Savitribai Phule Pune University, Pune

Faculty of Commerce and Management

Curriculum 2025 Pattern
Master of Business Administration (MBA) – Project Management

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 - Project Management 1st year effective from AY 2025 - 26
MBA - Project Management 2nd year effective from AY 2026 - 27

MBA – Project Management – Curriculum 2025 Pattern 2-year,
4 Semester Full time Programme
Choice Based Credit System (CBCS) and Grading System
Outcome Based Education Pattern
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MBA – Project Management I year effective from AY 2025 - 26

MBA – Project Management II effective from AY 2026 - 27

1.0 Preamble: The revised MBA – Project Management 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:*

a) every ONE-hour session per week of L amounts to 1 credit per semester
b) a minimum of TWO hours per week of T amounts to 1 credit per semester,
c) 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 Project Management Programme Focus:

3.1 Programme Educational Objectives (PEOs):

1. **PEO1:** Graduates of the MBA Project Management 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*.
2. **PEO2:** Graduates of the MBA Project Management 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*.
3. **PEO3:** Graduates of the MBA Project Management program will be appreciative of the significance of *Indian ethos and values in managerial decision making* and *exhibit value centered leadership*.
4. **PEO4:** Graduates of the MBA Project Management 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*.

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5. **PEO5:** Graduates of the MBA Project Management 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 Project Management 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):

PSO 1: Development and Implementation of Project Management Plan - Strategic analysis and planning: Graduates of MBA - Project Management Programme will be able to demonstrate the ability to develop and implement project management plan by application of concepts, theories, frameworks by aligning with purpose, vision, goals and objectives of corporate, entrepreneurial venture, non-profit organization and government organizations.

PSO 2: Thought Leadership for Managing diverse Teams and Stakeholders:
Graduates of MBA - Project Management will showcase thought leadership through exceptional communication skills, enabling them to effectively manage cross-functional, multi-disciplinary, and multicultural teams and stakeholders. They will adeptly handle continuity, change, risk, ambiguity, and complexity, while inspiring and motivating team members to foster a positive and productive work environment.

PSO 3: Application of advanced Tools for Agility: Graduates of MBA - Project Management will be equipped to analyze and evaluate dynamic contexts, making data-driven decisions to plan, execute, monitor, and control projects. They will leverage advanced project management technologies, tools, and techniques—including Agile methodologies, Gantt charts, critical path analysis, earned value management, and stakeholder analysis—to enhance agility across people, products, processes, and organizations.

PSO 4: Performance of Project Management using Bodies of Knowledge: Graduates of MBA - Project

Management will demonstrate proficiency in improving and optimizing project management practices through effective and efficient scope, time, cost, quality, resource, risk, procurement, and communication management, all while adhering to ethical standards and fostering integrity in decision-making.

3.4 Graduate Attributes (GAs): At the end of the MBA – Project Management 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- Project Management) Programme Structure as per NEP

Year	Level	Semester (2 Year)	Major		RM	OJT / FP	RP	Cumu lative	Degree
			Mandatory	Electives					
I	6.0	Semester I	22 credits	4	-	-	-	26	
		Semester II	14 credits	4	4	4 FP	-	26	
Cumulative 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	240	360	600
Mandatory	I	Generic Core	2	2	4	0	120	120
Elective	I	Generic Elective	2	2	4	80	0	80
		TOTAL	**10**	**-**	**26**	**320**	**480**	**800**
Mandatory	II	Generic Core	4	3	12	160	240	400
Mandatory	II	Generic Core	1	2	2	0	60	60
Mandatory	II	Business Research Methods	1	2	2	-	60	60
Mandatory	II	Desk Research	1	2	2	40	0	40
Mandatory	II	Field Project	1	4	4	40	120	160
Elective	II	Generic Elective	2	2	4	80	0	80
		TOTAL	**10**	**-**	**26**	**320**	**480**	**800**
PG Diploma in Management (Project Management) after Three Year UG Degree (with additional 4 credits of OJT for Exitoption)			**20**	**-**	**52**	**640**	**960**	**1600**

- The students can exit the Programme after one year of MBA Project Management, 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- Project Management) Structure as per NEP								
Type	**Semester**	**Course Type**	**Number of Courses**	**Credits**	**Total Credits**	**FA**	**SA**	**Total**
Mandatory	III	Generic Core	1	3	3	40	60	100
Mandatory	III	Subject Core	1	3	3	40	60	100
Mandatory	III	OJT (SIP)	1	8	8	80	120	200
Elective	III	Subject Elective	4	3	12	160	240	400
		TOTAL	**7**	**-**	**26**	**320**	**480**	**800**
Mandatory	IV	Generic Core	1	3	3	40	60	100
Mandatory	IV	Generic Core	1	2	2	0	60	60
Mandatory	IV	Subject Core	1	3	3	40	60	100
Mandatory	IV	Research Project	1	6	6	80	60	140
Elective	IV	Subject Elective	4	3	12	160	240	400
		TOTAL	**8**		**26**	**320**	**480**	**800**
PG Degree (MBA - Project Management) after Four-year UG Degree(Lateral Entry)			**15**		**52**	**640**	**960**	**1600**
PG Degree (MBA - Project Management) after Three years UG Degree			**35**		**104**	**1280**	**1920**	**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:** are the compulsory courses for all the students.

4.1.4 **Elective Course:** Elective course is a course which can be chosen from a pool of courses. It may be:

a) Very Specialized or advanced course focusing on a specific aspect
b) Supportive to the discipline of study
c) Providing an extended scope
d) Enabling an exposure to some other discipline/domain
e) 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 centric' elective is called 'Subject Elective.' Subject Elective courses, in the Semester III and IV are focused on Project Management area.

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 specific compulsory courses (subject core). BRM shall be a generic compulsory course.***

4.1.8 **Massive Open Online Courses (MOOCs)**: 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. **Up to 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 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.

   The Director / Head of the Department / designated academic authority shall approve the scheme of Formative Assessment (FA) Comprehensive Concurrent Evaluation with or without modifications.
2. 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.
3. *Each FA/ CCE item shall be of minimum 25 marks.*
4. *For a 3 Credit Course there shall be a MINIMUM of three FA/CCE items. The final scores shall be converted to 40, using an average or best two out of three formulae.*
5. *For 2 Credit Course there shall be a MINIMUM of two CCE items. The final scores shall be converted to 40.*
6. 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.
7. 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.
8. 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.
9. Institute may conduct additional make up / remedial FA/CCE items at its discretion.
10. 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.

5.1 Formative Assessment (FA) / Comprehensive Concurrent Evaluation Methods: Course teachers shall opt for a combination of one of 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) – At least 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

5.2 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.

5.3 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.

5.4 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.**

6.0 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 12 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 6 out of 9 (2 marks each)
Q.2	UNDERSTANDING	Answer any 2 out of 3 (6 marks each)
Q.3	APPLYING	Answer 3 (a) or 3 (b) (12 marks)
Q.4	ANALYSING	Answer 4 (a) or 4 (b) (12 marks)
Q.5	EVALUATING CREATING	Answer 5 (a) or 5 (b) (12 marks)

7.0 Programme Flexibility:

7.1 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 Project Management programme.

7.2 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

8.0 Additional Specialization:

1. **A student who has completed the MBA Project Management programme under this pattern may enroll for additional specialization after passing out the regular MBA Project Management 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.

9.0 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 next academic year a student must earn at least 50% of the total credits.

10.0 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.

11 Miscellaneous

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.
2. **Degree Requirements:** The degree requirements for the MBA-Project Management programme are completion of minimum 104 credits.
3. Maximum Attempts per Course:
   A student shall earn the credits for a given course in maximum FOUR attempts.
4. **Maximum Duration for completion of the Programme:** The candidates shall complete the MBA- Project Management Programme **within 4 years** from the date of admission.
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.
6. **Text Books and Reference Books** refer to the latest edition.
7. **Medium of Instruction:** The medium of Instruction & Evaluation shall be English.
8. **Grade Improvement:**
   - A Candidate who has secured any grade other than F (i.e. passed the MBA- Project Management programme) and desires to avail the Grade Improvement option, may apply under Grade Improvement Scheme within five years from passing that Examination.
   - He/she can avail not more than three attempts, according to the syllabus in existence, for grade improvement.
   - He /she shall appear for University Evaluation of **at least 1/3rd** of the Generic Core / Subject Core Courses (except OJT) 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	40	60	100
Mandatory	102	GC – 02	Organizational Behaviour	3	40	60	100
Mandatory	103	GC – 03	Economic Analysis for Business Decisions	3	40	60	100
Mandatory	104	GC – 04	Basics of Marketing	3	40	60	100
Mandatory	105	GC – 05	Business Analytics	3	40	60	100
Mandatory	106	GC – 06	Decision Science	3	40	60	100
Mandatory	107	GC – 07	Management Fundamentals	2	0	60	60
Mandatory	108	GC – 08	Indian Knowledge Systems	2	0	60	60
	CORE TOTAL		**8**	**22**	**240**	**480**	**720**
Semester I Generic Electives - Any 2 Courses to be Opted from the following list							
Elective	109	GE 01	Business Communication-I	2	40	0	40
Elective	110	GE 02	Technology Tools in Business Management -I	2	40	0	40
Elective	111	GE 03	Environmental, Social, and Governance (ESG)	2	40	0	40
Elective	112	GE 04	Demand Analysis & Forecasting	2	40	0	40
Elective	113	GE 05	Geopolitics & World Economic Systems	2	40	0	40
Elective	114	GE 06	Contemporary Frameworks in Management	2	40	0	40
Elective	115	GE 07	Essentials of Psychology for Managers	2	40	0	40
	ELECTIVE TOTAL		**2**	**4**	**80**	**0**	**80**
	SEMESTER TOTAL		**10**	**26**	**320**	**480**	**800**

SEMESTER II							
Type	**Sem Code**	**Course Code**	**Course**	**Credits**	**FA**	**SA**	**Marks**
Mandatory	201	GC – 09	Marketing Management	3	40	60	100
Mandatory	202	GC – 10	Financial Management	3	40	60	100
Mandatory	203	GC – 11	Human Resources Management	3	40	60	100
Mandatory	204	GC – 12	Operations & Supply Chain Management	3	40	60	100
Mandatory	205	GC - 13	Legal Aspects of Business	2	0	60	60
	CORE TOTAL		**5**	**14**	**160**	**300**	**460**
Mandatory	206	RM - 01	BRM	2	-	60	60
Mandatory	207	RM - 02	Desk Research	2	40	0	60
Mandatory	208	RM - 03	Field Project	4	40	120	160
	RESEARCH TOTAL		**3**	**8**	**80**	**180**	**260**
Semester II Generic Electives - Any 2 Courses to be Opted from the respective elective list							
Elective	209	GE 08	Business Communication-II	2	40	0	40
Elective	210	GE 09	Technology Tools in Business Management -II	2	40	0	40
Elective	211	GE 10	Sustainable Development Goals	2	40	0	40
Elective	212	GE 11	Selling & Negotiation Skills Lab	2	40	0	40
Elective	213	GE 12	Indian Economy	2	40	0	40
Elective	214	GE 13	International Business Environment	2	40	0	40
Elective	215	GE 14	Business Ethics	2	40	0	40
	ELECTIVE TOTAL		**2**	**4**	**80**	**0**	**80**
	SEMESTER TOTAL		**10**	**26**	**320**	**480**	**800**

SEMESTER III							
	Sem Code	**Course Code**	**Course**	**Credits**	**FA**	**SA**	**Marks**
Mandatory	301	GC – 14	Strategic Management	3	40	60	100
Mandatory	302	SC - 01	Fundamentals of Project Management	3	40	60	100
		CORE TOTAL	**2**	**6**	**80**	**120**	**200**
Mandatory	303	OJT (SC)	On the Job Training	8	80	120	200
		SIP TOTAL	**1**	**8**	**80**	**120**	**200**
Semester III Specialization Electives - Any 4 Courses to be Opted from the respective elective list							
Elective	304	SE 01	Ideation and Project Planning	3	40	60	100
Elective	305	SE 02	Project Estimating, Cost and Risk Management	3	40	60	100
Elective	306	SE 03	Tools and Techniques in Project Management	3	40	60	100
Elective	307	SE 04	Software & IT, ITES Project Management	3	40	60	100
Elective	308	SE 05	Project Management in Manufacturing	3	40	60	100
Elective	309	SE 06	Agile Project Management	3	40	60	100
Elective	310	SE 07	Marketing and Branding of Project	3	40	60	100
Elective	311	SE 08	MS Projects/ Jira/ Advanced Excel	3	40	60	100
ELECTIVE TOTAL			**4**	**12**	**160**	**240**	**400**
SEMESTER TOTAL			**7**	**26**	**320**	**480**	**800**
SEMESTER IV							
	Sem Code	**Course Code**	**Course**	**Credits**	**FA**	**SA**	**Marks**
Mandatory	401	GC – 15	Entrepreneurship, Innovation and Design Thinking	3	40	60	100
Mandatory	402	GC - 16	Enterprise Performance Management	2	0	60	60
Mandatory	403	SC - 02	Governance, Continuity and Ethics in Project Management	3	40	60	100
		CORE TOTAL	**3**	**8**	**80**	**180**	**260**
Mandatory	404	RP	Research Project	6	80	60	140
RESEARCH PROJECT TOTAL			**1**	**6**	**80**	**60**	**140**
Semester IV Specialization Electives - Any 4 Courses to be Opted from the following list							
Elective	405	SE 09	Procurements and Contract Management in Projects	3	40	60	100
Elective	406	SE 10	Infrastructure Project Management	3	40	60	100
Elective	407	SE 11	Quality Management	3	40	60	100
Elective	408	SE 12	Analytics in Project Management	3	40	60	100
Elective	409	SE 13	Lean Management	3	40	60	100
Elective	410	SE 14	Social Projects	3	40	60	100
Elective	411	SE 15	Digital Trends in Project Management	3	40	60	100
Elective	412	SE 16	Project Management, Execution and Monitoring	3	40	60	100
ELECTIVE TOTAL			**4**	**12**	**160**	**240**	**400**
SEMESTER TOTAL			**8**	**26**	**320**	**480**	**800**
PROGRAMME TOTAL			**35**	**104**	**1600**	**1600**	**3200**

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 Dhmija, 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 Theoryof 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 keyterms 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 qualityof 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. Knaflic, 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 x 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: Quantititave approcach for decision making- Cengage Learning-Anderson (latest edition)
3. Introduction to Operations Research by Billey E. Gilett, TMGH (latest edition)
4. Operations Research by Nita Shah, Ravi Gor, Hardik Soni, PHI (latest Edition).
5. Operations Research by R. Pannerselvam, 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

1.

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
CO 108.5	EVALUATING	EVALUATE the effectiveness of Jugaad innovations in various sectors and assess the impact of familyand 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 (WNT), 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. **(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, Addision 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	INDENTIFY 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 succesfully 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, Cannnon 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.

SEMESTER II							
	Sem Code	**Course Code**	**Course**	**Credits**	**FA**	**SA**	**Marks**
Mandatory	201	GC – 09	Marketing Management	3	40	60	100
Mandatory	202	GC – 10	Financial Management	3	40	60	100
Mandatory	203	GC – 11	Human Resources Management	3	40	60	100
Mandatory	204	GC – 12	Operations & Supply Chain Management	3	40	60	100
Mandatory	205	GC - 13	Legal Aspects of Business	2	0	60	60
	CORE TOTAL		**5**	**14**	**160**	**300**	**460**
Mandatory	206	RM - 01	Business Research Methods	2	-	60	60
Mandatory	207	RM - 02	Desk Research	2	40	0	40
Mandatory	208	RM - 03	Field Project	4	40	120	160
	RESEARCH TOTAL		**3**	**8**	**80**	**180**	**260**
Semester II Generic Electives - Any 2 Courses to be Opted from the respective elective list							
Elective	209	GE 08	Business Communication-II	2	40	0	40
Elective	210	GE 09	Technology Tools in Business Management -II	2	40	0	40
Elective	211	GE 10	Sustainable Development Goals	2	40	0	40
Elective	212	GE 11	Selling & Negotiation Skills Lab	2	40	0	40
Elective	213	GE 12	Indian Economy	2	40	0	40
Elective	214	GE 13	International Business Environment	2	40	0	40
Elective	215	GE 14	Business Ethics	2	40	0	40
	ELECTIVE TOTAL		**2**	**4**	**80**	**0**	**80**
	SEMESTER TOTAL		**10**	**26**	**320**	**480**	**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://revenueml.com/insights/articles/potential-generative-artificial-intelligence-pricing, accessed on 20th June 2024, at 12 .02 am.
11. https://www.forbes.com/sites/derekrucker/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 Compnay.
10. Performance Appraisal and Management, Himalaya Publishing House.

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

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

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

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. Everystudent 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. **<u>Field project must be related to the intended specialization of the student.</u>**
2. Field projects must be done individually. Group projects are not permitted.
3. The project should involve fieldwork; **<u>online projects are not permitted</u>**.
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 to100 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 <u>must be aligned with the specialization</u> 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: 160
Formative Assessment: 40 Marks
Summative Assessment: 120 Marks

E – 1] Formative Assessment Weightage (40 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 - 2 marks
   b) Quality of Analysis and Research - 2 marks
   c) Problem Solving and Decision Making - 2 marks
   d) Innovation and Impact - 4 marks
   e) Documentation and Reporting - 5 marks
   f) Reflection - 5 marks

E – 2] Summative Assessment Weightage (120 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 20 minutes presentation about their field project.
6. The panel will evaluate the presentation for 60 marks and the viva-voce shall have a weightage of 60 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-II
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, Addision 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 bya 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, McMurry & 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 Isenhart, 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 Theoryof 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 Pury 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

SEMESTER III COURSES – MBA PROJECT MANAGEMENT

Semester III	**301**	**GC 14 – Strategic Management**
3 Credits	**LTP: 2:1:1**	**Compulsory Generic Core Course**

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.

1 **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)

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)

3. **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)

4. **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. Prahlad,
4. Blue Ocean Strategy by Kim & Mauborgne

Semester III	**302**	**SC - 01 Fundamentals of Project Management**
3 Credits	**LTP: 2:1:1**	**Subject Core Course – Project Management**

CO#	**COGNITIVE ABILITIES**	**COURSE OUTCOMES**
CO 302.1	REMEMBERING	DEFINE the basic terms associated with modern Project Management and Organisational strategy.
CO 302.2	UNDERSTANDING	UNDERSTAND the organisational structure and culture and defining the Project.
CO 302.3	APPLYING	ESTIMATE project times & cost for defining the project plan.
CO 302.4	ANALYSING	ANALYZE Leadership traits for being an effective project manager and managing project teams.
CO 302.5	EVALUATING	ESTIMATE the risk involved in projects
CO 302.6	CREATING	CREATE project closure reports.

1. **Modern Project Management**:

What Is a Project - The Project Life Cycle, The Project Manager, The Importance of Project Management, Project Management Today: An Integrative Approach - Integration of Projects with Organizational Strategy, Integration of Projects through Portfolio Management, Integration of the Process of Implementing Actual Projects. **Organization Strategy and Project Selection:** The Strategic Management Process: An Overview, Scenario Planning, The Need for an Effective Project Portfolio Management System, A Portfolio Management System, Applying a Selection Model - Sources and Solicitation of Project Proposals, Ranking Proposals and Selection of Projects, Feasibility Report, Managing the Portfolio System - Balancing the Portfolio for Risks and Types of Projects, Overview of Outsourcing Project work, The Art of Negotiation. (7+1)

2. **Organization Structure and Culture**:

Project Management Structures - Organizing Projects within the Functional, Organization, Organizing Projects as Dedicated Teams, Organizing Projects within a Matrix
Arrangement, Different Matrix Forms, What Is the Right Project Management Structure and various Considerations, Organizational Culture and Identifying Cultural Characteristics, Implications of Organizational Culture for Organizing Projects. **Defining the Project:** Defining the Project Scope, Project Scope Checklist, Establishing Project Priorities, Work Breakdown Structure, How WBS Helps the Project Manager, WBS Development, Integrating the WBS with the Organization, Coding the WBS for the Information System, Responsibility Matrices, Project Communication Plan (8+1)

3. **Estimating Project Times and Cost:**

Factors Influencing the Quality of Estimates, Estimating Guidelines for Times, Costs, and Top-Down Versus Bottom- Up Estimating, Methods for Estimating Project Times and Costs, and various Approaches for Estimating Project Times and Costs, Types of Costs, Refining Estimates, Creating a Database for Estimating Resources. Overview of Resources scheduling and resource allocation methods. (8+1)

4. **Leadership:**

Being an Effective Project Manager, Managing Vs Leading, managing project stakeholders and their expectations, Social Network Building, Ethics and Project Management, Building Trust: The Key to Exercising Influence, Qualities of an Effective Project Manager. Overview of Project Management Office. Managing Project Teams: Five-Stage Team Development Model, Building High-Performance Project Teams, Managing Virtual and Cross-cultural Project Teams, Project Team Pitfalls. Overview of Progress and Performance Measurement and Evaluation, MIS, KPIs and KPMs, Developing status Report. **(8+1)**

5. **Developing a Project Plan:**

Developing the Project Network, From Work Package to Network, Constructing a Project Network, Terminology, Basic Rules to Follow in Developing Project Networks, Activity-on-Node (AON) Fundamentals, Network Computation Process, Understand PERT and CPM. **Managing Risk:** Risk Management Process, Probability Analysis, Risk Response Development, Mitigating Risk, Contingency

Planning, Opportunity Management, Contingency Funding and Time Buffers, Budget Reserves, Management Reserves, Risk Response Control, Change Control Management. **Project Closure:** Types and closure activities, Post implementation evaluation, Retrospectives. (9+1)

Suggested Text Books

1. Clifford Gray, Erik Larson and Gautam Desai, Project Management, The Managerial Process, Tata McGraw Hill
2. Effective Project Management, Clements and Gido, Thomson – India Edition.
3. Samuel Mantel, Jack Meredith, Scott Shafer, Margret Sutton and MRGopalan, Project Management, Wiley India
4. Prasanna Chandra, Projects, Planning, Analysis, Selection, Financing, Implementation and Review, Tata McGrawHill

Suggested Reference Books

1. Project management Institute, The Guide to the Project Management Body of Knowledge (PMBOK Guide), PMI Publication
2. Project Management Metrics, Kpis, And Dashboards **-** A Guide to Measuring and Monitoring Project Performance, Harold Kerzner, PhD

Suggested Audio /Visual Content

1. https://www.udemy.com/course/project-management-fundamentals
2. https://www.youtube.com/watch?v=JIKyxfZrsx4
3. Project Management https://www.youtube.com/watch?v=f4xD2nQut4Y
4. Fundamentals of Project Management https://www.youtube.com/watch?v=6LJLIfRfrts
5. Project Management Fundamentals https://www.youtube.com/watch?v=qTQsdJFG4SQ
6. Fundamentals of Project Planning and Managementhttps://www.youtube.com/watch?v=JonhH7zTUuw

Suggested Journals

https://www.journals.elsevier.com/international-journal-of-project-management
https://journals.sagepub.com/home/pmx
http://growingscience.com/beta/jpm https://www.sciencedirect.com/journal/international-journal-of-project-management
https://www.pmi.org/learning/academic-research/project-management-curriculum-and-resources/academic- project-management-case-studies
https://www.pmsolutions.com/case-studies
https://www.apm.org.uk/resources/find-a-resource/case-studies/

Websites https://www.pmi.org.in/
https://www.apm.org.uk/

Suggested Swayam Course
https://nptel.ac.in/courses/110/104/110104073/

https://nptel.ac.in/courses/110/107/110107081/

Semester III	**303**	**OJT(SC) - 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. **<u>OJT must be related to the intended specialization of the student.</u>**
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; **<u>online OJT is not permitted</u>**.
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 internee 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: 80 Marks Summative

Assessment: 120 Marks

1] *Formative Assessment Weightage (80 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.) - 5 marks
9. Internal Viva-Voce - 15 marks

2] *Summative Assessment Weightage (120 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 – 30 marks
   b) Viva-Voce – 30 marks
   c) Report – 30 marks
   d) Ability to connect with the theoretical & conceptual frame work – 30 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 Storytelling Presentation etc

Semester III	**304**	**SE – 01 Ideation and Project Planning**
3 Credits	**LTP: 2:1:0**	**Subject Elective Course – Project Management**

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

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 304.1	REMEMBERING	DEFINE various concepts related to project Management
CO 304.2	UNDERSTANDING	UNDERSTAND the perspective of project idea generation and selection
CO 304.3	APPLYING	APPLY various techniques of project planning
CO 304.4	ANALYSING	ANALYSE project feasibility from different angles
CO 304.5	EVALUATING	EVALUATE project ideas
CO 304.6	CREATING	CREATE project plans

1. **Introduction:**

overview: Definition of project, Types, objectives of project, factors affecting project, Project Management – Meaning process of project Management ,scope and functions of project management, Importance and limitations of Project management, tools and techniques of project management, project lifecycle (7+1)

2. **Project Idea Generation:**

Meaning, Generation of Idea ,sources of project Idea Generation tasks involved in generation and screening of idea factors affecting idea generation process, Tools and techniques for idea generation, importance of project idea generation, Monitoring the environment, corporate appraisal ,scouting for project idea, preliminary screening, project rating index screening and selection process (8+1)

3. **Project Planning:**

Project planning process, importance, objectives and functions, project networking techniques-PERT, CPM, Scheduling of project, resource allocation, portfolio planning tools, facets of project planning (8+1)

4. **Project Analysis:**

Market and demand analysis, Technical analysis, financial analysis, Analysis of risk-sensitivity analysis, scenario analysis, Monte Carlo simulation, Decision tree analysis, Risk Analysis in practice (8+1)

5. **Project Evaluation:**

Project Evaluation Meaning and types of project evaluation, Areas of project evaluation, techniques of project evaluation, structure of project management Information system(PMIS),Meaning features of PMIS, Advantages disadvantages of PMIS, Project control-Type and process forecasting project cost, Project Audit, Project closure (9+1)

Suggested Text Books

1. Project Planning analysis selection Implementation and review Prasanna Chandra, TATA Mc GRAW HILL
2. Project Management K.Nagarajan, New, New AGE Publication.
3. Project Management Vasant Desai Himalaya Publication
4. Project planning scheduling and control, James P .Lewis, TATA Mc GREW HILL

Suggested Reference Books

1. Project Management the Managerial Process 5 th Edition, Erik W Larson, Clifford F Grey, TATA Mc GRAW HILL
2. Project Managers Book of Tools and techniques, Cynthia Synder Dionisio WILLY publication

3. Effective Project Management Robert K Wysocki, WILLY publication
4. Visualizing the project Management, WILLY publication

Journals

Project Management Journal, PMI
Journal of Modern Project Management (www.journalmocernpm.com)

Websites

www.wiley.com
www.pmi.org.in

Semester III	**305**	**SE – 02 Project Estimating, Cost and Risk Management**
3 Credits	**LTP: 2:1:0**	**Subject Elective Course – Project Management**

CO#	**COGNITIVE ABILITIES**	**COURSE OUTCOMES**
CO 305.1	REMEMBERING	DEFINE the basic terms associated with Estimation Models.
CO 305.2	UNDERSTANDING	UNDERSTAND the Progress Monitoring and Cost Management.
CO 305.3	APPLYING	ESTIMATE projects, its specifications, contracts, bidding and various costs.
CO 305.4	ANALYSING	ANALYZE Project risks. Qualitative, semi quantitative project risk assessments.
CO 305.5	EVALUATING	EVALUATE Capital Evaluation of Large Projects.
CO 305.6	CREATING	CREATE risk management plan for the Projects.

1. **Estimating Models:**

Accuracy, Parametric Estimating, Modular Estimating, Parametric Model, Analogous Estimating - Ratio Estimating, The Three-Quarters Rule, The Square Root Rule, The Two-Thirds Rule, Range Estimating, Expert Judgment, Normalization (8+1)

2. **Progress Monitoring:**

Developing a Monitoring Plan, Elements of Monitoring, Earned Value, Productivity **Cost Management:** Causes of Change, Feed-Forward Technique, Impact of Schedule on Cost, Lifecycle Costs, Impact of Project Risk. (8+1)

3. **External Projects:**

Specifications, Contracts, Response to Specifications, Bidding, Project Costs, Direct Costs, Indirect Costs, Overhead, Allowance, Contingency, Project Audits. (8+1)

4. **Project risk management Basics:**

The project risk management approach, Establish the context, Risk identification, Qualitative risk assessment, Semi- quantitative risk assessment, Risk treatment, Monitoring and review, Communication and reporting, Project processes and plans, Simplifying the process, managing opportunities, Other approaches to project risk management. (8+1)

5. **Extending the Basic Process:**

Tender evaluation, contracts and risk allocation, Market testing and outsourcing, Public–private partnerships, private financing technical tools and techniques, Introduction to environmental risk management. **Quantification of Project Risks:** Introduction to quantification for project risks, Capital evaluation for large resource projects. (8+1)

Suggested Text Books

1. Project Estimating and Cost Management Parviz F Rad by Management Concepts, Inc.
2. Project Risk Management Guidelines Dale F. Cooper, Stephen Grey, Geoffrey Raymond and Phil Walker by John Wiley & Sons, Ltd.

Suggested Reference Books

1. Fundamentals of Risk Management: Understanding, evaluating and implementing effective risk. Paul Hopkin by Kogan Page Limited.
2. Project Management Toolbox Russ J. Martinelli by Wiley.

Suggested Audio /Visual Content

Project Management Fundamentals: Risk Management |
Udemy Project Cost and Estimation Techniques | Udemy

Journals

Vodafone: Using PMI standards to deliver a complex technology project
| PMI Project Review & Recovery: Manufacturer Slashes HR Costs
(pmsolutions.com) Agile And Earned Value | APM
Decommissioning Forecasting and Operating Cost Estimation 1st Edition
(elsevier.com)https://journals.sagepub.com/home/pmx
Occupancy Estimation and Modeling - 1st Edition (elsevier.com)

Websites

https://www.pmi.org.in/
https://www.apm.org.uk/

Suggested Swayam Course

1. http://www.digimat.in/nptel/courses/video/110107081/L52.html
2. https://www.managementconcepts.com/course/id/6111

Semester III	**306**	**SE – 03 Tools and Techniques in Project Management**
3 Credits	**LTP: 2:0:1**	**Subject Elective Course – Project Management**

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

CO#	**COGNITIVE ABILITIES**	**COURSE OUTCOMES**
CO 306.1	REMEMBERING	DEFINE the key concepts used in Project Management.
CO 306.2	UNDERSTANDING	DIFFERENRTIATE between various tools used in Project Management.
CO 306.3	APPLYING	IDENTIFY the tools appropriate for the situation.
CO 306.4	ANALYSING	CATEGORIZE the tools used for data analysis.
CO 306.5	EVALUATING	ESTIMATE the durations, resource needs, and Costs for various projects.
CO 306.6	CREATING	SOLVE the relevant numerical in the scope of the subject and DRAW the diagrams such as Mind Map, Decision Tree etc.

1. **Basics of Working in Project Teams and Data Gathering in Project**:

Composition of Project Teams and Basic Interpersonal and Team Skills, Data Gathering in Project through Benchmarking, Check Sheets, Checklists, Focus Groups, Brainstorming, Statistical Sampling (7+1)

2. **Data Analysis:**

Cost Benefit Analysis, Cost of Quality, Schedule Compression, Alternatives Analysis, Make-or-Buy Analysis, Performance Index, Regression Analysis, Reserve Analysis, Sensitivity Analysis, Stakeholder

Analysis, Technical Performance, Analysis, What-If Analysis (8+2)

3. **Advanced Data Analysis**:
Context Diagram, Funding Limit Reconciliation, Inspection, Method, Prompt Lists, Prototypes, Resource Optimization, Root Cause Analysis, Rolling-Wave Planning, Earned Value Analysis, Influence Diagrams Introduction to Critical Path Method, Leads and Lags, Precedence Diagramming, Decision Tree (8+1)

4. **Data Representation:**
Logical Data Model, Mind Mapping, Probability and Impact Matrix, Resource Breakdown Structure, RACI Matrix and Responsibility Assignment Matrix, Cause-and-Effect Diagram, Control Charts for variables and Control charts for Attributes, Flowcharts, Histograms, Stakeholder Mapping (9+1)

5. **Estimating**: Analogous Estimating, Bottom-Up Estimating, Estimate at Completion, Estimate to Complete, Parametric Estimating, To-Complete Performance Index, Three-Point Estimating, Variance at Completion (9+1)

Note: Extensive use of data analysis software is recommended for this course.

Suggested Text Books

1. A Project Manager's Book of Tools and Techniques A Companion to the PMBOK® Guide – Sixth Edition Cynthia Snyder Dionisio, Wiley and PMI
2. Project Management, K Nagarajan, New Age International Publishers

Suggested Reference Books

1. HBR guide to Project Management
2. Hillson D. A. & Simon P. W. 2012. "*Practical project risk management: The ATOM Methodology*" (second edition). Vienna, US: Management Concepts. ISBN 978-1-56726-366-4
3. Chandra, P., Projects, Tata McGraw-Hill Education, 2009, ISBN: 0070077932 | ISBN: 978007007793
4. Levy, F. K. and Wiest, J. D., A Management Guide to PERT/CPM, Prentice Hall, 1969, ISBN-10: 0135485118 | ISBN-13: 9780135485118.
5. Lewis, R., Project Management, McGraw-Hill, 2006, ISBN 0-07-147160-X.
6. Moder, J. J. and Phillips, C. R., Project Management with CPM, PERT and Precedence Diagramming, Van Nostrand Reinhold,1983, ISBN-10: 0442254156 | ISBN-13: 978-0442254155.
7. Morris, P. W. G., and Pinto, J. K., The Wiley Guide to Managing Projects, 2004, John Wiley & Sons, ISBN: 9780471233022.
8. Phillips, J., PMP Project Management Professional Study Guide, McGraw-Hill, 2003. ISBN 0-07-223062-2.
9. Pritsker, A. A. B., Modeling and analysis using Q-GERT networks, John Wiley & Sons Inc., 1979, ISBN: 0470266481 | ISBN: 9780470266489.

Suggested Audio Visuals Links
https://www.youtube.com/watch?v=VV2feQewbJg
https://www.youtube.com/watch?v=qUuVnbuDrk8

Suggested Journals
International Journal of Project Management
Project management: cost, time and quality, two best guesses and a phenomenon, it's time to accept other success criteria

Websites
https://onlinepmcourses.com/40-ted-talks-for-project-managers/
http://pmipunechapter.org/Publications/Newsletters/tabid/255/Default.aspx

Suggested Swayam Course
https://nptel.ac.in/courses/110/104/110104073/
https://nptel.ac.in/courses/110/107/110107081/

https://nptel.ac.in/courses/106/105/106105218/
https://nptel.ac.in/noc/courses/noc19/SEM2/noc19-mg30/
https://nptel.ac.in/noc/courses/noc17/SEM2/noc17-mg17/
https://nptel.ac.in/courses/112/102/112102106/

Semester III	**307**	**SE – 04 Software & IT, ITES Project Management**
3 Credits	**LTP: 2:1:0**	**Subject Elective Course – Project Management**

CO#	**COGNITIVE ABILITIES**	**COURSE OUTCOMES**
CO 307.1	REMEMBERING	Describe the basic terms associated with the introduction of software project management and overview
CO 307.2	UNDERSTANDING	Understand the software programme management, evaluation and approach
CO 307.3	APPLYING	Identify the challenges in estimating Project times & cost, and developing project plan for IT services and Software
CO 307.4	ANALYSING	Analyze the risks associated, resource allocation and monitoring & control
CO 307.5	EVALUATING	Evaluate the IT project life cycle stages management process
CO 307.6	CREATING	Managing the contracts and software quality, people and teams

1. **Introduction to Software Project Management:**

What is project? Software Project Vs. Other Types. Activities by Software Project Mgt. Plans, Methods and Methodologies. Problems with Software Projects. Management Control, Stakeholders, **Overview:** Step Wise Project Planning: Project Scope, Objectives, Infrastructure, Characteristics, Effort, Estimation, Risk Identification, Feasibility Study. **Programme Management & Project Evaluation**: Meaning, Managing Allocation of resources. Creating Programme. Individual Projects. Technical Assessment, Cost Benefit Analysis & Risk Evaluation. **Project Approach:** Intro. Technical Plan, Choice of Process Models: Waterfall, V- Process, Spiral. Prototyping. Incremental Delivery. **Computer Aided Software Engineering (CASE) Tools:** CASE Concepts; Classification of CASE Tools; Steps for CASE Tool Implementation; Integrated CASE Environments. Examples of Information Technology Projects, The Role of the Project Manager, Benefits of IT management software's, The Project Life Cycle and IT Development. The Nature of Information Technology Projects, Characteristics of Information Technology Project Team Members, Diverse Technologies (9+1)

2. **Effort Estimation:**

Meaning, Problems with Estimation, Basis, Estimation Techniques. Albrecht Function Point Analysis. Function points Mark II. COCOMO Model. Activity Planning: Objectives, Project Schedule, Network Planning Model. Time Dimension. Identifying Critical Path. Resource Allocation: Identifying Resource Requirements. Scheduling Resources. Publishing the Resource Schedule & Cost Schedule. Scheduling Sequence. (7+1)

3. **Managing Contracts:**

Introduction, Types of contracts, stages in placement, contract management, Acceptance. Software Quality: Introduction, Defining Software Quality. ISO 9126. Software Measures. Product Vs. Process Quality Management. External Standards. Managing people and organising teams: Introduction, understanding behaviour, organisational behaviour, selecting right people, motivation, managing team, decision making, Leadership, Organisational structures. Overview of ISO 9126 and ISO 12207. Procurement Management: Importance & Planning, Conducting, Controlling & Closing, Using Software to Assist in Project Procurement Management. Project Stakeholder Management: Meaning & Importance, Identification, Planning, Managing & Controlling Stakeholders engagement. Using Software to Assist in Project Stakeholder Management. Quality Management: Tools and Techniques for Quality Control, Quality Systems (ISO, Six Sigma, CMMI), Modern Quality Management, Improving It Project Quality, Using Software to Assist in Project Quality Management Project Implementation and Evaluation: Project

Procurement Management, Outsourcing, Project Implementation Methods, Project Evaluation Monitoring & Control: Creating Frameworks. Data collection. Visualising Progress. Cost Monitoring. Change Control (8+1)

4. **Managing IT projects: Project Integration Management**:

Meaning, Project Selection and Approval, developing a Project Charter & Project Management Plan, Directing and Managing Project Work, Performing Integrated Change Control on IT Projects., Using Software to Assist in Project Integration Management Project Human Resource Management: Meaning &Importance, Managing and Leading People, Developing the Human Resource Plan, Acquiring, Developing & Managing Project team. Using Software to Assist in Human Resource Management. (8+1)

5. **Project Risk Management & Communication Management**:

Risk Management: Categories of Risk. Identification. Assessment. Schedule Risk. Applying PERT Technique. Communication Management: Meaning & Importance, Managing, Controlling & Improving Project Communication, Using Software to Assist in Project Communications, Risk Management: Risk Identification, Assessment, and Planning, Identifying IT Project Risks, Risk Strategies, Risk Monitoring and Control, Using Software to Assist in Project Risk Management (8+1)

Suggested Text Books

1. Software Project Management by Bob Hughes and Mike Cotterrel, McGraw Hill Publication, 2nd edition
2. Information Technology Project Management: Kathy Schwalbe Thomson Publication
3. Information Technology Project Management providing measurable organizational value Jack Marchewka Wiley India
4. Applied software project management Stellman& Greene SPD
5. Software Engineering Project Management by Richard Thayer, Edward Yourdon WILEY INDIA
6. Information Technology Project Management, Revised 8th Edition, Kathy Schwalbe, Cengage Learning, 2015.
7. Levy, F. K. and Wiest, J. D., A Management Guide to PERT/CPM, Prentice Hall, 1969, ISBN-10: 0135485118 | ISBN-13: 9780135485118.
8. Joseph Phillips, IT Project Management –On Track From Start to Finish, Tata Mc Graw-Hill, ISBN13: 978-0- 07106727-0, ISBN-10: 0-07-106727-2.

Suggested Reference Books

1. Project management Institute, The Guide to the Project Management Body of Knowledge (PMBOK Guide), PMI Publication
2. Software Engineering for students: A Programming Approach by Douglas Bell, Pearson publication
3. Managing Information Technology Project, 6edition, by Kathy Schwalbe, Cengage Learning publication
4. Software Engineering, 7th edition, by Roger S Pressman, McGraw Hill Publication.
5. Project Management the Managerial Process 5th Edition, Erik W Larson, Clifford F Grey, TATA Mc GRAW HILL
6. Project Managers Book of Tools and techniques, Cynthia Synder Dionisio WILLY publication
7. Effective Project Management Robert K Wysocki, WILLY publication
8. Visualizing the project Management, WILLY publication

Suggested Audio /Visual Content

1. Software Project Management https://www.youtube.com/watch?v=bXLTxa7wBO0
2. What is Software Project Management https://www.youtube.com/watch?v=V-4yE4PmJ90
3. https://www.udemy.com/course/project-management-fundamentals
4. Software PM, why it is different? https://www.youtube.com/watch?v=TYBVAvWkG6M
5. Need for Software PM https://www.youtube.com/watch?v=FCn0xVZQx3w
6. Fundamentals of Project Planning and Management https://www.youtube.com/watch?v=JonhH7zTUuw

Journals

1. Project Management Metrics, Kpis, And Dashboards - A Guide to Measuring and Monitoring Project Performance, Harold Kerzner, PhD
2. Overview of ISO 12207 https://www.iso.org/obp/ui/#iso:std:iso-iec-ieee:12207:ed-1:v1:en
3. https://www.pmi.org/learning/academic-research/project-management-curriculum-and- resources/academic-project-management-case-studies

4. https://www.pmsolutions.com/case-studies
5. https://www.apm.org.uk/resources/find-a-resource/case-studies/
6. https://cdn.ymaws.com/members.councilofmls.org/resource/resmgr/files/CMLS-PMCaseStudy18f.pdf
7. https://www.easyproject.com/solutions/easy-project-management-case-studies
8. https://www.semanticscholar.org/paper/A-CASE-STUDY-ON-SOFTWARE-PROJECT-MANAGEMENT-IN-%E2%80%93-Mandl-Striegnitz-Lichter/9cdbdd25c38d98b21f4fcb71b326d5a9e753a063

Websites
https://www.pmi.org.in/
https://www.apm.org.uk/

Semester III	**308**	**SE – 05Project Management in Manufacturing**
3 Credits	**LTP: 2:1:0**	**Subject Elective Course – Project Management**

CO#	**COGNITIVE ABILITIES**	**COURSE OUTCOMES**
CO 308.1	REMEMBERING	Describe the basic terms associated with the manufacturing and management overview
CO 308.2	UNDERSTANDING	Understand the elements of manufacturing programme management approach and planning including team management
CO 308.3	APPLYING	Identify the challenges in PERT/CPM and Resource management
CO 308.4	ANALYSING	Analyze manufacturing economic analysis, data analysis & Management
CO 308.5	EVALUATING	Managing the Expert System for Production Scheduling and Computer Simulation and Software Tools
CO 308.6	CREATE	Create the production schedule for manufacturing project management

1. **Manufacturing Systems Analysis:**

What is manufacturing, Manufacturing and high technology, Manufacturing systems definition, Manufacturing Management – managing product complexity, Production Management – design, planning and manufacturing, Project of Manufacturing, Computer Integrated Manufacturing, Human aspects, Quality standards, Manufacturing Technology Integration (8+1)

2. **Elements of Programme Management:**

Project Management Approach, Project Planning – Feasibility analysis, Proposal Development, Budget Planning, Project Organisation – Selecting Project Manager, Personal motivation, Organisational structures, Team building – Project partnering, conducting project meetings, Team Leadership, Project Scheduling and Control, The Triple C model – Project Communication; Cooperation, Coordination, Resolving Project Conflicts (8+1)

3. **PERT/CPM Techniques:**

Overview, CPM, Precedence Structure, Gantt Charts, Project Crashing, PERT Network analysis, Precedence Diagramming Method, Line of Balance, Complexity of Activity Networks, **Resource Management** – Resource assessment & Planning, Resourceallocation in project Networks, Critical resource diagramming, Resource Work Rate analysis, Human Resource Management in projects (8+1)

4. **Manufacturing Economic Analysis:**

Cost concepts, Cash Flow analysis, Break-even analysis, Manufacturing cost estimation, Budgeting and Capital allocation, Activity Based Costing. **Data Analysis & Management:** Data Management – determination, collection, organisation, measures & attributes, Data Presentation Charts, Project Tracking charts, Statistical Control. (8+1)

5. **Expert System for Production Scheduling:**

Production sequencing & scheduling, role of expert system, Application background, **Computer Simulation and Software Tools** – Importance of simulation, Priority weights for resource allocation, Simulation Metamodel, Project Management Software, Selection of PM Software, Case Studies. (8+1)

Suggested Text Books

1. Project Management in Manufacturing and High Technology Operations By Adedeji Bodunde Badiru, 2nd edition, John Wiley and Sons
2. Project Management Absolute Beginner's Guide, Author Gregory Horine, PMP
3. Project Management Metrics, KPIs, and Dashboards: A Guide to Measuring and Monitoring Project Performance, by Harold Kerzner, Wiley Books
4. Project Management for Environmental, Construction and Manufacturing Engineers, A Manual for Putting Theory into Practice, by Munier, Nolberto

Suggested Reference Books

1. Project management Institute, The Guide to the Project Management Body of Knowledge (PMBOK Guide), PMIPublication
2. Project Management, Planning and Control, 7thEdition, Managing Engineering, Construction and Manufacturing Projects to PMI, APM and BSI Standards, by Albert Lester, Butterworth-Heinemann
3. Project Management for Engineering, Business, and Technology, by John M. Nicholas, Herman Steyn, Butterworth-Heinemann
4. Project Management for Engineering, Business and Technology, By Nicholas, Published by Taylor&Francis
5. Project Management Metrics, KPIs, and Dashboards - A Guide to Measuring and Monitoring Project Performance, Harold Kerzner, PhD

Suggested Audio Visuals link

1. Fundamentals of Project Planning and Management
   a. https://www.youtube.com/watch?v=JonhH7zTUuw
2. Project management for industrial manufacturershttps://www.youtube.com/watch?v=e9Dq62UifdY
3. Project Management Simplified https://www.youtube.com/watch?v=ZKOL-rZ79gs
4. Project management in the manufacturing industry - Discover Project and Technical Consultancy https://www.youtube.com/watch?v=gYCAmu14oYw
5. Beginning Engineers Project Managementhttps://www.youtube.com/watch?v=Bhm4mLoJ48I

Suggested Journals

1. https://www.journals.elsevier.com/international-journal-of-project-management
2. https://journals.sagepub.com/home/pmx
3. http://growingscience.com/beta/jpm
4. https://www.sciencedirect.com/journal/international-journal-of-project-management
5. https://www.sciencedirect.com/science/article/pii/S1877050919322537
6. https://sciendo.com/journal/JEPPM

Website

1. https://www.pmi.org.in/
2. https://www.apm.org.uk/
3. https://pm-alliance.com/

Suggested Swayam Course

1. https://nptel.ac.in/courses/110/104/110104073/

Semester III	309	SE – 06 Agile Project Management
3 Credits	LTP: 2:1:0	Subject Elective Course – Project Management

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

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 309.1	REMEMBERING	Define the Agile Manifesto and Principles
CO 309.2	UNDERSTANDING	Understand Agile approaches and environments
CO 309.3	APPLYING	Creating the product vision and roadmap, Agile planning and release
CO 309.4	ANALYZING	Apply the agile approach to manage the Project planning and execution
CO 309.5	EVALUATING	Understand and implement Agile management and team
CO 309.6	CREATE	Create risk management templates for implementing Agile

1. **Understanding Agile**: Modernizing Project Management, applying the Agile Manifesto and Principles, why being Agile works better (7+1)

2. **Being Agile**: Agile approaches, Agile environments in action, Agile behaviours in action (7+2)

3. **Agile Planning and Execution:** Defining the Product Vision and Product Roadmap, Agile planning, Planning releases and sprints, working throughout the day – daily scrum & tracking progress, showcasing the work, inspecting, and adapting, Preparing for release.(7+2)

4. **Agile Management:** Managing scope and procurement, managing time and cost, managing team dynamics and communication, Managing Quality and Risk (8+1)

5. **Ensuing Agile Success:** Building a foundation, Scaling across Agile teams, being a change agent, Key benefits of Agile project Management, Key factors for Success, metrics for Agile organizations.(9+1)

Suggested Text Books

1. Agile Project Management for Dummies, by Mark C. Layton, Steven J. Ostermiller, Wiley
2. Agile Project Management with Scrum, by Ken Schwaber, Microsoft Press
3. Project Management, the Agile way, Making it work in the enterprise, John C Goodpasture, PMP, J Ross Publishing.
4. Agile Project Management, Ross J, BPB Publications

Suggested Reference Books

1. Project Management Body of Knowledge, by Project Management Institute (PMI)
2. Coaching Agile Teams: A Companion for Scrum Masters, Agile Coaches, and Project Managers in Transition, by Lyssa Adkins
3. The Agile Enterprise: Building and Running Agile Organizations by Mario E. Moreira, APRESS Publications

Suggested Audio Visuals link
1. Agile Programme Management (DSDM) AgilePgM - An Introductory video on the Accredited Course https://www.youtube.com/watch?v=jmOxVPlQEnk
2. Richard Atherton on Agile Programme Management https://www.youtube.com/watch?v=B6nz77SePJQ
3. Agile Project Management Tutorial https://www.youtube.com/watch?v=thsFsPnUHRA
4. Agile Project Management on Coursera https://www.coursera.org/learn/it-project-management?isNewUser=true
5. Agile Project Management Explained (With Burgers!) https://www.youtube.com/watch?v=zi7uGg6FVM4

Suggested Journals
1. Researchgate https://www.researchgate.net/publication/326101642_Agile_Project_Management_Review_Challenges_and_Ope n_Issues
2. Agile Project Management: A Communicational Workflow https://www.sciencedirect.com/science/article/pii/S1877050919322574
3. Benefits of Agile Project Management http://apheit.bu.ac.th/jounal/Inter-1-2559/p23-29-Thosaphon.pdf
4. How agile project management can work for your research https://www.nature.com/articles/d41586-019-01184-9

Semester III	**310**	**SE – 07 Marketing and Branding of Projects**
3 Credits	**LTP: 2:1:0**	**Subject Elective Course – Project Management**

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

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 310.1	REMEMBERING	DEFINE the key concepts of Marketing and Branding.
CO 310.2	UNDERSTANDING	DEMONSTRATE knowledge & understanding of use of Marketing and Branding in the Projects.
CO 310.3	APPLYING	IDENTIFY and mitigate Examine brand concepts with reference to the Project setting by articulating the context of and the rationale for the application.
CO 310.4	ANALYSING	Analyze the Marketing strategies for Projects, Programmes and Portfolios
CO 310.5	EVALUATE	Evaluate the Brand Management Practices of the Project Based Organizations
CO 310.6	CREATING	CONDUCT a brand audit using both primary and secondary sources and to propose strategic recommendations based on the audit results.

1. **Introduction:** What is a brand and what is brand management? The importance of consumer perception and behavior in branding, Tools for marketing and branding strategy, Brand Equity, Branding and Ethics, Internet and Social media branding, Marketing Advantages of Strong Brands, Impact of brands in markets, society and business, The Internationalization of brands. (9+1)

2. **Brand Equity, Identity & Strategy:** The brand equity model by Aaker, Brand Loyalty, Brand Awareness, Corporate Brand Identity, Brand Visual Identity, Keller's Prism Model, Brand Positioning, Brand Reinforcement and Brand Revitalization, Brand leverage, vertical and horizontal extensions, Brand Management in time, Branded House and House of Brands (9+1)

3. **Branding of Projects:** Why every Project needs a branding, Creating Project Brand, 5 P's of Project Branding, Steps in Project branding, Project Branding elements, Branding tools & techniques for Projects. (7+1)

4. **Advertising**: Objectives, goals, DAGMAR Model. Media strategy: budgeting, approach and allocation. Media strategy: budgeting, approach and allocation. Media planning types, class, vehicle, scheduling and new media forms. Advertising effectiveness; pro and post launch research. (7+1)

5. **Cases:** Cases in application of branding and marketing of Projects, creation of branding materials for projects. (8+1)

Suggested Text Books

1. Kevin Lane Keller (2012), Strategic Brand Management: Building, Measuring, and Managing Brand Equity, 4th Edition, ISBN 10: 0-13-266425-9
2. Aaker. (2004) Brand Portfolio Strategy: Creating Relevance, Differentiation, Energy, Leverage, and Clarity: Free Press.

Suggested Reference Books

1. Project management Institute, The Guide to the Project Management Body of Knowledge (PMBOK Guide), PMI Publication

Journals

https://pmqlinkedin.files.wordpress.com/2011/09/why-every-project-needs-a-brand-mit-sloan.pdf
Lowrie, Understanding Branding in Higher Education, Marketing and Communication in Higher Education, DOI 10.1057/978-1-137-56071-1
https://www.thebrandingjournal.com/

Case Studies

https://www.brandextract.com/Work/
https://www.zurekdesigns.co.nz/branding-case-studies

Websites

https://sloanreview.mit.edu/article/why-every-project-needs-a-brand-and-how-to-create-one/
https://projectinsight.com/blogs/project-management/the-importance-of-branding-projects
https://simplicable.com/new/project-branding
https://www.forbes.com/sites/williamarruda/2018/03/06/seven-reasons-why-project-managers-need-to-brand- their-projects/?sh=3353c2173b8e
https://rccmindore.com/wp-content/uploads/2015/06/Advertsing-Brand-Managing-19-1.pdf

Semester III	**311**	**SE – 08 MS Projects / Jira / Advanced Excel**
3 Credits	**LTP: 2:0:1**	**Subject Elective Course – Project Management**

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

CO#	**COGNITIVE ABILITIES**	**COURSE OUTCOMES**
CO 311.1	REMEMBERING	SELECT appropriate menus and functions of MS Excel to Create, Format, Import, Merge, Save, Print Spreadsheets & Charts using business data.
CO 311.2	UNDERSTANDING	SHOW how to do basic troubleshooting and fix mistakes most people make when working with spreadsheets.
CO 311.3	APPLYING	USE various functions of MS Excel, Execute pivot table analysis, common (and powerful functions), and different types of lookups. (Vlookup, Hlookup, and index/match).
CO 311.4	ANALYSING	ILLUSTRATE the use of the most commonly used data-manipulation commands in MS Excel.
CO 311.5	EVALUATING	DERIVE insights from multiple data sources in MS EXCEL and work with it to answer relevant business questions.
CO 311.6	CREATING	CREATE standard Excel Templates for routine business data management and analysis activities.

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 (7+2)

2. **Excel Functions for Project Data 1:**

Defining Names in Excel, Sorting Data, Using Excel Tables, Filtering Data in Excel, Understand 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, Goal seeker and 3D formula. (8+1)

3. **Excel Functions for Project Data 2:**

Textto Columns, The Paste Special Function, Data Validation, Subtotals and Grouping, Consolidating Data, Scenario Analysis, Data Tables in Scenario Analysis, What-if Analysis, Mats and Trig Functions, Text Functions in Excel, Using Lookup Functions, Vlookups, HLookups, Match, Using 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, Understanding Macros, Custom Number Formats in Excel, Using Custom Lists, Working with Templates, Tracking Changes in Excel, Merging and Compare Excel Workbooks, Spark lines, Dashboard reporting (9+1)

4. **Using Pivot tables:**

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. (7+2)

5. **Triple Constraints Management with Excel:**

Managing Money With Excel, Building & Tracking Budgets, Planning And Tracking Loans, Keeping Account Registers, Creating Formulas for Financial Applications, PV, PMT, NPER, RATE, Creating Balance Sheet, Investment Calculations, Depreciation calculations, Lab based Evaluation, Gauging Business Status with Excel, Configuring Cash Flow Statements, Resolving Business Ratios, Creating Standard Excel Templates for routine business data management and analysis activities. (7+2)

Note:

1. The entire course should be delivered in the computer lab in an application-oriented manner.
2. Business applications should be stressed rather than merely teaching Excel as software.

Suggested Text Books:

1. Excel 2016 Bible, John Walkenbach, John Wiley & Sons
2. Excel: Formulas & Functions, Robert Dinwiddie
3. Excel 2007 for Dummies by Greg Harvey
4. New Perspectives on Microsoft Office Excel 2007
5. Microsoft Excel 2016 Step by Step, Curtis Frye

Semester IV	**401**	**GC 15 – 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 – Rishikesha 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 Pikkel & 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	**402**	**GC 16 – Enterprise Performance Management**
3 Credits	**LTP: 2:1:1**	**Compulsory Generic Core Course**

CO#	**COGNITIVE ABILITIES**	**COURSE OUTCOMES**
CO401.1	REMEMBERING	Enumerate the different parameters & facets of management control of an enterprise.
CO401.2	UNDERSTANDING	Illustrate the various techniques of enterprise performance management for varied sectors.
CO401.3	UNDERSTANDING	Determine the applicability of various tools and metrics as a performance evaluation & management tools.
CO401.4	APPLYING	Analyse the key financial & non-financial attributes to evaluate enterprise performance.
CO401.5	ANALYSING	Formulate the various parameters to evaluate enterprise performance effectively through implementation of strategy.

1. **Performance Management:** Concept, Need, Linkages with Strategic Planning, Management Control and Operational Control. **Performance Evaluation Parameters:** Financial – Responsibility Accounting –Concept of Responsibility Centers, Revenue Centre, Expense Centre - Engineered and Discretionary costs – Committed costs, Profit Centre, Investment Centers. ROI, ROA, MVA, EVA – DuPont analysis. (Numerical Not expected – Interpretation only) Limitations of Financial Measures**. (8+1)**

2. **Performance Evaluation Parameters:** Non-Financial Performance measures – Balanced Scorecard, Malcolm Baldrige Framework. **Measuring SBU Level Performance:** Concept, Need, and Linkages with Enterprise Performance Management – Goal Congruence. Transfer Pricing – Objective, Concept, and Methods – Cost based, Market price based & Negotiated, Applicability of Transfer Pricing. (Numerical / Case is expected) (7+1)

3. **Capital Expenditure Control**: Concept, Need, Process of Capital Budgeting, Types of capital expenditure decisions – pre-sanction, operational and post-sanction control of capital expenditure. Tools & Techniques of Capital Expenditure Control: Performance Index, Technical Performance Measurement, Post completion audit. **Performance Evaluation Parameters for Projects**: Project Control Process: Setting base line plan, Measuring progress and performance, comparing plan against action, Taking action, Schedule variance (time overruns), Project Cost Variance (cost overruns). (8+2)

4. **Performance Evaluation Parameters for Banks:** Customer Base, NPAs, Deposits, ROI, Financial Inclusion, Spread, Credit Appraisal, Investments. **Performance Evaluation Parameters for Retail:** ABC analysis, Sell Through Analysis, Multiple Attribute Method, Gross Margin Return on Investment (GMROI), GMROI as Gross Margin/Average Inventory at Cost, **Performance Evaluation Parameters for Non-Profit:** Features of Non-profit organizations, fund accounting, governance, product pricing, strategic planning & budget preparations, social audit. (8+2)

5. **Performance Evaluation Parameters for E-Commerce:** Features of E commerce, Need of evaluation, Metrics for performance evaluation: Business metrics, Traffic metrics, Conversion matrix & Audience involvement metrics. Various KPI used by E Commerce industry : Website traffic , referral traffic, conversion rate optimization, bounce rate of website, repeat visit, cart abandon rate, cost per conversion, average order value, revenue on advertising spend, customer life time value, net promoter score, churn rate. **Audit Function as a Performance Measurement Tool:** Financial Audit, Internal Audit, Cost Audit, Management Audit – Principles and Objectives (Audit Reports / Formats are expected to be discussed in the class from a performance measurement perspective). (9+1)

Suggested Text Books:

1. Management Control System by Robert Anthony & Vijay Govindrajan, Tata McGraw Hill Publishing Co. Ltd.
2. Management Control in Non Profit Organizations by Robert Anthony & David Young, McGraw Hill International Publication
3. Retailing Management by Swapna Pradhan, TMGH

Suggested Reference Books:

1. Project Management by K.Nagarajan, New Age International Publications
2. Principles and Practices of Auditing by Ravindar Kumar & Virendar Sharma, PHI.
3. Principles and Practices of Banking by Indian Institute of Banking & Finance, MacMillan India Ltd.
4. Financial Management by Prasanna Chandra, TMGH
5. E business: A Canadian perspective for a Networked World , Gerald Trites, J. Efrim Boritz Pearson

Semester IV	**403**	**SC – 02 Governance, Continuity and Ethics in Project Management**
3 Credits	**LTP: 2:1:0**	**Subject Core Course – Project Management**

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 403.1	REMEMBERING	DESCRIBE the concepts of Project and Project Management
CO 403.2	UNDERSTANDING	UNDERSTAND the Continuity process of Project Management
CO 403.3	APPLYING	MAKE USE OF the Governance in Project Management for successful project implementation.
CO 403.4	ANALYSING	ANALYZE the Professional ethics in Project Management
CO 403.5	EVALUATING	EVALUATE ethical decision practices & its effect on project management
CO 403.6	CREATING	DEVELOP best practices in project management.

1. **Project Management- Introduction:** Project management-Defining project, project characteristics; need for project management, project management plan, project time management, 7-step network building process, project time management, cost management, quality management, human resource management, communications management, risk management, change management, procurement management, document management, project life cycle, project integration management – initiating, planning, executing, controlling, closing Characteristics of project planner; flexible, creative, responsive, communicative, analytic. (7+2)
2. **Continuity of Project:** Business Continuity Process – definition and 7 step in BCP, Preparing people and organizations for the challenges of Change Concept of Continuity- Steps in Project Continuity-Project Planning, Training-Project Scheduling, Budget Planning, Procurement Management, Quality Planning, Communication, Risk Management, Project implementation, Project completion (7+2)
3. **Governance In Project Management:** Concept of Governance – Concept of Project management governance - Corporate Management Governance, -Corporate governance is concerned with - Accountability, Disclosure and transparency, Roles and responsibilities, Risk management, Decision-making, Ethics, Performance and effectiveness Project governance-Purpose, Principle- Project management governance framework- core elements project Management governance framework-Roles and responsibilities, Decision making process and levels, Methodologies, the need for methodology development, Competences, Communication process, Controlling process (7+2)
4. **Ethics in Project Management:** Concept of Ethics-Introduction to Professional Ethics-Professional Ethics – Definition, Characteristics of Ethical Managers, Causes of Unethical Behavior, Importance for the Project Management, Benefits of Maintaining Professional Ethics, Interpersonal Ethics for the Project Management - Maintaining High Standards for Self, Accepting Responsibility for Actions, Growing Capabilities, Interacting with Others in Fairness (7+2)
5. **Ethical Decision Making:** Code Of Ethics-Ethical issues in Project Management Ethical Practice during the Project Lifecycle- Ethical Reporting, Communicating and Managing Issues and Risks in an Ethical Manner, Ethical Decision Making- Framework of Ethical Decision Making, Barriers to Ethical Decision Making, Ethical Issues and Dilemmas, Solutions to Ethical Problems, Reasons for Ethical Violations in

Workplace, Consequences of Ethical Decisions, Best Practices in Project Management (7+2)

Suggested Text Books

1. Fundamentals of Project Management – Joseph Heagney– AMACOM
2. Project Management Core Textbook (2nd edition) – M. R. Gopalan – Wiley
3. Project Management: The Managerial Process – Clifford F Gray, Erik W Larson, Gautam V Desai - McGraw Hill Education
4. Business Ethics by Chandra Kumar Roy &Prabhat Kumar Roy, Vikas Publishing House

Suggested Reference Books

1. Project Management-A system Approach to Planning, Scheduling and Controlling-Harold Kerzner-Seventh Edition-Joan Wiley & Sons. Inc.
2. Project Management Case Studies-Harold Kerzner-Joan Wiley & Sons. Inc
3. Project Management Best Practices-Harold Kerzner-Fourth Edition-Joan Wiley & Sons. Inc
4. Project Management-The Open University of Hong kong
5. Business Ethics by Kumar Shailendra –Cengage Publication
6. Business Ethics and Corporate Governance - Second Edition –A.C.Fernando- Pearson

Journals

1. Project Management Journal, PMI
2. Journal of Modern Project Management (www.journalmocernpm.com)
3. Article_Frank_Smits.pdf

Websites

1. www.pmi.org.in

Semester IV	**404**	**RP- 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 top ics 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 IMPLMENTATION*

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: 140

Formative Assessment: 80 Marks Summative

Assessment: 60 Marks

1] *Formative Assessment Weightage 80 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 60 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 – 10 marks
   b) Viva-Voce – 20 marks
   c) Report – 20 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.

Semester IV	405	SE – 09 Procurements and Contract Management in Projects
3 Credits	LTP: 2:1:0	Subject Elective Course – Project Management

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

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 405.1	REMEMBERING	Describe the key concepts of Project Procurement Management
CO 405.2	UNDERSTANDING	Understand the Core Principles of Project Procurement Management
CO 405.3	APPLYING	Demonstrate the hands on expertise in Procurement Planning, Contract Strategy
CO 405.4	ANALYSING	Develop Collaborative procurement arrangements
CO 405.5	EVALUATING	Recognize and Promote Ethic Practice in Project Procurement and Contracting
CO 405.6	CREATING	Create project procurement plan and contracts

1. **Introduction to Project Procurement Management:** Concept, Definition, Centralized Procurement, decentralized Procurement, Six Major Project Procurement Processes- Procurement Planning, Solicitation Planning, Solicitation, Source Selection, Contract Administration, Contract Close out; Types of Procurement (8+1)

2. **Defining project scope for Make or Buy Decision**: Introduction to Corporate Teaming Arrangements; Basics of Project Procurement Risks and Risk Management; Role of Project Procurement Manager (7+1)

3. **Contract Management:** Objectives, Concept of Contract, Typical Clauses to be included in Project Procurement Contracts; Types of contract: turnkey contracts and non-turnkey contracts; Fixed cost contracts, cost- reimbursable contracts (Numerical on Fixed Cost Contracts and cost-reimbursable contracts); Sub- contracting; preparation of specifications for project activities; tenders- tender notice, tender documents, pre-qualification of tenders, EMD (Earnest Money Deposit), Security Deposit, Acceptance of Tenders, Letter of Intent, Execution of deed of contract, Penalty Clause, Types of Payments to contractors- 1) Bill- First and final bill & Running Account Bill; 2) Liquidated damages (10+1)

4. **Project Procurement Management Plan**: Scheduling, budgeting and other issues; Solicitation Planning- Business Definition (SOW), Technical Definition, Full and Open Procurement Competition, RFP, Evaluating Seller's Proposals (7+1)

5. **Solicitation of Sellers' Proposal:** Source Selection- Cost Analysis, Price Analysis; Contract Administration- Earned Value Management (EVM); Contract Close out- Termination of Contractual Relationship, Settlement of Seller's Claim, Project Close-out Checklist; Legal Aspects of Project Procurement t Management (8+1)

Suggested Text Books

1. Project Procurement Management- Contracting, Subcontracting, Teaming by Quentin W Fleming, FMC Press

Suggested Reference Books

1. Project Management by K Nagarajan, New Age International Publishers

Semester IV	**406**	**SE – 10 Infrastructure Project Management**
3 Credits	**LTP: 2:1:0**	**Subject Elective Course – Project Management**

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

CO#	**COGNITIVE ABILITIES**	**COURSE OUTCOMES**
CO 406.1	REMEMBERING	Understand the definition and concepts of infrastructural project management including the approaches for estimating costs
CO 406.2	UNDERSTANDING	Explain infrastructural projects and its management, life cycle and project formulation
CO 406.3	APPLYING	Optimize resources of infrastructural projects using scheduling, fast tracking and re-estimation techniques
CO 406.4	ANALYSING	Analyze and Manage time in infrastructural projects through tools and techniques
CO 406.5	EVALUATING	Estimate, update and monitor infrastructural Projects
CO 406.6	CREATING	Create model for infrastructural Project and develop benchmarking infrastructural Project

1. **PROJECT MANAGEMENT:**
   AN OVERVIEW: Introduction, Project Management process, Project Management techniques, Relationship to other management disciplines, Related endeavors, Concentric project management, Project formulation and development. (8+1)
2. **PROJECT PLANNING AND TIME MANAGEMENT**:
   Purpose, Project scheduling, activity definition, activity sequencing, activity duration estimating, schedule development, schedule control, project management using CPM\PERT- Network basics, Network development, PERT analysis, advantages. Computerized network analysis- features of PM software, capabilities of PM software, multi project analysis: (8+1)
3. **ORGANIZING FOR PROJECTMANAGEMENT**:
   Project Management – modern trends - Strategic Planning - Effects of Project Risks on Organization - Organization of Project Participants -Traditional Designer-Constructor Sequence - Professional Construction Management - Owner-Builder Operation - Turnkey Operation - Leadership and Motivation for the Project Team. (8+1)
4. **RESOURCE PLANNING:**
   Introduction, Inputs, Tools, Outputs, Resource scheduling, Resource leveling, Resource restrained scheduling, strategies for shortening the schedule Assigning resources: Work, duration, resources, Effort driven scheduling, create a resource list, Exercise on resource planning using software, Level now command, leveling Gantt chart, assigning rate to resources, techniques of duration cost trade-off. (8+1)
5. **COST ESTIMATION:**
   Costs Associated with Constructed Facilities - Approaches to Cost Estimation - Type of Construction Cost Estimates - Effects of Scale on Construction Cost - Unit Cost Method of Estimation - Methods for Allocation of Joint Costs - Historical Cost Data - Cost Indices - Applications of Cost Indices to Estimating - Estimate Based on Engineer's List of Quantities - Estimation of Operating Costs.(8+1)

Suggested Text Books:

1. Harold Kerzner – Project Management – systems approach to planning, scheduling & controlling –
a. 7th edition, John wiley & sons, Canada.
2. Microsoft Project for Windows 2000 –Microsoft Press, USA 2000.
3. Tim Pyron – Microsoft Project 2000 in 24 hours – Sama Teach yourself series- Techmedia Published New
4. Delhi.
5. Chitkara, - K.K. "Construction Project Management: Planning, Scheduling and Control", Tata McGraw-Hill
6. Publishing Company, New Delhi, 1998.
7. Choudhury S , "Project Management", McGraw-Hill Publishing Company, New Delhi, 1988.
8. Chris Hendrickson and Tung Au, "Project Management for Construction – Fundamental Concepts for Owners, Engineers, Architects and Builders", Prentice Hall, Pittsburgh, 2000.
9. Major Infrastructure Projects: Planning for Delivery by Andrew Price, David L. Moore, and Edward Ochieng

Suggested Reference Books :

1. Frederick E. Gould, "Construction Project Management", Wentworth Institute of Technology, Vary E. Joyce, Massachusetts Institute of Technology, 2000.
2. George J.Ritz , "Total Construction Project Management" - McGraw-Hill Inc, 1994.
3. Chandra, P., Projects, Tata McGraw-Hill Education, 2009, ISBN: 0070077932 | ISBN: 978007007793
4. Levy, F. K. and Wiest, J. D., A Management Guide to PERT/CPM, Prentice Hall, 1969, ISBN-10: 0135485118 |
5. ISBN-13: 9780135485118.
6. Lewis, R., Project Management, McGraw-Hill, 2006, ISBN 0-07-147160-X.
7. Moder, J. J. and Phillips, C. R., Project Management With CPM, PERT and Precedence Diagramming, Van Nostrand Reinhold,1983, ISBN-10: 0442254156 | ISBN-13: 978-0442254155.
8. Morris, P. W. G., and Pinto, J. K., The Wiley Guide to Managing Projects, 2004, JohnWiley & Sons, ISBN:
9. 9780471233022.
10. Phillips, J., PMP Project Management Professional Study Guide, McGraw-Hill, 2003. ISBN 0-07-223062-2.
11. Pritsker, A. A. B., Modeling and analysis using Q-GERT networks, John Wiley & Sons Inc, 1979, ISBN:
12. 0470266481 | ISBN: 9780470266489.

Suggested Journals:

https://journals.sagepub.com/home/pmx
https://www.journals.elsevier.com/international-journal-of-project-management
https://publons.com › journal › journal-of-construction
https://www.sciencedirect.com/journal/international-journal-of-project-management/vol/35/issue/6

Suggested Swayam Course:

https://onlinecourses.nptel.ac.in/noc21_mg71/preview
https://onlinecourses.nptel.ac.in/noc21_mg66/y

Semester- IV	407	SE – 11 Quality Management
3 Credits	LTP: 2:1:0	Subject Elective Course – Project Management

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

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 407.1	REMEMBERING	Describe the concepts of Project Quality Management
CO 407.2	UNDERSTANDING	Understand the Project Quality Management, it's Pioneers & Paradigm
CO 407.3	APPLYING	Developing the Project Quality Assurance Activities & Apply the Quality Control tools for Quality improvement.
CO 407.4	ANALYSING	Analyze the Quality data for understanding the project quality process & solving the project problems
CO 407.5	EVALUATING	Evaluate the common project practices & Quality in practice.
CO 407.6	CREATING	SOLVE the relevant numerical in the scope of the subject.

1. **Understanding Quality in the Project Management Domain:** Definition of Quality, Traditional Definitions, Quality and the Triple Constraint, Cost of Quality, Benefits of Quality, Evolution of Quality and Its Contemporary Application: Progressive History: The Dark Ages, Scientific Management, Understanding Variation, Japanese Quality, Customers and Systems, Quality Then and Now, The Wheel of Quality. (8+1)
2. **Pioneers , Paradigms & Quality Management:** Pioneers: Walter Shewhart , W. Edwards Deming, Joseph M. Juran, Philip B. Crosby, Kaoru Ishikawa, Genichi Taguchi, Paradigms: Six Sigma, ISO 9000, Baldrige National Quality Program, Quality Management: Quality Management & Quality Planning, Quality Management Plan, Identifying Customers, Prioritizing Customers, Identifying Requirements, Prioritizing Requirements, Quality Planning and Project Planning, Identifying Standards (9+1)
3. **Project Quality Assurance, Control & Improvement:** Project Quality Assurance: Developing Assurance Activities, Metrics, Quality Assurance Plan, Quality Audits. Quality Control: Role of Inspection, Quality Control Tools. Quality Improvement: Reasons for Quality Improvement, Hurdles, Improvement Methodology. (8+1)
4. **Tools for Managing Project Quality:** Collecting and Understanding Project Data: Tools for Collecting Data: Check sheet, Tools for Understanding Data: Graphs , Histograms , Pareto Charts , Scatter Diagrams, Tools for Understanding Project Processes: Flow Charts, Run Charts, Control Charts, Tools for Analyzing Processes: Cause and Effect Diagrams, Pillar Diagrams. Tools for Solving Project Problems: Force Field Analysis, Brainstorming, Affinity Diagrams, Nominal Group Technique and Multivoting. (8+1)
5. **Common Project Practices & Quality in Practice:** Commonly Used Tools: Compliance matrix, Peer Review. Project Systems and Solutions: The Red Bead Experiment , Practical Exercise: Background, Data Collection, Requirement. (7+1)

Suggested Text Books :

1. Project Quality Management by Kenneth H. Rose, J. Ross Publishing.
2. Operations Management: Theory and Practice by B Mahadevan, Pearson, 2nd Edition
3. Managing Quality by Dale, Blackwell Publication.

Suggested Reference Books:

1. Quality Management by Howard Gitlow, Alan Oppenheim, Rosa Oppenheim and David Levine, TMGH, 3rd Edition.
2. Managing Quality Edited by Barrie G Dale, Ton van der Wiele and Jos van Iwaarden, Blackwell Publishing, 5th Edition

Suggested Audio Visuals link:

https://www.youtube.com/watch?v=o_vexQUWH4s,

Suggested Journals:

https://www.researchgate.net/publication/285175541_Project_Quality_Management
https://www.academia.edu/Documents/in/Project_Quality_Management

Suggested Swayam Course

1. Continuous Quality improvement: Tools & Technique by Dr Sanjeev Singh, Quality Council of India
2. Quality Engineering & Management by Dr. Venkateshwarlu, Indira Gandhi National Open University.
3. Quality Design & Control by Prof. Pradip Kumar Ray, IIT Kharagpur

Semester IV	**408**	**SE – 12 Analytics in Project Management**
3 Credits	**LTP: 2:1:0**	**Subject Elective Course – Project Management**

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

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 408.1	REMEMBERING	Describe the basic terms associated Project Management analytics and its approaches
CO 408.2	UNDERSTANDING	Understand PM Framework and analytics concepts, tools and techniques
CO 408.3	APPLYING	Elaborate hypothesis Correlation, and Linear Regression; and analytic hierarchy process
CO 408.4	ANALYSING	Analyse the varied performance indicators for Projects like Earned Value method
CO 408.5	EVALUATING	Learn and Manage Lean Six Sigma and Statistical Applications in PM
CO 408.6	CREATE	Apply the concepts of Project Decision-Making and Lean Six Sigma Applications in PM

1. **Project Management Analytics -** What Is Analytics, Why Is Analytics Important in PM, How Project Managers use Analytics in PM, Project Management Analytics Approach. Data Driven Decision-making Automation and Management of the Decision-Making Process (8+1)
2. **Project Management Framework -** What Is a Project, How Is a Project Different from Operations, Project versus Program versus Portfolio, Project Management Office (PMO), Project Life Cycle (PLC), Project Management Life Cycle (PMLC), Process within the PMLC, Work Breakdown Structure (WBS), Systems Development Life Cycle (SDLC). **Introduction to Analytics Concepts, Tools, and Techniques -** Basics and Probability Distributions, Statistics Basics, Probability Distribution, Mean, Variance, and Standard Deviation of a Binomial, Distribution, Poisson Distribution, Normal Distribution, Confidence Intervals (9+1)
3. **Hypothesis, Correlation, and Linear Regression -** What Is a Hypothesis, Statistical Hypothesis Testing, Rejection Region, The z-Test versus the t-Test, Correlation in Statistics, Linear Regression, Predicting y- Values Using the Multiple Regression Equation. **Analytic Hierarchy Process -** Using the AHP, AHP Pros and Cons (7+1)
4. **Lean Six Sigma -** What Is Lean Six Sigma, How LSS Can Improve the Status Quo, Lean Six Sigma Tools. **Statistical Applications in PM -** Statistical Tools and Techniques for PM, Probability Theory, Probability Distributions, Central Limit Theorem, Critical Path Method (CPM), Critical Chain Method (CCM), Program Evaluation and Review Technique (PERT), Graphical Evaluation

and Review Technique (GERT), Correlation and Covariance, Predictive Analysis: Linear Regression, Confidence Intervals: Prediction Using Earned Value, Management (EVM) Coupled with Confidence Intervals, Earned Value Management (EVM) (8+1)

5. **Project Decision-Making with the AHP -** Project Evaluation and Selection, More Applications of the AHP in Project Management, **Lean Six Sigma Applications in PM -** PM Challenges and LSSRemedies, PM with Lean Six Sigma (PMLSS) - A Synergistic Blend, PMLC versus LSS DMAIC Stages, LSS Tools and Techniques, PMBOK4 Process Framework, Power of LSS Control Charts, Agile Project Management and Lean Six Sigma, Role of Lean Techniques in Agile PM, Role of Six Sigma Tools and Techniques in the Agile PM, Lean PMO, Improve the PMO . (8+1)

Suggested Text Books

1. Project Management Analytics, Harijit Singh, Paul Boger Publications, ISBN: 10: 0-13-418994-9
2. Data Analytics in ProjectManagementEdited bySeweryn Spalek, CRC Press, ISBN: 13: 978-1-138-30728-5
3. PMI Guide to Business Analysis, PMI, ISBN: 978-1-62825-198-2

Suggested Reference Books

1. Project management Institute, The Guide to the Project Management Body of Knowledge (PMBOK Guide), PMIPublication
2. Big Data Analytics Using Multiple Criteria Decision-Making Models
3. Edited ByRamakrishnan Ramanathan, Muthu Mathirajan, A. Ravi Ravindran
4. Collaboration Tools for ProjectManagers - How to Choose, Get Started, andCollaborate with Technology, By Elizabeth Harrin, PMI, ISBN: 978-1-62825-113-5

Suggested Audio Visuals link

5. Project Management Full Course | Learn Project Management In 8 Hours | Simplilearn https://www.youtube.com/watch?v=uWPIsaYpY7U
6. Data Analytics Project Management Toolshttps://www.youtube.com/watch?v=uRVSm5sFvyo
7. Project Management and Business Analysis | Fanshawe International https://www.youtube.com/watch?v=-RCj6QBwND4
8. PMBOK® Guide-Sixth edition : Earned Value Management Analysis https://www.youtube.com/watch?v=MO6EOMd-CkA

Suggested Journals

1. Project Management EssentialsAnalytics for Control, By Adedeji B. Badiru, CRC Press
2. Data Analytics, Agile Project Management and Machine Learning - A Three Book Bundle by Robert Keane, Createspace Independent Pub, ISBN-13 : 978-1981383443
3. Project Management Case Studies, https://www.pmi.org/learning/academic-research/project- management-curriculum-and-resources/academic-project-management-case-studies
4. Project Management Case Studies by PM Solutionshttps://www.pmsolutions.com/case-studies
5. https://harvardpartners.com/resources/case- studies/project-management-program-management/
6. A Case Study InProject Management, A CMLS Technology Section Council White Paper, https://cdn.ymaws.com/members.councilofmls.org/resource/resmgr/files/CMLS-PMCaseStudy18f.pdf
7. International Journal of Project Management https://www.journals.elsevier.com/international-journal-of-project-management
8. Analyzing project management research: Perspectives from top management journalshttps://www.researchgate.net/publication/222414832_Analyzing_project_management_researc h_Perspectives_from_top_management_journals
9. The Journal of Modern Project Managementhttps://www.journalmodernpm.com

Websites

https://www.pmi.org.in/
https://www.apm.org.uk/

Semester IV	**409**	**SE – 13 Lean Management**
3 Credits	**LTP: 2:1:0**	**Subject Elective Course – Project Management**

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

CO#	**COGNITIVE ABILITIES**	**COURSE OUTCOMES**
CO 409.1	REMEMBERING	Describe the concepts of Lean Management & House of Lean Management
CO 409.2	UNDERSTANDING	Understand the Lean Management Systems & Lean Educational System.
CO 409.3	APPLYING	Identification of waste & Apply the Lean measurement system to measure the waste.
CO 409.4	ANALYSING	Analyze the waste& apply the Lean tools to eliminate the waste
CO 409.5	EVALUATING	Evaluate the lean Management practices& develop the lean management systems Organizational Plan.
CO 409.6	CREATING	SOLVE the relevant numerical in the scope of the subject.

1. **Introduction to Lean Management:** Overview, Dawn of Lean Manufacturing, Porsche and the Lean Transformation, Performance Management, Asset Management, Resource Management, Risk Management, Lean Management System Deployment Model. House of Lean Management: Introduction, Lean Activity Model, A framework for lean Management Implementation, Inclusion of Lean Management System indicators & metrics. Four pillars of lean management model, five foundation stones of the Lean Management System. (7+2)
2. **Lean Management Systems:** Overview, Views of Toyota Management, Defining your Lean Management System – Lean Management System Scorecard, Lean Management Model, Strategy Management Model, Operations Management Model. Lean Educational System: Introduction, Purpose of Lean Educational System, Lean Education Strategy, Lean Learning Cycle, Key Education System Implementation Challenges. (6+2)
3. **Waste Identification & Quantifications:** Waste Identifications: introduction, what is variation, what is Waste, How Does Waste Creep into a Process, Power of Observation, Nine Waste Categories: Overproduction, Excess Inventory, Defects, Extra Processing, Waiting, Motion, Transportation, Underutilized people, Employee Behavior. Waste Quantification: Introduction, Measurement System Theory, Measurement System practice, Types of Measures, Lean measures vs Non-Lean measures, Critical Component of the Lean Measurement System, Selecting New lean measures, Measuring performance over time. (8+2)
4. **Lean Concept, Tools & Methods:** Introduction, Lean Managements Concepts, Lean Tools-5S, Overall Equipment Effectiveness, Mistake Proofing, Cellular Manufacturing, kanban, Visual Controls. The power of Lean Concepts & Lean Tools, Kaizen, Integrating Lean Management with DMAIC / DMADV: Introduction, Goals of DMAIC, DMADV & lean Management systems, Root Cause Analysis & lean Management. Integrating Lean & Theory of Constraints: Overview, Comparing lean & Theory of Constraint, Integrating lean & Six sigma under Theory of Constraint. (7+2)
5. **Lean Management Systems organizational Master Plan:** Overview, lean Management System Transition Phases- Evaluate the Lean Management System methodology, Define Opportunity with the Organization, Develop the Implementation plan, Implement the plan, measure the results, Continue to improvement. Developing a Lean Culture & Change Management Environment- Lean Culture Development, Change Management, Facilitating Lean Management, The organization as a System, Catchball. (7+2)

Suggested Text Books:

1. The Lean Management System Handbook by Rich Charron, H. James Harrington, CRC press.
2. Operations Management: Theory and Practice by B Mahadevan, Pearson, 2nd Edition
3. Operations Research – by Nita Shah, Ravi Gor, Hardik Soni- Prentice Hall India

Suggested Reference Books:

3. Implementing a Lean Management System by Thomas L Jackson, Productivity Press.
4. How to Implement a Lean Manufacturing by Lonnie Wilson, Mc Graw Hill publication,

Suggested Audio Visuals link:

1. https://www.youtube.com/watch?v=G_0bl6FHo_c

Suggested Journals:

1. https://www.researchgate.net/publication/271029631_Lean_manufacturing_Literature_review_an d_res earch_issues

Suggested Swayam Course

1. Toyota Production System by Dr. Rajat Agrawal, IIT Roorkee

Semester IV	**410**	**SE – 14 Social Projects**
3 Credits	**LTP: 2:1:0**	**Subject Elective Course – Project Management**

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

CO#	**COGNITIVE ABILITIES**	**COURSE OUTCOMES**
CO 410.1	REMEMBERING	DESCRIBE the core concepts in virtual and social project management.
CO 410.2	UNDERSTANDING	UNDERSTAND the relevance of social project management
CO 410.3	APPLYING	IDENTIFY the challenges in managing social projects.
CO 410.4	ANALYSING	ANALYZE the issues related to completion, effectiveness and efficiency of a social project.
CO 410.5	EVALUATING	EVALUATE the context of social projects for better decision making in Social Project Management
CO 410.6	CREATING	CREATE and apply a model of Social Project Model related to various Industry Sectors.

1. **Introduction to Social Project Management :** Meaning, Importance, Need, Advantages, How it started, Applicability, Scenario before 2008 and after 2008.Emergence of Project Management 2.0, Difference between Social Project Management and Traditional Project Management, Leadership, Role of Social Networking, Role, impact, challenges and limitations of Social Project Manager. Hurdles in implementation. Limitations of Social Project Management. (8+1)

2. **Social Project Management Platform:** Project Engagement Platform, social media tools, Social Computing, Role of free Lancers, Agencies and NGOs, social media marketing campaigns, Understanding the Project Cycle – Objectives, Planning, Project Collaboration – Tools, Group Communication Tools, Emerging issues in social projects, **Social Tools and Technologies:** Various Types of Social Tools and Technologies, Ways of Adoption, Types, Adoption by various Industries, How Social Project Management helps productivity (7+2)

3. **Social Computing :**Meaning, Need, Scope, Characteristics, Paradigms, New forms of Enterprise Organizations, Models, Role of Social Technology, Support by Social Technology. New

Management Approach, Social Business, Social Network, Enterprise 2.0 and Social Enterprise, Social Business Applications, **Knowledge Management:** Concept, Challenges, Requirements, KM as business Practice (8+1)

4. **Governance and Audit of Social Projects**: Role of Government in Social Projects, Role of NGOs in Governance, Legal Norms of Social Project Management. Social Audit. (8+1)

5. **Study and Analyse Case Studies:** Bill Gates Foundation, Paani Foundation, Tata Group, Socio – Economic Projects (7+2)

Suggested Text Books

1. Corporate Impact: Measuring and Managing Your Social Footprint, Adrian Henriques
2. Project Management Absolute Beginner's Guide, Author Gregory Horine, PMP
3. A Guide to the Project Management Body of Knowledge (PMBOK Guide)Project Management Institute
4. Project Management for Environmental, Construction and Manufacturing Engineers, A Manual for Putting Theory into Practice, by Munier, Nolberto

Suggested Reference Books

5. Project management Institute, The Guide to the Project Management Body of Knowledge (PMBOK Guide), PMI Publication
2. Managing Social Research: A Practical Guide, Roger Tarling
3. Managing to Care: Case Management and Service System Reform (Social Institutions and Social Change)Ann Dill.
4. Managing Corporate Social Responsibility in Action (Corporate Social Responsibility Series)Hond

Audio Visual Content

1. Social Project Management https://www.youtube.com/watch?v=oj2OU54_1Oo
2. 10 Best Project Management Tools for Teams in 2019 https://www.youtube.com/watch?v=qUuVnbuDrk8
3. Social Project Management https://www.youtube.com/watch?v=oj2OU54_1Oo&t=64s
4. Social Media: The Ultimate Project Planning Tool https://www.youtube.com/watch?v=jy18tDF1KMI
5. SCBA- Project Management (Social Cost Benefit Analysis) https://www.youtube.com/watch?v=wDLUBbSSsUY

Journals

1. https://www.simplilearn.com/social-media-project-management-guide-article#:~:text=%20The%20Ultimate%20Social%20Media%20Project%20Management%20Guide,time.%20 This%20is%20especially%20true%20with...%20More%20
2. https://www.journals.elsevier.com/international-journal-of-project-management
3. https://journals.sagepub.com/home/pmx
4. http://growingscience.com/beta/jpm
5. https://www.sciencedirect.com/journal/international-journal-of-project-management
6. https://www.sciencedirect.com/science/article/pii/S1877050919322537
7. https://sciendo.com/journal/JEPPM

Case Studies

1. https://www.simplilearn.com/social-media-project-management-guide-article#:~:text=%20The%20Ultimate%20Social%20Media%20Project%20Management%20Guide,time.%20 This%20is%20especially%20true%20with...%20More%20
2. https://www.pmi.org.in/PMI-Case-Studies-Research-Report/tmpUpload/34201406092928.pdf
3. https://som.yale.edu/faculty-research-centers/centers-initiatives/program-on-social-enterprise/social- enterprise-case-studies
4. https://pmworldlibrary.net/wp-content/uploads/2013/01/PMWJ4-Nov2012-GOEDKNEGT-Sustainability- in-Project-Management-StudentPaper.pdf

5. https://www.icmrindia.org/casestudies/Case_Studies_Concept_Wise.asp?cat=Social%20Responsibility

Websites

4. https://www.pmi.org.in/
5. https://www.apm.org.uk/
6. https://pm-alliance.com/
7. www.manage.gov.in

Semester IV	**411**	**SE – 15 Digital Trends in Project Management**
3 Credits	**LTP: 2:1:0**	**Subject Elective Course – Project Management**

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

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 411.1	REMEMBERING	DEFINE the key concepts of Digitalization.
CO 411.2	UNDERSTANDING	DEMONSTRATE knowledge & skills of the concept of digitization and describe digital trends, challenges and possibilities for individual, organization and society.
CO 411.3	APPLYING	IDENTIFY and APPLY the concepts digital information and digital transformation in the field of Project Management.
CO 411.4	ANALYSING	ANALYSE challenges faced for digitalization of project management practices across industries
CO 411.5	EVALUATING	ILLUSTRATE the results from various projects to inquire and elaborate on the issues concerning digitization of the project management.
CO 411.6	CREATE	CONDUCT a study of use of digitalization in project practical Management

1. **Fundamentals of Digitalization:** Digitization as a strategy, Important steps in Digitization – Planning, Pre digitization, Digital conversion, Post Digitization., IPR in digitization, Digital Preservation, Digital Access, Digital Repositories, Economic Aspects of digitization. Challenges during digital transformation (9+1)

2. **Digital-age Skills for Managers:** Data Science Skills, Innovative Mindset, Security and Privacy Knowledge, Legal Aspects of digitalization, Data driven decisions, Collaborative Leadership. Role of digital project manager. (8+1)

3. **Next-Level Tools and approaches:** IoT, AI, Cloud Solutions, 3 D Printing, Block Chain, Autonomous Vehicles, Large Scale Energy Sources, Spreadsheet, MS Project, Accolade, Smartsheet, Trello, Atlassian, Collabnet. (8+1)

4. **Digital project phases: Initiating:** Need Assessment, Documentation, **Planning Phase:** Communication, Information Architecture, Analysis, Development, preparation **Execution phase:** Content, Testing**, Maintenance phase** (8+1)

5. **Cases:** Cases in application of digitalization tools and strategies in the field of Project Management. (7+1)

Suggested Text Books

1. Rogers, David L. The digital transformation playbook: Rethink your business for the digital age. Columbia University Press, 2016.
2. Digital Project Management, The complete step by step guide to a successful launch. Taylor Olson, J.Ross Publication, 2016

Suggested Reference Books

1. Project Management in Manufacturing and High Technology Operations By Adedeji Bodunde Badiru, 2nd edition, John Wiley and Sons
2. Project Management Absolute Beginner's Guide, Author Gregory Horine,
3. PMP Project Management Metrics, KPIs, and Dashboards: A Guide to Measuring and Monitoring Project Performance, by Harold Kerzner, Wiley Books
4. Project Management for Environmental, Construction and Manufacturing Engineers, A Manual for Putting Theory into Practice, by Munier, Nolberto

Suggested Journals

1. Westerman, George, Didier Bonnet, and Andrew McAfee. "The nine elements of digital transformation." MIT Sloan Management Review 55.3 (2014): 1-6.
2. https://www.pmi.org/-/media/pmi/documents/public/pdf/learning/thought-leadership/pulse/digital-pm- skills.pdf
3. https://www.pmi.org/-/media/pmi/documents/public/pdf/learning/thought-leadership/pulse/maximize- benefits-disruptive-technologies-projects.pdf?v=23e686de-3a1a-47cf-ba0a-d22343b44f74

Websites

https://www.bl.uk/digitisation-services/getting-started

Semester IV	**412**	**SE – 16 Project Management, Execution and Monitoring**
3 Credits	**LTP: 2:1:0**	**Subject Elective Course – Project Management**

CO#	**COGNITIVE ABILITIES**	**COURSE OUTCOMES**
CO 412.1	REMEMBERING	DEFINE the basic terms associated with execution of project.
CO 412.2	UNDERSTANDING	UNDERSTAND the progress of monitoring the project.
CO 412.3	APPLYING	ESTIMATE inputs and output for monitoring and controlling project
CO 412.4	ANALYSING	ANALYZE use of tools and techniques for managing communication
CO 412.5	EVALUATING	EVALUATE the triple constraint for real time projects.
CO 412.6	CREATING	CREATE the monitoring and controlling plans for the projects in varied business contexts

1. **Executing a Project:**

Directing and Managing Project Work, Input to Directing and Managing Project Work, Tools and Techniques for Directing and Managing Project Work, Output of Directing and Managing Project Work, Managing Project Knowledge, Input to Manage Project Knowledge, Tools and Techniques for Managing Project Knowledge, Output of Managing Project Knowledge, Managing Quality, Tools and Techniques for Performing Quality Management, Output of Performing Quality Management, Conducting Procurements, Tools and Techniques for Conducting Procurements, Output of Conducting Procurements (8+1)

2. **Project Resources:**

Resource Management: Acquiring Project Resources, Selecting and Assigning Resources, Tools and Techniques for Acquiring and Selecting Project Resources, Developing the Project Team, Managing the Project Team, Tools and Techniques for Managing the Project Team, Output of Managing the Project Team, Motivating Your Team (8+1)

3. **Managing Communication and Stakeholder Engagement**:

Manage Communication, Tools and Techniques for Managing Communication, Mechanisms of Communication and Dimensions of Communication Activities, Output of Manage Communication, Managing Stakeholder Engagement (7+1)

4. **Monitoring and Controlling the Project:**

Monitoring and Controlling Project Work, Input to Monitor and Control Project Work, Tools and Techniques for Monitor and Control Project Work, Output of Monitor and Control Project Work, Performing Integrated Change Control, Input to Integrated Change Control, Tools and Techniques for Integrated Change Control, Output from Integrated Change Control, Controlling Quality, Tools and Techniques for Quality Control, Output of Quality Control, Monitoring Risks, Control Procurements (9+1)

5. **Controlling Scope, Schedule, and Resources:**

Controlling Scope, Controlling the Schedule, Performing the Control Schedule Process, Controlling Project Resources, Controlling Cost, Scope, Schedule, and Cost: The Triple Constraint, Monitoring Stakeholder Engagement, Monitor Communication, Performing the Monitor Communication Process (8+1)

Suggested Text Books

1. Project Estimating and Cost Management Parviz F Rad by Management Concepts, Inc.
2. Project Risk Management Guidelines Dale F. Cooper, Stephen Grey, Geoffrey Raymond and Phil Walker by John Wiley & Sons, Ltd.

Suggested Reference Books

1. Fundamentals of Risk Management: Understanding, evaluating and implementing effective risk. Paul Hopkin by Kogan Page Limited.
2. Project Management Toolbox Russ J. Martinelli by Wiley.

Suggested Audio /Visual Content

Project Management Fundamentals: Risk Management |
Udemy Project Cost and Estimation Techniques | Udemy

Journals

Project Review & Recovery: Manufacturer Slashes HR Costs
(pmsolutions.com) Agile And Earned Value | APM
Vodafone: Using PMI standards to deliver a complex technology project | PMI
Occupancy Estimation and Modeling - 1st Edition (elsevier.com)

Websites

https://www.pmi.org.in/
https://www.apm.org.uk/

Suggested Swayam Course

https://nptel.ac.in/courses/110/104/110104073/