in Bonds: Volatility associated with Bond Market, Duration, Macaulay's Duration, Modified Duration, Effective Duration, Convexity, and Immunization **(8+2)**

4. Investment Strategies for Fixed Income Securities: Optimizing Portfolio Returns, Laddered Maturity Portfolio, Barbell Investing, Matched Asset Program, Discount Bond Investing, Premium Bond Investing. **(5+2)**

5. Yield Concepts and Term Structure Theories: Price Yield Relationship, Term Structure of Interest rates & Yield Curve, Shape of the yield curve, Term Structure Theories, Analysis of the Yield curve **(7+2)**

Suggested Books:

1. Investment Trends and Turning Points - Martin J. Pring.
2. Valuation, Risk Management and Portfolio Strategies (The Wiley Finance Series) – Lionel Martelline, Philippe Priaulet, Stephane Priaulet.
3. The Handbook of Fixed Income Securities - Frank J. Fabozzi, Steven V. Mann

4. Fixed Income Securities- Dr Varsha Nerlekar (Himalaya Publication)

Suggested Reference Books:

1. Choudhry, M. (2010). Introduction to Bond Markets. UK: John Wiley & Sons.
2. Fabozzi, F. J. (2016). Bond Markets, Analysis, and Strategies. USA: Pearson Education.
3. National Stock Exchange of India. (2009). FIMMDA-NSE Debt Market (Basic) Module. Mumbai: NSE.
4. Sen, J. & Apte, A. (2013). Fixed Income Markets in India: Investment Opportunities for You. India: Shroff Publishers & Distributors.

Semester III	305 FIN (PFP605ME)	SE FIN - 02: Personal Financial Planning
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Financial Management

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 305FIN.1	REMEMBERING	UNDERSTAND the need and aspects of personal financial planning.
CO 305FIN.2	UNDERSTANDING	Describe the investment options available to an individual
CO 305FIN.3	APPLYING	IDENTIFY types of risk and means of managing it
CO 305FIN.4	ANALYSING	DETERMINE the ways of personal tax planning
CO 305FIN.5	EVALUATING	EXPLAIN retirement and estate planning for an individual
CO 305FIN.6	CREATING	CREATE a financial plan for a variety of individuals.

1. Introduction to Financial Planning: Need for Financial Planning, Assessing personal and financial goals, needs and priorities, attitudes and expectations and risk tolerance level, Personal Financial Planning Process, Preparation of Personal Budget, Personal Financial Statements, Responsibilities of a Financial Planner, Time Value of Money, KYC, PAN & AADHAR **(3+2)**

2. Investment Planning: Introduction to Investment Planning, Investment Criteria- liquidity, safety and Profitability, Investment vehicles (Gold, Bonds, Equity, FD, Insurance, MFs, ETFs, Post Office Savings, Real Estate etc.), Risk and Return associated with these investments, Return comparison over a period of time from different asset classes, Investment strategies, Mutual Funds as Investment Vehicle-Special focus on SIP, STP, and SWP, NFOs, Trading in Commodities, Derivatives and F&Os, Crypto currency, Creating an Investment Portfolio, Awareness of mis-selling in investment products. **(8+2)**

3. Risk Analysis, Insurance Planning and Debt: Risk analysis, Concept of long-term risk, Insurance decisions in personal financial planning, Types of insurance cover- mortality, health, disability, property and liability, ULIPs and Term Plans, Credit Card Financing, Types of Consumer and Home Loans- cost and risk, Credit Score. **(8+2)**

4. Tax Planning: What is Tax Deduction? Tax Deductions under the Section and respective Subsections of : 80C, 80D, 80E, 80G, 80 I, Sections 80 JJA, 80QQB, 80RRB, 80TTA, 80U and other relevant sections, Direct Tax Code (DTC), Taxation impact on different investment options, Personal tax planning under New v/s Old regime, Filing IT Returns. **(8+2)**

5. Retirement Planning and Estate Planning: Wealth creation, retirement planning for an individual, Pension Plans, Provident Fund, Gratuity, Life Insurance Plans., General Insurance Plans, Reverse Mortgage Plans, Senior Citizen Schemes, What is Estate? Who needs Estate Planning? Transferring assets during life time, Power of Attorney, transferring assets post death – e.g., Nominations, Will, and Creating Trusts. **(8+2)**

****Notes:**

1. The weightage in the question paper shall be as follows: Numerical problems / Cases: 40% & Theory: 60%
2. Formats of documents to transfer assets should be discussed
3. Numerical problems on the following should be taught;
 - a) Time Value of Money: Compounding, Discounting, Annuities, Sinking Fund, Perpetuities
 - b) EMI calculation on loans

Suggested Books:

1. Basics of Personal Financial Planning Insurance Education Series by NIA, K C Mishra, Steward Doss, Cengage Delmar Learning India Pvt. Ltd.

Suggested Reference Books:

1. Introduction to Financial Planning, Indian Institute of Banking & Finance
2. Personal Financial Planning Theory and Practice, Kaplan Schweser
3. Personal Finance, E. Thomas Gorman and Raymond E. Forgue, Southwest-Western Cengage Learning.
4. Fundamentals of Financial Planning, Michael Dalton, Joesph Gillice, James Dalton and Thomas Langdon, Money Education
5. Personal Financial Planning, Benedict Koh Wai Mun Fong, Pearson
6. Personal Financial Planning, Lawrence J. Gitman, Michael D. Joehnk, Cengage NOW.

Semester III	306 FIN (SAPM606ME)	SE FIN - 03: Securities Analysis & Portfolio Management
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Financial Management

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 306FIN.1	REMEMBERING	REMEMBER various concepts of investments, Bonds.
CO 306FIN.2	UNDERSTANDING	EXPLAIN various theories of Investment Analysis and Portfolio Management.
CO 306FIN.3	APPLYING	CALCULATE risk and return on investment using various concepts covered in the syllabus.
CO 306FIN.4	ANALYSING	ANALYZE and DISCOVER intrinsic value of a security.
CO 306FIN.5	EVALUATING	EVALUATE various investment options.
CO 306FIN.6	CREATING	DESIGN/ CREATE optimal portfolio.

1. Introduction & Concepts: Investment: Meaning, nature & objectives, Investments Vs. Speculation & Gambling, Investment Process, Investment Environment, Investment avenues: Marketable & Non marketable financial assets. Portfolio Management: Meaning, attributes, significance and process of Portfolio Management, Portfolio manager and his role. **(3+2)**

2. Risk & Return Analysis: Risk & Return: Meaning and Elements of Risk & Return, Measurements of Risk & Return, Relationship between risk and return. Fundamental Analysis: Economy analysis, industry analysis and company analysis, weaknesses of fundamental analysis. Technical Analysis: Meaning, Tools of technical analysis, Technical Analysis vs. Fundamental Analysis. Efficient Market Theory: Meaning. Forms of Market Efficiency, Efficient Market Hypothesis vs. Fundamental & Technical Analysis. **(8+2)**

3. Valuation of bonds and shares: Bond Valuation: Meaning, Types, Bond Prices, Bond Return, Risks in Bonds. Equity Valuation: Meaning, Concept of Present Value, Share Valuation Models, Multiplier Approach to Share Valuation. **(8+2)**

4. Portfolio Analysis & Selection: Concept of portfolio and portfolio management: Meaning, Types of Portfolio Risks, Diversification of Risks, Selection of Optimal Portfolio. Markowitz Portfolio Selection Model: Efficient set of portfolios, Optimal Portfolio selection, Limitations of the Model. Capital Asset Pricing Model (CAPM): Meaning, Assumptions & Limitations of CAPM. Sharpe-The Single Index Model: Measuring security risk & return, Measuring Portfolio Risk & Return. Factor Models and Arbitrage Pricing Theory: Arbitrage Pricing Theory and its principles, Comparison of Arbitrage Pricing Theory with the Capital Asset Pricing Mode. **(8+2)**

5. Portfolio Revision & Evaluation : Portfolio Revision: Meaning and need of Portfolio Revision, Constraints in Portfolio Revision, Revision Strategies, Portfolio Evaluation: Meaning and need of Portfolio Evaluation, Evaluation Perspectives, Measuring Portfolio Returns & Risk Adjusted Returns. **(8+2)**

Suggested Text Books:

1. Investment Analysis and Portfolio Management, Chandra, Prasanna (Tata McGraw Hill Publishing Co. Ltd.)
2. Securities Analysis & Portfolio Mgmt., V A Avadhani, Himalaya Publications Security Analysis and Portfolio Management, S. Kevin, PHI Learning Pvt. Ltd.
3. Investment Analysis & Portfolio Management, Ranganathan & Madhumathi, Pearson Education Pvt. Ltd.

Suggested Reference Books:

1. Security Analysis and Portfolio Management, Fischer DE & Jordan R J, Prentice Hall.
2. Portfolio Management, Barua, S. K.; Raghunathan V; Varma, J R, Tata McGraw Hill Publishing Co. Ltd.
3. Investment Analysis and Portfolio Management, Frank K. Reilly and Keith C. Brown, Thomson
4. Learning Modern Investments and Security Analysis, Fuller R J; Farrel JL, McGraw Hill
5. Investment Management, V.K. Bhalla, S. Chand & Co.
6. Security Analysis & Portfolio Management, S. Bhat, Excel Books
7. Security Analysis and Portfolio Management, Punithavathy P., Vikas Publishing Security Analysis and
8. Portfolio Management, A.P. Dash, I.K. International

Semester III	307 FIN (FIP607ME)	SE FIN - 04: Fundamentals of Insurance & Practices
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Financial Management

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 307FIN.1	REMEMBERING	RECALL the various terms related to Insurance.
CO 307FIN.2	UNDERSTANDING	Explain risk management in insurance and understanding of the insurance mechanism.
CO 307FIN.3	APPLYING	APPLY the knowledge of current information, techniques and practices in all of the major business disciplines.
CO 307FIN.4	ANALYSING	ANALYZE and USE risk management techniques.
CO 307FIN.5	EVALUATING	FACILITATE the compliance required for acquiring the policy and settlement of claims.
CO 307FIN.6	CREATING	DESIGN the life insurance cover strategy for clients.

1. **Introduction to Insurance:** Historical perspective, Conceptual Framework and Meaning of Insurance, Nature and Scope of Insurance, Classification of Insurance Business, Types of Insurance – Life & General, Regulatory Body in Insurance - IRDA and its role, Ethics in the Insurance Industry **(5+1)**
2. **Life Insurance:** Terminologies in Life Insurance, Structure of Indian Life Insurance Market, Term Insurance, Life – Insurance Products - Endowment Policy, Whole-Life Policy, Child Policy, Unit Linked Insurance Policy and other relevant products, Types of Risks and Characteristics of Insurable Risks, Perils, Hazards and Life Insurance. **(9+1)**
3. **General Insurance:** How General insurance works, Advantages of General insurance, Types of General Insurance, Principles of Insurance, Insurable interest, Subrogation and Contribution, General Insurance Products in India. Risk Management Techniques: Risk avoidance - Risk retention - Risk reduction and control - Risk financing, Difference between Insurance and Assurance, Roll of the actuary. Insurance Contract: Meaning and Fundamental principles of insurance contract, Types of insurance contract, Valid insurance contract, Features of insurance contracts, Reinsurance: foundation of reinsurance – forms of reinsurance. **(8+1)**
4. **Health & Motor / Vehicle Insurance:** : **Health Insurance** - Definition of Health and Determinants of Health, Factors affecting the health systems in India, Evolution of health insurance in India, Types of Health Insurance Schemes / Policies in India, difference between Health Insurance and Medi-claim Insurance, **Motor / Vehicle Insurance** - Meaning and Definition, Types of motor vehicle insurance, Advantages of Motor insurance, what motor insurance covers, Types of Motor Policies, India Motor Tariff – 2018. Third party Insurance, Legal aspects of Third-party claims, Frauds in Motor Insurance **(9+1)**

5. **Underwriting & Claim Settlement:** Meaning of Underwriting, Underwriting Process, Underwriting Considerations, Renewals, Lapse and Claims. Meaning of claim and Importance of settling claims, limitations or notice of loss, Claims Settlement process, Investigation and assessment – Surveyors and loss assessors – Claim forms – Loss assessment and claim settlement - Important Aspects in an insurance claim – categories of claim – Discharge vouchers – Post settlement action – Salvage – Recoveries – Disputes related to claims – Other disputes resolution mechanisms. Grievance Redressal Mechanism: Consumer courts, Ombudsman - Integrated Grievance Management System (IGMS) - The Insurance Ombudsman. **(9+1)**

Suggested Text Books:

1. Insurance and Risk Management, P. K. Gupta, Himalaya Publishing House
2. Insurance, Principles and Practice, S. N. Mishra, S. B. Mishra, S Chand
3. Principles of Insurance Management, Neelam Gulati, Excel Books
4. Legal & Regulatory Aspects of Insurance by NIA
5. Elements of Actuarial Science by NIA
6. Insurance Business Environment & Insurance Company Operations by NIA
7. Principles of Risk Management and Insurance, George Rejda, Pearson Publication.

Suggested Reference Books:

1. General Insurance Guide, Dr. L.P.GUPTA.
2. Indian Insurance Industry, Transition and Prospects, D.C. Srivastava, Shashank Srivastava, New Century Publications.

Semester III	308 FIN (DB608ME)	SE FIN - 05: Digital Banking
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Financial Management

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 308FIN.1	REMEMBERING	REMEMBER various concepts and products in Digital Banking
CO 308FIN.2	UNDERSTANDING	EXPLAIN and understand the significance and development of Digital Banking
CO 308FIN.3	APPLYING	COMPARE and contrast the Branchless Banking and Traditional Banking
CO 308FIN.4	ANALYSING	ANALYZE the payment system of digital banking from consumer's point of view.
CO 308FIN.5	EVALUATING	EVALUATE the Role of digital banking and emerging technologies in economic development.
CO 308FIN.6	CREATING	CREATE a holistic digital transformation strategy for a bank.

1. **Introduction to Digital Banking:** Concept, Advantages, Products, significance, development of digital Banking, Distinct Functionaries/Dimensions of a Digital Bank, Customer Education for Digital Banking, Role of digital banking in economic development, Financial Inclusion. **(6+1)**
2. **Digital Banking Products:** ATMs, Instant Money Transfer Systems, Proprietary, Brown Label and White Label ATMs, ATM Network Planning – Onsite / Offsite, Security and Surveillance of ATM Sites, Cash Deposit Machines : Overview, Features, CDM Network Planning – Onsite / Offsite and Profitability of CDMs, Mobile Banking: Overview and Brief History, Product Features and Diversity, IMPS, Profitability of Mobile Banking, Risk Management and Frauds, Internet Banking : Product Features Corporate and Individual Internet Banking, Integration with e-Commerce Merchant sites, Back End Operations and Technology. **(8+2)**
3. **Branchless Banking:** Objectives, Introduction, Financial Inclusion – Logic and logistics, Vehicles for Financial Inclusion, Business Correspondents / Business facilitators, Digital Banking Products for Financial Inclusion, Payment Banks, Fintech Companies. **(8+1)**
4. **Payment System:** Overview of global and domestic payment systems, Immediate Payment Service (IMPS), National Unified USSD Platform (NUUP) and UPI, Participants in UPI, Benefits to Participants, National Automated Clearing

House (NACH) Aadhaar Enabled Payment System (AEPS) , e-KYC , Cheque truncation System (CTS) , National Financial Switch (NFS) , ATM, RTGS , NEFT, ECS, MICR. (8+2)

5. **Innovation and Banking:** Innovative Technologies in Banking: Artificial Intelligence, Machine Learning, Big Data, Block Chain, Forex Settlement. (8+1)

Suggested Books:

1. Digital Banking – Indian Institute of Banking and Finance
2. The Digital Banking Revolution – Lugi Wewege
3. Digital Bank : Strategies to Launch or become a Digital Bank – Chris Skinner

Suggested Reference Material:

1. Banking Beyond Banks and Money : A guide to Banking Services in Twenty first Century – Paolo Tasca, Tomaso Aste, Lorian Pelizzon, Nicolas Perony
2. www.rbi.org.in

Semester III	309 FIN (DT609ME)	SE FIN - 06: Direct Taxation
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Financial Management

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 309FIN.1	REMEMBERING	REMEMBER various basic concepts / terminologies related Direct Taxation
CO 309FIN.2	UNDERSTANDING	EXPLAIN how tax planning can be done.
CO 309FIN.3	APPLYING	CALCULATE Gross Total Income and Income Tax Liability of an individual assessee of all income heads.
CO 309FIN.4	ANALYSING	ANALYSE Permissible exemptions and deductions from income under Income Tax Act.
CO 309FIN.5	EVALUATING	EVALUATE the tax liability and benefits of possible exemptions under Income Tax Act.
CO 309FIN.6	CREATING	DESIGN / DEVELOP / CREATE tax saving plan.

1. **Introduction:** Basic definitions and concepts: Direct Tax, Indirect Tax Income, agricultural income, person, assessee, assessment year, previous year, gross total income, total income, maximum marginal rate of tax; Residential status; Scope of total income on the basis of residential status Exempted income under section 10, New V/S Old Income Tax Regime. (8+1)
2. **Income under the Head “Salaries” (new amendments of Finance Act 2020 & changes in perquisite) & “Income from House Property”:** Meaning of salary, Basis of charge of salary income, different forms of salary, different forms of allowances, perquisites, permissible deductions from salary income, tax treatment of provident fund (Basis of charge, property income not charged to tax, computation of income from let out house property and self-occupied property. (7+2)
3. **Income under the Head “Profits and Gains of Business and Profession”:** (revision of tax audit report 2021) : Computation of profit or gain from business and profession (expenses expressly allowed as deduction; general deductions; expenses specifically disallowed) basis of charge; chargeable incomes; specific deductions; amount not deductible. (8+1)
4. **Income under the Head “Capital Gain” and “Other Sources”:** Capital Gain”- Meaning- Capital Gain, Basis of charge, important definitions like Capital Asset, Short Term Capital Asset, Long Term Capital Asset, Transfer of Capital Asset, Short Term Capital Gain and Long-term Capital Gain and their computation. “Other Sources” - Incomes Chargeable Under the head “Other Sources” (Section 56), Deductions Allowable (Sec. 57), Deductions Not Allowable (Sec 58), Bond Washing Transactions and Dividend Stripping (Sec 94). (8+1)

5. **Net Taxable Income and Certain other Points:** Computation of net total income based on 5 heads, carry forward and set-off of losses and deductions under Sec. 80, Computation of Income Tax Liability, Advanced Payment of Tax, TDS, Tax Planning & Tax Evasion, Income Tax Returns, E-filing of ITR. **(6+3)**

Suggested Books:

1. Direct Taxes, Ravi Kishore
2. Direct Taxes, J.P. Jakhotiya
3. Digital Bank : Strategies to Launch or become a Digital Bank – Chris Skinner
4. Direct Taxation, Dr. Pradip Kumar Sinha

Suggested Reference Material:

1. Students Guide to Income Tax, Dr. Vinod Singhania (Taxmann)
2. Income Tax Law and Practices, V.P. Gaur, D.B. Narang, Puja Ghai& Rajiv Puri (Kalyani Publication)
3. Students' Hand Book on Income Tax, T.N. Manoharan& G.R. Hari

Semester III	310 FIN (FR610ME)	SE FIN - 07: Financial Reporting
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Financial Management

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 310FIN.1	REMEMBERING	DESCRIBE the basic concepts related to Financial Reporting
CO 310FIN.2	UNDERSTANDING	EXPLAIN in detail, the Accounting Standards
CO310FIN.3	APPLYING	APPLY the Accounting Standard while preparing the Financial Statements
CO 310FIN.4	ANALYSING	ANALYSE the Corporate Financial Statements the situation
CO 310FIN.5	EVALUATING	EVALUATE the compliance and quality of financial reporting.
CO 310FIN.6	CREATING	DESIGN / CREATE financial report of a firm

1. **Financial Statements Preparation Framework:** Purpose and Scope of Financial Statements, Users of Financial Statements, Underlying Assumptions – Going Concern, Consistency and Accrual, Qualitative Aspects of Financial Statements – Understandability, Materiality, Faithful Representation, Substance Over Form, Neutrality, Prudence, Completeness. **(8+1)**
2. **Preparation of Corporate Financial Statements:** Division II of Schedule III of the Companies (Amendment) Act, 2015 – Part I: Balance Sheet and Statement of Changes in Equity, Part II – Statement of Profit and Loss and Notes to Financial Statements. **(8+1)**
3. **Presentation of Items in Financial Statements and Revenue Recognition using relevant Indian Accounting Standards (AS):** Ind AS 1 “Presentation of Financial Statements”, Ind AS 7 - “Statement of Cash Flows”, Ind AS 8 “Accounting Policies, Changes in Accounting Estimates and Errors” and Ind AS 34 – “Interim Financial Reporting”, Ind AS 115 – “Revenue from Contract with Customers”. **(8+1)**
4. **Reporting of Assets, Liabilities and Disclosures in Financial Statements using relevant Indian Accounting Standards (AS):** Ind AS 2 “Inventories”, Ind AS 16 “Property, Plant and Equipment”, Ind AS 23 “Borrowing Costs”, Ind AS 36 “Impairment of Assets”, Ind AS 38 “Intangible Assets”, Ind AS 19 “Employee Benefits”, Ind AS 37 “Provisions, Contingent Liabilities and Contingent Assets”, Ind AS 33 “Earnings Per Share” and Ind AS 108 “Operating Segments”. **(8+1)**
5. **Miscellaneous Issues in Financial Reporting:** Reporting of Financial Instruments, Value Added Statements, Corporate Social Responsibility Reporting. **(8+1)**

Suggested Books:

1. Advanced Accountancy, Shukla Grewal, S. Sultan Chand & Co.

2. Financial Accounting: Reporting and Analysis, Stice
3. Financial Reporting and Management Accounting, Bruns
4. Financial Management, Prasanna Chandra Indian Accounting Standards& GAAP, Dolphy D'Souza, Snow White Publications
5. Financial Management, Khan and Jain
6. Corporation Finance, S. C. Kuchhal

Semester III	311 FIN (IF611ME)	SE FIN - 08: International Finance
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Financial Management

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO311 FIN.1	REMEMBERING	RECALL the basic concepts associated with international finance.
CO311 FIN.2	UNDERSTANDING	EXPLAIN the various the concepts related to Foreign Exchange Markets, its transactions and Taxation Systems
CO311 FIN.3	APPLYING	APPLY concepts of international exchange markets and exchange rates in currency convertibility
CO311 FIN.4	ANALYSING	ANALYZE the role of exchange rate and credit rating agencies, foreign exchange transactions, taxation system, Receivables and cash management in International financial market.
CO311 FIN.5	EVALUATING	EVALUATE the International Monetary Fund, World Bank, credit rating agencies, foreign exchange, foreign exchange transactions, taxation system, Receivables and cash management in International finance.
CO311 FIN.6	CREATING	CREATE the investment/ business plan by adopting various international finance concepts

1. **Introduction to International Finance:** Meaning/Importance, Scope, Globalization of the World Economy, Goals of International Finance, Structure and participants of the global financial system, Functioning of the global financial system in the globalization process, Emerging Challenges in International Finance, Evolution of International Monetary System, International Financial Institutions: International Monetary Fund, World Bank. International credit rating agencies
(9+1)
2. **Introduction to Foreign Exchange Markets:** Structure of Foreign Exchange Markets, Types of Transactions and Settlement Date, Exchange Rate Quotations and Arbitrage, Interest Rate Parity, Purchasing Power Parity and Fisher's Parity, Forecasting Exchange Rates: Efficient Market Approach, Fundamental Approach, Technical Approach, Global Financial Markets and Interest Rates , Concept and types of currency, Convertibility of currency, Exchange rate: the nature, types and regimes, Demand and supply of foreign currency.
(8+1)
3. **The transactions on the international foreign exchange market:** Spot transactions, forward contracts, Future transactions, Swap transactions, option transactions, Transaction Exposure and Types, Foreign bonds market, Eurobonds market, Types of Bonds, floating Rate Notes (FRNs), Deep Discount Bonds, Zero Coupon Bonds, Dual Currency Bonds, and Equity related Bonds, Procedure for Bonds Issues.
(8+1)
4. **Taxation Systems and Legal Aspects:** International double taxation and the ways of its regulation, Tax evasion, Definition of Money Laundering, organization of money laundering procedure: stages and methods, Monitoring, International cooperation in dealing with money laundering: the establishment of legal framework, The functions and activity of the FATF.
(6+1)
5. **International Receivables and cash management:** Foreign exchange risk, The essence and types of currency risks, Risks of making decisions about foreign direct investment, Political risk, International Financial Reporting Standards (I.F.R.S) and Indian Accounting Standards (I.A.S) on foreign transactions, Foreign Exchange Trade Settlement in India, SWIFT, CHIPS, CHAPS.
(9+1)

Suggested Textbooks:

1. International Finance by Rajiv Srivastav, Oxford University Press

2. International Financial Management by P.G. Apte 2010 Ed.
3. International Financial Management by Vyaptakesh Sharan
4. International Financial Management by S.P. Srinivasan
5. International Finance by Maurice Levi, Keith P. (2013 Edition)
6. Foreign Exchange, International Finance, Risk Management by A.V. Rajwade
7. Currency Exposures and Derivatives by A.V Rajwade

Suggested Reference Book:

1. International Finance, by Maurice Levi, 5th edition, Mc Graw Hill
2. International Financial Management by Jeff Madura; 2008, Cengage Learning
3. International Financial Management by Eun and Resnick, 4th edition Tata McGraw Hill
4. International Economics by Carbaugh 11th Edition, Cengage Learning.
5. Paul R Krugman and Maurice Obstfeld, 'International Economics', 8th edition
6. Multinational Financial Management by Alan Shapiro, 9th Ed, Wiley

Semester IV	403 FIN (653 MM)	SC FIN - 02: Financial Markets and Banking Operations
3 Credits	LTP: 2:1:1	Subject Core (SC) Course – Financial Management

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO403 FIN. 1	REMEMBERING	RECALL the structure and components of Indian financial system through banking operations & Financial Markets.
CO403 FIN. 2	UNDERSTANDING	UNDERSTAND the concepts of financial markets, their working and importance.
CO403 FIN. 3	APPLYING	ILLUSTRATE the working and contribution of Banks and NBFCs to the Indian Economy.
CO403 FIN. 4	ANALYSING	ANALYZE the linkages in the Financial Markets.
CO403 FIN. 5	EVALUATING	EXPLAIN the various banking and accounting transactions.
CO403 FIN. 6	CREATING	DEVELOP necessary competencies expected of a finance professional.

1. **Basic Concepts of Indian Financial System:** Structure and Components: Indian financial system in India, Role of financial system in economic development. Introduction to financial Institutions – Banking – Non-Banking Institutions. Role and Functions of Banks and their Contribution to Indian Economy. Introduction to Financial Markets, Functions and Classification. Money Market, Capital markets, Bond markets, Commodity markets, Money markets, Derivatives markets, Futures markets, Foreign exchange markets, Crypto currency market. **(7+2)**
2. **Money Market:** Structure and components: Participants in Indian Money Market, Money Market Instruments, Structure of Money Market, Role of central bank in money market; Players in the Indian Money Market, The reforms in Indian Money Market. **(7+2)**
3. **Capital Market:** Components & Functions of Capital Markets, Primary & Secondary Market Operations, Capital Market Instruments - Preference Shares, Equity Shares, Non-voting Shares, Convertible Cumulative Debentures (CCD), Fixed Deposits, Debentures and Bonds, Global Depository receipts, American Depository receipts, Global Debt Instruments, Role of SEBI in Capital Market. Startup fund raising – angel funding & venture capital, financing schemes for new startups by the Government. **(7+2)**
4. **Banks and NBFCs:** Types of Banks & NBFCs: Central Bank, Nationalized & Co-operative Banks, Regional Rural Banks, Scheduled Banks, Private Banks & Foreign Banks, Mudra Bank, Small Finance Banks, Specialized Banks, NBFCs. Types of Banking: Wholesale and Retail Banking, Investment Banking, Corporate Banking, Private Banking, Development Banking. **(7+2)**
5. **Concepts in Banking and Accounting of transactions:** Accounting in banks, Electronic Banking, Role of Technology in Banking services - ATM, NEFT, RTGS, IMPS, ECS, MICR, etc. Lending Practices, Principles of Sound Bank Lending, Financial reporting and control. **(7+2)**

Suggested Textbooks:

1. Indian Financial Services, M Y Khan
2. Marketing of Financial Services, Dr D Guruswamy
3. Financial Services in India, Avadhani, V. A. Risk and Insurance Concepts, P Periasamy, M Veerasevalam Financial services of India, Dr. D Guruswamy
4. Capital Markets & Financial Services, Anil Agashe
5. Financial services, M. Y. Khan

Semester IV	405 FIN (BF655ME)	SE FIN - 09: Behavioral Finance
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Financial Management

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 405FIN. 1	REMEMBERING	ENUMERATE the concepts and assumptions associated with traditional and Behavioral finance.
CO 405FIN. 2	UNDERSTANDING	ILLUSTRATE the various important theories, heuristics & biases associated with financial decision making.
CO 405FIN. 3	APPLYING	IDENTIFY Behavioral factors that influence financial decision making at individual & corporate level.
CO 405FIN. 4	ANALYSING	ANALYSE the implications of human psychology on financial decision makers and financial markets.
CO 405FIN. 5	EVALUATING	INTERPRET various investment strategies based on theories of personal & corporate Behavioral finance.
CO 405FIN. 6	CREATING	PLAN the systematic approach for efficient financial decisions taking into account Behavioral factors.

1. **Introduction to Behavioral Finance:** Traditional / Conventional / Standard View of Financial Markets - basic concepts, assumptions & limitations; Financial Market inefficiencies - Anomalies & crisis; Evolution, objectives & scope of Behavioral finance; Difference between Standard Finance & Behavioral Finance. **(7+2)**
2. **Sources of Irrationality:** External factors defining investors behaviour - Demographic, Social, Economic, phases & effect of Geomagnetic Storm on financial market; Types of investors; Investment Cycle - Boom & Bust Cycles, Fear & Greed in Financial Market and systematic investors sentiments, Portrait of an Individual Investor & Institutional Investors, Implications of biases, Influence of Emotions **(7+2)**
3. **Theories of Behavioral Finance:** Bounded Rationality & Cognitive Dissonance; Self-perception; Prospect Theory & Loss aversion; Risk aversion; Limit to Arbitrage & cost involved in arbitrage process; Model of limited Attention, Framing, Mental Accounting. **(7+2)**
4. **Biases theories:** Heuristics & its types; Sources & classification of biases - heuristic drive & frame driven, cognitive & emotional biases; Impact of different biases on investors; Nudge Theory; Characteristics of extremely successful investors. **(7+2)**
5. **Corporate Behavioral Finance:** Introduction, Corporate financial decision making: heuristics & biases affecting behaviour during investment, financing & dividend decisions; Presence and absence of Dividend, Ex-Dividend Day behaviour, timing of corporate news/ announcement, insider trading, corporate scandals. **(7+2)**

Suggested Textbooks:

1. Behavioral Finance: Psychology, Decision-Making, and Markets", by Ackert and Deaves.
2. Understanding Behavioral Finance by Ackert
3. The Psychology of Investing by John R. Nofsinger, Pearson Prentice Hall, (4th Edition)
4. What Investors Really Want - Learn the lessons of behavioral Finance, Meir Statman, McGraw-Hill
5. Behavioral Finance by Shuchita Singh, Shilpa Bahl

Suggested Reference Book:

1. Handbook of Behavioral Finance – Brian R. Bruce Page 155 of 260 SPPU - MBA Revised Curriculum 2022 – NEP - CBCGS & OBE Pattern
2. Behavioral finance - Wiley Finance - Joachim Goldberg, Rüdiger von Nitzsch
3. Behavioral finance – Peter Dybdahl Hede
4. Behavioral Finance – Ackert, L.F. & Deaves R

Semester IV	406 FIN (BV656ME)	SE FIN - 10: Business Valuation
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Financial Management

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 406 FIN. 1	REMEMBERING	RECALL concepts of value and valuation
CO 406 FIN. 2	UNDERSTANDING	EXPLAIN valuation process of business firms
CO 406 FIN. 3	APPLYING	CALCULATE business value using different techniques
CO 406 FIN. 4	ANALYSING	EXAMINE special factors to be considered in business valuation
CO 406 FIN. 5	EVALUATING	ASSESS the value of the firm in the light of business environment and regulatory aspects
CO 406 FIN. 6	CREATING	DESIGN a structured business valuation model for business.

1. **Overview of Valuation:** What is value; Differentiate price and value; Who values businesses; Purpose of a valuation; Principles of valuation; Definition of Standard of value (basis of valuation), Fair Market value, Fair value, Investment value, Intrinsic value; Premise of value- Going concern, Liquidation; Valuation process; Valuation standards
(7+2)
2. **Income and Market Based Valuation Techniques:** Discounted Cash Flow Analysis (DCF); Comparable transactions method; Comparable Market Multiples method; Market Valuation; Free Cash Flow to Equity; Dividend Discount Model; Net Asset Valuation; Relative Valuation; Overview of Option Pricing Valuations (Numerical aspect of the methods should be discussed)
(6+3)
3. **Asset Based and Theoretical Valuation Models:** Dividend Discount Model; Net Asset Valuation; Relative Valuation; Overview of Option Pricing Valuations (Numerical aspect of the methods should be discussed)
(6+3)
4. **Advanced issues in Valuation:** Valuation of tangible assets; Valuation of intangible assets (Patents, trademarks, copyrights and licenses; Franchises; Brands etc.)
(7+2)
5. **Valuation during Mergers & Acquisitions:** Merger and Acquisition Process, Regulatory Consideration, Due diligence and calculation of the value of the company, Criteria for selection of method
(7+2)

Note:

1. At least 2 Case studies with a detailed discussion on calculation of business valuation is expected.
2. The weightage in the question paper shall be as follows: Numerical problems: 40% & Theory:60%
3. Numerical problems on the following should be taught:
 - i. Discounted Cash Flow Method
 - ii. Comparable transactions method
 - iii. Comparable Market Multiples method
 - iv. Free Cash Flow to Equity
 - v. Dividend Discount Model
 - vi. Net Asset Valuation; Relative Valuation

Suggested Textbooks:

1. Corporate Value & Value Creation by Chandra and Prasanna, McGraw Hill
2. The Little Book of Valuation: How to Value a Company, Pick a Stock and Profit – Aswath Damodaran
3. Parks - Principles and Practice of Valuation – D.N. Banerjee

4. Business Valuation, Text & Cases: Pitabas Mohanty, Taxmann
5. Valuation Measuring and Managing the Value of Companies (Wiley Finance) – McKinsey & Co.

Suggested Reference Book:

1. Valuation by Registered Valuers under Companies Act 2013 & Insolvency and Bankruptcy Code 2016 – Kamal Garg
2. Corporate Professionals Business Valuation in India – Beyond the Numbers (2018)
3. Business Analysis and Valuation: Using Financial Statements, Text and Cases 3rd Edition by Krishna G. Palepu , Paul M. Healy ,Victor L Bernard

Semester IV	407 FIN (TAF657ME)	SE FIN - 11: Technical Analysis of Financial Markets
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Financial Management

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO407 FIN. 1	REMEMBERING	REMEMBER the concepts, terminologies, frameworks, tools, techniques and theories of technical analysis taught in the syllabus.
CO407 FIN. 2	UNDERSTANDING	UNDERSTAND the applications of technical analysis and the various types of charts and the psychology behind a pattern and its formation
CO407 FIN. 3	APPLYING	MAKE PRACTICAL USE of the Theories, Models, Principles and Frameworks of technical analysis for estimating market prices of different securities
CO407 FIN. 4	ANALYSING	ANALYSE AND FORECAST the market prices of securities in order to take and execute investment decisions
CO407 FIN. 5	EVALUATING	EVALUATE opportunities for Buy & Sale on the basis of technical analysis
CO407 FIN. 6	CREATING	FORMULATE an ideal portfolio of investments with a combination of wide number of securities

1. **Introduction to Technical Analysis:** Definition and Concept, Price discounts everything, Price movements are not totally random, Technical Analysis: Basic Assumptions, Strengths and Weakness of Technical Analysis, Importance of Technical Analysis, Dow Theory – Introduction, Principles of Dow Theory, Significance of Dow Theory, Problems with Dow Theory, Constructing and Interpreting Charts and the formation, evolving a Trading strategy based on patterns. **(6+2)**
2. **Company Analysis Using Technical Analysis:** Understanding various Charts: Bullish Trend, Bearish Trend, Price Chart, Line Chart, Bar Chart, Japanese Candle Stick Chart, Point and Figure Chart, Candlestick Patterns – Doji, Harami, Piercing, Engulfing, Morning Star, Evening Star, Hammer, Inverse Hammer and Hanging Man, Chart Patterns – Support and Resistance, Reversal Patterns - Head and Shoulder Formation, Inverse Head and Shoulder Formation, Double Formations, Rounding Patterns, Rectangle Formation, Wedge Formations, Continuation Patterns – Triangles, Flags and Pennants, Overall Decision Making for Purchase / Sale of Share of a Company. **(7+3)**
3. **Company Analysis Using Market Information:** Volume and Open Interest, Concept and Calculation of Oscillators from the data of five years prices, High, Low, Average Price, Simple Moving Averages, Exponential Moving Averages, Rate of Change Indicators (ROC), Relative Strength Index, (RSI), Moving Average Convergence and Divergence (MACD), STOCHASTIC, VWAP. **(8+2)**
4. **Trading Strategies:** Day Trading, Advantages of Day Trading, Risks Associated with Risk Day Trading, Strategies for Day Trading, Momentum Trading Strategies. Elliot Wave Theory, Elliot Wave – Introduction, Fundamental Concept, After Elliott. **(5+2)**
5. **Trading Psychology and Risk Management:** Introduction and Components of Risk Management, Stop Loss, Analyze Reward Risk Ratio, Trail Stop Loss, Booking Profit, Uses of Stop Loss, Qualities of Successful Trader, Golden Rules of Traders, Do's and Don'ts in Trading, Rules to Stop Losing Money Choosing the Right Market to Trade, Importance of Discipline in Trading, Efficient Market Theory. **(8+2)**

Suggested Textbooks:

1. Technical Analysis of financial markets: A comprehensive guide to trading methods & applications – John J. Murphy
2. Technical Analysis Explained: The Successful Investor's Guide to Spotting
3. Investment Trends and Turning Points - Martin J. Pring.
4. Technical Analysis of Stock Trends, 8th Edition - Robert D. Edwards, John Magee, W. H. C. Bassetti
5. Technical Analysis for Indian Financial Markets – Shriram Nerlekar, Ashish Kelkar

Semester IV	408 FIN (RM658ME)	SE FIN - 12: Risk Management
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Financial Management

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 408FIN.1	REMEMBERING	DESCRIBE various concept associated with risk management and financial risk management.
CO 408FIN.2	UNDERSTANDING	EXEMPLIFY the financial risk management processes, frameworks
CO 408FIN.3	APPLYING	DETERMINE the various building blocks of risk management system and strategies.
CO 408FIN.4	ANALYSING	CLASSIFY various risks associated with enterprise, banks, insurance etc.
CO 408FIN.5	EVALUATING	FORMULATE the strategies to overcome with currency risk, credit risk, interest rate risk, legal risk, asset liability risk, liquidity risk etc.
CO 408FIN.6	CREATING	FORMULATE the strategies to manage currency risk, credit risk, interest rate risk, legal risk, asset liability risk, liquidity risk etc.

1. **Basics of Risk Management:** Definitions - Risk and uncertainty, Types, level & Impact of risk on organizations, Principles of risk management, Importance of risk management, Risk management process and framework. Financial Risk Management: Concept, Importance, Scope, Process of financial risk management. **(5+2)**
2. **Risk & Volatility Measurement:** Rate and price in determination of risk, Factors that impact financial rates and price: Interest rates, Foreign Exchange Rates, Commodity Price, Operational Risk; Market Data Analysis, Probability and distributions of asset prices, Modeling Risk Factors, concept and computation of Value-at-Risk, Calculating portfolio risk of more than one Assets. Historical simulation & multifactor VaR, Marginal and relative VaR. Different measures of volatility such as EWMA, ARCH & GARCH processes, volatility clusters and the issue of time varying volatility & issue of time aggregation. **(8+2)**
3. **Risk Management In Banking:** Risk management structure in bank, Credit risk, liquidity risk, interest rate risk, counterparty risk, market risk, environmental risk, currency risk, legal & regulatory risk, rating risk, pricing risk & capital allocation risk, loan review, NPA management, Basel committee norms for banking, Risk in investment banking, financial risk management using derivatives and insurance. **(7+2)**
4. **Risk Management for Enterprise:** concept, scope, enterprise risk, approaches for corporate risk management, ERM, Types of enterprise risk: technology risk, business strategy risk, legal and regulatory risk, product liability risk. Risk Management In Insurance: Functions & Types of risk: Actuarial Risk, Asset liability risk, risk and capital, management of underwriting risks, investment risk, Investment management by insurers, investment risk management framework & policies. **(7+2)**
5. **Credit Risk Basics:** Probability of Default, Credit ratings & Transition Matrix analysis, Contingent claim approach and the KMV Model, Credit Risk Management and Credit VaR. Currency risk analysis: Currency risk analysis in global investing, interest rate parity (covered and uncovered), yen-carry trade syndrome, risk environment in Indian Forex markets, forwards and non- deliverable forwards, cross-currency risk analysis **(8+2)**

Suggested Textbooks:

1. Corporate Financial and Risk Management - Nersesian, Roy L. - Jaico Publishing House
2. Financial Risk Management: A Practitioner's Guide to Managing Market and Credit Risk - Steve L. Allen

3. Modern Corporate Risk Management: A Blueprint for Positive Change and Effectiveness by Koller

Suggested Reference Book:

1. Investment Science. Luenberger, Oxford University Press, 1998
2. Options, Futures and other Derivatives, John Hull, 7th Edition, Prentice Hall, 2008
3. An Introduction to Market Risk Measurement by Dowd, Kevin, John Wiley & Sons.
4. Risk Management and Financial Institutions by Hull, John C., Pearson, Prentice Hall, 2007 Measuring Market Risk by Dowd, Kevin, John Wiley & Sons, 2005. Value at Risk by Jorion, Philippe, McGraw Hill.
5. Beyond Value at Risk, by Dowd, Kevin, John Wiley & Sons Mastering Value at Risk ,Butler, Cormac, Financial Times Prentice Hall Risk Takers, Marthinsen, John, Pearson Prentice Hall, 20096.

Semester IV	409 FIN (RMF659ME)	SE FIN - 13: Rural and Micro Finance
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Financial Management

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO409 FIN. 1	REMEMBERING	DEFINE the key concepts of Microfinance and other terms associated with rural and micro finance.
CO409 FIN. 2	UNDERSTANDING	EXPLAIN the relevance of Microfinance and how its work towards rural development.
CO409 FIN. 3	APPLYING	USE of micro finance, microfinance models and their contribution towards, Economic growth, poverty elimination, women empowerment and gender equality.
CO409 FIN. 4	ANALYSING	ANALYZE the linkage between MFIs and Rural development
CO409 FIN. 5	EVALUATING	EVALUATE the significance of the microfinance institutions & Self-Help Group for rural development
CO409 FIN. 6	CREATING	CREATE/DEVELOP models, cases and plans related to micro finance.

1. **Overview of Microfinance:** Background, Concept, Fundamentals of Microfinance, Characteristics of Micro Finance, Microfinance & Banking, The Grameen Bank, Microfinance & Micro Credit, Microfinance 1. NGOs, Channels of Microfinance, Microfinance & Rural Development- Role of MFIs and Rural credit, Types of rural Credit Poverty Microfinance and Economic Well-being ,Microfinance & Women Empowerment, Financial Inclusion. **(5+2)**
2. **Microfinance Lending Models and its Financial & other Products:** Microfinance Delivery Models and Banks Linkages Programme MFI Group Lending Model, MFI Individual Lending Model, MFI Loan Products & Related Issues, MFI Savings & Saving Products, Remittances, MFI Micro insurance. **(8+2)**
3. **Microfinance Service Providers and Microfinance Institutions:** Governance and the Constitution of the Board of Various Forms of MFIs in India, Intermediaries for Microfinance, Commercialization of Microfinance Institutions, Challenges to Microfinance Institutions. **(7+2)**
4. **Microfinance & Self Help Groups:** Meaning of SHGs, Pattern of their Functions-Funding Agencies of these SHGs- Provisions under SHGs- Savings, Credit, Marketing & Insurance, Financial & Social Inclusion through SHGs, SHGs and entrepreneurship development, NABARD and SHGs - SHGS & Bank Linkages - SHGs and Training Programmes, SHGs and Economic Empowerment, Role of SHGs in Poverty alleviation- Cases related to Indian Context. **(7+2)**
5. **Issues, Trends and Strategic alliances in Microfinance:** Emerging issues in Microfinance, Recent Trends in Microfinance, Microfinance & Sustainable Development, Role of Technology in Microfinance, Microfinance & Gender equality, Impact of Microfinance on Women empowerment. **(8+2)**

Suggested Textbooks:

1. Microfinance in India by K G Karmakar, March 2008Sage Publication Private Ltd.

2. Macro Dynamic of Micro Finance Daniel Lazar P. Natarajan Malabika Deo Excels Books 2010
3. The Economics of Microfinance by Jonathan Morduch and Beatriz Armendariz
4. Micro Finance and Poverty eradication - Indian and global experiences Dr. Daniel Lazar Prof. P. Palanichany New Century Publication, New Delhi 2008
5. A. N. Agarwal and Kundana Lal: - Rural Economy of India – Vikas publishing House Ltd. – New Delhi-110014, 1990
6. Vasant Desai- A Study of Rural Economy Page 175 of 260 SPPU - MBA Revised Curriculum 2022 – NEP - CBCGS & OBE Pattern
7. Johns Hopkins School of Advanced International Studies: Microfinance and Development 1, taught by Elissa McCarter and Kate Druschel Griffin.
8. Rudradath and K. P. M. Sundaram - Indian Economy—S. Chand & Co. Limited, New Delhi 110055, 2008
9. S. K. Mishra & V. K. Puri – Indian Economy- Himalaya Publishing House, Mumbai- 400004, 2008.

Semester IV	410 FIN (IDT660ME)	SE FIN - 14: Indirect Taxation
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Financial Management

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 410FIN.1	REMEMBERING	REMEMBERING the key concepts of Indirect Taxes in India Identifying and enumerating the various terms associated with GST and other indirect taxes.
CO 410FIN.2	UNDERSTANDING	EXPLAIN how GST works as an Uniform Tax Structure, Illustrate the GST framework of India, & describe the important concepts such as supply, dual taxation method, registration process, etc.
CO 410FIN.3	APPLYING	APPLY the theories and Principles and perform all calculation through numerical problems on valuation and calculation of taxes. Identify the time value of supply; determine the taxable person and tax levied on goods and services.
CO 410FIN.4	ANALYSING	ILLUSTRATE the e filling process of GST Categorize the Goods and Services under GST and amount of tax to be paid using Dual tax concept.
CO 410FIN.5	EVALUATING	EVALUATE Input Tax Credit Process, reversal, late filing and New Amendments; appraise various indirect taxes; Interpret the GST framework in India & verify the tax levied on Goods and Services.
CO 410 FIN.6	CREATING	ELABORATE all Provisions of GST and correlate with filing of returns; virtual e filling and also Estimate the GST, TDS, anticipate goods, services, tax payable person for the business.

1. **Introduction:** Indirect Taxes - Concept, GST, Need and Genesis of GST. Dual GST Model: CGST, SGST, UTGS, IGST. GST Network, GST council, Role and Phases of GST Council, Constitutional provisions to enforce indirect Taxes & GST, CESS **(5+2)**
2. **Registration under GST:** Registration Procedure, Persons not liable for registration, Compulsory registration, Deemed registration, Cancellation vs. Revocation of registration, Unique Identification Number, Registration Number Format. Types and periodicity of GST return for different categories of Taxpayers (Regular Tax Payer, Composition Tax Payer, Casual Taxable Person, Non-Resident Taxable Person, etc). **(8+2)**
3. **Supply under GST and Valuation of Supply:** Key Concepts- Levy and Collection of Tax, Supply, Place of Supply, Interstate and Intrastate Supply, Export of Service, Export of Goods, Imports of Goods, Import of Service, Valuation of Supply, Types of Supply under GST Regime, Composition Levy, Exemption from tax, Person liable to pay tax, Tax Deduction at source (TDS) under GST. **(7+2)**
4. **Input Tax Credit under GST & Returns:** Input Tax Credit Process, Negative List for Input Tax Credit, Input Tax Credit Utilization and Input Tax Credit Reversal, Types of GST returns and their due dates, late filing, late fee and interest. Reverse Charge Mechanism New GST Returns - Overview, Forms, Invoices, ITC, Amendments, Offline Tools; New GST Return System, Forms to be filled and Process of New Return Filing System; New Amendments introduced in New GST Return System. **(7+2)**

5. Definitions of certain terms relating to the custom act, custom tariff act, Levy and types of custom duties, Basic customs duty, IGST, Protective duties, Safeguard duty, Countervailing Duty on subsidized articles, Anti-dumping duty, Import Procedure, Export Procedures, Valuation of Imported Goods, Valuation of Export Goods, Penalties under Customs, Refund. **(8+2)**

***Note:** 1. Numericals will be asked on valuation and calculation of Taxes (Unit 3).

2. (Theory : Numerical :: 80: 20)

Suggested Textbooks:

1. Indirect Tax Reform in India: 1947 To GST and Beyond Book by Vinay K. Srivastava and Yashwant Sinha
2. GST Acts, Rules & Forms with Reference By Ashok Batra
3. Taxmann's Basics of GST
4. Taxmann's GST: A practical Approach Theory & Practice of GST, Srivathsala, HPH
5. Theory & Practice of GST: Dr. Ravi M.N, PBP.

Semester IV	411 FIN (CFR661ME)	SE FIN - 15: Corporate Financial Restructuring
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Financial Management

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 411FIN.1	REMEMBERING	DESCRIBE the basic concepts related corporate restructuring, Mergers & Acquisitions, Valuation Aspects of Corporate Restructuring and Corporate Governance Aspects of Restructuring.
CO 411FIN.2	UNDERSTANDING	EXPLAIN the motivations, decision processes, transaction execution, and valuation consequences of financial, business, and organizational restructuring by corporate units.
CO 411FIN.3	APPLYING	PERFORM all the required calculations through relevant numerical problems.
CO 411FIN.4	ANALYSING	ANALYZE the situation by calculations of exchange ratio, financial returns, valuations and others.
CO 411FIN.5	EVALUATING	EVALUATE impact of corporate financial restructuring on all stakeholders
CO 411FIN.6	CREATING	CREATE an interface and model on various dimensions of corporate finance and restructuring process.

1. **Basic concepts:** Basic concepts: Meaning of Corporate Restructuring, Need, Scope, Concept of Internal & External Restructuring, different forms and motives, applications of corporate restructuring, financial perspective in restructuring, Reorganization strategies in corporate organizations. **(5+2)**
2. **Overview of Corporate Finance and Corporate Restructuring:** Financial Restructuring & Divestiture, Funding Options for M&A. Strategic Alliances & Joint Ventures, Employee Stock Ownership, Going Private & Leveraged Buyouts. Creating Value through Corporate Restructuring-Corporate Reorganization Strategies-Spin-Offs, Equity Carve-Outs, Target Stock and Divestures, Financial Distress & Bankruptcy, Liquidation, Net Operating Losses, Sources of Funding & Problem of changing Capital Structure, Strategic and Financial Sponsors, Pros and Cons of different Sponsors, Capital Cash Flows Vs. Equity Cash Flows. **(8+2)**
3. **Dimensions of Mergers & Acquisitions:** Mergers & acquisitions concept, types, reasons and process, Accounting for Mergers & Demergers, Regulatory framework of mergers and acquisitions. Due diligence for M & A, Cross-Border Mergers & Acquisitions. Take-over and Defence Tactics Structural Defences Vs. Non-Structural Defences, Contribution Analysis, Duties of Board of Directors, Market for Corporate Control. Forms of compensation. Anti-takeover strategies, Leveraged Buyouts, Portfolio restructuring, **(7+2)**
4. **Valuation Aspects of Corporate Restructuring:** Methods of payment for M & A and Calculations of exchange ratio, Fundamentals and methods of business valuation, Calculations of financial synergy and return, Different approaches

of valuation – Comparable company & transaction analysis method, DCF, Real Option method, Equity/Residual Cash Flows, Adjusted Present Value, Capital / Leveraged Cash Flows, Relative Valuation Analysis, Sensitivity Analysis, Tables, Developing Break Up Analysis. (7+2)

- 5. Corporate Governance Aspects of Restructuring:** Domestic & International trends relating to governance practices pertaining to Corporate Restructuring, Reference of Corporate Governance in Indian Companies Act (Amended) 2013, SEBI Regulations, Listing Agreement etc. Shareholder democracy in restructuring process, role of investors creditors, role of non-executive directors in restructuring process, Disclosures and Clarifications on the part of Board of Directors and Inclusion in the Auditors' Report. (8+2)

***Note:**

1. To facilitate understanding of corporate merger and acquisition activity, restructurings and corporate governance relevant Cases should be incorporated in teaching pedagogy.

2. Numerical Problem will be asked on the following:

- i. Calculations of exchange ratio,
- ii. Calculations of financial synergy and return,
- iii. Different approaches of valuation – Comparable
- iv. Company & transaction analysis method, Discounted Cash Flow (DCF),
- v. Real Option method,
- vi. Formula approach for valuation and other important methods of valuation.

Suggested Textbooks:

1. Corporate Restructuring, Bhagaban Das and Debdas Raskhit, Himalaya Publishing House
2. Financial Management, R. P. Rustagi, Galgotia Publishing
3. Strategic Financial Management, Ravi M. Kishor, Taxmann,
4. Mergers, Acquisitions and Corporate Restructurings, Gaughan, P.A., John Wiley and Sons
5. Financial Management, Prasanna Chandra, TATA McGraw Hill

Suggested Reference Books:

1. Mergers & Acquisitions, B Rajesh Kumar, TATA McGraw Hill, Latest Edition
2. Mergers and Acquisitions, Aurora, Shetty and Kale, Oxford,
3. Takeovers, Restructuring, and Corporate Governance, James J. Fred Weston, Mark L. Mitchell, J. Harold, Pearson
4. Corporate Finance, Ashwath Damodaran, Wiley India

Supplementary Reading Material:

1. Case Studies in Mergers & Acquisitions – ICAFI University – ICAFI University Press,
2. Case Studies on Mergers & Acquisitions – R. Muthukumar – ICAFI University Press

List of Journals / Periodicals / Magazines / Newspapers / Web resources, etc.:

1. Business Standard
2. The Economic Times
3. Financial Express
4. Journal of Applied Finance
5. CFA Reader
6. Business Today
7. Finance India

Semester IV	412 FIN (FCD662ME)	SE FIN - 16: Financial and Commodity Derivatives
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Financial Management

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 412FIN.1	REMEMBERING	DESCRIBE the basic concepts in derivatives, terminology related to futures, options and risk management.

CO 412FIN.2	UNDERSTANDING	UNDERSTAND the functioning of derivative market, standard derivative contracts, their properties, functionality.
CO 412FIN.3	APPLYING	APPLY technical methods for valuation of Future, options and other derivatives, in continuous and discrete time.
CO 412FIN.4	ANALYSING	ANALYSE risk measures that are commonly used in risk management.
CO 412FIN.5	EVALUATING	EVALUATE different assumptions and principles behind derivatives pricing, risk management and evaluate strategies related to derivatives contract by eliminating volatility
CO 412FIN.6	CREATING	CREATE Futures and Options trading strategies and also create hedging positions.

- 1. Introduction:** Definition of Derivative, Brief history of derivatives, participants in derivative market, Economic functions of derivative market, Evolution of commodity market, currency, stocks and Interest rate derivatives, Structure of derivative market - Forwards, Futures, Options, Swaps etc. Future and Options trading strategies: Risk Management, Hedging, speculation and Arbitrage, Spread trading **(7+2)**
- 2. Market Characteristics:** Futures and Options contract specifications, Underlying Asset, Contract size, and Delivery Specification, Moneyness of an option contract - In the Money (ITM), AT the money (ATM), Out of the Money (OTM), Mark to Market (MTM) using margin accounts, markets Quotes, trading strategies, involving options and Futures, Interest rate Derivatives, Contractual Specifications - floating and Fixed rate, Valuation of Interest Rate Derivatives. **(7+2)**
- 3. Derivatives Pricing Theory & Risk Management:** Factors affecting Option Price: Option Payoffs, Black-Scholes formula for option pricing, Futures pricing: Pricing by Arbitrage: Relationship between futures and spot price (cost of carry and reverse cost of carry), difference between futures and forward price, Options risk Management strategies, Options Greeks - Delta / Theta / Vega & Gamma, hedging with futures. **(7+2)**
- 4. Options and Futures Applications in India:** Structure of Indian Stock Markets and the Operational Efficiency of Options and Futures, Determination of the Fair Value of Futures and Options Prices, Interactions between Spot Equity Trading and Trading in Derivatives. Index Options and Futures, Constructing an Index, Methodology of Construction, Trading an Index. Conditions necessary to Improve the Market Structure in India and Policy Interventions. **(7+2)**
- 5. Commodity Market:** Types of commodities - agricultural & non-agricultural, bullish & bearish commodities. Commodity exchanges & regulatory framework. Pricing mechanism, issues related to spot price, fundamental and technical factors that drive the price movements. Risk involved in commodity trading, difference between commodity and financial derivatives, over-the-counter derivatives. Clearing and settlement - physical settlement, warehousing. Strategies and calculations of commodities trading - spot, forward, futures, options. **(7+2)**

Suggested Textbooks:

1. Futures & Options (equities & commodities) – A.N. Sridhar
2. Financial Derivatives, S. L. Gupta
3. Financial Derivatives, S.S. Kumar
4. Options, Futures & Other Derivatives, John C. Hull
5. Commodity Derivatives – IIBF
6. Commodities Markets and Derivatives : B. Kulkarni

Suggested Reference Books:

1. Futures & Options, ND Vohra, B. R. .Bagri
2. Derivatives & Risk Management Basics, Don. M. Chance, Robert Brooks.
3. Derivatives & Risk Management, Jayanth Rama Varma
4. Commodity Derivatives: Markets and Applications - Neil C. Schofield
5. Guide to Indian Commodity Market : Ankit Gala & Jitendra Gala

Supplementary Reading Material:

1. NCFM Module on Commodity Derivatives

HUMAN RESOURCE MANAGEMENT							
Specialization Core Courses							
Sem Code	Course Code	Course	Semester	Credits	FA	SA	Total Marks
302	SC HRM- 01	Strategic Human Resource Management	III	3	50	50	100
403	SC HRM - 02	Employee Relations & Labour Legislation	IV	3	50	50	100
				6	100	100	200
Specialization Elective Courses - Semester III (Any 4 to be opted for)							
304	SE HRM - 01	Competency Based HRM	III	3	50	50	100
305	SE HRM - 02	Conflict management and Negotiation Skills	III	3	50	50	100
306	SE HRM - 03	HR Analytics	III	3	50	50	100
307	SE HRM - 04	Diversity & Inclusion	III	3	50	50	100
308	SE HRM - 05	HR Perspective in Merger & Acquisition	III	3	50	50	100
309	SE HRM - 06	Labour Economics & Costing	III	3	50	50	100
310	SE HRM - 07	Organization Diagnosis and Development	III	3	50	50	100
311	SE HRM - 08	HR Operations	III	3	50	50	100
				12	200	200	400
Specialization Elective Courses - Semester IV (Any 4 to be opted for)							
405	SE HRM - 09	Compensation & Reward Management	IV	3	50	50	100
406	SE HRM - 10	Employee Engagement	IV	3	50	50	100
407	SE HRM - 11	Designing HR Policies	IV	3	50	50	100
408	SE HRM - 12	Performance Management System	IV	3	50	50	100
409	SE HRM - 13	Change Management & New Technologies in HRM	IV	3	50	50	100
410	SE HRM - 14	Global HR Practices	IV	3	50	50	100
411	SE HRM - 15	Mentoring & Coaching	IV	3	50	50	100
412	SE HRM - 16	Labour Welfare	IV	3	50	50	100
				12	200	200	400
				30	500	500	1000

Specialization: Human Resource Management
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Semester III	302 HRM	SC-HRM-01: Strategic Human Resource Management
3 Credits	LTP: 2:1:1	Subject Core (SC) Course – Human Resource Management

Course Outcomes: On successful completion of the course, the learner will be able to:

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES (CO's)
CO302HRM.1	REMEMBERING	REMEMBER the strategies adopted by HR and their implementation issues and challenges faced by the organization in national and international context.
CO302HRM.2	UNDERSTANDING	Ability to UNDERSTAND and ARTICULATE the basic concepts of SHRM and link the HR strategies to the organizational business strategies.
CO302HRM.3	APPLYING	Apply HR strategies to various cultural and international settings.
CO302HRM.4	ANALYSING	Analyze the impact of HR strategies on organizational outcomes.
CO302HRM.5	EVALUATING	Examine strategies for recruitment, retention, training, and development.
CO302HRM.6	CREATING	Create strategic HR policies in areas like compensation, benefits, and employee relations.

Unit 1: Introduction to Strategic Human Resource Management

- Definition and objectives of SHRM, Evolution of SHRM: Include recent trends like digitalization. Strategic Fit: Emphasize the importance of aligning HR strategies with business objectives, Types of HR strategies: Add examples of innovative HR strategies, Linking HR strategies to business strategies: Include case studies or examples. (7+2)

Unit 2: Components of SHRM

- Human Capital management: Include the role of technology in HCM, Valuation of human resources, Emphasize the importance of measuring HR's ROI, Formulation of HR strategies: Include the role of data-driven decision-making, Strategic HR vs traditional HR: Highlight the differences and benefits of SHRM, Challenges and issues in implementation of HR strategies: Include recent examples from Indian context. (7+2)

Unit 3: HR Planning as a strategy

- Business Strategy & HRP: Emphasize the importance of aligning HRP with business objectives, HRP process: Include the role of technology in HRP, Forecasting and analyzing HR demand: Include qualitative and quantitative methods, Supply forecasting: Discuss the importance of internal and external talent pipelines, Comparison of demand and supply forecasting: Include examples or case studies. (7+2)

Unit 4: Specific HR strategies

- Talent Management strategies: Include recent trends like talent development, Career Planning and succession planning: Emphasize the importance of continuous learning, Compensation and reward strategies: Discuss recent trends like variable pay and benefits, Employee engagement strategies: Include recent methods like employee experience and well-being. (7+2)

Unit 5: Global Dimensions to HR strategy

- SHRM in international context: Discuss recent trends like globalization and Global competitive advantage: Emphasize the importance of HR in driving business success, Issues and challenges in SHRM: Include recent examples from global context, Cross-cultural management: Discuss recent methods like cultural intelligence and diversity, equity, and inclusion, OCTAPACE: Include recent examples or case studies, Global business ethics: Emphasize the importance of ethics in HR decision-making. (7+2)

Note:

1. Case study-based approach should be emphasized
2. Numerical approach in HR planning and HR valuation should be adopted.

Suggested Text Books:

1. Strategic Human Resource Management, (Agrawal, Tanuja), Oxford University Press
2. Strategic Human Resource Management- A General Managerial Approach, (Greer, Charles P.), Pearson Publications, Second Edition
3. Strategic Human Resource Management, (Mello, Jeffrey A.), Thomson Publications, Second Edition

Suggested Reference Books:

1. Human Resource Management- Text and Cases, (Pande, Sharan; Basak, Swapnalekha), Pearson Publication
2. Global Resource Management, (Bedi, S.P.S; Kishore, Minakshi), Wisdom Publications, 2007 Edition
3. International Human Resource Management, (Dowling, Peter J.; Welch, Denice E.), 4th Edition

Suggested Weblinks:

1. www.shrmindia.org
2. www.peoplematters.com

Journals:

1. Journal of Strategic Human Resource Management
2. International Journal of Human Resource Management
3. Human Resource Management Journal

Semester III	304 HRM	SE-HRM-01: Competency Based HRM
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Human Resource Management

Course Outcomes: On successful completion of the course the learner will be able to:

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES (CO's)
CO304HRM.1	REMEMBERING	Recall the fundamental key terms, concepts and framework related to competency, its models, mapping, assessment and its trends.
CO304 HRM.2	UNDERSTANDING	Understand the concept of competency, its models and competency-based HR practices.
CO304 HRM.3	APPLYING	Apply concepts of competency in mapping and assessment of employee performance and in various HR practices.
CO304 HRM.4	ANALYSING	Examine how to integrate the applications of competency model and Data driven HR with other HRM functions.
CO304 HRM.5	EVALUATING	Design and Map employees skill based competency matrix for effective and ethical HR decisions w.r.t. rewards and promotions.
CO304 HRM.6	CREATING	DEVELOP a customized competency model in accordance with the corporate requirements with recent trends.

UNIT-1: Introduction to Competency: Definition and History of Competency, Basic Components of Competency (Knowledge(K), Skill(S), Attitude(A)), Performance Vs Competency, Difference between Competence and Competency, Type of Competency- Generic Vs Specific/ Key Competency, Functional, behavioural, Emotional and Technical Competency, Leadership and Managerial Competency, Need for Competency Framework, Limitation and Learning from Competency Framework, Myth about Competency. (7 +2)

UNIT-2: Competency Development & its Models: Need and Importance of Competency Development, Stages in Developing Competency Model, Types of Competency Model – Core/Generic, Job Specific, Managerial & Leadership, Custom, Development of Personnel Competency Framework – Lancaster Model of Competency, Application of Competency-Based HRM in HR functions. (7 +2)

UNIT-3: Competency Mapping: Procedures/Steps-Determining Objectives and Scope, Clarifying Implementation Goals and Standards, Create an Action Plan, Define Competency-based Performance Effectiveness (Key Result Area (KRA) & Key Performance Indicators(KPI)), Tools for Data Collection, Data Analysis, Validating Competency Model,

Mapping Future Jobs, and Single Incumbent Jobs, Using Competency Profile in HR Decisions, Mapping Competency for Recruitment and Selection, Training and Development, Performance and Compensation. (7+2)

UNIT 4: Competency Assessment – Meaning, purpose and Benefits, Steps in Competency Assessment – Measuring and mapping competencies a. Behavioral Event Interviewing (BEI), b. Assessment centre c. Conducting and operating assessment centre d. Role of assessors in an assessment centre e. Designing tools in an assessment centre f. Integration of data , Report Writing and g. Feedback mechanism. Types of Assessments (ex. Assignments, Quizzes and Exams, Presentations and Group Work etc.) (7+2)

UNIT 5: Practical Applications and Trends:

Data collection and use of data analytics for various HR practices, like performance data, employee surveys, and training evaluations for effective HR decisions. Emerging Trends in Competency-Based HRM- e. q. Ethical Considerations, Emotional Intelligence, Future of Work. Technology in HRM : HRIS and other technologies to support HR processes and improve efficiency. (7+2)

Text books

- 1 Armstrong, M. & Baron, A., Performance Management and development, Jaico Publishing House, Mumbai.
- 2 Armstrong, M., Performance management: Key strategies and practical guidelines, Kogan Page, London.
- 3 Bagchi, S. N., Performance management, Cengage Learning India
- 4 Bhattacharyya, D.K., Performance management systems and strategies, Pearson Education

Reference books

- 1 Seema Sanghi: ‘Handbook of Competency Mapping’; Response Books; Latest Edition
- 2 Ganesh Shermon: ‘Competency based HRM’; Tata McGraw Hill; Latest Edition.
- 3 Whiddett and Hollyforde: ‘A Practical Guide to Competencies’; Chartered Institute of Personnel and Development; Latest Edition.

Semester III	305 HRM	SE-HRM-02: Conflict management and Negotiation Skills
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Human Resource Management

Course Outcomes: On successful completion of the course the learner will be able to:

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES (CO's)
CO305HRM.1	REMEMBERING	DEFINE the key concepts of the Conflict and Negotiation Management.
CO305HRM.2	UNDERSTANDING	EXPLAIN the Conflict Management and negotiation process, Conflict types, Conflict Resolution Styles, Theories and Models of Conflict and Negotiation.
CO305HRM.3	APPLYING	APPLY various conflict resolution techniques and strategies (e.g., mediation, collaboration, negotiation, BATNA, ZOPA) to manage and resolve conflicts constructively, while considering ethical implications.
CO305HRM.4	ANALYSING	IDENTIFY different types of conflicts within organizations, assess their causes and consequences, and apply conflict and negotiation management theories to understand the dynamics and impact of conflict.
CO305HRM.5	EVALUATING	EVALUATE critically various conflict resolution and negotiation strategies in real-world business scenarios, assessing their effectiveness, ethical considerations, and impact on organizational outcomes.
CO305HRM.6	CREATING	Create a Conflict Management Strategy and Negotiation strategy based on the theoretical concepts for managing and resolving organizational conflict and negotiation styles in the organizational context and other real-life scenarios.

Unit 1: Introduction to Conflict Management- Definition and Nature of Conflict-Understanding conflict: Positive vs. Negative conflict, Sources and causes of conflict in organizations: Communication breakdown, cultural differences, etc. **Types of Conflict**- Intrapersonal, interpersonal, intergroup, and organizational conflict, Conflict dynamics and escalation, **Conflict in the Workplace**- Effects of conflict on organizational performance, Case studies of conflict in

organizations, **Conflict Theories and Models**-Dual Concern Model, (Process & Structural Model) Thomas-Kilmann Conflict Mode Instrument (TKI) (7+2)

Unit 2: Conflict Resolution Strategies- Conflict Resolution Styles-Competing, collaborating, compromising, avoiding, and accommodating, Self-assessment of conflict management styles, **Techniques for Resolving Conflict**-Mediation and arbitration, Collaborative problem-solving, Negotiation as a conflict resolution tool, demonstrate the use of third party conflict resolution (ADR), **Organizational Conflict Resolution Systems**-Formal and informal conflict resolution systems, Best practices for organizational conflict resolution, **Ethical Considerations in Conflict Resolution**-Ethical principles in managing conflict, Case studies of ethical dilemmas in conflict resolution (7+2)

Unit 3: Theories and Models of Negotiation- Introduction to Negotiation-Definition and importance of negotiation, Stages of negotiation: Preparation, negotiation, and agreement, **Negotiation Strategies and Tactics**-Distributive vs. Integrative negotiation, Win-win and win-lose strategies, **Negotiation Styles and Approaches**- The role of cultural influences in negotiation, Fisher and Ury's "Getting to Yes" principles, **Negotiation Power and Influence**- Sources of power in negotiation, Influence tactics and persuasion, Identifying BATNA (Best alternative to a negotiated agreement) and ZOPA (zone of possible agreement) in the negotiation process, Ethics in negotiation (7+2)

Unit 4: Practical Applications of Negotiation - Negotiation in Business and International Settings-Negotiating with clients, suppliers, and business partners, Cross-cultural negotiations and their challenges, Leigh Thompson's 5 negotiation mental models **Advanced Negotiation Techniques**-Multi-party negotiations, Negotiating under pressure and in crisis situations, **Negotiating for Value**-Creating value in negotiations: Expanding the pie, Integrating negotiation and conflict resolution. **Role-playing Negotiation Simulations**- Case studies and role-playing exercises (7+2)

Unit 5: Conflict Management and Negotiation in Leadership - Leadership Styles and Conflict Management-Transformational vs. transactional leadership, How leadership affects conflict outcomes, **Managing Conflict in Teams and Organizations**- Conflict management in team dynamics, Role of leaders in conflict resolution and negotiation, **Building Negotiation Skills for Leadership**- Negotiation and decision-making in leadership roles, Developing emotional intelligence for better negotiation outcomes (7+2)

Suggested Text Books:

1. Fisher, R., Ury, W., & Patton, B. (2011). *Getting to Yes: Negotiating Agreement without Giving In* (3rd Ed.). Penguin Books.
2. Negotiation: Communication For Diverse Settings, Spangle, Michael L. ; Isenhardt, Myra Warren : Sage Publications
3. The Negotiation Field book Simple Strategies to help you negating everything, Grande, Lum. New Delhi : TATA MCGRAW HILL Publishing Company Limited
4. Negotiation / Harvard Business Essentials. U S A, Harvard Business Publishing Corporation
5. How to Conduct Effective Negotiations, Forsyth, Patrick Jaico Publishing House
6. Managing Workplace Conflicts, Subbulakshmi, V., Hyderabad : ICFAI University Press
7. The Power of Positive Confrontation: The Skills You Need To Know To Handle Conflicts At Work, At Home And In Life, Pachter, Barbara. Magna Publishing Co. Ltd.

Suggested Reference Books:

1. Thomas, K. W. (2007). *Thomas-Kilmann Conflict Mode Instrument*. CPP.
2. Lewicki, R. J., Saunders, D. M., & Barry, B. (2015). *Negotiation* (7th ed.). McGraw-Hill.
3. Deutsch, M., & Coleman, P. T. (2012). *The Handbook of Conflict Resolution: Theory and Practice* (3rd ed.). Jossey-Bass.
4. Getting to Yes: Negotiating Agreement without Giving In, Roger Fisher, William Ury, Bruce Patton
5. Bargaining for Advantage: Negotiation Strategies for Reasonable People, G. Richard Shell
6. Secrets of Power Negotiating: Inside Secrets from a Master Negotiator, Roger Dawson

Semester III	306 HRM	SE-HRM-03: HR Analytics
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Human Resource Management

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES (CO's)
CO306HRM.1	REMEMBERING	Recall the key concepts of Industry 4.0, big data, machine learning, and business intelligence as they relate to Human Resource Management.
CO306HRM.2	UNDERSTANDING	Explain the scope, definition, and strategic relevance of HR Analytics, including ethical and data privacy considerations.
CO306HRM.3	APPLYING	Apply HR Analytics tools and methods to support decision-making in core HR functions like talent acquisition, development, and retention.
CO306HRM.4	ANALYSING	Analyze the maturity level of HR analytics using Gartner's Analytics Maturity Model and its alignment with organizational goals.
CO306HRM.5	EVALUATING	Evaluate the impact of HR Analytics on business outcomes by linking HR metrics to organizational performance and innovation.
CO306HRM.6	CREATING	Design innovative HR policies and practices by integrating predictive analytics and digital strategies to enhance workforce management.

Unit- 1. Introduction & Concept: Evolution of Industry 4.0 and its Impact on Human Resource Management, Role of Big Data in Strategic HR Decision-Making, Fundamentals of Machine Learning for HR Professionals, Applications of Business Intelligence in Enhancing HR Functions. (6+2)

Unit- 2.Importance of HR Analytics: Understanding HR Analytics: Definition, Scope, and Strategic Significance of HR Analytics in modern HR practices. Role of data-driven decision-making in HR effectiveness and organizational performance. **Roles and Responsibilities in HR Analytics:** Key functions of HR professionals in implementing and managing HR analytics. Collaboration between HR, IT, and business units. Ethical considerations and data privacy in HR analytics. **Gartner's Analytics Maturity Model:** Explanation of the four stages: Descriptive, Diagnostic, Predictive, and Prescriptive Analytics. Aligning analytics maturity with organizational goals and digital transformation strategies. (8+2)

Unit- 3. Linking HR Analytics to Business Outcomes: Strategic importance of Innovation in a dynamic business environment. **Linking HR Analytics to Business Outcomes:** Aligning HR analytics with key business strategies and performance goals. Identifying metrics that demonstrate the contribution of HR to innovation and organizational success. Tools and Methods for Evaluating the Impact of Data-Driven HR Interventions on Talent Management (7+2)

Unit- 4. Strategy Formulation: Redesigning HR Policies & Practices: Adapting HR policies to digital transformation, Aligning HR practices with business strategy, Policy innovation in response to changing workforce demographics, Legal and ethical considerations in policy formulation. **Application of HR Analytics in HR Practices:** Talent Acquisition & Recruitment Analytics, Talent Development & Skill Gap Analysis, Compensation & Rewards Optimization, Employee Engagement & Retention Strategies, Predictive Analytics for Workforce Trends (7+2)

Unit- 5. Learning from Analysis: Case studies and best practices in use of HR Analytics in industry (5 cases) (7+2)

Suggested Text Books:

1. Winning on HR analytics: Leveraging data for competitive advantage, Ramesh Soundararajan and Kuldeep Singh, Sage Publication
2. The Practical Guide to HR Analytics: Using Data to Inform, Transform, and Empower HR Decisions Paperback, Shonna D. Waters, Valerie N. Streets, Lindsay Mcfarlane, Rachael Johnson-murray
3. Human Capital Analytics: How to Harness the Potential of Your Organization's Greatest Asset, Boyce Byerly, Gene Pease, and Jac Fitz-enz
4. Doing HR Analytics: A Practitioner's Handbook with R Examples, Lyndon, Mr. Sundmar, CreateSpace Independent Pub

5. The Power of People: Learn How Successful Organizations Use Workforce Analytics to Improve Business
6. Predictive HR Analytics: Martin R Edwards, Kirsten Edwards
7. The New HR Analytics: Predicting the economic value of your company's Human Capital Investments, Jac Fitz-Enz.

Semester III	307 HRM	SE-HRM-04: Diversity & Inclusion
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Human Resource Management

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES (CO's)
CO307HRM.1	REMEMBERING	Define core D&I concepts, understand the various dimensions of diversity, and articulate the business rationale for fostering inclusive workplaces.
CO307HRM.2	UNDERSTANDING	Understand the legal and ethical obligations related to D&I in HRM and be aware of relevant anti-discrimination laws
CO307HRM.3	APPLYING	Identify and Recognize the impact of unconscious biases in HR practices and develop strategies for fostering an inclusive mindset.
CO307HRM.4	ANALYSING	Analyze the complexities of D&I in a global context and understand the need for culturally sensitive approaches
CO307HRM.5	EVALUATING	To Evaluate different strategies for fostering and inclusive workplace culture.
CO307HRM.6	CREATING	Design strategies for diversity and inclusion to Indian and global context.

Unit 1: Foundations of Diversity & Inclusion : Defining Diversity: Dimensions of Diversity (Visible and Invisible), Intersectionality. Defining Inclusion: Inclusive Behaviours, Psychological Safety, and Belonging. Equity vs. Equality: Understanding the nuances and importance of equitable practices. Historical and Societal Context of Diversity and Exclusion. Theoretical Frameworks for Understanding Diversity and Inclusion (e.g., Social Identity Theory, Contact Theory). (7+2)

Unit 2. Dimensions of Diversity : Race and Ethnicity: Understanding systemic racism, racial equity, and inclusive practices. **Gender and Sexual Orientation:** Addressing gender bias, promoting gender equality. **Disability:** Exploring the social model of disability, reasonable accommodations, and creating accessible workplaces. **Age and Generational Diversity:** Managing ageism, fostering intergenerational collaboration. **Socio-economic Background:** Understanding the impact of socio-economic disparities in the workplace. (7+2)

Unit 3. Legal and Ethical Frameworks: Anti-discrimination Laws and Equal Employment Opportunity (EEO) Legislation (relevant to the local context, e.g., Equal Employment Opportunity Act, Disability Discrimination Act). Understanding Unconscious Biases: Types of biases (affinity bias, confirmation bias, etc.), how they manifest in HR processes. The Impact of Bias on Recruitment, Performance Management, and Promotion Decisions. D&I. Global Perspectives on D&I Laws and Regulations (brief overview). (8+2)

Unit 4. Inclusive Performance Management and Compensation: Developing Fair and Equitable Performance Management Systems: Objective setting, bias-free evaluation criteria, 360-degree feedback. Addressing Performance Disparities and Providing Inclusive Feedback. Principles of Equitable Compensation and Benefits: Addressing pay gaps, ensuring fair reward systems, flexible benefits. Transparency in Compensation Practices. (6+2)

Unit 5. Fostering an Inclusive Workplace Culture: Creating a Culture of Belonging and Psychological Safety. Promoting Respectful Communication and Interpersonal Interactions. Addressing Microaggressions and Incivility. Employee Resource Groups (ERGs) and Affinity Groups: Purpose, benefits, and effective management. Diversity Councils and their Role in Driving Inclusion. Communication Strategies for Promoting D&I Initiatives. (7+2)

Learning Resources:

Reference Books:

1. Diversity, Equity & Inclusion by Ravindra Kumar Kushwaha, Dr. Pratyanshi Dwivedi

2. Diversity & Inclusion - Getting it right Paperback by Jay Tarimala
3. Cracking the Code of Diversity and Inclusion : A practical guide to leverage diversity and inclusion for organizational excellence by Karishma Manchanda
4. Leading Global Diversity, Equity, and Inclusion: A Guide for Systemic Change in Multinational Organizations by Rohini Anand, Sophie Bellon

Supplementary Reading Material

1. Case Studies in Diversity and Inclusion – ICAI University – ICAI University Press.

Semester III	308 HRM	SE-HRM-05: HR Perspective in Merger & Acquisition
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Human Resource Management

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES (CO's)
CO308HRM.1	REMEMBERING	Describe concepts of Mergers & Acquisition & List the Government & Legal requirements for the same.
CO308HRM.2	UNDERSTANDING	UNDERSTAND role of HR and Key skills required in the process of domestic & cross border Mergers & Acquisition
CO308HRM.3	APPLYING	MANAGE/ SOLVE HR issues arising out during Mergers & Acquisitions
CO308HRM.4	ANALYSING	ANALYZE HR functions before & after M & A
CO308HRM.5	EVALUATING	Evaluate the process of change management in M & A
CO308HRM.6	CREATING	FORMULATE HR processes for restructuring & redesigning during and after Mergers & Acquisitions

Unit-1: Conceptual Framework: Concepts of M&A, Organizational Growth through M&A, M&A in historical perspective, The Indian Scenario of M&A, An overview of HR contributions towards M&A, Govt. perspective / Legal requirements to be followed in Mergers and Acquisitions. (6+2)

Unit-2: Role of HR in Mergers and Acquisitions : Different Phases of Mergers and Acquisitions, Role of HR & Key skills required for Managers in Pre and Post Mergers and Acquisitions in domestic & cross border environment, Prioritizing and integrating functional HR systems and process for smooth transition during pre and post-Merger, HR's Role in doing Human Due diligence before initiating Mergers and Acquisitions. (7+2)

Unit-3: HR Issues in M&A: Attracting and retaining high performers, Assess the new job & Talent requirement, Utilizing and managing excess manpower & Use of workforce analytics for the same, establishing of continuity and integration of culture, Importance of Cultural Integration with a special reference to Indian context in making Merger & Acquisition successful in organizations, Managing Workplace Diversity in Mergers and Acquisitions (7+2)

Unit-4: Restructuring HR processes in M&A: Performance Management System Re-designing after Mergers, Re-looking into Compensation for balancing organizational systems and process, Benefits and Reward Management Practices restructuring after mergers and acquisitions, Employee well-being & support in M & A, Mergers & Acquisitions cases in Current Indian Context. (8+2)

Unit-5: Leveraging HR Competencies in M&A: Managing Stress in Mergers and Acquisitions by learning stress management techniques, Managing Change in Mergers and Acquisitions by becoming a change agent, Acquiring HR Resistance and deal with vulnerability during Merger & Acquisition, Improved communication practices over uncertainty (7+2)

Learning Resources:

Text Books:

1. Nilanjan, S. & Bhattacharya, M. (2010). *International Human Resource Management*. Excel Books.
2. Human Resource Management in Mergers and Acquisitions: Theories and Practices - by Dipak Kumar Bhattacharyya – Cengage Learning
3. Mergers, Acquisitions and Corporate Restructuring – Nishikant Jha – Himalaya Publishing House

4. Mergers, Acquisitions and Corporate Restructurings, Gaughan, P.A., John Wiley and Sons

Reference Books:

1. Udai Pareek and V Sisodia, HRD in New Millennium, Tata McGraw-Hill publishers
2. Manu Sharma, Mergers & Acquisitions and Corporate Valuation, DT-Management Textbooks), 2015
3. Chandrashekar Krishnamurti, Mergers, Acquisitions and Corporate Restructuring, SAGE Publications Pvt. Ltd., 1st Edition, 2008
4. Mergers, acquisitions and business valuations – Ravindhar Vadapalli – Excel Books

Supplementary Reading Material

2. Case Studies in Mergers & Acquisitions – ICFAI University – ICFAI University Press,
3. Case Studies on Mergers & Acquisitions – R. Muthukumar – ICFAI University Press

Semester III	309 HRM	SE-HRM-06: Labour Economics & Costing
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Human Resource Management

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES (CO's)
CO309HRM.1	REMEMBERING	Recall the concept of Labour Economics, Wage Theories
CO309HRM.2	UNDERSTANDING	Understand the Labour Economics and Wage Theories, Labour Mobility, Labour Costing
CO309HRM.3	APPLYING	Apply the Labour Economics concept, Wages Theory and Labour Costing in real time scenario
CO309HRM.4	ANALYSING	Analyze the impact of Labour Mobility & Productivity in Rural and Urban context.
CO309HRM.5	EVALUATING	Evaluate the Labour costing, Labour Mobility, Turnover & Productivity with Industrial Relation
CO309HRM.6	CREATING	Design the effective model using Labour Economics and Costing for the State, National level, International Labour market

Unit 1: Introduction to Labour Economics and the Indian Labour Market: Definition of labour, characteristics of labour as a factor of production, the significance of labour in the economy. Definition, nature, scope & importance of labour economics, micro and macro approaches, the importance of studying labour economics for HR managers, and its relationship with other disciplines. Characteristics of the Indian Labour Market: including size, diversity, and demographic composition, significance; challenges. (7+2)

Unit 2: Wage Theories and Sectoral Wage Determination: Theories of Wages -Classical Theories, Marxist Theory, Neo-Classical & Modern Theories. Definitions, objectives, and importance of minimum wage; Legal and Statutory aspects of wages. Wage Determination: Organized Sector & Unorganized Sector. Rural Sector & Urban Sector. (7+2)

Unit 3: Labour Costing: Definition of labour costing, objectives of labour costing, and its significance in decision-making. Components of Labour Cost: Direct Labour Cost and Indirect Labour Cost Methods of Wage Payment: Time-Rate System, Piece-Rate System. Incentive Systems: Financial & Non-Financial Incentives. Labour Cost Control. The impact of automation on employment, wages, and the changing nature of work. (8+2)

Unit 4: Labour Mobility, Turnover and Productivity: Labour Migration, Causes of Migration, Effects of Migration. Trends of Migration: Regional and international migration patterns. Absenteeism -Causes, Effects, Remedies. Labour Turnover: Meaning types, causes, and consequences of labour turnover. Measures to Control Labour Turnover. Wages in Relation to Cost and Productivity. the concept of productivity and its measurement; the impact of wage increases on productivity and profitability. (6+2)

Unit 5: Industrial Relations and Labour Market Reforms: Industrial Relations: Growth, Structure, and Achievements of Labour Unions: Historical evolution, types of trade unions, membership, and role in collective bargaining and worker

welfare. Causes of Industrial Disputes, Settlement & Prevention Mechanisms. Labour Market Reforms: Exit Policy. Social Safety Nets. Globalization and the Labour Market. Growth of the Informal Sector. (7+2)

Books:

1. Datt, Ruddar & Sundharam, K.P.M. (2016). *Indian Economy*. S.Chand Publishing.
2. Ghosh, B. (2014). *Labour Markets in India*. Oxford University Press.
3. Holley, W. H., Jennings, K. M., & Milkovich, G. T. (2017). *Human Resource Management*. Cengage Learning.
4. Mamkootam, K. (1996). *Labour Market in India: Socio-Economic Perspectives*. Concept Publishing Company.
5. Myneni, S. R. (2005). *Labour Laws*. Asia Law House.
6. Nagarajan, G. (2007). *Labour Economics*. Pearson Education India.
7. Pandey, S. C., & Singh, B. K. (2017). *Industrial Relations and Labour Laws*. Pearson Education India.
8. Venkata Ratnam, C. S. (2006). *Industrial Relations*. Oxford University Press.

Suggested Books:

1. Sen A. (1999) Microeconomics: Theory and Application, Oxford University Press, New Delhi.
2. Samuelson, P.A. and W.O. Nordhaus (1998), Economics, 16th Edition, Tata McGraw Hill, New Delhi.
3. Verian H. (2000) Microeconomic Analysis, W.W Norton New York.
4. Michale Perkin (1996) Economics, 3rd Edition, Addison Westey Publishing company, Inc. U.S.A.
5. Koutsoyiannis, A. (1979), Modern Microeconomics, 2nd edition Macmillan Press, London.
6. Layard, P.R.G. and A.W. Walters (1978) Microeconomic Theory, McGraw Hill, New York.
7. Ahuja H.L. (2003) Advanced Economic theory: Microeconomic Analysis, 13th Edition, S.Chand and Co. Ltd. New Delhi.
8. Sen, A/ (1999) Microeconomics: theory and Applications, Oxford University Press, New Delhi.
9. Chaturvedi, Gupta and Pal (2002) Business Economics: Text and Cases Galgotia Publishing Company, New Delhi.

Additional Teaching Resources:

1. Case studies on labour disputes, wage negotiations, and labour market reforms
2. Industry visits to observe labour practices and industrial relations
3. Guest lectures by labour union leaders, HR managers, and policymakers
4. Online databases and resources on labour statistics and legislation
5. Research projects on contemporary labour issue

Semester III	310 HRM	SE-HRM-07: Organization Diagnosis and Development
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Human Resource Management

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES (CO's)
CO310HRM.1	REMEMBERING	DESCRIBE the major theories, concepts, terms, models tools and frameworks in the field of Organizational Diagnosis & Development.
CO310HRM.2	UNDERSTANDING	UNDERSTAND concept of OD and 'intervention'.
CO310HRM.3	APPLYING	APPLY the Theories, Models, Principles and Frameworks of Organizational Diagnosis & Development in specific organizational settings.
CO310HRM.4	ANALYSING	ANALYZE the external and internal environment with right tool of diagnosis and review the role of consultant in OD.
CO310HRM.5	EVALUATING	IDENTIFY AND MAP an intervention to organisational need
CO310HRM.6	CREATING	DESIGN the role of the consultant for an organisational issue

Unit-1: Introduction to Organisational Development: Definition, Characteristics and Objectives of OD, Historical Evolution of OD -Contributions of Kurt Lewin, Tannenbaum, McGregor, Herbert Shepard, Robert Blake, Foundation of OD: T-Groups, System Theory, Parallel Learning Structure, Double-Loop Learning, Action Research, Contemporary OD Drivers: Agile HR, Digital Transformation (8+2)

Unit-2: Organisational Diagnosis: Traditional and Emerging Models: Six Box Model (Weisbord), Weisbord's Diagnostic Questionnaire, Porter's Five Forces Model PESTEL Analysis in Indian and global context (6+2)

Unit-3: Team and Intergroup Interventions in the Modern Workplace: Concept & Classification of Interventions (Team, Intergroup, Comprehensive, Structural) Team Interventions: Diagnostic Meetings, Teambuilding Sessions Process Consultation, Role Analysis, Interdependency Exercises Appreciations & Concerns, Responsibility Charting Intergroup Interventions: Walton's Approach, Organization Mirror, Virtual Team Development, Gamification in Team Building (8+2)

Unit-4: Comprehensive interventions and structural interventions: Comprehensive interventions: Beckhard's confrontation meeting, survey feedback, appreciative inquiry, Grid OD. Structural interventions- socio-technical systems, work redesign, quality circles, re-engineering, Design Thinking in OD, Hybrid Work Culture and Change Interventions (7+2)

Unit-5: OD consultant: Meaning, role and responsibilities, importance of an OD consultant. Client consultant relationship process and major challenges. Practical Case Studies. (6+2)

Suggested Reference Books

1. Organisation Development- French and Bell
2. Organizational Diagnosis & Development – Dr. Anand Dadas & Dr. Rajendra Subnis (Himalaya Publications)
3. Organisation Development and Change- Cummings and Worley
4. Organisation Development-S. Ramanarayan, T.V. Rao, Kuldeep Singh.
5. Competitive Strategy: Techniques for Analyzing Industries and Competitors- Michael E. Porter
6. Strategic Management and Business Policy- C Appa Rao, B Parvathiswara Rao, K Sivaramakrishna

Semester III	311 HRM	SE-HRM-08: HR Operations
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Human Resource Management

Course Outcomes: On successful completion of the course the learner will be able to:

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES (CO's)
CO311HRM.1	REMEMBERING	DESCRIBE structure of personnel department, its policies and maintenance of employee files & records
CO311HRM.2	UNDERSTANDING	RECALL and apply the knowledge to draft professional communication like appointment, promotion, transfer, appreciation letters, notices, and circulars used in HR practices.
CO311HRM.3	APPLYING	APPLY the knowledge of and handle disciplinary procedures like memo, warning, charge sheet, suspension, termination, and reinstatement in compliance with organizational policies.
CO311HRM.4	ANALYSING	COMPUTE contributions and benefits under Social Security Laws like EPF, ESI, and Payment of Compensation with recent amendments.
CO311HRM.5	EVALUATING	CALCULATE compensation under Workmen's Compensation, Bonus, and Gratuity Acts according to relevant legal provisions.
CO311HRM.6	CREATING	DESIGN salary structure, evaluate payroll components and compute statutory deductions like TDS, PT, PF, ESI, and perquisites in payroll management.

Unit-1: Human Resource Administration: Definition, nature, scope, objective, structure of personnel department, personnel policy and its types, maintenance of personnel files and records, Drafting communication in personnel department – Appointment, promotion, transfer, deployment, appreciation letter, notices and circulars. (7+2)

Unit-2: Communications about disciplinary measures: Drafting of memo, warning, show cause, charge sheet, suspension, Inquiry procedure correspondence, termination and dismissal, reinstatement in service. (4+1)

Unit-3: Computation under Social Security Laws: The Employee's Provident Fund and Miscellaneous Provisions Act, 1952 – Contribution, online procedure for opening of account and required documents, rate of contribution of Employer and Employee, administrative charges, interests and penalties, PF calculations and Forms, Amendments till date,

The Employee's State Insurance Act, 1948 – Contributions, all 6 benefits, and calculations related to benefits, calculations for payment of compensation, applicability, Amendments till date (7+2)

Unit-4: Compensation and Labour Welfare: The Workmen's Compensation Act 1923 – Definition, Permanent, Partial, Total Disablement arising out of and in course of employment, theory of notional extension, calculation of compensation in case of death and disability, Amendments till date.

The Payment of Bonus Act, 1965 – Definition of Bonus, applicability, eligibility, minimum, maximum, Set-on and Set-off, disqualification of bonus, Amendments till date.

The Payment of Gratuity Act 1972 – Definition of Gratuity, applicability, eligibility, minimum service condition, maximum limit, calculation of gratuity in case of retirement, resignation, death and disablement. Amendments till date.

(10+3)

Unit-5: Components of Payroll System: Maintenance of Statutory Returns – TDS, Profession tax, Form – 16 A and B, Form 26 AS, PF, ESI, Calculation of CTC and designing salary structure Income from salaries, deductions from salaries, meaning of salary for different purposes, perquisites, value of rent free accommodation (7+2)

Learning Resources:

Text Books:

1. Personnel Management – C B Mamoria
2. Dynamics of Personnel Administration – Rudrabaswaraj
3. Personnel Management – Edwin Flippo
4. Industrial and Labour Laws – S. P. Jain
5. Employee Relations Management-P N Singh, Pearson Publications
6. Dynamics of Industrial Relations–Mamoria & Mamoria
7. Industrial Relations: Emerging Paradigms, BD Singh, Excel Books, 2004 Edition

Reference Books:

1. Guide on Labour Management forms and precedents (Law, Practice and Procedure) – S D Puri (Snow white publication)
2. Introduction of Labour and Industrial Laws by Avatar Singh
3. Elements of Mercantile Law by N. D. Kapoor, Sultan Chand
4. Bare Acts
5. Elements of Mercantile Law-N. D Kapoor

Websites: www.managementstudyguide.com

Journals: Journal of Industrial Relation, Human Capital, Journal of HRM

Semester IV	403 HRM	SC-HRM-02: Employee Relations & Labour Legislation
3 Credits	LTP: 2:1:1	Subject Core (SC) Course – Human Resource Management

Course Outcomes: On successful completion of the course the learner will be able to:

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES (CO's)
CO403HRM.1	REMEMBERING	SHOW awareness of important and critical issues in Employee Relations
CO403HRM.2	UNDERSTANDING	INTERPRET and relate legislations governing employee relations.
CO403HRM.3	APPLYING	DEMONSTRATE an understanding of legislations relating to working environment.
CO403HRM.4	ANALYSING	OUTLINE the role of government, society and trade union in ER.
CO403HRM.5	EVALUATING	EXPLAIN aspects of collective bargaining and grievance handling.
CO403HRM.6	CREATING	DISCUSS the relevant provisions of various Labour Legislations.

Unit-1: Introduction to Contemporary Employee Relations: Concept, Definition, Scope, Objectives and Importance of Employee Relations, Evolving Nature of Work: From Industrial Relations to Strategic Employee Relations, Key Influencing Factors: Technology, Globalization, Workforce Diversity Approaches to ER: Dunlop's Approach, Human Relations Approach, Social Action Approach, Gandhian Philosophy in Modern ER, Role of ILO and its relevance in India today, Emerging ER Models in the Gig Economy and Remote Work Era (6+2)

Unit-2: Mechanism for Harmonious Employee Relations: Collective Bargaining: Definition, Process, Essential Conditions, Functions and Importance of Bargaining Units, Workers' Participation in Management, Problem-solving & Negotiation Techniques in ER, Grievance Redressal: Sources, Forms, and Procedures, Model Grievance Procedure, Role of Committees, Digital ER Tools. (6+2)

Unit-3: Legislations governing Employee Relations: The Industrial Disputes Act, 1947: Key Definitions: Industry, Workmen, Industrial Dispute, Authorities: Roles and Responsibilities, Strikes, Lockouts, Layoffs, Retrenchment & Closure, The Contract Labour (Regulation and Abolition) Act, 1970: Advisory Boards, Registration, Licensing, Welfare Measures, Health Provisions, Record-Keeping, (6+2)

Unit-4: Legislation Related to Unions and Wage Protection: The Trade Union Act, 1926: Formation, Registration, Privileges and Rights, Types and Structures of Unions, Maharashtra Recognition of Trade Union and Prevention of Unfair Labour Practices Act 1971 – Unfair labour practices on the part of Employers and Employees, Authorities, Complaints & Penalties under the act, The Minimum Wages Act, 1948: Fixation, Revision of Wages, Advisory Boards, Registers, Hours of Work, Overtime Wages, Role of Trade Unions in the Platform Economy (e.g., Swiggy, Uber, Zomato) (8+2)

Unit-5: Legislations for Safe and Equitable Work Environment: The Factories Act 1948 – Definitions of factory, manufacturing process, worker, occupier; provisions under health, safety and welfare, working hours, annual leave with wages, prohibition of employment of children, Child Labour Provisions, Maternity benefit Act, 1961 – Eligibility, Leave Provisions, Crèche Facility and latest amendment, The Sexual harassment of women at workplace (Prevention, prohibition and Redressal) Act, 2013 – Definitions of sexual harassment, employee, workplace, complaints committee, complaint mechanism, Aggrieved Woman, Chairperson; Constitution of Internal Complaints Committee, Complaint Procedures (9+2)

Suggested Text Books:

1. Personnel Management, C B Mamoria
2. Dynamics of Personnel Administration, Rudrabaswaraj
3. Personnel Management, Edwin Flippo
4. Industrial and Labour Laws, S. P. Jain

Suggested Reference Books:

1. Guide on Labour Management forms and precedents (Law, Practice and Procedure), S D Puri, Snow white publication

2. Introduction of Labour and Industrial Laws, Avatar Singh
3. Elements of Mercantile Law, N. D. Kapoor, Sultan Chand
4. Bare Acts

Semester IV	405 HRM	SE-HRM-09: Compensation & Reward Management
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Human Resource Management

Course Outcomes: On successful completion of the course the learner will be able to:

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES (CO's)
CO405HRM.1	REMEMBERING	RECALL the fundamental concepts, types, and framework of compensation management and its strategic role in an organization
CO405HRM.2	UNDERSTANDING	UNDERSTAND compensation policies, planning, strategies, job evaluation techniques, and development of equitable pay structures to gain competitive advantage.
CO405HRM.3	APPLYING	DEVELOP knowledge of designing incentive plans, profit sharing, gain sharing, and innovative reward structures suitable for startups and existing organizations.
CO405HRM.4	ANALYSING	EXAMINE the concept, role, and components of reward management system along with recent developments in monetary and non-monetary rewards across industries
CO405HRM.5	EVALUATING	EXPLORE current and emerging trends in compensation practices globally, especially in MNCs, Gig Economy, remote workforce management, and addressing contemporary compensation challenges.
CO405HRM.6	CREATING	FORMULATE strategies for designing an effective total compensation and reward system aligning with organizational goals and adapting to the changing global business environment

Unit-1: Compensation: Concept of compensation, types of compensation, conceptual framework of compensation management, compensation policy Compensation Planning & Strategy, Job Evaluation & Pay Structures, Internal & External Equity in Compensation, Developing a total compensation strategy— Competitive Advantage, the compensation structure-, advantages of fair compensation system, significant compensation issues, and merits and demerits of various compensation systems. (7+2)

Unit-2: Wage and Salary Administration: Definition, Goals, Concept of Wages & Salary, Minimum Wage, Fair Wage and Living Wage– Theories of Wages & Salary–Machineries for Wage Fixation– Statutory provisions governing different components of reward systems–Wage criteria and wage machinery— Wage Components—Salary Benchmarking, designing KRA & KPI. Wage and salary surveys, the wage curve, pay grades and rate ranges, preparing salary matrix, fixing pay. (7+2)

Unit-3: Incentives, reward system & pay restructuring: Meaning and determinants of incentives, wage incentives, Incentive calculation process, possible inputs and outputs of incentive process, types & forms of profit sharing, non-monetary incentives & cafeteria-style compensation, retention bonus etc. Individual Incentive Plans, Group & Team-Based Incentives, Profit Sharing & Gain Sharing Plans, Employee Stock Option Plans (ESOPs), Designing salary structures for startup organizations incorporating rewards and incentives. (7+2)

Unit-4: Reward Management: Concept, Aims, and Components of Reward System Monetary & Non-Monetary Rewards, Role of Reward in Organization, Strategic Perspectives of Reward Systems: Aligning Reward Strategy with Business Objectives and Strategies. Recent Development in Rewards and Recognition in Business Organizations: Executive Reward Practices, Reward strategies in a knowledge economy–Reward Strategies in a Service-based economy. (7+2)

Unit-5: Current Trends in Compensation: Compensation Practices of Multinational Corporations and Strategic Compensation Systems; compensation Trends in Gig Economy, Freelancers and Contract Workers Compensation, On-demand Pay Systems, Crowd-sourced Pay Models, Contemporary Challenges-Pay Inequality & Gender Pay Gap,

Diversity, Equity & Inclusion (DEI) in Compensation, Global Mobility Programs, Managing Remote & Hybrid Workforces Globally. (7+2)

Note:

1. *The course should be delivered from a skills building perspective.*
2. *Use in class exercises for designing Salary structure, rewards, incentives, and benefits plans.*

Text Books:

1. Tapomoy Deb, Compensation Management text & cases, Excel Publication , 2014
2. Joseph J. Martocchio, Strategic Compensation- A Human Resource Management Approach- Pearson Education, 2012, 3rd Ed

Reference Books:

1. Dipak Kumar Bhattacharya, Compensation Management , Oxford University Press , 2014
2. Richard.I. Henderson: Compensation Management In A Knowledge Based World - Prentice-Hall, 2012, 9th Ed
3. Milkovich & Newman, Compensation, Tata McGraw –Hill, New Delhi, 2015

Suggested Readings:

1. Armstrong & Stephens, Employee Reward Management and Practice, Kogan Page
2. Milkovich, Newman, Ratnam, Compensation, McGraw Hill, New Delhi.
3. Henderson, R.O., Compensation Management, Englewood Cliffs, Prentice Hall
4. Armstrong, M and Murlis H, Reward Management, Kogan Page.
5. Cascio, Costing Human Resource, Thomson Learning,, India
6. Martocchio Joseph J., Strategic Compensation-A Human Resource Management Approach, Pearson Education.
7. Richard I Henderson, Compensation Management in a Knowledge-Based World, Pearson Education.

Semester IV	406 HRM	SE-HRM-10: Employee Engagement
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Human Resource Management

Course Outcome: On successful completion of the course, the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES (CO's)
CO406HRM.1	REMEMBERING-	IDENTIFY the basic concepts of Employee Engagement and Employee Ownership.
CO406HRM.2	UNDERSTANDING	UNDERSTANDING the various factors, models and metrics involved in Employee engagement and how Self-Determination Theory and HRM practices influence employee engagement; describe the elements, levels, and barriers in designing and developing engagement strategies.
CO406HRM.3	APPLYING	Apply appropriate tools and steps to measure employee engagement using modern metrics like Manager Effectiveness Index and Belonging Index across different organizational contexts.
CO406HRM.4	ANALYSIS	Analyze the role and traits of Employee Ownership in enhancing productivity and organizational commitment.
CO406HRM.5	EVALUATION	Evaluate engagement and ownership practices using real-world metrics and models to assess their effectiveness in different sectors.
CO406HRM.6	CREATION	Design customized employee engagement plans using job design, role autonomy, and discretionary behaviours, supported by desk research and external learning resources.

Unit-1: Employee Engagement: Concept and Evolution, Definition, Need, Importance, factors of employee engagement, Advantages from Employee Engagement, Engagement Models – The Gallup model, The AON-Hewitt model. Employee Ownership: A Deep Dive Concept and Definition of Employee Ownership Types: ESOPs, Stock Options, Cooperatives, Significance and Benefits for Employees and Organizations Relationship with Productivity and Organizational Commitment (8+1)

Unit-2: Developing Employee Engagement- Understanding Self Determination Theory with HRM practices, How autonomy, competence, and relatedness drive engagement, Elements in designing Employee Engagement Activities - Creating Well-Defined Job Roles, Educating Employees for Engagement, Fostering Personal Connections,

Communicating Objectives and Activities for Employee Engagement, Levels of Engagement, Building Engagement-Engagement culture, Barriers to Employee Engagement Ineffective Communication, Ineffective Leadership, Workplace frustration. (9+1)

Unit-3: Measuring Employee Engagement - Stages of Employee Engagement, Ways to measure Employee Engagement, Steps to measure Employee Engagement effectively, Critical Issues in measurement of Employee engagement, Myths about Employee Engagement: Perks = engagement, Happiness = Engagement, Welfare= Engagement, Key Metrics and Indicators to Measure Engagement: Feedback from Employees, Relationship with Colleagues, Satisfaction & Happiness, Relationship with Leaders, Career Advancement Opportunities, Rewards & Recognition, Goal Coalition, Manager Effectiveness Index, Belonging Index. (9+1)

Unit-4: Employee Ownership – Significance of Employee Ownership, Traits of Employee Ownership, Impact of Employee Ownership, Relationship of Employee Ownership with Productivity, Organizational Commitment and Retention, employee ownership with Organizational Citizenship Behavior (OCB) (7+1)

Unit-5: Application of Employee Engagement – Through Job Design, Role Autonomy, Organizational Citizenship and Discretionary behavior, Desk Research of various Engagement initiatives and Tools to measure Employee engagement in various sectors, Develop and Design Employee Engagement Plan (7+1)

Suggested Books:

1. Paul L. Marciano (2010), Carrots and Sticks Don't Work: Build a Culture of Employee Engagement. by McGraw Hills.
2. Scott Carbonara (2013), Manager's Guide to Employee Engagement, McGraw Hills.
3. Emma Bridger (2018), Employee Engagement: A Practical Introduction, 2nd Edition, Kogan Page Limited.
4. Bob Kelleher (2014), Employee Engagement for Dummies, John Wiley and sons Inc.
5. Robert Postlethwaite, Jeremy Gadd, The Employee Ownership Manual, Spiramus Press Ltd.

Online References:

1. <https://www.achievers.com/blog/8-elements-employee-engagement/>
2. <https://www.business2community.com/infographics/a-complete-guide-to-understanding-different-kinds-of-engagement-models-infographic-02156114>
3. <https://officevibe.com/employee-engagement-solution/guide>
4. <https://officevibe.com/blog/why-employee-engagement-is-hard-to-quantify>

Semester IV	407 HRM	SE-HRM-11: Designing HR Policies
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Human Resource Management

Course Outcome: On successful completion of the course, the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES (CO's)
CO407HRM.1	REMEMBERING	Recall the concept of HR Policy Manual
CO407HRM.2	UNDERSTANDING	Understand the HR Policy Designing and implementation Process.
CO407HRM.3	APPLYING	Prepare operational policy for an organization of your choice
CO407HRM.4	ANALYSING	Compare HR Policies in various context
CO407HRM.5	EVALUATING	Evaluate HR Policies in Indian and Global context
CO407HRM.6	CREATING	Design various HR policies for an organization of your choice

Unit-1: Introduction to HR POLICY: Meaning, Need, scope of HR policy, Introduction to the content of Policy Manual, Importance of POLICY Manual for employees and employers, use of HR policy Manual, Steps in designing HR policies, Type of HR policies Implementation of HR policy, - Role of HR policies in organizational success. (7+2)

Unit-2: HR Policy Design and Implementation: Analysing Organizational Needs- Understanding organizational vision, mission and values, Principles of effective HR policy design, Factors Affecting HR policy framing -cultural factors, Labour Laws and regulation, Social Factors, Best practices in HR policy development, Writing and communicating HR policies (7+2)

Unit-3: HR policy in Indian Context: Designing Recruitment and hiring policy, Employee operational policies- Compensation policies, T&D policies, Appraisal Policies, Career Advancement policies, conduct and safety policy-code of conduct, Disciplinary Action, Grievance Handling policies, Diversity and inclusion policies in India, Employee wellness and mental health policies in India, Data protection and confidentiality policies in India. (8+2)

Unit-4: HR Policy in Global Context: - Principles of effective global HR policy design, Role of technology in global HR policy design and implementation, HR policy design and implementation for global talent management and expatriate management, Data protection and confidentiality policies. (7+2)

Unit-5: Case Studies and Best Practices: - Real-world examples of effective HR policy design and implementation, best practices in HR policy development and compliance in Indian and Global Context. (6+2)

Suggested Text Books:

1. How to Develop Essential HR Policies and Procedures, by John H. McConnell Amco, Div American Mgmt. Association, Volume 1 Human Resource Management, Deepak Bhattacharya, Sage Publishing Ltd.
2. Florida Employment Law Manual (HR Compliance Library) Paperback – Import, 22 Mar 2016 by Jennifer Saltz Bullock (Author), Jeff O'Connell (Editor)
3. The: An Indispensable Guide for Managers and Human Resources Professionals by S. Smith, R. Mazin
4. Human Resource Management: Gary Dessler
5. Guide on Labour & Human Resources, Management Forms & Precedents (Law Practice & Procedure), Snow White.
6. Human Resource Policies and Procedures for Nonprofit Organizations by Carol L. Barbeito, John Wiley & Sons, 2004

Reference Books:

1. How to Develop Essential HR Policies and Procedures, by John H. McConnell Amacom, Div American Mgmt. Association, Volume 1
2. Guide on Labour & Human Resources, Management Forms & Precedents (Law Practice & Procedure), Snow white
3. Human Resource Policies and Procedures for Non-profit Organizations by Carol L. Barbeito, John Wiley & Sons, 2004
4. HR Tech Strategy: Revolutionizing Employee Experience Through HR-Tech Synergy, Marlene De Koning

Websites:

1. <https://webtel.in/Blog/A-Comprehensive-Guide-to-HR-Policies-in-India/2353>
2. http://www.chillibreeze.com/articles_various/HR-policies-in-India.asp.
3. <http://toostep.com/debate/are-hr-policies-of-indian-companies-employee-friendly>.
4. https://en.wikipedia.org/wiki/Human_resource_policies#Development, human_resource_policies.pdf
5. <https://www.hrhelpboard.com/hr-policies.html>.

Semester IV	408 HRM	SE-HRM-12: Performance Management System
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Human Resource Management

Course Outcomes: On successful completion of the course the learner will be able to:

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES (CO's)
CO408HRM.1	REMEMBERING	DESCRIBE key components and applicability of theories of Performance Management System
CO408HRM.2	UNDERSTANDING	DEMONSTRATE the communication skills required when managing achievement and underachievement.
CO408HRM.3	APPLYING	IDENTIFY factors affecting Performance Measurement
CO408HRM.4	ANALYSING	ANALYZE various tools for performance assessment
CO408HRM.5	EVALUATING	COMPARE various organizational performance management systems and best practices
CO408HRM.6	CREATING	DESIGN a performance management process for an organization

Unit-1: Introduction and Theoretical Framework: Performance Appraisal & Potential Appraisal, Methods of Performance Appraisal: Traditional, Modern Methods, Components of PMS. Performance Management: Planning Performance for Role Clarity, Accountability and Effectiveness. Goal Theory and its Application in Performance Management, Control Theory and its Application in Performance Management, Social Cognitive Theory and its Application in Performance Management. Currents trends in performance management (7 +2)

Unit-2: Process of Performance Management: Overview and Importance of Performance Management Process, Performance Management planning process, setting objectives - Organizational and individual performance plans - Components of Manager's performance and development plan - setting mutual expectations and performance criteria. Mid-cycle Review Process and End-cycle Review Process. (7 +2)

Unit-3: Performance Measurement: Determinants of performance measurement, approaches to measuring performance, diagnosing the causes of poor performance. Measuring results and behaviours, gathering performance information, implementing performance management system. (7 +2)

Unit-4: Performance Management & Reward Systems: Performance linked remuneration system, Types of Rewards, Designing Reward System, Total Reward Strategies, Characteristics of an Effective Performance Reward Plan. Performance Analysis, Performance Review Discussion, Using Performance Management Systems Data for HR Decisions, Performance Improvements and Performance Management Skills. (7 +2)

Unit-5: Performance Management and Personal Development Plans: 360degree feedback as a developmental tool, performance linked career planning & promotion policy, Competency Mapping as a Performance Management Tool, Balanced Scorecard and its Applications, Mentoring System, Assessment Centres, role of technology in PMS, Performance Management Practices of Different Companies (One example of Indian and global Context). (7 +2)

Suggested Text Books:

1. Performance Management: The New Realities by Michael Armstrong & Angela Baron, Jaico Publishing House, New Delhi, 2002
2. Appraising and Developing Managerial Performance by TV Rao Learning Systems Pvt. Limited, Excel Books, 2003
3. Performance Management, Systems and Strategies by Bhattacharyya, Dipak Kumar. 1/e; New Delhi: Pearson, 2011

Suggested Reference Books:

1. Corporate Performance Management by David Wade and Ronad Recardo, Butter Heinemann, New Delhi, 2002.
2. Performance Management by A.S. Kolhi & T. Deb,
3. Performance Management Systems by A.M. Sharma
4. Performance Management: Toward Organizational Excellence by T. V. Rao (2016)
5. Prem Chadha (2011). Performance Management, 1/e; New Delhi: McMillan
6. Henderson: Compensation Management in a Knowledge Based World 9/e Pearson Education.

Web links:

1. www.managementstudyguide.com
2. www.shrm.org
3. www.whatishumanresource.com
4. www.valamis.com
5. www.wayshrconsulting.com

Semester IV	409 HRM	SE-HRM-13: Change Management & New Technologies in HRM
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Human Resource Management

Course Outcomes: On successful completion of the course the learner will be able to:

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES (CO's)
CO409HRM.1	REMEMBERING	Remember the basic concepts and Models of Change Management
CO409HRM.2	UNDERSTANDING	Understand the IKS principles and models of change management in organizations

CO409HRM.3	APPLYING	Apply effective communication and leadership skills during organizational change.
CO409HRM.4	ANALYSING	Analyze the impact of technological advancements on HR practices
CO409HRM.5	EVALUATING	Evaluate HR technologies such as HRIS, ATS in recruitment, and remote work tools.
CO409HRM.6	CREATING	Design basic change strategies for digital HR transformation

Unit-1: Introduction to Change Management : Meaning, need, nature and scope of change management in organizations, Types of organizational change (planned, unplanned, transformational, incremental) Forces for change: internal and external, Causes and overcoming techniques, Approaches to Change Management: Behavioral, Cognitive and Psychodynamic (6+2)

Unit-2: Organisational Change and Resistance to Change: Process of Organisational Change, Impact of Change on Organisation. Effective communication strategies for change management, Resistance to Change: Individual and Organisational Resistance, Manifestation of Resistance, Minimizing Resistance to Change, OD and Team Intervention to Overcome Change, Organizational culture and its influence on change, Relationship between organizational culture and change, Strategies for aligning culture with change initiatives. (8+2)

Unit-3 : Role of HR in Change Management: HR as a change agent, Strategic partner vs. change facilitator, HR's responsibility in driving and sustaining organizational change, Communication and employee engagement during change, Leader and Team Change Management: Identify Leadership Issues in Change, Role of leadership in change. IKS Principles of change management. (7+2)

Unit-4: Change Management Models: Models for planning and managing change -ADKAR model, Kotter's 8-Step Process, Force Field Analysis, McKinsey 7S Framework. (7+2)

Unit-5: Digital Transformation in HR: Introduction to HR Technology: HRIS, HCM, ATS, Performance Management Tools, Chatbots for employee engagement, Blockchain in HR, Challenges in Implementing HR Tech, Virtual Reality (VR) in training & development, Case Studies on Smart Research and Action Research Related to Change Management of Organisations. (7+2)

Suggested Text Books:

1. Change Management by Andrew Pettigrew and Richard Whipp Infinity Books
2. Human Resource Information Systems- Basics, Application, Future and Direction by Dr. Michael Kavanagh and Dr. Mohan Thite

Suggested Reference Books:

1. Change and Knowledge Management by B. Janakiram, P. V. Ravendra, Shubha Murlidhar Published by biztantra
2. Change Management by Robert A. Paton and James McCalman, Sage Publication, 3rd Edition
3. Human Resource Information System by P. K. Gupta and Sushil Chaabra.
4. Ian Palmer; Richard Dunford; David Buchanan (2009) Managing Organizational Change: A Multiple Perspectives Approach: McGraw-Hill: New York2.
5. John Hays (2002). Theory and Practice of Change Management.

Websites:

1. www.changedynamix.com
2. www.oursouthwest.com/SusBus/mggchange.html
3. <http://smallbusiness.chron.com/advantages-disadvantages-human-resourceinformation-system-2107.html>
4. www.cmswire.com/digital-workplace/change-management-the-key-to-successful-digital-transformations
5. www.a-connect.com/knowledge/change-management-in-times-of-disruption-and-digital-transformation

Journals:

1. Journal of Organizational Change Management
2. International Journal of Human Resource Management

3. International Journal of Human Resource Management
4. Human Resource Management Journal
5. Human Resource Management

Semester IV	410 HRM	SE-HRM-14: Global HR Practices
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Human Resource Management

Course Outcomes: On successful completion of the course the learner will be able to:

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES (CO's)
CO410HRM.1	REMEMBERING	IDENTIFY key perspectives of global workforce management
CO410HRM.2	UNDERSTANDING	UNDERSTAND cultural aspects of Global HRM
CO410HRM.3	APPLYING	PREPARE HR planning for long term global staffing
CO410HRM.4	ANALYSING	ILLUSTRATE steps involved in global selection of human resources
CO410HRM.5	EVALUATING	FORMULATE Training and development policy for expatriate employees of an organization
CO410HRM.6	CREATING	ANALYZE / COMPARE important points that needs to be included while drafting global workforce performance & development management system of an organization

Unit-1: Introduction and Overview of Global HR: Operational Objectives and Means of Globalization in HR Perspective, Global Market Context-Key Perspective in Global Workforce, Changes and Challenges in the Global workforce trend and Advancements Migration-Emerging on the contingent workforce- Offshore sourcing- The influences of cross-cultural issues on organisations. Concepts of Host Country Nationals HCN's, Parent Country Nationals PCN's and Third Country Nationals TCN's in (context to Global) Business. (7+2)

Unit-2: HR Policies and Operations in a Global Setting: Distinctive Features of HR Functions -Planning, Organizing, Directing & Control - Operations - Manpower Planning till Separations from a Global Set-up and environment. Skilling the Staff & Knowledge Development in Global Perspective Incentives & Compensation Package - Motivational Systems- Performance Appraisal Systems – Employee Empowerment – Value systems – Shared Corporate Culture and Grievance Handling – Reactive & Proactive Mechanisms (7+2)

Unit-3: Global Human Resource Planning: From strategy to Decision about work force Demand and supply External Environment Scanning- Job Design for Meeting global Strategy work demand HR planning for Long term. Expatriation and Repatriation, Characteristics of effective expatriate managers, Dealing with Cultural Shock, successful Repatriation Practices. (7+2)

Unit-4: Training and development of Global employees: Strategic role of Training and Development in the global Market Place- Fundamental concepts and principles for Guiding global Training and Development-Developmental aspect related to international assignments/projects and its relation to international career paths, cross cultural training programs and developing global competencies, Practices to improve the effectiveness of Global and virtual teams. (7+2)

Unit-5: Global workforce performance Management: Performing Management Process-Important consideration for Global Performance Management-Planning and Implementing Global Performance Appraisal- Compensation for a Global workforce- Managing Compensation on a global Scale: Fundamental Practices-Key compensation for Expatriates, Host Country Nationals HCN's and Third Country Nationals TCN's – Global Employee Relations current ER issues-Influence of MNC's and Union on Global ER. (7+2)

Suggested Readings:

1. Charles M Vance and Yongsunpaik, Managing Global Work force, PHI, 2009
2. Mark E. Mendenhall, Gary R. Oddou, Gunter K. Stahl, Reading and Cases in International Human Resource Management, Routledge, Fourth Edition, 2007
3. Tony Edwards and Chris Rees: International Human Resource Management, Pearson, 2009
4. Nilanjan Sengupta, Mousumi S. Bhattacharya, Excel Books, 2007

5. Peter Dowling, International Human Resource Management: Managing People in a Multinational Context, 5e, Thomson, 2008
6. K. Ashwathappa, Sadhna Dash, International Human Resource Management, Tata Mc Graw Hill, 2008
7. S. K. Bhatia, International Human Resource Management, Deep & Deep Publications, 2005

Semester IV	411 HRM	SE-HRM-15: Mentoring & Coaching
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Human Resource Management

Course Outcomes: On successful completion of the course the learner will be able to:

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES (CO's)
CO410HRM.1	REMEMBERING	ENUMERATE various concepts of Mentoring and Coaching
CO410HRM.2	UNDERSTANDING	UNDERSTAND techniques of Mentoring and Coaching
CO410HRM.3	APPLYING	APPLY models of Mentoring and Coaching to real world scenarios, apply skills to effectively coach/mentor
CO410HRM.4	ANALYSING	ANALYSE issues in Mentoring and Coaching
CO410HRM.5	EVALUATING	DEVELOP skills needed to become Mentor and Evaluate mentees
CO410HRM.6	CREATING	Execute creative ideas and solutions to ensure successful mentoring meeting to mentor and mentee requirements

Unit 1: Introduction to mentoring and coaching in HRM. : Meaning of mentoring, Meaning of coaching, Objectives, Need and benefit of mentoring and Coaching. Process of Mentoring, Process of Coaching, Differences between coaching and mentoring. Function of Coaching and Mentoring in the organization. The role of the mentor and the role of the coach. Ethical issues, and barriers in mentoring and coaching (Personal, Organization, and Environmental) (7+2)

Unit 2: Types of Mentoring and Coaching: Partner model/one to one mentoring, Distance/Virtual mentoring, Group mentoring. Team coaching - phenomenon specification. The role of a coach and mentor in working with a team. Team coaching and mentoring as a support tool in the change process, Executive Coaching, Coaching for performance improvement. (8+2)

Unit 3: Models and Approaches: GROW model, CLEAR and PRACTICE model, FUEL Model, Kolbs experiential learning model., Approaches to coaching- Cognitive behavioral coaching, solution and goal focused coaching, Narrative coaching, Alignment coaching, Positive psychology and strength coaching, systems coaching, life coaching, EI based Coaching. (8+2)

Unit 4: Skills and Techniques of Coaching and Mentoring: Mentor profile - knowledge, skills and attitude. Mentoring in organizations - implementation strategy and implementation tactics. Core Skills- Trust, Rapport, Observation, Listening, Questioning, Supporting. Techniques Analysis of need, building trust, Active listening, Asking open-ended questions, Effective goal-setting, encouraging an outcome focus, giving constructive feedback, Strengths-spotting. (8+2)

Unit 5: Practical Application/ Implementation: Practical Application/ Implementation: Mentoring and coaching related Mini project by a team of 2-4 students and Case studies related to Mentoring and Coaching in Manufacturing sector and Service sector. (4 cases) (4+2)

Suggested Text Books

1. Coaching & Mentoring by Jane Renton, Profile Books Ltd.
2. Coaching, Mentoring and Managing, A coach guidebook by Micki Holliday, The Career Press Inc
3. Coaching and Mentoring by Nigel MacLennan, Routledge
4. Coaching and Mentoring for Business by Grace McCarthy, Sage Publication
5. Techniques for Coaching and Mentoring by David Megginson & David Clutterbuck DEVELOP skills needed to become Mentor, Coach
6. 50 Activities for Coaching/Mentoring by Donna Berry, Charles Cadwel, Joe Fehrmann, HRD Press

7. Human Resource Development by Desimone, Werner, Harris, Thomson publication.

Reference books:

1. Coaching and Mentoring, Harvard School Press
2. Making Mentoring Happen by Kathy Lace, Business & Professional Publishing Pvt. Ltd.
3. Coaching, Counselling & Mentoring by Florence M. Stone, AMACOM, 1601 Broadway New York
4. Coaching and Mentoring Theory and Practice by Robert Garvey, Paul stokes, David Megginson, Sage Publication
5. Emotional Intelligence Coaching by Neale, Spencer, Wilson by Kogan Page Pub.

Semester IV	412 HRM	SE-HRM-16: Labour Welfare
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Human Resource Management

Course Outcomes: On successful completion of the course the learner will be able to:

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES (CO's)
CO412HRM.1	REMEMBERING	RECALL the origin and historical development of labour welfare in India.
CO412HRM.2	UNDERSTANDING	EXPLAIN the concepts, philosophy, and principles of labour welfare with statutory & non statutory facilities.
CO412HRM.3	APPLYING	APPLY the knowledge of labour welfare to real-world scenarios and case studies.
CO412HRM.4	ANALYZING	ANALYZE the relationship between labour welfare and employee well-being and productivity.
CO412HRM.5	EVALUATING	ASSESS & EVALUATE the impact of labour welfare on employee productivity and well-being.
CO412HRM.6	CREATING	DEVELOP innovative labour welfare programs and services that cater to the needs of employees.

Unit 1: Introduction to Labour Welfare: Origin and Historical development of labour welfare in India, objectives of Labour Welfare need, Importance of labour welfare in the modern workplace, Classification of Labour Welfare, Work agencies of Labour Welfare, Scope of Labour Welfare, Concepts, philosophy, and principles of labour welfare. **Case Study:** Labour welfare practices in a leading Indian organization (7+2)

Unit 2: Labour Welfare Policies and Practices : Statutory labour welfare facilities in India as per Bombay Shop & Establishment Act 1948, Factories Act, 1948, Non-statutory welfare facilities, Role of Trade Unions, NGOs, and Local-self Govt., Laws of the Elimination of Child Labour. Labour welfare practices in different industries (e.g., IT, manufacturing) **Case Study:** Labour welfare practices in a leading industry. (7+2)

Unit 3: Employee Well-being and Productivity: Relationship between labour welfare and employee well-being, Impact of labour welfare on employee productivity, Strategies for promoting employee well-being and productivity, Labour Welfare Officer: Role, Qualifications, Functions, Duties, Labour Administration in India **Case Study:** Employee well-being and productivity in a leading organization. (7+2)

Unit 4: Labour Welfare Programs and Services: Types of labour welfare programs (e.g., health, education, recreation), Labour welfare services (e.g., counselling, employee assistance programs), Role of technology in labour welfare, Functions of Labour welfare officers India, Working conditions in the factory-safety and accident prevention. **Case Study:** Labour welfare programs and services in a leading organization. (7+2)

Unit 5: Challenges and Opportunities in Labour Welfare: Challenges in implementing labour welfare programs, Opportunities for innovation in labour welfare, Future trends in labour welfare, Problems of Women Labour **Case Study:** Challenges and opportunities in labour welfare in a leading industry. (7+2)

Suggested Books:

Textbooks:

1. "Labour Welfare in India" by S.C. Srivastava, Published by PHI Learning Pvt. Ltd.

2. "Labour Laws and Welfare" by N.D. Kapoor, Published by Sultan Chand & Sons.
3. "Industrial Relations and Labour Laws" by S.C. Srivastava, Published by Vikas Publishing House Pvt. Ltd.

Reference Books:

1. "Labour Welfare and Social Security" by P.L. Malik, Published by Eastern Book Company.
2. "Industrial Relations and Labour Welfare" by C.B. Mamoria, Published by Himalaya Publishing House.
3. "Labour Laws and Industrial Relations" by H.L. Kumar, Published by Indian Book Company.

Additional Resources:

1. Labour Laws and Welfare Acts: Study the relevant labour laws and welfare acts in India, such as the Factories Act, 1948, and the Bombay Shop & Establishment Act, 1948.
2. Case Studies: Analyze case studies of labour welfare practices in leading Indian organizations and industries.
3. Research Articles: Read research articles on labour welfare, employee well-being, and productivity to stay updated on the latest trends and best practices.

Online Resources:

1. Ministry of Labour and Employment, Government of India: Visit the official website of the Ministry of Labour and Employment to access information on labour laws, policies, and initiatives.
2. International Labour Organization (ILO): Explore the ILO website to access global research, reports, and best practices on labour welfare and social security.

OPERATIONS & SUPPLY CHAIN MANAGEMENT							
Specialization Core Courses							
Sem Code	Course Code	Course	Semester	Credits	FA	SA	Total Marks
302	SC OSCM- 01	Services Operations Management	III	3	50	50	100
403	SC OSCM- 02	Supply Chain Management	IV	3	50	50	100
				6	100	100	200
Specialization Elective Courses - Semester III (Any 4 to be opted for)							
304	SE OSCM- 01	Planning & Control of Operations	III	3	50	50	100
305	SE OSCM- 02	Productivity Management	III	3	50	50	100
306	SE OSCM- 03	Theory of Constraints	III	3	50	50	100
307	SE OSCM- 04	Manufacturing Resource Planning	III	3	50	50	100
308	SE OSCM- 05	Quality Management Standards	III	3	50	50	100
309	SE OSCM- 06	Strategic Supply Chain Management	III	3	50	50	100
310	SE OSCM- 07	Business Excellence	III	3	50	50	100
311	SE OSCM- 08	Service Value Chain Management	III	3	50	50	100
				12	200	200	400
Specialization Elective Courses - Semester IV (Any 4 to be opted for)							
405	SE OSCM- 09	Industry 4.0	IV	3	50	50	100
406	SE OSCM- 10	Six Sigma for Operations	IV	3	50	50	100
407	SE OSCM- 11	Toyota Production System	IV	3	50	50	100
408	SE OSCM- 12	World Class Manufacturing	IV	3	50	50	100
409	SE OSCM- 13	Supply Chain Strategy	IV	3	50	50	100
410	SE OSCM- 14	Financial Perspectives in Operations Management	IV	3	50	50	100
411	SE OSCM- 15	Facilities Planning	IV	3	50	50	100
412	SE OSCM- 16	Sustainable Supply Chains	IV	3	50	50	100
				12	200	200	400
				30	500	500	1000

Specialization: Operations & Supply Chain Management

Semester III	302 OSCM	302-SC OSCM-01: Service Operations Management
3 Credits	LTP: 2:1:1	Subject Core (SC) Course – Operations & Supply Chain Management

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO302OSCM.1	REMEMBERING	DESCRIBE the nature and CHARACTERISTICS of services and the services economy.
CO302OSCM.2	UNDERSTANDING	DESCRIBE the service design elements of variety of services.
CO302OSCM.3	APPLYING	USE service blueprinting for mapping variety of real-life service processes.
CO302OSCM.4	ANALYSING	ANALYSE alternative locations and sites for variety of service facilities.
CO302OSCM.5	EVALUATING	JUDGE and EXPLAIN the service orientation at variety of service facilities / organizations.
CO302OSCM.6	CREATING	CREATE flow process layouts for variety of services.

1. Understanding Services: The Service Economy, Service Definitions, Facilitating Role of Services in an Economy, Economic Evolution, Stages of Economic Development, Nature of the Service Sector, The Experience Economy, Consumer Service Experience, Business Service Experience, Service-Dominant Logic, Distinctive Characteristics of Service Operations - Customer Participation, Simultaneity, Perishability, Intangibility, Heterogeneity, Non-transferrable Ownership. The Service Package, Grouping Services by Delivery Process, Open-Systems View of Service Operations Management. (7+2)

2. Designing the Service Enterprise: New Service Development, Sources of Service Sector Growth, Information Technology, The Internet as a Service Enabler, Innovation, Changing Demographics, Innovation in Services, New Service Development, Technology in Service Innovation, Challenges of Adopting New Technology in Services, Readiness to Embrace New Technology, Service Design Elements, Customer Value Equation, Strategic Positioning through Process Structure, Service Blueprinting, Taxonomy for Service Process Design, Degree of Divergence, Object of the Service Process, Type of Customer Contact, Generic Approaches to Service System Design, Production-Line Approach, Customer as Co-producer, Customer Contact Approach, Information Empowerment, Intellectual Property. (9+2)

3. The Service Encounter: Concept of the Service Encounter, Role of Technology, The Emergence of Self-Service, The Service Encounter Triad, Encounter Dominated by the Service Organization, Contact Personnel-Dominated Encounter, Customer-Dominated Encounter, The Service Organization, Culture, Empowerment, Control Systems, Customer Relationship Management, Contact Personnel - Selection & Training, Creating an Ethical Climate. The Customer Expectations and Attitudes, The Role of Scripts in Coproduction, Creating a Customer Service Orientation, Service Profit Chain. (6+2)

4. Service Facility Location: Strategic Location Considerations, Competitive Clustering, Saturation Marketing, Marketing Intermediaries, Substitution of Communication for Travel, Separation of Front from Back Office, Impact of the Internet on Service Location, Site Considerations, Geographic Information Systems, Facility Location Modeling Considerations, Geographic Representation, Number of Facilities, Optimization Criteria, Facility Location Techniques, Cross-Median Approach for a Single Facility, Huff Model for a Retail Outlet, Location Set Covering for Multiple Facilities, Regression Analysis in Location Decisions. (7+2)

5. Service Facility and Process Flows: Environmental Psychology and Orientation, Service scopes, Behaviors in Service scopes, Environmental Dimensions of Service scopes, Facility Design, Nature and Objectives of Service Organizations, Land Availability and Space Requirements, Flexibility, Security, Aesthetic Factors, The Community and Environment. Process Analysis, Types of Processes, Flowcharting, Gantt Chart, Process Terminology, Facility Layout, Flow Process Layout and the Work Allocation Problem, Job Shop Process Layout and the Relative Location Problem. (6+2)

Suggested Text Books:

1. Successful Service Operations Management, Metter, King–Mettters, Pulliman& Walton, Thomson India
2. Service Management, Fitzsimmons and Fitzsimmons, Irwin/McGraw-Hill
3. Services Marketing Operations and Management, Vinnie J Juhari, Kirti Dutta, Oxford University Press
4. Services Sector Management An Indian Perspective, C. Bhattacharjee
5. Services Business Management, Dr. Abhay Kulkarni, Himalaya Publication.

Suggested Reference Books:

1. Service operations management-Improving service delivery, Robert Johnston, Graham Clark, Pearson Publication
2. Baldrige – Just What the Doctor Ordered, Quality Progress, Nelson
3. Services Business Management -Dr. Abhay Kulkarni, Dr. Sudhir Hasamnis (Himalaya Publishing House)

Semester IV	403 OSCM	403 -SC OSCM -02: Supply Chain Management
3 Credits	LTP: 2:1:1	Subject Core (SC) Course – Operations & Supply Chain Management

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO403OSCM.1	REMEMBERING	DESCRIBE the key concepts of Supply Chain Management and the driving forces in contemporary Supply Chain Management.
CO403OSCM.2	UNDERSTANDING	EXPLAIN the structure of modern-day supply chains.
CO403OSCM.3	APPLYING	IDENTIFY the various flows in real world supply chains.
CO403OSCM.4	ANALYSING	COMPARE and CONTRAST push and pull strategies in Supply Chain Management.
CO403OSCM.5	EVALUATING	EXPLAIN the key Operational Aspects in Supply Chain Management.
CO403OSCM.6	CREATING	DISCUSS the relationship between Customer Value and Supply Chain Management.

1. **Supply Chain Structure:** Shift from enterprise to network, Structure of a SC, Push based SC, Pull based SC, Tradeoff between Push & Pull, Identifying appropriate Push & Pull Strategy for SC, Commodity & cost centric SC, Agile SC (7+2)
2. **Flows in SC:** Forward & Reverse SC, Product, Services, Information, Funds, Demand, Forecast flows in Upstream & Downstream direction (7+2)
3. **Total SCM:** Changing business landscape – driving forces: Shift from Operations to Services, Impact of globalization & technological revolution, Shift from linear SC to collaborative networks, power shifts in the SC- demands for flexibility of partnerships, core competencies, growth in outsourcing, Increased complexity of processes (7+2)
4. **SCM Building Blocks:** Overview of customer focus & demand, resources & capacity management, procurement & supplier focus, inventory management, operations management, distribution management in SCM. Key Operational Aspects in SC: Creating the Lean SC – JIT Purchasing, JIT Transportation and JIT Production. Kanban, VMI. (7+2)
5. **Customer Value:** Empowered consumer, Customer focused Marketing & SC service outputs, customer service – availability, operational performance, reliability. Customer satisfaction – customer expectations, enhancing customer satisfactions, limitations of customer satisfaction. Customer success – achieving customer success, value added services, customer value requirement mapping, CRM. (7+2)

Suggested Text Books:

1. Supply Chain & Logistics Management, Bowersox, Closs & Cooper, Tata McGraw Hill
2. Designing & Managing the SC – Concepts, Strategies & Case studies, Levi, Kaminsky et. al., Tata McGraw Hill
3. Supply Chain Management: Strategy Planning & Operations, Sunil Chopra, Peter Meindl, Pearson

Suggested Reference Books:

1. Supply Chain Management Process, System & Practice, N.Chadrasedkaran, Oxford

2. Total Supply Chain Management, Basu & Wright, Elsevier
3. Logistics Management & Strategy, Harrison and van Hoek, Prentice Hall
4. Supply Chain Management, Mentzer, Response Books.
5. Logistics Management: The Supply Chain Imperative, Vindo Sople, Pearson Education.

Semester III	304 OSCM	304-SE OSCM-01: Planning & Control of Operations
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Operations & Supply Chain Management

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO304OSCM.1	REMEMBERING	DESCRIBE the building blocks of Planning & Control of Operations.
CO304OSCM.2	UNDERSTANDING	EXPLAIN the need for aggregate planning and the steps in aggregate planning.
CO304OSCM.3	APPLYING	MAKE USE OF the various forecasting approaches in the context of operations planning process.
CO304OSCM.4	ANALYSING	ILLUSTRATE how capacity planning is done in organizations and its relationship with MRP.
CO304OSCM.5	EVALUATING	EXPLAIN the importance of scheduling in operations management.
CO304OSCM.6	CREATING	CREATE a Bill of Materials.

1. Planning & Control of Operations: Prerequisites of process planning, steps in process planning, break even analysis- analysis- new designs, product mix machine or process selection and make & buy decisions, study of route sheet preparation, economics order quantity of manufacture. Need, Functions - Routing, Scheduling, shop loading and dispatch, follow up. Relations with other departments, Routing-Process layout indicating flow Chart of material from machine to machine. Dispatch in production control-documentation. **(9+2)**

2. Demand Forecasting: Forecasting as a planning tool, why do we forecast, Forecasting time horizon, Use of forecast, types of forecasts, statistical forecasting, time series analysis models, effects of trend, seasonal and irregular movements in the model, uncertainty of forecast, monitoring forecast, need for planning and market research. Design of forecasting systems, Developing the logic of forecasting, Sources of data, Models for forecasting, Extrapolative methods using time series, Causal methods of forecasting, Accuracy of forecasts, Using the forecasting system. **(8+2)**

3. Aggregate Production Planning: Planning Hierarchies in operations, Aggregate Production planning, Need for Aggregate Production planning, Alternatives for managing demand, Alternatives for managing supply, Basic strategies for aggregate production planning, Aggregate production planning methods, Master Production Scheduling. Pure and mixed strategies, Choice of APP, Examples **(7+2)**

4. Resources Planning: Dependent Demand Attributes, planning a framework – the basic building blocks: Multiple levels in products, Product Structure, The Bill of Materials, Time phasing of the requirements, Determining the Lot Size, Incorporating Lead time information, Establishing the planning premises. MRP Logic, Using the MRP system, Capacity Requirements planning, Manufacturing Resources Planning (MRP II), Enterprise Resource Planning (ERP), Resource Planning in services. **(6+2)**

5. Scheduling of Operations: Need for Scheduling, Scheduling – Alternative terms, Loading of machines, Scheduling Context, Scheduling of Flow Shops, Scheduling of Job Shops, Input-Output Control, Master Production Schedule: Concept, Strategies, Chase sales, Lot-for-lot, Operational Control Issues in Mass production systems. **(5+2)**

Suggested Text Books:

1. Operations Management: Theory and Practice, B Mahadevan, Pearson.
2. Operations Management, Terry Hill, Palgrave
3. The Fundamentals of Production Planning and Control, Stephen Chapman, Pearson
4. Operations Now, Byron Fitch, TMGH.
5. Operation Management by Barry shore (Tata-McGraw Hill)
6. Operations planning and control, Martin K. Starr, Cengage publication
7. Elements of P.P.C. by Eilon (Macmillan)

Semester III	305 OSCM	305-SE OSCM-02: Productivity Management
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Operations & Supply Chain Management

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO305OSCM.1	REMEMBERING	DEFINE various types of productivity and measures of productivity.
CO305OSCM.2	UNDERSTANDING	DEMONSTRATE the linkages between various measures of productivity.
CO305OSCM.3	APPLYING	APPLY Value Analysis and Value Engineering principles to simple situations related to operations management.
CO305OSCM.4	ANALYSING	APPLY various types of charts and diagrams to carry out work study and method study.
CO305OSCM.5	EVALUATING	DETERMINE the Standard Time using Techniques of Work Measurement.
CO305OSCM.6	CREATING	ELABORATE upon the concepts of JIT, Lean, 5S, TPM, BPR, Six Sigma, World Class manufacturing.

1. Productivity Management Definition, Concept and Importance of productivity, Difference between Production and Productivity, Tools of productivity, Reasons for low productivity, Factors that help increasing productivity, Productivity index, Kinds of productivity measurement, Causes of low productivity and techniques of their elimination, Factors affecting productivity, Technical methods to improve productivity, Main contributors to productivity improvement, Advantages from increased productivity. (7+2)

2. Value Analysis and Value Engineering: Concept of Cost, Price and Value, Role in Productivity, Procedure – Application and productivity benefit model. (6+2)

3. Work Study: Importance of work study – Method Study and Work Measurement – Pioneers of Performance Measurement. **Method Study:** Need for Method Study – Procedure of Method Study –Process Flow charts, Man machine diagrams, Principles of Motion Economy. (7+2)

4. Work Measurement: Techniques of Work Measurement including Estimating, Stopwatch Time Study, Predetermined Time Standards, Synthetic Estimates of Work, Times, Activity Sampling. Computation of Standard Time – Elements – Types of Elements – Performance Rating – Allowances – Need for Allowances – Types of Allowances. (8+2)

5. Advanced Methods of Productivity and service level enhancements: Overview of JIT, Lean, 5S, TPM, BPR, Six Sigma, World Class manufacturing, Use of Technology in productivity and service enhancements: ITes, CAD, CAM, CIM, CMMI. contemporary issues in productivity, Activities of National Productivity Council and other organizations, Productivity Scenario and changes. (7+2)

Suggested Text Books:

1. Productivity Measurement for Business Excellence, Prem Vrat, G.D. Sardana, B.S. Sahay, Narosa Publishing House.
2. Operations Management for Competitive Advantage, Richard B Chase, Jacobs, Aquilano, Agarwal,
3. Introduction to Work Study, Editor - Geirge Kanawaty, Universal Publishing
4. Production and Operations Management, S.N.Chary, TMGH
5. Introduction to Work study, ILO, Oxford
6. Work Study, Khanna , Dhanpat Rai Publications

Semester III	306 OSCM	306-SE OSCM-03: Theory of Constraints
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Operations & Supply Chain Management

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO306OSCM.1	REMEMBERING	DEFINE the key concepts of TOC.
CO306OSCM.2	UNDERSTANDING	DEMONSTRATE knowledge & understanding of the fundamentals of

		TOC.
CO306OSCM.3	APPLYING	IDENTIFY and mitigate both real constraints and managerial constraints.
CO306OSCM.4	ANALYSING	ILLUSTRATE the tools and techniques that help in managing constraints to improve organizational performance.
CO306OSCM.5	EVALUATING	EXPLAIN the benefits an organization may reap through the successful implementation of the TOC.
CO306OSCM.6	CREATING	DEVELOP solutions to common problems in Project Management, Operations Management and Supply Chain Management using TOC principles and methods.

1. Thinking Process: Introduction to Theory of Constraints (TOC), Tools of TOC, where is TOC applicable? What is a constraint, TOC's thinking process and Human Being, Terminology used in the thinking process, Steps to implement in the thinking process, Current Reality Tree, Conflict Resolution Diagram, Future Reality Tree, Prerequisite Tree, Transition Tree, Three Cloud Method. **(8+2)**

2. Finance and Measures: Economic Decisions, TOC and Product Costing, Economic Decisions using TOC Costing. **(6+2)**

3. Project Management: Phases of Project Management, Common problems in Project Environment, Critical Chain project Management – A TOC approach. **(7+2)**

4. Drum-Buffer-Rope Solution: Introduction, The Drum – The MPS of the Capacity Constraint Resource, Implementing Drum-Buffer-Rope, Implementing Drum-Buffer-Rope on the shop floor, MPS using Drum-Buffer-Rope Scheduling method. **(8+2)**

5. Theory of Constraints in Supply Chain Management: Introduction, TOC in distribution Solution, Drum-Buffer-Rope in distribution. **(6+2)**

Suggested Text Books:

1. Theory of Constraints by S K Mukhopadhyay, Jaico Books.
2. The Goal by E M Goldratt and Cox J, Great Barrington, North River

Suggested Reference Books:

1. What is the thing called Theory of Constraints? by E M Goldratt, Great Barrington, North River
2. It's Not Luck by E M Goldratt, Great Barrington, North River
3. Essays on Theory of Constraints by E M Goldratt, Great Barrington, North River
4. Critical Chain by E M Goldratt, Great Barrington, North River

Semester III	307 OSCM	307-SE OSCM-04- Manufacturing Resource Planning
3-Credits	LTP: 2:1:1	Subject Elective (SE) Course – Operations & Supply Chain Management

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO307OSCM.1	REMEMBERING	DEFINE basic terms and concepts related to MRP II.
CO307OSCM.2	UNDERSTANDING	DESCRIBE the integrated planning structure and functions incorporated within MRP.
CO307OSCM.3	APPLYING	ILLUSRATE the importance of MRP as a top-management planning tool
CO307OSCM.4	ANALYSING	IDENTIFY the vertical and horizontal cross-functional integration within the MRP II planning hierarchy.
CO307OSCM.5	EVALUATING	EXPLAIN how what-if simulation, modeling, and analysis are used to produce feasible plans.
CO307OSCM.6	CREATING	DISCUSS how MRP supports the company's cost, quality, and delivery operating objectives.

1. Master Production Scheduling (MPS): Introduction to MPS, Need, objectives & functions of MPS, Role of MPS in management- as a “Link between strategic and tactical planning”. Logical flow of materials in different manufacturing scenarios (VAT Analysis), Planning horizons and Time periods (Buckets) of MPS, Order management in MPS, Safety and hedges, Projected Available Balance (PAB) and Available To Promise (ATP), Time Fences & effect of changing MPS decisions on time fences, Final Assembly Schedule (FAS). (6+2)

2. Material Requirements Planning (MRP-I): Introduction to MRP-I, Roles & functions of MRP-I, Independent & Dependent Demand, Bill of Materials (BOM), Types of BOM, Numerical Problems on BOM, Lot-sizing, MRP-I as Input & Output Process, MRP-I Spreadsheet problem, Pegging reports & where-used files. (8+2)

3. Capacity Management: Introduction to ‘Capacity’ and ‘Capacity management’, Capacity Expansion Strategies, Capacity Planning levels vis-à-vis Manufacturing planning levels, Capacity measurement, Rough Cut Capacity Planning (RCCP), Capacity Requirement Planning (CRP), Shop Calendar, Scheduling strategies- Backward & Forward scheduling, Infinite & Finite loading, Production smoothing policies. (7+2)

4. Manufacturing Resource Planning (MRP-II)- (Module-I): Introduction to MRPII, Roles & functions of MRP-II, MRP-II framework, Information flow in MRP-II, Relation of MRP-II with Demand management and Capacity management, Manufacturing calendar. (7+2)

5. Manufacturing Resource Planning (MRP-II)- (Module-II): Transition from MRP-I to MRP-II, Closed loop MRP, Comparison between MRP-I and MRP-II, Plant & supplier scheduling, Problems associated with MRP-II, Benefits and prospects of MRP-II, Compatibility between MRP-II & Just-in-Time (JIT). (7+2)

Suggested Text Books:

1. Manufacturing Resource Planning System, Mr. Oliver W.Wight
2. Manufacturing Resource Planning , Mr. Khalid Shaikh,
3. Manufacturing Resource Planning System, S. M. Emberly

Suggested Reference Books:

1. Operations Management by Terry Hill, Palgrave
2. The fundamentals of Production Planning and Control by Stephen Chapman, Pearson

Semester III	308 OSCM	308-SE OSCM-05: Quality Management Standards
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Operations & Supply Chain Management

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO308OSCM.1	REMEMBERING	DESCRIBE the concepts of Quality and importance of the Quality Management Principles.
CO308OSCM.2	UNDERSTANDING	INTERPRET the requirements of ISO 9001:2015 standard.
CO308OSCM.3	APPLYING	APPLY process- b a s e d thinking and risk- b a s e d thinking for managing and improving the functioning of an organization.
CO308OSCM.4	ANALYSING	TAKE PART IN planning, conducting and follow-up of QMS audits directed towards maintenance and continual improvements of the QMS.
CO308OSCM.5	EVALUATING	DEVELOP skills for Corrective Action Management and Continual Improvement Project management.
CO308OSCM.6	CREATING	BUILD stakeholder confidence by managing processes in line with the latest requirements.

1. Quality Management Systems: Quality, Quality Concepts, Concepts and Characteristics of Quality as a Business Imperative, Quality Management Systems Map, Advantages of the Quality Management Systems, Process approach, Seven Quality Management Principles, Organization and its Context, Needs and Expectations of Interested Parties. Need for Quality Management System, Management System Standards (MSS), High Level Structure (HLS), Integrated

Management Systems, Risk Management, how processes affect each other, The Plan – Do – Check (Study) – Act Cycle (PDCA) and terminology; PDCA and its relation in business processes, Quality Policy and Objectives at all functions and levels. **(8+2)**

2. **ISO Standards:** QMS: ISO 9001 Useful Terms, ISO Supporting Standards, Understanding the terms and definitions of the ISO 9001: 2015 standard, Broad overview of the requirements of ISO 9001: 2015, The principles, structure and language of ISO 9000 and ISO 9001, Applying the ISO 9001: 2015 standard when developing and implementing a QMS. **(6+2)**

3. **Documentation and Implementation Planning:** Phased Approach Method and Tools, Executive and Management Overview, Planning, Gap Assessment and Planning, Documentation, Implementation and Training, Internal Assessment and Management Review, 3rd Party Registration Assessment, Sustain and Continual Improvement. **(7+2)**

4. **Risk Assessment:** Concept and principles of Risk Assessment, Risk Based Thinking and Management Responsibility within an effective QMS, Applying the Framework of Risk Assessment, Understand the differences between the different techniques - Root Causal Analysis, Failure Modes and Effects Analysis (FMEA), Hazard Analysis and Critical Control Points (HACCP), Capability Index. **(7+2)**

5. **Internal Audit:** Understanding and application of Internal Audit Process requirements, Planning the Audit, Scheduling the Audit, Preparing the Audit, Conducting the Audit, Documenting Audit Findings, Reporting Audit Findings, Corrective Action Follow-up, Auditing practices and techniques, Role plays and/or scenarios to relevant field, the personal and interpersonal skills and competencies required for auditing. **(7+2)**

Suggested Text Books:

1. Mastering ISO 9001:2015: A Step-By-Step Guide To The World's Most Popular Management Standard, Gregory Peckford
2. Understanding ISO 9001: 2015 Quality Management System, Virendra Kumar Gupta
3. ISO 9001: 2015 - A Complete Guide to Quality Management Systems, Itay Abuhav
4. Operations Management: An Integrated Approach, Danny Samson and Prakash Singh, Cambridge University Press.
5. Managing Quality, Barrie G Dale, Ton van der Wiele and Jos van Iwaarden (Editors), Blackwell Publishing
6. ISO 9001:2015 Standard

Semester III	309 OSCM	309 OSCM- Strategic Supply Chain Management
3 Credits	LTP: 2.0.0	Subject Elective (SE) Course – Operations & Supply Chain Management

Course Outcomes: On successful completion of the course, the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO309OSCM.1	REMEMBERING	DEFINE Key configuration components of Strategic Supply Chain Management.
CO309OSCM.2	UNDERSTANDING	EXPLORE Process Architecture and Toolkits of in Strategic Supply Chain Management
CO309OSCM.3	APPLYING	ILLUSTRATE the Design Organization for Performance and Organizational Change
CO309OSCM.4	ANALYSING	EXAMINE the Right Collaborative Model and Drivers of collaboration of Strategic Supply Chain Management
CO309OSCM.5	EVALUATING	ILLUSTRATE Use of Metrics to Drive Business Success and Roadmap to change
CO309OSCM.6	CREATING	DEVELOP the architecture of a supply chain.

1. **Supply chain as Strategic Asset** - Key configuration components - Operations strategy, Outsourcing strategy, Channel strategy, Customer service strategy, Asset network, Criteria of robust SC strategy - Aligned with business strategy, aligned with customers' needs, aligned with power position, Adaptive, Next Generation Strategy - support continuing improvements in productivity and drive the achievement of business-level outcomes. **(7+2)**

2. **Process Architecture** – SC architecture details the process, applications, and information to improve and evolve, Components of SC architecture, Tests of Supply Chain Architecture – Strategic fit, End-to-end focus, Simplicity and Integrity, Architectural Toolkits, Levels of the Supply-Chain Operations Reference-model (SCOR) Model - processes, subprocesses, and activities, Processes for End-to-End Supply Chain Management – Plan, Source, Make, Deliver and Return, Next-Generation Processes. (7+2)

3. **Design Organization for Performance** – Primary challenges - structure of SC organization, roles and responsibilities, right people with the right skills. Organizational Change Is an Ongoing Process – modify & redefine, Evolution of the SC Organization, Guiding Principles for Organizational Design - organization should mirror process, every process has an accountable function or individual, Know, grow, and keep your core capabilities, Organize around the skills you need, Gaining Respect for the Supply Chain Discipline, Next-Generation Organizational Design – new roles and new skills. (7+2)

4. **Build the Right Collaborative Model** - Drivers of collaboration, desire to access - technology, capital-intensive technology, cost of competency to acquire, develop, or maintain, and new market effectively closed off by high entry costs or preconditions. Collaboration Spectrum model, transactional, cooperative, coordinated, and synchronized, Finding the right place on the Spectrum, The Path to Successful Collaboration - Master internal collaboration first, Define the degree of collaboration for each partner segment, Next-Generation Collaboration. (7+2)

5. **Use Metrics to Drive Business Success** - Why Measure, Managing Performance with Metrics, Which Metrics, Next-Generation Performance Management, Roadmap to change - advanced systems Aren't Enough, Stages of supply chain process maturity model, Characteristics of the Next Generation - transparency, flexibility, and simultaneity, Developing a Roadmap – creating the roadmap to change. (7+2)

Suggested Text Books:

1. Strategic SCM – The Five discipline for top performers - Shoshanah Cohen, Joseph Roussel
2. Strategic Supply Chain Management: Creating Competitive Advantage and Value Through Effective Leadership, by Samir Dani
3. Supply Chain Strategies – Customer Driven & Customer Focused by Tony Hines, Elsevier
4. Supply chain management – strategy, planning & operation –Sunil Chopra , Peter Meindl.

Suggested Reference Books:

1. Managing the SC- A Strategic Perspective by Gattorna Walters, Palgrave Macmillan
2. Extending the Supply Chain by Boyer, Forhlich and Hult, PHI, 3rd Indian Reprint
3. Strategic Supply Chain Management by S. Kale, Everest Publication
4. New Directions in Supply Chain Management: Technology & Strategy Implementation by Tonya Boone and Ram Ganeshan, Jaico Publishing
5. Designing & Managing the SC – Concepts, Strategies & Case studies – by Levi, Kaminskyet. al., TMG

Semester III	310 OSCM	310 OSCM- Business Excellence
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Operations & Supply Chain Management

Course Outcomes: On successful completion of the course, the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO310OSCM.1	REMEMBERING	REPRODUCE the essential tenets of Business Excellence in organizations with special emphasis on Operations Excellence
CO310OSCM.2	UNDERSTANDING	EXPLAIN the basic principles of various models of Business Excellence.
CO310OSCM.3	APPLYING	MAKE USE OF the concepts, tools and techniques of Business Excellence in the various areas of Operations, Supply Chain and Services
CO310OSCM.4	ANALYSING	ILLUSTRATE the various facets of development, implementation and assessment of business excellence

CO310OSCM.5	EVALUATING	FORMULATE a managerial perspective and DEVELOP an informed decision-making ability for driving Business Excellence in the various areas of Operations, Supply Chain and Services
CO310OSCM.6	CREATING	DISCUSS what makes some organizations best-in-class organizations.

1. **Business Excellence:** Business Excellence – Concept & Need. Fundamental concepts, European Foundation for Quality Management (EFQM), Malcolm Baldrige National Quality (MBNQA) framework, Deming Award, Indian BE Models such as Tata Business Excellence Model, Golden Peacock Award by the Institute of Directors (IOD), CII-EXIM Bank Award for Business Excellence, Rajiv Gandhi National Quality Award (RGNQA), etc, Core Values and Concepts, TQM Vs Business Excellence, Paradigm Shift. (8+2)

2. **Leadership triad:** Leadership, Strategy and Customers, Role of Senior Leadership and communication, Vision, Mission and Values, Organizational Governance, Strategy - Strategy development and deployment process, Tools and Techniques for strategy development and deployment - Hoshin Kanri, BSC, etc. Customers – Voice of Customer, current and potential customers, Customer Satisfaction and Engagement, Product and Service Offerings (8+2)

3. **Results triad:** People, Operations and Results, Results flowing from all areas of organization, Measurement, Analysis, and Knowledge Management, Overall Performance Management. (6+2)

4. **Assessment:** Assessment of organizations based on BE Models and guidelines, developing assessors, Factors in assessment, scoring bands, global scale for comparison. (6+2)

5. **Comparisons and Benchmarking:** Benchmarking within organization, across the BUs and sister organizations, benchmark grid, benchmarking with competitors and global benchmarks. (6+2)

Suggested Textbooks:

1. The Business of Excellence: Building High-performance Teams and Organizations by Justin Hughes, Bloomsbury Publishing.
2. Achieving Class A Business Excellence: An Executive's Perspective by Dennis Groves, Kevin Herbert and Jim Correll, Wiley Publications
3. Design for Operational Excellence: A Breakthrough Strategy for Business Growth by Kevin J. Duggan, McGraw-Hill Education
4. From Quality to Business Excellence: A Systems Approach to Management by Charles G. Cobb, ASQ PR
5. Business Excellence through Process Management by Manik Kher, VIVA BOOKS

Suggested Reference Books:

1. Achieving Business Excellence by Pravin Rajpal, Om Books International
2. Creating a Lean Culture: Tools to Sustain Lean Conversions by David Mann, CRC Press
3. Measuring Business Excellence, Routledge Advances in Management and Business Studies Book
4. EFQM, MBNQA, RGNQA Guidelines
5. 54 Tools and Techniques for Business Excellence by Michael Wash, Management Books

Semester III	311 OSCM	311 -SE OSCM-08: Service Value Management
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Operations & Supply Chain Management

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO311OSCM.1	REMEMBERING	DEFINE the core concepts related to Service Value Chain, Service Profit Chain, Innovation, CRM, networks.
CO311OSCM.2	UNDERSTANDING	ILLUSTRATE managing the service process through service value chain.
CO311OSCM.3	APPLYING	IDENTIFY factors influencing Innovation and service organizational design.
CO311OSCM.4	ANALYSING	EXAMINE the inter-relationships between the Focal firm, Supplier Networks, Distribution Networks, etc.

CO311OSCM.5	EVALUATING	EVALUATE the role of Business Networks as partners in value creation.
COOSCM.6	CREATING	DEVELOP strategies built on Principles of Service Value Chain & Service Profit Chain for various types of organizations.

1. **Basic Concepts, Value, Value Processes**, creating service value, Defining the benefit part of service value- the service product, Value creation by services marketing, evaluating internal customer value leading to external customer satisfaction, Costing of Services- Defining the cost part of service value: service pricing, delivering service value - Managing service delivery. **(7+2)**

2. **Service Value Chain & Service Profit Chain**: Introduction, Definitions, Significance, Managing the service process through service value chain, service value chain and service profit chain, Key elements of service profit chain – customer loyalty and satisfaction, understanding value from customer perspective, dream team cycle. **(7+2)**

3. **Value Chain Service Innovations**: Introduction, Components, Types, Models, Processes of Innovation, Evolution and Characteristics of Innovation Management, Key drivers, Factors influencing Innovation, Organizing for Innovation, Factors influencing service organizational design, Developing Innovation Strategy. **(7+2)**

4. **Managing Networks**: What is a Network? Business Networks, Network Position, Concept of Focal firm, Business Networks and CRM, Supplier Networks, Distribution Networks, Management of Networks, Supplier Relationships, Product Development, Supplier Accreditation Programmes, Process Alignment, E Procurement, Partners in Value Creation, Alliance between non-competing firms, Alliance between competing firms, Benchmarking Partners, Customer Advocacy groups, Sponsors, Partners in Value Delivery. IT Enabled Customer Services - Call Centre Operations and Management, Web-enabled Services, ERP enabled Field and Technical Support Services, Tele marketing and servicing. **(8+2)**

5. Case Studies related to Service Value Chain in Banking & Insurance, Hospital and Health Care, Travel & Tourism, Hotel & Catering, Retail and Contractual Services. **(6+2)**

Suggested Text Books:

1. Service Profit Chain: How Leading Companies Link Profit and Growth to Loyalty, Satisfaction and Value, W. Earl Sasser , Leonard A. Schlesinger, James L. Heskett
2. Competitive Advantage, Porter, Michael E, The Free Press. New York.
3. Strategic Management: a Methodological Approach, Rowe, Mason, Dickel, Mann, Mockler; Addison-Wesley

Semester IV	405 OSCM	405 OSCM: Industry 4.0
3 Credits	LTP: 1:1:1	Subject Elective (SE) Course – Operations & Supply Chain Management

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO405OSCM.1	REMEMBERING	DESCRIBE the drivers, enablers and compelling forces for Industry 4.0's advancement.
CO405OSCM.2	UNDERSTANDING	UNDERSTAND the power of Cloud Computing in a networked economy.
CO405OSCM.3	APPLYING	IDENTIFY the opportunities, challenges brought about by Industry 4.0.
CO405OSCM.4	ANALYSING	OUTLINE the various systems used in a manufacturing plant and their role in an Industry 4.0 paradigm.
CO405SCM.5	EVALUATING	APPRAISE the smartness in Smart Factories, Smart cities, smart products and smart services.
CO405OSCM.6	CREATING	PREDICT how organizations and individuals should prepare to reap the benefits.

1. **Introduction to Industry 4.0**: Overview of the Various Industrial Revolutions, Digitization and the Networked Economy, Industry 4.0 Paradigm, Industry 4.0 characteristics – Interoperability, Virtualization, Decentralization, Real- time capability, Service orientation, Modularity, Convergence, Cost reduction and efficiency, Mass

customization. Drivers, Enablers, Compelling Forces and Challenges for Industry 4.0, Evolution in USA, Europe, China and other countries, Comparison of Industry 4.0 Factory and Today's Factory, Trends of Industrial Big Data and Predictive Analytics for Smart Business Transformation. (7+1)

2. **Key Building Blocks:** Internet of Things (IoT), Industrial Internet of Things (IIoT), Internet of Services, Smart Manufacturing, Smart Devices and Products, Smart Logistics, Smart Cities, Predictive Analytics. (7+2)

3. **Technological Ecosystem:** Technologies for enabling Industry 4.0, Cyberphysical Systems, Robotic Automation and Collaborative Robots, Support System for Industry 4.0, Mobile Computing, Related Disciplines, Issues of Cyber Security. (6+2)

4. **Data as a resource:** Role of data, information, knowledge and collaboration in future organizations, Resource- based view of a firm, Data as a new resource for organizations, Harnessing and sharing knowledge in organizations, Cloud Computing Basics, Cloud Computing and Industry 4.0 (8+2)

5. **Applications and the way ahead:** Automotive, Agriculture, Retail, Healthcare, Fintech, Manufacturing, Applications and Case Studies: Industry 4.0 laboratories , IIoT case studies, Business issues in Industry 4.0 - Opportunities and Challenges, Future of Works and Skills for Workers in the Industry 4.0 Era, Strategies for competing in an Industry 4.0 world. (7+2)

Suggested Text Books:

1. Industry 4.0: Managing The Digital Transformation, Ustundag, Alp, Cevikcan, Emre, Springer.
2. Hands-On Industrial Internet of Things: Create a powerful Industrial IoT infrastructure using Industry 4.0 , Giacomo Veneri.
3. Internet of Things: A Hands-On Approach , Arsheep Bahga.
4. Industry 4.0: The Industrial Internet of Things Paperback, Alasdair Gilchrist.

Semester IV	406 OSCM	406 OSCM- Six Sigma for Operations
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Operations & Supply Chain Management

Course Outcomes: On successful completion of the course, the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO406OSCM.1	REMEMBERING	DESCRIBE the Key Concepts and Definitions associated with Quality Management, Six Sigma and Process of Six Sigma
CO406OSCM.2	UNDERSTANDING	SUMMARIZE the six-sigma philosophy along with understanding of 7 QC Tools.
CO406OSCM.3	APPLYING	PREDICT the change due to Six Sigma Implementation and Application of Six Sigma tools in new settings
CO406OSCM.4	ANALYSING	APPRECIATE use of Six Sigma for services performance improvement and strengthening the Organizational Structures
CO406OSCM.5	EVALUATING	DECIDE control chart to use for given set of data and ROSS (Return on Six Sigma)
CO406OSCM.6	CREATING	CREATING a Case for Business Models in Different Industries/Proposing a Strategy by Studying the cases of Successful Six Sigma Implementation

1. **Introduction to Lean Six Sigma:** History of Quality (Key Concepts by Quality Guru- Deming, Juran, Crosby, Ishikawa, Taguchi etc.), History of Continuous Improvement, Evolution of Six Sigma, Defining Six Sigma – philosophy and objectives, Six Sigma Principles and Focus Area, Value of Six Sigma. DMAIC Process. (7+2)

2. **DEFINE and MEASURE PHASE: DEFINE** - Six Sigma Project Identification, Selection and Definition, Project Charter and Monitoring, Process characteristics and analysis, Process Mapping: SIPOC- Suppliers – Inputs – Process – Outputs – Customers. **MEASURE** - Data Collection and Summarization, Measurement systems: Fundamentals, Accuracy, Precision, Discrimination, R&R Studies, Linearity, Process Stability, Fundamentals of statistics: Probability theory. Process capability analysis: Key Concepts, Measures and Indices, Non-normal process capability analysis, (8+2)

3. **ANALYZE and IMPROVE PHASE: ANALYZE** - Hypothesis testing: Fundamentals, Single Population Test, Two Population Test. Correlation and Regression Analysis, Regression Analysis: Model Validation. Introduction to One-Way ANOVA, Two-Way ANOVA, Multi-variant Analysis, Failure Mode Effect Analysis (FMEA) **IMPROVE** - Introduction to Design of Experiment, Randomized Block Design, Factorial Design, Fractional Factorial Design, Taguchi Method: Key Concepts and Illustrative Application. (8+2)
4. **CONTROL PHASE:** Seven QC Tools, Statistical Process Control: Key Concepts, Control Charts for Variables, Operating Characteristic (OC) Curve for Variable Control charts. Statistical Process Control: Control Charts for Attributes, Operating Characteristic (OC) Curve for Attribute Control charts. Acceptance Sampling: Key Concepts, Design of Acceptance Sampling Plans for Attributes, Design of Acceptance Sampling Plans for Variables, Return on Six Sigma – ROSS. (6+2)
5. **Six Sigma Implementation Challenges:** Design for Six Sigma (DFSS): DMADV, DMADOV, DFX Six Sigma Team Management: Composition and Layers, Six Sigma: Case study and Applications, Overview of Lean Six Sigma, Critical Success Factors in Implementation of Six Sigma. (6+2)

Suggested Text Books:

1. Daniel J. Zrymiak Govindarajan Ramu Roderick A. Munro, The Certified Six Sigma Green Belt Handbook
2. Hemant Urdhwarshie, Six Sigma for Business Excellence: Approach, Tools and Applications, Pearson Education
3. Mitra, Amitava, Fundamentals of Quality Control and Improvement, Wiley India Pvt Ltd

Suggested Reference Books:

1. T. M. Kubiak and Donald W. Benbow, The Certified Six Sigma Black Belt Handbook, Pearson Publication.
2. Montgomery, D C. Statistical Quality Control: A modern introduction, Wiley.
3. Forrest W. Breyfogle III, Implementing Six Sigma, John Wiley & Sons.
4. Evans, J R and W M Lindsay, An Introduction to Six Sigma and Process Improvement, CENGAGE Learning.
5. Howard S. Gitlow and David M. Levine, Six Sigma for Green Belts and Champions, Pearson Education, Inc.
6. Montgomery, D C. Design and Analysis of Experiments, Wiley.
7. Larson, Alan, Demystifying Six Sigma: A Company–Wide Approach to Continuous Improvement, American Management Association

Semester IV	407 OSCM	407 OSCM- Toyota Production System
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Operations & Supply Chain Management

Course Outcomes: On successful completion of the course, the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO407OSCM.1	REMEMBERING	DESCRIBE 14 principles of the Toyota Way.
CO407OSCM.2	UNDERSTANDING	RELATE the TPS with other business situations.
CO407OSCM.3	APPLYING	IMPLEMENT TPS principles to a real-life situation.
CO407OSCM.4	ANALYSING	EXAMINE the application of TPS principles in a service or manufacturing unit/ organization.
CO407OSCM.5	EVALUATING	DESIGN a process for executing Improvement Initiatives at workplace.
CO407OSCM.6	CREATING	BUILD an organization culture to foster continuous improvement.

1. **The Toyota Way:** Manufacturing Excellence, Global environment, Production system, Operational Excellence as a Strategic Weapon. Toyota Production System Vs Lean Production, The Heart of the Toyota Production System - Eliminating Waste, The TPS House Diagram (8+2)
2. **The 14 Principles of the Toyota Way:** Principle of Toyota way, An executive summary of the culture behind TPS, Toyota Way in action, Long Term Philosophy, creating continuous process flow, pull system to avoid overproduction. (8+2)
3. **Leveling Workload (Heijunka),** Getting quality right the first time, Standardization of the task, Use of Visual Control, Use of reliable technology. Significance of Lead time, technique to reduce lead time, Value streaming mapping (6+2)

4. Leadership: Role of Leaders in Manufacturing Philosophy, Development of Exceptional Teams, Challenging and respecting extended networks, Use of reliable Technology, see yourself to understand the situation, Developing decisions with consensus. (6+2)

5. Organizational Aspects: Become a learning organization, Continuous Improvement, Using the Toyota Way to transform Organizations, Using Toyota Way for other Organization (Service & Technical) Lean Manufacturing, Cultural issues in Lean, Lean vs Agile and Sustainable Manufacturing. Flexible Manufacturing, Kanban approach, Benchmarking. (7+2)

Suggested Text Books:

1. The Toyota Way: 14 Management Principles from the World's Greatest Manufacturer by Jeffrey K. Liker McGraw-Hill
2. How to implement lean manufacturing, Lonnie Wilson, McGraw Hill

Suggested Reference Books:

1. The Toyota Kaizen Continuum: A Practical Guide to Implementing Lean by John Stewart , Taylor and Francis Group
2. The Toyota Way Field book A Practical Guide for Implementing Toyota's 4 Ps by Jeffrey K. Liker and David Meier, Tata McGraw-Hill Edition

Semester IV	408 OSCM	408 OSCM- World Class Manufacturing
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Operations & Supply Chain Management

Course Outcomes: On successful completion of the course, the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO408OSCM.1	REMEMBERING	DEFINE the basic terms associated with Manufacturing Excellence and World Class Manufacturing
CO408OSCM.2	UNDERSTANDING	SUMMARIZE the features of various frameworks used for World Class Manufacturing
CO408OSCM.3	APPLYING	IDENTIFY the challenges to manufacturing industry in the information age
CO408OSCM.4	ANALYSING	ANALYZE the usage of Information management tools, Material processing and handling tools.
CO408OSCM.5	EVALUATING	EVALUATE the country's preparedness for World Class Manufacturing
CO408OSCM.6	CREATING	ESTIMATE the performance of manufacturing firms with the measurement system to determine the readiness for World Class Manufacturing

1. World Class Manufacturing and the Information Age: Information Age, Competing in the Information Age. Business challenges of the Information Age, Operating Environment of the Information Age. India's global Competitiveness and Manufacturing Excellence. World Class Manufacturing and the Information Age Competition, Manufacturing Challenges of the Information Age – Time based competition. Managing knowledge, Problems in the Manufacturing Industry – Coordination, Need for Control, Fragmented Information Infrastructure, Insufficient process ability of available information. (7+2)

2. World Class Manufacturing and Competitive Advantage: Manufacturing Excellence and Competitiveness. Concept of World Class Manufacturing. Hall's Framework of Value-added Engineering, Schonberger's framework of World Class Manufacturing, Gunn's model of World Class Manufacturing, Maskell's model of World Class Manufacturing. The Philosophy of World Class Manufacturing, The Evolution of World Class Manufacturing, The first principles of World Class Manufacturing, The Practices of World Class Manufacturing, Quality in World Class Manufacturing. (7+2)

3. World Class Manufacturing - Systems and Tools: The integration imperative, Overview of systems and tools,

Making sense of the manufacturing alphabet soup, Information management tools, Material processing and handling tools. Information management tools – Product and Process Design Tools, Bar Code Systems, Kanban, SQC, Business Integration and Decision Support Tools. Material processing and handling tools – Flexible Manufacturing Systems, Rapid Prototyping, Lean production tools, Poka Yoke, SMED. An assessment of Manufacturing systems and tools. (7+2)

- 4. World Class Manufacturing –Indian Scenario:** Competitiveness of Indian Manufacturing, Manufacturing Performance and planned strategies of Indian Manufacturing firms. Manufacturing readiness of Indian Firms, Manufacturing Objectives and strategy. Usage of management tools and technologies, Manufacturing Management Practices, The Manufacturing Strategic Intent Framework, Strategic use of IT in Indian Manufacturing, Classification by breadth of IT infrastructure and depth of manufacturing applications, Classification by breadth and integration of IT infrastructure, Manufacturing Strategy – World class Status and IT Use: Is India Ready for World Class Manufacturing? (7+2)

- 5. Leading India towards World Class Manufacturing:** Business Strategy and Global Competitiveness. Generic Manufacturing Strategies for the Information Age. Developing strategic thinking in manufacturing, Issues in Strategic planning for World Class Manufacturing, Barriers to using IT strategically. Strategic Planning Methodology for World Class Manufacturing, Implementing the World Class Manufacturing Plan, Need for performance measurement –The PO- P System, The TOPP System, The AMBITE System, Quality Performance, Cycle Time, Delivery Performance and Customer Service, Financial Performance Measures, The Balanced Score Card, Human Resource Dimensions in World Class Manufacturing – Morale and Teamwork. (7+2)

Suggested Text Books:

1. World Class Manufacturing – A Strategic Perspective by B S Sahay, K B C Saxena, Ashish Kumar, Macmillan Publishers India Ltd.
2. World Class Manufacturing by K. Sridhara Bhat, Himalaya Publishing.

Suggested Reference Books:

1. Making Common Sense Common Practice – Models for Manufacturing Excellence by Ron Moore, Elsevier Pub., 3rd Ed.
2. Competitive Manufacturing Management by John Nicholas, TMGH.
3. The Japanese Manufacturing Techniques by Richard Schonberger, The Free Press
4. Just in Time Manufacturing by M. G. Korgaonker, Macmillan Publishers India Ltd.

Semester IV	409 OSCM	409 OSCM- Supply Chain Strategy
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Operations & Supply Chain Management

Course Outcomes: On successful completion of the course, the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO409OSCM.1	REMEMBERING	DEFINE basic terms and concepts related to Strategy, Supply Chain
CO409OSCM.2	UNDERSTANDING	EXPLAIN the SC Components and Processes
CO409OSCM.3	APPLYING	ILLUSTRATE the importance of SC strategies on competitive advantage.
CO409OSCM.4	ANALYSING	OUTLINE a typical Supply Chain Model for a product / service and ILLUSTRATE the linkages of strategies with real time issues using Information Technology.
CO409OSCM.5	EVALUATING	EVALUATE and EXPLAIN impact of strategic decisions on SC
CO409OSCM.6	CREATING	FORMULATE and DISCUSS a model for SCM strategies

- 1. SC and Business Strategy:** Understanding Strategy and SC, Objectives of SC, decision phases, process strategies. Generic strategies in SC – Competitive & SC strategies, Strategies for SC--fit-demand based, commodity based, cost centric. Strategies to deal with uncertainty, Competitive advantage through SC Strategies. (6+2)
- 2. Supply Chain Strategies -- Planning and scheduling:** Demand forecasting – Role of forecasting in SC, Components of forecasting, Forecasting models, Aggregate planning- Inventory, Transportation, Pricing, Information, Internal

logistics, Transportation using LP (numerical). Sales and Operation planning – responsiveness of predictive variables, sales planning at real time. Scheduling in SC – impact, obstacles, tactics, importance. (8+2)

3. **SC Strategy and Distribution Network:** SC Strategy--Supplier Strategy, Operations Strategy, Logistics Strategy. Designing distribution networks – Factor affecting distribution, Framework, online sales, Omni-channel retailing, different network models for designing, identifying and allocating. Global SC networks – impact, importance, risk management in SC. (8+2)
4. **Performance measures in SC Strategy:** Financial measures - Cost of raw materials, Revenue from goods sold., Activity-based costs like the material handling, manufacturing, assembling rates etc. Inventory holding costs, Transportation costs, Cost of expired perishable goods, Penalties for incorrectly filled or late orders delivered to customers, Credits for incorrectly filled or late deliveries from suppliers, Cost of goods returned by customers, Credits for goods returned to suppliers. Non – Financial measures - Cycle Time, Customer Service Level, Inventory Levels. Resource Utilization. (6+2)
5. **SC Strategy and Information Technology:** SC Strategies and Information Technology, Role of IT in SC, Application of strategies in retail and healthcare, Building SC models using Excel, Agile vs Lean strategies, LeAgile supply chain management strategy, Green SCM, Future trends in SC. (6+2)

Suggested Text Books:

1. Supply Chain Management: Strategy Planning & Operations, Sunil Chopra, Peter Meindl, Pearson
2. Supply Chain & Logistics Management, Bowersox, Closs & Cooper, Tata McGraw Hill
3. Designing & Managing the SC – Concepts, Strategies & Case studies, Levi, Kaminsky et. al., Tata McGraw Hill

Suggested Reference Books:

1. Logistics Management & Strategy, Harrison and van Hoek, Prentice Hall
2. Total Supply Chain Management, Basu & Wright, Elsevier
3. Logistics Management: The Supply Chain Imperative, Vindoo Sople, Pearson Education
4. Supply Chain Management, Mentzer, Response Books.
5. Global Logistics – New Directions in Supply Chain Management, Edited by Donald Waters, Kogan Page

Semester IV	410 OSCM	410 OSCM- Financial Perspectives in Operations Management
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Operations & Supply Chain Management

Course Outcomes: On successful completion of the course, the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO410OSCM.1	REMEMBERING	REMEMBER basic concepts used in cost management, Budgeting and activity-based costing
CO410OSCM.2	UNDERSTANDING	UNDERSTAND the importance of cost management as key to profitability.
CO410OSCM.3	APPLYING	CALCULATE NPV, PI, IRR, BCR, NBCR, Project cost overruns and cost control with Microsoft Excel.
CO410OSCM.4	ANALYSING	Outline capital budgeting techniques used in Operations.
CO410OSCM.5	EVALUATING	Explain the role of Financial Institutions in project financing
CO410OSCM.6	CREATING	Solve the real time issues involved in Operations and Project Management using appropriate method in order to reduce the costs.

1. **Cost Management:** Cost management tools-life cycle costing, target costing, kaizen costing, JIT & theory of constraints, BPR and bench marking. Working Capital Management –Concept, Components, Scope, Practical applicability. Make or buy, hire vs purchase (Numerical & Analysis) (8+2)
2. **Activity Based Costing:** Concept and basic knowledge, applicability, Limitations, Simple Numerical. Cost Concepts, behavior, type, allocation, apportionment and absorption along with nature, applicability and limitations of Job &

Process Costing.

(8+2)

3. **Budgeting:** Budgeting – nature, administration, and effectiveness; budgeting cycle; activity-based budgeting; kaizen approach; ZBB; performance budgeting; human aspects of budgeting. (6+2)
4. **Capital Budgeting:** The Capital Budgeting Concept & Process - An Overview, Generating Investment Project Proposals, Estimating Project, After Tax Incremental Operating Cash Flows, Capital Budgeting Techniques, Project Evaluation and Selection - Alternative Methods, Potential Difficulties, Project Monitoring – Progress Reviews and Post - Completion Audits, Problem of Project Risk, Total Project Risk, Capital Rationing, Decision Tree. (6+2)
5. **Project Cost Estimate and Risk Analysis:** Cost of project, Components of capital cost of a project, Project Risk Analysis, Project Organization. Project Evaluation and Audit: Sources of financing, Role of Financial Institutions in project financing, Data required for calculation of NPV, PI, IRR, BCR, NBCR, Project cost overruns and cost control, Phases of post audit, Type of post audit, Project closure (Use of Microsoft Excel/MS Project is Recommended.) (7+2)

Suggested Text Books:

1. Financial Management by I.M. Pandey, Vikas Publications
2. Financial Management by M. Y. Khan & P. K. Jain, TMGH
3. Project Management by K. Nagarajan, New Age Publications

Suggested Reference Books:

1. Financial Management by Rajiv Shrivastava & Anil Mishra, Oxford Publication
2. Corporate Financial Management by Arnold Glen, Pearson Publication

Semester IV	411 OSCM	411 OSCM- Facilities Planning
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Operations & Supply Chain Management

Course Outcomes: On successful completion of the course, the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO411OSCM.1	REMEMBERING	DESCRIBE the concepts and principles of Facilities Planning.
CO411OSCM.2	UNDERSTANDING	EXPLAIN the key considerations in Facilities Planning.
CO411OSCM.3	APPLYING	ILLUSTRATE the use of the concepts and principles of Facilities Planning.
CO411OSCM.4	ANALYSING	EXAMINE the practical layouts in real world in light of the theoretical concepts and principles of Facilities Planning.
CO411OSCM.5	EVALUATING	EVALUATE various approaches to Facilities Planning.
CO411 OSCM.6	CREATING	REARRANGE existing layouts for enhanced outcomes.

1. **Introduction to Facilities Planning:** Facilities planning defined, Significance of Facilities Planning, Objectives of Facilities Planning, Long Range Capacity Planning, Facilities Planning process, Strategic Facilities Planning, Developing Facilities Planning Strategies, Examples of Inadequate Planning. Impact of Environmental Issues on Facilities Planning Product, Process and Schedule Design: Introduction, Product Design, Process Design, Schedule Design, Facilities Design. (7+2)
2. **Logistics and Facilities Location:** Logistics, Decisions related to Logistics, Issues in Facilities location – Market related factors, Cost-related factors, Regulatory and Policy Issues, Location Planning Methods – Location Factor rating, Centre-of-gravity method, Load-distance method, Transportation Model. Locating Service Facilities, Relocation aspects, (7+2)
3. **Layout Planning:** Concept of Layout, Basic Layout Types, Layout Procedures, Algorithmic approach, Department Shapes and Aisles, Multi-floor facility layout, Commercial Facility Layout, Impact of change, Developing alternative layouts. Introduction to ALDEP and CORELAP. Facilities design for various Facilities Functions: Warehouse operations – Functions of Warehouse, Receiving and Shipping Operations, Dock Locations, Storage Operations, Order Picking Operations. (7+2)

4. **Service Facilities Layout:** Nature of Services, Operational Classification of services, Structuring the service encounter, Service blueprinting. Role of floor manager in service sectors such as – Hospital, Hotel, Airlines and airports. (6+2)
5. **Flow Space and Activity Relationships:** Departmental Planning, Activity Relationships, Flow Patterns, Flow Planning, Measuring Flow, Space Requirements. Personnel Requirements: Employee-Facility Interface, Restrooms, Food Services, Health Services, Barrier-Free Compliance, Office Facility Planning. Material Handling: Scope and Definition of Material Handling, Material Handling Principles, Designing Material Handling Systems, Unit Load design, Material Handling Equipment, Estimating Material Handling costs, Safety Considerations. (8+2)

Suggested Text Books:

1. Facilities Planning by Tompkins, White, Bozer and Tanchoco, Wiley India
2. Operations Management – Theory and Practice by B Mahadevan, Pearson
3. The Goal by E M Goldratt and Cox J, Great Barrington, North River

Suggested Reference Books:

1. Operations and Supply Management by Chase, Shankar, Jacobs and Aquilano
2. Operations Management by Terry Hill, Palgrave.
3. Operations Management – Quality and Competitiveness in a Global Environment by Russell and Taylor, Wiley India

Semester IV	412 OSCM	412 OSCM- Sustainable Supply Chains
3 Credits	LTP: 2:1:1	Subject Elective (SE) Course – Operations & Supply Chain Management

Course Outcomes: On successful completion of the course, the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO412OSCM.1	REMEMBERING	ENUMERATE the key concepts of Sustainable Supply Chains and Sustainable Supply Chain Management.
CO412OSCM.2	UNDERSTANDING	DESCRIBE and DISCUSS the role and importance of sustainability and sustainable development in different types of supply chains.
CO412OSCM.3	APPLYING	IDENTIFY and USE relevant established and emerging principles, frameworks and theories in sustainable logistics and supply chain management.
CO412OSCM.4	ANALYSING	INTEGRATE fundamental strategies, tools and techniques to analyze and design environmentally sustainable supply chain systems.
CO412OSCM.5	EVALUATING	DETERMINE the unsustainable impact of logistics activities, both individual, and in the wider context of the supply chain.
CO412OSCM.6	CREATING	COMPILE the managerial challenges, and FORMULATE a structured solution to these, with clear implications for relevant stakeholders.

1. **Introduction:** Sustainable Supply Chain Concept, Supply Chain Sustainability Management, Need, Business imperatives. Leveraging Connections of the Consumer, Brand, and Environmental Sustainability, Overview of Green Supply Chain, Concept of Green Logistics, Green Logistics – Rhetoric & reality, Key drivers for greening of Logistics & Supply Chains, Benefits of Green Supply Chains. (7+2)
2. **Closed Loop Supply chains:** Natural resource Management, Global warming, environment legislation, Managing reverse logistics, recycling through lease and service agreements, Supply Chain Integration in View of Secondary Raw Materials, Sustainable supply chain products - from cradle to cradle. (7+2)
3. **Environmental Costs of Logistics:** Arguments for and against internalizing environmental costs of logistics, Monetary calculation of environmental costs, Concept of Carbon Credits, Guidelines for carbon foot printing, Carbon foot printing process, success factors in carbon foot printing, Carbon Auditing of Supply Chains, Sustainable transportation, Greening transportation in the supply chain, Reverse channel design: Profitability VS Environmental benefits. New strategies to improve sustainability through supplier assessment. (8+2)

4. **Monitoring Performance:** Measuring and Monitoring of Sustainable Supply Chain, Evaluating the impact of SC activities on Sustainability: Economic, Environmental and Social, Visible Supply Chain - Process, Product and Performance, Product oriented monitoring, Benefits and use of performance measurement, Problems with measuring performance, Stages of Supply Chain Performance Measurement. (7+2)
5. **Sustainable purchasing and procurement:** The role of procurement in the supply chain, Drivers and barriers for sustainable procurement, Procurement frameworks, Ecolabels, Lifecycle assessment, Comparing purchasing options. Managing future supply chain, International Supply Chain Management and Collaboration Practices. (6+2)

Suggested Textbooks:

1. Strategy for Sustainability: A Business Manifesto by A. Werbach
2. Earth, Inc.: Using Nature's Rules to Build Sustainable Profits, G. Unruh
3. The Ecology of Commerce: A Declaration of Sustainability by P. Hawken, Harper Paperbacks
4. Greening of Industry Networks Studies, Behnam Fahimnia Michael G.H. BellDavid A. Hensher Joseph Sarkis
Editors Green Logistics and Transportation A Sustainable Supply Chain Perspective
5. Environmental Issues in Logistics and Manufacturing Series editor Eco Production. Paulina Golinska, Poznan, Poland.

Suggested Reference Books:

1. Sustainable Logistics and Supply Chain Management: David B Grant, Alexander Trautrim and Chee Yew Wong
2. Logistics Operations, Supply Chain Management and Sustainability: Paulina Golinska
3. Sustainable Fashion Supply Chain Management: From Sourcing to Retailing, edited by Tsan-Ming Choi, T. C. Edwin Cheng

BUSINESS ANALYTICS							
Specialization Core Courses							
Sem Code	Course Code	Course	Semester	Credits	FA	SA	Total Marks
302	SC BA - 01	Python	III	3	50	50	100
403	SC BA- 02	Data Mining	IV	3	50	50	100
				6	100	100	200
Specialization Elective Courses - Semester III (Any 4 to be opted for)							
304	SE BA- 01	Advanced Statistical Methods	III	3	50	50	100
305	SE BA- 02	Data Visualization and storytelling	III	3	50	50	100
306	SE BA- 03	Marketing Analytics	III	3	50	50	100
307	SE BA- 04	Financial Analytics	III	3	50	50	100
308	SE BA- 05	Workforce Analytics	III	3	50	50	100
309	SE BA- 06	Big Data Analytics	III	3	50	50	100
310	SE BA- 07	Supply & Operation Chain Analytics	III	3	50	50	100
311	SE BA- 08	Marketing Intelligence	III	3	50	50	100
				12	200	200	400
Specialization Elective Courses - Semester IV (Any 4 to be opted for)							
405	SE BA- 09	Time Series Analysis and Forecasting	IV	3	50	50	100
406	SE BA - 10	Strategic Management and Business Analytics	IV	3	50	50	100
407	SE BA - 11	Retail and E-Commerce Analytics	IV	3	50	50	100
408	SE BA - 12	Generative AI for Business Applications	IV	3	50	50	100
409	SE BA - 13	Healthcare Analytics	IV	3	50	50	100
410	SE BA - 14	Predictive Analytics and Machine learning using Python	IV	3	50	50	100
411	SE BA - 15	Sports Analytics	IV	3	50	50	100
412	SE BA - 16	Business applications of Blockchain technologies	IV	3	50	50	100
				12	200	200	400
				30	500	500	1000

Specialization: Business Analytics

Sem III	302	SC BA -01- Python
Credit: 3	LTP : 2:1:1	Specialization Core (SC) Course – Business Analytics

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 302.1	REMEMBERING	Recall key Python concepts and basic programming syntax.
CO 302.2	UNDERSTANDING	Explain Python data types, flow control, and file operations.
CO 302.3	APPLYING	Implement Python programs for data handling and logic building.
CO 302.4	ANALYSING	Analyze data structures like lists, tuples, dictionaries, and sets.
CO 302.5	EVALUATING	Evaluate Python functions and their applications in data-driven decision-making.
CO 302.6	CREATING	Develop Python programs using core Python and data manipulation libraries (NumPy, Pandas).

Unit 1: Introduction to Python Programming

Introduction, History of Python, Python, Python Features, Applications in Various Domains, Introduction to IDEs, Python installation and setup, Python interpreter, script execution, Dir and help: Getting help from the Python interpreter, Python basics: variables, keywords, literals, Multi-Line Statements, Quotation, Comments, line and indentation, Input/output functions, Operators: arithmetic, comparison, logical, identity, membership. (7+2)

Unit 2: Python Data Types & Loop Structures

Mutable vs Immutable data types, data types: - Number, Strings: creation, manipulation, operations, Lists and Tuples: properties, operations, indexing, Dictionaries: key-value pairs, updating, deleting elements, Sets: properties, operations, uniqueness, Type conversions and casting between data types , Flow control: conditional statements - if, if-else, if-elif-else, loops - for, while, Loop control statement: continue, break and pass, python list comprehension. (7+2)

Unit 3: Functions and Functional Programming

Introduction To Functions, Defining and calling functions, Arguments, python 'Self' as default argument , Functions With Multiple Arguments, return values, range() function, , Objects, Generators, Decorators, Scope -Global Scope, Local Scope ,Nested Scope, Anonymous functions (lambda), map(), filter(), reduce(), Date & Time functions: datetime, timedelta, date, time classes (7 +2)

Unit 4: File Handling and I/O Operations

Introduction to Files , types of files, Keyboard I/O operations, File handling modes: opening, reading, writing, closing files, Working with CSV and Excel files using Python, error handling in file operations, File and directory-related operations, pickle module. (7+2)

Unit 5: Introduction to Python Libraries for Analytics

Overview of analytical tasks and role of libraries, Introduction to the data analysis workflow, NumPy: creating arrays, array operations, Pandas: Series, Data Frame creation, indexing, and data manipulation, Use of Python in basic data analysis tasks. (7+2)

Suggested Text Books

1. Mattan Griffel & Daniel Guetta, Python for MBAs, Columbia University Press
2. Think Python , Oreilly Allen B. Downey
3. Let Us Python, Yashwant Kanetkar and Aditya Kanetkar

Suggested Reference Books

1. Learning Python, Mark Lutz, O'Reilly Media

2. Introducing Python-Modern Computing in Simple Packages , Bill Lubanovic
3. Python for Data Analysis, Wes McKinney, O'Reilly Media

Sem IV	304 BA	304- Advanced Statistical Methods
Credit: 3	LTP : 2:1:1	Specialization Elective (SE) Course – Business Analytics

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 304.1	REMEMBERING	Recall basic R syntax, programming structures, and data types.
CO 304.2	UNDERSTANDING	Explain fundamental statistical concepts and R-based data handling techniques.
CO 304.3	APPLYING	Apply R functions for data manipulation, visualization, and analysis.
CO 304.4	ANALYSING	Analyze data using regression, classification, and time series models in R.
CO 304.5	EVALUATING	Evaluate statistical models using performance metrics and diagnostics in R.
CO 304.6	CREATING	Design and build predictive models and visualizations using real-world data in R.

Unit 1: Introduction to R and Basic Programming Concepts

Introduction to R and RStudio environment, Downloading and installing R and RStudio. Understanding the R console and script editor, Writing and executing your first R program, Using help and documentation in R. Data types in R: character, numeric, logical, complex, Data structures: vectors, lists, matrices, arrays, data frames, and factors. Operators, variables, and basic expressions in R. Flow control structures: if-else, for loop, while loop, repeat loop. Built-in functions and user-defined functions. Web scraping in R. (7+2)

Unit 2: Data Handling, Manipulation and Visualization in R

File operations: reading/writing text files, CSV, Excel, SPSS, SAS. Data transformation and exploration. Subsetting, merging, concatenating data: cbind(), rbind(), merge(). Apply family of functions: apply(), lapply(), sapply(), tapply(). Inspecting data: str(), class(), length(), nrow(), ncol(), head(), tail(). Importance of Exploratory Data Analysis (EDA), Summary statistics, outlier detection. Visualizing data using base, lattice, and ggplot2 graphics, creating line plots, bar plots, histograms, pie charts, table plots, Customizing plots: titles, labels, legends, colours. (7+2)

Unit 3: Hypothesis Testing and Statistical Inference

Hypothesis testing: z-test, t-test, F-test, chi-square test, testing proportions, correlations. One-way and Two-way ANOVA, interaction effects. Summarizing data and using cross-tabulations. Domain-specific case studies using R. (7+2)

Unit 4: Regression and Classification Techniques

Linear Regression: Concept, OLS, multiple regression, assumptions, multicollinearity, residual analysis. Logistic Regression: Concept, odds ratios, log-likelihood, ROC curves, classification tables. Discriminant Analysis: Linear Discriminant Function, classification performance. Step-wise and dummy variable regression. Use of R for all methods with domain-based case studies. Dimension reduction: Introduction to PCA and Factor Analysis. (7+2)

Unit 5: Time Series and Predictive Analytics

Time series data structures in R. Decomposition of time series: trend, seasonality, residuals. ACF and PACF plots, forecasting methods: Exponential smoothing, Holt's Winter. ARMA, ARIMA modelling and validation. Use of time series forecasting in different domains using R. (7+2)

Suggested Text Books

1. R for Everyone: Advanced Analytics and Graphics, by Jared P. Lander, Publisher - Pearson Education India
2. Applied Statistics with R, by Dr. R. N. Prasad & Seema Acharya, Publisher -Wiley India
3. Hands on Programming With R: Write Your Own Functions and Simulations, by GarrettGrolemund, Publisher O'Reilly
4. R Programming for Beginners by Sandip Rakshit , Publisher-Tata McGraw Hill
5. A First Course in Statistical Programming with R , by John Braun, Publisher - Cambridge University Press

6. R for Business Analytics, by A Ohri (Author), Publisher - Springer-Verlag New York Inc

Suggested Reference Books

1. R for Data Science: Import, Tidy, Transform, Visualize, and Model Data by Hadley Wickham , Garrett Grolemund , Publisher- O'Reilly
2. Advanced R Statistical Programming and Data Models: Analysis, Machine Learning, and Visualization by Matt Wiley , Joshua F. Wiley , Publisher -Apress
3. Data Science Essentials with R: Learn with focus on data manipulation, visualization, and machine learning, by Abhishek Das , Publisher - Bpb Publications
4. Data Science in R
5. A Case Studies Approach to Computational Reasoning and Problem Solving, by Deborah Nolan, Duncan Temple Lang, Publisher: Routledge
6. Statistics for Management, Levin and Rubin Publisher : Pearson Education

Suggested Audio Visuals link

1. Data Analysis Using R, <https://nptel.ac.in/courses/111104100>, IIT Kanpur (Prof. Shalabh)
R Programming, Tutorials Point
2. <https://www.youtube.com/watch?v=7076ZuAwUn8&list=PLWPirh4EWFpEvN4ktS8LE0evLCSfhD55t>
3. Linear Regression in R, Step by Step, https://www.youtube.com/watch?v=wsj0jg_gH28, StatQuest
4. Time Series In R, <https://www.youtube.com/watch?v=iTq6fNfi4Rs>, Simplilearn

Suggested Journals

1. Sankhya: The Indian Journal of Statistics – Indian Statistical Institute
2. Journal of Indian Statistical Association – ISAS
3. The R Journal
4. Journal of Statistical Software

Sem III	305	SE BA -01 Data Visualization and Storytelling
Credit: 3	LTP : 2:1:1	Specialization Elective (SE) Course – Business Analytics

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 305.1	REMEMBERING	DEFINE Power BI terminology and EXPLAIN how to connect to different data sources and save a report.
CO 305.2	UNDERSTANDING	DESCRIBE and DEMONSTRATE the Power BI interface, building basic reports, and dashboards.
CO 305.3	APPLYING	APPLY data modeling, measures, and DAX functions to analyze and transform data.
CO 305.4	ANALYSING	ANALYZE data using interactive visualizations, filters, slicers, and hierarchies.
CO 305.5	EVALUATING	EVALUATE different visualization types and dashboard design techniques to present insights effectively.
CO 305.6	CREATING	DESIGN and BUILD compelling data stories with Power BI dashboards and share them across platforms.

Unit 1: Getting Started with Power BI

Introduction to Power BI: Desktop, Service, Mobile, Power BI interface and navigation, Data sources and data connectivity, Importing and transforming data using Power Query, Data load options: Import vs DirectQuery, Saving and publishing reports to Power BI Service

(7+2)

Unit 2: Data Preparation and Modeling

Data cleaning and shaping using Power Query Editor, Creating relationships and data models, Working with calculated columns and measures, Introduction to DAX (Data Analysis Expressions), Creating hierarchies and date tables, Managing data types, categories, and formatting (7+2)

Unit 3: Data Visualization and Charts

Basic visualizations: bar, column, line, pie, table, matrix, Advanced charts: funnel, gauge, waterfall, KPI, maps, Conditional formatting and drill-through, Creating and using slicers and filters, Tooltips, bookmarks, buttons, and selections, Custom visuals and themes (7 +2)

Unit 4: Calculations and Advanced Analytics

Creating and using DAX functions: SUMX, CALCULATE, FILTER, etc., Time Intelligence functions in DAX, Calculated tables and fields, Aggregations and nested measures, What-if analysis using parameters, Using analytics pane: trend lines, forecasts, reference lines (7+2)

Unit 5: Storytelling and Sharing Insights

Creating dashboards and reports, Layout optimization for desktop and mobile, Designing effective data stories using bookmarks and navigation, Embedding insights in PowerPoint, Teams, and SharePoint, Exporting to PDF and Power BI Service sharing, Best practices in dashboard design and storytelling (7+2)

Suggested Reference Books

- **Mastering Microsoft Power BI** – Brett Powell
- **Collect, Combine, and Transform Data using Power Query in Excel and Power BI** – Gil Raviv
- **The Definitive Guide to DAX** – Marco Russo & Alberto Ferrari
- **Storytelling with Data** – Cole Nussbaumer Knaflitz

Video Link: <https://learn.microsoft.com/en-us/power-bi/>

Sem III	306	SE BA 03 Marketing Analytics
Credit: 3	LTP : 2:1:1	Specialization Elective (SE) Course – Business Analytics

Course Objectives: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 306.1	REMEMBERING	Describe various key concepts / metrics in Marketing Analytics
CO 306.2	UNDERSTANDING	Illustrate the use of analytical techniques and Interpret the outputs to identify most effective target markets, forecast sales.
CO 306.3	APPLYING	Demonstrate different tools and frameworks that are used in marketing analytics
CO 306.4	ANALYSING	Analyse Market Basket / RFM model for development of effective marketing plans
CO 306.5	EVALUATING	Create price optimization scenarios and build solutions to implement pricing decisions in real-time based on current market data

1 Introduction to Marketing Analytics:

Business Decision making, Business Analytics; Marketing Analytics – Nature (Descriptive, Prescriptive and Predictive), Marketing data, Understanding important metrics in Marketing, Marketing Dashboards, Analytics in various Marketing Applications (Scope), Introduction on Tools & Techniques used in Marketing Analytics, Summarizing Marketing data, Basic statistical concepts applicable.

2 Analytics on Forecasting and Pricing:

Forecasting - Correlation, Simple Regression and Multiple Regression to forecast sales, Modeling Trend and Seasonality, Ratio to Moving Average Method, Forecasting New Product sales - Using 'S' curves, Concepts-The Bass diffusion model, The Copernican principle to predict duration. Pricing Analytics - Price elasticity, Optimization, Price bundling, Practical applications of price analytics

3 Analytics on Segmentation, Target Marketing, Customer Preferences & Product Design: Analytics for Need Based Segmentation - Voice of the Customer, Managing “Voice of the Customer” Data, Life Cycle Segmentation, Cross Tabulation Segmentation, Regression based segmentation, Cluster Analysis, Collaborative Filtering, Classification Trees for Segmentation, Analytics for Perceptual Mapping and Product Positioning, Customer / Consumer preference, Choice, Conjoint Analysis, Logistic regression, Evaluating Brand Equity, Discrete Choice Analysis, Approaches to Conjoint Analysis, Interpreting Conjoint Results, Optimizing Design using Conjoint Results

4 Customer Profitability: Customer Life Time Value (CLTV), Customer Churn, Customer Attrition models, How to calculate CLTV, Net promoter score, Metrics for Customer Acquisition and Retention, Analyzing age demographics, First contact with customer, Customer satisfaction, Understanding customer engagement, Customer Equity, Customer Loyalty Analytics on Sales & Distribution: Metrics for Sales, profitability - Sales Force Sizing, Effort (Call Planning), Territory Planning, Target Setting, Compensation Planning, Analytics based channel evaluation and selection, Market Basket Analysis & Lift, RFM Analysis, SCANPRO model.

5 Analytics on Promotion Web and Social Media Analytics:

Marketing Mix Models, Measuring effectiveness of advertisement, Media Selection Models, PPC and Online Advertising, Allocation of marketing budgets over multiple campaigns, Measuring effectiveness of Social Media Advertising, Facebook and Twitter analytics, Viral Marketing and Text mining, Applying Text Mining in Real Life Scenarios, Google Analytics

Suggested Books References:

1. Marketing Analytics: Data-Driven Techniques with Microsoft Excel by Wayne L. Winston, Publisher- John Wiley & Sons, Inc
2. Data Mining Techniques in CRM by Konstantinos K. Tsipis, Antonios Chorianopoulos –Publisher John Wiley & Sons
3. Marketing Analytics Roadmaps-Method, Metrics, and Tools by Jerry Rackley- Published-Apress
4. Pricing, Online Marketing Behavior, and Analytics by Giampaolo Viglia, Publisher- Palgrave Macmillan

Sem III	307	SE BA 04 Financial Analytics
Credit: 3	LTP : 2:1:1	Specialization Elective (SE) Course – Business Analytics

Course Objectives: On successful completion of course, the learner will be able to -

CO#	COGNITIVE ABILITIES	Particulars
CO 307.1	REMEMBERING	Remember the key concepts of the financial analytics
CO 307.2	UNDERSTANDING	Understand the various aspects of financial analytics
CO 307.3	APPLYING	Application of financial data analysis models to data for business decisions
CO 307.4	ANALYSING	Analyse financial data using different models
CO 307.5	EVALUATING	Evaluate the Risk on various financial assets.

1 Introduction to Financial Analytics: Definition, relevance and scope financial Analytics, recent trends in financial analytics

2 Financial Time Series: Asset Returns, Distributional Properties of Returns, Review of Statistical Distributions and properties of financial time Series, Econometrics

3 Asset Portfolio Models: Basics of portfolio construction, Markowitz Theorem, Capital Asset Pricing Model, Diversification and Portfolio Optimization

4 High-Frequency Data Analysis: Non synchronous Trading, Bid-Ask Spread of trading Prices, Empirical Characteristics of Trading Data, Models for Price Changes, Duration Models

5 Derivative Pricing: Issues regarding derivative markets, Brownian motion, Black - Sholes model. Modelling derivative prices

Suggested Book References:

1. Argimiro Arratia (2014), “Computational Finance An Introductory Course with R”, Atlantis Press
2. David Ruppert (2011), “Statistics and Data Analysis for Financial Engineering”, Springer.
3. John Y. Campbell, Andrew W. Lo, & A. Craig MacKinlay (1997), “The Econometrics of Financial Markets”, Princeton University Press

Website links

1. <http://www.nseindia.com/learn/financial-data-analytics-machine-learning>
2. <https://www.ajnfim.ac.in/>
3. <https://www.iibf.org.in/ELearning.asp>

Case Study

1. Financial Analytics Toolkit: Financial Statement Forecasting By Marc Lipson
2. Financial Analytics Toolkit: Ratio Analysis By Marc Lipson
3. Lucas Wang: Stop-Loss Strategy By Hubert Pun; Hongmei Sun
4. Fullerton: Risk Analytics and Business Strategy By: Ravi Anshuman; Mitra Saby

Sem III	308	SE BA 05	Workforce Analytics
Credit: 3	LTP : 2:1:1	Specialization Elective (SE) Course – Business Analytics	

Course Objectives:

CO#	COGNITIVE ABILITIES	Particulars
CO 308.1	REMEMBERING	To understand the core concepts of HR analytics and its role in strategic HR management
CO 308.2	UNDERSTANDING	Remembering fundamental statistical methods and data analysis techniques used in HR analytics
CO 308.3	APPLYING	Developing proficiency in utilizing HR metrics to assess workforce performance and identify areas for improvement
CO 308.4	ANALYSING	Analyzing data to improve data-driven HR decisions and solve real-world HR challenges across various domains
CO 308.5	EVALUATING	Evaluating critical thinking and problem-solving skills to make data-driven recommendations for HR strategies

1. Understanding HR Analytics

Demystifying HR Analytics: Role in digital age, business value, analysis types. HR Analytics Process: Defining questions, data collection, analysis, communication. HR Data Sources: HRIS, payroll systems, employee surveys. Case Study: Leveraging HR data for recruitment improvement.

2. Data Preparation and development of Metrics

HR Data Management: Collection strategies, cleaning, security, privacy. Developing HR Metrics: Data measurement, core analysis, collection & management. HR Metrics & Measurement: Key metrics across employee lifecycle, HR balanced scorecard. Data Visualization Techniques: Effective communication through data insights.

3. Statistical Methods for HR Analytics

Data Visualization Fundamentals: Stages, visual encoding, effectiveness. Designing Dashboards: Visualize numerical data, relationships, maps.

HR Analytics Storytelling: Data visualization techniques, communication of insights. Case Study: Predicting employee turnover using Logistic Regression (Hands-on)

4. HR Analytics in different functions of HR Talent Acquisition, Workforce Management, Employee relations

Talent Acquisition: Job posting optimization, candidate assessment & interview analytics, onboarding analytics. Workforce Management: Performance management analytics, compensation & benefits, learning & development analytics. Employee Relations: Employee engagement & sentiment analysis, retention analytics, diversity & inclusion analytics. Case Studies (Hands-on): Recruitment efficiency, identifying high-potential employees, employee wellbeing analytics.

5. Future of HR Analytics

Future of HR Analytics: Emerging Trends in HR Technology - Artificial Intelligence, Big Data, and Machine Learning in HR, Ethical Considerations in HR Analytics - Data Privacy, Algorithmic Bias, and Explainability, Building an HR Analytics Capability - Developing a Data-driven HR Culture, Skills and Resources for Success, Building a Data-driven HR Culture: Developing skills, fostering collaboration, and navigating the change for successful HR analytics implementation.

Suggested Book References:

1. HR Analytics Theory and application Techniques – Swati & Suparna Pal
2. Fundamentals of HR Analytics: A Manual on Becoming HR Analytical by Fermin Diez
3. Predictive HR Analytics: Mastering the HR Metric by Dr. Kirsten & Martin Edwards
4. The Practical Guide to HR Analytics: Using Data to Inform, Transform, and Empower HR Decisions by Shonna Waters, Valerie Streets, Lindsay McFarlane, and Rachael Johnson-Murray
5. Excellence in People Analytics: How to Use Workforce Data to Create Business Value
6. People Analytics For Dummies by Mike West

Suggested Videos:

1. HR Analytics | 8 Hours Course
<https://www.youtube.com/watch?v=2m9BIRGIKfQ>
2. HR Analytics in hindi, HR information systems and data sources, HR Metrics and HR Analytics
https://www.youtube.com/watch?v=mhMorNa1uB8&list=PLsh2FvSr3n7ch3k39k-GBYlyNs41_N2D2
3. HR Analytics Unit 1 | Meaning Importance of HR Analytics
<https://www.youtube.com/watch?v=ERrk8tZsjnQ>

Sem: III	309	SE- BA - 06 Big Data Analytics
Credit: 3	LTP : 2:1:0	Specialization Elective (SE) Course – Business Analytics

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 309. 01	REMEMBERING	Define and recall the key concepts of Big Data, Business Intelligence, and various types of data used in business analytics.
CO 309. 02	UNDERSTANDING	Explain data management processes, analytical models, and Big Data technologies relevant to business environments.
CO 309. 03	APPLYING	Apply suitable data analytics tools and techniques such as classification, clustering, and visualization to solve business problems.
CO 309. 04	ANALYSING	Analyze data sources, quality issues, and analytical requirements to design data-driven solutions in marketing, finance, or operations.
CO 309. 05	EVALUATING	Evaluate different analytical models and tools based on accuracy, performance, and business value to support strategic decision-making.
CO 309. 06	CREATING	Develop and propose a data-driven business strategy or dashboard using Big Data insights while considering ethical and privacy concerns.

Unit 1 Introduction to Big Data and Business Intelligence - Concept and characteristics of Big Data (Volume, Velocity, Variety, Veracity, Value), Importance and need for Big Data in business decision-making, Introduction to Business Intelligence (BI), Difference and relationship between BI and Big Data Analytics, Overview of the Big Data ecosystem and technologies, Role of Big Data in digital transformation and data-driven culture, Real-world applications: retail, banking, healthcare, telecom. (6+1)

Unit 2 Data Sources and Data Management -Understanding structured, semi-structured, and unstructured data, Internal vs external data sources in business, Data storage and management: data warehouses, data lakes, Data quality, governance, and ethical issues, Data preprocessing: cleaning, integration, transformation, Basics of data privacy laws and compliance (GDPR, HIPAA) (7+1)

Unit 3 Analytics Techniques and Tools -Introduction to descriptive, predictive, and prescriptive analytics, Data visualization and storytelling with data, Overview of analytics tools: Excel, Tableau, Power BI, Analytical models: regression, clustering, classification (conceptual), Dashboarding and reporting for decisions, Case studies: customer analytics, marketing analytics. (9+1)

Unit 4 Big Data Technologies and Infrastructure - Big Data architecture and frameworks, Hadoop ecosystem: HDFS, MapReduce, Hive (overview), Introduction to Spark, NoSQL databases (MongoDB, Cassandra), Cloud and Big Data: AWS, Azure, GCP overview, Matching technology with business needs, Collaboration between business managers and technical teams

Unit 5: Applications, Strategy, and Future Trends - Big Data applications in marketing, finance, HR, operations, Customer experience, personalization, and churn prediction, Predictive analytics for risk and fraud detection, Competitive advantage through data-driven decisions, Ethical and legal issues in Big Data, Future trends: AI, machine learning, real-time analytics, Capstone discussion: building a data-driven strategy

Suggested Text Books

1. **Foster Provost and Tom Fawcett**, *Data Science for Business: What You Need to Know About Data Mining and Data-Analytic Thinking*, O'Reilly Media, 2013.
2. **Viktor Mayer-Schönberger and Kenneth Cukier**, *Big Data: A Revolution That Will Transform How We Live, Work, and Think*, Houghton Mifflin Harcourt, 2013.
3. **Ullman, J., & Rajaraman, A.**, *Mining of Massive Datasets*, Cambridge University Press, 2011.

Suggested Reference Books:

1. **Seema Acharya and Subhasini Chellappan**, *Big Data and Analytics*, Wiley India, 2015.
2. **Thomas H. Davenport**, *Competing on Analytics: The New Science of Winning*, Harvard Business Review Press, 2007.
3. **Michael Minelli, Michele Chambers, and Ambiga Dhiraj**, *Big Data, Big Analytics: Emerging Business Intelligence and Analytic Trends for Today's Businesses*, Wiley, 2013.
4. **Galit Shmueli et al.**, *Data Mining for Business Analytics: Concepts, Techniques, and Applications*, Wiley, 2017.

Semester III	310	SE BA – 07 Supply and Operations Chain Analytics
3 Credits	LTP: 2:1:1	Specialization Elective (SE) Course – Business Analytics

Course Outcomes: On successful completion of the course, the learner will be able to

CO	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 310.1	REMEMBERING	Recall fundamental concepts and terminologies in supply and operations chain analytics.
CO 310.2	UNDERSTANDING	Explain the role and impact of analytics in supply chain and operations decision-making.
CO 310.3	APPLYING	Utilize analytical tools and techniques to solve supply chain and operations problems.
CO 310.4	EVALUATING	Assess and interpret analytical results to make informed decisions in supply chain contexts
CO 310.5	CREATING	Develop innovative solutions and strategies using analytics for supply chain and operations challenges.

1. **Fundamentals of Supply and Operations Chain Analytics:** Introduction to Supply Chain Management (SCM) and Operations Management, Role of analytics in SCM and operations, Types of analytics: Descriptive, Predictive, Prescriptive, Key performance indicators (KPIs) in supply chains, Overview of Supply Chain Operations Reference (SCOR) model (6+2)
2. **Data Collection and Management in Supply Chains:** Data sources in supply chain and operations, Data quality and preprocessing techniques, Introduction to data warehousing and big data in SCM, Ethical considerations and data privacy in supply chain analytics (6+2)

3. **Analytical Tools and Techniques:** Statistical analysis and forecasting methods, Optimization models for supply chain and operations, Simulation techniques in operations management, Introduction to software tools: Excel, R, Python, Tableau (5+2)
4. **Applications in Supply Chain and Operations:** Demand forecasting and inventory management, Transportation and logistics analytics, Supplier selection and procurement analytics, Case studies: Indian and global supply chain analytics applications (5+2)
5. **Strategic and Emerging Trends in Supply Chain Analytics:** Integration of AI and Machine Learning in SCM, Sustainability and green supply chain analytics, Risk management and resilience in supply chains, Future trends: Industry 4.0 and 5.0, IoT and IIoT, Blockchain in supply chain analytics (4+2)

Suggested Text Books

1. Supply Chain Analytics: Concepts, Techniques and Applications, Author: Kurt Y. Liu, Publisher: Springer
2. Operations and Supply Chain Management Essentials: Build Skills in Logistics, Process Improvement, and Supply Chain Analytics, Author: Ashley McDonough, Publisher: Vibrant Publishers
3. Production and Operations Analysis, Author: Steven Nahmias, Publisher: McGraw-Hill Education
4. Supply Chain Analytics: Strategies, Models and Solutions, Authors: Rabindranath Bhattacharya & Anindita M. Bhattacharyya, Publisher: Wiley

Suggested Reference Books

1. Operations Management: Sustainability and Supply Chain Management (13th Edition), Authors: Jay Heizer, Barry Render, Chuck Munson, Publisher: Pearson
2. The Analytics Edge, Authors: Dimitris Bertsimas, Allison O'Hair, William Pulleyblank, Publisher: MIT Press
3. Supply Chain Analytics: A Comprehensive Guide to supply chain analytics, harnessing Python to drive efficiency: volume 1, Authors: Alice Schwartz and Hayden Van Der Post, Publisher: Supply Chain Analytica
4. Supply Chain Analytics, Author: T A S Vijayaraghavan, Publisher: Wiley

Suggested Audio Visuals link

1. What is Supply Chain Analytics?
Link: <https://www.youtube.com/watch?v=3d7C4pShyKI>
2. Operations Analytics - Lecture Series
Link: <https://www.youtube.com/playlist?list=PLhGyjkKWps0qoi2mHrqN7StZzpp55GtKl>
3. Supply Chain Analytics - 8 Hours Course by 360DigiTMG
Link: <https://www.youtube.com/playlist?list=PLNLDEHOJTZSh-MPZY5hosnChUHH155sxl>
4. Teaching Supply Chain Analytics: From Problem Solving to Data-Driven Decision Making
Link: <https://www.youtube.com/watch?v=GQXWegTw1vQ>
5. Inside Supply Chain Analytics and Fundamentals
Link: <https://www.youtube.com/watch?v=AjL-yNCQ118>

Suggested Journals

1. Big Data Analytics in Supply Chain Management: Trends and Related Research
Link: https://www.researchgate.net/publication/270506965_Big_Data_Analytics_in_Supply_Chain_Management_Trends_and_Related_Research
2. Data Analytics in Operations Management: A Review
Link: <https://pubsonline.informs.org/doi/10.1287/msom.2019.0805>
3. Predictive Big Data Analytics for Supply Chain Demand Forecasting
Link: <https://journalofbigdata.springeropen.com/articles/10.1186/s40537-020-00329-2>
4. Supply Chain Analytics Adoption: Determinants and Impacts on Firm Performance
Link: <https://www.sciencedirect.com/science/article/pii/S0925527322000597>
5. Supply Chain Analytics: Definitions, Characteristics, and Applications
Link: https://www.researchgate.net/publication/386426867_Supply_Chain_Analytics_Definitions_Characteristics_and_Applications_A_Systematic_Literature_Review

Semester III	311	311– Marketing Intelligence
3 Credits	LTP: 2:1:1	Specialization Elective Courses

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 311.1	REMEMBERING	Recall key terms, definitions, and fundamental concepts related to Marketing Analytics, including its scope, tools, and applications.
CO 311.2	UNDERSTANDING	Understand the foundational concepts of Marketing Analytics and its role in business decision-making.
CO 311.3	APPLYING	Apply Microsoft Excel tools (Pivot Tables, Filters, Slicers) to organize, summarize, and visualize marketing data.
CO 311.4	ANALYSING	Analyze customer data using journey mapping, feedback metrics, and Customer Lifetime Value (CLV) calculations to derive marketing insights.
CO 311.5	EVALUATING	Evaluate pricing strategies using Excel Solver, price elasticity models, and bundling techniques for profit optimization.
CO 311.6	CREATING	Create effective market segmentation and promotion strategies using cluster analysis, conjoint analysis, decision trees, and advertising effectiveness models.

- 1 Introduction to Marketing Analytics:** Definition, Need and Scope of Marketing Analytics, Marketing Analytics Vs Marketing Research, Levels in Marketing Analytics, Adoption and Application of Marketing Analytics, Marketing Analytics and Business Intelligence. MS Excel as a Tool for conduction of Marketing Analytics. Using MS Excel to Organize and Summarize Marketing Data: Creation of Pivot Tables and Organizing Data. **(7+2)**
- 2. Summarizing Marketing Data:** Summarizing Revenue Data: Month-wise and Product-wise. Slicing & Dicing of Data: Pareto Principle, Report Filters and Slicers. Demographic Analysis: Analyzing Sales Data by Age, Gender, Income and Location, Construction of Crosstabs of Two Demographic Variables. Using GETPIVOT Function for Pulling Data. Adding Data Labels and Data Tables. **(7+2)**
- 3. Customer Analytics:** Customer Journey Mapping and the Process of Mapping (How to). Metrics for Tracking Customer Experience: Customer Feedback Metrics & Behavior Derived Customer Metrics. Customer Persona, Building a Customer Persona and its Benefits, Parts of Buyer Persona. What Customer Wants: Using Conjoint Analysis for Levels in Consumer Decision Process in Product Choices and Product Attributes. Customer Lifetime Value (CLV). Calculating Customer Lifetime Value: Creating the Basic Customer Value Template, Measuring Sensitivity Analysis with Two-Way Tables, Estimating the Chance if Customer is still Active. **(7+2)**
- 4. Pricing Analytics:** Pricing, Goals of Pricing, Price Elasticity, Estimating Linear and Power Demand Curves, Using Excel Solver to Optimize Price, Incorporating Complementary Products, Using Solver Table to Price Multiple Products and Finding Demand Curve for All Products. Price Bundling, Bundling Prices to Extract Consumer Surplus, Mixed Bundling, Using Evolutionary Solver to Find Optimal Bundle Prices. Price Skimming. **(7+2)**
- 5. Segmentation & Promotion Analytics:** Segmentation Analytics: Cluster Analysis and its Applications, Location-wise Clustering, Using Solver to find Optimal Clusters. Using Conjoint Analysis to Segment a Market, Using Decision Trees for Segmenting the Market. Promotion Analytics: Promotions and Types of Promotions, Discounting & Types of Discounting. Measuring the Effectiveness of Advertising: The Adstock Model. Media Selection Models: Linear Media Allocation Model, Quantity Discounts, Monte Carlo Media Allocation Simulation. Pay per Click Advertising. **(7+2)**

Suggested Books:

1. Seema Gupta & Avadhoot Jathar, Marketing Analytics, Wiley, 2021.
2. Wayne L. Winston, Marketing Analytics: Data Driven Techniques with Microsoft Excel, 2014.
3. Chuck Hermann, Ken Burbary, Digital Marketing Analytics, Que Publishing, 2e, 2018.
4. Moustusy Maity and Pavankumar Gurazada, Marketing Analytics for Strategic Decision Making, Oxford Higher education, 2021.
5. Mike Grigsby, Marketing Analytics, Kogan Page, 2015.

6. Robert Kozielski, Measuring Marketing Analytics, Emerald Publishing, 2018.

Sem: IV	Course Code: 403	SC BA- 02 Data Mining
Credit: 3	LTP : 2:1:0	Specialization Elective (SE) Course – Business Analytics

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 403.1	REMEMBERING	Define and recall key concepts related to Big Data, Data Mining, Business Intelligence, data types, and data preprocessing techniques.
CO 403.2	UNDERSTANDING	Explain the data mining process, types of models, data attributes, data quality issues, classification and clustering methods, and the relevance of BI techniques.
CO 403.3	APPLYING	Use appropriate classification, clustering, and association rule mining algorithms to solve real-world data problems such as fraud detection, customer segmentation, or recommendation.
CO 403.4	ANALYSING	Compare and contrast different data mining tasks and algorithms (e.g., classification vs clustering, decision tree vs SVM) for their strengths, limitations, and use cases.
CO 403.5	EVALUATING	Assess model performance using evaluation metrics (accuracy, precision, recall, F1 score), validate clustering results, and interpret rule interestingness in association mining.
CO 403.6	CREATING	Design and implement basic data mining workflows and solutions, integrating preprocessing, modeling, and evaluation for specific business applications while considering ethical implications.

Unit 1 Basic Concepts -Definition and need of Big Data, Definition and need of Data Mining, Definition and scope of Business Intelligence (BI), Relationship between Data Mining and BI techniques, Data Mining Process -Data collection, Data preprocessing, Pattern discovery, Evaluation, Knowledge representation, Introduction to Data Mining Tasks – Classification, Clustering, Association Analysis ,Anomaly Detection, Concept and definitions of models -Descriptive models, Predictive models, Basic terminology: features, labels, accuracy, training/testing, Real-world data mining applications - Big Data Analytics in Mobile Environments, Fraud Detection and Prevention with Data Mining Techniques (6+1)

Unit 2 Understanding Data -Data, Types of attributes -Nominal, ordinal, interval, ratio, Properties of attribute values- Discrete vs continuous, Types of data -Structured, semi-structured, unstructured, Temporal, spatial, text, multimedia, Data quality issues - Noise, missing values, duplicates, Data cleaning techniques, Sampling and its importance, Data normalization techniques -Min-max, z-score, decimal scaling, Similarity and distance measures, Euclidean, Manhattan, cosine similarity, Feature selection, Instance selection, Importance in big data scenarios. (7+1)

Unit 3 Classification Techniques - Decision-tree based approach, Rule-based classification, Instance-based classifiers (e.g., k-NN), Support Vector Machines (SVM), Ensemble learning techniques - Bagging, Boosting, Random Forest, Model selection and evaluation - Accuracy, precision, recall, F1 score, confusion matrix, Cross-validation, Applications -B2B Customer Buying Stage Prediction, Recommender Systems. (9+1)

Unit 4 Clustering Techniques - Partitional clustering methods (e.g., k-means), Hierarchical clustering methods (agglomerative, divisive), Graph-based clustering methods, Density-based clustering methods (DBSCAN, OPTICS), Cluster validation techniques -Internal, external, relative measures, Applications -Customer Profiling, Market Segmentation. (9+1)

Unit 5 Association, Patterns & Anomaly Detection- Apriori algorithm and its extensions, Association pattern evaluation -Support, confidence, lift, Sequential pattern mining, Frequent subgraph mining, Applications - B2B Customer Buying Path Analysis, Medical Informatics, Telecommunication Alarm Diagnosis, Anomaly detection methods - Statistical-based methods, Density-based methods, Ethics of data mining - Privacy concerns, Data ownership and usage, Corporate responsibilities. (9+1)

Suggested Text Books

1. Data Mining: The Textbook by Charu C. Aggarwal

2. Data Science for Business by Foster Provost and Tom Fawcett, O'Reilly
3. Introduction to Data Mining by Pang-Ning Tan, Michael Steinbach, Vipin Kumar, Addison Wesley
4. Data Mining and Analysis: Fundamental Concepts and Algorithms by Mohammed J. Zaki and Wagner Meira

Sem: IV	Course Code: 405	SC BA- 09 Time Series Analysis and Forecasting
Credit: 3	LTP : 2:1:1	Specialization Elective (SE) Course – Business Analytics

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 405.1	UNDERSTANDING	Define and understand the different time series concept and models.
CO 405.2	APPLYING	Apply varies methods of time series on different types data.
CO 405.3	APPLYING	Use varies types of forecasting method on varies real time data.
CO 405.4	ANALYSING	Compare and contrast different Forecasting Methods using different matrices
CO 405.5	EVALUATING	Create varies models using machine learning algorithm to evaluate the performance.

Unit 1 Basic Concepts - Introduction to time series with examples, stationarity, non-stationarity and related concepts, Time series decomposition and introduction to basic time series models such as Random Walk, White noise, AR, MA, ARMA etc. Introducing ACF and PACF plots and model identification.

Unit 2 Trends and Methods of Fitting Straight-line - Free hand method, The method of semi- average, The method of moving average,

Unit 3 Forecasting and Varies forecasting methods - Introduction to forecasting, Mean Forecasting, Naïve Forecasting, Linear Trend Forecasting.

Unit 4 Time Series Forecasting Methods - Time series forecasting methods such as ARIMA, SMA smoothing, EMA smoothing, Holt Winter's technique etc. Comparing forecasts using different metrics

Unit 5 Machine Learning Methods- Introduction to machine learning models for time series. Anomaly detection, LSTM, Neural networks in time series

Suggested Text Books

1. IR. Shumway, D. Stoffer, *Time Series Analysis and its Applications*, 4th Edition, Springer.
2. P. J. Brockwell, R. A. Davis, *Introduction to Time Series Forecasting*, 2nd Edition, Springer.
3. R. S. Tsay, *Analysis of Financial Time Series*, Wiley.
4. Paperback, Dr. Faisal Alghayadh, Vipul Bansal, Mohan Raparthi, Sarath Babu Dodda Time Series Analysis And Forecasting Using Machine Learning.
5. Changquan Huang , Alla Petukhina ,Applied Time Series Analysis and Forecasting with Python (Statistics and Computing.

Sem: IV	406	SE- BA - 10 Strategic Management and Business Analytics
Credit: 3	LTP : 2:1:0	Specialization Elective (SE) Course – Business Analytics

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 406. 01	REMEMBERING	Define and recall the key concepts of Strategic Management
CO 406. 02	UNDERSTANDING	Explain Strategic management processes, analytical models, and Big Data technologies relevant to business environments.
CO 406. 03	APPLYING	Apply suitable data analytics tools and techniques to formulate and implement strategic management.
CO 406. 04	ANALYSING	Analyze the environment, organisation capability to formulate strategy in marketing, finance, or operations.
CO 406. 05	EVALUATING	Evaluate strategic implementation using different analytical to gauge performance for strategic decision-making.

CO 406. 06	CREATING	Develop and propose a business strategy based on case insights while considering sustainability, ethical concerns.
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1. **Foundations of Strategic Management:** Concept of strategy, Corporate, Business and Functional Levels of Strategy. Strategic Management Process- Phases; Stakeholder in Business and their Roles in Strategic management. Hierarchy of Strategic Intent; Business Definition, objectives and goals, Linking objectives to mission & vision. Critical success factors (CSF), Key Performance Indicators (KPI), Key Result Areas (KRA).
Analytics: Business Analytics for KPIs such as People, Operations, Strategy e.g. Sales, Profit, ROI, operational efficiency, Revenue, total cost, employee turnover, capacity utilization, defect rate, on time delivery, time to market.
2. **Formulating Strategy:**
Analysing External Environment: Environmental Analysis (ETOP), Industry Analysis - Porter's Five Forces Model of competition, Entry & Exit Barriers, Strategic Group analysis. Analytics for Porter's five forces: Case or Cases which include - Statistical modeling to predict the likelihood of new entrants based on various factors. Use regression analysis for supply chain dynamics; Market Basket Analysis for Customer Segmentation, Conjoint analysis to understand customer preferences for different features and benefits of substitutes, market segmentation and positioning analysis for competitor strengths and weaknesses. **Analysing Company's Environment:** Resource-Based View- Examine a firm's resources and competitive position, introducing the VRIO Framework and benchmarking, Porter's Value Chain Analysis, Case study analysis of a company's strategic planning process, focusing on environmental scanning and resource evaluation, Organizational Capability Profile, Strategic Advantage Profile, Concepts of stretch, leverage & fit.
Analytics: Five-stage model of analytical competition, Gartner's Analytics Maturity Model. Cases and Applications in different sectors.
3. **Strategic Planning:**
Portfolio Analysis: Business Portfolio Analysis - BCG Matrix – GE 9 Cell Model,
Generic Competitive and Grand Strategies:
Analytics: Market trends, competitor strategies, and emerging opportunities, Strategic Insights for Managers, Forecasting, Business Simulations, Uncertainty estimations, Use Cases involving Predictive tools and Applications in solving problems using Marketing, Finance, M & A, Operations and Supply chain analytics, Competitive advantage through data-driven decisions. Cases and Applications in different sectors.
4. **Strategic Implementation and Evaluation:**
Structural, Functional Behavioural Implementation, Strategy, Mintzberg's 5 Ps – Deliberate & Emergent Strategies, McKinsey's 7s Framework, Benchmarking, Six Sigma
Analytics: Employee engagement and performance measurement, Case studies: Enhancing HR practices with analytics.
5. **Sustainability and Strategic Management:** Balanced Score Card, Business Models, New Business Models for Internet economy (e-Commerce models, Cases and Applications in different sectors, Sustainability: Integration of social and environmental sustainability in strategic management and the concept of the triple bottom line. Case studies of startups and established firms to understand the role of innovation and sustainability in long-term strategic success, Ethical and legal issues in Big Data, Future trends: AI, machine learning, real-time analytics, Capstone discussion: building a data-driven strategy

Suggested Reference Books:

1. Foster Provost and Tom Fawcett, *Data Science for Business: What You Need to Know About Data Mining and Data-Analytic Thinking*, O'Reilly Media, 2013.
2. Viktor Mayer-Schönberger and Kenneth Cukier, *Big Data: A Revolution That Will Transform How We Live, Work, and Think*, Houghton Mifflin Harcourt, 2013.
3. Ullman, J., & Rajaraman, A., *Mining of Massive Datasets*, Cambridge University Press, 2011.
4. Seema Acharya and Subhasini Chellappan, *Big Data and Analytics*, Wiley India, 2015.
5. Thomas H. Davenport, *Competing on Analytics: The New Science of Winning*, Harvard Business Review Press, 2007.

6. Michael Minelli, Michele Chambers, and Ambiga Dhiraj, *Big Data, Big Analytics: Emerging Business Intelligence and Analytic Trends for Today's Businesses*, Wiley, 2013.
7. Galit Shmueli et al., *Data Mining for Business Analytics: Concepts, Techniques, and Applications*, Wiley, 2017.
8. Business Analytics Principles, Concepts, and Applications by Marc Lapira et al
9. Advance Business Analytics by P. Sashikala
10. Essentials of BA by Camm, Fry, Williams
11. The analytics revolution: how to improve your business by making analytics operational in the big data era, Bill Franks. Hoboken: Wiley
12. Statistical data analysis explained: applied environmental statistics with R, Clemens Reimann. Chichester: John Wiley and Sons
13. Data Analytics using R, Seema Acharya, TMGH

Semester IV	407	SE BA – 11 Retail and e-Commerce Analytics
3 Credits	LTP: 2:1:1	407 Subject Elective (SC) Course –

Course Outcomes: On successful completion of the course, the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO407.1	REMEMBERING	Define key concepts and terminologies in retail and e-commerce analytics.
CO407.2	UNDERSTANDING	Explain the role and impact of analytics in retail and e-commerce decision-making.
CO407.3	APPLYING	Utilize analytical tools to interpret retail and e-commerce data for business insights.
CO407.4	EVALUATING	Assess the effectiveness of analytics-driven strategies in retail and e-commerce contexts.
CO407.5	CREATING	Develop innovative analytics solutions to address challenges in retail and e-commerce.

1. **Introduction to Retail and E-Commerce Analytics:** Evolution and significance of analytics in retail and e-commerce, Key performance indicators (KPIs) in retail and online businesses, Overview of retail formats and e-commerce business models (B2B, B2C, C2C), Role of analytics in customer acquisition, retention, and personalization, Case studies: Flipkart, Amazon India, Reliance Retail (6+2)
2. **Data Collection and Management:** Types of data: transactional, customer, behavioral, supplier and sellers' data, and inventory data, Data sources: POS systems, CRM, web analytics, social media, Data warehousing and ETL processes, Data privacy, security, and ethical considerations in India, Tools: SQL, Google Analytics, CRM platforms (6+2)
3. **Analytical Tools and Techniques:** Descriptive, predictive, and prescriptive analytics, Customer segmentation and RFM (Recency, Frequency, and Monetary value) analysis, Market basket analysis and recommendation systems, Pricing analytics and dynamic pricing strategies, Tools: Excel, Python (pandas, scikit-learn), R, Tableau (6+2)
4. **Applications in Retail and E-Commerce:** Inventory management and demand forecasting, Supply chain optimization using analytics, Personalization and customer journey mapping, Omni-channel analytics and integration, Case studies: Big Bazaar, Myntra, D-Mart (6+2)
5. **Emerging Trends and Strategic Implications:** Artificial Intelligence and Machine Learning (AIML) in retail, Chatbots and virtual assistants in customer service, Augmented Reality (AR) and Virtual Reality (VR) in shopping experiences, Ethical AI and data governance, Future of retail: phygital experiences and sustainability (6+2)

Suggested Text Books

1. Ecommerce Analytics: Analyze and Improve the Impact of Your Digital Strategy (FT Press Analytics) 1st Edition, Author: Judah Phillips, Publisher: FT Press
2. Retail Analytics: The Secret Weapon, Author: Emmett Cox, Publisher: Wiley

Suggested Reference Books

1. "Style & Statistics: The Art of Retail Analytics" Author: Brittany Bullard, Publisher: Wiley
2. "The New Science of Retailing", Authors: Marshall Fisher and Ananth Raman, Publisher: Harvard Business Press
3. Mastering Google Analytics 4 For Ecommerce Success: The Ultimate Guide to Measure Your Online Store, Author: Anton Koekemoer

Suggested Audio Visuals link

1. Retail Analytics Explained – Simplilearn
An overview of retail analytics concepts and applications.
Link: <https://www.youtube.com/watch?v=XYZ123>
2. E-Commerce Analytics Tutorial – Analytics Vidhya
A tutorial on key metrics and tools in e-commerce analytics.
Link: <https://www.youtube.com/watch?v=ABC456>
3. Data Analytics in Retail Industry – Great Learning
Insights into how data analytics is transforming retail.
Link: <https://www.youtube.com/watch?v=DEF789>
4. Google Analytics for E-Commerce – Google Analytics
Official guide to using GA for e-commerce tracking.
Link: <https://www.youtube.com/watch?v=GHI012>
5. AI in Retail and E-Commerce – TechTalks
Discussion on the impact of AI in retail and e-commerce sectors.
Link: <https://www.youtube.com/watch?v=JKL345>

Suggested Journals

1. "Real-Time Data Analytics in E-Commerce and Retail" by Naveen Bagam
Link: https://www.researchgate.net/publication/386072549_Real-Time_Data_Analytics_in_E-Commerce_and_Retail
2. "Artificial Intelligence In Retail And E-Commerce: Enhancing Customer Experience"
Link: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5057420
3. "Harnessing Real-Time Data Analytics for Strategic Customer Insights in E-Commerce and Retail"
Link: https://www.researchgate.net/publication/383561415_Harnessing_real-time_data_analytics_for_strategic_customer_insights_in_e-commerce_and_retail
4. "Application and Future of Data Analytics in Retail E-Commerce"
Link: <https://www.atlantispress.com/article/125983811.pdf>
5. "Data Analytics's Role in E-Commerce"
Link: <https://www.ijnrd.org/papers/IJNRD2312102.pdf>

Sem: IV	Course Code: 408	SE BA-12 Generative AI for Business Applications
Credit: 3	LTP : 2:1:0	Specialization Elective (SE) Course – Business Analytics

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 408.1	REMEMBERING	<i>Define</i> the core concepts, evolution, and components of Generative AI such as LLMs, GANs, and Transformers.
CO 408.2	UNDERSTANDING	<i>Explain</i> the application of Generative AI tools like ChatGPT, Midjourney, and DALL·E in diverse business domains such as sales, marketing, operations, and customer service.
CO 408.3	APPLYING	<i>Apply</i> Generative AI techniques for tasks like content generation, personalization, customer interaction, and data preparation in real-world business settings.
CO 408.4	ANALYSING	<i>Analyze</i> the impact of Generative AI on decision-making, productivity, and innovation in business functions such as HR, finance, and service delivery.
CO 408.5	EVALUATING	<i>Evaluate</i> ethical, legal, and strategic considerations while deploying Generative AI in organizations.
CO 408.6	CREATING	<i>Design</i> AI-enabled solutions and strategies that align with organizational goals and foster an AI-ready culture.

Unit 1: Fundamentals of Generative AI in Business - Define Generative AI, Evolution of AI: From Rule-Based Systems to Generative Models , Key Concepts: Large Language Models (LLMs), Agentic workflows and protocols like MCP, A2A, Generative Adversarial Networks (GANs), Transformers, Generative AI vs. Predictive AI, Common Tools in the Industry: ChatGPT, DALL·E, Midjourney, Claude, , Open-source Platforms (Hugging Face, LangChain), Stable diffusion too, Real-world Business Use Cases: Retail, Banking, Healthcare, Education. (7+1)

Unit 2: Generative AI in Sales and Marketing - AI-Driven Content Generation: Marketing Campaigns, Blog Posts, Social Media Captions, Email Writing, Personalization and Engagement: AI for Product Recommendations, Dynamic Pricing, Customer Journey Mapping, Virtual Assistants and AI Chatbots: AI in Pre-Sales and Customer Support, Conversational AI and NLP, Multimodal Multi-turn models, Planning and execution AI agents, Business Cases from E-Commerce and Financial Services. (9+1)

Unit 3: Generative AI in Product and Service Innovation -AI in Product Design: Generating Ideas, Creating Digital Prototypes, User Testing, AI in Market Research: Competitor Insights, Customer Trends, AI in report generation, AI for Superior Service: Automated Customer Support, Sentiment Detection, Feedback Systems, AI for “Retrieval augmented generation”, Use Cases: Telecom, Travel, and Hospitality, Embedding AI into Service Workflows.(9+1)

Unit 4: Generative AI in Business Analytics and Decision-Making -AI for Data Preparation: Synthetic Data Generation, Cleaning, and Preprocessing, Enhancing Business Intelligence: Automated Dashboards, Report Writing, Scenario Planning, AI in Decision Support: Strategic Insights for Managers, Forecasting, Business Simulations, Uncertainty estimations, Use Cases in HR, Finance, and Operations. (9+1)

Unit 5: Ethics, Risk, and Strategy in Generative AI - Ethical Concerns: AI Bias, Fake Content, Copyright Issues, Regulatory and Legal Aspects: GDPR, HIPAA, CCPA – Implications for Business, Responsible Use of AI in Business, Aligning AI with Business Goals, Explainability techniques like SHAP and LIME Preparing for the AI-Driven Workplace, Building an AI-Ready Culture and Workforce. (6+1)

Suggested Textbooks

1. Marr, B. (2024). *Generative AI in practice: 100+ amazing ways it is changing business and society*. Wiley.
2. Cronin, I. (2024). *Understanding generative AI business applications*. Apress.
3. Kurniawan, T. (2023). *AI for marketing and product innovation: Powerful new tools for predicting trends, connecting with customers, and closing sales*. Wiley.
4. Bhatnagar, R. (2024). *Artificial Intelligence and Generative AI for Business Applications*. McGraw-Hill Education India.
5. **Jain, V., & Sharma, P. (2023).** *Generative AI and Business Applications*. BPB Publications.

Sem IV	409	SE BA 13 Healthcare Analytics
Credit: 3	LTP : 2:1:1	Specialization Elective (SE) Course – Business Analytics

Course Objectives:

CO#	COGNITIVE ABILITIES	Particulars
CO 409.1	REMEMBERING	Understand the drivers for healthcare transformation and the role of data analytics in a data-driven healthcare system
CO 409.2	UNDERSTANDING	Identify and define key quality metrics and performance measurement frameworks used in healthcare
CO 409.3	APPLYING	Analyze and compare healthcare delivery systems using data-driven methods
CO 409.4	ANALYSING	Evaluate the impact of healthcare analytics on decision-making.
CO 409.5	EVALUATING	Creating data-driven recommendations to improve healthcare operations and outcomes

1. Introduction to Healthcare Analytics

Types of healthcare data, Electronic Health Records (EHR) roles, Biomedical image analysis, Basic Techniques for Healthcare Data Analytics, Advanced Techniques for Healthcare Analytics, Applications of Healthcare Analytics, Future of Healthcare Analytics. Big Data in Healthcare

2. Foundational Data Analysis Techniques

Data Cleaning and Preprocessing Techniques, Descriptive Statistics and Data Visualization for Healthcare Data, Statistical Modeling for Healthcare Analytics: Hypothesis Testing & Regression Analysis, Predictive Analytics in Healthcare, Data Mining Techniques for Healthcare Research

3. Social Media Analytics for Healthcare

Disease outbreak detection and tracking, Syndromic surveillance systems, Public health research trends, Sentiment analysis, Search queries and website access logs

Social media platforms (Twitter, blogs), Online doctor and patient communities

Legal and ethical considerations in using social media data for healthcare

4. Visual Analytics for Healthcare:

Visualizations for Healthcare Data, Clinical Data Exploration, Disease Pattern Recognition, Healthcare Decision Support, Communication of Healthcare Insights, Human-Computer Interaction (HCI) in Healthcare, Big Data Visualization for Healthcare

5. Fraud Detection in Healthcare

Understanding Fraud in the Healthcare System, Definition and Types of Healthcare Fraud, Identifying Healthcare Fraud from Data Ethical Considerations in Healthcare Data Analytics: Data privacy and security concerns in healthcare, Ethical considerations in using patient data, Regulatory compliance in healthcare data analysis

Suggestive Book References:

1. Healthcare Management and Administration, S.L. Goel, Deep & Deep Publications Pvt. Ltd. New Delhi
2. Industrial and Labour Laws, S. P. Jain
3. Guide on Labour Management forms and precedents (Law, Practice and Procedure), S D Puri, Snow white publication
4. Introduction of Labour and Industrial Laws, Avatar Singh
5. Elements of Mercantile Law, N. D. Kapoor, Sultan Chand

Sem IV	410	410- Predictive Analytics and Machine learning using Python
Credit: 3	LTP : 2:1:1	Specialization Elective (SE) Course – Business Analytics

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 410.1	REMEMBERING	Recall key concepts, types, and terminologies of predictive analytics and machine learning.
CO 410.2	UNDERSTANDING	Explain the working of various supervised and unsupervised ML algorithms.
CO 410.3	APPLYING	Implement predictive models using Python on structured datasets.
CO 410.4	ANALYSING	Analyze and evaluate the performance of different ML models.
CO 410.5	EVALUATING	Compare multiple models and select the most appropriate algorithm for a given problem.
CO 410.6	CREATING	Design and develop a predictive model pipeline using Python libraries and tools.

Unit 1: Introduction to Predictive Analytics and Python Basics

Introduction to Predictive Analytics and its Applications in Business, Types of Predictive Models (Regression, Classification, Time Series, Clustering), Python Basics for Data Science: Lists, Dictionaries, Functions, Loops, Introduction to Jupiter Notebook and Anaconda, Libraries: NumPy, Pandas, Matplotlib, Seaborn, Exploratory Data Analysis (EDA) using Pandas and Visualization Libraries (7+2)

Unit 2: Data Preprocessing and Feature Engineering

Understanding Data Types and Handling Missing Values, Data Cleaning Techniques, Encoding Categorical Variables (Label Encoding, One-Hot Encoding), Feature Scaling: Standardization and Normalization, Feature Selection Techniques (Correlation, Chi-Square) (7+2)

Unit 3: Supervised Machine Learning Techniques

Regression Models: Linear Regression, Multiple Linear Regression, Ridge & Lasso Regression, Classification Models: Logistic Regression, K-Nearest Neighbours (KNN), Decision Trees, Random Forest, SVM, Model Evaluation Metrics: RMSE, R², Accuracy, Precision, Recall, F1-Score, ROC-AUC, Hyperparameter Tuning using Grid Search CV and Randomized Search CV, Train-Test Split and Cross-Validation (7+2)

Unit 4: Unsupervised Learning and Clustering

Introduction to Unsupervised Learning, Clustering Techniques: K-Means, Hierarchical Clustering, DBSCAN, Evaluation of Clustering Models: Elbow Method, Dimensionality Reduction: Principal Component Analysis (PCA), Use Cases: Customer Segmentation, Market Basket Analysis (7+2)

Unit 5: End-to-End ML Project Development & Ethical Considerations

Designing a Machine Learning Workflow, Model Deployment Introduction: Using Pickle, Case Study: End-to-End Business Problem Solving using ML, Introduction to Responsible AI and Bias in Machine Learning, Privacy and Ethical Implications of Predictive Analytics (7+2)

Suggested Text Books:

1. Machine Learning using Python - Manaranjan Pradhan, U Dinesh Kumar
2. Ultimate Step by Step Guide to Machine Language using Python: Predictive modelling concepts explained in simple terms for beginners by Daneyal Anis
3. Machine Learning by Anuradha Srinivasaraghavan and Vincy Joseph
4. Machine Learning in Python – Michael Bowles
6. Machine Learning for Absolute Beginners: A Plain English Introduction (First Edition by Oliver Theobald)

Suggested Reference Books

1. Python Machine Learning, Sebastian Raschka
2. Introduction to Machine Learning with Python, Andreas Müller & Sarah Guido
3. Machine Learning: A Probabilistic Perspective , Kevin P. Murphy
4. Python for Data Analysis by Wes McKinney
5. Machine Learning by Peter Flach
6. Machine Learning: A step-by-Step Guide to Learning and Understanding from Beginner to Expert (Beginner, Intermediate and Advanced) – Ronald Anthony

Semester III	411	SE BA 15 Sports Analytics
2 Credits	LTP: 2:1:1	Subject Elective (SC) Course – Sports Analytics

Course Outcomes: On successful completion of the course, the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 411.1	REMEMBERING	Recall and define key terms, elements, concepts, and historical developments in sports analytics.
CO 411.2	UNDERSTANDING	Explain the role of data in sports, including sources, types, and ethical considerations in the Indian and global context.
CO 411.3	APPLYING	Use tools like Excel, Python, and Tableau to perform basic analysis on real-world sports datasets and interpret results.
CO 411.4	EVALUATING	Critically assess team strategies, player performance, and business decisions using statistical models and performance metrics.
CO 411.5	CREATING	Design and present a comprehensive sports analytics project involving data collection, analysis, visualization, and actionable recommendations.

1. **Introduction to Sports Analytics:** History and evolution of sports analytics, Key stakeholders and their roles: Govt, Regulatory bodies, teams, coach and mentors, leagues, fans, media, sponsors, Types of analytics: Descriptive, Predictive, Prescriptive, Importance of data in sports decision-making, Overview of popular sports: Cricket, Football, Kabaddi, Tennis, eSports, etc., Case studies: Moneyball, IPL data revolution, Pro Kabaddi League (5+1)
2. **Data Collection and Management in Sports:** Data types: Player profiles and stats, biometric data, videos, GPS, social media, fan engagement, Data sources: Wearables, IoT, recorded matches and practice sessions, performance

software (e.g., Catapult, Hudl), Data storage, cleaning, and preprocessing techniques, Ethical considerations and data privacy in sports, Indian sports databases: BCCI, ISL, PKL, Olympic associations (5+2)

3. **Statistical and Analytical Tools:** Key statistical concepts used in sports, Excel for sports data analysis, Introduction to R / Python (basic libraries: pandas, matplotlib, seaborn), Performance metrics: Batting/Bowling averages, xG (expected goals), PER (Player Efficiency Rating), etc., Visualization techniques (dashboards using such as Tableau / Power BI) (5+1)
4. **Applications in Team and Player Performance:** Player scouting and recruitment using analytics, In-game strategy and decision-making, Injury prediction and load management, Opponent analysis and match preparation, Case Studies: IPL auction analytics, Football formations, Olympic athlete preparation (5+2)
5. **Business and Fan Engagement Analytics:** Sports marketing and sponsorship analytics, Revenue generation models, Ticket pricing and sales optimization, Social media and sentiment analysis, Fantasy sports and betting trends (with ethical/legal overview), Fan experience, loyalty, and CRM in stadiums and digital platforms, Indian case study: Dream11, Hotstar engagement metrics, stadium attendance trends (4+2)

Suggested Text Books

1. "Sports Analytics: A Guide for Coaches, Managers, and Other Decision Makers", Author: Benjamin C. Alamar, Publisher: Columbia University Press
2. "Analytics in Sport: How Do You Measure Success?", Author: Peter O'Donoghue, Publisher: Routledge
3. "Moneyball: The Art of Winning an Unfair Game", Author: Michael Lewis, Publisher: W. W. Norton & Company

Suggested Reference Books

1. "Statistical Sports Models in Excel", Author: Andrew Mack
2. "Data Science and Sports Performance: Using Data to Improve Sports Performance", Authors: David Sumpter / Daniel Memmert
3. "The Numbers Game: Why Everything You Know About Football is Wrong", Authors: Chris Anderson and David Sally
4. "Cricket Analytics", Author: Hemant Buch (Indian context)
5. "Sport Business Analytics: Using Data to Increase Revenue and Improve Operational Efficiency", Editor: C. Keith Harrison
6. "Python for Data Analysis", Author: Wes McKinney
7. "Storytelling with Data: A Data Visualization Guide for Business Professionals", Author: Cole Nussbaumer Knaflic

Suggested Audio Visuals link

1. **How I Would Learn Sports Analytics (If I Could Start Over)**
A comprehensive guide on initiating a career in sports analytics, covering essential skills and resources.
<https://www.youtube.com/watch?v=BD63DcLvT1w>
2. **Game-Changing Data: The Evolution of Sports Analytics**
An insightful discussion on the transformation of sports analytics over the years.
<https://www.youtube.com/watch?v=wRcRlp1U5pE>
3. **Intro to Sports Analytics**
A beginner-friendly introduction to the field of sports analytics.
4. **Sports Video Analytics - Improving Your Team With Data - Chapter 4**
Explores the role of video analytics in enhancing team performance.
<https://www.youtube.com/watch?v=-hIQkwwgz2U>
5. **How to get started in Sport Analytics (Python, R, SQL, Visualisations)**
Guides on the technical tools and skills required for data management in sports analytics.

Suggested Journals

1. A review paper on the emerging trends in sports analytics in India, Samrat Ray, https://www.researchgate.net/publication/373101915_A_review_paper_on_the_emerging_trends_in_sports_analytics_in_India

2. Action Spotting and Precise Event Detection in Sports: Datasets, Methods, and Challenges", Authors: Hao Xu et al. <https://arxiv.org/abs/2505.03991>
3. Sports Analytics: A Review, ResearchGate, https://www.researchgate.net/publication/345937877_Sport_Analytics_A_Review
4. Transforming Indian Sports with AI and Data Science, <https://www.ijert.org/papers/IJCRT24A4309.pdf>

Sem IV	412	SE BA 16 Business Applications of Blockchain Technologies
Credit: 3	LTP : 2:1:1	Specialization Elective (SE) Course – Business Analytics

Course Objectives:

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 412.1	REMEMBERING	Memorizing the principles of blockchain technology
CO 412.2	UNDERSTANDING	Understanding basic blockchain functionalities using development tools or platforms
CO 412.3	APPLYING	Analyze the scalability and sustainability challenges associated with different blockchain implementations
CO 412.4	ANALYSING	Articulate the ethical considerations surrounding blockchain technology and its applications
CO 412.5	EVALUATING	Designing novel business models that leverage blockchain technology for competitive advantage.

1 Introduction to Block Chain, Block Chain Applications in management

Introduction to Block Chain, Blockchain – fundamentals, evolution-history, uses, application areas, Block Chain: The Indian Imperative (Introduction to Cryptographic Algorithms, Public-Private key, Digital Signature, Digital Certificates, Hashing), Blockchain components and applications, Blocks, transactions, distributed ledger, Mining, Block Chain in E-Governance, Block Chain Currency (Cryptocurrency), Introduction to Blockchain Pillars, Block Chain: The Indian Imperative

2 Bitcoin Blockchain

Introduction to Bitcoin, Bitcoin Wallets, Bitcoin Block, Bitcoin Transaction, Bitcoin Scripts, Bitcoin Attacks, Bitcoin Network, Bitcoin Mining

3. Ethereum Blockchain

Introduction to Ethereum, Swarm and whisper, Remix IDE, Truffle Framework, Ethereum Networks, Ethereum Wallets, Ethereum Clients, Web3.js, NFT

4 Enterprises Blockchain

Enterprise Blockchain, Hyperledger, Hyperledger Sawtooth, Hyperledger Iroha, Hyperledger Indy, Hyperledger Burrows, Hyperledger Fabric, Hyperledger Fabric Transaction, Fabric Network, Fabric Network Types, Fabric Explorer, Node Js, R3 Corda, Corda Network

5 Multichain

Introduction to Multichain, Multichain Installation, Create a Multichain Instance, Multichain Assets, Multichain Streams, Multichain Consensus, Multichain API

Suggestive Book References:

1. Mastering Blockchain: Inner workings of blockchain, from cryptography and decentralized identities, to DeFi, NFTs and Web3, 4th Edition
2. Blockchain and the Supply Chain: Concepts, Strategies and Practical Applications
3. Blockchain Principles and Applications in IoT Rajdeep Chakraborty, Anupam Ghosh, Valentina Emilia Balas and Ahmed A. Elnga
4. Blockchain Technology: Exploring Opportunities, Challenges, and Applications Sonali Vyas, Vinod Kumar Shukla, Shaurya Gupta, Ajay Prasad

AGRI BUSINESS MANAGEMENT							
Specialization Core Courses							
Sem_Splz Code	Course Code	Course	Semester	Credits	FA	SA	Total Marks
302 ABM	SC ABM- 01	Agriculture and Indian Economy	III	3	50	50	100
403 ABM	SC ABM- 02	ICT for Agriculture	IV	3	50	50	100
				6	100	100	200
Specialization Elective Courses - Semester III (Any 4 to be opted for)							
304 ABM	SE ABM- 01	Agricultural Marketing Management	III	3	50	50	100
305 ABM	SE ABM- 02	Rural Marketing	III	3	50	50	100
306 ABM	SE ABM- 03	Rural Banking	III	3	50	50	100
307 ABM	SE ABM- 04	Agri- Insurance	III	3	50	50	100
308 ABM	SE ABM- 05	Agri- Supply Chain Management	III	3	50	50	100
309 ABM	SE ABM- 06	Agricultural Import Export	III	3	50	50	100
310 ABM	SE ABM- 07	Current trends in Agriculture	III	3	50	50	100
311 ABM	SE ABM- 08	Agri- Entrepreneurship & Startup Management	III	3	50	50	100
				12	200	200	400
Specialization Elective Courses - Semester IV (Any 4 to be opted for)							
405 ABM	SE ABM- 09	Food Retail management	IV	3	50	50	100
406 ABM	SE ABM- 10	Agri- Input Marketing	IV	3	50	50	100
407 ABM	SE ABM- 11	Microfinance	IV	3	50	50	100
408 ABM	SE ABM- 12	Commodity derivatives and Risk Management	IV	3	50	50	100
409 ABM	SE ABM- 13	Procurement Management	IV	3	50	50	100
410 ABM	SE ABM- 14	Agri- Production, Planning and Control	IV	3	50	50	100
411 ABM	SE ABM- 15	Management of Allied Agro Industries	IV	3	50	50	100
412 ABM	SE ABM- 16	Agri- Cooperative Management	IV	3	50	50	100
				12	200	200	400
				30	500	500	1000

Specialization: Agri Business Management

Semester III	302 ABM	SC ABM 01: Agriculture and Indian Economy
3 Credits	LTP: 2:0:2	Subject Core (SC) Course- Agri Business Management

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO302ABM.1	REMEMBERING	DEFINE the key terms in Indian Agriculture/Land Reforms/ economic holding.
CO302ABM.2	UNDERSTANDING	EXPLAIN the key terms in the place of agriculture in the national economy/ The present position of Indian Agriculture with an advanced management perspective.
CO302ABM.3	APPLYING	IDENTIFY the various issues in the Agriculture Industry in India. DEMONSTRATE their significance from the perspective of Indian farmer & Indian Economy & business decision making.
CO302ABM.4	ANALYSING	EXAMINE the inter-relationships between various facets of Agriculture & economy from the perspective of a farmer, Labour, firm, industry, market, competition and business cycles.
CO302ABM.5	EVALUATING	DEVELOP critical thinking based on changing pattern of ownership and operational holdings in India, Farms size, Productivity/ Profitability and farm efficiency
CO302ABM.6	CREATING	ANTICIPATE how other firms in an industry and consumers will respond to economic decisions made by a business, and how to incorporate these responses into their own decisions.

- Indian Agriculture under the Five-Year Plans:** The Green Revolution, The place of agriculture in the national economy, progress of agriculture under the Five-Year Plans, Present position of Indian Agriculture: Looming Crisis, New Thrust Areas in Agriculture, National Commissions of Farmers and Green Revolution, Crop Pattern in India since 1951. (7+1)
- Food Security in India:** Green Revolution, Second Green Revolution – the future prospects, Concept of Food Security, Food self-sufficiency and food security, Poverty and need for Public Distribution Systems, Policy Options for reforms of PDS, Food Insecurity at Global level, Food Security Act – Salient features and implications. (7+1)
- Irrigation and other agricultural inputs:** Irrigation, multipurpose river valley project - a controversy, irrigation in the 12th plan, private sector participation in irrigation, fertilizers and manures, improved seeds, soil conservation and reclamation, livestock and dairy development, mechanization of agriculture. (7+1)
- Land Reforms:** The need and scope for land reforms in a developing economy, the abolition of intermediaries, tenancy reforms, ceiling on land holdings, an appraisal of land reforms. Size of Farms and Productive Efficiency: Meaning of economic holding, changing pattern of ownership and operational holdings in India, Farms size, Productivity/ Profitability and farm efficiency, the problem of sub division and fragmentation of holdings, cooperative farming. (7+1)
- Agriculture Labour:** Present position of agricultural Labour in India, Agricultural Labour and Minimum Wages, Abolition of Bonded Labour, Recommendations of National Commissions on Rural Labour (NCRL). (7+1)

Suggested Text Books:

- Indian Economy, Datt and Sundharam, S Chand
- Indian Economy Since Independence, edited by Uma Kapila, Academic Foundation
- Indian Agriculture - issues and perspectives, Edited by N Janardhana Rao, ICFAI University Press

Suggested Reference Books:

- Adhikary M. 1986. Economic Environment of Business. S. Chand & Sons.
- Aswathappa K. 1997. Essentials of Business Environment. Himalaya Publications
- Francis Cherunilam 2003. Business Environment. Himalaya Publications

Semester III	304 ABM	SE ABM 01: Agricultural Marketing Management
3 Credits	LTP: 2:0:2	Subject Elective Agri Business Management Specialization

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO304ABM.1	REMEMBERING	Define key concepts and terminology related to agricultural marketing, including the nature, scope, and objectives.
CO304ABM.2	UNDERSTANDING	Understand the role of market intelligence, product management, and product development in agricultural marketing.
CO304ABM.3	APPLYING	Apply knowledge of pricing strategies and factors influencing pricing decisions to determine agricultural prices and marketing margins.
CO304ABM.4	ANALYSING	Analyse promotional management techniques like advertising, sales promotion, and standardization.
CO304ABM.5	EVALUATING	Evaluate distribution management practices, including storage, warehousing, and the roles of marketing agencies and intermediaries.
CO304ABM.6	CREATING	Develop marketing strategies for agricultural products, incorporating market intelligence, product development, pricing, promotion, and

1. **Introduction to Agricultural Marketing:** Definition of Market and agricultural marketing, Understanding Agricultural Markets, Nature & scope, Objectives of Agriculture Marketing, Organizations and functions of agricultural marketing in India. Difference between consumer, industrial and agricultural markets. (7+1)
2. **Product Development:** Role, importance and concepts of market intelligence, critical review of market intelligence and news service, Product management - product management process and decisions, new product development – significance and classification of new product, stages and estimation of demand of new product; product life cycle. (7+1)
3. **Pricing of Agricultural Commodities Pricing Decisions:** Agricultural price terminology, administered prices including support prices, Factors influencing pricing decisions. Determination of agricultural prices and marketing margins, Role of agricultural price commission Various pricing strategies, Concept of Value and Value Addition; Pricing in Competitive Environment. (7+1)
4. **Promotional management:** advertising planning and execution; sales promotion; grading and standardization. (7+1)
5. **Distribution management:** storage and warehousing and transportation management for agricultural products; marketing agencies/intermediaries – roles and functions; distribution channels involved in agribusiness. (7+1)

Suggested Text Books:

1. Marketing of Agricultural Products by Richard Louis Kohls, Joseph N. Uhl, Person Publication, 9thEdition.
2. Agriculture Marketing in India by S. S. Acharya & N.L. Agarwal , Oxford & IBH Publishing Co. Pvt. Ltd New Delhi, 4thEdition

Suggested Reference Books:

1. New Perspective in Rural & Agricultural Marketing by Ramkishen Y., Jaico Publishing House, 2ndEdition
2. Introduction to Agribusiness Marketing by George Seperich, Michael Woolverton, James Beierlein, Pearson Education.
3. Rural Agriculture & Marketing by S.B. Verma, S.K. Jiloka & Mandal, Deep & Deep Publication Pvt. Ltd.
4. Agricultural Communications Changes & Challenges by Kristina Boone, Terry Meisenbach and Mark Tucker, Surjeet Publication

Semester III	305 ABM	SE ABM 02: Rural Marketing
3 Credits	LTP: 2:0:2	Subject Elective Agri Business Management Specialization

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO305ABM.1	REMEMBERING	Recall key concepts and components of rural marketing including market environment, consumer behaviour, segmentation, and distribution challenges.

CO305ABM.2	UNDERSTANDING	Grasp the evolution of rural marketing, rural economic structures, and the impact of PEST analysis on rural marketing strategies.
CO305ABM.3	APPLYING	Apply knowledge of rural consumer behaviour, segmentation, and targeting strategies to design effective marketing campaigns for rural markets.
CO305ABM.4	ANALYSING	Analyse pricing strategies, distribution challenges, and communication methods specific to rural markets.
CO305ABM.5	EVALUATING	Evaluate the effectiveness of product strategies, branding approaches, and credit systems in rural marketing contexts.
CO305ABM.6	CREATING	Develop comprehensive rural marketing strategies integrating product development, pricing, distribution, and communication tailored for rural markets.

1. **Introduction to Rural Marketing:** Defining rural markets & rural marketing, evolution of rural marketing. Rural Marketing Environment – PEST analysis. Rural Economic Structure, Rural Occupation Pattern, Incomes & Consumption, Rural market Size. Rural Infrastructure. (7+1)
2. **Rural Consumer Behaviour & Marketing Research:** Characteristics of Rural Consumers, Role of Opinion Leaders, Diffusion of Innovation in Rural Markets. Sources & Type of Secondary Data on Rural markets. Collecting Primary Data in Rural setting. (7+1)
3. **Segmentation, Targeting & Positioning:** Bases of Segmenting Rural Markets. Target Marketing, Coverage of Markets. Positioning in Rural Markets. (7+1)
4. **Product & Pricing Strategy in Rural Markets:** Rural Product Categories, Packaging for Rural Markets, Branding in Rural Markets, Problem of Fake Brands. Pricing Strategy – special considerations in rural markets. Credit in rural markets – need, sources & innovative credit delivery systems. (7+1)
5. **Rural Distribution & Communication:** Challenges of distribution in Rural markets, Rural Retail System – last mile problem, public distribution system, cooperatives. Emerging Models in Rural Markets: E-Chaupal, Project Shakti. Challenges for Rural Communication: Massage & Media for Rural Communication. (7+1)

Suggested Text Books:

1. Rural Marketing – Text and Cases, Krishnamacharyulu and Ramakrishnan, Pearson
2. Rural Marketing – Concept and Practices, Dogra and Ghuman, TMGH
3. Rural Marketing, Velayudhan, Sage
4. Rural Marketing, Gopaldaswamy, Vikas Publishing house
5. Rural Marketing in India, Habeeb - ur – Rahman, Himalaya Publishing House
6. Rural Marketing Text and Cases, S L Gupta, Wisdom Publications

Suggested Reference Book:

1. Singh AK & Pandey S. 2005. Rural Marketing. New Age. Singh Sukhpal. 2004.
2. Rural Marketing. Vikas Publishing House.

Semester III	306 ABM	SE ABM 03: Rural Banking
3 Credits	LTP: 2:0:2	Subject Elective Agri Business Management Specialization

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO306ABM.1	REMEMBERING	Recall key regulatory bodies overseeing Rural Financial Institutions (RFIs) and their roles, including the functions of NABARD in rural development.
CO306ABM.2	UNDERSTANDING	Understand the genesis, evolution, and challenges faced by Regional Rural Banks (RRBs), along with policy interventions and reforms suggested by various committees.

CO306ABM.3	APPLYING	Apply knowledge of cooperative banking structures and the implications of the draft Co-operatives Bill in enhancing rural financial inclusion.
CO306ABM.4	ANALYSING	Analyse the role of commercial banks in rural economies, including their lending practices, operational challenges, and compliance with regulatory norms.
CO306ABM.5	EVALUATING	Evaluate recent policy reforms affecting rural financial institutions and their potential impacts on rural branch operations and financial inclusion.
CO306ABM.6	CREATING	Develop strategies and recommendations for improving the effectiveness of Rural Local Area Banks (LABs) and alternative credit mechanisms in rural finance, based on case studies and experiences

1. **Regulation and Policy Framework in Rural Financial Services: Regulatory Framework of Rural Financial Institutions (RFIs):** Overview of regulatory bodies governing RFIs, Role of Reserve Bank of India (RBI) in regulating rural banking. **National Bank for Agriculture and Rural Development (NABARD):** NABARD's mandate and functions in rural development, Impact of economic liberalization on rural banking policies. (7+1)
2. **Regional Rural Banks (RRBs): Introduction to Regional Rural Banks (RRBs):** Historical background and rationale for establishing RRBs, Key Policy Initiatives and Reforms, Structure and Governance of RRBs, Role of RRBs in Agri-Business and Rural Development, Challenges and Future Prospects of RRBs. (7+1)
3. **Co-operative Banks in Rural Financial Inclusion: Introduction to Cooperative Banks** Definition, Concept, and Objectives, Structure of Cooperative Banking in India: Three-Tier Structure: Primary Agricultural Credit Societies (PACS), District Central Cooperative Banks (DCCBs), State Cooperative Banks (SCBs), Role in Agricultural and Rural Finance, Regulatory and Governance Framework: Role of Reserve Bank of India (RBI) and National Bank for Agriculture and Rural Development (NABARD), Challenges in Cooperative Banking, Digital Transformation in Cooperative Banking (7+1)
4. **Commercial Banks' Role in Rural Economy: Rural Lending by Commercial Banks:** Practices and challenges in rural branch operations, Transaction costs and risk management in rural financing. **Policy Reforms and Strategic Shifts:** Recent policy changes and their implications for rural branches, Compliance with prudential norms in rural lending. (7+1)
5. **Emerging Trends in Rural Financial Institutions: Local Area Banks and Other Financial Institutions:** Genesis and regulatory guidelines for Rural Local Area Banks (LABs), Role and impact of private banks and non-banking financial companies (NBFCs) in rural finance. (7+1)

Suggested Text Books:

1. Banking – Dharmaraj E – Scitech Publications
2. R.M. Srivastava: Management of Financial Institutions in India

Suggested Reference Book:

1. Indian Economy – Datt, Sundaram – S.Chand& Sons,
2. Indian Economic Problem – Amitabh Bhattacharya – Metropolitan Publications,
3. Vasant Desai: Nature and problems of Commercial Banking in India.
4. Vasant Desai: Development Banks: Issues and Options

Websites

1. www.nabard.org
2. www.banknetindia.com
3. www.rbi.org.in
4. www.iba.org

Semester III	307 ABM	SE ABM 04: Agri- Insurance
3 Credits	LTP: 2:0:2	Subject Elective Agri Business Management Specialization

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO307ABM.1	REMEMBERING	Recall insurance products, key players, and major agricultural insurance schemes.
CO307ABM.2	UNDERSTANDING	Understand agricultural insurance principles, importance, and regulatory roles.
CO307ABM.3	APPLYING	Use knowledge of policies to assess insurance offerings for rural development.
CO307ABM.4	ANALYSING	Analyse climate change impacts, insurance evolution, and government schemes.
CO307ABM.5	EVALUATING	Evaluate challenges, future outlook, and digital innovations in agricultural insurance.
CO307ABM.6	CREATING	Develop strategies for loss management and improve government-supported insurance policies.

1. **Fundamentals of Insurance: Overview of Insurance Products:** Understanding various insurance offerings and policy types. **Regulatory Framework:** Role and functions of the Insurance Regulatory and Development Authority (IRDA). **Insurance Industry in India:** Analysing the landscape and key players in the Indian insurance market. **General Insurance Coverage:** Exploring types of liabilities, insurance value assessment, and policy conditions. **Insurance Marketing Channels:** Identifying and evaluating the roles of insurance agents, distributors, and other channel members. (7+1)
2. **Agricultural Insurance Essentials: Concept and Definition:** Fundamental principles and definitions of agricultural insurance. **Importance for Rural Areas:** The necessity and benefits of agricultural insurance in rural development. **Government Support Mechanisms:** Strategies and policies for government assistance in agricultural insurance. **Product Classification:** Different types of agricultural insurance products and their characteristics. **Challenges and Future Outlook:** Analysing the current issues and potential developments in agricultural insurance. (7+1)
3. **Agricultural Risks and Crop Insurance: Agricultural Risk Factors:** Identifying and understanding various risks faced in agriculture. **Impact of Climate Change:** How climate change affects agricultural risks and strategies for adaptation. **Digital and Technological Innovations:** The role of technology in managing agricultural risks and insurance. **Historical Development of Crop Insurance:** A detailed look at the evolution of crop insurance in India. **Key Insurance Schemes in India.** (7+1)
4. **Livestock and Poultry Insurance: Evolution of Livestock Insurance:** Historical perspective on cattle insurance in India. **Livestock Insurance Policies:** In-depth study of cattle insurance policies and central government schemes. **Loss Management:** Techniques for loss assessment, settlement, and minimization in livestock insurance. **Poultry Insurance History:** Development and significance of poultry insurance in India. **Poultry Insurance Policies:** Policy details, market agreements, underwriting processes, and loss management. (7+1)
5. **Government-Sponsored Schemes: Pradhan Mantri Fasal Bima Yojana (PMFBY):** Objectives, key features, coverage details, and premium rates. **Modified National Agriculture Insurance Scheme (MNAIS):** Goals, crop coverage, risk assessment, and indemnity specifics. **Weather-Based Crop Insurance Scheme (WBCIS):** Aims, crops and perils covered, and implementation strategy. **Comparative Analysis:** Comparing different government schemes and their impacts on agricultural insurance. (7+1)

Suggested Text Books:

1. Agriculture, Food Security & Rural Development, Asian Development Bank
2. Agriculture Risk & Insurance in India, Dr. S. S Raju & Dr. Ramesh Chand, NCAEPR, New Delhi, 2010, Books for Development, Bangalore
3. Adaptation to Climate Change and Insurance, Agricultural Insurance Training – Manual
4. Agricultural insurance (2006), K. N. Rao, Insurance Institute of India, Mumbai
5. Agriculture Insurance (2000), Poojari P.C., Insurance Institute of India, Mumbai
6. Agriculture Insurance (1994), Musafir, Rai

Suggested Reference Book:

1. Government Support to Agricultural Insurance, Mahul, Olivier; Stutley, Charles
2. Agricultural Insurance Theory and Practice and Application to Developing Countries, P. K. Ray, Pergamon Press
3. Economics of Agricultural Crop Insurance: Theory and Evidence, Darrell L. Hueth University of Maryland
William H. Furtan University of Saskatchewan, Springer- Science + Business Media, LLC
4. Knowledge Paper Released at National Conference on Accelerating Agriculture Insurance, 2018, FICCI.

Semester III	308 ABM	SE ABM 05: Agri- Supply Chain Management
3 Credits	LTP: 2:0:2	Subject Elective Agri Business Management Specialization

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO308ABM.1	REMEMBERING	Recall key concepts and elements of supply chain management, including traditional and modern agricultural practices.
CO308ABM.2	UNDERSTANDING	Understand demand planning, forecasting, and operational management strategies in supply chains.
CO308ABM.3	APPLYING	Apply procurement and inventory techniques such as MRP, JIT, and VMI to supply chain scenarios.
CO308ABM.4	ANALYSING	Analyse logistics and distribution strategies, including transportation, fleet management, and warehousing.
CO308ABM.5	EVALUATING	Evaluate technology applications and benchmarking methods to measure supply chain performance.
CO308ABM.6	CREATING	Develop innovative IT solutions and logistics strategies for efficient agricultural supply chain management.

1. **Foundations of Supply Chain Management:** Adapting to the Changing Business Environment, The Current Necessity of SCM, Conceptual Framework of Supply Chain Management, The Evolutionary Path of SCM, Various Approaches to SCM, Traditional versus Modern Agricultural Supply Chain Management Practices, Key Elements in Supply Chain Management. (7+1)
2. **Demand and Operations Management:** Understanding Different Types of Demand, Strategies for Demand Planning and Forecasting, Operational Strategies in Supply Chain Management, Fundamental Principles of Manufacturing Management. (7+1)
3. **Procurement and Inventory Management:** Steps in the Purchasing Cycle, Various Types of Purchases, Contract and Corporate Farming Practices, Classification of Goods and Services Purchased, Conventional Inventory Management Techniques, Material Requirements Planning (MRP), Just-in-Time (JIT) Inventory, Vendor Managed Inventory (VMI). (7+1)
4. **Logistics and Distribution:** Historical Overview of Logistics, Key Components of Logistics Management, Strategies for Distribution Management, Pool Distribution Methods, Transportation and Fleet Management, Innovations in Logistics Services, Warehousing Solutions, Packaging Strategies for Logistics, Utilization of Third-Party Logistics (TPL/3PL), Implementation of GPS Technology. (7+1)
5. **Technology and Performance in SCM:** Applications of Information Technology in SCM, Techniques for Advanced Planning and Scheduling, Integrating SCM with Electronic Business, The Role of Knowledge Management in SCM, Methods for Performance Measurement and Control in Agricultural Supply Chains, Introduction and Concepts of Benchmarking, Various Forms of Benchmarking. (7+1)

Suggested Text Books:

1. Altekarr RV. 2006. Supply Chain Management: Concepts and Cases. Prentice Hall of India.
2. Monczka R, Trent R & Handfield R. 2002. Purchasing and Supply Chain Management. Cengage Asia.

Suggested Reference Book:

1. van Weele AJ. 2000. Purchasing and Supply Chain Management Analysis, Planning and Practice. Vikas Publ. House

Semester III	309 ABM	SE ABM 06: Agricultural Import Export
3 Credits	LTP: 2:0:2	Subject Elective Agri Business Management Specialization

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO309ABM.1	REMEMBERING	Define key concepts in agricultural trade, including import, export, and trade regulations, and identify main export and import products in India.
CO309ABM.2	UNDERSTANDING	Explain the benefits of agricultural trade, the role of trade policies, and the importance of meeting international quality standards.
CO309ABM.3	APPLYING	Demonstrate the steps and documentation required for exporting and importing agricultural products, and manage the logistics and supply chain of these activities.
CO309ABM.4	ANALYSING	Analyse trade barriers, tariffs, and the impact of global market dynamics on Indian agricultural trade.
CO309ABM.5	EVALUATING	Assess government support programs, financing options, and insurance needs for agricultural trade activities.
CO309ABM.6	CREATING	Develop effective strategies for entering foreign markets, leveraging digital tools, and ensuring sustainable trade practices in response to future trends and opportunities.

1. **Basics of Agricultural Trade:** Introduction to Trade: What is import and export in agriculture? Why Trade Matters: Benefits of trading agricultural products. Rules and Regulations: Basic laws and guidelines for international trade. India's Trade Policies: How India manages agricultural trade. Global Markets: Understanding the global trade environment. (7+1)
2. **Exporting Agricultural Products from India:** Main Export Products: Key crops and products India exports, like spices and tea. How to Export: Simple steps and necessary documents for exporting. Government Support: Overview of government help for exporters. Quality Standards: Importance of meeting international quality requirements. Finding Markets: Tips for entering and succeeding in foreign markets. (7+1)
3. **Importing Agricultural Products into India:** Main Import Products: Key agricultural products India imports. How to Import: Simple steps and necessary documents for importing. Costs and Barriers: Understanding tariffs and trade barriers. Supply Chain Basics: Managing the logistics of importing goods. Dealing with Risks: Basic risk management in importing. (7+1)
4. **Trade Finance and Documentation:** Financing Trade: Simple ways to finance import and export activities. Essential Documents: Key documents needed for trade transactions. Customs Basics: Understanding customs procedures. Insurance: Why and how to insure trade transactions. Currency Exchange: Basics of dealing with currency changes in trade. (7+1)
5. **Future Trends and Opportunities:** Technology in Trade: How digital tools are changing agricultural trade. Sustainable Practices: Importance of eco-friendly trade practices. Climate Impact: How climate change affects trade. Trade Agreements: Basic overview of trade deals affecting agriculture. Looking Ahead: Future trends in Indian agricultural trade. (7+1)

Suggested Text Books:

1. Indian Economy, Dutt R and Sundharam K.P.M, S. Chand, Delhi
2. Indian Economy, Agarwal A. N., Vikas Publishing House, Delhi
3. Indian Economy, Misra S.K. and Pury V.K., Himalaya Publishing House, New Delhi

Suggested Reference Book:

1. Dynamics of International Trade and Economy: An Inquiry Into Emerging Markets, Rajagopal, Nova Science Publishing

2. International Trade and Agriculture: Theories and Practices, Won W. Koo, P. Lynn Kennedy, Blackwell Publishing
3. Agriculture and International Trade: Law, Policy and the WTO, Michael N. Cardwell, Margaret Rosso Grossman, C. P. Rodger, CABI Publishing

Semester III	310 ABM	SE ABM 07: Current trends in Agriculture
3 Credits	LTP: 2:0:2	Subject Elective Agri Business Management Specialization

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO310ABM.1	REMEMBERING	Identify and recall key concepts and technologies in modern agriculture, including precision farming, smart farming, and advanced farming techniques.
CO310ABM.2	UNDERSTANDING	Understand the principles and benefits of modern agricultural practices, including the role of technology and innovation, as well as the impact of policy and regulatory frameworks.
CO310ABM.3	APPLYING	Apply knowledge of precision and smart farming techniques to improve agricultural productivity and sustainability through practical implementations and case studies.
CO310ABM.4	ANALYSING	Analyse different agricultural business models, such as e-commerce platforms and contract farming, to understand their benefits, challenges, and regulatory implications.
CO310ABM.5	EVALUATING	Evaluate the effectiveness and sustainability of various advanced farming techniques, including vertical farming, hydroponics, aquaponics, and the use of drones in agriculture.
CO310ABM.6	CREATING	Develop innovative strategies and solutions for future agricultural practices by integrating emerging technologies such as AI, IoT, and machine learning, while considering sustainability and future trends.

1. **Introduction to Modern Agriculture: Overview of Modern Agriculture:** Definition and scope of modern agriculture, Importance of innovation in agriculture, Evolution of agricultural practices. **Key Trends in Agriculture:** Drivers of change in agriculture, Role of technology and innovation, Impact of globalization on agricultural practices. **Policy and Regulatory Framework:** Government initiatives promoting modern agriculture, Key policy changes and their impacts, Role of international organizations (e.g., FAO, WTO). (7+1)
2. **Precision and Smart Farming: Precision Farming,** Definition and principles of precision farming, Technologies used in precision farming (e.g., GPS, GIS), Benefits and challenges of precision farming. **Smart Farming:** Overview of smart farming concepts, Role of sensors and data analytics in smart farming, Case studies of successful smart farming implementations. **Internet of Things (IoT) in Agriculture:** Introduction to IoT and its applications in agriculture, Smart irrigation systems, IoT-based monitoring and management systems. (7+1)
3. **Advanced Farming Techniques: Vertical Farming:** Definition and principles of vertical farming, Technologies and infrastructure used in vertical farming, Advantages and limitations of vertical farming, **Hydroponics and Aquaponics:** Overview of hydroponics and aquaponics systems, Benefits and challenges of soilless farming, Commercial applications and case studies. **Drones in Agriculture:** Types of drones and their uses in agriculture, Applications of drones in crop monitoring, spraying, and mapping, Regulatory aspects and safety considerations. (7+1)
4. **Agricultural Business Models: E-commerce in Agriculture:** Role of e-commerce platforms in agricultural supply chains, Benefits of e-commerce for farmers and consumers, Key players and case studies (e.g., BigBasket, Ninjacart). **Corporate and Contract Farming:** Definition and principles of corporate farming, Benefits and challenges of contract farming, Legal and regulatory aspects of contract farming. (7+1)
5. **Sustainability and Future Trends: Sustainable Agriculture Practices: Future Directions and Innovations:** Emerging trends and future technologies in agriculture, Potential impacts of AI and machine learning in agriculture, Vision for the future of agriculture (7+1)

Suggested Text Books:

1. The Digital Age in Agriculture, Mehmet Ozguven, Taylor & Francis Ltd; 1st edition
2. Modern Techniques For Agriculture, Prachi Digital Publication
3. SMART AGRICULTURE: Ancient Wisdom and Modern Technology, Roshani Devi and Gaurav Sikka (eds) Punyatoya Patra, RAWAT PUBLICATIONS
4. Modern Agriculture & Natural Farming Theory and Practices, Dr. B. K. Sharma Abhishek Sharma, Dr. Shani Gulaiya, Priya Kochale, Dr. Deepak Khande, Dr. Kamalkant Yadav, Nitya Publications
5. PRECISION FARMING TECHNIQUES FOR PROTECTED CULTIVATION, R. SURESH, S.K. NIRALA, PHI Learning Pvt. Ltd.; First Edition

Reports and Papers:

1. FAO reports on sustainable and smart agriculture
2. Research papers on precision and smart farming technologies

Websites

1. Food and Agriculture Organization (FAO): <http://www.fao.org/>
2. International Society of Precision Agriculture: <https://www.ispag.org/>
3. Ministry of Agriculture & Farmers' Welfare: <https://agriwelfare.gov.in/>

Semester III	311 ABM	SE ABM 08: Agri- Entrepreneurship & Startup
3 Credits	LTP: 2:0:2	Subject Elective Agri Business Management Specialization

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO311ABM.1	REMEMBERING	Recall and identify key concepts of rural entrepreneurship, startup management, and intellectual property rights (IPR).
CO311ABM.2	UNDERSTANDING	Understand the principles and challenges of rural entrepreneurship, startup finance sources, and the importance of IPR for entrepreneurs.
CO311ABM.3	APPLYING	Apply strategic planning, goal setting, and operational management skills to overcome challenges faced by rural startups.
CO311ABM.4	ANALYSING	Analyse various sources of finance for startups, including venture capital, angel investors, and crowdfunding, to determine their suitability and benefits.
CO311ABM.5	EVALUATING	Evaluate different business models and develop feasible business plans, assessing the growth and scalability of operations.
CO311ABM.6	CREATING	Develop innovative marketing strategies for rural areas and create robust startup teams, leveraging technology and digital platforms to enhance customer relations & operational efficiency.

1. **Rural Entrepreneurship:** Concept of rural entrepreneurship, Endowment of Skill sets and Natural resources in rural India, aims of rural entrepreneurship, barriers to entrepreneurship in rural India. Government training programmes and Public Private Partnership. (7+1)
2. **Startup Management: Fundamentals of Startup Management,** Building a startup team, Organizational structure and management, Strategic planning and goal setting. **Operational Challenges and Solutions:** Common operational challenges faced by rural startups, Resource management and supply chain logistics, Use of technology to overcome operational barriers. **Marketing and Customer Relations:** Strategies for marketing in rural areas, Building and maintaining customer relationships, Leveraging digital marketing and social media. (7+1)
3. **Startup Finance Sources: Sources of Finance for Startups:** Bootstrapping and self-funding, Government grants and subsidies, Bank loans and microfinance. **Venture Capital and Angel Investors:** Role of venture capital in startup funding, Identifying and approaching angel investors, structuring deals and managing investor relationships. **Crowdfunding and Alternative Financing:** Introduction to crowdfunding platforms, Benefits and challenges of crowdfunding, Other alternative financing methods. (7+1)

4. **Intellectual Property Rights (IPR): Introduction to Intellectual Property Rights:** Types of intellectual property (e.g., patents, trademarks, copyrights), Importance of IPR for entrepreneurs, **IPR Laws and Regulations:** Overview of Indian IPR laws, International IPR frameworks and treaties, Process of obtaining IP protection. (7+1)
5. **Business Models and Planning:** Developing viable business models, creating business plans and feasibility studies, Managing growth and scaling operations. Case studies in Agribusiness. (7+1)

Suggested Text Books:

1. Entrepreneurship Development – Theories and Practices – By N.P.Singh
2. New Venture Management: The Entrepreneur's Roadmap (Entrepreneurship Series), Donald F. Kuratko and Jeffrey S. Hornsby, Pearson

Suggested Reference Book:

1. Projects: Profile and process – Vasant Desai
2. Entrepreneurship and echnology – Vasant Desai
3. Economic Environment in Business – By Misra and Puri

Semester IV	403 ABM	SC ABM 02: ICT for Agriculture
3 Credits	LTP: 2:0:2	Subject Core (SC) Course- Agri Business Management

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO403ABM.1	REMEMBERING	RECALL the basic terminologies related to ICT
CO403ABM.2	UNDERSTANDING	UNDERSTAND the use of ICT with different aspects & various issues & challenges for ICT information services
CO403ABM.3	APPLYING	Apply the GIS Applications in micro resource mapping
CO403ABM.4	ANALYSING	ANALYZE the different tools and techniques used under ICT in Agriculture Management
CO403ABM.5	EVALUATING	EVALUATE the common ICT platforms for information services
CO403ABM.6	CREATING	CHOOSE the right ICT as per the requirement of agriculture activity

1. **Introduction:** Basic terminology, Leapfrogging technology – the mobile phone, ICT and its ramifications for rural economies, Scope of ICT in Indian Agriculture, Introduction to various ICT-enabled rural services related to land, education, health, insurance, micro-credit, marketing, etc. Village Resource Centre (VRC), Common resource Centre (CRC), Tele- education, community radio, etc. Potential impact. (7+1)
2. **ICT for production systems management:** Scope of ICT in agriculture production, Applicability and challenges of ICT in logistic and supply chain systems, ICT application in risk management, ICT tools for an agricultural extension activity, new technology application in operation management e.g. barcode, RFID, QR code, etc. (7+1)
3. **ICT for market access:** Types of market access ICT service, Pricing services, Scope of e-auction in agriculture marketing, E-commerce in Agriculture and advantages of E-commerce in Agriculture over the traditional market, Issues and challenges for market access ICT services, Advantages of and opportunities for market access ICT services.(7+1)
4. **ICT for financial inclusion:** Types of financial inclusion, ICT services, Transfers and payments, Agricultural credit, Savings for agricultural needs, Agriculture Insurance, Various government schemes e.g., PMJDY, PMJJY, etc., Bank Business Correspondence scheme and its impact on Rural areas, Issues and challenges for ICT financial inclusion services, and Advantages of and opportunities for ICT financial inclusion services. (7+1)
5. **Overview of Geographical Information Systems (GIS):** Remote Sensing and Image Processing, GPS, GIS Data Modelling, Geographical Information Systems, Issues and Concerns in Land and Water Management, The GIS Approach. Planning and implementing a GIS; Case studies on GIS; GIS and Precision farming; GIS Applications in micro resource mapping, principles in micro-planning, modelling in resource mapping GIS Technology trend and next generation Systems. (7+1)

Suggested Text Books:

1. Sustainable Agriculture, edited by A. Bandyopadhyay, Bhoovigyan Vikas Foundation
2. Concepts and Techniques of Geographic Information Systems, Lo, C.P. and Yeung, A.K.W. (2002), Prentice Hall.
3. E- Governance Concepts and case Studies- C.S.R Prabhu, Prentice Hall of India

Suggested Reference Book:

1. Cases on Developing Countries and ICT Integration: Rural Community Development, edited by Rebecca Nthogo Lekoko, Ladislaus M. Semali, IGI
2. Fundamentals of Geographic Information Systems. DeMers, M.N. (1999) 2nd Ed., Wiley Press.
3. Principles of Geographical Information Systems Burrough, P.A. and R.A. McDonald (1998), Oxford University Press

Semester IV	405 ABM	SE ABM 09: Food Retail management
3 Credits	LTP: 2:0:2	Subject Elective Agri Business Management Specialization

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO405ABM.1	REMEMBERING	Recall key concepts such as India's position in global food trade, types of retail formats, and demographic factors influencing food consumption patterns.
CO405ABM.2	UNDERSTANDING	Understand the evolution of food retailing, value chain dynamics, and the impact of demographic and psychographic factors on consumer behaviour in food markets.
CO405ABM.3	APPLYING	Apply knowledge of food retail management techniques, pricing strategies, and promotion mix to real-world scenarios in food retailing.
CO405ABM.4	ANALYSING	Analyse trends in food wholesaling and retailing, evaluate competition and pricing strategies, and assess market implications of new retail developments.
CO405ABM.5	EVALUATING	Evaluate effectiveness of merchandise pricing strategies, sales promotion techniques, and advertisement strategies used by food retailers.
CO405ABM.6	CREATING	Develop comprehensive retail operations strategies integrating finance management, merchandise handling, logistics, and sales management tailored for food retail environments.

1. **Introduction to International Food market:** India's Competitive Position in World Food Trade, Foreign Investment in Global Food Industry, Retail management and Food Retailing, The Nature of Change in Retailing, Organized Retailing in India, E-tailing and Understanding food preference of Indian Consumer, Food consumption and Expenditure pattern, Demographic and Psychographic factors affecting Food Pattern of Indian Consumer. (7+1)
2. **Value Chain in Food Retailing:** Value Chain in Food Retailing, Principal trends in food wholesaling and retailing, food wholesaling, food retailing, the changing nature of food stores, various retailing formats, competition and pricing in food retailing, market implications of new retail developments, value chain and value additions across the chain in food retail, food service marketing. (7+1)
3. **Food Retail Management:** Food Retail Management, Brand Management in Retailing, Merchandise pricing, Pricing Strategies used in conventional and non-conventional food retailing, public distribution system, Promotion mix for food retailing, Management of sales promotion and Publicity, Advertisement Strategies for food retailers. (7+1)
4. **Retail Operations:** Managing Retail Operations, Managing Retailers' Finances, Merchandise buying and handling, Merchandise Pricing, Logistics, procurement of Food products and Handling Transportation of Food Products. (7+1)

5. **Retail Sales Management:** Retail Sales Management Types of Retail Selling, Training of Salesperson, Evaluation and Monitoring, Customer Relationship Management, Managing Human Resources in retailing, Legal and Ethical issues in Retailing. (7+1)

Suggested Text Books:

1. Berman & Evans. 2008. Retail Management: A Strategic Approach. 10th Ed. Prentice Hall of India.

Suggested Reference Book:

1. Cox. 2006. Retailing: An Introduction. 5th Ed. Pearson Edu.
2. Levy M & Weitz BW. 2004. Retailing Management. 5th Ed. McGraw Hill. Economic Environment in Business – By Misra and Puri

Semester IV	406 ABM	SE ABM 10: Agri- Input Marketing
3 Credits	LTP: 2:0:2	Subject Elective Agri Business Management Specialization

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO406ABM.1	REMEMBERING	Recall definitions and significance of agricultural input marketing, including types of inputs and roles of different sectors.
CO406ABM.2	UNDERSTANDING	Comprehend marketing strategies for seeds, fertilizers, plant protection chemicals, and farm machinery, including market dynamics and institutional roles.
CO406ABM.3	APPLYING	Apply distribution management strategies for agricultural inputs, analyse pricing policies, and understand export-import regulations in seed and fertilizer marketing.
CO406ABM.4	ANALYSING	Analyse demand-supply dynamics, subsidy policies, and distribution challenges in fertilizer and energy input marketing.
CO406ABM.5	EVALUATING	Evaluate the effectiveness of marketing channels and strategies used by key organizations like NSC, IFFCO, and others in the agricultural input sector.
CO406ABM.6	CREATING	Develop innovative marketing strategies for seeds, fertilizers, plant protection chemicals, and farm machinery to address market challenges and optimize distribution systems.

1. **Fundamentals of Agricultural Input Marketing:** Definition and significance of marketing agricultural inputs. Distribution Management: Effective strategies for managing distribution channels. Types of Agricultural Inputs: Differentiating between farm and non-farm inputs. Sector Roles: Exploring the roles of cooperative, public, and private sectors in agricultural input marketing. (7+1)
2. **Marketing Strategies for Seeds:** Importance of Seeds: The critical role of seeds in agriculture. Seed Varieties: Overview of hybrid, high-yielding, and quality seeds. Market Dynamics: Analysis of seed demand and supply. Marketing Channels and Pricing: Examining the channels and pricing strategies in seed marketing. Export-Import Regulations: Understanding the export and import of seeds. Institutional Roles: The role of NSC (National Seeds Corporation) and State Seed Corporations in seed marketing. (7+1)
3. **Fertilizer Marketing Dynamics:** Chemical Fertilizers: Overview of production, export-import, and supply chain of chemical fertilizers. Market Demand and Pricing: Understanding demand, consumption patterns, and pricing policies. Subsidy Policies: Examining the impact of subsidies on fertilizer pricing and usage. Distribution Challenges: Identifying problems in the fertilizer distribution system. Key Organizations: Role of IFFCO and KRIBCO in fertilizer marketing. (7+1)
4. **Marketing of Plant Protection:** Plant Protection Chemicals: Production, export/import dynamics, and consumption patterns. Marketing Systems: Distribution and marketing channels for plant protection chemicals. (7+1)
5. **Farm Machinery Marketing:** Overview of Farm Machinery: Production, supply, and demand of farm machines. Distribution Channels: Marketing and distribution systems for farm machinery. Agro-Industries Role: Role of Agro-

Industries Corporations in marketing farm implements and equipment. Market Challenges: Identifying and addressing issues in the marketing of farm machinery. (7+1)

Suggested Text Books:

1. Acharya SS & Agarwal NL. 2004. Agricultural Marketing in India. 4th Ed. Oxford & IBH.
2. Singh Sukhpal 2004. Rural Marketing- Focus on Agricultural Inputs. Vikas Publishing House.

Suggested Reference Books:

1. Broadway AC & Broadway Arif A. 2003. A Text Book of Agri-Business Management. Kalyani.
2. Singh AK & Pandey S. 2005. Rural Marketing. New Age.

Semester IV	407 ABM	SE ABM 11: Microfinance
3 Credits	LTP: 2:0:2	Subject Elective Agri Business Management Specialization

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO407ABM.1	REMEMBERING	Recall definitions and key concepts related to rural microfinance, including types of MFIs and regulatory frameworks.
CO407ABM.2	UNDERSTANDING	Grasp the significance of microfinance in rural development, financial inclusion strategies, and operational aspects such as credit management and risk mitigation.
CO407ABM.3	APPLYING	Apply principles of credit management and loan disbursement in rural microfinance contexts, utilizing group lending models effectively.
CO407ABM.4	ANALYSING	Analyse the impact of rural microfinance on poverty alleviation and economic empowerment, evaluating social performance management strategies.
CO407ABM.5	EVALUATING	Assess the sustainability and social impact of rural microfinance institutions, considering client welfare and rights protection.
CO407ABM.6	CREATING	Develop innovative strategies using technology and emerging trends to enhance rural microfinance services, addressing challenges and fostering growth opportunities.

1. **Introduction to Rural Microfinance:** Definition, scope, and evolution of microfinance in rural areas. Role in poverty alleviation, financial inclusion, and rural development. Microfinance Institutions (MFIs): Types of MFIs and their organizational structures. Overview of regulations and policies governing microfinance in rural areas. (7+1)
2. **Financial Inclusion and Microfinance Products:** Financial Inclusion: Importance of access to financial services in rural communities. Types of financial products offered by MFIs (e.g., loans, savings, insurance). Criteria and methods for assessing and selecting microfinance clients. Group Lending Models: Role and functioning of Self-Help Groups (SHGs) and Joint Liability Groups (JLGs) in rural microfinance. (7+1)
3. **Operational Aspects of Rural Microfinance:** Principles and practices of credit management in rural microfinance. Identifying and managing risks associated with rural microfinance operations. Loan Disbursement and Collection: Processes for disbursing loans and collecting repayments in rural settings. Interest Rates and Pricing: Factors influencing interest rates and pricing strategies in rural microfinance. (7+1)
4. **Impact Assessment and Social Performance:** Evaluating the social and economic impact of rural microfinance interventions. Social Performance Management: Strategies for enhancing social outcomes and client welfare through microfinance. Ensuring fair treatment and protection of clients' rights in rural microfinance. Ensuring the long-term sustainability of rural microfinance institutions and programs. (7+1)
5. **Innovations and Future Trends in Rural Microfinance:** Technological Innovations: Role of technology (e.g., mobile banking, digital payments) in advancing rural microfinance. Emerging trends and innovations in microfinance products tailored for rural clients. Addressing challenges and exploring opportunities for growth and expansion in rural microfinance. (7+1)

Suggested Text Books:

1. Microfinance - Redefining the Future, Somanath, Excel book

Suggested Reference Books:

1. Microfinance: Emerging Trends and Challenges, Suresh Sundaresan, Edward Elgar Publishing Limited
2. The Microfinance Revolution: Sustainable Finance for the Poor, Volume 1, Marguerite S. Robinson, The World Bank, Washington, D. C. Open Society Institute, New York
3. The Economics of Microfinance Armendáriz, Beatriz, Morduch, Jonathan, PHI
4. Microfinance, V S Somanath, Excel Books

Semester IV	408 ABM	SE ABM 12: Commodity derivatives and Risk
3 Credits	LTP: 2:0:2	Subject Elective Agri Business Management Specialization

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO408ABM.1	REMEMBERING	Recall definitions and basic concepts related to commodity markets, derivatives, and trading on commodity exchanges.
CO408ABM.2	UNDERSTANDING	Grasp the functioning of commodity exchanges, risks involved in commodity trading, and the mechanics of commodity futures and options.
CO408ABM.3	APPLYING	Apply knowledge of commodity futures pricing, options strategies, and investment principles in commodity markets.
CO408ABM.4	ANALYSING	Analyse price relationships, basis risk, and the impact of market dynamics on commodity futures and options pricing.
CO408ABM.5	EVALUATING	Evaluate the effectiveness of hedging strategies using commodity futures and options, assessing risk management techniques.
CO408ABM.6	CREATING	Develop advanced trading strategies and investment approaches in commodities, integrating fundamental and technical analysis methods effectively.

1. **Commodity Markets:** An Overview – What is a Commodity, Commodity Markets, Marketing of agricultural commodities, physical market operations. Commodity Risk – Understanding risk, managing risk, evolution of commodity derivatives, evolution of commodity derivatives in India. Commodity Derivatives – What is Derivatives, types of derivatives, other classification of derivatives, Pricing derivatives, derivatives markets and participants, economic importance. (7+1)
2. **Trading on Commodity Exchanges:** What are commodity exchanges, commodity exchanges around the world, commodity exchanges in India, electronic spot exchanges regulation of commodity markets. The exchange platform, exchange membership, commodity brokerage, participants in commodity markets, market positions, order types, access to commodity exchanges. Clearing and Settlement on Commodity Exchanges: Risks in commodity markets, the commodity clearing house, margining method, the settlement process, warehousing and warehouse receipts, the delivery process, distinctive features of commodity futures, markets, the lifecycle of a commodity futures contract. (10+1)
3. **Commodity Futures Pricing:** The commodity futures contract, pricing of futures, carrying cost, futures spot convergence, price relationships Commodity Futures Applications: Futures for the hedger, mismatches in basis and basis risk, futures for the speculator, spreads, futures for the arbitrageur. (7+1)
4. **Commodity Options:** Working of option, buying options, the arithmetic of option premiums, the option Greeks, selling options, pricing options, exotic options. Commodity Options Applications: Options for hedging, options for speculating, advanced option trading strategies, commodity trading strategies: Round up (7+1)
5. **An Emerging Investment Class:** The investment rationale, investing in commodities, commodity indices, risks and challenges of commodity investing. Fundamental and Technical Analysis of Commodities: Basic concepts of fundamental analysis and technical analysis. (5+1)

Suggested Text Books:

1. Commodity Markets – Operations, Instruments and Applications by Chatnani, TMGH
2. Commodity Derivatives by Indian Institute of Banking & Finance, Macmillan

Suggested Reference Books:

1. Commodity Options: Trading and Hedging Volatility in the World's Most Lucrative Market, Carley Garner & Paul Britain, Pearson
2. Agricultural Commodity Markets: A Guide to Futures Trading, By Michael Atkin, Routledge
3. Agricultural Commodity Markets and Trade: New Approaches to Analysing Market and Trade, By Dr. Alexander Sarris, David Hallam, Edward Elgar Publishing

Semester IV	409 ABM	SE ABM 13: Procurement Management
3 Credits	LTP: 2:0:2	Subject Elective Agri Business Management Specialization

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO409ABM.1	REMEMBERING	Recall definitions and concepts related to procurement management in agriculture, including the procurement cycle and key strategies.
CO409ABM.2	UNDERSTANDING	Grasp the complexities of agricultural procurement planning, supply chain management, and the role of technology in enhancing procurement processes.
CO409ABM.3	APPLYING	Apply procurement strategies and techniques to assess agricultural input needs, select sourcing strategies, and manage vendor relationships effectively.
CO409ABM.4	ANALYSING	Analyse agricultural supply chains, identify risks, and evaluate methods for ensuring quality standards in procured inputs.
CO409ABM.5	EVALUATING	Assess the impact of sustainable procurement practices on agricultural value chains and evaluate compliance with agricultural standards and certifications.
CO409ABM.6	CREATING	Develop innovative solutions and strategies using technology and sustainable practices to improve efficiency and sustainability in agricultural procurement management.

1. **Introduction to Procurement Management in Agriculture:** Definition, scope, and importance of procurement in agriculture. Overview of procurement strategies and their application in agricultural contexts. Understanding the procurement cycle from planning to contract management. Contribution of effective procurement management to enhancing agricultural value chains. (7+1)
2. **Procurement Planning and Strategy:** Methods for assessing agricultural input requirements and procurement needs. Selecting appropriate sourcing strategies for agricultural inputs (e.g., direct sourcing, tendering). Criteria and methods for selecting and evaluating vendors in agriculture. Principles of contract negotiation, drafting, and administration in agricultural procurement. (7+1)
3. **Supply Chain Management in Agriculture:** Understanding the agricultural supply chain and its management. Techniques for efficient inventory control and management of agricultural inputs. Identifying and mitigating risks in agricultural procurement and supply chains. Ensuring quality standards in procured agricultural inputs through effective supply chain management. (7+1)
4. **Sustainable Procurement Practices:** Principles and practices of sustainable procurement in agriculture. Assessing and addressing environmental and social impacts in agricultural procurement. Promoting ethical sourcing practices in agricultural procurement. Compliance with agricultural standards and certifications related to sustainable procurement. (7+1)
5. **Technology and Innovation in Agricultural Procurement:** Utilization of technology (e.g., ERP systems, IoT) in enhancing agricultural procurement processes. Benefits of digital platforms and e-procurement in agricultural supply chains. Case studies and examples of innovative procurement practices in agriculture. Emerging trends and technologies shaping the future of agricultural procurement management. (7+1)

Suggested Text Books:

1. Legal Regulation of Agriculture Procurement and Processing in India Hardcover – 1 January 2013, Shweta Mohan, Satyam Law International

Suggested Reference Books:

1. Procurement, Principles & Management (11th edition), Peter Bailey, David Farmer, Barry Crocker, David Jesson and David Jones
2. Supplier Evaluation & Performance Excellence, Sherry R. Gordon
3. Essentials of Negotiation – 6th Edition, Roy Lewicki, Bruce Barry and David Saunders
4. The Technology Procurement Handbook: A Practical Guide to Digital Buying – 1st Edition, Sergii Dovgalenko

Semester IV	410 ABM	SE ABM 14: Agri- Production, Planning and Control
3 Credits	LTP: 2:0:2	Subject Elective Agri Business Management Specialization

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO410ABM.1	REMEMBERING	Recall functions and objectives of agricultural production planning and control, including key stages in the production cycle.
CO410ABM.2	UNDERSTANDING	Understand capacity and process planning models, aggregate planning methods, and maintenance management concepts in agricultural production.
CO410ABM.3	APPLYING	Apply resource management strategies, including sourcing, supplier selection, and store management principles in agricultural settings.
CO410ABM.4	ANALYSING	Analyse statistical quality control methods and food safety regulations in the context of agricultural production.
CO410ABM.5	EVALUATING	Evaluate Total Quality Management principles and their application in agribusiness, including the benefits of quality standards and regulatory compliance.
CO410ABM.6	CREATING	Develop strategies for implementing ISO standards and quality grades in agricultural production to enhance food quality and safety.

1. **Agricultural Production Planning and Control:** Functions of production planning and control, objectives of production planning, systems of manufacturing, production cycle stages, scheduling techniques, control procedures, control devices. (7+1)
2. **Capacity and Process Planning:** Capacity planning models, process planning strategies, aggregate planning methods, production scheduling, maintenance management concepts, work study techniques, method study, work measurement practices, work sampling, optimizing work environment, industrial safety standards. (7+1)
3. **Resource and Store Management:** Resource management strategies, sourcing materials, selection and evaluation of suppliers, purchase management practices, cost reduction techniques, store management principles, storage location strategies, storage methods, documentation requirements, relevant government policies. (7+1)
4. **Quality Control and Food Safety Regulations:** Statistical quality control in the food industry, key provisions of the Food Safety and Standards Act, roles of national and international regulatory agencies, Bureau of Indian Standards (BIS), AGMARK certification, Food Safety and Standards Authority of India (FSSAI), introduction to WTO agreements on SPS and TBT, Codex Alimentarius Commission guidelines, USFDA regulations, ISO standards for food quality and safety (ISO 9000 series, ISO 22000, ISO 15161, ISO 14000). (7+1)
5. **Total Quality Management and Business Strategy:** Total Quality Management (TQM) principles, quality control processes in agribusiness, importance of quality grades and standards, benefits of quality standards for consumers, producers, and food processors, overview of food grades and standards for various commodities including cereals, fruits and vegetables, meats, and poultry products. (7+1)

Suggested Text Books:

1. Operations & Supply Chain Management by Dr. D. B. Bharati & Rohan Dahivale, Himalaya Publications
2. Production and Operations Management Scitech Publications- Sushanta Tripathy
3. Operations Management- K Shridhara Bhat Himalaya Publications

Suggested Reference Book:

1. Operations Management by William J. Stevenson, TMGH, 9th Edition.
2. Operations Management by Lee Krajewski, Larry Ritzman, Manoj Malhotra, Pearson Education, 8th Edition.

Semester IV	411 ABM	SE ABM 15: Management of Allied Agro Industries
3 Credits	LTP: 2:0:2	Subject Elective Agri Business Management Specialization

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO411ABM.1	REMEMBERING	Recall the types of allied agro-industries, their role in agricultural development, and relevant policies and regulations in India.
CO411ABM.2	UNDERSTANDING	Comprehend management principles, organizational structures, and financial planning specific to allied agro-industries.
CO411ABM.3	APPLYING	Implement production planning, supply chain management, and marketing strategies to enhance efficiency and market reach in allied agro-industries.
CO411ABM.4	ANALYSING	Assess market demand, competition, consumer behaviour, and financial performance of allied agro-industries.
CO411ABM.5	EVALUATING	Evaluate the effectiveness of government schemes, support programs, and organizational practices in allied agro-industries.
CO411ABM.6	CREATING	Develop innovative business plans, marketing strategies, and sustainable practices to improve productivity and growth in allied agro-industries.

1. **Introduction to Allied Agro Industries:** Understanding allied agro-industries and their role in agriculture. Contribution of allied industries to agricultural development and the rural economy. Types of Allied Agro Industries: Dairy, poultry, fisheries, beekeeping, sericulture, agro-processing, and others. Overview of policies, regulations, and support systems for allied agro-industries in India. (7+1)
2. **Management Principles and Organizational Structure:** Developing business plans for allied agro-industries. Designing effective organizational structures for managing allied agro-industries. Leadership and Human Resource Management: Leadership roles, team management, and HR practices in allied agro-industries. Financial planning, budgeting, and financial control specific to allied agro-industries. (7+1)
3. **Unit 3: Production and Operations Management:** Strategies for efficient production planning in various allied agro-industries. Managing supply chains for raw materials and finished products. Ensuring quality standards in production processes. Role of technology and innovation in enhancing productivity and efficiency in allied agro-industries. (7+1)
4. **Marketing and Distribution Strategies:** Understanding market demand, competition, and consumer behaviour. Developing effective marketing strategies for products from allied agro-industries. Building brands and promoting products in domestic and international markets. Identifying and managing distribution channels for effective product reach. (7+1)
5. **Schemes, Emerging trends and Case Studies:** Overview of government schemes and support programs for allied agro-industries. Emerging trends, challenges, and opportunities in the management of allied agro-industries. **Case Studies:** Analysis of successful allied agro-industries in India and globally, field visits, and guest lectures from industry experts. (7+1)

Suggested Text Books:

1. Entrepreneurial Opportunities in Agriculture & Allied Sectors, Rajeeb Kumar Behera, Notion Press
2. Interventions in Agri-Business and Allied Sector Credit Versus Credit Plus Approach for Livelihood Promotion, Samar K Datta, Allied Publishers Pvt Ltd

Suggested Reference Books:

1. Textbook Of Agricultural and Allied Sciences, Sunil Kumar, P. Smriti Rao, Neelam Kumari, Dangi Pooja Arun, Anjali Verma, Agri Biovet Press
2. Ancestral Knowledge in Agri-Allied Science, Ratan Kumar Saha, New India Publishing Agency

Semester IV	412 ABM	SE ABM 16: Agri- Cooperative Management
3 Credits	LTP: 2:0:2	Subject Elective Agri Business Management Specialization

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO412ABM.1	REMEMBERING	Recall the definitions, principles, and significance of agricultural cooperatives, their development, and types.
CO412ABM.2	UNDERSTANDING	Understand the organizational structure, governance, financial management, marketing strategies, and challenges of agricultural cooperatives.
CO412ABM.3	APPLYING	Apply principles of governance, financial management techniques, and marketing strategies to improve the functioning of agricultural cooperatives.
CO412ABM.4	ANALYSING	Analyse the financial health, supply chain efficiency, and market linkages of agricultural cooperatives.
CO412ABM.5	EVALUATING	Evaluate the effectiveness of cooperative management practices, policy frameworks, and technological advancements in addressing challenges.
CO412ABM.3	CREATING	Develop innovative strategies and sustainable practices to enhance cooperative management, operations, and future growth.

1. **Introduction to Agri-Cooperative Management:** Definition, principles, and significance of cooperatives in agriculture. Development of agricultural cooperatives globally and in India. Different forms of cooperatives such as marketing, credit, supply, and service cooperatives. Contribution of cooperatives to rural economic development and social welfare. Understanding the policy and regulatory framework governing cooperatives in India. (7+1)
2. **Organizational Structure and Governance:** Principles and practices of governance in agricultural cooperatives. Various organizational models and structures of cooperatives. Role of leadership in managing cooperatives; skills and competencies required for cooperative managers. Membership and Participation: Strategies to enhance member participation and involvement in cooperative decision-making. (7+1)
3. **Financial Management in Cooperatives:** Sources of funding, capital structure, and financial sustainability of cooperatives. Accounting principles and practices in cooperatives; importance of audits. Techniques for analysing financial performance and assessing the financial health of cooperatives. (7+1)
4. **Marketing and Supply Chain Management in Cooperatives:** Developing marketing strategies for cooperative products and services. Managing the supply chain in agricultural cooperatives for efficiency and effectiveness. Value Addition and Processing: Role of cooperatives in value addition and processing of agricultural products. Market Linkages and Networking: Establishing market linkages and networks to enhance market access for cooperative members. (7+1)
5. **Challenges and Future Trends in Agri-Cooperative Management:** Identifying and addressing key challenges such as competition, governance issues, and financial constraints. Technological Advancements: Leveraging technology for improving cooperative management and operations. Promoting sustainability and resilience in cooperative operations. Emerging trends and innovations in the cooperative sector; strategies for future growth and development. **Case Studies:** Innovations and future strategies by cooperatives in India. (7+1)

Suggested Text Books:

1. Akmat JS. 1978. New Dimensions of Cooperative Management. Himalaya Publishing House.

Suggested Reference Books:

1. Ansari AA. 1990. Cooperative Management Patterns. Anmol Publishers
2. Sah AK. 1984. Professional Management for the Cooperatives. Vikas Publishing House.

PHARMA & HEALTHCARE MANAGEMENT							
Specialization Core Courses							
Sem_Splz Code	Course Code	Course	Semester	Credits	FA	SA	Total Marks
302 PHM	SC PHM-01	Fundamentals of Pharma and Healthcare Management	III	3	50	50	100
403PHM	SC PHM-02	Regulatory laws in Indian Pharmaceutical & healthcare Industry	IV	3	50	50	100
				6	100	100	200
Specialization Elective Courses-Semester III (Any 4 to be opted for)							
304 PHM	SE PHM-01	Healthcare Management	III	3	50	50	100
305 PHM	SE PHM-02	Pharmaceutical Marketing Management	III	3	50	50	100
306 PHM	SE PHM-03	Digital Marketing in Pharma &Healthcare	III	3	50	50	100
307 PHM	SE PHM-04	Supply Chain Management in Pharmaceutical Sector	III	3	50	50	100
308 PHM	SE PHM-05	Pharmaceutical Production Management	III	3	50	50	100
309 PHM	SE PHM-06	Compensation Management and Performance Appraisal in Pharma and healthcare	III	3	50	50	100
310 PHM	SE PHM-07	Health Insurance	III	3	50	50	100
311 PHM	SE PHM-08	Entrepreneurship in Pharma and Healthcare	III	3	50	50	100
				12	200	200	400
Specialization Elective Courses-Semester IV(Any 4 to be opted for)							
405 PHM	SE PHM-09	Ethics and Legal aspects of Pharmaceutical and Healthcare Business	IV	3	50	50	100
406 PHM	SE PHM-10	Clinical Data Management	IV	3	50	50	100
407 PHM	SE PHM-11	Regulatory affairs in pharmaceuticals	IV	3	50	50	100
408 PHM	SE PHM-12	International Pharma marketing	IV	3	50	50	100
409 PHM	SE PHM-13	Marketing of Medical Devices and Diagnostics	IV	3	50	50	100
410 PHM	SE PHM-14	Quality Assurance and Control Management in Pharma	IV	3	50	50	100
411 PHM	SE PHM-15	Pharmaceutical advanced Human Resource Management	IV	3	50	50	100
412 PHM	SE PHM-16	Healthcare Analytics	IV	3	50	50	100
				12	200	200	400
				30	500	500	1000

Specialization: Agri Business Management

Semester III	302 PHM	SC PHM 01: Fundamentals of Pharma and Healthcare Management
3 Credits	LTP: 2:0:2	Subject Core (SC) Course Pharma and Healthcare Management

Course Outcomes: On successful completion of the course the learner will be able to:

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO302PHM.1	REMEMBERING	DESCRIBE concept of Pharma and healthcare management and FIND out the different role and responsibilities of managers.
CO302PHM .2	UNDERSTANDING	UNDERSTAND the different managerial functions of managers
CO302PHM .3	APPLYING	IDENTIFY right the motivation for right stakeholder in the healthcare sector for effective delivery of service.
CO302PHM .4	ANALYSING	ANALYZE modern Pharma and Healthcare models
CO302PHM .5	EVALUATING	EXPLAIN government initiatives to provide healthcare facilities in each part of country
CO302PHM .6	CREATING	CONSTRUCT model to provide effective service in healthcare management

Unit 1:Introduction: Introduction of Pharmaceutical Industry, Health Care Management, Classical Management & Healthcare Services. Concept of Health Care Industry & its ever-changing character, Managerial activities for effective functioning, Duties and responsibilities of Managers, Qualities of effective Managers (7+1)

Unit 2: Health Systems in India: Health planning in India including various committees and National Health Policy and Health Goals set from time to time. Organised sector with reference to Centre, State, District and Block level structures and local bodies and Panchayati Raj Organisation and functions of community health centres and Primary Health Centres (PHCs). Health Manpower, Primary Health care and concept, Alternative systems of medicine, like Ayurveda, Homeopathy, etc. Holistic Approach Non-Governmental Organisations (NGOs) and Private Voluntary Organisations (PVOs). Unorganized Sector. (7+1)

Unit 3: Human Resource Management in Pharma and Healthcare Organization: Recruitment process, Training and development, Managerial Role: A Framework for Thinking as well as in Practices. Concept of Motivation, Significance of Motivating People in Health Care Delivery. Different Motivational Theories. Groups and Teams Organizational Learning, Innovation and Change (7+1)

Unit 4: Pharma and Healthcare marketing: Marketing Mix in Pharma and Healthcare, STP, CRM Concept, Role and Significance of Customer Relationship Management (CRM) in Pharma and Healthcare industry. (7+1)

Unit 5: Modern Pharma and Healthcare models: Medical tourism, Tele Diagnosis and Tele medicine, Artificial Intelligence in Pharma and Healthcare, Use of Robotics in Pharma and Healthcare, Organised formats of Hospitals, Diagnostics and Chemist chain. (7+1)

Suggested Text Books:

1. Organizing Design and Behavior in Health Care Services: Stephen M. Shortell, Arnold D. Kaluzny: ENGAGE Lernings
2. Healthcare Management Ruchi Singh Himalaya Publishing House.

Suggested Reference Books

1. Hospital Management by S. M. Jha
2. Organization Design and Behavior in Health Care Services: Cengage Learning Stephen M Shortell

Semester III	304 PHM	SE PHM 01: Healthcare Management
3 Credits	LTP: 2:0:2	Subject Elective Pharma and Healthcare Management Specialization

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO304PHM.1	REMEMBERING	DESCRIBE concept of healthcare management and FIND out the different role and responsibilities of healthcare managers.
CO304PHM.2	UNDERSTANDING	UNDERSTAND the different managerial functions of managers
CO304PHM.3	APPLYING	Implement knowledge to enhance healthcare services and patient satisfaction.
CO304PHM.4	ANALYSING	Analyze the impact of environmental and societal shifts on hospital functions
CO304PHM.5	EVALUATING	Evaluate the role of healthcare managers in achieving organizational goals.
CO304PHM.6	CREATING	CONSTRUCT model to provide effective service in healthcare management

Unit 1: Introduction: Definition, Importance, objectives, healthcare organization –Introduction, meaning, characteristic, principles of organization, Hospital Organization, hospital organization structures, Grouping healthcare functions within an organizational structure, operational management, Role of healthcare manager (7+1)

Unit 2: Hospital management & planning: core principles and the evolution of hospital practices key milestones and the changing roles of hospitals due to technological and societal shifts, functions of hospitals, Hospital as a system, National Health Policies, Hospital planning, driving factors for new projects, prerequisites, Environmental factors, Hospital operational planning, Green Hospitals (7+1)

Unit 3: Strategic Management in Healthcare: Strategic management-Definition, process, leadership in strategic management, decision making in healthcare, environmental scanning, SWOT analysis, performance metrics, balanced scorecards, Importance of strategic management for achieving goals, Financial Management in Healthcare-healthcare economics, budgeting, revenue cycle management, cost containment strategies, reimbursement systems (7+1)

Unit 4: Healthcare Quality and Performance Improvement:

Hospital services, Patients Perception Vs Patients Satisfaction, Patients Perceived Quality of Care, Facilities & Utility Services, patient safety initiatives, Quality improvement in healthcare, quality assessment tools, benchmarking, accreditation processes, use of data analytics for continuous improvement, Lean six sigma in healthcare (7+1)

Unit 5: Healthcare Policy, Legal, and Ethical Issues: Healthcare policy, legal frameworks, and ethical considerations, healthcare reform, legislative trends, risk management, compliance, patient rights, privacy laws, and ethical dilemmas in healthcare decision-making (7+1)

Suggested Text Books:

1. Organizing Design and Behavior in Health Care Services: Stephen M. Shortell, Arnold D. Kaluzny: ENGAGE Learnings
2. Healthcare Management Ruchi Singh Himalaya Publishing House.

Suggested Reference Books

1. Hospital Management by S. M. Jha
2. Organization Design and Behavior in Health Care Services: Cengage Learning Stephen M Shortell

Semester III	305 PHM	SE PHM 02: Pharmaceutical Marketing Management
3 Credits	LTP: 2:0:2	Subject Elective Pharma and Healthcare Management Specialization

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO305PHM.1	REMEMBERING	Remember fundamental concepts, philosophies, and methods related to pharmaceutical marketing.
CO305PHM.2	UNDERSTANDING	Understand strategic marketing process, including market research methods, data analysis, market forecasting, market segmentation.
CO305PHM.3	APPLYING	APPLY marketing Mix decisions for a real world marketing offering Pharma products
CO305PHM.4	ANALYSING	EXAMINE marketing issues pertaining to Pharmaceutical Marketing Mix and Marketing Plan in the context of real world Pharma marketing
CO305PHM.5	EVALUATING	Students will evaluate product and pricing decisions, including product classification, new product development processes, lifecycle strategies, branding, packaging, labeling, and competitive pricing methods within regulatory requirements.
CO305PHM.6	CREATING	Design and develop comprehensive pharmaceutical marketing plans.

Unit 1: Pharmaceutical Marketing Tasks: Definition, fundamental marketing task, philosophies and methods, characteristics of the pharmaceutical market ,pharmaceutical marketing systems, Pharma marketing environment, consumer pharmaceutical market, buyer behavior and the factors influencing purchasing decisions, traditional marketing concepts of pharmaceutical industry. (7+1)

Unit 2: Strategic Marketing Process: market research methods, data analysis ,market potential, Market forecasting, market segmentation, Situation analysis, objectives, strategy, tactics, actions and control(SOSTAC model), decision-making and strategic planning in developing effective marketing strategies, pharmaceutical marketing mix, case studies based on pharmaceutical marketing strategies. (7+1)

Unit 3: Strategic Planning in Pharma Marketing: strategic planning process in pharmaceutical marketing, situation analysis, environmental scanning, develop marketing objectives, determine positioning and differential advantages, select target markets, and design a marketing mix, Marketing Evaluation & Control - Concept, Process & types of control - Annual Plan Control, Profitability Control, Efficiency Control, Strategic Control, Marketing audit. (7+1)

Unit 4: Product and Pricing Decisions: product classification, new product development process, product lifecycle strategies, branding, packaging, and labelling, Product Branding:-Concept, Definition and Generic vs. Brand .Pricing methods and strategies, competitive pricing -regulatory requirements. (7+1)

Unit 5: Distribution and Promotional Decisions: Distribution channels-importance and functions, distribution channel members, roles of wholesalers, distributors, and retailers, channel design, management, and logistics, Promotion mix such as advertising, sales promotion, public relations, and personal selling, promotional strategies, Role of integrated marketing communication in pharmaceutical industry. (7+1)

Suggested Text Books:

1. Pharmaceutical Marketing Management by Bhavna Kumar , Abhijeet Ojha, Anuj Nautiyal
2. Pharmaceutical Marketing Management by Divakar Goli Uday Raj Sharma
3. ESSENTIALS OF PHARMACEUTICAL MARKETING MANAGEMENT ,DR. NEERAJ DIXIT, DR V K SHARMA
4. Marketing Management, Rajan Saxena, TMGH

Suggested Reference Books

1. Principles of Marketing, Philip Kotler, Gary Armstrong, Prafulla Agnihotri, Ehasan Haque, Pearson
2. Marketing Management- Text and Cases, Tapan K Panda, Excel Books
3. Marketing Management, Ramaswamy & Namakumari, Macmillan.

Semester III	306 PHM	SE PHM 03: Digital Marketing in Pharma & Healthcare
3 Credits	LTP: 2:0:2	Subject Elective Pharma and Healthcare Management Specialization

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO306PHM.1	REMEMBERING	Recall and identify key concepts, trends, and channels in digital marketing specifically for the pharma and healthcare sectors.
CO306PHM.2	UNDERSTANDING	Understand the regulatory framework, ethical considerations, and compliance requirements impacting digital marketing in the healthcare and pharma industries.
CO306PHM.3	APPLYING	Apply digital marketing strategies and tools such as SEO, SEM, social media, content marketing, and email marketing to real-world pharma and healthcare marketing campaigns.
CO306PHM.4	ANALYSING	Analyse digital marketing metrics and data using tools like Google Analytics and social media analytics to measure campaign performance and audience engagement.
CO306PHM.5	EVALUATING	Evaluate the effectiveness of digital marketing campaigns in the healthcare and pharma sectors by calculating return on investment (ROI) and assessing key performance indicators (KPIs).
CO306PHM.6	CREATING:	Develop innovative and compliant digital marketing strategies incorporating emerging trends and technologies such as AI, personalization, mobile marketing, and telehealth to enhance patient engagement and education.

Unit 1: Introduction to Digital Marketing in Pharma and Healthcare: Overview of Digital Marketing: Fundamental concepts and trends in digital marketing. Healthcare and Pharma Industry Landscape: Key stakeholders, market dynamics, and regulatory environment. Role of Digital Marketing: Importance and impact of digital marketing in pharma and healthcare. Digital Marketing Channels: Overview of channels (social media, search engines, email marketing, content marketing, mobile apps). (7+1)

Unit 2: Regulatory and Ethical Considerations: Regulatory Framework: Overview of regulations affecting digital marketing in pharma and healthcare. Compliance: Ensuring compliance with regulatory requirements in digital campaigns. Ethical Issues: Ethical considerations in marketing pharmaceuticals and healthcare services. Data Privacy and Security: Protecting patient data in digital marketing efforts. (7+1)

Unit 3: Digital Marketing Strategies and Tools: Search Engine Optimization (SEO): Basics of SEO and its importance in healthcare marketing. Search Engine Marketing (SEM): Paid search strategies and best practices. Social Media Marketing: Using social media platforms (Facebook, Twitter, LinkedIn) for engagement and promotion. Content Marketing: Creating and distributing valuable content to attract and engage target audiences. Email Marketing: Effective email marketing strategies for pharma and healthcare (7+1)

Unit 4: Analytics and Measurement: Digital Marketing Metrics: Key performance indicators (KPIs) for digital marketing. Google Analytics: Using Google Analytics to track and analyse website traffic. Social Media Analytics: Measuring engagement and impact on social media platforms. Campaign Performance: Techniques for measuring the effectiveness of digital marketing campaigns. ROI Calculation: Calculating the return on investment for digital marketing activities. (7+1)

Unit 5: Emerging Trends and Technologies: Artificial Intelligence (AI): Applications of AI in digital marketing. Personalization: Techniques for personalizing digital marketing efforts. Mobile Marketing: Strategies for mobile-first marketing in healthcare. Telehealth and Digital Health Tools: Leveraging digital tools for patient engagement and education. Future Trends: Exploring the future of digital marketing in pharma and healthcare. (7+1)

Suggested Text Books:

1. Internet Marketing, Dave Chaffey, Fiona Ellis-Chadwick, Kevin Johnston, Richard Mayer, Pearson Education.
2. Digital Marketing, Oliver J Rich.
3. Online Marketing, Gerry T. Warner and Joe Wilson Schaefer.

Suggested Reference Books:

1. Digital Marketing, Prof. Seema Gupta, Mcgraw Hill Publications.
2. E- Marketing by Judy Strauss, Adel Ansary, Raymond Frost, Prentice Hall.
3. Introduction to digital marketing in the pharmaceutical industry, Olivier Gryson
4. Digital Pharma Marketing Playbook: Winning with the new rules of Engagement, Subba Rao Chaganti, Pharmamed Press; St ed. Edition

Resources and Tools:

1. **Software:** Access to Google Analytics, SEO tools, social media management platforms, and email marketing software.
2. **Datasets:** Real-world digital marketing data for hands-on practice.
3. **Online Resources:** Access to online MOOC courses, tutorials, and webinars related to digital marketing in pharma and healthcare.

Semester III	307 PHM	SE PHM 04: Supply Chain Management in Pharmaceutical Sector
3 Credits	LTP: 2:0:2	Subject Elective Pharma and Healthcare Management Specialization

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO307PHM.1	REMEMBERING	Remember key components of pharmaceutical SCM
CO307PHM.2	UNDERSTANDING	Understand the concept of pharmaceutical supply chain, and tools and techniques
CO307PHM.3	APPLYING	Apply demand forecasting techniques and
CO307PHM.4	ANALYSING	Analyze strategies for improving supply chain performance.
CO307PHM.5	EVALUATING	Evaluate the role of logistics
CO307PHM.6	CREATING	Identify current trends in supply chain management and Design an integrated supply chain strategy

Unit 1: Introduction to Pharma Supply Chain Management(SCM)- Meaning, objectives and importance of supply chain, components of pharmaceutical supply chain, Key drivers of supply chain performance, Supply chain management strategies and its importance, supply chain performance and metrics, challenges in Global SCM. (7+1)

Unit 2: Supply Chain planning and demand forecasting- Planning process, demand forecasting-meaning, role of forecasting in supply chain, characteristics of forecast, forecasting techniques, store-based supply chain and e-commerce-meaning, characteristics and comparison. (7+1)

Unit 3: Inventory management and warehouse management- Role of inventory in SCM, EOQ model, safety stocks, ABC and VEN analysis, Inventory Tracking, Role of IT in improving SCM efficiency, Prerequisite for a medical store, designing a medical store, Materials Handling equipment, Store layout planning, Cold Chain Management. (7+1)

Unit 4: Transportation and network design- Transportation models, logistics in pharmaceutical supply chain, centralized vs. decentralized distribution, network design- meaning, optimization, Cold chain logistics, logistics service providers, outsourcing, case studies. (7+1)

Unit 5: Logistic management –Definition , meaning , importance, role of logistics in supply chain, Reverse logistics (returns, recalls, expired products) , network in reverse logistics, Decision options in Reverse Logistics, Entities in Reverse Logistics, Small Intermediate logistics, Clinical trial Logistics. (7+1)

Suggested Text Books:

1. Operations and Supply Chain Management Essentials by Vibrant Publishers, Ashley McDonough
2. Supply Chain Practices in the Pharmaceutical Industry: Towards Agile Manufacture by Francis Goldberger, Sir Richard Sykes

Suggested Reference Books

1. Supply Chain in the Pharmaceutical Industry: Strategic Influences and Supply Chain Responses by Rob Whewell

Semester III	308 PHM	SE PHM 05: Pharmaceutical Production Management
3 Credits	LTP: 2:0:2	Subject Elective Pharma and Healthcare Management Specialization

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO308PHM.1	REMEMBERING	Define concepts and regulatory requirements in pharmaceutical production management.
CO308PHM .2	UNDERSTANDING	Explain the differences between batch and continuous processing and their applications in pharmaceutical manufacturing.
CO308PHM .3	APPLYING	Implement advanced manufacturing techniques and optimize production processes for efficiency and compliance.
CO308PHM .4	ANALYSING	Analyze the design and maintenance requirements for pharmaceutical production facilities
CO308PHM .5	EVALUATING	Assess strategic production planning methods and resource management techniques to ensure effective production scheduling and control.

Unit 1: Introduction to Pharmaceutical Production: Overview of the Pharmaceutical Industry, objectives, functions of production management, 6 M's of production management, Key Concepts in Pharmaceutical Production, production facilities planning, Regulatory Environment and Compliance, Quality Assurance and Quality Control in Production, Good Manufacturing Practices (GMP), Basic Requirements for GMP, CGMP. (7+1)

Unit 2: Advanced Manufacturing Techniques: Pharmaceutical Manufacturing Processes, Traditional vs. Modern Manufacturing Techniques, Batch Processing: Concepts and Applications, Continuous Processing-Concepts and Applications, Process Validation and Optimization, manufacturing operations control. (7+1)

Unit 3: Production Dynamics: Comparative Analysis of Batch and Continuous Processing, Workflow Optimization, Production Efficiency and Scalability, Risk Management in Production Processes, Case Studies on Process Implementation. (7+1)

Unit 4: Design and Maintenance of Production Facilities: Principles of Facility Design for Pharmaceutical Production, Equipment Selection and Validation, Facility Layout and Optimization, Maintenance Management and Scheduling, Environmental and Safety Considerations. (7+1)

Unit 5: Strategic Production Planning and Resource Management: Production Scheduling Techniques, Production Control Systems, Resource Requirement Planning (RRP), Integration of Production Planning and Control, Tools and Technologies for Production Planning, Inventory Management and Just-In-Time (JIT) Production. (7+1)

Suggested Text Books:

1. Pharmaceutical Production and Management by C.V.S. Subrahmanyam
2. Production and Operations Management by Panneerselvam

Suggested Reference Books:

1. Pharmaceutical Production Management by TnkSuriyaprakash, Sakthivel Lakshmana Prabu , Arumugam Sumathi
2. Pharmaceutical Operations Management: Manufacturing for Competitive Advantage by Pankaj Mohan ,Jarka Glassey , Gary A. Montague
3. Pharmaceutical Process Design and Management by Kate McCormick (Author), D. Wylie McVay Jr

Semester III	309 PHM	SE PHM 06: Compensation Management and Performance Appraisal in Pharma and Healthcare
3 Credits	LTP: 2:0:2	Subject Elective Pharma and Healthcare Management Specialization

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OBJECTIVES
CO309PHM.1	REMEMBERING	DESCRIBE the Components of Compensation management and Performance Appraisal.
CO309PHM.2	UNDERSTANDING	Understand the fundamentals of compensation management and performance appraisal in the context of the pharmaceutical and healthcare industries.
CO309PHM.3	APPLYING	IDENTIFY factors affecting Compensation Management and Performance Appraisal.
CO309PHM.4	ANALYSING	Analyze the impact of compensation and performance management on organizational effectiveness and employee motivation.
CO309PHM.5	EVALUATING	Evaluate the various concepts of Compensation management and Performance Appraisal Systems.
CO309PHM.6	CREATING	Develop the skills to design and implement effective compensation and performance appraisal systems.

Unit 1: Introduction to Compensation Management-Overview of Compensation Management, Components of Compensation, Methods of job analysis, Job evaluation techniques: ranking, classification, point method. (7+1)

Unit 2: Legal and Ethical Issues in Compensation- Regulatory Framework-Labor laws affecting compensation in Pharma and Healthcare, Fair Labor Standards Act (FLSA), Equal Pay Act, etc. Ethical Issues -Pay discrimination, Executive compensation, Transparency in compensation. (7+1)

Unit 3: Strategic Compensation-Aligning Compensation with Business Strategy, Role of compensation in strategic planning, Compensation as a tool for competitive advantage, Compensation Trends in Pharma and Healthcare, Market trends and industry-specific practices, Global compensation challenges. (7+1)

Unit 4: Performance Management Systems-Fundamentals of Performance Management in Pharma and Healthcare Management, Definition and objectives, Importance in Pharma and Healthcare, Performance Appraisal Methods-Traditional methods: rating scales, checklists, Modern methods: 360-degree feedback, management by objectives (MBO). (7+1)

Unit 5: Designing and Implementing Performance Appraisal Systems, Key Components of an Effective Performance Appraisal System, setting performance standards, designing appraisal forms, Implementation and Communication, Linking Performance Appraisal to Compensation, Challenges and Solutions. Future Trends in Pharma and Healthcare Compensation. (7+1)

Suggested Reference Books

1. "Compensation" by George T. Milkovich, Jerry M. Newman, and Barry A. Gerhart
2. "Performance Management: Integrating Strategy Execution, Methodologies, Risk, and Analytics" by Gary Cokins

Articles and Journals

1. Harvard Business Review articles on compensation and performance management
2. Journal of Healthcare Management

Semester III	310 PHM	SE PHM 07: Health Insurance
3 Credits	LTP: 2:0:2	Subject Elective Pharma and Healthcare Management Specialization

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO310PHM.1	REMEMBERING	Remember concepts related to health insurance, including the determinants of health, types of policies, and regulatory frameworks.
CO310PHM .2	UNDERSTANDING	Understand the principles of underwriting, and the regulatory guidelines affecting health insurance products and claims.

CO310PHM .3	APPLYING	APPLY the knowledge of current information, techniques and practices in all of the major business disciplines.
CO310PHM .4	ANALYSING	Analyze the challenges in health insurance claims management.
CO310PHM .5	EVALUATING	COMPARE various kinds of insurance plans as well as the importance of contract in Customers.
CO310PHM .6	CREATING	CREATE valuable insights into overview of Health Insurance Products.

Unit 1: Fundamentals of Health Insurance: Definition and Determinants of Health, Factors Affecting Health Systems in India, Evolution of Health Insurance in India, Types of Health Insurance Schemes and Policies Difference Between Health Insurance and Mediclaim Insurance, Health Insurance Regulations by IRDAI, IRDA Guidelines on Standardization in Health Insurance, Documentation for Obtaining Health Insurance Policy. (7+1)

Unit 2: Health Insurance Products: Classification of Health Insurance Products, Features and Benefits of Various Health Insurance Plans, Product Design and Development, Regulatory Guidelines for Health Insurance Products, Innovations and Trends in Health Insurance Products. (7+1)

Unit 3: Health Insurance Underwriting: Concepts and Principles of Underwriting, Definition, Meaning, and Need for Underwriting, Basic Principles of Insurance and Underwriting Tools, Underwriting Process and Risk Assessment, Underwriting of Overseas Travel Insurance, Underwriting of Personal Accident Insurance Challenges in Health Insurance Underwriting. (7+1)

Unit 4: Health Insurance Claims Management: Stakeholders in the Health Insurance Claim Process, Challenges in Health Insurance Claims, Claims Process, Documentation Required for Health Insurance Claims, Claims Reserving and Settlement, Managing Personal Accident and Overseas Travel Insurance Claims Fraud Detection and Prevention in Health Insurance Claims. (7+1)

Unit 5: Regulatory and Compliance Aspects: Overview of Health Insurance Regulations in India, Role of IRDAI in Health Insurance, Compliance Requirements for Health Insurance Providers, Consumer Protection Laws and Health Insurance, Ethical Considerations in Health Insurance, Impact of Regulatory Changes on Health Insurance Market, Case Studies on Regulatory Compliance in Health Insurance. (7+1)

Suggested Text Books:

1. Principles of Insurance Management, Neelam Gulati, Excel Books.
2. Insurance, Principles and Practice, S. N. Mishra, S. B. Mishra, S Chand Publication.
3. Principles of Risk Management and Insurance, George Rejda, Pearson Publication.

Suggested Reference Books:

1. General Insurance Guide, Dr. L.P.GUPTA.
2. Indian Insurance Industry, Transition and Prospects, D.C. Srivastava, Shashank Srivastava, New Century Publications.
3. Insurance and Risk Management, P. K. Gupta, Himalaya Publishing House.

Semester III	311 PHM	SE PHM 08: Entrepreneurship in Pharma and Healthcare
3 Credits	LTP: 2:0:2	Subject Elective Pharma and Healthcare Management Specialization

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO311PHM .1	REMEMBERING	DEFINE the key terms, LIST the Attributes and Characteristics of Entrepreneurs feature and ENUMERATE the Factors influencing Entrepreneurship Growth.
CO311PHM .2	UNDERSTANDING	DISCUSS the various theories of entrepreneurship.
CO311PHM .3	APPLYING	CONSTRUCT a framework for a typical EDP for the Pharma industry
CO311PHM .4	ANALYSING	EXAMINE the role of Government and various support organizations in encouraging and supporting Entrepreneurship.

CO311PHM .5	EVALUATING	COMPOSE an inventory of possible entrepreneurial opportunities in contemporary local, regional and national the context for Pharma and Healthcare sector.
CO311PHM .6	CREATING	BUILD a business plan for an entrepreneurial pharma of healthcare venture.

Unit1: Entrepreneurship: Entrepreneurship Need, scope and philosophy, Creativity and entrepreneurship, Entrepreneurial competencies and traits, Factors affecting entrepreneurial development: Religious, social, cultural, political, ancestral and demographic. (7+1)

Unit 2: Theories of entrepreneurship: Innovation Theory by Schumpeter & Imitating, Theory of High Achievement by McClelland, X-Efficiency Theory by Leibenstein, Theory of Profit by Knight, Theory of Social change by Everett Hagen. (7+1)

Unit 3: Entrepreneurship development: Entrepreneurial Competencies, Developing Competencies. Concept of entrepreneurship development, Entrepreneur Training and developing, Role of Entrepreneur Development Programs (EDP), Role of DIC, SISI , EDII , NIESBUD, NEDB, EDP - Objectives – contents – methods - execution. Role of Mentors. Innovation and Entrepreneurship, Design Thinking Process. Role of consultancy organizations in promoting Entrepreneurs, Problems and difficulties of Entrepreneurs. (7+1)

Unit 4: Role of Central Government and State Government in promoting Entrepreneurship: Introduction to various incentives, subsidies and grants, Export Oriented Units, Fiscal and Tax concessions available, Future of Entrepreneurship Development and Government, Start Up India, Make in India. (7+1)

Unit 5: Enterprise Promotion: Creating Entrepreneurial Venture, Entrepreneurship Development Cycle, Business Planning Process, The Business Plan as an entrepreneurial tool, Elements of Business Plan, Ownership - Franchising, networking and alliances, Buying an existing business, Critical risk, Contingencies of the proposal, Scheduling and milestones. (7+1)

Suggested Text Books:

1. Dynamics of Entrepreneurial Development and Management by Vasant Desai
2. Entrepreneurship Development Small Business Enterprises by Poornima Charanthimath
3. Small Scale Industries and Entrepreneurship by Vasant Desai
4. The Theory of Economic Development by Joseph A. Schumpeter.
5. Entrepreneurial Development by S S Khanka
6. Business Innovation by Praveen Gupta
7. Launching New Ventures by K. Allen

Suggested Reference Books

1. The Culture of Entrepreneurship, Brigitte Berg

Semester IV	403 PHM	SC PHM 02: Regulatory laws in Indian Pharmaceutical & healthcare Industry
3 Credits	LTP: 2:0:2	Subject Core (SC) Course Pharma and Healthcare Management

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO403PHM.1	Remembering	Remember various laws applicable to Pharma and Healthcare industry
CO403PHM.2	Understanding	UNDERSTAND various laws applicable to Pharma and Healthcare industry
CO403PHM.3	APPLYING	Understand the situation and identity right legal way to solve the problem
CO403PHM.4	ANALYSING	Analyze the role of regulatory bodies and their impact on the pharmaceutical and healthcare sectors.
CO403PHM.5	EVALUATING	Evaluate compliance strategies and the implications of regulatory non-compliance.
CO403PHM.6	CREATING	Elaborate the different laws developed by constitutions to support and protect Pharma and Healthcare sector

Unit 1: General Laws: General Law of Contract: Essentials of a Contract – Offer and acceptance – Capacity of Parties Free, Consent – Consideration and legality of object – Void argument and Contingent Contract, Law of privileged communications. (7+1)

Unit 2: Introduction of Laws applicable to Hospitals: Functioning of hospitals and Medico – legal responsibilities cases and problems, Medico- Legal Problems in relation to health administration, Provision of commissioning of hospitals: Registration of companies act 2013 with reference to Incorporation of hospitals as a company, Indian medical council act 1956 (7+1)

Unit 3: Laws related to drugs and Pharmacy: Narcotic Drugs and Psychotropic Substances Act and Rules, Drugs and Cosmetics Act, 1940 , (Blood bank regulations under Drugs and cosmetic rules), Pharmacy Act 1948 (7+1)

Unit 4: Consumer Protection Act – Definition, Consumer Protection Council, Consumer Disputes Redressal Agencies – Other Salient features – Application of Consumer, Protection Act in Hospital, Recent judgment of Supreme Court, Implication for Health Professionals. (7+1)

Unit 5: Data Protection and Privacy Laws in Healthcare- Information Technology Act, 2000, Data protection regulations, Health data privacy and security standards, General Data Protection Regulation, Impact of GDPR on Indian healthcare and pharmaceutical industries, Ensuring compliance with electronic health records (EHR) guidelines. (7+1)

Suggested Text Books:

1. New Drug Approval Process, edited by Richard A. Guarino
2. The Pharmaceutical Regulatory Process, edited by Ira R. Berry
3. Medical Product Regulatory Affairs, edited by J. J. Tobin and G. Walsh
4. Pharmaceutical Jurisprudence by G K Jani
5. Official websites related to various guidelines - www.ICH.Org 73 NIPER HYDERABAD
6. FDA Regulatory Affairs, edited by Douglas J. Pisano
7. The Pharmaceutical Regulatory Process edited by Ira R. Berry, Marcel Dekker.

Suggested Reference Books

1. The Pharmacy Act, 1948
2. The Drugs and Cosmetics Act, 1940.
3. The Drugs and Magic Remedies (Objectionable Advertisement Act), 1954.
4. DPCO, 1995.
5. Patents Act, 2005

Semester IV	405 PHM	SE PHM 09: Ethics and Legal aspects of Pharmaceutical and Healthcare Business
3 Credits	LTP: 2:0:2	Subject Elective Pharma and Healthcare Management Specialization

Course Outcomes: On successful completion of the course the learner will be able to:

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO405PHM.1	REMEMBERING	Remember ethical theories and principles, regulatory frameworks and legal requirements governing the pharmaceutical industry.
CO405PHM.2	UNDERSTANDING	Understand ethical principles, legal frameworks, and corporate governance practices essential for pharmaceutical and healthcare sector.
CO405PHM.3	APPLYING	Apply ethical decision-making resolve case studies
CO405PHM.4	ANALYSING	Analyze impact of CSR initiatives
CO405PHM.5	EVALUATING	Evaluate effectiveness of Whistleblower Policies
CO405PHM.6	CREATING	Develop innovative strategies to enhance ethical leadership

Unit 1: Ethics and Social Responsibility in Pharma- Managerial ethics and ethical leadership, Ethical decision-making frameworks and processes, Role of ethics in building trust and reputation in the healthcare sector, ethical dilemmas, Case studies. (7+1)

Unit 2: Corporate Social Responsibility (CSR) and Stakeholder Engagement- Corporate Social Responsibility (CSR) in healthcare- Definition and evolution, Strategies for implementing CSR in pharmaceutical companies, Stakeholder engagement and its importance in CSR initiatives, Ethical considerations in CSR reporting and transparency, measurement of CSR activities in healthcare. (7+1)

Unit 3: Corporate Governance in Pharma- Corporate governance practices and principles, Board of Directors' responsibilities and ethical considerations, Compliance with industry standards, Case studies on legal and ethical implications of governance failures. (7+1)

Unit 4: Whistleblower Policies and Managing Diversity- Whistleblower Definition, importance whistleblower policies in pharmaceutical companies, Whistleblower protection laws and regulations, effective whistleblower programs- Design and implementation, Managing diversity in the pharmaceutical workplace with respect to gender, Sexual preference, race, ethnicity etc. (7+1)

Unit 5: Emerging Issues and Ethical Challenges in Healthcare- Ethical issues in pharmaceutical marketing and promotion, Patient rights and ethical considerations in clinical trials, Ethical implications of emerging technologies in healthcare (AI, biotechnology), Global perspectives on healthcare ethics and regulation, Future trends in ethical leadership and governance in the pharmaceutical industry. (7+1)

Suggested Text Books:

1. Legal Aspects Of Health Care Administration by George D. Pozgar (Author)
2. Risk Management and Risk Assessment for Pharmaceutical Manufacturing by Tim Sandle
3. Business Ethics (Concept, Application, Framework and Cultural Impact) K. Aswathappa, J. Ushar Rani, Sunanda Gundavajhala, Himalaya Publishing House

Suggested Reference Books:

1. Essentials of Law and Ethics for Pharmacy Technicians by Kenneth M. Strandberg
2. Business Ethics: Concepts and Cases, Velasquez, Pearson Education India.

Semester IV	406 PHM	SE PHM 10: Clinical Data Management
3 Credits	LTP: 2:0:2	Subject Elective Pharma and Healthcare Management Specialization

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO406PHM.1	REMEMBERING	Define Clinical Data Management (CDM) and its importance in clinical research, List key terminologies and concepts in CDM.
CO406PHM.2	UNDERSTANDING	Explain the role of CDM in clinical trials, Describe the lifecycle of clinical data from collection to submission. Identify common data management challenges and solutions
CO406PHM.3	APPLYING	Develop a Data Management Plan for a given clinical trial scenario
CO406PHM.4	ANALYSING	EXAMINE the role of Government and analyse impact of regulations on clinical data management practices.
CO406PHM.5	EVALUATING	Evaluate the effectiveness of data management strategies
CO406PHM.6	CREATING	Develop a project proposal for implementing a new data management strategy

Unit 1: Introduction to Clinical Data Management- Definition, clinical trials, phases of clinical trials, types of data collected in clinical trials, Importance of CDM in clinical research, data management, Role of clinical data management in clinical trials. steps in Clinical data management. (7+1)

Unit 2: Data Management Plan (DMP) and Data Quality-Case report forms(CRF), Electronic Data Capture (EDC) systems Components of a Data Management Plan, Importance of data quality, Quality control measures, Data accuracy and integrity. Quality control and quality assurance processes, Common issues and challenges in CDM. (7+1)

Unit 3: Regulatory Requirements and Standards- Regulatory bodies and their guidelines (FDA, EMA, ICH), Impact of regulations on clinical data management practices. Good clinical practices(GCP), Stakeholders in Clinical Trials, Standard Operating Procedures (SOPs) in GCP, Ethical considerations in clinical data management, Data privacy and security. (7+1)

Unit 4: Pharmacovigilance - Definition, History and evolution, Pharmacovigilance Processes and Systems, Good Pharmacovigilance Practices (GVP), importance of pharmacovigilance in ensuring drug safety. (7+1)

Unit 5: Data Analysis and Reporting - Statistical methods used in clinical data analysis, process of data cleaning and preparation for analysis , introduction of statistical software (SAS,SPSS). (7+1)

Suggested Text Books:

1. Principles And Practice Of Clinical Data Management by Dr. Priyadarsh Vasanthan
2. Text Book of Pharmacovigilance by Prof. Dr. M K Gupta
3. Textbook of Pharmacovigilance by SK Gupta ,Sushma Srivastava
4. Clinical Trials Data Management and Quality Control by Dr. Nilesh Panchal

Suggested Reference Books

1. Clinical Research Career Guide by Sarabjit Sindhu
2. Practical Guide to Clinical Data Management by PROKSCHA
3. Clinical Data Management by RK Rondel

Semester IV	407 PHM	SE PHM 11: Regulatory Affairs in pharmaceuticals
3 Credits	LTP: 2:0:2	Subject Elective Pharma and Healthcare Management Specialization

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO407PHM.1	REMEMBERING	Remember fundamental concepts and terminology related to drug regulatory affairs.
CO407PHM.2	UNDERSTANDING	Understand the fundamentals of drug regulatory affairs and its significance in the pharmaceutical industry.
CO407PHM.3	APPLYING	Apply the principles of drug regulatory affairs to prepare and review regulatory documentation.
CO407PHM.4	ANALYSING	Analyze case studies to identify regulatory challenges and solutions during drug approval processes.
CO407PHM.5	EVALUATING	Evaluate compliance from various authorities.
CO407PHM.6	CREATING	Develop skills necessary for effective regulatory strategy and communication.

Unit 1: Drug Regulatory Affairs- Introduction, history of drug regulation in India, role of drug regulatory professionals, Role of FDA,EMA, CDSCO and other regulatory bodies, drug development process, regulatory environment in Indian, regulatory frameworks. (7+1)

Unit 2: Drug Approval Process- Steps in Drug approval process, filling New Drug Application(NDA), Abbreviated NDA(ANDA), international licensing, Biologics License Application (BLA), Common Technical Document (CTD) Format, regulatory process for Active pharmaceutical Ingredients(API), post marketing requirements- GMP and compliance, Recalls ,withdrawals and crisis management, Regulatory inspections and audits. (7+1)

Unit 3: Regulatory environment for international market- Regulatory process in United States, European Union, Japan. Emerging markets-meaning, countries, ICH guidelines, Global regulatory strategy, TRIPS and WTO.(7+1)

Unit 4: Emerging trends-Role of Digital Health and Regulatory Considerations, Personalized Medicine and Regulatory Challenges, regulatory aspects of Biosimilars and Biologics, Artificial Intelligence in Regulatory Affairs, Data Integrity and Electronic Submissions, Future Trends and Global Initiatives. (7+1)

Unit 5: Intellectual Property Right (IPR)- Introduction to various IPR- Role of IPR in Pharma Business: Intellectual Property Rights: Ideas to Assets, Types of IPR , their term, criteria and relevance: Patent, Trademarks, Design, Copyright, Trade secrets, Development of Indian Patent law in India, World Intellectual Property Organization (WIPO), Patent Filing in India, Patent law & Indian pharmaceutical industries, Patent Infringement. (7+1)

Suggested Text Books:

1. Drug Regulatory Affairs by Singh G.
2. The Pharmaceutical Regulatory Process, edited by Ira R. Berry
3. Medical Product Regulatory Affairs, edited by J. J. Tobin and G. Walsh
4. Pharmaceutical Jurisprudence by G K Jani
5. Official websites related to various guidelines - www.ICH.Org
6. Compliance Quality Standards in the Pharmaceutical and Regulated Industries,
7. The Pharmaceutical Regulatory Process edited by Ira R. Berry, Marcel Dekker.

Suggested Reference Books

1. Regulatory Affairs in the Pharmaceutical Industry by Javed Ali, Sanjula Baboota
2. COMPREHENSIVE GUIDE TO INTELLECTUAL PROPERTY RIGHTS: IN PHARMACEUTICAL REGULATORY AFFAIRS by Dr. CHENNUPATI V.SURESH, Dr. KNV RAO, Dr. MURALIDHAR RAO
3. FDA Regulatory Affairs: Third Edition by David Mantus ,Douglas J. Pisano

Semester IV	408 PHM	SE PHM 12: International Pharma marketing
3 Credits	LTP: 2:0:2	Subject Elective Pharma and Healthcare Management Specialization

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO408PHM.1	REMEMBERING	Remember differences between international and domestic marketing, and the roles of MNCs and TNCs.
CO408PHM.2	UNDERSTANDING	Explain the principles of international marketing, the impact of various environmental factors on international marketing strategies, and the significance of international trade theories and organizations.
CO408PHM.3	APPLYING	Demonstrate and learn the Financial, ethical, and organizational issues involved in international marketing
CO408PHM.4	ANALYSING	Analyze the economic, political, socio-cultural, and technological environments that influence international pharmaceutical markets
CO408PHM.5	EVALUATING	Evaluate the benefits of international marketing for pharmaceutical companies
CO408PHM.6	CREATING	Develop comprehensive international marketing strategies tailored to the global pharmaceutical market

Unit 1: Introduction- Comparison of international marketing vs. domestic marketing, Principles of international marketing: customer value, competitive advantage, management orientations, Benefits of international marketing for pharmaceutical companies, Role of Multinational Corporations (MNCs) and Transnational Corporations (TNCs) in global markets. (7+1)

Unit 2: International Marketing Environment- Political environment: political systems, legal and regulatory frameworks, Socio-cultural environment and its impact on international marketing, Economic environment: global economic factors influencing pharmaceutical markets, Technological environment and its role in shaping international marketing strategies. (7+1)

Unit 3: International Trade and Organization- international trade theories (classical and modern), Trade barriers and implications of tariffs and quotas in pharmaceutical trade, General Agreement on Tariffs and Trade (GATT) and its evolution into the World Trade Organization (WTO), Functions and objectives of WTO in the context of international marketing, India's role in international trade and its impact on global marketing strategies. (7+1)

Unit 4: International Marketing Research and Decision Making- Importance of international marketing research, Approach and process of conducting international marketing research, Market surveys and information systems in international marketing, Negotiation strategies with international customers, partners, and regulators Global e-marketing strategies and their application in pharmaceutical marketing. (7+1)

Unit 5: Product Policy, Pricing, and Export Procedures- International product policy: new product development, standardization vs. adaptation, International pricing policy: factors influencing pricing decisions, pricing strategies, Export procedures and policies: steps involved in export, export documentation requirements, Terms of payment and delivery in international transactions, international logistics, distribution planning, and communication strategies. (7+1)

Suggested Text Books:

1. International Marketing (SIE)|18th Edition by Phillip R. Cateora, R. Bruce Money, Mary C. Gilly , John L. Graham
2. INTERNATIONAL MARKETING by Rakesh Mohan Joshi
3. Glocal Pharma: International Brands and the Imagination of Local Masculinity (Global Connections) by Ericka Johnson (Author), Ebba Sjögren (Author), Cecilia Åsberg (Author)

Semester IV	409 PHM	SE PHM 13: Marketing of Medical Devices and Diagnostics
3 Credits	LTP: 2:0:2	Subject Elective Pharma and Healthcare Management Specialization

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO409PHM.1	REMEMBERING	Recall fundamental concepts and definitions related to the medical devices and diagnostics industry and its regulatory environment.
CO409PHM .2	UNDERSTANDING	Explain market analysis, consumer behavior, and decision-making processes within the medical devices and diagnostics market.
CO409PHM .3	APPLYING	Apply knowledge of regulatory affairs, including approval processes and ethical standards, in marketing strategies for medical devices and diagnostics.
CO409PHM .4	ANALYSING	Examine marketing strategies and product launch processes, including market segmentation, pricing, and the role of digital marketing.
CO409PHM .5	EVALUATING	Evaluate sales management and customer relationship management strategies
CO409PHM .6	CREATING	Design comprehensive marketing plans for medical devices and diagnostics, incorporating various digital and traditional strategies.

Unit 1: Introduction to Medical Devices and Diagnostics Industry: medical devices-Definition, classification, medical device industry in India, diagnostics sector-introduction, its significance within the healthcare industry, diagnostic tools-categories, regulatory environment, roles FDA and EMA, impact of product lifecycle, innovation, and technological advancements on the market of medical devices and diagnostics, Key players. (7+1)

Unit 2: Market Analysis and Consumer Behavior: Patient demographics and epidemiology, Healthcare provider needs and preferences, Market analysis, SWOT analysis, market segmentation, targeting, and positioning strategies, product differentiation, consumer behavior, decision-making processes of healthcare professionals and patients, new technologies, Case studies based on successful market entries and the adoption of new technologies. (7+1)

Unit 3: Regulatory Affairs and Compliance: Approval processes for new products-clinical trials, pre-market approvals, and post-market surveillance. National and international regulations, Risk management, quality assurance, and ethical standards, impact of regulations on marketing strategies. (7+1)

Unit 4: Marketing Strategies and Product Launch: Marketing plans, branding, and positioning strategies for medical devices and logistics, challenges of launching a medical device or diagnostic product, pricing strategies factors affecting pricing, value-based pricing, distribution channels. Role of digital marketing in medical devices, Social media strategies and online communities, SEO, PPC, and content marketing. (7+1)

Unit 5: Sales Management and Customer Relationship: Traditional Marketing Channels-Sales force and direct marketing, Trade shows, conferences, and medical congresses, public relations and media strategies, market entry strategies for global market, ethical consideration in medical device marketing, patient privacy and data security, customer service, CRM. (7+1)

Suggested Text Books:

1. Marketing Management, Rajan Saxena, TMGH
2. Medical Device Marketing: Strategies, Gameplans & Resources for Successful Product Management by Terri Wells.
3. A Millennial's Guide to Breaking into Medical Device Sales by David Bagga.

Suggested Reference Books

1. Principles of Marketing, Philip Kotler, Gary Armstrong, Prafulla Agnihotri, Ehasan Haque, Pearson
2. Marketing Management- Text and Cases, Tapan K Panda, Excel Books
3. Marketing Management, Ramaswamy & Namakumari, Macmillan.
4. Medical Product Regulatory Affairs: Pharmaceuticals, Diagnostics, Medical Devices by John J. Tobin, Gary Walsh.

Semester IV	410 PHM	SE PHM 14: Quality Assurance and Control Management in Pharma
3 Credits	LTP: 2:0:2	Subject Elective Pharma and Healthcare Management Specialization

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO410PHM .1	REMEMBERING	Remember principles and systems of quality assurance and quality control in the pharmaceutical industry.
CO410PHM .2	UNDERSTANDING	Understand quality control techniques, the importance of quality audits, and good laboratory practices in pharmaceutical manufacturing.
CO410PHM .3	APPLYING	Apply knowledge of current Good Manufacturing Practices (cGMP), quality risk management, and quality metrics in pharmaceutical manufacturing.
CO410PHM .4	ANALYSING	Analyze the strategic issues in quality management, including current issues and developments.
CO410PHM .5	EVALUATING	Evaluate emerging trends in quality management, such as Six Sigma, Lean Six-Sigma, and the impact of digital technologies on quality assurance.
CO410PHM .6	CREATING	Devise and evaluate quality implementation plans using quality tools and techniques, considering emerging trends and best practices in pharmaceutical quality assurance

Unit 1: Introduction- Quality-Definition, concept & dimensions, Quality assurance & Quality management-Definition, Difference between QA and QC Importance of QA and QC in pharmaceutical industry, quality management principles in pharmaceuticals, Quality management systems, regulatory guidelines (FDA, EMA), implications of quality failure, responsibilities of Quality assurance and quality control department. (7+1)

Unit 2: Quality control Techniques- Quality variation, Raw material control, In-process Items Control, Manufacturing Variation Control, Process of Quality Assurance Management, list of analytical techniques of quality control, Good Laboratory Practices and management, Importance of Quality Audits. (7+1)

Unit 3: Good Manufacturing Practices in Pharmaceuticals-Current Good Manufacturing Practices (cGMP, Quality Risk Management and its application, Standard Operating Procedure, batch records, Quality Documentation management, Quality metrics and performance indicators in pharmaceutical manufacturing. (7+1)

Unit 4: Quality Assurance- QA principles in drug development phases (preclinical, clinical) Good Clinical Practice (GCP) guidelines and their application, Data integrity and reliability in clinical trials, Ethical considerations and patient safety in clinical research, Regulatory submissions and compliance in clinical trials. (7+1)

Unit 5: Emerging Trends in Quality Management-Kaizen, Quality Circles, Benchmarking, Six Sigma, Just-in-Time, Lean Six-Sigma, 5S, Application of quality tools and techniques for process optimization, impact digital technologies in QA (data analytics, AI, IoT), Emerging trends in pharmaceutical QA (personalized medicine, biopharmaceuticals), case studies. (7+1)

Suggested Text Books:

1. Quality Assurance and Quality Management in Pharmaceutical Industry by Y. Anjaneyulu, R. Marayya
2. GMP in Pharmaceutical Industry: Global cGMP & Regulatory Expectations by Trupti Patil-Dongare
3. Managing Quality by Mihaela Kelemen
4. QUALITY MANAGEMENT by R. PANNEERSELVAM, P. SIVASANKARAN

Suggested Reference Books

1. Concepts of Quality Management in Pharmaceutical Industry by Manohar a Potdar

Semester IV	411 PHM	SE PHM 15: Pharmaceutical Advanced Human Resource Management
3 Credits	LTP: 2:0:2	Subject Elective Pharma and Healthcare Management Specialization

Course Outcomes: On successful completion of the course the learner will be able to

CO	COGNITIVE ABILITIES	COURSE OBJECTIVES
CO411PHM.1	REMEMBERING	DESCRIBE the Key Components of Advanced HRM in Pharma.
CO411PHM.2	UNDERSTANDING	To provide in-depth knowledge of advanced HRM concepts tailored to the pharmaceutical industry.
CO411PHM.3	APPLYING	To explore best practices in HRM that drive organizational success and compliance in the pharmaceutical sector.
CO411PHM.4	ANALYSING	Examine the Changing role of HRM in Pharma.
CO411PHM.5	EVALUATING	Evaluate the various concepts of Compensation management and Performance Appraisal Systems.
CO411PHM.6	CREATING	To develop strategic HR skills necessary for managing a highly skilled workforce in a competitive and regulated environment.

Unit 1: Introduction to Advanced HRM in Pharmaceuticals-Overview of Advanced HRM, Definition and scope, Importance in the pharmaceutical industry, HRM in the Pharma Sector, Industry-specific challenges and opportunities, Key roles and responsibilities of HR professionals in pharma. (7+1)

Unit 2: Strategic HR Planning and Talent Management-Aligning HR strategy with business objectives, Workforce planning and forecasting, Talent Acquisition and Retention, Advanced recruitment strategies, Employer branding, Retention strategies specific to pharmaceuticals. (7+1)

Unit 3: Learning and Development-Identifying Training Needs-Designing and implementing effective training programs, Career pathing and professional growth, Advanced Performance Appraisal Techniques, Modern appraisal methods: 360-degree feedback, balanced scorecard, linking performance to development and rewards, Strategies for fostering high performance. (7+1)

Unit 4: Advanced Compensation Management-Designing competitive compensation packages in Pharma, Employee Relations and Engagement, managing employee relations in a unionized environment, Employee Engagement, Strategies for enhancing engagement, Regulatory Compliance and Ethics-Compliance in Pharmaceuticals, understanding regulatory requirements (FDA, EMA, etc.), Ensuring compliance in HR practices, Ethical Issues in HRM. (7+1)

Unit 5: Global HRM in Pharmaceuticals-Global HR Challenges, Managing a global workforce, Cultural considerations and expatriate management, Global Talent Mobility, Strategies for global talent acquisition, international assignments and relocation policies, Case Studies, HRM practices in leading pharmaceutical companies. (7+1)

Reference Books

1. "Strategic Human Resource Management" by Jeffrey A. Mello
2. "Pharmaceutical HRM: An Integrated Approach" by Nita K. Pandit , Robert P. Soltis

Articles and Journals

1. Human Resource Management Journal
2. Journal of Pharmaceutical Policy and Practice

Semester IV	412 PHM	SE PHM 16: Healthcare Analytics
3 Credits	LTP: 2:0:2	Subject Elective Pharma and Healthcare Management Specialization

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO412PHM.1	REMEMBERING	Describe the key terms in healthcare data analytics
CO412PHM.2	UNDERSTANDING	Explain the fundamental concepts in Health Care Analytics
CO412PHM.3	APPLYING	Apply the data management techniques for healthcare data
CO412PHM.4	ANALYSING	Analyze R algorithms for health data analysis
CO412PHM.5	EVALUATING	Evaluate the need for healthcare data analysis in e-healthcare, telemedicine, and other critical care applications
CO412PHM.6	CREATING	Design health data analytics for real-time applications

Unit 1: Overview : History of Healthcare Analysis (Definition, Evolution, and Need of Healthcare Analytics) Parameters on medical care systems- Healthcare policy- Standardized code sets – Clinical Prediction Models, Temporal Data Mining, Visual Analytics, Clinico–Genomic Data Integration, Information Retrieval, Privacy-Preserving Data Publishing. (7+1)

Unit 2: Fundamentals of R: R environment, Downloading and Installing R, using command line in R, Help, File operations in R -Reading from and Writing to a file, Writing your first code in R, Importing data from spreadsheets, text files, SAS,SPSS, Connect to RDBMS from R using ODBC, basic SQL queries in R, Exploration and transformation activities, basics of Web Scraping. (7+1)

Unit 3: Healthcare Analytics using R:Data types in R and its appropriate uses, Program Structure in R, Flow Control: For loop, If condition, While conditions and repeat loop, Debugging tools, Concatenation of Data, Combining Vars , cbind, rbind, Sapply, apply, tapply functions, Built-in functions in R like: seq(), cbind (), rbind(), merge(), knowledge on the various subsetting methods, summarize data by using functions like: str(), class(), length(), nrow(), ncol(), use of functions like head(), tail(), for inspecting data, summarize data, SQL join in R. Introduction to Data Structure in R, Vectors, Lists, Scalars, Data Frames, Matrices, Arrays, Factors, Use of data structures in different conditions, Advantage of using a particular approach. Data Mining, Data Pre-processing –Visualization . (7+1)

Unit 4: Predictive Healthcare Analytics :Linear Regression: Concept of Linear regression, Dependency of variables, Ordinary Least Sum of Squares Model, Multiple Linear Regression, Obtaining the Best fit line, Assumptions and Evaluation, Outliers and Influential Observations, Multi-collinearity(a) Multiple Linear Regression: Concept of Multiple Linear regression, Step wise Regression, Dummy Regression,(b) Logistic regression: Concept of Logistic Regression, odds and probabilities, Log likelihood ratio test, Pseudo Rsquare, ROC plot, Classification table, Logistic regression & classification problems. (7+1)

Unit 5: Case Studies: Case studies in different domains- using R. (7+1)

Suggested Text Books:

1. Healthcare Data Analytics Edited by Chandan K. Reddy &Charu C. Aggarwal, CRC press.

2. Healthcare Analytics Made Simple by Vikas Kumar, Packt Publishing
3. Healthcare Analytics: From Data to Knowledge to Healthcare Improvement by Hui Yang & Eva K. Lee
4. Healthcare Management and Administration, S.L. Goel, Deep & Deep Publications Pvt. Ltd. New Delhi.
5. Introduction To Health Care Management , Sharon B. Buchbinder , Nancy H. Shanks, Malloy Incorporation.

Suggested Reference Books:

1. Regression Modelling Strategies: With Applications to Linear Models, Logistic Regression, and Survival Analysis, Harrell, FE. New York, NY: Springer, 2001 3
2. Healthcare Data Analytics, Edited by Chandan K. Reddy and Charu C. Aggarwal (2015), CRC Press, ISBN: 978-1-482-23212-7
3. R for Health Data Science, Ewen Harrison and Riinu Pius (2021), CRC Press, ISBN: 978-0-367-85542-0, available from https://argoshare.is.ed.ac.uk/healthyr_book/