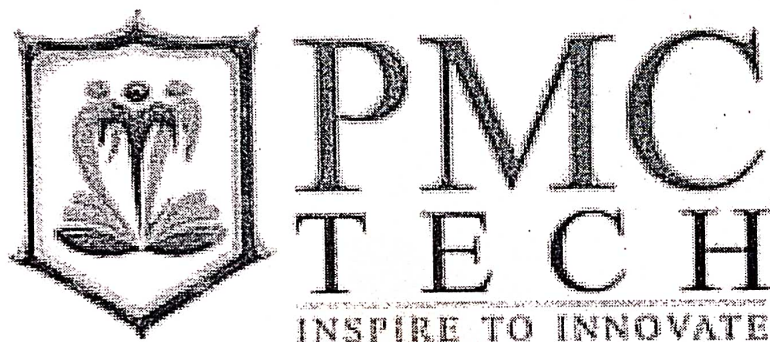


Er. PERUMAL MANIMEKALAI COLLEGE OF ENGINEERING
Koneripalli, Hosur - 635117.
(An Autonomous Institution–Affiliated to Anna University, Chennai)

Curriculum & Syllabi
(Version 1)



ACADEMIC REGULATIONS 2023 (R23)
MASTER OF BUSINESS ADMINISTRATION (MBA)

(Applicable from 2023 - 2024 onwards)

AUTONOMOUS AFFILIATED COLLEGE
REGULATIONS - 2023
CHOICE BASED CREDIT SYSTEM
MASTER OF BUSINESS ADMINISTRATION (FULL TIME)
CURRICULUM AND SYLLABI FOR I TO IV SEMESTERS

The following Regulations are applicable to the students admitted to M.B.A. Programme from the academic year 2023-2024.

1. DEPARTMENT VISION

To be a Premier recognized department for creating leaders in the emerging areas of Business.

2. DEPARTMENT MISSION

- To develop management professionals to meet the modern industries through innovative teaching and curriculum.
- To groom Post Graduate students to meet future challenges in business and inculcating innovative Management Practices.
- To instill passion for lifelong learning, right ethical values to contribute to the society

3. PROGRAMME NAME : Master of Business Administration

4. REGULATION 2023 (Choice Based Credit System)

5. PROGRAM EDUCATIONAL OBJECTIVES (PEO's)

PEO 1 – Employability: To develop students with industry specific knowledge & skills to meet the industry requirements and also join Public sector undertaking through competitive examinations.

PEO 2 - Entrepreneurship: To create effective business service owners, with a growth mindset by enhancing their critical thinking, problem solving and decision-making skills.

PEO3 – Research and Development: To instill and grow a mindset that focusses efforts towards inculcating and encouraging the students in the domains of research and development.

PEO 4 – Contribution to Business World: To produce ethical and innovative business professionals to enhance growth of the business world.

PEO 5 – Contribution to the Society: To work and contribute towards holistic development of the society.



6. PROGRAM OUTCOMES (PO's)

On successful completion of the programme, the Post graduate students will have:

PO1: Problem Solving Skill: Application of tools & techniques relevant to management theories and practices in analyzing & solving business issues.

PO2: Decision Making Skill: Application of analytical and critical thinking models for data-driven decision making.

PO3: Ethical Value: Nurture the development of ethical practices in business and work.

PO4: Communication Skill: Be trained in and to practice skills of listening, verbal and non-verbal communications for effective information and knowledge transfer.

PO5: Individual and Team Leadership Skill: Ability to be self-motivated in leading & driving a team towards achievement of organizational goals and contributing effectively to establish industrial harmony.

PO6: Employability Skill: Foster and enhance employability skills through relevant industry subject knowledge.

PO7: Entrepreneurial Skill: Equipped with skills and competencies to become a successful entrepreneur.

PO8: Contribution to Society: Strive towards building and delivering products and services with a social benefit perspective.

7. MAPPING OF PEOs, POs & PSOs

Programme Educational Objectives					Programme Outcomes			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
PEO1	3	3	2	3	3	2	1	1
PEO2	3	3	3	3	2	2	3	2
PEO3	3	3	1	1	2	2	3	2
PEO4	3	3	3	2	1	2	2	1
PEO5	2	2	3	2	2	1	2	3

(Low 1, Medium 2, High 3)

Credit Calculations _MBA_ Regulations 2023

PG: MASTER OF BUSINESS ADMINISTRATION

S.No.	Subject Area	I	II	III	IV	Total Credits
		Credits per Semester				
1	HM	02	02	-	-	04
2	PL	03	05	-	-	08
3	PC	20	22	08	-	50
4	PE	-	-	18	-	18
5	OE/IL	03	03	-	-	06
6	PD	-	-	04	-	04
7	PR	-	-	-	12	12
Total		28	32	30	12	102

HM	Humanities, Social sciences & Management	PL	Professional Lab
PC	Professional Core	OE/IL	Open Elective, Industrial Lecture, Value added courses
PE	Professional Elective	PD	Professional Development, In-plant raining/Internship
PR	Project		

INSPIRE TO INNOVATE

**AUTONOMOUS AFFILIATED COLLEGE
REGULATIONS 2023 - CHOICE BASED CREDIT SYSTEM
MASTER OF BUSINESS ADMINISTRATION
SYLLABI FOR I TO IV SEMESTERS**

SEMESTER – I

S.N.	COURSE CODE	COURSE NAME	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
0		Induction Programme – 2 Weeks	-	-	-	-	-	0
THEORY								
1	PPMB1PC01	Principles and Practices of Management	PC	3	-	-	3	3
2	PPMB1PC02	Statistics for Management	PC	3	1	-	4	4
3	PPMB1PC03	Managerial Economics	PC	3	1	-	4	4
4	PPMB1PC04	Organizational Behaviour	PC	3	-	-	3	3
5	PPMB1PC05	Accounting for Managers	PC	3	-	2	5	4
6	PPMB1PC06	Legal Aspects of Business	PC	3	-	-	3	3
7	PPMB1OEXX	Non-Functional Electives	OE /IL	3	-	-	3	3
PRACTICALS								
8	PPMB1PL01	Business Communication (Laboratory)	PL	-	-	4	4	2
9	PPMB1HM01	Indian Ethos (Seminar)	HM	-	-	4	4	2
TOTAL				21	2	10	33	28

Non-Functional Electives	
PPMB1OE01	Entrepreneurship Development
PPMB1OE02	Business Environment



SEMESTER – II

S.N	COURSE CODE	COURSE NAME	CATEGO RY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CR
				L	T	P		
THEORY								
1	PPMB2PC07	Operations Management	PC	3	-	-	3	
2	PPMB2PC08	Applied Operations Research	PC	3	-	2	5	
3	PPMB2PC09	Financial Management	PC	3	1	-	4	
4	PPMB2PC10	Business Analytics	PC	3	-	2	5	
5	PPMB2PC11	Human Resource Management	PC	3	-	-	3	
6	PPMB2PC12	Marketing Management	PC	3	-	-	3	
7	PPMB2PC13	Business Research Methods	PC	3	-	2	5	
8	PPMB2OEXX	Non-Functional Elective	OE/IL	3	-	-	3	
PRACTICALS								
9	PPMB2PL02	Creativity & innovation (Laboratory)	PL	-	-	4	4	
10	PPMB2HM02	Business Ethics (Seminar)	HM	-	-	4	4	
TOTAL				24	1	14	39	

Non-Functional Electives	
PPMB2OE01	Event Management
PPMB2OE02	Industrial psychology

NOTE: in the First & Second semester, students need to choose one elective from the Non-Functional Elective



PROFESSIONAL ELECTIVES (PE)

1. Students can take **THREE** elective subjects from **TWO** functional specializations
OR
2. Students can take **SIX** elective subjects from any one Sectoral specialization

2. Students can take any

S.N O.	COURSE CODE	COURSE NAME	CATEGOR Y	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CR
				L	T	P		
Specialization: Human Resource Management (6)								
1	PPMB3PE01	Industrial Relations and Labour Legislations	PC	3	-	-	3	
2	PPMB3PE02	Strategic Human Resource Management	PC	3	-	-	3	
3	PPMB3PE03	Talent acquisition and Management	PC	3	-	-	3	
4	PPMB3PE04	Reward and Compensation Management	PC	3	-	-	3	
5	PPMB3PE05	People Analytics	PE	3	-	-	3	
6	PPMB3PE06	Organizational Design Change and Development	PE	3	-	-	3	

S.N O.	COURSE CODE	COURSE NAME	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CR
				L	T	P		
Specialization: Marketing Management (6)								
1	PPMB3PE07	Digital Marketing	PE	3	-	-	3	
2	PPMB3PE08	Services Marketing	PE	3	-	-	3	
3	PPMB3PE09	Integrated Marketing Communication	PE	3	-	-	3	
4	PPMB3PE10	Product and Brand Management	PE	3	-	-	3	
5	PPMB3PE11	Retail Marketing	PE	3	-	-	3	
6	PPMB3PE12	Consumer Behavior	PE	3	-	-	3	

S.NO	COURSE CODE	COURSE NAME	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		

Specialization: Analytics and Systems (5)

1	PPMB3PE13	Data Mining for Business Intelligence	PE	3	-	-	3	3
2	PPMB3PE14	Deep Learning and Artificial Intelligence	PE	3	-	-	3	3
3	PPMB3PE15	Enterprise Resource Planning	PE	3	-	-	3	3
4	PPMB3PE16	Python for Data Science	PE	3	-	-	3	3
5	PPMB3PE17	Social Media Web Analytics	PE	3	-	-	3	3

S.N O.	COURSE CODE	COURSE NAME	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		

Specialization: Financial Management (7)

1	PPMB3PE18	Security Analysis and Portfolio Management	PE	3	-	-	3	3
2	PPMB3PE19	Banking and Financial Services Management	PE	3	-	-	3	3
3	PPMB3PE20	Financial Derivatives	PE	3	-	-	3	3
4	PPMB3PE21	International Finance	PE	3	-	-	3	3
5	PPMB3PE22	Financial Modeling	PE	3	-	-	3	3
6	PPMB3PE23	Corporate Finance	PE	3	-	-	3	3
7	PPMB3PE24	Financial Markets	PE	3	-	-	3	3

S.N O.	COURSE CODE	COURSE NAME	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CR
				L	T	P		
Specialization: Operations Management (6)								
1	PPMB3PE25	Logistics and Supply Chain Management	PE	3	-	-	3	
2	PPMB3PE26	Quality Management	PE	3	-	-	3	
3	PPMB3PE27	Product Design and Development	PE	3	-	-	3	
4	PPMB3PE28	Supply chain Analytics	PE	3	-	-	3	
5	PPMB3PE29	Lean Manufacturing	PE	3	-	-	3	
6	PPMB3PE30	Industry 4.O	PE	3	-	-	3	

S.N O.	COURSE CODE	COURSE NAME	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CRE
				L	T	P		
Sectoral Specialization: Logistics & supply chain Management								
1	PPMB3PE31	Supply Chain Concepts and Planning	PE	3	-	-	3	
2	PPMB3PE32	Sourcing and Supply Management	PE	3	-	-	3	
3	PPMB3PE33	Supply Chain Inventory Management	PE	3	-	-	3	
4	PPMB3PE34	Supply Chain Information System	PE	3	-	-	3	
5	PPMB3PE35	Transportation And Distribution Management	PE	3	-	-	3	
6	PPMB3PE36	Reverse And Contract Logistics	PE	3	-	-	3	
7	PPMB3PE37	Containerization and Allied Business	PE	3	-	-	3	
8	PPMB3PE38	Exim Management	PE	3	-	-	3	
9	PPMB3PE39	Fundamentals Of Shipping	PE	3	-	-	3	

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S.N O.	COURSE CODE	COURSE NAME	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		

Sectoral Specialization: Infrastructure & Real Estate Management

1	PPMB3PE40	Infrastructure Planning Scheduling and Control	PE	3	-	-	3	3
2	PPMB3PE41	Contracts and Arbitration	PE	3	-	-	3	3
3	PPMB3PE42	Disaster Mitigation and Management	PE	3	-	-	3	3
4	PPMB3PE43	Urban Environmental Management	PE	3	-	-	3	3
5	PPMB3PE44	Smart Materials, Techniques and Equipment's for Infrastructure	PE	3	-	-	3	3
6	PPMB3PE45	Strategic Airport Infrastructure Management	PE	3	-	-	3	3
7	PPMB3PE46	Real Estate Marketing and Management	PE	3	-	-	3	3
8	PPMB3PE47	Infrastructure and Real Estate Entrepreneurship	PE	3	-	-	3	3
9	PPMB3PE48	Valuation of Real Estate and Infrastructure Assets	PE	3	-	-	3	3

S.N O.	COURSE CODE	COURSE NAME	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		

Sectoral Specialization: Tourism Management

1	PPMB3PE49	Tourism Principles and Practices	PE	3	-	-	3	3
2	PPMB3PE50	Travel Management	PE	3	-	-	3	3
3	PPMB3PE51	Tourism Geography	PE	3	-	-	3	3
4	PPMB3PE52	Culture and Heritage	PE	3	-	-	3	3
5	PPMB3PE53	Tourism Products in India	PE	3	-	-	3	3
6	PPMB3PE54	Accommodation and House Keeping Management	PE	3	-	-	3	3
7	PPMB3PE55	Travel Media and Public Relations	PE	3	-	-	3	3
8	PPMB3PE56	Tour Operations	PE	3	-	-	3	3
9	PPMB3PE57	Medical Tourism	PE	3	-	-	3	3

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SEMESTER – I

PPMB1PC01	PRINCIPLES AND PRACTICES OF MANAGEMENT	L T P 3 0 0
COURSE OBJECTIVE		
The objective of this course is to familiarize the students to the basic concepts of management in order to aid in understanding how an organization functions, and in understanding the complexity and wide variety of issues managers face in today's business firms.		
UNIT I INTRODUCTION TO MANAGEMENT		
Organization- Management- Role of managers- Evolution of management thought- Organization and the environmental factors- Managing globally - Strategies for International business.		
UNIT II PLANNING		
Nature and purpose of planning- Planning process- Types of plans- Objectives- Managing Objective(MBO) strategies- Types of strategies – Policies – Decision Making- Types of decision making process- Rational decision making process-Decision making under different conditions		
UNIT III ORGANISING		
Nature and purpose of organizing- Organization structure- Line and staff authority- Departmentation - Span of control- Centralization and decentralization- Delegation of authority- Staffing- Selection and Recruitment-Career development-Career stages-Training-Performance appraisal.		
UNIT IV DIRECTING		
Managing people-Communication-Hurdles to effective communication-Organization culture-Elements and types of culture – Managing cultural diversity.		
UNIT V CONTROLLING		
Process of controlling-Types of control- Budgetary and non-budgetary control techniques – Managing productivity – Cost control- Purchase control- Maintenance control – Quality control- Planning operations.		
		TOTAL: 45 PERIODS
COURSE OUTCOMES:		
<ol style="list-style-type: none"> 1. The student should be able to describe and discuss the elements of effective management, 2. Discuss and apply the planning, organizing and control processes, 3. Describe various theories related to the development of leadership skills, motivation techniques, team work and effective communication 4. Communicate effectively through both oral and written presentation. 		

TEXTBOOKS:

1. Harold Koontz and Heinz Weihrich, Essentials of management: An International & Leadership Perspective 10th edition, Tata McGraw – Hill Education, 2020.

REFERENCES:

1. Andrew J. Dubrin, Essentials of Management, Thomson South western, 9th edition, 2020.
2. Samuel C. Certo and Tervis Certo, Modern management: concepts and skills, Pearson education, 12th edition, 2021.
3. Don Hellriegel, Susan E. Jackson and John W. Slocum, Management-A competency-based approach, Thompson South Western, 11th edition, 2020.
4. Heinz Weihrich, Mark V Cannice and Harold Koontz, Management-A global entrepreneurial perspective, Tata McGraw Hill, 13th edition, 2020.
5. Stephen P. Robbins, David A. De Cenzo and Mary Coulter, Fundamentals of Management, Prentice Hall of India, 2020

WEB REFERENCES:

1. <https://open.umn.edu/opentextbooks/textbooks/34>
2. <https://openstax.org/details/books/principles-management>
3. <https://open.umn.edu/opentextbooks/textbooks/693>
4. <https://open.umn.edu/opentextbooks/textbooks/34>

NPTEL/ SWAYAM/ MOOC REFERENCE:

1. NPTEL: Principles of Management, Prof. M.P. Ganesh, IIT Hyderabad.

PPMB1PC02

COURSE OBJECTIVE

To learn the applications of statistics in business decision making.

UNIT I INTRODUCTION

Basic definitions and rules for probability, Bayes theorem, and random variables, Probability distributions: Binomial, Poisson, Uniform and Normal distributions.

UNIT II SAMPLING DISTRIBUTION AND ESTIMATION

Introduction to sampling distributions, sampling distribution of mean and proportion, sampling techniques, estimation: point and interval estimates for population parameters of large sample and small samples, determining the sample Size.

UNIT III TESTING OF HYPOTHESIS - PARAMETRIC TESTS

Hypothesis testing: one sample and two sample tests for means and proportions of large samples (z-test), one sample and two sample tests for means of small samples (t-test), F-test for two sample Standard deviations. ANOVA one and two way

UNIT IV NON-PARAMETRIC TESTS

Chi-square test for single sample standard deviation. Chi-square tests for independence of attributes and goodness of fit. Sign test for paired data. Rank sum test. –Mann – Whitney U test and Kruskal Wallis test. sample run test.

UNIT V CORRELATION AND REGRESSION

Correlation – Coefficient of Determination – Rank Correlation – Regression – Estimation of Regression line. Method of Least Squares – Standard Error of estimate.

TOTAL: 60 PERCENT

COURSE OUTCOMES:

1. To facilitate objective solutions in business decision making.
2. To understand and solve business problems.
3. To apply statistical techniques to data sets, and correctly interpret the results.
4. To develop skill-set that is in demand in both the research and business environments.

TEXTBOOKS:

1.N. D. Vohra, Business Statistics, Tata Mc Graw Hill, 2020.

REFERENCES:

1. Richard I. Levin, David S. Rubin, Masood H.Siddiqui, Sanjay Rastogi, Statistics for Management, Pearson Education, 8th Edition, 20119.
2. Prem. S. Mann, Introductory Statistics, Wiley Publications, 9th Edition, 2020.
3. T N Srivastava and Shailaja Rego, Statistics for Management, Tata McGraw Hill, 5th Edition 2020.
4. David R. Anderson, Dennis J. Sweeney, Thomas A.Williams, Jeffrey D.Camm, James J.Cochran, Statistics for business and economics, 13th edition, Thomson (South – Western) Asia, Singapore, 2021

WEB REFERENCES:

1. <https://statistics.laerd.com/statistical-guides/descriptive-inferential-statistics.php>
2. http://www.stat.ufl.edu/~aa/articles/agresti_hitchcock_2006.pdf

PPMB1PC03	MANAGERIAL ECONOMICS	L T P C 3 1 0 4
COURSE OBJECTIVE		
To introduce the concepts of scarcity and efficiency; to explain principles of micro economics relevant to managing an organization; to describe principles of macroeconomics to have the understanding of economic environment of business.		
UNIT I INTRODUCTION		12
Managerial Economics – Meaning, Nature, Scope- Fundamental concepts of Managerial Economics - The themes of economics – scarcity and efficiency – three fundamental economic problems – society’s capability – Production possibility frontiers (PPF) – Productive efficiency Vs economic efficiency –economic growth & stability – Micro economies and Macro economies.		
UNIT II CONSUMER AND PRODUCER BEHAVIOUR		12
Market – Demand and Supply – Determinants – Market equilibrium – elasticity of demand and supply – consumer behaviour – consumer equilibrium –Approaches to consumer behaviour –Production –Short-run and long-run Production Function – Returns to scale – economies Vs diseconomies of scale –Analysis of cost – Short-run and long-run cost function.		
UNIT III PRODUCT AND FACTOR MARKET		12
Product market – perfect and imperfect market – different market structures –Perfect competition – Monopoly-Monopolistic Competition – Oligopoly- Firm’s equilibrium and supply – Market efficiency –factor market – Land, Labour and capital – Demand and supply – determination of factor price –Price – Meaning, Types of Pricing.		
UNIT IV PERFORMANCE OF AN ECONOMY – MACRO ECONOMICS		12
Macro-economic aggregates – Circular flow of macroeconomic activity – National income determination– Aggregate demand and supply – Macroeconomic equilibrium – Components of aggregate demand and national income – multiplier effect – Fiscal policy in theory.		
UNIT V AGGREGATE SUPPLY AND THE ROLE OF MONEY		12
Unemployment and its impact – Okun’s law – Inflation and the impact – reasons for inflation – Demand Vs Supply factors –Inflation Vs Unemployment tradeoff –Phillips curve, Money market- Demand and supply of money – money-market equilibrium and national income – the role of monetary policy.		
TOTAL: 60 PERIODS		
COURSE OUTCOMES:		
<ol style="list-style-type: none"> 1. To introduce the concepts of scarcity and efficiency; 2. To explain principles of microeconomics relevant to managing an organization m 3. To describe principles of macroeconomics 4. To have the understanding of economic environment of business. 5. To study about the policies that regulate economic variables 		

TEXTBOOKS:

1. Paul A. Samuelson, William D. Nordhaus, Sudip Chaudhuri and Anindya Sen, Economics, 22nd edition, Tata McGraw Hill, New Delhi, 2021

REFERENCES:

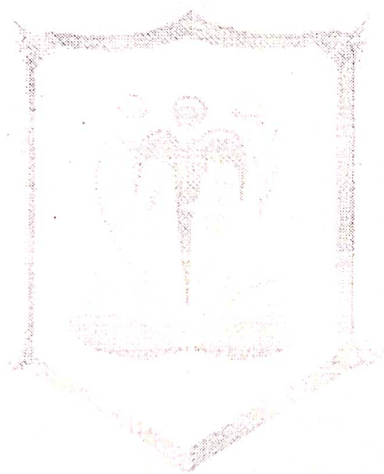
1. N. Gregory Mankiw, Principles of Economics, 11th edition, Thomson learning, New Delhi, 2021.
2. Richard Lipsey and Alec Chrystal, Economics, 13th edition, Oxford, University Press, New Delhi, 2020
3. Karl E. Case and Ray C. Fair, Principles of Economics, 15th edition, Pearson, Education, Asia, New Delhi, 2021.

WEB REFERENCES

1. <https://www.cfainstitute.org/-/media/documents/support/programs/cfa/prerequisite-economics-material-demand-and-supply-analysis-intro.pdf>
2. <https://www.investopedia.com/terms/b/business-economics.asp>
3. <https://books.google.com/books?id=hNJ98ZCYHEEC&dq=managerial+economics+definitions&pg=>

NPTEL/ SWAYAM/ MOOC REFERENCE:

1. NPTEL: Managerial Economics, Prof. Trupti Mishra, IIT BOMBAY



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PPMB1PC04	ORGANIZATIONAL BEHAVIOUR	L T P C 3 0 0 3
COURSE OBJECTIVE		
The objective of this course is to provide an overview of theories and practices in organizational behaviour in individual, group and organizational level.		
UNIT I: FOCUS AND PURPOSE		9
Definition, need and importance of organizational behaviour – Nature and scope – Frame work – Organizational behaviour models.		
UNITII INDIVIDUAL BEHAVIOUR		9
Personality – types – Factors influencing personality – Theories – Learning – Types of learners – The learning process– Learning theories, Attitudes – Characteristics – Components – Formation – Measurement-Values. Perceptions–Importance–Factors influencing perception – Interpersonal perception – Motivation – Importance – Types – Effects on work behavior.		
UNIT III - GROUP BEHAVIOUR		9
Organization structure – Formation – Groups in organizations – Influence – Group dynamics –Emergence of informal leaders and working norms – Group decision making techniques – Teambuilding-Interpersonal relations–Communication–Control.		
UNITIV – LEADERSHIP AND POWER		9
Meaning– Importance – Leadership styles – Theories – Leaders Vs Managers – Sources of power – Power centers – Power and Politics.		
UNIT -V: DYNAMICS OF ORGANIZATIONAL BEHAVIOUR		9
Organizational culture and climate – Factors affecting organizational climate – Importance. Job satisfaction – Determinants – Measurements – Influence on behavior. Organizational change – Importance – Stability Vs Change – Proactive Vs Reaction change – the change process – Resistance to change – Managing change. Stress – Work Stressors – Prevention and Management of stress –Balancing work and Life. Organizational development – Characteristics – objectives.		
TOTAL: 45 PERIODS		
COURSE OUTCOMES:		
Students will have a better understanding of human behavior in organization. They will know the framework for managing individual and group performance.		
TEXTBOOKS:		
1. Stephen P. Robins, Organizational Behavior, PHI Learning/ Pearson Education, Edition 17, 2020 (Global edition)		

REFERENCES:

1. Fred Luthans, Organizational Behavior, McGraw Hill, 19th Edition,
2. Mc Shane & Von Glinov, Organisational Behaviour, 4th Edition, Tata Mc Graw Hill, 2020
3. Nelson, Quick, Khandelwal. ORGB – An innovative approach to learning and teaching. Cengage, 4th edition. 2021
4. Ivancevich, Konopasko & Maheson, Organisational Behaviour & Management, 7th edition, Tata McGraw Hill, 2020.
5. Udai Pareek, Understanding Organizational Behaviour, 6th Edition, Oxford Higher Education, 2021.
6. Jerald Greenberg, Behaviour in Organization, PHI Learning. 15th edition. 2020.

WEB REFERENCES

1. <https://www.gsb.stanford.edu/faculty-research/faculty/academic-areas/organizational-behavior>
2. <https://library.cbc.edu/orgbeh/websites>.

NPTEL/ SWAYAM/ MOOC REFERENCE:

1. NPTEL: Organizational Behaviour, Prof. M.P. Ganesh, IIT Hyderabad.



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PPMB1PC05	ACCOUNTING FOR MANAGERS	L T P C 3 0 2 4
COURSE OBJECTIVE		
Acquire a reasonable knowledge in accounts analysis and evaluate financial statements.		
UNIT I INTRODUCTION TO ACCOUNTS		12
Introduction to Financial, Cost and Management Accounting – Generally accepted accounting principles– Double Entry System – Preparation of Journal, Ledger and Trial Balance Preparation of Final Accounts: Trading, Profit and Loss Account and Balance Sheet,		
Practical exercise session using “Tally”. 1. Company creation, creating groups. 2. creation of ledgers & vouchers.		
UNIT II ANALYSIS OF FINANCIAL STATEMENTS		12
Financial ratio analysis, Interpretation of ratio for financial decisions- Dupont Ratios – Comparative statements - common size statements. Cash flow and Funds flow statement analysis.		
Practical exercise session using “Tally”, 1. Creating Financial statements & analysis		
UNIT – III COST ACCOUNTING		12
Cost Accounts – Classification of costs – Job cost sheet – Job order costing, Activity Based Costing, Target Costing. Marginal Costing and profit planning – Cost, Volume, Profit Analysis – Break Even Analysis.		
Practical exercise session using “Tally” 2. Preparing cost sheet preparing costing techniques and Application of GST		
UNIT – IV BUDGETING AND VARIANCE ANALYSIS		12
Budgetary Control – Sales, Production, Cash flow, fixed and flexible budget – Standard costing and Variance Analysis – (excluding overhead costing) – Accounting standards and accounting disclosure Practices in India.		
Practical exercise session using advance tools in MS excel: preparing revenue management and portfolio selection, Preparing final accounts with adjustments		
UNIT V ACCOUNTING IN COMPUTERIZED ACCOUNTING		12
Significance of computerized accounting system – Codification and grouping of accounts – Maintaining the hierarchy of ledgers – Prepackaged Accounting software		
Practical exercise session using “tally” 1. Creating journals credit and debit notes, Preparing trial balance and final accounts.		
		TOTAL: 60 PERIODS
COURSE OUTCOMES		
1. A thorough grounding of financial accounting concepts 2. Preparation of financial statement analysis 3. Understand the management and cost accounting techniques 4. Apply the management and cost accounting techniques for decision making 5. Assess the accountancy standards of practices in India		

TEXTBOOKS:

1. S N Maheshwari, Suneel Maheshwari & Sharad K Maheshwari Accounting for Management, Vikas, 4th Edition, 2018
2. R. Narayanaswamy, Financial Accounting : A Managerial Perspective, PHI Learning, New Delhi, 6th Edition 2017.

REFERENCES:

1. Uma Kapila, Indian Economy since Independence, Academic Foundation, Gaziabadh, 2021.
2. C.T. Horngren, Gary L. Sundem, Jeff O. Schatzberg, and Dave Burgstahler, Introduction to Management Accounting, Pearson, 20th Edition, 2021.
3. Mark Hirshey, Economics for Managers, 2007, Thomson Learning.

WEBSITE REFERENCE:

1. <https://www.accountingtools.com/articles/2017/5/15/basic-accounting-principles>
2. https://www.drnishikantjha.com/booksCollection/Accounting for Management_for MBA.pdf
3. <https://www.profitbooks.net/what-is-depreciation>

NPTEL/ SWAYAM/ MOOC REFERENCE:

1. MOOC: Finance for Managers :IESE
2. NPTEL: Introduction to Management Accounting Dr. Varadaraj Bapat, IIT Bombay .

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PPMB1PC06	LEGAL ASPECTS OF BUSINESS	L T P C 3 0 0 3
COURSE OBJECTIVE		
The objective of this course is to familiarize the students with various laws relating to business and Certain Corporate bodies that will help them to refine their understanding of how law affects the different aspects of business		
UNIT I: COMMERCIAL LAW		9
THE INDIAN CONTRACT ACT 1872 Definition of contract, essentials elements and types of a contract, Formation of a contract, breach of contract and its remedies, Quasi contracts - Contract of Agency: Creation and types of agents, Authority and liability of Agent and principal, Rights and duties of Principal and Agents, termination of agency. - Cases		
THE SALE OF GOODS ACT 1930 Nature of Sales contract, Documents of title, risk of loss, Guarantees and Warranties, performance of sales contracts, Rights of an unpaid seller. - Cases		
NEGOTIABLE INSTRUMENTS ACT 1881: Nature and requisites of negotiable instruments. Types of negotiable instruments, liability of parties, holder in due course, discharge of negotiable instruments. Cases		
UNIT II COMPANY LAW AND COMPETITION ACT		9
COMPANY ACT 2013 Major principles – Nature and types of companies, Formation, Memorandum and Articles of Association, Prospectus, Power, duties and liabilities of Directors, winding up of companies, Corporate Governance.- Cases Competition Act 2002 - Introduction, Definitions, Enquiry into Certain Agreements and Dominant Position of Enterprise and Combinations. - Cases		
UNIT III - INDUSTRIAL LAW		9
An overview of Factories Act - Payment of Wages Act - Payment of Bonus Act - Industrial Disputes Act.		
UNIT IV - CORPORATE TAX & GST		9
Corporate Tax Planning, GST: Introduction, Objectives, Classification, Levy and collection of GST, Input tax credit, Computation of GST Liability, Registration, Tax Invoice, Credit & Debit Notes, Electronic Way bill, Returns, Payment of taxes including Reverse Charge.		
UNIT - V: CONSUMER PROTECTION ACT AND INTRODUCTION OF CYBER LAWS		9
Consumer Protection Act – Consumer rights, Procedures for Consumer grievances redressal, Types of consumer Redressal Machineries and Forums- IT Act 2000 and 2002, Cyber Laws & Cyber crimes, IPR Intellectual Property Laws- Introduction, and Filing of Patent Applications, Rights from Patents, Infringement of Patents, Copyright, Infringement of Copyright, Civil Remedies for Infringement.– Trademarks, Right to Information Act, 2005.		
TOTAL: 45 PERIODS		

COURSE OUTCOMES:

1. Understand the fundamental legal principles in developing various contracts and commercial laws in the business world
2. Identify the common forms of business associations and elements of Corporate Governance
3. Develop insights regarding the laws related to industrial environment
4. Ability to understand the fundamentals of corporate tax and GST
5. Understand the role of consumer rights, IPR and cyber laws in the modern business environment

TEXTBOOKS:

1. N. D. Kapoor, Elements of Mercantile Law, Sultan Chand and Company, India, 40th Edition, 20223.

REFERENCES:

1. Akhileshwar Pathak, Legal Aspects of Business, Tata McGraw Hill, 10th Edition 2012.
2. Sinha P.K, Dr. Vinod Singhanian, Text Book of Indirect Tax, Taxman Publication, New Delhi
3. Taxmann, GST Manual with GST Law Guide & Digest of Landmark Rulings, 13th Edition, 2021
4. Dr. Vinod K. Singhanian, Direct Taxes Planning and Management, 24th, 2021.
5. Richard Stim, Intellectual Property- Copy Rights, Trade Marks, and Patents, Cengage Learning, 24th Edition 2021.

WEBSITE REFERENCE:

1. <https://www.ezylegal.in/blogs/what-are-the-legal-aspects-of-a-business>
2. <https://consumeraffairs.nic.in/acts-and-rules/consumer-protection>
3. <https://ipindia.gov.in/>

NPTEL/ SWAYAM/ MOOC REFERENCE:

1. NPTEL: Patent Search for Engineers and Lawyers, Prof. M.Padmavati, Shreya Matilal, IITKGP
2. NPTEL: IPR & Competition law, Prof.K.D.Raju, Prof. Niharika Sahoo Bhattacharya, IITKGP
3. SWAYAM : Online course - Fundamentals of Legal Aspects of Business, Dr. Mamta Brahmabhatt,
4. B .K. School of Professional Studies and Management, Gujarat University



PPMB1OE01	ENTREPRENEURSHIP DEVELOPMENT	L T P C 3 0 0 3
COURSE OBJECTIVE		
1. To equip and develop the learners entrepreneurial skills and qualities essential to undertake Business. 2. To impart the learner's entrepreneurial competencies needed for managing business efficiently and effectively.		
UNIT I ENTREPRENEURIAL COMPETENCE		9
Entrepreneurship concept –Entrepreneurship as a Career –Entrepreneurial Personality - Characteristics of Successful Entrepreneurs – Knowledge and Skills of an Entrepreneur.		
UNIT II ENTREPRENEURIAL ENVIRONMENT		9
Business Environment - Role of Family and Society - Entrepreneurship Development Training and Other Support Organizational Services - Central and State Government Industrial Policies and Regulations.		
UNIT III BUSINESS PLAN PREPARATION		9
Sources of Product for Business - Prefeasibility Study - Criteria for Selection of Product - Ownership Capital Budgeting- Project Profile Preparation - Matching Entrepreneur with the Project - Feasibility Report Preparation and Evaluation Criteria.		
UNIT IV LAUNCHING OF SMALL BUSINESS		9
Finance and Human Resource Mobilization - Operations Planning - Market and Channel Selection Growth Strategies - Product Launching – Incubation, Venture capital, Start-ups.		
UNIT V MANAGEMENT OF SMALL BUSINESS		9
Monitoring and Evaluation of Business - Business Sickness - Prevention and Rehabilitation of Business Units - Effective Management of small Business - Case Studies		
		TOTAL: 45 PERIODS
COURSE OUTCOMES:		
After the completion of the course, the students will be able to:		
1. The learners will gain entrepreneurial competence to run the business efficiently. 2. The learners are able to undertake businesses in the entrepreneurial environment 3. The learners are capable of preparing business plans and undertake feasible projects. 4. The learners are efficient in launching and develop their business ventures successfully 5. The learners shall monitor the business effectively towards growth and development.		
TEXTBOOKS :		
1. S.S.Khanka, Entrepreneurial Development, S.Chand and Company Limited, New Delhi, 2022		

REFERENCES:

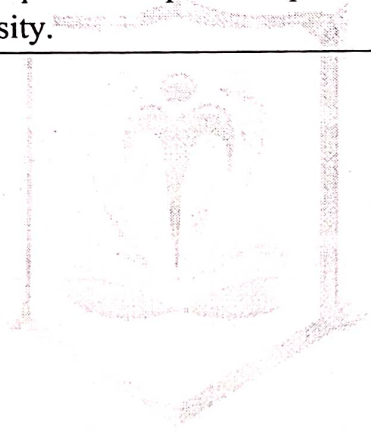
1. R.D.Hisrich, Entrepreneurship, Tata McGraw Hill, New Delhi, 2020.
2. Rajeev Roy ,Entrepreneurship, Oxford University Press, 2nd Edition, 2021.
3. Donald F Kuratko,T.V Rao.Entrepreneurship: A South Asian perspective. Cengage Learning, 2023.
4. Dr. Vasant Desai, "Small Scale Industries and Entrepreneurship", HPH,2022.
5. Arya Kumar. Entrepreneurship, Pearson,2021.
6. Prasanna Chandra, Projects – Planning, Analysis, Selection, Implementation and Reviews, Tata McGraw-Hill, 8th edition ,2020.

WEBSITE REFERENCE:

1. <https://www.ediindia.org/>
2. [https://www.emerald.com/insight/publication/issn/1462-6004\](https://www.emerald.com/insight/publication/issn/1462-6004)
3. <https://www.simplynotes.in/e-notes/mbabba/entrepreneurship-development/>
4. <https://www.ediindia.org/>
5. <https://www.emerald.com/insight/publication/issn/1462-6004>
6. <https://www.simplynotes.in/e-notes/mbabba/entrepreneurship-development/>

NPTEL/ SWAYAM/ MOOC REFERENCE:

1. NPTEL: Entrepreneurship Development, Dr. Nilam Panchal, B.K. School Of Business Management, Gujarat University.



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PPMB1OE02	BUSINESS ENVIRONMENT	L T P C 3 0 0 3
COURSE OBJECTIVE		
Use business analytics for decision making To apply the appropriate analytics and generate solutions Model and analyze the business situation using analytics		
UNIT I THE DYNAMICS AND CHALLENGES OF BUSINESS ENVIRONMENT		9
Defining a business and its role- Defining stakeholder.-Contradictions in business objectives and stakeholder objectives-The role of business in society and economy-The internal and external environments for a business:-An Introduction-the VUCA environment and the business challenges.-Dynamics of the SPECTACLES :Social, Political, Economic, Cultural, Technological, Aesthetic, Customer, Legal, Environmental and Sectorial environment , Analysis and the interconnectedness- The issue of ethics and sustainability in the business environment.		
UNIT II ANALYSING ECONOMIC PERFORMANCE		9
Measuring economic performance.-GDP, GNP, Inflation, Bank rates, Fiscal deficit, Balance of trade, employment and manufacturing data, circular flow, business cycles-Foreign exchange, analysis of import-export and trade balance, stock market indices. The Indian budget and its impact on the nation- The fiscal and monetary policies and the challenges. The role of RBI and banks.		
UNIT III EVALUATING COMPETITION AND INDUSTRY CHARACTERISTICS		9
Industry SWOT and drivers of industry and the impact of PESTLE on specific sectors- Porter's Five Forces: An overview- Thompson and Strickland 7S model- The value chain and economies of scale, integration and location.		
UNIT IV ANALYSING INDUSTRY DYNAMICS AND TRENDS		9
The Economic Geography of India- Sectorial analysis of the Indian economy. -Regulatory perspectives and challenges for the industry categories. The service - manufacturing conundrum - The role of public sector. An overview of the legal environment		
UNIT V UNDERSTANDING CONTEMPORARY ISSUES AND TRENDS IMPACTING BUSINESS ENVIRONMENT		9
Globalization and challenges-The digital economy-Development challenges in the Indian context-Emerging alternative business models- Industry 4.0. -Technology as a problem solver in the Indian context-Geopolitics and tipping points -Emerging business trends and challenges		
		TOTAL: 45 PERIODS

COURSE OUTCOMES:

1. Analyze the drivers and components of business environment and their inter-relationships and impact businesses.
2. Evaluate economic data, national and global events and understand the cause-effect and draw conclusions.
3. Prepare industry reports and formulate industry analysis using appropriate tools.
4. Understand the role of government, its agencies and their impact on the business environment.
5. Assess business activities vis-à-vis sustainability and ethics, best practice examples and consequences of non-compliances

TEXTBOOKS:

1. Business Environment, Alok Goyal ,Mridula Goyal, V.K Global Publications Pvt Ltd 2021

REFERENCES:

1. Dr.C.B. Gupta, Business Environment, Sultan Chand&Sons, 2022
2. B.E Frankiston, 2nd edition, hirelas Publishing-2021

WEBSITES:

1. <http://www.business-standard.com>
2. <http://onlinelibrary.wiley.com>
3. www.iso.org

NPTEL / SWAYAM / MOOC REFERENCES:

1. NPTEL : Business Environment , Chhavi Jain , IIS (deemed to be University), Jaipur

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PPMB1PL01	BUSINESS COMMUNICATION (LABORATORY)	LTPC 0 0 4 2
COURSE OBJECTIVE		
To help the students to acquire some of the necessary skills to handle day-to-day managerial responsibilities such as - making speeches, controlling one-to-one communication, enriching group activities and processes, giving effective presentations, writing letters, memos, minutes, reports and advertising and maintaining one's poise in private and in public		
UNIT I: INTRODUCTION AND TYPES OF BUSINESS COMMUNICATION		12
Introduction to Business Communication: Principles of effective communication, Target group profile, Barriers of Communication, Reading Skills, Listening, Feedback. - Principles of Non verbal Communication: Professional dressing and body language. Role Playing, Debates and Quiz. Types of managerial speeches - Presentations and Extempore - speech of introduction, speech of thanks, occasional speech, theme speech. - Group communication: Meetings, group discussions. – Other Aspects of Communication: Cross Cultural Dimensions of Business Communication Technology and Communication, Ethical & Legal Issues in Business Communication.		
UNIT II BUSINESS COMMUNICATION WRITING MODELS AND TOOLS		12
Business letters, Routine letters, Bad news and persuasion letters, sales letters, collection letters, Maintaining a Diary, Resume/CV, job application letters, proposals. Internal communication through - notices, circulars, memos, agenda and minutes, reports. Case Studies. Exercises on Corporate Writing, Executive Summary of Documents, Creative Writing, Poster Making, Framing Advertisements, Slogans, Captions, Preparing Press Release and Press Notes.		
UNIT III EFFECTIVE PRESENTATIONS		12
Principles of Effective Presentations, Principles governing the use of audio visual media.		
UNIT IV INTERVIEW SKILLS		12
Mastering the art of giving interviews in - selection or placement interviews, discipline interviews, appraisal interviews, exit interviews, web/video conferencing, tele-meeting.		
UNIT V REPORT WRITING		12
Objectives of report, types of report, Report Planning, Types of Reports, Developing an outline, Nature of Headings, Ordering of Points, Logical Sequencing, Graphs, Charts, Executive Summary, List of Illustration, Report Writing.		
TOTAL: 60 PERIODS		
COURSE OUTCOMES:		
<ol style="list-style-type: none"> 1. Develop good managerial communication skills 1. Ability to excel in different forms of written communication required in a business context 2. Develop good presentation skills 3. In-depth understanding of interview skills 4. Ability to prepare Business reports 		

REFERENCES:

1. Meenakshi Raman, Prakash Singh, Business Communication by, Oxford, 5th edition, 2020
2. Raymond V. Lesikar, Flatley, Basic Business Communication Skills for Empowering the Internet Generation, by, M.E., TMGH, New Delhi, 10th edition, 2020
3. Ludlow R, Panton, The Essence of Effective Communications, Prentice Hall of India Pvt. Ltd, 2001
4. C. S. Rayadu, Communication by, HPH, 2021
5. R. C. Sharma, Krishna Mohan, Business Correspondence & Report Writing, Tata McGraw Hill, 5th Edition, 2020
6. Malcolm Goodale, Developing Communication Skills, 5th Edition Professional Presentations, Cambridge University Press
7. Supplementary Reading Material Business Communication - Harvard Business Essentials Series, Press
8. Adair, J, Effective Communication. , Pan Macmillan Excellence in Business Communication by J.V. & Bovee, G.L, Mc Graw Hill, New York. Business Communications: From Process to Product Bowman, J.P. & Branchaw, P.P., Dryden Press, Chicago.
9. Rajendra Pal, J.S. Korlahalli, Essentials of Business Communication by, Sultan Chand & Sons, 13th Edition, 2021.

WEBSITE REFERENCE:

1. www.businesscommunicationskills.com
2. www.kcittraining.com
3. www.mindtools.com
4. www.businesscommunication.org

NPTEL/ SWAYAM/ MOOC REFERENCE:

1. NPTEL: Business Communication, Prof. Bringi Dev Professor & Chairperson, Centre for Management Communication, Indian Institute of Management Bangalore.

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PPMB1HM01	INDIAN ETHOS	L T P C 0 0 4 2
COURSE OBJECTIVE		
To enable the learners in understanding of the basic concepts of Indian Ethos and familiarize about ethical behavior and value systems at work.		
NOTE:		
1. The following is the list of topics suggested for preparation and presentation by students twice during the semester.		
2. This will be evaluated by the faculty member(s) handling the course and the final marks are consolidated at the end of the semester. No end semester examination is required for this course.		
1) Indian Ethos and Personality Development 2) Work ethos and ethics for Professional Managers 3) Indian Values, Value Systems and Wisdom for modern managers 4) Ethos in leadership development 5) Indian system of learning – Gurukul system of learning, Law of humility, Law of growth, Law of responsibility		
		TOTAL: 60 PERIODS
COURSE OUTCOMES:		
1. The learners are able to apply the basic concepts of Indian ethos and value systems at work. 2. The learners can handle issues of business ethics and offer solutions in ethical perspectives. 3. The learners are professionally efficient and skillful in value systems and culture. 4. The learners are capable in ethically manage business towards well-being of the society. 5. The learners can be socially effective in undertaking business responsibilities.		
WEBSITE REFERENCE:		
1. www.kcittraining.com 3. www.mindtools.com		

SEMESTER – II

PPMB2PC07	OPERATIONS MANAGEMENT	L T P 3 0 0
COURSE OBJECTIVE		
To provide a broad introduction to the field of operations management and explain the concepts, strategies, tools and techniques for managing the transformation process that can lead to Competitive advantage.		
UNIT I INTRODUCTION TO OPERATIONS MANAGEMENT		
Operations Management – Nature, Importance, historical development, transformation process, differences between services and goods, a system perspective, functions, challenges, current priorities, recent trends. Operations Strategy – Strategic fit, framework. Productivity; World-class manufacturing practices		
UNIT II OPERATIONS AND THE VALUE CHAIN		
Capacity Planning – Long range, Types, Developing capacity alternatives, tools for capacity planning. Facility Location – Theories, Steps in Selection, Location Models. Sourcing and procurement - Strategic Sourcing, make or buy decision, procurement process, managing vendors.		
UNIT III DESIGNING OPERATIONS		
Product Design - Criteria, Approaches. Product development process - stage-gate approach - tools for Efficient development. Process - design, strategy, types, analysis. Facility Layout – Principles, Types, Planning tools and techniques.		
UNIT IV PLANNING AND CONTROL OF OPERATIONS		
Demand Forecasting – Need, Types, Objectives and Steps - Overview of Qualitative and Quantitative Methods. Operations planning - Resource planning - Inventory Planning and Control. Operations Scheduling - Theory of constraints - bottlenecks, capacity constrained resources, synchronous manufacturing		
UNIT V QUALITY MANAGEMENT		
Definitions of quality, The Quality revolution, quality gurus; TQM philosophies; Quality management tools, certification and awards. Lean Management - philosophy, elements of JIT manufacturing continuous improvement. Six sigma.		
		TOTAL: 45 PERIODS
COURSE OUTCOMES:		
<ol style="list-style-type: none"> 1. To facilitate objective solutions in business decision making. 2. To understand and solve business problems. 3. To apply statistical techniques to data sets, and correctly interpret the results. 4. To develop skill-set that is in demand in both the research and business environments. 5. To enable the students to apply the statistical techniques in a work setting. 		



TEXTBOOKS:

1. Norman Gaither and Gregory Frazier, Operations Management, South Western Cengage Learning, 11th edition, 2021.

REFERENCES:

1. Richard B. Chase, Ravi Shankar, F. Robert Jacobs, Operations and Supply Chain Management, McGraw Hill Education (India) Pvt. Ltd, 17th Edition, 2021.
2. Mahadevan B, Operations management: Theory and practice. Pearson Education India; 2019.
3. Cecil C. Bozarth, Robert B. Handfield, Introduction to Operations and Supply Chain Management, Pearson, 4th Edition, 2016.

NPTEL/ SWAYAM/ MOOC REFERENCE:

1. NPTEL: Operations Management, Prof. Inderdeep Singh, IIT Roorkee



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PPMB2PC08	APPLIED OPERATIONS RESEARCH	LTP 302
COURSE OBJECTIVE		
To apply quantitative techniques in modeling and solving business related problems.		
UNIT I INTRODUCTION TO LINEAR PROGRAMMING (LP)		
Relevance of quantitative techniques in management decision making. Linear Programming-formulation solution by graphical and simplex methods (Primal, dual method, Two Phase),.		
UNIT II TRANSPORTATION MODELS		
Transportation Models (Minimizing and Maximizing Problems) – Balanced and unbalanced Problem. Initial Basic feasible solution by N-W Corner Rule, Least cost and Vogel's approximation methods. Check for optimality. Solution by MODI / Stepping Stone method. Case of Degeneracy. Transshipment Models.		
UNIT-3 ASSIGNMENT MODELS		
Assignment Models (Minimising and Maximising Problems) – Balanced and Unbalanced Problem. Solution by Hungarian and Branch and Bound Algorithms. Travelling Salesman problem. Crew Assignment Models.		
UNIT IV INVENTORY AND REPLACEMENT MODELS		
Inventory Models – EOQ and EBQ Models (With and without shortages), Quantity Discount Models. Replacement Models-Individual replacement Models (With and without time value of money) – Group Replacement Models.		
UNIT V QUEUING THEORY AND GAME THEORY		
Queuing Theory - single and multi-channel models – infinite number of customers and infinite call source. Game Theory-Two-person Zero sum games-Saddle point, Dominance Rule, Convex Linear Combination(Averages), methods of matrices and graphical method.		
Practical exercise session using SPSS, EXCEL & TORA <ul style="list-style-type: none"> • Transportation Models • Linear Programming-formulation, solution by graphical and simplex methods (Primal, dual method, Two Phase),. • Assignment Models (Minimising and Maximising Problems) • Inventory Models – EOQ and EBQ Models (With and without shortages), • Replacement Models • Queuing Theory • Game Theory 		
		TOTAL: 60 PERCENT

COURSE OUTCOMES:

To understand the applications of

1. Linear programming in product mix decisions
2. Transportation and assignment in logistics and job allocation scenarios
3. Game theory and heuristics of decision making in real time decisions
4. Inventory management and replacement models in manufacturing context
5. Queuing and simulation in real time scenario optimization

TEXTBOOKS:

1. Paneer selvam R., Operations Research, Prentice Hall of India, seventh Print, 2020.

REFERENCES:

1. N. D Vohra, Quantitative Techniques in Management, Tata Mcgraw Hill, 2017.
2. G. Srinivasan, Operations Research – Principles and Applications, 4th edition, PHI, 2018.
3. Hamdy A Taha, Introduction to Operations Research, Prentice Hall India, Tenth Edition, Third Indian Reprint 2019.
4. Bernard W. Taylor III, Introduction to Management Science, 9th Edition, Pearson Ed.
5. N.M. Singhvi, Ruzbeh J. Bodhanwala, Management Accounting – Text and cases, 3rd edition PHI Learning, 2018.

WEBSITES:

1. <http://www.ijorlu.liu.ac.ir/>
2. <https://www.rairo-ro.org/>

NPTEL/ SWAYAM/ MOOC REFERENCE:

1. NPTEL: Introduction to Operations Research, Prof. G. Srinivasan, Department of Management Studies, IIT Madras

PPMB2PC09	FINANCIAL MANAGEMENT	LPT 3 1
COURSE OBJECTIVE		
Facilitate student understand the operational nuances of a Finance Manager. Comprehend the technique of making decisions related to finance functions		
UNIT I FOUNDATIONS OF FINANCE		
Introduction to finance- Financial Management – Nature, scope and functions of Finance, organization financial functions, objectives of Financial management, Major financial decisions – Time value of money features and valuation of shares and bonds – Concept of risk and return – single asset and of a portfolio.		
UNIT II INVESTMENT DECISIONS		
Capital Budgeting: Principles and techniques - Nature of capital budgeting-Identifying relevant cash flow Evaluation Techniques: Payback, Accounting rate of return, Net Present Value, Internal Rate of Return Profitability Index - Comparison of DCF techniques - Concept and measurement of cost of capital -Specific cost and overall cost of capital.		
UNIT III FINANCING AND DIVIDEND DECISION		
Leverages - Operating and Financial leverage – measurement of leverages – degree of Operating Financial leverage – Combined leverage, EBIT – EPS Analysis- Indifference point. Capital structure Theories – Net Income Approach, Net Operating Income Approach, MM Approach – Determinants of Capital structure. Dividend decision- Issues in dividend decisions, Importance, Relevance & Irrelevant theories Walter's – Model, Gordon's model and MM model. – Factors determining dividend policy – Types of dividend policies – forms of dividend.		
UNIT IV WORKING CAPITAL MANAGEMENT		
Principles of working capital: Concepts, Needs, Determinants, issues and estimation of working capital Receivables Management - Inventory management – Cash management - Working capital finance : Commercial paper, Company deposit, Trade credit, Bank finance.		
UNIT V LONG TERM SOURCES OF FINANCE		
Indian capital market- New issues market- Secondary market - Long term finance: Shares, debentures and term loans, lease, hire purchase, venture capital financing, Private Equity.		
COURSE OUTCOMES:		TOTAL :60 PERIODS
<ol style="list-style-type: none"> 1. Identify the concepts of financial decision of an organisation 2. Recognize the time value of money 3. Learn the capital budgeting and cost of capital techniques 4. Understand how to decide the decision of capital structure and distribution of dividend 5. Assess the short-term and long-term sources of finance 		
TEXTBOOKS:		
1.I.M. Pandey Financial Management, Vikas Publishing House Pvt. Ltd., 11th edition, 2018		

REFERENCES:

- 1.M.Y. Khan and P.K.Jain Financial management, Text, Problems and cases Tata McGraw Hill, 8th edition, 2019.
2. Aswath Damodaran, Corporate Finance Theory and practice, John Wiley & Sons, 2020.
3. James C. Vanhorne –Fundamentals of Financial Management– PHI Learning, 13th Edition, 2019.
4. Fundamentals of financial Management by Dr. S. N. Maheshweri (Sutan chand Publishing)
5. Prasanna Chandra, Financial Management, 9th edition, Tata McGraw Hill, 2017.
6. Srivatsava, Mishra, Financial Management, Oxford University Press, 2018.

WEBSITE REFERENCES:

1. <https://talkingbiznews.com/they-talk-biz-news/investopedia-editor-silver-my-goal-is-to-answer-questions/>
2. <https://ir.iac.com/static-files/>

NPTEL/ SWAYAM/ MOOC REFERENCE:

1. Financial Management for Managers PROF. ANIL K. SHARMA, Department of Management IIT, Roorkee
2. Fundamentals of Financial Management By Dr. Rupali Sheth Savitribai Phule Pune University, Pune



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PPMB2PC010	BUSINESS ANALYTICS		L T 3 0
COURSE OBJECTIVE			
Use business analytics for decision making To apply the appropriate analytics and to generate solutions Model and analyses the business situation using analytics.			
UNIT I INTRODUCTION TO BUSINESS ANALYTICS (BA)			
Business Analytics -Terminologies, Process, Importance, Relationship with Organizational Decision Making, BA for Competitive Advantage.			
UNIT II MANAGING RESOURCES FOR BUSINESS ANALYTICS			
Managing BA Personnel, Data and Technology. Organizational Structures aligning BA. Managing Information policy, data quality and change in BA.			
UNIT III DESCRIPTIVE ANALYTICS			
Introduction to Descriptive analytics – Visualizing and Exploring Data- Descriptive Statistics-Sampling and Estimation-Probability Distribution for Descriptive Analytics-Analysis of Descriptive analytics.			
UNIT IV PREDICTIVE ANALYTICS			
Introduction to Predictive analytics-Logic and Data Driven Models- Predictive Analysis Modeling procedure-Data Mining for Predictive analytics. Analysis of Predictive analytics			
UNIT V PRESCRIPTIVE ANALYTICS & DATA ANALYTICS			
Introduction to Prescriptive analytics- Prescriptive Modeling- Non Linear Optimization– Demonstrating Business Performance Improvement. Business Intelligence Tools: Tableau: measure and charts. Power BI: data connection types and Data Analytics. Practicals Using: 1. Charts using Tableau and its applications 2. Charts using Power BI and its applications OR 3. Related Data Analytical tools			
COURSE OUTCOMES:			TOTAL: 60 PER
1.Ability to understand the role of Business Analytics in decision making 2.Ability to identify the appropriate tool for the analytics scenario 3.Ability to apply the descriptive analytics tools and generate solutions 4. Understanding of Predictive Analytics and applications 5. Knowledge of Prescriptive Analytics and demonstrating business process improvement			

TEXTBOOKS:

Marc J. Schniederjans, Dara G. Schniederjans and Christopher M. Starkey, " Business Analytics Principles, Concepts and Applications - What, Why, and How", Pearson Ed, 2020

REFERENCE BOOKS:

1. Christian Albright S and Wayne L. Winston, "Business Analytics - Data Analysis and Decision Making" , Fifth edition, Cengage Learning, 2021
2. James R. Evans, "Business Analytics - Methods, Models and Decisions", Pearson Ed, 2021

WEBSITES:

1. <https://www.ibm.com/community/datascience/>
2. <https://mitsloan.mit.edu/LearningEdge>.

NPTEL/ SWAYAM/ MOOC REFERENCE:

1. NPTEL: Business Analytics For Management Decision, IIT Kharagpur, Dr. Rudra P. Pradhan



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PPMB2PC11	HUMAN RESOURCE MANAGEMENT	L.T 30
COURSE OBJECTIVE		
To provide knowledge about management issues related to staffing, training, performance, compensation, human factors consideration and compliance with human resource requirements		
UNIT I - PERSPECTIVES IN HUMAN RESOURCE MANAGEMENT		
Evolution of human resource management – The importance of the human capital – Role of human resource manager – Challenges for human resource managers - trends in Human resource policies – Computer applications in human resource management – Human resource accounting and audit.		
UNIT II – HUMAN RESOURCE PLANNING AND RECRUITMENT		
Importance of Human Resource Planning – Forecasting human resource requirement- matching supply and demand - Internal and External sources- Organizational Attraction- Recruitment, Selection, Induction Socialization- Theories, Methods and Process.		
UNIT III -TRAINING AND DEVELOPMENT		
Types of training methods –purpose- benefits- resistance. Executive development programme – Communication practices - Benefits – Self development – Knowledge management		
UNIT IV - EMPLOYEE ENGAGEMENT		
Compensation plan – Reward – Motivation – Application of theories of motivation – Career management – Mentoring - Development of mentor – Protégé relationships- Job Satisfaction- Employee Engagement – Organizational Citizenship Behavior: Theories, Models		
UNIT V- PERFORMANCE EVALUATION AND CONTROL		
Method of performance evaluation – Feedback – Industry practices. Promotion, Demotion, Transfer, Separation – Implication of job change. The control process – Importance – Methods – Requirements for effective control systems grievances – Causes – Implications-Redressal methods.		
COURSE OUTCOMES:		TOTAL: 45 PER
6. Students would have gained knowledge on the various aspects of HRM 7. Students will gain knowledge needed for success as a human resources professional. 8. Students will develop the skills needed for a successful HR manager 9. Students would be prepared to implement the concepts learned in the workplace. 10. Students would be aware of the emerging concepts in the field of HRM		
TEXTBOOKS:		
1. Gary Dessler and Biju Varkkey, Human Resource Management, 16 th Edition, Pearson Education Limited, 2020		
REFERENCE BOOKS:		
1. David A. Decenzo, Stephen .P. Robbins, and Susan L. Verhulst, Human Resource Management, Wiley International Student Edition, 11th Edition, 2014. 2. Luis R. Gomez-Mejia, David B. Balkin, Robert L Cardy , Managing Human Resource. PHI Learning, 2020 3. Bernadin, Human Resource Management ,Tata Mc Graw Hill ,10 th edition 2019. 4. Wayne Cascio, Managing Human Resource, McGraw Hill, 2019.		

WEBSITES:

1. <https://www.abfilin>
2. <https://www.uacembassy.n>
3. [https://www.theforage.com /](https://www.theforage.com/)

NPTEL/ SWAYAM/ MOOC REFERENCE:

1. NPTEL : Human resource Development, Prof. KBL Srivastava, IIT Kharagpur



PPMB2PC12	MARKETING MANAGEMENT	L T 3 0
COURSE OBJECTIVE		
<p>The objective of this course is to understand the changing business environment and the fundamental premise underlying market driven strategies.</p> <p>To identify the indicators of management thoughts and practices.</p>		
UNIT I: INTRODUCTION		
<p>Defining Marketing – Core concepts in Marketing – Evolution of Marketing – Marketing Planning Process–Scanning Business Environment: Internal and External–Value chain–Core Competencies PESTEL – SWOT Analysis – Marketing interface with other functional areas – Production, Finance Human Relations Management, Information System – Marketing in global environment – International Marketing–Rural Marketing–Prospects and Challenges</p>		
UNIT II: MARKETING STRATEGY		
<p>Marketing strategy formulations – Key Drivers of Marketing Strategies - Strategies for Industrial Marketing – Consumer Marketing – Services marketing – Competition Analysis – Analysis of consumer and industrial markets – Influence of Economic and Behavioral Factors – Strategic Marketing components.</p>		
UNIT III: MARKETING MIX DECISIONS		
<p>Product planning and development–Product life cycle–New product Development and Management –Defining Market Segmentation–Targeting and Positioning–Brand Positioning and Differentiation Channel Management – Managing Integrated Marketing Channels – Managing Retailing, Wholesaling Logistics–AdvertisingandSalesPromotions–PricingObjectives,PoliciesandMethods</p>		
UNIT IV: BUYER BEHAVIOUR		
<p>Understanding Industrial and Consumer Buyer Behavior – Influencing factors – Buyer Behavior Models – Online buyer behaviour – Building and measuring customer satisfaction – Customer relationship management – Customer acquisition, Retaining, Defection – Creating Long Term Loyalty Relationship</p>		
UNIT V: MARKETING RESEARCH &TRENDS IN MARKETING		
<p>Marketing Information System–MarketingResearchProcess–Conceptsandapplications:Product Advertising – Promotion – Consumer Behaviour – Retail research – Customer driven organizations Cause related marketing – Ethics in marketing – Online marketing trends - social media and digital marketing</p>		
COURSE OUTCOMES:		TOTAL: 45 PERIODS
<ol style="list-style-type: none"> 1. Applied knowledge of contemporary marketing theories to the demands of business and management practice. 2. Enhanced knowledge of marketing strategies for consumer and industrial marketing 3. Deep understanding of choice of marketing mix elements and managing integrated marketing channels 4. Ability to analyze the nature of consumer buying behaviour 5. Understanding of the marketing research and new trends in the arena of marketing 		

TEXTBOOKS:

1. Philip T. Kotler and Kevin Lane Keller, Marketing Management, Prentice Hall India, 15th Edition, 2020.

REFERENCE BOOKS:

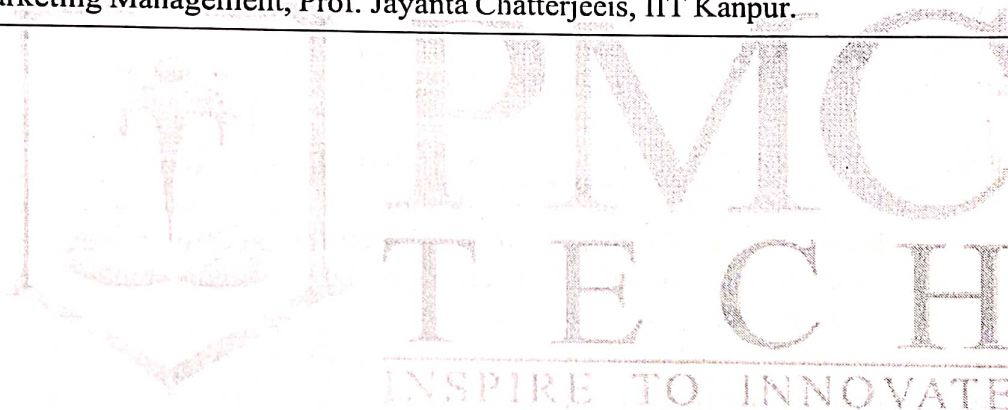
1. K S Chandrasekar, "Marketing management-Text and Cases" Tata Mc Graw Hill Education, 2019 Lamb, Hair, Sharma, McDaniel-Marketing-An Innovative approach to learning and teaching-A south Asian perspective, Cengage Learning, 2017.
2. Paul Baines, Chris Fill, Kelly Page, Marketing, Asian edition, Oxford University Press, 5th edition, 2019.
3. A. NAG, Marketing successfully- A Professional Perspective, Macmillan 2018.
4. Michael R. Czinkota, Masaaki Kotabe, Marketing Management, Vikas Thomson Learning, 2nd edition 2018.
5. Philip Kotler, Gay Armstrong, Prafulla Agnihotri, Principles of marketing, 7th edition, 2019.

WEBSITES:

1. www.wrike.com
2. www.marketingmanagementanalytics.com

NPTEL/ SWAYAM/ MOOC REFERENCE:

1. NPTEL: Marketing Management, Prof. Jayanta Chatterjee, IIT Kanpur.



PPMB2PC13	BUSINESS RESEARCH METHODS	LTP 301
COURSE OBJECTIVE		
To make the students of tourism understand the principles of scientific methodology in business enquiry, develop analytical skills of business research, to prepare scientific business reports and application of research tools.		
UNIT I INTRODUCTION		
Business Research – Definition and Significance – the research process – Types of Research – Exploratory and causal Research – Theoretical and empirical Research – Cross –Sectional and time series Research – Research questions / Problems – Research objectives – Research hypotheses – characteristics – Research in an evolutionary perspective – the role of theory in research.		
UNIT II RESEARCH DESIGN AND MEASUREMENT		
Research design – Definition – types of research design – exploratory and causal research design – Descriptive and experimental design – different types of experimental design – Validity of findings – internal and external validity – Variables in Research – Measurement and scaling – Different scales – Construction of instrument – Validity and Reliability of instrument.		
UNIT III DATA COLLECTION		
Types of data – Primary Vs Secondary data – Methods of primary data collection – Survey – Observation – Experiments – Construction of questionnaire and instrument – Types of Validity – Sampling plan – Sample size – determinants optimal sample size – sampling techniques – Sampling methods.		
UNIT IV DATA PREPARATION, REPORT DESIGN AND WRITING		
Data Preparation – editing – Coding –Data entry – Validity of data – Qualitative Vs Quantitative analyses – Research report –Types – Contents of report – need for executive summary – chapterization – contents of chapter – report writing – the role of audience – readability – comprehension – tone – final proof – report format – title of the report.		
UNIT V APPLICATION OF STATISTICAL SOFTWARE FOR DATA ANALYSIS		
Applications of Bivariate and Multivariate statistical techniques, Factor analysis, Discriminant analysis, Cluster analysis, Multiple regression and Correlation, Multidimensional scaling – Conjoint Analysis – I – Analysis & Sensitivity Analysis.- Spreadsheet Software and Data Analysis Tools.		
Practicals Using: Spread sheet software & SPSS Descriptive Statistics Parametric Tests Non-parametric Tests Correlation & Regression Bivariate and Multivariate statistical techniques, Factor analysis, Discriminant analysis, Cluster analysis, Multiple regression and Correlation, Multidimensional scaling Conjoint Analysis.		
TOTAL: 45 PERIODS		

COURSE OUTCOMES:

1. Students will understand and appreciate scientific inquiry
2. Students would know to write research proposals
3. The students would be able to undertake a systematic outlook towards business situations for the purpose of objective decision making, and the method of conducting scientific inquiry to solve organizational problems
4. Students could prepare data & research reports
5. Students would be able to analyze data and find solutions to the problems. By application of statistical software.

TEXTBOOKS:

1. Donald R. Cooper, Pamela S. Schindler and J K Sharma, Business Research methods, 21st Edition, Tata Mc Graw Hill, New Delhi, 2022.

REFERENCES:

1. Alan Bryman and Emma Bell, Business Research methods, 13th Edition, Oxford University Press, New Delhi, 2021.
2. Uma Sekaran and Roger Bougie, Research methods for Business, 15th Edition, Wiley India, New Delhi, 2022.
3. William G Zikmund, Barry J Babin, Jon C.Carr, AtanuAdhikari, Mitch Griffin, Business Research methods, A South Asian Perspective, 18th Edition, Cengage Learning, New Delhi, 2022.
5. Panneerselvam. R, Research Methodology, 10nd Edition, PHI Learning, 2022.

WEBSITE REFERENCE:

1. <https://research-methodology.net/>
2. <https://sagepub.libguides.com/c.php?g=453083&p=3094886>
3. <https://ipindia.gov.in/>

NPTEL/ SWAYAM/ MOOC REFERENCE:

1. NPTEL: Business Research Methods, Dr G. Parameshwari , Department of Commerce, PES College of Science Arts and Commerce, Mandya, Karnataka



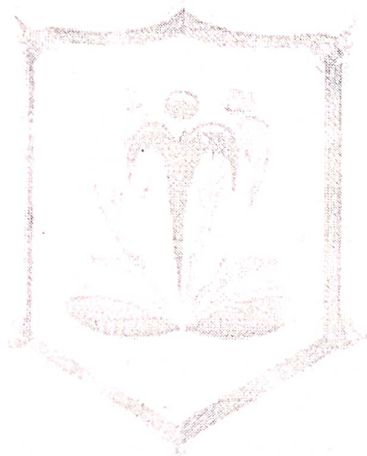
PPMB2OE01	EVENT MANAGEMENT	LT 30
COURSE OBJECTIVE		
This course is designed to provide an introduction to the principles of event management. The course aims to impart knowledge on the various events and how these events can be organized successfully.		
UNIT I EVENT CONTEXT		
History & Evolution – Types of events – MICE – Types of Meeting, Trade Shows, Conventions Exhibitions- Structure of event industry – Event Management as a profession – Perspectives on event Government, Corporate & Community – Code of Ethics.		
UNIT II EVENT PLANNING & LEGAL ISSUES		
Conceptualizing the event – Host, sponsor, Media, Guest, Participants, Spectators – Crew – Design concept – Theme and content development – Visualization – Event objectives – Initial planning – Budget – Event design and budget checklist – Preparation of functional sheets – Timing – Contracts and Agreements – Insurance, Regulation, Licence and Permits – Negotiation.		
UNIT III EVENT MARKETING		
Role of Strategic Marketing Planning -Pricing – Marketing Communication Methods & budget – Elements of marketing communication – Managing Marketing Communication – Role of Internet – Sponsorship Event sponsorship – Strategy – Managing Sponsorships – Measuring & Evaluating sponsorship.		
UNIT IV EVENT OPERATION		
Site Selection – Types of location – Venue Requirements – Room, Stage, Audi-Visual, Lighting, Performance Decors, Caterer, Photography & Videography –Protocols – Guest list – Guest demographics– Child event – Invitation – Media – Freelance Event Operation – Road show - Food & Beverage – Entertainment Event Logistics – Supply of facilities – Onsite logistics – Control of event logistics – Evaluation & Logistics		
UNIT V SAFETY & EVENT EVALUATION		
Risk assessment – Safety officer, Medical Manager – Venue, Structural safety – Food safety – Occupational safety – Fire Prevention – Sanitary facilities – Vehicle traffic – Waste Management. Event Impact – Evaluation Process – Service Quality – Customer Satisfaction.		
COURSE OUTCOMES:		TOTAL: 45 PERCENT
<ol style="list-style-type: none"> 1. Learning about structure and code of ethics of events 2. Exploring and getting to know about event planning and regulations 3. Understand about event marketing, planning and strategies 4. Enhance professional skills in event management 5. Analyze the safety measure of event management 		
TEXTBOOKS:		
1, Lynn Van Der Wagen, Event Management for Tourism, Cultural Business & Sporting Events, 9 th Edition, Pearson Publications, 2020		

REFERNCES:

1. Judy Allen, Event Planning 2nd Edition, Wiley & Sons, Canada, 2019.
2. G.A.J. Bowdin, Events Management ,Elseiver Butterworth
3. John Beech, Sebastian Kaiser & Robert Kaspar, the Business of Events Management, Pearson Publication, 2021.
4. Judy, Event Planning Ethics and Etiquette: A Principled Approach to the Business of Special Event Management, 2022.

NPTEL/ SWAYAM/ MOOC REFERENCE:

- 1.SWAYAM: Basics of Event Management , Prof. Heena K. Bijli, Indira Gandhi National Open University



PMCTECH
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PPMB2OE02	INDUSTRIAL PSYCHOLOGY	LTP 3 0
COURSE OBJECTIVE		
The aim of undergoing this course is to develop an awareness of the major perspectives underlying the of Industrial Psychology and understanding for the potential Industrial Psychology has for society organizations now and in the future.		
UNIT I : INTRODUCTION		
Introduction: The role of the psychologist in industry, the field of occupational Psychology: Study of behaviour in work situation and applications of Psychological principles to problems of selection, Placement, Counselling and training		
UNIT II : DESIGN OF WORK ENVIRONMENT		
Design of Work Environments: Human engineering and physical environment techniques of job analysis, Social environment: Group dynamics in Industry Personal psychology, Selection, training placement, promotion, counseling, job motivations, job satisfaction. Special study of problem of fatigue, boredom and accidents		
UNIT III : UNDERSTANDING CONSUMER BEHAVIOR		
Understanding Consumer Behavior: Consumer behaviour, study of consumer preference, effects of advertising, Industrial morale: The nature and scope of engineering psychology, its application to industry		
UNIT IV: WORK METHODS		
Efficiency at work, the concept of efficiency, the work curve, its characteristics, the work methods hours of work, nature of work, fatigue and boredom, rest pauses. The personal factors; age abilities interest, job satisfaction, the working environment, noise, illumination, atmospheric conditions increasing efficiency at work; improving the work methods, Time and motion study, its contribution and failure resistance to time and motion studies, need for allowances in time and motion study.		
UNIT V: WORK AND EQUIPMENT DESIGN		
Criteria in evaluation of job-related factor, job design, human factors, Engineering information, input processes, mediation processes, action processes, methods design, work space and its arrangement human factors in job design. Accident and Safety: The human and economic costs of accidents, accident record and statistics, the causes of accidents situational and individual factors related to accident reduction.		
		TOTAL: 45 PER
COURSE OUTCOMES:		
<ol style="list-style-type: none"> 1. Understanding of key concepts, theoretical perspectives, and trends in industrial psychology. 2. Evaluate the problems thorough and systematic competency model. 3. Analyse the problems present in environment and design a job analysis method 4. Create a better work environment for better performance 5. Design a performance appraisal process and form for the human behavior 		
TEXTBOOKS:		
1. Tiffin, J and McCormic E.J., Industrial Psychology, Prentice Hall, 10 th Edition., 2020.		
REFERENCES:		
<ol style="list-style-type: none"> 1. McCormic E.J., Human Factors Engineering and Design, McGraw Hill, 9th Edition.,2019. 2. Mair, N.R.F., Principles of Human relations 3. Gilmer, Industrial Psychology 		

4. Ghiselli & Brown, Personnel and Industrial Psychology.
5. Myer, Industrial Psychology.
6. Dunnette, M.D., Handbook of Industrial and Organizational Psychology.

WEBSITE REFERENCE:

1. <https://www.ezylegal.in/blogs/what-are-the-legal-aspects-of-a-business>
2. <https://consumeraffairs.nic.in/acts-and-rules/consumer-protection>
3. <https://ipindia.gov.in/>

NPTEL/ SWAYAM/ MOOC REFERENCE:

1. NPTEL: Patent Search for Engineers and Lawyers, Prof. M.Padmavati, Shreya Matilal, IITKGP
2. NPTEL: IPR & Competition law, Prof.K.D.Raju, Prof. Niharika Sahoo Bhattacharya, IITKGP
3. SWAYAM : Online course - Fundamentals of Legal Aspects of Business, Dr. Mamta Brahmabhatt,
3. B .K. School of Professional Studies and Management, Gujarat University



PMCTECH
INSPIRE TO INNOVATE

PPMB2PL02	CREATIVITY AND INNOVATION LABORATORY	LT 00
COURSE OBJECTIVE		
To understand the nuances involved in Creativity & Innovation. To get hands on experience in applying creativity in problem solving.		
UNIT I INTRODUCTION		
Need for Creative and innovative thinking for quality – Essential theory about directed creativity Components of Creativity, Methodologies and approaches, individual and group creativity, Organizational role in creativity, types of innovation, barriers to innovation, innovation process, establishing criteria Assessment of creativity & innovation.		
UNIT II CREATIVITY		
Nature of Creativity: Person, Process, Product and Environment, Methods and tools for Directed Creativity Basic Principles – Tools that prepare the mind for creative thought – stimulation – Development and Application - Processes in creativity ICEDIP – Inspiration, Clarification, Distillation, Perspiration, Evaluation Incubation – Creativity and Motivation The Bridge between man creativity and the rewards of innovation – Applying Directed Creativity.		
UNIT III ESSENCE OF TRIZ METHODOLOGY (theory to resolve inventive problems)		
Concept of ideality by value engineering- ideality by TRIZ- concept of contradiction- physical contradiction- types of physical contradiction-39 parameters of contradiction matrix- approach to solve contradiction- case studies for the identification of inventive principles through contradiction matrix.		
UNIT IV 40 INVENTIVE PRINCIPLES		
40 inventive principles for products/processes/ systems-4		
UNIT V CREATIVITY IN PROBLEM SOLVING		
Generating and acquiring new ideas, product design, service design – case studies and hands-on Exercises stimulation tools and approaches, six thinking hats, lateral thinking – Individual activity, group Activity contextual influences. Assessing Your Personal Creativity and Ability to Innovate, Enhancing Your Creativity and Innovative Abilities		
TOTAL: 45 PERCENT		
COURSE OUTCOMES:		
<ol style="list-style-type: none"> 1. Provides insights about approaches to creativity and innovation 2. Understanding of heuristic models and its applications 3. Enhances the knowledge of nature of creativity 4. Ability to apply creativity in problem solving 5. Knowledge about radical and disruptive models of innovation 		
<p>Note: Students will undergo the entire programme similar to a Seminar. It is an activity-based programme. Students will undergo the programme with both theoretical and practical content. Each student is Required to come out with innovative products or services. This will be evaluated by the faculty members. Handling the course and the consolidated marks can be taken as the final mark. No end semester Examination is required for this course</p>		

REFERENCES:

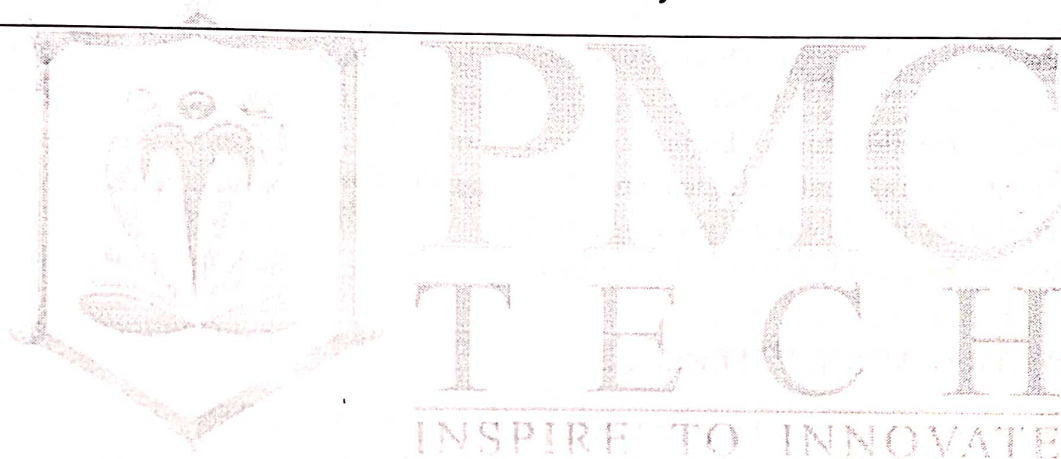
1. Rousing Creativity: Think New Now Floyd Hurt, ISBN 1560525479, Crisp Publications Inc.2020
2. Geoffrey Petty," How to be better at Creativity", The Industrial Society 2021
3. Clayton M. Christensen Michael E. Raynor," The Innovator's Solution", Harvard Business School Press Boston, USA, 2022
4. Semyon D. Savransky," Engineering of Creativity – TRIZ", CRC Press New York USA,"1st edition,2022
5. CSG Krishnamacharyalu, Lalitha R Innovation management, Himalaya Publishing House 2022

WEBSITE REFERENCE:

1. https://www.researchgate.net/publication/343714490_Creativity_and_Innovation_in_Entrepreneurship
2. <https://www.cambridgeinternational.org/Images/426483-chapter-4-innovation-and-creativity.pdf>
3. https://www.worldscientific.com/doi/pdf/10.1142/9789813141889_0001

NPTEL/ SWAYAM/ MOOC REFERENCE:

1. NPTEL: Innovation, Business Models and Entrepreneurship, Prof. Rajat Agrawal, Prof. Vinay Sharma, IIT Roorkee
2. NPTEL:Module 7 Creative Problem Solving , Innovation and Meaningful R & D, Dr. P.K.Tulsi, NITTT
3. SWAYAM: Innovation by Design,Prof. B.K. Chakravarthy



PPMB2HM02	BUSINESS ETHICS	L1 2
COURSE OBJECTIVE:		
To enable the learners to have exposure on business ethics and ethical business perspectives.		
NOTE :		
<ul style="list-style-type: none"> The following is the list of topics suggested for preparation and presentation by students twice the semester. This will be evaluated by the faculty member(s) handling the course and the final marks are consolidated at the end of the semester. No end semester examination is required for this course. <ol style="list-style-type: none"> Individual Culture and Ethics Ethical codes of conduct and value Systems Loyalty and Ethical Behaviour, Ethical decision making Ethical business issues and solutions Corporate Social Responsibilities of Business 		
		TOTAL: 60 PE
COURSE OUTCOMES:		
<ol style="list-style-type: none"> The learners can handle issues of business ethics and offer solutions ethical perspectives The learners are able to apply the basic concepts of Indian ethos and value systems at work. The learners can handle issues of business ethics and offer solutions in ethical perspectives The learners are professionally efficient and skilful in value systems and culture The learners are capable in ethically manage business towards wellbeing of the society. The learners can be socially effective in undertaking business responsibilities. 		
NPTEL/ SWAYAM/ MOOC REFERENCE:		
1.NPTEL: Business Ethics, Prof. Susmita Mukhopadhyay, IIT Kharagpur		

YEAR	SEM	COURSE NAME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
1	SEM-I	Principles and Practices of Management	1	2	1	2	3	3	2	1
1		Statistics for Management	3	3	-	1	-	2	1	-
1		Managerial Economics	3	3	2	2	1	3	1	3
1		Organizational Behavior	3	3	2	1	2	3	3	2
1		Accounting for Managers	3	3	-	-	-	3	2	-
1		Legal Aspects of Business	-	-	-	2	2	2	2	2
		Non-Functional Elective:								
1		Business Communication (Laboratory)	3	1	2	3	2	1	1	3
1		Indian Ethos (Seminar)								

YEAR	SEM	COURSE NAME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
2	SEM-II	Applied Operations Research	3	3	-	1	2	1	2	2
2		Business Research Methods	3	2	2	2	-	2	1	1
2		Financial Management	2	2	-	3	-	2	2	-
2		Human Resource Management	-	-	-	2	3	2	2	-
2		Information Management	3	2	3	-	2	-	-	3
2		Operations Management	3	3	1	1	1	3	2	1
2		Marketing Management	3	3	2	2	1	2	2	3
2		Data Analysis and Business Modelling	-	-	1	2	-	3	-	-
2		Non-Functional Elective:								
2		Creativity and Innovation Laboratory (Laboratory)	-	-	-	-	-	2	3	2
2		Business Ethics (Seminar)	1	-	-	2	3	-	-	-

Q2.

DEPARTMENT OF MASTER OF BUSINESS ADMINISTRATION
Syllabus – Autonomous regulation – 2023
Third Semester Category – PC

PROFESSIONAL CORE (PC)

S.N O.	COURS E CODE	COURSE NAME	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CR
				L	T	P		
1	PPMB3PC14	Strategic Management	PC	3	-	-	3	3
2	PPMB3PC15	International Business Management	PC	3	-	-	3	3



**PMC
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PPMB3PC14	STRATEGIC MANAGEMENT	L T P C
		3 0 0 3
COURSE OBJECTIVE:		
<p>➤ To learn the major initiatives taken by a company's top management on behalf of corporate, involving resources and performance in external environments. It entails specifying the organization's mission, vision and objectives, and to equip with skills required to manage business and non-business organizations at senior levels. The course adopts a functional approach to management developing policies and plan to understand the analysis and implementation of strategic management in strategic business units.</p>		

UNIT I	STRATEGY AND PROCESS	9
Conceptual framework for strategic management, the Concept of Strategy and the Strategy Formation Process – Stakeholders in business – Vision, Mission and Purpose – Business definition, Objectives and Goals - Corporate Governance and Social responsibility-case study.		

UNIT II	COMPETITIVE ADVANTAGE	9
External Environment - Porter's Five Forces Model-Strategic Groups Competitive Changes during Industry Evolution-Globalisation and Industry Structure - National Context and Competitive advantage Resources- Capabilities and competencies-core competencies-Low cost and differentiation Generic Building Blocks of Competitive Advantage- Distinctive Competencies- Resources and Capabilities durability of competitive Advantage- Avoiding failures and sustaining competitive advantage-Case study.		

UNIT III	STRATEGIES	9
The generic strategic alternatives – Stability, Expansion, Retrenchment and Combination strategies - Business level strategy- Strategy in the Global Environment-Corporate Strategy- Vertical Integration- Diversification and Strategic Alliances- Building and Restructuring the corporation- Strategic analysis and choice – Managing Growth - Environmental Threat and Opportunity Profile (ETOP) - Organizational Capability Profile - Strategic Advantage Profile - Corporate Portfolio Analysis - SWOT Analysis - GAP Analysis - Mc Kinsey's 7s Framework - GE 9 Cell Model – Distinctive competitiveness - Selection of matrix - Balance Score Card-case study.		

UNIT IV	STRATEGY IMPLEMENTATION & EVALUATION	9
The implementation process, Resource allocation, Designing organisational structure -Designing Strategic Control Systems- Matching structure and control to strategy-Implementing Strategic change- Politics-Power and Conflict-Techniques of strategic evaluation & control-case study.		

2.

UNIT V OTHER STRATEGIC ISSUES

Managing Technology and Innovation - Strategic issues for Non Profit organisations. New Business Models and strategies for Internet Economy-case study Challenges in Strategic Management Introduction, Strategic Management as an Organisational Force, Dealing with Strategic Management Various Situations, Strategic Management Implications and Challenges. Recent Trends in Strategic Management: Introduction, Strategic Thinking, Organisational Culture and its Significance Organisational Development and Change, Change Management, Strategic management in a globalised economy

TOTAL: 45 PERIODS

COURSE OUTCOMES:

1. Ability to understand the Strategic management process and social responsibility of business organizations
2. In-depth understanding about the need for developing competitive advantage for organizations
3. Provides insights into various corporate and business level strategies
4. Facilitates to identify the various control systems required for organizational strategy implementation process
5. Enhances the cognitive knowledge about various strategic issues and development of new business models

TEXT BOOKS:

1. Hill. Strategic Management: An Integrated approach, 2023 Edition Wiley (2023).

REFERENCES:

1. John A.Parnell. Strategic Management, Theory and practice Biztantra (2022).
2. Azhar Kazmi, Strategic Management and Business Policy, 3rd Edition, Tata McGraw Hill, 2021.
3. Adriaan H Aberberg and Alison Rieple, Strategic Management Theory & Application, Oxford University Press, 2022.
4. Lawrence G. Hrebiniak, Making strategy work, Pearson, 2nd edition, 2023.
5. Gupta, Gollakota and Srinivasan, Business Policy and Strategic Management – Concepts and Application, Prentice Hall of India, 2022.
7. Dr.Dharma Bir Singh, Strategic Management & Business Policy, KoGent Learning Solutions Inc., Wiley, 2023.
8. John Pearce, Richard Robinson and Amitha Mittal, Strategic Management, McGraw Hill, 12th Edition, 2023
9. Lafley AG and Roger L Martin, Playing to Win : Strategy really works, Harvard Business Review Press

CO/ PO Mapping:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	2		3	2				
CO2	1		3				3	
CO3			2					3
CO4		2						3
CO5	2				3			2
Avg	2	2		3	3			3
				2.6	3		3	2.8

2.

PPMB3PC15	INTERNATIONAL BUSINESS MANAGEMENT	L T P C 3 0 0 3
COURSE OBJECTIVE		
To understand the multinational dimensions in management of a MNC company and the business operations in more than one country.		
UNIT I AN OVERVIEW OF INTERNATIONAL BUSINESS		9
Definition and drivers of International Business- Changing Environment of International Business- Country attractiveness- Trends in Globalization- Effect and Benefit of Globalization-International Institution: UNCTAD Basic Principles and Major Achievements, Role of IMF, Features of IBRD, Role and Advantage of WTO.		
UNIT II THEORIES OF INTERNATIONAL TRADE AND INVESTMENT		9
Theories of International Trade: Mercantilism, Absolute Advantage Theory, Comparative Cost Theory, Hecksher-Ohlin Theory-Theories of Foreign Direct Investment : Product Life Cycle, Eclectic, Market Power, Internationalisation-Instruments of Trade Policy : Voluntary Export Restraints, Administrative Policy, Anti-dumping Policy, Balance of Payment.		
UNIT III GLOBAL ENTRY		9
Strategic compulsions— Strategic options – Global portfolio management- Global entry strategy, different forms of international business, advantages - Organizational issues of international business – Organizational structures – Controlling of international business, approaches to control – Performance of global business, performance evaluation system.		
UNIT IV PRODUCTION, MARKETING, FINANCIALS OF GLOBAL BUSINESS		9
Global production: Location, scale of operations- cost of production- Standardization Vs Differentiation- Make or Buy decisions- global supply chain issues- Quality considerations. Globalization of markets: Marketing strategy- Challenges in product development- pricing- production and channel management. Foreign Exchange Determination Systems: Basic Concepts-types of Exchange Rate Regimes- Factors Affecting Exchange Rates.		
UNIT V HUMAN RESOURCE MANAGEMENT IN INTERNATIONAL BUSINESS		9
Selection of expatriate managers- Managing across cultures -Training and development- Compensation- Disadvantages of international business – Conflict in international business- Sources and types of conflict – Conflict resolutions – Negotiation –Ethical issues in international business – Ethical decision-making.		
TOTAL: 45 PERIODS		
COURSE OUTCOMES:		
On completion of this course, students will;		
CO1: In Depth knowledge of driving factors of international Business		
CO2: Understanding of theories of trade and investment practiced in the global world		
CO3: Deep Insights in to various market entry strategies followed by Global Organizations		
CO4: Ability to identify the various global production and supply chain issues and have an understanding of foreign exchange determination system		
CO5: Enhance the cognitive knowledge of managing business across the cultures.		

TEXTBOOKS:

1. International Business: Competing in the Global Marketplace (SIE) | 11th Edition – 14 August
Charles W. L. Hill (Author), G. Tomas M. Hult (Author), Rohit Mehtani (Author), McGraw Hill

REFERENCES:

1. Charles W.L. Hill and Arun Kumar Jain, International Business, 6th edition, Tata McGraw Hill, 2010.
2. Michael R. Czinkota, Ilkka A. Ronkainen and Michael H. Moffet, International Business, 7th Edition, Cengage Learning, New Delhi, 2010.
3. K. Aswathappa, International Business, 5th Edition, Tata McGraw Hill, New Delhi, 2012.
4. John D. Daniels and Lee H. Radebaugh, International Business, Pearson Education Asia, New Delhi, 10th edition.
5. Vyuptakesh Sharan, International Business, 3rd Edition, Pearson Education in South Asia, New Delhi, 2011.
6. Rakesh Mohan Joshi, International Business, Oxford University Press, New Delhi, 2009.

WEB REFERENCES:

1. <https://guides.loc.gov/international-business/general-resources>
2. <https://www.emerald.com/insight/publication/issn/1876-066X>

NPTEL/ SWAYAM/ MOOC REFERENCE:

1. NPTEL: Internationalbusiness-Prof Dr.J.K.Nayak, Management Studies, IIT Roorke

CO PO MAPPING

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8
CO 1	2	2		3	-	2	2	
CO 2	2	2		2		3	2	1
CO 3	2	2		3		3	3	1
CO 4		3		3		2	3	
CO 5	2	2		2		3	3	
Avg	4	2.2		2.6		2.6	2.6	

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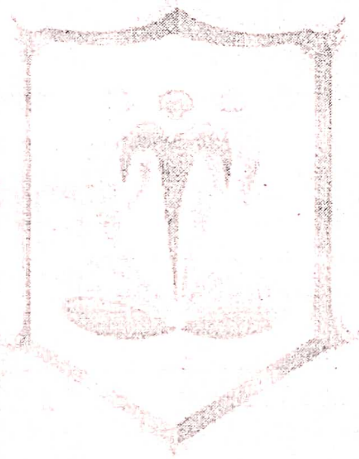
Third Semester Category – PE
PROFESSIONAL ELECTIVES (PE)

1. Students can take **THREE** elective subjects from **TWO** functional specializations
- OR**
2. Students can take **SIX** elective subjects from any one Sectoral specialization

S.N O.	COURSE CODE	COURSE NAME	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
Specialization: Human Resource Management (6)								
	PPMB3PE01	Industrial Relations and Labour Legislations	PC	3	-	-	3	3
	PPMB3PE02	Strategic Human Resource Management	PC	3	-	-	3	3
	PPMB3PE03	Talent acquisition and Management	PC	3	-	-	3	3
	PPMB3PE04	Reward and Compensation Management	PC	3	-	-	3	3
	PPMB3PE05	People Analytics	PE	3	-	-	3	3
	PPMB3PE06	Organizational, Design, Change and Development	PE	3	-	-	3	3

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PPMB3PE01	INDUSTRIAL RELATIONS AND LABOUR LEGISLATIONS
COURSE OBJECTIVE	
<ul style="list-style-type: none"> ➤ To explore contemporary knowledge and gain a conceptual understanding of industrial relations. ➤ To have a broad understanding of the legal principles governing the employment relationship at individual and collective level. 	
UNIT I INDUSTRIAL RELATIONS	
Concept, scope- objectives- Importance - Approaches to IR- Industrial relations system in India. Trade Unions Act, 1926- trade union movement in India- objective -role - functions-procedure for registration of trade unions- Rights and responsibilities- problems- Employee relations in IT sector.	
UNIT II INDUSTRIAL CONFLICTS AND LABOUR WELFARE	
The Industrial Disputes Act, 1947-Disputes – Impact – Causes – Strikes – Prevention – Industrial Peace Government Machinery – Conciliation – Arbitration – Adjudication. Labour welfare- statutory-Voluntary- welfare funds-welfare of unorganized labour	
UNIT III LABOUR LEGISLATIONS-I	
Origin and growth of labour legislation in India- Principles of labour legislations-Factories Act 1948- Minimum Wages Act, 1948- Payment of Wages Act, 1936- Payment of Bonus Act, 1965 Removed : Industrial Standing Orders Act, 1946	
UNIT IV LABOUR LEGISLATIONS-II	
The Apprentices act, 1961-The Equal Remuneration act, 1976- Payment of Gratuity act 1972- Employee compensation act in 2013.	
UNIT V LABOUR LEGISLATIONS-III	
Employees' Provident fund and Miscellaneous provisions act, 1952 - Employees' state insurance (ESI) Act, 1948- Maternity Benefit Act, 1961- Contract Labour Regulations and Abolition Act, 1970 -The Child Labour Prevention and Regulation Act, 1986. New Labour Codes - Recent Trends. Added : New Labour Codes -Recent Trends.(Anna University Regulation 2023)	
TOTAL: 45 PERIODS	
COURSE OUTCOMES:	
<ol style="list-style-type: none"> 1. To Understand and appreciate Industrial relations system and Trade unions 2. To Understand and Evaluate the Industrial Disputes and labour welfare measures 3. To articulate, and appraise the Labour legislation & legal provisions for factory workers, wages and Bonus 4. To analyze and evaluate the Legal provisions for equal remuneration, gratuity, compensation, industrial employment and Apprenticeship 5. To understand and apply the Legal provisions for EPF, ESI, Maternity, contract labours, and child labour prevention and the perspectives of New Labour Codes 	
TEXTBOOKS:	
<ol style="list-style-type: none"> 1. Mamoria C.B. and Sathish Mamoria, Dynamics of Industrial Relations, Himalaya Publishing House, New Delhi, 2022. 2. Labour Industrial Laws with Latest Amendments By S.N.Mishra edition 2020-2021 	



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REFERENCES:

1. Kapoor N. D, Elements of Mercantile Law, Sultan Chand and Sons, 2022.
2. Arun Monappa, Ranjeet Nambudiri, Patturaja Selvaraj. Industrial relations & Labour Laws. Tata McGraw Hill. 2012
3. P.K. Padhi, Industrial Laws, PHI, 2017.
4. Tax Mann, Labour Laws, 2022.
5. Srivastava, Industrial Relations and Labour laws, 8th Edition, Vikas, 2022.

WEB REFERENCES:

1. <https://labour.gov.in/labour-codes>
2. https://sk.sagepub.com/reference/hdbk_industrialrelations

NPTEL/ SWAYAM/ MOOC REFERENCE:

1. NPTEL: Labour Codes Prof K.D. Raju , IIT Kharagpur
2. New Labour codes of India Prof K.D. Raju , IIT Kharagpur

CO PO MAPPING:

CO	Program Outcomes							
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
1	3	1	2	2	2	3	2	1
2	2	2	2	3	1	3	2	1
3	3	2	2	1	2	3	2	1
4	2	1	1	3	2	3	2	1
5	2	3	3	2	1	3	2	1
Avg	2	1.8	2	2.2	1.6	3	2	1

COURSE OBJECTIVE

The objective of this course is to familiarize the students with transformation in the role of HR functions from being a support function to strategic function and to develop the skills and capabilities to become an effective HR managers.

UNIT I: CONTEXT OF SHRM

9

SHRM - SHRM models - strategic HRM vs Traditional HRM - Barriers to Strategic HR- Understanding and Measuring Human capital - Human side of corporate strategies - strategic work redesign - Bench Marking.

UNIT II HUMAN RESOURCE DEVELOPMENT

9

Meaning – Strategic framework for HRM and HRD – HRD Functions - Roles of HRD Professionals - HRD Needs Assessment- HRD practices – Measures of HRD performance – HRD Program Implementation and Evaluation – Recent trends –HRD Audit.

UNIT III E-HRM

9

E- Employee profile– E- selection and recruitment - Virtual learning and Orientation – E- training and development - E- Performance management - and Compensation design– Development and Implementation of HRIS – Designing HR portals

UNIT IV CAREER & COMPETENCY DEVELOPMENT

9

Career Concepts – Roles — Career planning and Process – Career development Models– Career Motivation and Enrichment –Managing Career plateaus- Designing Effective Career Development Systems – Competencies and Career Management – Competency Mapping Models

UNIT V EMPLOYEE COACHING & COUNSELING

9

Need for Coaching – Role of HR in coaching – Coaching and Performance – Skills for Effective Coaching Coaching Effectiveness– Need for Counseling – Role of HR in Counseling – Components of Counseling Programs – Counseling Effectiveness – Employee Health & Welfare Programs - Future of SHRM. .

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

1. Understand the relationship of HR strategy with overall corporate strategy, the strategic role of specific HR systems.
2. Appreciate SHRM in the context of changing forms of organisation and will have a better understanding of the tools and techniques used by organizations to meet current challenges.
3. To be more sensitive to cross-cultural issues and understanding of international approaches to dealing with people in organisations.
4. Understand the career development theories and models and gain necessary self-insight, skills and techniques to become effective HR managers.
5. Providing an overview of the counselling and coaching processes and techniques, Developing alternative approach to dealing with problem situations in organisations.

TEXTBOOKS:

Aswathappa, K, "Human Resource Management - Text and Cases", Tata McGraw-Hill, 12th Edition, 2010

REFERENCES:

1. Strategic Human Resource Management- An International Perspective, 3rd edition, Edited by Gary Rees and Paul E Smith, Sage Books, 2021
2. Taxmann, GST Manual with GST Law Guide & Digest of Landmark Rulings, 13th Edition, 2022
3. Ananda Das Gupta, Strategic Human Resource Management Formulating and Implementing HR Strategies for a Competitive Advantage, Productivity Press New York-Routledge, 1st Edition 2021.
4. Karen Beaven, Strategic Human Resource Management – An HR Professional's Toolkit, Kogan Page, 2020
5. John Storey, Patrick M Wright, and Dave Ulrich, Strategic Human Resource Management – A Research Overview, Routledge Focus, 2020
6. Feza Tabassum Azmi, Strategic Human Resource Management – Text and Cases- Cambridge University Press, 2019.

WEBSITE REFERENCE:

1. www.shrm.org
2. www.cipd.org
3. [www.testlify.com/hr current affairs & cases](http://www.testlify.com/hr-current-affairs-cases)

NPTEL/ SWAYAM/ MOOC REFERENCE:

1. NPTEL: Advances in Strategic Human Resource Management, Prof. Ashish Pandey, Shailesh . J. Mehta, School of Management, IIT Bombay.
2. NPTEL: Strategic Performance Management, Prof. KBL Srivastava, IIT Kharagpur
3. SWAYAM : Online course – Management of Human Resource, Dr. Mirali Khan, IIT.

CO PO MAPPING

CO	PO							
	1	2	3	4	5	6	7	8
1	3	1	2	2	2	3	2	1
2	3	2	2	3	2	3	2	1
3	3	2	2	2	2	3	2	1
4	3	1	2	2	2	3	2	1
5	3	3	2	2	3	3	2	1
Avg	3	1.8	2	2.2	2.2	3	2	1
							2	1

2

COURSE OBJECTIVE

To familiarize the students to the basic concepts of compensation.

UNIT I COMPENSATION

Types of compensation, conceptual framework of compensation management, Theories of wages – criteria of wage fixation – Institutional and cultural factors on compensation practices, National differences in compensation – Compensation system design issues: Compensations Philosophies, compensation approaches

UNIT II COMPENSATION PLANNING

Developing a total compensation strategy – Competitive Advantage – Job evaluation systems, the compensation structure- Wage and salary surveys, the wage curve, pay grades and rate ranges, preparing salary matrix, fixing pay, significant compensation issues

UNIT III VARIABLE PAY

Strategic reasons for incentive plans, administering incentive plans, individual incentive plans, group incentive plans, team compensation, ESOPs, Performance measurement issues, incentive application and globalization, Managing Employee Benefits: Nature and types of benefits, employee benefits programs security benefits, retirement security benefits, health care benefits, time-off benefits, benefits administrations, employee benefits required by law, discretionary major employee benefits, employee services designing a benefits package

UNIT IV EXECUTIVE COMPENSATION

Elements of executive compensation and its management, Executive compensation in an international context, Wage Determination: Principles of wage and salary administration, methods of wage determination in India; internal and external equity in compensation system

UNIT V WAGE ADMINISTRATION IN INDIA

Wage policy in India, wage boards: structure, scope and functions, Pay Commissions. International Compensation, global convergence of compensation practices - Pay for performance for global employees - practices in different industries, Employee benefits around the world, CEO pay in a global context, Beyond compensation.

TOTAL: 45 PERIODS

COURSE OUTCOMES:

On completion of the course, students will be able to

CO1: Be familiarized with compensation

CO2: Understand Compensation Planning

CO3: Design Executive and Compensation

CO4: Understand Wage administration in India

CO5: Be aware of the importance of Wage administration in India

TEXTBOOKS:

1. Jerry M. Newman, Barry Gerhart & George T. Milkovich, Compensation, McGrawHill, 12th Edition, 2020.

REFERENCES:

1. Tapomoy Deb, Compensation Management, Text and Cases, Excel Books, 1st Edition, 2009.

2. Milkovich, Newman & Gerhart, Compensation, TMH, 10th Edition, 2011.

WEBSITES:

1. <https://www.aihr.com/blog/compensation-and-benefits/>

2. <https://www.economicdiscussion.net/human-resource-management/compensation-and-reward-management/32236>

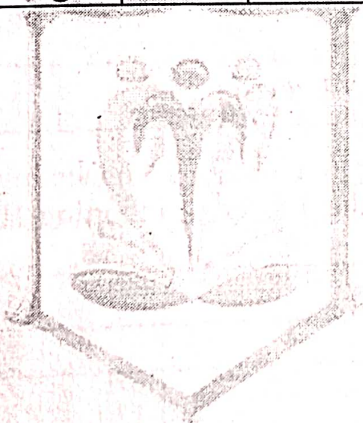
NPTEL / SWAYAM / MOOC REFERENCES:

1. Performance and Reward Management/ Susmita Mukhopadhyay, Associate Professor, VGSOM

2. Talent Acquisition and Management/ By Prof. Santosh Rangnekar | IIT Roorkee

COPO Mapping:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1		2		3	2			
CO2	2			2				
CO3			2		3			3
CO4	2					2		
CO5	3						2	
Avg	2.3	1	1	2.5	2.5	2	2	3



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PPMB3PE05

PEOPLE ANALYTICS

COURSE OBJECTIVE

To derive a strong understanding of HR Analytics, Process and impact.

UNIT I INTRODUCTION TO HUMAN RESOURCE ANALYTICS

Understanding HR indicators, metrics and data, HR Analytics Process, Frameworks for HR Analytics, LAMP Framework, HCM 21 Framework. Application of analytical techniques to evaluate human capital impact on business

UNIT II STATISTICS FOR HRM

Statistical analysis for HR, Toolkits, Compensation KPIs, Power interest stakeholder matrix, Data models, creating dash boards, analyzing and reporting.

UNIT III BEST PRACTICES IN HR ANALYTICS

Staffing, supply and demand forecasting, Total compensation analyses, Performance Analytics, Attrition Analytics, Learning and Development Analytics, Diversity Analytics, Employee engagement analytics, Employee satisfaction analytics

UNIT IV MEASURING HR CONTRIBUTION

Developing HR Scorecard, Developing HR Analytics Unit: Analytics Culture, Analytics for decision making, Analytics for Human Capital in the Value Chain- Balance Score card – ROI – Predictive Analytics

UNIT V HR REGULATIONS AND REPORTING REQUIREMENTS

Policies, Procedures and guidelines, Key regulations and reporting requirements, connecting missions and goals to HR Benchmarks and metrics, Reporting & Advising - the 4 rules of reporting HR analytics, importance of data visualization.

TOTAL: 45 PERIODS

COURSE OUTCOMES:

1. Gain clarity on the concept of HR Analytics.
2. Explore on statistics and toolkits.
3. Contrasting and assimilating best practices in HR analytics.
4. Demonstrate in analyzing optimal methods for measuring HR contribution
5. Design and construct HR regulations and reporting requirements

TEXTBOOKS:

1. Martin Edwards, Kirsten Edwards, Predictive HR Analytics: Mastering the HR Metric, Kogan Page, Edition, 2019.

REFERENCES:

1. Fitz-Enz, J., The New HR Analytics: Predicting the Economic Value of Your Company's Human Capital Investments, American Management Association Amacom, 1st Edition, 2020
2. Sesil, J. C., Applying advanced analytics to HR management decisions: Methods for selection, developing incentives, and improving collaboration. Upper Saddle River, New Jersey: Pearson Education, 1st Edition, 2020.
3. Dipak Kumar Bhattacharyya, Hr Analytics: Understanding Theories and Applications, Sage Publications India Private Limited, 1st Edition, 2019

WEBSITE REFERENCE:

1. www.spiceworks.com
2. www.gartner.com

NPTEL/ SWAYAM/ MOOC REFERENCE:

1. **NPTEL:** HR Analytics using Excel, Prof. Subbulakshmi Somu, Dayananda Sagar College of Arts, Science and Commerce.
2. **SWAYAM:** Human Resource Management, Dr. Prakash Pillai R, Loyola College of Social Sciences

CO PO MAPPING

CO	PO							
	1	2	3	4	5	6	7	8
1	2	2				3		
2	2		2			3		
3		2				3		
4	2					2		
5	2	2				2		
Avg	2	2	2			2.8		



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PPMB3PE06	ORGANIZATIONAL DESIGN, CHANGE AND DEVELOPMENT	LTPC
		3003
COURSE OBJECTIVE		
<ul style="list-style-type: none"> To help the students to gain knowledge about the concepts of change management and to acquire the skills required to manage any change effectively To understand the techniques of OD and to enable the skills for the application of OD in organizations. 		
UNIT I: ORGANIZATIONAL DESIGN		
Organizational Design – Determinants – Components – Basic Challenges of design – Differentiation, Integration, Centralization, Decentralization, Standardization, Mutual adjustment -Mechanistic and Organic Structures- Technological and Environmental Impacts on Design-Importance of Design – Success and Failures in design.		
UNIT II ORGANIZATIONAL CHANGE		
Meaning, Nature, Forces for change- change agents- Change process-Types and forms of change- Models of change- Resistance to change – individual factors – organizational factors – techniques to overcome change- Change programs –job redesign.		
UNIT III - ORGANIZATIONAL DEVELOPMENT		
Introduction- evolution- basic values and assumptions-foundations of OD- Process of OD- managing phases of OD- Organizational diagnosis-Process-stages- Techniques-Questionnaire, interview, workshop, task force- collecting, analyzing- feedback of diagnostic information.		
UNIT IV - OD INTERVENTION		
Human process interventions-Individual, group and inter-group human relations- structure and technical interventions- strategy interventions – sensitivity training – survey feedback, process consultation – team building – inter-group development.		
UNIT - V: ORGANIZATIONAL EVOLUTION AND SUSTENANCE 9		
Organizational life cycle – Models of transformation – Models of Organizational Decision making – Organizational Learning – Innovation, Intrapreneurship and Creativity-HR implications.		
TOTAL: 45 PERIODS		
COURSE OUTCOMES:		
The student gets to learn about		
<ol style="list-style-type: none"> 1. The fundamentals of organizational design and structure 2. Change process, types, and models of change in organizations 3. The fundamentals of organizational development 4. Organizational development Interventions 5. Organizational evolution and sustenance 		
TEXTBOOK:		
1.Rajiv Shaw: Surviving Tomorrow: Turnaround Strategies In Organisational Design And Development, Vikas Publishing House. 2019		
REFERENCES		
<ol style="list-style-type: none"> 1. French & Bell: Organisational Development, McGraw-Hill, 2020 2. Wendell L. French, Cecil H. Bell, Jr, Veena Vohra - Organization Development : Behavioral Science Interventions for Organizational Improvement, Sixth Edition 2017 3. Thomas G. Cummings, Christopher G. Worley: Organisation Development And Change, Thomson Learning.2020 4. S. Ramnarayan, T. Venkateswara Rao, Kuldeep Singh: Organization Development: Interventions And Strategies, Sage Publications 2021 5. Organization Development, behavioral science interventions for Organization Improvement, Wendell French, Cecil H.Bell, Veena, Jr, Pearson, PHI 		

WEBSITE REFERENCE:

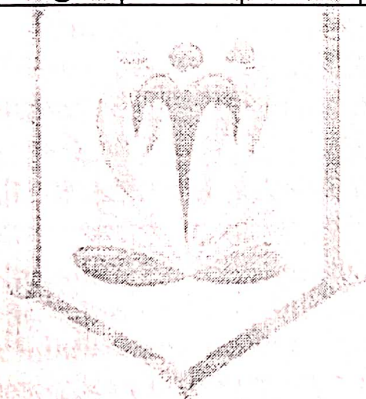
1. <https://guides.library.ucsc.edu/citedata>
2. <https://www.oecd.org/about/publishing/OECD-Style-Guide-Third-Edition.pdf>
3. https://clarivate.libguides.com/incites_ba/aboutdata

NPTEL/ SWAYAM/ MOOC REFERENCE:

1. NPTEL: Sourav Mukherji Indian Institute Of Management Bangalore (IIMB)
2. NPTEL: Prof. Susmita Mukhopadhyay IIT Kharagpur
3. SWAYAM :, Prof. Sangeeta Sahney IIT Khanpur
4. SWAYAM: Prof. S. Srinivasan Vinod Gupta School of Management IIT

CO PO MAPPING

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8
CO1		2	3	2	2	3	2	1
CO2	2	3	1	2	2	3	2	1
CO3		3	1	3	3	3	2	1
CO4		2	1	2	3	3	2	1
CO5		2	1	2	3	3	2	1
Avg	0.4	2.4	1.4	2.2	2.6	3	2	1



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S.NO.	COURSE CODE	COURSE NAME	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
Specialization: Marketing (6)								
	PPMB3PE07	Digital Marketing	PE	3	-	-	3	3
	PPMB3PE08	Services Marketing	PE	3	-	-	3	3
	PPMB3PE09	Integrated Marketing Communication	PE	3	-	-	3	3
	PPMB3PE10	Product and Brand Management	PE	3	-	-	3	3
	PPMB3PE11	Retail Marketing	PE	3	-	-	3	3
	PPMB3PE12	Consumer Behavior	PE	3	-	-	3	3



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REFERENCES:

1. Vandana Ahuja, (2020), Digital Marketing, 1st edition, Oxford University Press
2. Avinash Kaushik, (2019), Web Analytics 2.0: The Art of Online Accountability and Science of Customer Centricity
3. Rob Stokes, (2018), e-marketing: The Essential Guide to Digital Marketing, 5th edition, Quirk Education

WEBSITE REFERENCE:

1. www.investopedia.com
2. blog.hubspot.com/marketing

NPTEL/ SWAYAM/ MOOC REFERENCE:

1. NPTEL: Digital Marketing, Prof. Dr. Tejinderpal Singh, Punjab University, Chandigarh

CO PO MAPPING

CO	PO							
	1	2	3	4	5	6	7	8
1	3	3	2	2	2	2	2	2
2	3	3	2	2	2	2	3	3
3	3	3	2	1	1	1	1	3
4	2	3	2	1	1	1	2	3
5	3	2	1	1	1	1	3	3
Avg	2.8	2.8	1.8	1.4	1.4	1.4	2.2	2.8

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PPMB3PE08	SERVICES MARKETING	L T P C 3 0 0 3
COURSE OBJECTIVE		
The objective of this course is to understand the fundamental differences between services and goods and to provide insight into ways to improve service quality and productivity in various service sectors.		
UNIT I INTRODUCTION TO SERVICES MARKETING		9
Marketing Services: Introduction - Growth of the service sector - The Concept of Service - Nature & Characteristics of Service, Service and Goods Difference, – Classification of Service- Understanding Marketing Mix - 7 P's of Marketing, Service encounter stage, Service Marketing triangle.		
UNIT II SERVICE PRODUCTS, POSITIONING, DISTRIBUTION OF SERVICE		9
Service products, Flow of service, New service development - Hierarchy of new service category, Positioning of services, Customer driven strategy, Segmenting and Targeting Service Markets, Positioning maps, Distribution of services, Location considerations, Delivery of service, Challenges of distribution.		
UNIT III DEMAND AND CAPACITY MANAGEMENT, SERVICE ENVIRONMENT, SERVICE PRICING		9
Productive Service Capacity, Demand Fluctuations, Managing Demand and Capacity, Patterns of Demand, Managing Waiting Lines, Service Environment, Purpose of Service environment, Consumer Response, Dimensions, Pricing of services- Pricing strategy, Revenue Management, Ethical concerns in pricing, Putting service pricing into practice, Pricing, Strategies And Tactics.		
UNIT IV MANAGEMENT OF SERVICE QUALITY AND SERVICE PROCESS		9
Service quality- Causes Of Service – Quality Gaps, Gap model in service design, Measuring service quality, Measuring productivity, Improving service productivity, Designing service processes - Service Blueprinting, service process redesign, Customer participation in service process.		
UNIT V SERVICE STRATEGY IN VARIOUS SECTOR		9
Marketing of Service - Financial Services – Health Service - Hospitality Services including travel, hotels and tourism - Professional Service - Public Utility Services - Educational Services.		
TOTAL: 45 PERIODS		

COURSE OUTCOMES:

1. To understand the similarities and differences in service-based and physical product based marketing activities.
2. To demonstrate a positioning of services to identify a competitive position in the market for service differentiation.
3. To manage and utilize service capacity for improving productivity of services and to analyze the influence of service environment on customer satisfaction.
4. To apply pricing strategy for different services and to examine various ethical concerns in pricing of services.
5. To assess the causes of service quality gap and to improve service productivity through service blueprinting.

TEXTBOOKS:

1. Philip Kotler & Kevin Lane Keller, "Marketing Management", Pearson Education, 13th Edition, 2016

REFERENCES:

1. Lovelock, C., Wirtz, J. and Chatterjee, J., Services Marketing, 7th Edition, Pearson, 2022
2. Zeithaml, V., Bitner, M.J., Gremler, D. and Pandit, A., Services Marketing, 5th Edition, Tata McGraw-Hill, 2021
3. Gronoos, C., Service Management and Marketing: Customer Management in Service Competition, 3rd Edition, Wiley India, 2020

WEBSITE REFERENCE:

1. www.webfx.org
2. www.marketing schools.org
3. [www.mu.ac.in/marketing affairs](http://www.mu.ac.in/marketing%20affairs)

NPTEL/ SWAYAM/ MOOC REFERENCE:

1. NPTEL: Services Marketing: Integrating People, Technology, Strategy, Prof. Zillur Rahman Roorkee.
2. NPTEL: Services Marketing: A Practical Approach, Prof. Biplab Datta, IIT Kharagpur
3. SWAYAM : Strategic Services Marketing, Prof. Kalpak Kulkarni , IIT Roorkee.

CO PO MAPPING

CO	PO							
	1	2	3	4	5	6	7	8
1	2	3	1	-	-	2	2	3
2	3	3	1	1	-	3	3	2
3	3	3	2	1	1	3	3	2
4	3	3	2	-	1	3	3	3
5	3	3	3	3	3	3	3	2
Avg	3	3	1.8	1	1	2.8	2.8	2.4

PPMB3PE09	INTEGRATED MARKETING COMMUNICATION	L T P C 3 0 0 3
COURSE OBJECTIVE		
This course introduces students to the essential concepts and techniques for the development and designing an effective Integrated Marketing Communication programme.		
UNIT I AN INTRODUCTION TO INTEGRATED MARKETING COMMUNICATION (IMC)		
An Introduction to Integrated Marketing Communication (IMC): Meaning and role of IMC in Marketing process, one voice communication V/s IMC. Introduction to IMC tools – Advertising, sales promotion, publicity, public relations, and event sponsorship; The role of advertising agencies and other marketing organizations providing marketing services and perspective on consumer behaviour		
UNIT II UNDERSTANDING COMMUNICATION PROCESS		9
Understanding communication process: Source, Message and channel factors, Communication response hierarchy- AIDA model, Hierarchy of effect model, Innovation adoption model, information processing model, The standard learning Hierarchy, Attribution Hierarchy, and low 20% involvement hierarchy Consumer involvement- The Elaboration Likelihood (ELM) model, The Foote, Cone and elding (FCB) Model		
UNIT III PLANNING FOR MARKETING COMMUNICATION (MARCOM)		9
Establishing marcom Objectives and Budgeting for Promotional Programmes-Setting communication objectives, Sales as marcom objective, DAGMAR approach for setting ad objectives. Budgeting for marcom-Factors influencing budget, Theoretical approach to budgeting viz. Marginal analysis and Sales response curve, Method to determine marcom budget		
UNIT IV DEVELOPING THE INTEGRATED MARKETING COMMUNICATION PROGRAMME		9
Planning and development of creative marcom, Creative strategies in advertising, sales promotion, publicity, event sponsorships etc. Creative strategy in implementation and evaluation of marcom- Types of appeals and execution styles. Media planning and selection decisions- steps involved and information needed for media planning. Measuring the effectiveness of all Promotional tools and IMC.		
UNIT V DIGITAL MEDIA & ADVERTISING		9
Digital Media, Evolution of Technology, Convergence of Digital Media, E- Commerce and Digital Media, Advertising on Digital Media, Social Media, Mobile Adverting, E-PR Advertising Laws & Ethics: Adverting & Law, Advertising & Ethics		
TOTAL: 45 PERIODS		
COURSE OUTCOMES		
<ol style="list-style-type: none"> 1. To review and give a general understanding of the basics of traditional communication forms, such as advertising, personal selling, sales promotion and indirect promotion within various delivery vehicles from broadcast to targeted social media. 2. This course introduces students to the essential concepts and techniques for the development and designing an effective Integrated Marketing Communication programme. 3. To Know how IMC fits into the marketing mix. 4. To develop an awareness about marketing communications tools, and how each can be used effectively- individually or in an integrated mix. 5. To examine the process by which integrated marketing communications programs are planned, developed, executed and measured. 		
TEXTBOOKS:		

1. Advertising and Promotion: An Integrated Marketing Communications Perspective (SIE) by George E Belch, Michael A Belch, Keyoor Purani, 12th edition, McGraw Hill Education, 2021.

REFERENCES:

1. Advertising & Promotion- An Integrated Marketing Communications Perspective, George Belch, Michael Belch & Keyoor Purani, TATA McGraw Hill 8th edition
2. Wells, Moriarty & Burnett, Advertising, Principles & Practice, Pearson Education, 7th Edition, 2006.
3. Kenneth Clow, Donald Baack, Integrated Advertisements, Promotion and Marketing communication, Prentice Hall of India, New Delhi, 3rd Edition, 2006.
3. Terence A. Shimp and J. Craig Andrews, Advertising Promotion and other aspects of Integrated Marketing Communications, CENGAGE Learning, 9th edition, 2016
4. S. H. H. Kazmi and Satish K Batra, Advertising & Sales Promotion, Excel Books, New Delhi, 3rd Revised edition, 2008.
5. Julian Cummings, Sales Promotion: How to Create, Implement and Integrate Campaigns that Really Work, Kogan Page, London, Fifth Edition, 2010.
6. Jaishri Jethwaney, Advertising Management, Oxford University Press, 2nd Edition, 2013.
7. Dr Niraj Kumar, Integrated Marketing Communication, Himalaya Publishing House 2015

WEB REFERENCE :

1. <https://cpd.taueu.org/advertising-vs-sales-promotion-all-you-need-to-know/>
2. https://books.google.com/books/about/Advertising_And_Sales_Promotion.html?id=1fQuLiaGY4Y

NPTEL/ SWAYAM/ MOOC REFERENCE:

1. Introduction to Marketing Essentials By Prof. Zillur Rahman | IIT Roorkee
2. https://onlinecourses.swayam2.ac.in/cec20_ge02/preview

CO PO MAPPING

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8
CO 1	2	3	2	2	2	3	3	3
CO 2	2	3	2	3	3	2	2	3
CO 3	3	3	1	1	3	2	3	3
CO 4	3	3	1	1	1	1	3	3
CO 5	3	3	1	3	1	1	3	3
Avg	2.6	3	1.4	2	2	1.8	2.8	3

PPMB3PE10	PRODUCT AND BRAND MANAGEMENT	L T P C
COURSE OBJECTIVE		3 0 0 3
<ul style="list-style-type: none"> To help the students appreciate the relationship between Corporate Strategy and Product and Brand Management To provide a framework to understand the new product development process, the organizational structures for new product development and product management functions within an organization To explore the various issues related to Brand Management and to enhance the understanding and appreciation of this important intangible strategic asset, including brand associations, brand identity, brand architecture, leveraging brand assets, brand portfolio management etc. 		
UNIT I: INTRODUCTION		
Management of New Product Development Process - Managing Product Life cycle -Brands and Branding- Introduction to Brand Management -Brand Management Process - Brand Choice Decisions and Models.		9
UNIT II: ELEMENTS OF BRANDING		
Product Plans-Elements of Branding- Brand Identity -Brand Communication -Brand Positioning -Brand Image and Personality - Valuation of Brands- Brand Valuation -Brand Tracking and Monitoring.		9
UNIT III: MARKETING MIX		
Marketing Mix Factors and Products-Managing Brand Over Time- Building Brands in Indian Market - Launching a New Brand -Revitalizing Brands - Branding Strategies- Brand Extension Strategies - Brand Portfolio Management- Managing Brands Across Geographical Borders.		9
UNIT IV: BRAND EXPERIENCE		
Managing Brand Experience - Digital Branding-Employment Branding - Co-branding- Brand extension scorecard-Culture and branding-Brand flashbacks-Future brand priorities.		9
UNIT - V: BRAND ADVERTISING		
Advertising -Brand Name Plan- Pricing Systems -Product Distribution Systems -Advertising and Sales Promotion - Product Sales Management -Product and Public Relations Service Product Marketing - Industrial Product Marketing Product Exports and International Marketing -Critical Success Factors in Brand Management.		9
TOTAL: 45 PERIODS		
COURSE OUTCOMES:		
<ol style="list-style-type: none"> 1. Apply the fundamental concepts of product and brand development and management. 2. Use the brand positioning framework to develop a brand, keep it relevant, expand a brand internationally, and reposition a brand. 3. Use tools and metrics to analyze competitors and develop positioning strategies. 4. Recognize the importance of using teams and organization to coordinate multiple interdisciplinary tasks in order to create and manage products within an organization. 5. Apply an understanding of the product manager's role in product pricing, sales, and promotion. 		
TEXT BOOKS		
Donald, R.L., & Russell S.W. (2021). Product Management (3rd Ed.). Tata McGraw Hil		

REFERENCES:

1. Keller, K.L., & Swaminathan, V. (2019). Strategic Brand Management: Building, Measuring, Managing Brand Equity (5th Ed.). Prentice Hall
2. Trott, P. (2020). Innovation Management and New Product Development (4th Ed.). Prentice Hall
3. Kapferer, J. (2019). The New Strategic Brand Management: Advanced Insights and Strategic Thinking (4th Ed.). Kogan Page
4. Reis, A., & Trout, J. (2022). Positioning: The Battle for Your Mind. McGraw Hill Education

WEBSITE REFERENCE:

1. <https://www.emerald.com/insight/publication/issn/1061-0421>
2. <https://www.emerald.com/insight/publication/issn/1061-0421/vol/27/iss/4>
3. https://www.researchgate.net/publication/276941751_Journal_of_Product_and_Brand_Management

NPTEL/ SWAYAM/ MOOC REFERENCE:

1. NPTEL: product and brand management Prof. vinay sharma department of management studies IIT
2. NPTEL: Preeti Krishnan Lyndem Visiting Faculty, Marketing Indian Institute of Management Bangalore
3. SWAYAM : Shishir Bharadwaj Quality Council Of India,
4. B .K. School of Professional Studies and Management, Gujarat University

CO PO MAPPING

CO	PO							
	1	2	3	4	5	6	7	8
1	3	3	1	2	1	3	3	2
2	3	3	2	2	1	3	3	3
3	3	3	2	1	1	3	3	3
4	3	3	1	1	-	3	2	2
5	3	3	2	1	1	2	2	3
Avg.	3	3	1.6	1.4	0.8	2.8	2.6	2.5

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PPMB3PE11	RETAIL MARKETING	L T P C 3 0 0 3
COURSE OBJECTIVE		
Design a comprehensive retail marketing plan for a specific retail business.		
UNIT INTRODUCTION		
An overview of Global Retailing – Challenges and opportunities – Retail trends in India – Socio economic and technological Influences on retail management – Government of India policy implications on retails.		9
UNIT II RETAIL FORMATS		
Organized and unorganized formats – Different organized retail formats – Characteristics of each format – Emerging trends in retail formats – MNC's role in organized retail formats.		9
UNIT III RETAILING DECISIONS		
Choice of retail locations - internal and external atmospherics – Positioning of retail shops – Building retail store Image - Retail service quality management – Retail Supply Chain Management – Retail Pricing Decisions. Merchandizing and category management – buying.		9
UNIT IV RETAIL SHOP MANAGEMENT		
Visual Merchandise Management – Space Management – Retail Inventory Management – Retail accounting and audits - Retail store brands – Retail advertising and promotions, – Retail Management Information Systems - Online retail – Emerging trends.		9
UNIT V RETAIL SHOPPER BEHAVIOUR		
Understanding of Retail shopper behavior – Shopper Profile Analysis – Shopping Decision Process - Factors influencing retail shopper behavior – Complaints Management - Retail sales force Management – Challenges in Retailing in India.		9
TOTAL: 45 PERIODS		
COURSE OUTCOMES:		
1. Recall the key concepts and principles of retail marketing. 2. Demonstrate the fundamental principles and strategies of retail marketing. 3. Experiment retail marketing techniques to develop effective products 4. Analyze retail shopper behavior in the context of retail marketing. 5. Evaluate the effectiveness of retail marketing strategies and campaigns..		
TEXT BOOKS:		
1 Levy, Michael, Weitz, Barton A., and Pandit Ajay (2020). Retail Management, Tata McGraw-Hill, 8th Edition, New Delhi.		

REFERENCES

1. Ogden, Integrated Retail Management, Biztantra, India, 2020
2. Patrick M. Dunne and Robert F Lusch, Retailing, Thomson Learning, 6th Edition 2019.
3. Chetan Bajaj, Rajnish Tow and Nidhi V. Srivatsava, Retail Management, OxfordUniversity Press, 2017.
4. Swapna Pradhan, Retail Management -Text and Cases, Tata McGraw Hill, 3rd Edition, 2009.
5. Dunne, Retailing, Cengage Learning, 2nd Edition, 2008

WEB REFERENCES:

1. <https://doi.org/10.1515/9783110543827-010>
2. <https://www.ama.org/marketing-news/how-brands-can-help-consumers-green-up-their>

CO PO MAPPING

CO	PO						
	1	2	3	4	5	6	7
1	3	2	2	2	2	1	1
2	2	2	3	3	2	1	2
3	3	2	2	2	2	2	3
4	2	3	2	3	3	1	1
5	2	2	1	2	2	2	2
Avg.	2.33	2.17	2.17	2.33	2.17	1.33	1.83

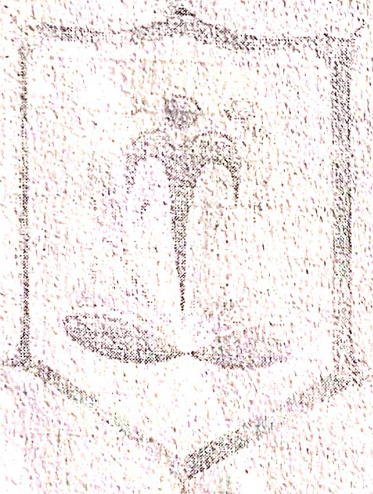
PPMB3PE12	
CONSUMER BEHAVIOR	
L T P C	
3 0 0 3	
COURSE OBJECTIVE:	
➤ To study and understand the consumer' behavior in-order to effectively utilise the market' potential	
UNIT I INTRODUCTION	
Understanding Consumer behaviour - Consumption, Consumer orientation, Interpretive and Quantitative approaches - Effects of Technology, Demographics and Economy on Consumer behaviour.	
UNIT II INTERNAL INFLUENCES	
Influences on consumer behavior – motivation – perception – Attitudes and Beliefs - Learning and Experience - Personality & Self Image.	
UNIT III EXTERNAL INFLUENCES	
Socio-Cultural, Cross Culture - Family group – Reference group – Communication - Influences on Consumer behavior	
UNIT IV CONSUMER BEHAVIOR MODELS	
Traditional and Contemporary Consumer behaviour model for Individual and industrial buying behaviour and decision making.	
UNIT V PURCHASE DECISION PROCESS	
Consumer decision making process – Steps, Levels and decision rules - Evolving Indian consumers – Opinion Leadership - Diffusion and Adoption.	
TOTAL: 45 PERIODS	
COURSE OUTCOMES:	
The student understands	
1. Consumer orientation and consumption	
2. Intrinsic influences	
3. Effects of external influences	
4. Models of consumer and industrial buying	
5. The decision making process	
TEXT BOOK	
1. Ramanuj Majumdar, Consumer Behaviour - Insights from Indian Market, PHI, 2023.	
REFERENCES:	
1. Suja R.Nair, Consumer Behaviour & Marketing Research, Himalaya Publishing, 2022	
2. Leon G.Schiffman and Leslie LasarKanuk, Consumer Behavior, Pearson Education, India, ninth edition, 2023.	
3. Barry J.B., Eric G.H., Ashutosh M., Consumer Behaviour - A South Asian Perspective, Cengage Learning, 2022.	
4. Paul Peter et al., Consumer Behavior and Marketing Strategy, Tata McGraw Hill, Indian Edition, 22th Edition 2023.	



CO/PO MAPPING

CO	Program Outcomes							
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	3	3	1	1		2		
CO2	1	1			1	1		
CO3	1	1		2		1		
CO4	1	2				1	2	
CO5	2	2	1			3		
Avg	1.6	1.8	1	1.5	1	1.6	2	

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S.NO	COURSE CODE	COURSE NAME	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
Specialization: Analytics and Systems (5)								
	PPMB3PE13	Data Mining for Business Intelligence	PE	3	-	-	3	3
	PPMB3PE14	Deep Learning and Artificial Intelligence	PE	3	-	-	3	3
	PPMB3PE15	Enterprise Resource Planning	PE	3	-	-	3	3
	PPMB3PE16	Python for Data Science	PE	3	-	-	3	3
	PPMB3PE17	Social Media Web Analytics	PE	3	-	-	3	3

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PPMB3PE13	DATA MINING AND BUSINESS INTELLIGENCE	L T E C 3 0 3
COURSE OBJECTIVE		
This course helps students learn data mining techniques and how to apply them practically		
UNIT I INTRODUCTION		
Data mining, Text mining, Web mining, Spatial mining, Process mining, Data ware house and datamarts.		
UNIT II DATA MINING PROCESS		
Datamining process – KDD, CRISP-DM, SEMMA and Domain-Specific, Classification and Prediction performance measures -RSME, MAD, MAP, MAPE, Confusion matrix, Receiver Operating Characteristic curve & AUC; Validation Techniques - hold-out, k-fold crossvalidation, LOOCV, random subsampling and bootstrapping		
UNIT III PREDICTION TECHNIQUES		
Data visualization, Time series – ARIMA, Winter Holts, Vector Autoregressive analysis, Multivariate regression analysis.		
UNIT IV CLASSIFICATION AND CLUSTERING TECHNIQUES		
Classification- Decision trees, k nearest neighbour, Logistic regression, Discriminant analysis; Clustering; Market basket analysis		
UNIT V MACHINE LEARNING AND AI		
Genetic algorithms, Neural network, Fuzzy logic, Support Vector Machine, Optimization techniques- Ant Colony, Particle Swarm, DEA		
TOTAL: 45 PERIODS		
COURSE OUTCOMES:		
<ol style="list-style-type: none"> 1. To apply data mining techniques to analyze complex datasets and discover meaningful patterns & trends. 2. To select the appropriate data mining processes for specific tasks based on their requirements and challenges. 3. To evaluate the performance of data mining models using relevant evaluation measures to assess their accuracy and effectiveness. 4. To use prediction techniques to make accurate forecasts and predictions in different domains. 5. To apply classification techniques to accurately categorize and classify data, supporting decision making processes 		
TEXTBOOKS:		
1. Data Mining for Business Intelligence Peter C. Bruce Galit Shmueli, Nitin R. Patel, 5th edition, Wiley-2021.		
REFERENCES:		

1. Data Mining: Concepts and Techniques (2020), Jiawei Han 1st edition, Oxford University Press
2. Business Intelligence: Data Mining and Optimization for Decision Making, students edition, Wiley

WEBSITE REFERENCE:

1. bootcamp.rutgers.edu/blog
2. www.investopedia.com

NPTEL/ SWAYAM/ MOOC REFERENCE:

1. NPTEL: Business Analytics and Data Modelling, Prof. Gaurav Dixit, IIT Roorkee.
2. SWAYAM: Data Mining, Prof. Pabitra Mitra, IIT Kharagpur.

CO PO MAPPING

CO	PO							
	1	2	3	4	5	6	7	8
1	3	3	2	2	2	2	2	2
2	3	3	2	2	2	2	3	3
3	3	3	2	1	1	1	1	3
4	2	3	2	1	1	1	2	3
5	3	2	1	1	1	1	3	3
Avg	2.8	2.8	1.8	1.4	1.4	1.4	2.2	2.8

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COURSE OBJECTIVE

The objective of this course is to provide students with a comprehensive understanding of deep models, intelligent systems, knowledge representation, and their applications in the field of artificial intelligence.

UNIT I: DEEP NETWORKS

Deep Networks: Modern Practices: Deep Forward Networks: Example: Learning XOR - Gradient Based Learning - Hidden Units - Architecture Design - Regularization for Deep Learning.

UNIT II MODELS

Optimization for Training Deep Models: How Learning Differs from Pure Optimization - Challenges in Neural Network Optimization - Basic Algorithms - Parameter Initialization Strategies - Algorithms with Adaptive Learning Rates - Approximate Second-Order Methods - Optimization Strategies and Meta-Algorithms.

UNIT III INTELLIGENT SYSTEM

Introduction to Artificial Intelligence: Intelligent Systems - Foundations of AI - Applications - Tic-Tac-Toe Game Playing - Problem Solving: State-Space Search and Control Strategies: Introduction General Problem Solving - Exhaustive Searches - Heuristic Search Techniques.

UNIT IV KNOWLEDGE REPRESENTATION

Advanced Problem-Solving Paradigm: Planning: Introduction - Types of Planning Systems - Knowledge Representation: Introduction - Approaches to Knowledge Representation - Knowledge Representation using Semantic Network - Knowledge Representation using Frames.

UNIT V APPLICATIONS

Expert Systems and Applications: Blackboard Systems - Truth Maintenance Systems - Application of Expert Systems - Machine-Learning Paradigms: Machine-Learning Systems - Supervised and Unsupervised Learnings.

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

1. Apply modern practices and techniques in deep networks, including gradient-based learning, hidden units, architecture design, and regularization, to effectively solve complex problems
- 2: Employ optimization strategies, such as parameter initialization, adaptive learning rates, and approximate second-order methods, to optimize deep models and improve their performance.
- 3: Demonstrate proficiency in utilizing problem-solving techniques, such as state-space search and control strategies, to develop intelligent systems that can address real-world challenges.
- 4: Utilize various approaches to knowledge representation, such as semantic networks and frames, to effectively model and represent knowledge in intelligent systems.
- 5: Analyze, design, and implement expert systems, including blackboard systems and truth maintenance systems, to solve domain-specific problems in diverse fields.

TEXTBOOKS:

Ian Good fellow, Yoshua Bengio, Aaron Courville, "Deep Learning", MIT Press, 2023.

REFERENCES:

1. LiDeng and DongYu, "Deep Learning Methods and Applications", Foundations Signal Processing, 2022.
2. Yoshua Bengio, "Learning Deep Architectures for AI", Foundations in Machine Learning, 2021.
3. Saroj Kaushik, "Artificial Intelligence", Cengage Learning India Pvt.Ltd, 2020.
4. Deepak Khemani, "A First Course in Artificial Intelligence", McGraw Hill, New Delhi, 2020.
5. Elaine Rich, Kevin Night, Shivashankar B Nair, "Artificial Intelligence" 3rd Edition, McGraw Hill, 2008.

WEBSITE REFERENCE:

1. www.deeplearning.ai
2. www.AI.org
3. www.coursefast.ai

NPTEL/ SWAYAM/ MOOC REFERENCE:

1. NPTEL: Deep Learning, Prof. Prabir Kumar Biswas, IIT Kharagpur
2. NPTEL: AI, Prof. Mitesh. M. Khapra, IIT Madras
3. SWAYAM : Machine Learning And Deep Learning - Fundamentals And Applications, Prof. M. K. Bhuyan, IIT Guwahati

CO PO MAPPING

CO	PO							
	1	2	3	4	5	6	7	8
1	3	3	2	3	3	2	1	3
2	3	3	3	3	3	3	2	3
3	3	3	2	3	3	2	2	3
4	3	3	2	3	3	2	1	3
5	3	2	1	3	2	2	1	3
Avg	3	3	2	2	3	3	2	3

COURSE OBJECTIVE

To develop students with the necessary knowledge and skills to effectively analyze, select, implement, and integrate ERP systems in various business contexts

UNIT I INTRODUCTION

ERP Introduction - Origin, Evolution, Structure and Benefits - Conceptual Model of ERP- Scenario of ERP in India - Various Modules of ERP - Advantage of ERP

UNIT II DATA MANAGEMENT

Advancement of IT and Impact on organizations data management: Data warehousing, Data Mining, Analytic Processing (OLAP), Product Life Cycle Management (PLM). ERP Marketplace and Market Dynamics: Market Overview, Marketplace Dynamics, and The changing ERP Market

UNIT III MARKETPLACE DYNAMICS

ERP Marketplace and Marketplace Dynamics: Market Overview, Marketplace Dynamics, and The changing Market. ERP- Functional Modules: Introduction, Functional Modules of ERP Software Integration of Supply chain and Customer Relationship Applications

UNIT IV ERP IMPLEMENTATION

ERP- Functional Modules: Introduction, Functional Modules of ERP Software Integration of ERP, Supply chain and Customer Relationship Applications. ERP Implementation: Business Process and mapping, ERP Implementation Life Cycle, Role of Consultants, Vendors and Employees. Critical Success Factors: Guiding.

UNIT V TRENDS

Selection and Evaluation of ERP, Strategies and CSF for Successful ERP Implementation, Causes of ERP Failure. Practical Module: ERP & E-Commerce, Future Directives- in ERP, Integrating ERP into organizational culture. Using an open source ERP tool for orienting students to ERP.

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

On completion of this course, students will be able to:
Understand the concepts and benefits of ERP systems, and their relevance in the Indian business environment.

CO1: Gain knowledge about advancements in information technology and their impact on data management, including data warehousing, data mining, OLAP, and PLM.

CO2: Recognize the dynamics of the ERP marketplace, including market trends and changes in ERP systems.

CO3: Comprehend the functional modules of ERP software and their applications in supply chain management and customer relationship management.

CO4: Evaluate critical success factors and strategies for successful ERP implementation, including business process mapping, the role of consultants, vendors, and employees. Students will also be aware of potential causes of ERP failure and approaches for integrating ERP into organizational culture.

TEXTBOOKS :

1. Dr. Ashim Raj Singla, Enterprise Resource Planning 2nd Edition, Cengage Learning, 2019.

REFERENCES:

1. Enterprise Resource Planning (ERP) Text and Case Studies, Mr. C.S.V. Murthy, Himalaya Publication, 2008.
2. David L. Olson, Managerial Issues of Enterprise Resource Planning Systems, McGraw Hill, 2008.
3. F. Robert Jacobs and D. Clay Whybark, Why ERP? A primer on SAP Implementation, McGraw Hill, 2000.
4. Dr. Ashim Raj Singla, Enterprise Resource Planning 2nd Edition, Cengage

WEBSITE REFERENCE:

- <https://www.netsuite.com/portal/resource/articles/erp/what-is-erp.shtml>
<https://community.sap.com/t5/enterprise-resource-planning-q-a/how-to-add-web-references/qaq-p/7440336>

NPTel/SWAYAM/ MOOC REFERENCE:

- NPTel: Enterprise Resource planning: Dr. Indra Deep Singh
<http://www.digimat.in/nptel/courses/video/110105083/L10.html>

PO MAPPING

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8
CO 1	3	3					2	
CO 2					3	3	2	
CO 3	2	3					3	
CO 4	3	2					3	3
CO 5			3	2	3		2	3
Avg	2.6	2.6	3	2	3	3	2.4	2

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COURSE OBJECTIVE

To empower students with the ability to effectively apply Python for business analytics, enabling them to derive valuable insights and make data-driven decisions across diverse domains.

UNIT I: INTRODUCTION TO DATA SCIENCE

Introduction to Business Analytics - Evolution of Business Data and Analytics timeline – Types of Analytics - Marketing Analytics Applications - Summarizing & Reporting Marketing Data using Excel

UNIT II VISUALIZING BUSINESS DATA USING TABLEAU

Visualizations Using Python & R - Understanding the Metrics across domains -Developing Metrics for Metric Creation.

UNIT III BUSINESS MODELS & STRATEGIES

Business Models - Marketing Engineering – Segmentation Analytics – Clustering Algorithms - Position Analysis - Data Mining applications

UNIT IV MARKETING MIX ANALYTICS

New Product development decisions - Pricing the Product - Forecasting the Sales – Allocating the Retail & Sales Resource – Consumer Attribution Modelling Methods.

UNIT V MARKETING MIX ANALYTICS APPLICATIONS

Customer Churn Modelling – Purchase Behaviour Prediction Models- social media Listening and Sentimental Analysis – Market Basket Analysis – RFM Analysis – Recommender Systems development.

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

After studying this course,

1. Acquire a strong command of Python for conducting business analytics tasks, encompassing data manipulation, analysis, and visualization.
2. Learn to employ Python libraries to craft compelling and informative visual representations of data, empowering them to effectively convey insights to stakeholders.
3. Gain practical experience in utilizing Python libraries to implement advanced analytics methods, such as segmentation analysis, clustering, sentiment analysis, and market basket analysis.
4. Acquire the skills to analyze business data using Python, extract valuable insights, and leverage them to make well-informed decisions across various domains, including marketing, pricing, forecasting, and resource allocation.
5. Engage in hands-on projects and case studies that simulate real-world scenarios, enabling them to apply Python and business analytics techniques to solve complex problems and generate actionable recommendations.

TEXTBOOKS:

1. Data Science with Python Sarat Kr.Chettri Notion Press (18 November 2021); edition

REFERENCES:

1. Business Analytics", Dinesh Kumar U Wiley India, 1st Edition, 2017.
2. Marketing Metrics: The Definitive Guide to Measuring Marketing Performance", Paul W Farris, Pearson Education, 2nd Edition, 2010
3. Marketing Analytics – Data Driven Techniques with Microsoft Excel", Wayne L Winston, Wiley Publications, 1st Edition, 2015.
4. Sridhar S, Indumathi J and Hariharan V M, "Python Programming", Pearson, 2023.

WEBSITE REFERENCE:

1. <https://www.classcentral.com/course/swayam-programming-in-python-95322>
2. <https://www.guvi.in/courses/tamil/programming/python/>

NPTEL/ SWAYAM/ MOOC REFERENCE:

1. NPTEL: Data Analytics with Python , Prof A.Ramesh, IIT Roorkee
2. NPTEL: Applied Linear Algebra for Signal Processing, Data Analytics, and Machine Learning, IIT Kanpur
3. NPTEL Introduction to Data Analytics, IIT Madras

CO PO MAPPING

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8
CO 1		3				2		
CO 2	3	3			2			
CO 3				2		3		
CO 4				3	2	2		
CO 5		3				3		
Avg	1	3		2.5	2	2.5		

COURSE OBJECTIVE:

- To showcase the opportunities that exist today to leverage the power of the web and social media

UNIT I INTRODUCTION

Evolution of online communities - History and Evolution of Social Media- Social Media vs. traditional media - Social Media Audience and Goals for using Social Media - Understanding Social Media: Strong and weak ties – Influencers - How ideas travel – Viralness - Social theory and social media - technological determinism in popular discourse on social media technologies.

UNIT II COMMUNITY BUILDING AND MANAGEMENT

Science of Social Media - Keys to Community Building - Promoting Social Media Pages- Linking Social Media Accounts-The Viral Impact of Social Media-Digital PR-Encourage Positive Chatter Social Media - Identity in social media: formation of identities, communities, activist movements, consumer markets - Social Media as business.

UNIT III SOCIAL MEDIA POLICIES AND MEASUREMENTS

Social Media Policies-Etiquette, Privacy- ethical problems posed by emerging social media technologies - The road ahead in social media- The Basics of Tracking Social Media - social media analytics- Insights Gained From Social Media- Customized Campaign Performance Reports - Observations of social media use.

UNIT IV WEB ANALYTICS

Web Analytics - Present and Future, Data Collection - Importance and Options, Overview of Qualitative Analysis, Business Analysis, KPI and Planning, Critical Components of a Successful Web Analytics Strategy, Web Analytics Fundamentals, Concepts, Proposals & Reports, Web Data Analysis.

UNIT V SEARCH ANALYTICS

Search engine optimization (SEO), non-linear media consumption, user engagement, user generated content, web traffic analysis, navigation, usability, eye tracking, online security, online ethics, content management system, data visualization, RSS feeds, Mobile platforms, User centered design Understanding search behaviors.

TOTAL: 45 PER**COURSE OUTCOMES:**

1. The students will be able to enhance the social media skills.
2. The students will be able to develop a mass communication strategy and guide campaigns.
3. To get an idea of social media policies.
4. Understand the fundamentals and concepts of web analytics
5. How to effectively use the resulting insights to support website design decisions, campaign optimisation, search analytics, etc.

TEXT BOOK:

1. K. M. Shrivastava, Social Media in Business and Governance, Sterling Publishers Private Limited, 2023.

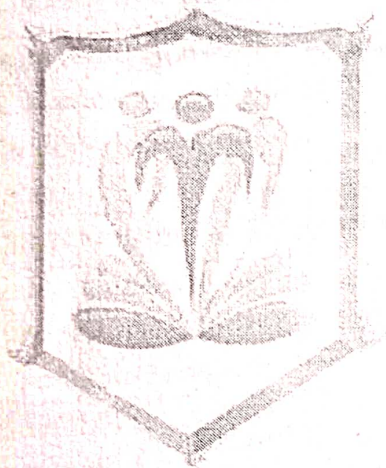
REFERENCES:

1. Christian Fuchs, Social Media a critical introduction, SAGE Publications Ltd, 2023
2. Bittu Kumar, Social Networking, V & S Publishers, 2023
3. Avinash Kaushik, Web Analytics - An Hour a Day, Wiley Publishing, 2021
4. Ric T. Peterson, Web Analytics Demystified, Celilo Group Media and Café Press, 2021
5. Takeshi Moriguchi, Web Analytics Consultant Official Textbook, 7th Edition, 2021

CO/ PO MAPPING

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1		1		1	2	3		2
CO2		1	2	1	2	3		2
CO3	3	2		1		3		2
CO4	2	3		1		3		2
CO5		3	2	1	3	3		2
Ave.	1	2	0.8	1	1.4	3		2

Q 1



PMC
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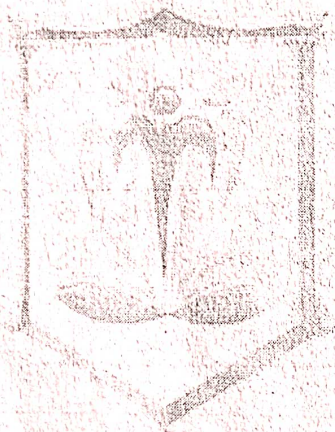
S.N O.	COURSE CODE	COURSE NAME	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS
				L	T	P	
Specialization: Financial Management (7)							
	PPMB3PE18	Security Analysis and Portfolio Management	PE	3	-	-	3
	PPMB3PE19	Banking and Financial Services Management	PE	3	-	-	3
	PPMB3PE20	Financial Derivatives	PE	3	-	-	3
	PPMB3PE21	International Finance	PE	3	-	-	3
	PPMB3PE22	Financial Modeling	PE	3	-	-	3
	PPMB3PE23	Corporate Finance	PE	3	-	-	3
	PPMB3PE24	Financial Markets	PE	3	-	-	3



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PPMB3PE18	SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT	LTPC 3003
COURSE OBJECTIVE		
Enables student to understand the nuances of stock market operations and the techniques involved in deciding upon purchase or sale of securities.		
UNIT I INTRODUCTION		9
Introduction to investing – Investment vs speculation, investment process, categories. Securities Markets – Functions of markets, primary and secondary markets, Over the Counter Markets and Size of Order. Risk and Return – returns elements, measurement, scientific predicting, Capital Allocation. Introduction to Bonds – Types and markets.		
UNIT II FUNDAMENTAL ANALYSIS		9
Economic Analysis: Economic forecasting and stock Investment Decisions – Forecasting techniques. Industry Analysis: Industry classification, Industry life cycle. Company Analysis: Measuring Earnings and Forecasting Earnings, Applied Valuation Techniques.		
UNIT III TECHNICAL ANALYSIS		9
Introduction to Technical Analysis: Market Indicators, Types of Charts, Moving Averages. Efficient Market theory: Random Walk, Efficient Market Hypothesis, Empirical tests of semi- strong form.		
UNIT IV PORTFOLIO CONSTRUCTION AND SELECTION		9
Portfolio analysis: Need and effect of combining securities, Minimum Variance Portfolio, Optimal Risk portfolio. Index Models: single factor and single index models, Treynor-Black and Multifactor Models. Illustration of Portfolio Construction.		
UNIT V CAPITAL MARKET THEORY (CMT) AND MANAGED PORTFOLIOS		9
CMT assumptions - Capital Asset Pricing model - Lending and borrowing - CML - SML - Pricing with CAPM - Arbitrage pricing theory- Portfolio Evaluation - Sharpe's index Treynor's index, Jensen's index – Mutual Funds – Portfolio Revision.		
TOTAL: 45 PERIODS		
COURSE OUTCOMES:		
At the end of the course the students would be able to		
CO1: Understand, Analyse and evaluate investment alternatives.		
CO2: Relate, Analyse the industry and evaluate the fundamentals of the company.		
CO3: Interpret, apply and estimate the secondary market parameters through technical analysis.		
CO4: Compare, build and construct an efficient portfolio		
CO5: Understand, apply the CAPM for Portfolios.		
TEXT BOOKS:		

Q.



REFERENCES

1. Prasanna Chandra, Investment analysis and Portfolio Management, McGraw Hill, Sixthe edition, 2021.
2. Frank K. Reilly & Keith C. Brown, Investment Analysis and Portfolio Management, Cengage Learning, 9th edition, 2011.
3. S. Kevin, Securities Analysis and Portfolio Management, PHI Learning, 2015.
4. V.A. Avadhani, Securities Analysis and Portfolio Management, Himalaya Publishing House, 2013.
5. Pandian Punithavathy, Securities Analysis and Portfolio Management, 2nd edition, Vikas Publishing, 2013.

WEB REFERENCES:

1. www.sapm.com
2. www.nseindia.com

NPTEL:

1. Security Analysis And Portfolio Management Prof Jp Singh-Dept Of Management Studies IIT Roorkee

CO PO MAPPING

CO	PO							
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
1	3	3				3	2	1
2	3	3			1	3	3	1
3	3	3		1	1	3	3	1
4	3	3	2	1	1	3	3	1
5	3	3	1		1	3	3	1
Avg.	3	3	0.6	0.4	0.8	3	2.8	1

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COURSE OBJECTIVES :

- Grasp how banks raise their sources and how they deploy it and manage the associated risks to Understand about other asset based and fund based financial services in India

UNIT I INTRODUCTION TO INDIAN BANKING SYSTEM AND PERFORMANCE EVALUATION

Overview of Indian Banking system – Structure – Functions – Key Regulations in Indian Banking sector – RBI Act, 1934/ 2006 – Banking Regulation Act, 1949– Negotiable Instruments Act 1881/ 2017 – Provisions Relating to CRR – Provision for NPA's - Overview of Financial Statements of banks Balance Sheet – Income Statement - CAMEL

UNIT II MANAGING BANK FUNDS/ PRODUCTS & RISK MANAGEMENT

Capital Adequacy – Deposit and Non-deposit sources – Designing deposit schemes and pricing deposit sources – loan management – Investment Management – Asset and Liability Management – Financial Distress – Signal to borrowers – Prediction Models – Risk Management – Interest rate Forex – Credit market – operational and solvency risks – NPA's Current issues on NPA's – M&A of banks into securities market Current issues on NPA's – M&A's of banks into securities market

UNIT III DEVELOPMENT IN BANKING TECHNOLOGY

Payment system in India – paper based – e payment – electronic banking – plastic money – e-money – forecasting of cash demand at ATM's – The Information Technology Act, 2000 in India RBI's Financial Sector Technology vision document – security threats in e-banking & RBI's Initiative

UNIT IV ASSET BASED FINANCIAL SERVICES

Introduction – Need for Financial Services – Financial Services Market in India – NBFC – RBI framework and act for NBFC – Leasing and Hire Purchase – Financial evaluation – underwriting – mutual funds

UNIT V INSURANCE AND OTHER FEE BASED FINANCIAL SERVICES

Insurance Act, 1938 – IRDA – Regulations – Products and services – Venture Capital Financing – Bill discounting – factoring – Merchant Banking – Role of SEBI

TOTAL :45 PERIODS**COURSE OUTCOMES:**

1. Understand the overall structure and functions of Indian Financial System
2. Gain knowledge about regulations governing the Indian Banking system
3. Price various types of loans proposed by banks to various prospective borrowers with different risk profiles and evaluate the performance of banks
4. Familiarise the students with the concept of e-banking
5. In-depth understanding of fee-based and fund-based financial services in India

TEXT BOOK

1. Padmalatha Suresh and Justin Paul, "Management of Banking and Financial Services, Pearson, Delhi, 2022.

REFERENCES:

1. Meera Sharma, "Management of Financial Institutions – with emphasis on Bank and Risk Management", PHI Learning Pvt. Ltd., New Delhi 2021
2. Peter S. Rose and Sylvia C. and Hudgins, "Bank Management and Financial Services", Tata McGraw Hill, New Delhi, 2022

CO/ PO MAPPING

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1		1						
CO2		1	2	1	2	3		2
CO3	3	2		1	2	3		2
CO4	2	3		1		3		2
CO5		3	2	1		3		2
Ave.	1	2	0.8	1	3	3		2
					1.4	3		2

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COURSE OBJECTIVE

To enable students to understand the nuances and the basic operational mechanisms in Derivatives

UNIT I INTRODUCTION

Derivatives – Definition – Types – Forward Contracts – Futures Contracts – Options – Swaps – Differences between Cash and Future Markets – Types of Traders – OTC and Exchange Traded Securities – Types of Settlement – Uses and Advantages of Derivatives – Risks in Derivative

UNIT II FUTURES CONTRACT

Specifications of Futures Contract - Margin Requirements – Marking to Market – Hedging using Futures – Types of Futures Contracts – Securities, Stock Index Futures, Currencies and Commodities – Delivery Options – Relationship between Future Prices, Forward Prices and Spot Prices.

UNIT III OPTIONS

Definition – Exchange Traded Options, OTC Options – Specifications of Options – Call and Put Options – American and European Options – Intrinsic Value and Time Value of Options – Option payoff, options on Securities, Stock Indices, Currencies and Futures – Options pricing models – Differences between future and Option contracts

UNIT IV SWAPS

Definition of SWAP – Interest Rate SWAP – Currency SWAP – Role of Financial Intermediary – Warehousing – Valuation of Interest rate SWAPs and Currency SWAPs Bonds and FRNs – Credit Risk

UNIT V DERIVATIVES IN INDIA

Evolution of Derivatives Market in India – Regulations - framework – Exchange Trading in Derivatives – Commodity Futures – Contract Terminology and Specifications for Stock Options and Index Options in NSE – Contract Terminology and specifications for stock futures and Index futures in NSE – Contract Terminology and Specifications for Interest Rate Derivatives

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

1. Possess good skills in hedging risks using derivatives
2. Understand about future contract and options
3. Learning in depth about options and swaps
4. Knowing about the evolution of derivative markets
5. Develop in depth knowledge about stock options and index futures in NSE

TEXTBOOKS:

1. John.C.Hull, Options, Futures and other Derivative Securities", PHI Learning, 9th Edition, 2022

REFERENCES:

- 1.Hull, J.C. and Basu, S., Options, Futures and Other Derivatives, Pearson, 10th Edition, 2018
- 2.Chance, D. and Brooks, R., Derivatives and Risk Management Basics, SouthWestern, 10th edition, 2015
- 3.S.L. Gupta, Financial Derivatives, Theory, Concepts and Problems, PHI Learning 2nd edition, 2017
- 4.Patrick Boyle, Jesse McDougall, Trading and Pricing Financial Derivatives, DeGruyter, A Guide to Future, Options and Swaps, 2nd Edition, Publishers, 2018
- 5.James A. Overdahl, Financial Derivatives, Wiley India Pvt. Ltd, 3rd Edition, 2014
- 6.Keith Redhead, Financial Derivatives – An Introduction to Futures, Forwards, Options and SWAPs, PHI Learning, 2011.
- 7.Stulz, Risk Management and Derivatives, Cengage Learning, 2nd Edition, 2011.
- 8.Varma, Derivatives and Risk Management, 2nd Edition, 2011.

WEBSITE REFERENCE:

1. <https://www.investopedia.com/terms/d/derivative.asp>
2. <https://www.imf.org/external/bopage/pdf/98-1-20.pdf>
3. https://www.ebcwebstore.com/product/financial-derivatives-theory-concepts-problems?products_id=99097472

NPTEL/ SWAYAM/ MOOC REFERENCE:

- 1.NPTEL: Financial Departments & Risk Management Prof J P SINGH IIT ROORKEE
- 2.NPTEL:Commodity derivatives and Risk Management Prof.Prabina Rajab III Kharagpur

CO PO MAPPING

CO	PO							
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
1	3	3		2		3	2	1
2	3	3		2		3	2	1
3	3	3		2		3	2	1
4	3	3		2		3	2	1
5	3	3		2		3	2	1
Avg.	3	3		2		3	2	1

PPMB3PE21	INTERNATIONAL FINANCE	L.T. 30
COURSE OBJECTIVE		
The objective of this course is to understand the International Financial Environment, Management Risks involved.		
UNIT I INTRODUCTION TO INTERNATIONAL FINANCE		
Introduction to international finance: Introduction, Meaning, Nature, scope, Importance, Gold Standard Bretton Woods system, Exchange rate regimes, fixed and floating exchange rates.		
UNIT II FOREIGN EXCHANGE MARKET		
Foreign exchange market: Function and Structure of the Forex markets, major participants, types of transactions and settlements, Foreign exchange quotations, process of arbitrage		
UNIT III MANAGEMENT OF FOREIGN EXCHANGE		
Management of foreign exchange exposure and risk: Types of Exposure, Foreign Currency Exposure, Economic Exposure, Operations exposure, Interest rate exposure. Theories - Purchase Power Parity, Interest Rate Parity – International Fisher Effect.		
UNIT IV CROSS BORDER INVESTMENT DECISIONS		
Cross-border investment decisions: Capital budgeting, Approaches to Project Evaluation, Risk in Cross-border Investment Decisions, Corporate Risk in Investment Decisions. Financing Decisions of MNC		
UNIT V MULTINATIONAL FINANCIAL INSTITUTIONS		
Multinational financing institutions and contemporary issues: The International Bank for Reconstruction and Development, the International Development Association, The International Finance Corporation, International monetary fund, Export and Import financing.		
TOTAL: 45 PERIODS		
COURSE OUTCOMES:		
<ol style="list-style-type: none"> 1. Understand and explain the concept of International Finance 2. Recall and describe the functions of Foreign Exchange Market 3. Interpret, apply and estimate the management of foreign exchange exposure and risk involved in it. 4. Understand, analyse and evaluate the cross-border investment decisions 5. Recall and analyse multinational financing institutions and contemporary issues 		
TEXTBOOKS:		
Apte, P. G., & Kapshe, S., International Financial Management, McGraw-Hill Education, 2022.		

REFERENCES:

1. Eun, C.S., & Resnick, B.G., International Financial, Tata McGraw-Hill Education, 4 Edition, 2010
2. V. A. Avadhani, International Financial Management, Second Edition, HPH, 2011
3. Eiteman & Stonchill, "Multinational Business Finance", 12th Edition, Pearson, 2010
4. V.K. Bhalla. "International Financial Management for the Multinational Firm", 4th Edition, 2014
5. Alan C. Shapiro, Multinational Financial Management, PHI Learning, 5th Edition, 2010.
6. Madura, J., International financial management. Cengage Learning, 202

WEBSITE REFERENCE:

1. www.ifc.org
2. www.iif.com
3. www.ifsc.gov.in

NPTEL/ SWAYAM/ MOOC REFERENCE:

1. NPTEL: International Finance, Dr.A.S.K Mishra , IIT Kharagpur.
2. NPTEL: International Financial Environment, Dr.Arun.K.Mishra & Dr.Prabina Rajib, IIT Kharagpur
3. SWAYAM : Online course – International Financial Business, Dr. Rajupur Singh, IIT.

CO PO MAPPING

CO	PO							
	1	2	3	4	5	6	7	8
1		2						1
2		2				2	2	1
3		2				2	2	1
4		2					2	1
5		2				2	2	1
Avg		2				1.2	1.6	1

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PPMB3PE22	FINANCIAL MODELING	LTP 3 0 1
COURSE OBJECTIVE		
Enables students to build financial models by including various fields of study viz Financial Management and Corporate, Portfolio and Derivative Finance		
UNIT I INTRODUCTION TO FINANCIAL MODELLING & BUILT-IN FUNCTIONS IN SPREADSHEETS		
Introduction to Financial Modelling - Need for Financial Modelling- Steps for effective financial modelling - Introduction to Time value of money & Lookup array functions: FV, PV, PMT, RATE, NPER, VLOOKUP, IF, COUNTIF, etc - Time value of Money Models: EMI with Single & Two Interest rates – Loan amortization modeling - Debenture redemption modeling		
UNIT II BOND & EQUITY SHARE VALUATION MODELLING		
Bond valuation – Yield to Maturity (YTM): Rate method Vs IRR method - Flexi Bond and Strip Bond YTM Modelling - Bond redemption modelling - Equity share valuation: Multiple growth rate value modelling with and without growth rates		
UNIT III CORPORATE FINANCIAL MODELLING		
Altman Z Score Bankruptcy Modelling - Indifference point modelling – Financial Break even modelling - Corporate valuation modelling (Two stage growth) - Business Modelling for capital budget evaluation: Payback period, NPV, IRR, and MIRR		
UNIT IV PORTFOLIO MODELLING		
Risk, Beta and Annualised Return – Security Market Line Modelling – Portfolio risk calculation (Equity Proportions) - Portfolio risk optimisation (varying proportions) - Portfolio construction modelling		
UNIT V DERIVATIVE MODELLING		
Option pay off modelling: Long and Short Call & Put options - Option pricing modeling (B-S Model)- Optimal Hedge Contract modelling		
TOTAL: 45 PERIODS		
COURSE OUTCOMES:		
<ol style="list-style-type: none"> 1. To identify and apply the relevance of financial models for various corporate finance purposes 2. To understand, analyse and evaluate the securities by using the modelling techniques 3. To recall, apply and appraise efficient financial budgets and the equity value of a company applying various methods 4. To interpret, apply and assess the evaluation of securities through the tools and techniques portfolio models. 5. To understand, analyse and appraise the aptitude of analyzing the investment decision-based derivatives 		
TEXTBOOKS:		
1.Chandan Sen Gupta, Financial Analysis and Modelling – Using Excel and VBA, Wiley Publications House, 2020		

REFERENCES:

1. Ruzhbeh J Bodanwala, Financial Management using Excel Spreadsheet, Taxman Allied Services Pvt Ltd, New Delhi, 3rd Edition, 2019.
2. Michael Rees (2018), Principles of Financial Modelling: Model Design and Best Practices Using Excel and VBA (The Wiley Finance Series), 1st Edition, Wiley
3. Danielle Stein Fairhurst (2017), Financial Modeling in Excel for Dummies, 1st Edition, Wiley.

WEBSITE REFERENCE:

1. corporatefinanceinstitute.com
2. financial-modeling.com

NPTEL/ SWAYAM/ MOOC REFERENCE:

1. NPTEL: Financial statements analysis and Reporting, Prof.A.K.Sharma, IIT Roorkee.
2. SWAYAM : Financial Management, Prof. CA Amita Bissa , Jai Narain Vyas University, Jodhpur.

CO PO MAPPING

CO	PO							
	1	2	3	4	5	6	7	8
1	3	3				2	2	
2	3	3				2	2	
3	3	3				2	2	
4	3	3				2	2	
5	3	3				2	2	
Avg	3	3				2	2	

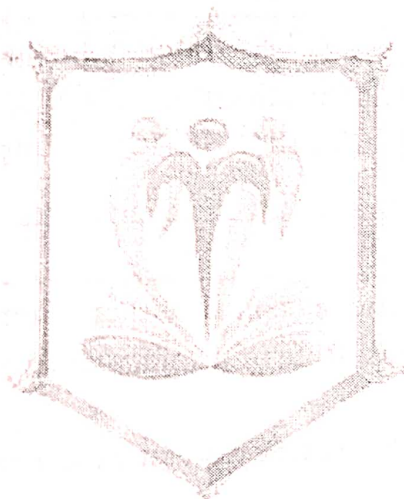
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PPMB3PE23	CORPORATE FINANCE	L T P C 3 0 0 3
COURSE OBJECTIVE		
<ul style="list-style-type: none"> • Student will acquire Nuances involved in short term. • Corporate financing • Good ethical practices 		
UNIT I: INDUSTRIAL FINANCE		9
Indian Capital Market – Basic problem of Industrial Finance in India. Equity – Debenture financing- Guidelines from SEBI, advantages and disadvantages and cost of various sources of Finance - Finance from international sources, financing of exports – role of EXIM bank and commercial banks.– Finance for rehabilitation of sick units		
UNIT II SHORT TERM-WORKING CAPITAL FINANCE		6
Estimating working capital requirements – Approach adopted by Commercial banks, Commercial paper- Public deposits and inter corporate investments		
UNIT III - ADVANCED FINANCIAL MANAGEMENT		12
Appraisal of Risky Investments - certainty equivalent of cash flows and risk adjusted discount rate - risk analysis in the context of DCF methods using Probability information - nature of cash flows - Sensitivity analysis - Simulation and investment decision, Decision tree approach in investment decisions.		
UNIT IV - FINANCING DECISION		10
Simulation and financing decision - cash inadequacy and cash insolvency - determining the probability of cash insolvency- Financing decision in the Context of option pricing model and agency costs- Interdependence of investment- financing and Dividend decisions.		
UNIT - V: CORPORATE GOVERNANCE		8
Corporate Governance - SEBI Guidelines- Corporate Disasters and Ethics-Corporate Social Responsibility- Stakeholders and Ethics- Ethics, Managers and Professionalism.		
TOTAL: 45 PERIODS		
COURSE OUTCOMES:		
<ol style="list-style-type: none"> 1. Understand the fundamental legal principles in developing various contracts and commercial laws in the business world 2. Identify the common forms of business associations and elements of Corporate Governance 3. Develop insights regarding the laws related to industrial environment 4. Ability to understand the fundamentals of corporate tax and GST 5. Understand the role of consumer rights, IPR and cyber laws in the modern business environment 		
TEXTBOOK		
1. Richard A.Brealey, Stewart C.Myers and Mohanthy, Principles of Corporate Finance, Tata McGraw Hill 9th Edition, 2011		
REFERENCES		
<ol style="list-style-type: none"> 1 I.M.Pandey, Financial Management, Vikas Publishing House Pvt., Ltd., 12th Edition, 2012. 2. Brigham and Ehrhardt, Corporate Finance - A focused Approach, Cengage Learning, 2nd Edition, 2011 3. M.Y Khan, Indian Financial System, Tata McGraw Hill, 6th Edition, 2011 4. Smart, Megginson, and Gitman, Corporate Finance, 2nd Edition, 2011. 5. Krishnamurthy and Viswanathan, Advanced Corporate Finance, PHI Learning, 2011. 		

CO PO MAPPING

Mapping	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8
CO 1	2			1		2		
CO 2	3	3		1		2		
CO 3	3	3				2		
CO 4	3	3				2		
CO 5	2	3	2	2		2	2	
Avg	3	3	2	1.3		2	2	

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PPMB3PE24	FINANCIAL MARKETS	LTPC 3003
COURSE OBJECTIVE		
➤ To understand the types and functions of the various financial markets in India, its instruments and Regulations.		
UNIT I FINANCIAL MARKETS IN INDIA		
Indian financial system and markets – structure of financial markets in India –Types-Participants in financial Market – Regulatory Environment, - RBI, CCIL, Common securities market, Money market, Capital market - Governments philosophy and financial market – financial instruments		
UNIT II INDIAN CAPITAL MARKET- PRIMARY MARKET		
Primary Market - Primary market system - Types of scripts - Issue of capital: process, regulation pricing of issue, – Methods of floating new issues, Book building- Primary markets intermediaries: commercial banks, development banks, Merchant banker, issue managers, rating agencies etc – Role of primary market – Regulation of primary market.		
UNIT III SECONDARY MARKET		
Stock exchanges in India - History and development -listing - Depositories - Stock exchange mechanism: Trading, Settlement, risk management, Basics of pricing mechanism - Player and stock exchange - Regulations of stock exchanges –Role of SEBI – BSE, OTCEI, NSE, ISE, - Role of FIIs, MFs and investment bankers –Stock market indices – calculation.		
UNIT IV DEBT MARKET AND FOREX MARKET		
Bond markets in India: Government bond market and its interface with capital market - Components of bond market - G-Sec, T-Bills, Corporate Bonds, Yield conventions, Role of primary dealers, Auction Markets - Pricing of Bonds Introduction to Forex markets, basics in exchange rates theory - Forex risk exposures and basics of corporate forex risk management.		
UNIT V MUTUAL FUNDS, DERIVATIVES MARKETS AND VENTURE CAPITAL AND PRIVATE EQUITY		
Mutual funds institutions in India. Types of mutual funds, Basics in portfolio management, Metrics of performance for fund manager Introduction to Derivatives and the size of derivatives markets -Brief introduction to forwards, Option Futures And Swaps. Role of VCs and PEs in financial markets - Venture capital and Private equity		
TOTAL: 45 PERIODS		
COURSE OUTCOMES:		
<ol style="list-style-type: none"> 1. Understanding the basic concepts of the finance markets in India 2. Identify the underlying structure and functions of Indian financial markets 3. Familiarise the methods of issuing shares and the role of intermediaries in the primary market 4. Learn about the trading mechanism in stock market 5. Describe the instruments, participants and trading in debt market 		

REFERENCES:

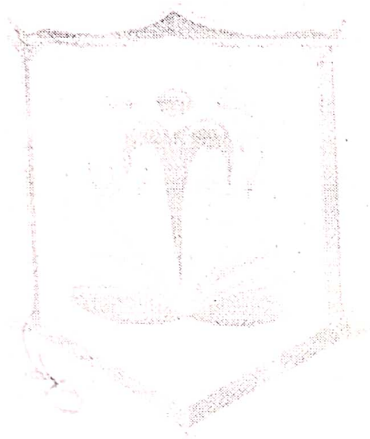
1. Christopher Viney and Peter Phillips, Financial Institutions, Instruments and Markets (2015), 8th Edition published by McGraw Hill.
2. Pathak, Bharati V., Indian Financial System: Markets, Institutions and Services, Pearson education (Singapore), New Delhi, Fourth edition, 2014.
3. Saunders, Anthonu and Cornett, Marcia Millon, Financial markets and Institutions: An Introduction to the risk management approach, McGrawHill, Irwin, New York, 3rd Edition, 2017.
4. Bhole, L.M, Financial institutions and Markets: Structure, Growth and Innovations, McGrawHill, New Delhi, Sixth edition, 2017.
5. Fabozzi, Frank J. and Modigliani, Franco, Capital Markets: Institutions and Markets, Prentice Hall of India, New Delhi, Fourth edition, 2009.

CO/ PO Mapping

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	2		3	2			3	
CO2	1		3					3
CO3			2					3
CO4		2			3			2
CO5	2			3	3			3
Avg	1.4	2	2.4	2.5	2		3	2.8

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S.N O.	COURSE CODE	COURSE NAME	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
Specialization: Operations Management (6)								
	PPMB3PE25	Logistics and Supply chain Management	PE	3	-	-	3	3
	PPMB3PE26	Quality Management	PE	3	-	-	3	3
	PPMB3PE27	Product Design and Development	PE	3	-	-	3	3
	PPMB3PE28	Supply chain Analytics	PE	3	-	-	3	3
	PPMB3PE29	Lean Manufacturing	PE	3	-	-	3	3
	PPMB3PE30	Industry 4.O	PE	3	-	-	3	3



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PPMB3PE25

LOGISTICS AND SUPPLY CHAIN MANAGEMENT

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COURSE OBJECTIVE

To treat the subject in depth by emphasizing on the advanced quantitative models. methods in logistics and supply chain management and its practical aspects and the latest developments in the field.

UNIT I INTRODUCTION

9

Supply Chain – Fundamentals, Evolution, Role in Economy, Importance, Decision Phases, Enablers & Drivers of Supply Chain Performance; Supply chain strategy; Supply Chain Performance Measures.

UNIT II SUPPLY CHAIN NETWORK

9

Distribution Network Design – Role in supply chain, Influencing factors, design options, online sales and distribution network, Distribution Strategies; Network Design in supply chain – Role, influencing factors, framework for network design, Impact of uncertainty on Network Design.

UNIT III PLANNING DEMAND, INVENTORY AND SUPPLY

9

Managing supply chain cycle inventory and safety inventory - Uncertainty in the supply chain , Analyzing impact of supplychain redesign on the inventory, Risk Pooling, Managing inventory for short life-cycle products, multiple item -multiple location inventory management; Pricing and Revenue Management.

UNIT IV LOGISTICS

9

Transportation – Role, Modes and their characteristics, infrastructure and policies, transport documentation, design options, trade-offs in transportation design, intermodal transportation. Logistics outsourcing – catalysts, benefits, value proposition. 3PL, 4PL, 5PL, 6PL; International Logistics - objectives, importance in global economy, Characteristics of global supply chains, Incoterms.

UNIT V SUPPLY CHAIN INNOVATIONS

9

Supply Chain Integration, SC process restructuring, IT in Supply Chain; Agile Supply Chains, Legible supply chain, Green Supply Chain, Reverse Supply chain; Supply chain technology trends – AI, Advanced analytics, Internet of Things, Intelligent things, conversational systems, robotic process automation, immersive technologies, Blockchain.

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

- Understand the concepts of production and its design, capacity planning and make or buy decisions and apply and adapt the concepts in managing operations.
- Understand and apply location models to complex plant location decisions and choose among the different types of layout by applying layout planning tools.
- Understand the different approaches, analyze, design and develop the work system.
- Understand, apply and evaluate the various inventory models and choose the best inventory control policy.
- Understand the quality management principles, apply the quality tools and develop a quality management system.

TEXTBOOK:

1. Nada R. Sanders, Big data driven supply chain management: A framework for implementing analytics and turning information into intelligence, Pearson Education, 2020.

REFERENCES

1. T. A. S. Vijayaraghavan, Supply Chain Analytics, Wiley, 2021
2. Kurt Y. Liu, Supply Chain Analytics, Springer, 2022
3. Jeremy Shapiro, Modeling the Supply Chain, Cengage Learning, 2nd Edition, 2006
4. Michael Watson, Sara Lewis, Peter Cacioppi, Jay Jayaraman, Supply Chain Network Design: Applying Optimization and Analytics to the Global Supply Chain, Pearson Education, 2019.
5. Muthu Mathirajan, Chandrasekharan Rajendran, Sowmya Narayanan Sadagopan, Arunachalam Ravindran, Parasuram Balasubramanian, Analytics in Operations/Supply Chain Management, I.K. International Publishing House Pvt. Ltd., 2020.

WEBSITE REFERENCE:

1. <https://www.wpi.edu/academics/study/operations-supply-chain-analytics-ms>
2. <https://core.ac.uk/download/pdf/301373764.pdf>

NPTEL/SWAYAM REFERENCE:

1. NPTEL: Dr. Mayank Aggarwal Gurukul Kangri Vishwavidyalaya, Haridwar
2. NPTEL: B Mahadevan Indian Institute Of Management Bangalore (IIMB)

SWAYAM : Prof. Inderdeep Singh IIT Roorkee.

CO PO MAPPING

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8
CO 1	1			1	1	3		
CO 2	3	3		1	1	3		
CO 3	3	3		1	1	3		
CO 4	3	3		1	1	3		
CO 5	3	3		1	1	3		
Ave.	2.6	2.4		1	1	3		

PPMB3PE26	QUALITY MANAGEMENT	L T P C
3 0 0 3		
OBJECTIVE:		
To learn the various principles and practices of Quality Management		

UNIT I	INTRODUCTION	9
Introduction – Need for quality – Evolution of quality – Definition of quality. Concept of Quality – different perspectives. Concept of total Quality – Design, inputs, process and out put– TQM frame work, benefits, awareness and obstacles. Quality – vision, mission and policy statements. Customer Focus – customer perception - customer retention. Dimensions of product and service quality. Cost of quality.		
UNIT II	QUALITY MANAGEMENT PHILOSOPHIES AND PRINCIPLES	9
Over view of the contributions of Quality Gurus-Crosby, Deming, Masaaki Imai, Feigenbaum, Ishikawa, Juran, Oakland, Shigeo Shingo, and Taguchi. Concepts of Quality circle, Japanese 5 S principles and 8D methodology.		
UNIT III	STATISTICAL PROCESS CONTROL	9
Statistical Process Control (SPC) – Meaning, Significance. construction of control charts for variables and attributes. Process capability – meaning, significance and measurement. Six sigma- concepts of process capability. Reliability concepts – definitions, reliability in series and parallel, product life characteristics curve. Total productive maintenance (TMP), Terotechnology. Business process Improvement (BPI) –principles, applications, reengineering process, benefits and limitations.		
UNIT IV	QUALITY TOOLS AND TECHNIQUES	9
Quality Tools - The seven traditional tools of quality, New management tools. Six-sigma, Bench marking, Poka-yoke, Failure Mode Effect Analysis (FMEA) – reliability, failure rate, FMEA stages, design, process and documentation. Quality Function Deployment (QFD) – ,Voice of customer, information organization, House of quality (HOQ), building a HOQ, QFD process..Taguchi-quality loss function, parameter and tolerance design, signal to noise ratio.		

UNIT V	QUALITY MANAGEMENT SYSTEMS	9
Introduction Quality management systems – IS/ISO 9004:2000 – Quality System –Elements, Documentation- guidelines for performance improvements. Quality Audits - QS 9000 – ISO14000 – Concepts. TQM -culture, framework, benefits, awareness and obstacles. Employee involvement – Motivation, empowerment, Team and Teamwork, Recognition and Reward, Performance appraisal. Supplier - Selection, Partnering, Supplier Rating.		
TOTAL: 45 PERIODS		
COURSE OUTCOMES:		
On completion of the course, students will be able to		
<ul style="list-style-type: none"> Define Total Quality, Understand the evolution of Quality and prioritize customers' requirements Explain, analyze and adapt the principles and philosophies of quality management Illustrate and apply statistical process control, process capability and reliability concepts to enhance quality and build a TPM system. Understand and apply the different quality tools and construct house of quality Matrix by mapping customers and technical requirements Understand, examine and devise quality management systems and evaluate and select suppliers 		

TEXT BOOK:

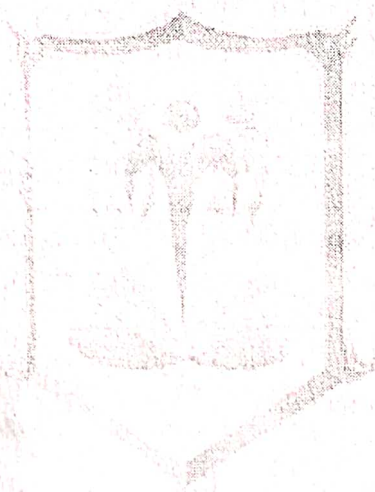
1. Bester field DaleH., Besterfield Carol, Besterfield GlenH., Besterfield Mary, Urdhwareshe Hemant, Urdhwareshe Rashmi, Total Quality Management, Pearson Education, 2023.

REFERENCE BOOK

2. Shridhara BhatK, Total Quality Management Text and Cases, Himalaya Publishing House, 2023.
3. Poornima M.Charantimath, Total Quality Management, Pearson Education, Second Edition, 2023.
4. Douglas C.Montgomery, Introduction to Statistical Quality Control, 2021.
5. Panneerselvam. R, Sivasankaran.P, Quality Management, PHI Learning, 2022

CO/ PO MAPPING

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1		1		1	2	3		2
CO2		1	2	1	2	3		2
CO3	3	2		1		3		2
CO4	2	3		1		3		2
CO5		3	2	1	3	3		2
Ave.	1	2	0.8	1	1.4	3		2



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PPMB3PE27	PRODUCT DESIGN AND DEVELOPMENT	L T P C 3 0 0 3
COURSE OBJECTIVE		
To understand the application of structured methods to develop a product		
UNIT I PRODUCT DESIGN & DEVELOPMENT		9
Product design & development - characteristics, duration and cost, challenges; Development Process - Generic Process, Concept development, Adapting to product types; Product Planning-Process, Understanding customer need, Product Specification; Concept Generation Evaluation-decay curve, cost expenditure curve; Technology Life Cycle; Disruptive Technologies.		
UNIT II PRODUCT CONCEPT		9
Concept Selection – Importance, Methodology, concept Screening, Concept Scoring, Concept Testing; Product Architecture - Definition, Modularity, implication, Establishment, Delayed Differentiation, Platform Planning.		
UNIT III PRODUCT DATA MANAGEMENT		9
PDM - concept and benefits, functions, Product data and workflow, Product reliability, CIM data, Architecture of PDM systems, Product data interchange, Portal integration, PDM acquisition and implementation; Product Life Cycle management - strategy, Change management for PLM.		
UNIT IV DESIGN TOOLS		9
Design Approaches - Industrial Design, Design for Manufacturing, Value Engineering, Ergonomics, Robust Design, Design for Excellence; Collaborative Product development- Prototyping, failure rate curve, product use testing-Product development economics, scoring model, financial analysis.		
UNIT V PATENTS		9
Intellectual Property and Patents -Definitions, Patent Searches, Application, Patent Ownership and Transfer, Patent Infringement, New Developments and International Patents		
TOTAL: 45 PERIODS		
COURSE OUTCOMES:		
<ol style="list-style-type: none"> 1. To understand, design and develop the new products and services 2. To understand , apply and adapt product concept to build products 3. To define, Identify and Assess product data and manage the product life cycle 4. To understand and apply design tools and evaluate product performance 5. To Understand the concepts of intellectual property, analyze and construct product design for patenting 		
TEXTBOOKS:		
1 A.K. Chitale and R.C. Gupta, Product Design and Manufacturing, PHI, 2021.		
REFERENCES:		
<ol style="list-style-type: none"> 1. Karl T. Ulrich, Steven D. Eppinger, Anita Goyal Product Design and Development, McGraw Hill Education, 4th Edition, 2021. 2. Kenneth B.Kahn, New Product Planning, Sage, 2021 3. Michael Grieves, Product Life Cycle Management, Tata McGraw Hill , 2020. 		
WEBSITE REFERENCE:		
<ol style="list-style-type: none"> 1. product-design-and-development-phases-and-approach 2. dergipark.org. 		

NPTEL/ SWAYAM/ MOOC REFERENCE:

1. NPTEL: Product design and development, Prof. Indereep Singh, IIT Roorkee.
2. NPTEL: New Product Development, Prof. Ganesh N Prabhu, IIM Bangalore
3. SWAYAM : Product design and Manufacturing, Prof. J. Ramkumar, IIT Kanpur

CO PO MAPPING

CO	PO							
	1	2	3	4	5	6	7	8
1		1	2	1	1	3	3	2
2		1		1	1	3	1	
3	2	2		1	1	3	1	
4		3	2	1	1	3	1	
5		2	3	1	1	3	3	2
Avg	0.4	1.8	1.4	1	1	3	2	0.8



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2

TEXTBOOK:

1. Nada R. Sanders, Big data driven supply chain management: A framework for implementing analytics and turning information into intelligence, Pearson Education, 2020.

REFERENCES

1. T. A. S. Vijayaraghavan, Supply Chain Analytics, Wiley, 2021
2. Kurt Y. Liu, Supply Chain Analytics, Springer, 2022
3. Jeremy Shapiro, Modeling the Supply Chain, Cengage Learning, 2nd Edition, 2006
4. Michael Watson, Sara Lewis, Peter Cacioppi, Jay Jayaraman, Supply Chain Network Design: Applying Optimization and Analytics to the Global Supply Chain, Pearson Education, 2019.
5. Muthu Mathirajan, Chandrasekharan Rajendran, Sowmya Narayanan Sadagopan, Arunachalam Ravindran, Parasuram Balasubramanian, Analytics in Operations/Supply Chain Management, I.K. International Publishing House Pvt. Ltd., 2020.

WEBSITE REFERENCE:

1. <https://www.wpi.edu/academics/study/operations-supply-chain-analytics-ms>
2. <https://core.ac.uk/download/pdf/301373764.pdf>
3. https://gtl.csa.iisc.ac.in/scm/scm_references.html

NPTEL/SWAYAM REFERENCE:

1. NPTEL: Dr. Mayank Aggarwal Gurukul Kangri Vishwavidyalaya, Haridwar
2. NPTEL: B Mahadevan Indian Institute Of Management Bangalore (IIMB)
3. SWAYAM : Prof. Inderdeep Singh IIT Roorkee.

CO PO MAPPING

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8
CO 1	1			1	1	3		
CO 2	3	3		1	1	3		
CO 3	3	3		1	1	3		
CO 4	3	3		1	1	3		
CO 5	3	3		1	1	3		
Ave.	2.6	2.4		1	1	3		

PPMB3PE28	SUPPLY CHAIN ANALYTICS	LTPC 3003
COURSE OBJECTIVE		
To treat the subject in depth by emphasizing on the advanced quantitative models. methods in logistics and supply chain management and its practical aspects and the latest developments in the field.		
UNIT I: INTRODUCTION		9
introduction to analytics – descriptive, predictive and prescriptive analytics, Data Driven Supply Chains – Basics, transforming supply chains, Barriers to implementation, Road Map		
UNIT II WAREHOUSING DECISIONS		9
Mathematical Programming Models - P-Median Methods - Guided LP Approach - Balmer – Wolfe Method, Greedy Drop Heuristics, Dynamic Location Models, Space Determination and Layout Methods		
UNIT III - INVENTORY MANAGEMENT		9
9 Inventory aggregation Models, Dynamic Lot sizing Methods, Multi-Echelon Inventory models, Aggregate Inventory system and LIMIT, Risk Analysis in Supply Chain - Measuring transit risks, supply risks, delivering risks, Risk pooling strategies.		
UNIT IV - TRANSPORTATION NETWORK MODELS		9
Notion of Graphs, Minimal Spanning Tree, Shortest Path Algorithms, Maximal Flow Problems, Multistage Transshipment and Transportation Problems, Set covering and Set Partitioning Problems, Traveling Salesman Algorithms, Advanced Vehicle Routing Problem Heuristics, Scheduling Algorithms-Deficit function Approach and Linking Algorithms.		
UNIT - V: MULTI-CRITERIA DECISION MAKING MODELS		9
Analytic Hierarchy Process(AHP), Data Envelopment Analysis (DEA), Fuzzy Logic and Techniques, the analytical network process (ANP), TOPSIS-Application in SCM OUTCOME		
TOTAL: 45 PERIODS		
COURSE OUTCOMES:		
<ul style="list-style-type: none"> • Understand the concepts of production and its design, capacity planning and make or buy decisions and apply and adapt the concepts in managing operations. • Understand and apply location models to complex plant location decisions and choose among the different types of layout by applying layout planning tools. • Understand the different approaches, analyze, design and develop the work system. • Understand, apply and evaluate the various inventory models and choose the best inventory control policy. • Understand the quality management principles, apply the quality tools and develop a quality management system. 		

PPMB3PE29	LEAN MANUFACTURING	L T P C 3 0 0 3
COURSE OBJECTIVE		
The objective of this course is to familiarize the underlying principles of lean manufacturing and its application. This course discusses the concepts and techniques used to minimize waste in manufacturing and service organisations and provides insights on application of lean tools for productivity improvement.		
UNIT I INTRODUCTION TO LEAN		9
Evolution of Lean Manufacturing – Lean Principles – Framework of Lean Processes - Lean Production - 7 hidden wastes – Concepts of Cycle time and Takt time – Process mapping - The Lean Enterprise – Lean and Green Manufacturing		
UNIT II LEAN PRODCUTION		9
Just-in-Time Inventory – Characteristics of JIT - Lean Production - Pull production – Toyota Production System - Heijunka – Point of use storage - Cellular Layout – Focused factory - Supermarket - Case studies.		
UNIT III LEAN CONCEPTS & TOOLS		9
Kaizen events - 5S Housekeeping – Poka Yoke - SMED– Kanban system – Visual workplace – One-piece flow – Gemba – Andon – Shadow Board - Jidoka – Catch Ball – FMEA - Zero defects – Design of Experiments – Root Cause Analysis - Standardized work - Value Stream Mapping .		
UNIT IV LEAN MANUFACTURING THROUGH TPM		9
Principles of TPM – 8 TPM Pillars – Jishu Hozen - Planned and Quality Maintenance– Kobetsu Kaizen - 6 Big Losses - TPM in office functions – Overall Equipment Efficiency - OEE Goals – TPM implementation.		
UNIT V LEAN IN SERVICE SECTOR		9
Lean wastes in service - Financial sector – Marketing sector – Retailing – Health care & Hospitality sector - Lean office – Lean suppliers - Internet of Things – IoT for Lean Production.		
TOTAL: 45 PERIODS		
COURSE OUTCOMES:		
<ol style="list-style-type: none"> 1. Explain the fundamental concepts of lean manufacturing and its application in business organisations. 2. Propose suitable lean tools and techniques to eliminate waste in business processes for productivity enhancement. 3. Display critical thinking skills in the application of suitable lean tools for process improvement. 4. Display analytical thinking skills in the application of suitable production planning and control tools for effective business decision making 5. Propose suitable tools and techniques of production planning and control for improving Service productivity. 6. 		
TEXTBOOKS:		
S.R. Devadasan, Lean and Agile Manufacturing, Tata McGraw-Hill, 12th Edition, 2023.		

REFERENCES:

1. R.Radhakrishnan & S.Balasubramanian, Lean Business Process Reengineering, PHI, 13th Edition, 2022
2. James Evans, Ninth edition, Lean Management, Rex Book store, Inc, 1st Edition 2021.
3. Joseph Phillips, 2013, Lean Management, Tata McGraw Hill Ltd., 4th edition, 2020
4. Chandrasekaran, 2013, Lean Manufacturing, Info career Pvt. Ltd., 2nd Edition, 2020
5. Arun Desai, Lean Manufacturing: Perspectives and Application, IUP, 2019.

WEBSITE REFERENCE:

1. www.leanmanufacturing.org
2. www.asq.org
3. www.leanmanufacturingtools.org

NPTEL/ SWAYAM/ MOOC REFERENCE:

1. NPTEL: Introduction to Lean construction, Prof. Koshy Varghese & Prof.N.Raghavan, IIT Madras.
2. NPTEL: Manufacturing System Technology (Part – I) Prof. Shatanu Bhattacharya, IIT Bombay
3. SWAYAM: online Course, Lean Manufacturing Technology, IIT Kharagpur.

CO PO MAPPING

CO	PO							
	1	2	3	4	5	6	7	8
1	3	1	2	2	2	3	2	1
2	3	2	2	3	2	3	2	1
3	3	2	2	2	2	3	2	1
4	3	1	2	2	2	3	2	1
5	3	3	2	2	3	3	2	1
Avg	3	1	2	2	2	3	2	1

PPMB3PE30	INDUSTRY 4.0	L T P C 3 0 0 3
COURSE OBJECTIVE		
1.To impart basic idea in Industry 4.0 and to provide students with good depth of knowledge of designing Industrial 4.0 Systems for various application. 3.Learn the design and analysis of Industry 4.0 systems for Energy and smart vehicular applications.		
UNIT I INTRODUCTION TO INDUSTRY 4.0		
Introduction, Historical Context, General framework, Application areas, Dissemination of Industry 4.0 and the disciplines that contribute to its development, Artificial intelligence, The Internet of Things and Industrial Internet of Things, Additive manufacturing, Robotization and automation, Current situation of Industry 4.0. Introduction to Industry 4.0 to Industry 5.0 Advances		9
UNIT II INDUSTRY 4.0 AND CYBER PHYSICAL SYSTEM		
Introduction to Cyber Physical Systems (CPS), Architecture of CPS- Components, Data science and technology for CPS, Emerging applications in CPS in different fields. Case study: Application of CPS in health care domain.		9
UNIT III SMART ENERGY SOURCES		
Energy Storage for Mitigating the Variability of Renewable Electricity Sources-Types of electric energy storage, Potential of Sodium-Sulfur Battery Energy Storage to Enable Integration of Wind-Case study. Electric Vehicles as Energy Storage: V2G Capacity Estimation.		9
UNIT IV SMART GRID		
Smart grid definition and development Smart Grid, Understanding the Smart Grid, Smart grid solutions, Design challenges of smart grid and Industry 4.0.		9
UNIT V SMART APPLICATIONS		
Understanding Smart Appliances -Smart Operation-Smart Monitoring-Smart Energy Savings-Smart maintenance, Case study-Smart Cars, Self-Driving Cars, Introducing Google's Self-Driving Car, Intellectual Property Rights.		9
TOTAL: 45 PERIODS		
COURSE OUTCOMES:		
Understand the basic concepts of Industry 4.0 and the other related fields. Understand cyber physical system and the emerging applications. Analyze the different energy storage systems Analyze a smart grid system. Implement the industry 4.0 to solve engineering problem		
BOOKS:		
Garg (Arshdeep), 2015 , Internet of Things A Hands on Approach, Universities Press,		

REFERENCES:

1. Luger F George, 2008, Artificial Intelligence 6th edition, Addison-Wesley;
2. Nina Godbole, 2011, Cyber Security- Understanding Cyber Crimes, Computer Forensics and Legal Perspectives, Wiley
3. Alasdair Gilchrist, 2017, Industry 4.0: The Industrial Internet of Things, Oxford

WEBSITES:

1. <http://www.business-standard.com>
2. <http://onlinelibrary.wiley.com>
3. www.iso.org

CO PO MAPPING

CO	PO							
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8
1	2	2			2	2	2	1
2	2	2			2	3	3	1
3	2	2			2	3	3	1
4	2	2			2	3	3	1
5	2	2			2	3	3	1
Avg.	2	2			2	2.8	2.8	1



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S.N O.	COURSE CODE	COURSE NAME	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
Sectoral Specialization: Logistics & supply chain Management								
1	PPMB3PE31	Supply Chain Concepts and Planning	PE	3	-	-	3	3
2	PPMB3PE32	Sourcing and Supply Management	PE	3	-	-	3	3
3	PPMB3PE33	Supply Chain Inventory Management	PE	3	-	-	3	3
4	PPMB3PE34	Supply Chain Information System	PE	3	-	-	3	3
5	PPMB3PE35	Transportation And Distribution Management	PE	3	-	-	3	3
6	PPMB3PE36	Reverse And Contract Logistics	PE	3	-	-	3	3
7	PPMB3PE37	Containerization and Allied Business	PE	3	-	-	3	3
8	PPMB3PE38	Exim Management	PE	3	-	-	3	3
9	PPMB3PE39	Fundamentals Of Shipping	PE	3	-	-	3	3

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PPMB3PE31	SUPPLY CHAIN CONCEPTS AND PLANNING	LTPC 3003
COURSE OBJECTIVES:		
<ul style="list-style-type: none"> To describe the various streams of the supply chain To describe the drivers of the supply chain To describe the concepts employed in the supply chain To explain about the strategies employed in the supply chain 		
UNIT- I CONCEPTS OF SUPPLY CHAIN		
Service and manufacturing supply chain dynamics - Evolution of supply chain management -Multiple views and flows - Service supply chains -Manufacturing supply chains - Measures of supply chain performance - Differentiation-Bullwhip effect		
UNIT - II SUPPLY CHAIN PROCESSES AND STRATEGIES		
Integrated supply chains design - Customer relationship process - Order fulfilment process - Supplier relationship process - Supply chain strategies - Strategic focus - Mass customization - Lean supply chains - Outsourcing and offshoring - Virtual supply chains.		
UNIT - III SUPPLY CHAIN PERFORMANCE DRIVERS AND FORECASTING		
Drivers of supply chain performance - Logistics drivers (Location, inventory and transportation) -Cross functional drivers (Pricing, information and sourcing) – Forecasting introduction -Framework for a forecast system - Choosing right forecasting technique - Judgment methods (Composite Forecasts, Surveys, Delphi Method, Scenario Building, Technology Forecasting, Forecast by Analogy) - Causal methods (Regression Analysis -Linear & Non-Linear Regression, Econometrics) - Time series analysis (Autoregressive Moving Average (ARMA), Exponential Smoothing, Extrapolation, Linear Prediction, Trend Estimation, Growth Curve, Box-Jenkins Approach) – CPFR		
UNIT - IV SALES AND OPERATIONS PLANNING		
Introduction to Sales and operations planning - Purpose of sales and operations plans -Decision context - Sales and operations planning as a process - Overview of decision support tools		
UNIT- V RESOURCE PLANNING AND SCHEDULING		
Enterprise resource planning - Planning and control systems for manufacturers – Materials requirement planning - Drum – Buffer – Rope system – Scheduling - Scheduling service and manufacturing processes - Scheduling customer demand - Scheduling employees - Operations scheduling.		
TOTAL: 45 PERIODS		
COURSE OUTCOMES:		
The students will be able to		
<ul style="list-style-type: none"> Identify the concepts of supply chain. Analyze supply chain dynamics and various issues of supply chain performance. 		
TEXT BOOKS:		
<ol style="list-style-type: none"> Sunil Chopra, Peter Meindl, Supply Chain Management: Strategy, Planning, and Operation, Pearson, 2010. Janat Shah, Supply Chain Management, Pearson Education India, 2009 Supply Chain management, Chandrasekaran,N., Oxford University Publications, 2010 Supply Chain Management for The 21st Century by B S SAHAY. Macmillan Education, 2001 		

PPMBEPE32	SOURCING AND SUPPLY MANAGEMENT	LTPC 3003
COURSE OBJECTIVES		
<ul style="list-style-type: none"> To provide understanding of the framework. To illustrate current practices in industries. To provide knowledge on certain tools & techniques 		
UNIT - I INTRODUCTION TO PURCHASING AND SUPPLY CHAIN MANAGEMENT 9		
The Purchasing Process. Purchasing Policies and Procedures. Supply Management Integration for Competitive Advantage, Purchasing and Supply Management Organization.		
UNIT - II STRATEGIC SOURCING 9		
Supply Management and Commodity Strategy Development, Supplier Evaluation and Selection Supplier Quality Management Supplier Management and Development, Creating a World-Class Supply Base, Worldwide Sourcing.		
UNIT - III STRATEGIC SOURCING PROCESS 9		
Strategic Cost Management, Purchasing and Supply Chain Analysis: Tools and Techniques, Negotiation and Conflict Management Contract Management Purchasing Law and Ethics.		
UNIT - IV SUPPLIER PERFORMANCE AND QUALITY MANAGEMENT 9		
Performance Measurement and Evaluation: Strategies, tools and techniques for measuring and managing supplier performance, Supplier performance evaluation, Purchasing services, Supply Chain Information Systems and Electronic Sourcing.		
UNIT - V FUTURE DIRECTIONS 9		
Purchasing and Supply Strategy Trends Green Buying, Sustainability, material research, Lean supply Chain Management		
TOTAL: 45 PERIODS		
COURSE OUTCOMES:		
<ul style="list-style-type: none"> To understand basic functions and nuances. To understand the holistic dimensions of SCM & corporate perspectives. Learn to acquire skills to become a sourcing professional. 		
TEXT BOOKS:		
<ol style="list-style-type: none"> Purchasing and Supply Chain Management, Robert .M. Monczka, Handfield, Glunipero Paterson, Waters, 6th Edition, Cengage Publication Purchasing and Supply Chain Management, Benton, 3 rd Edition, Tata Mc Graw Hill. World Class Supply Chain Management, Burt, Dobler, Starling, 7th Edition, Tata Mc Graw Hill. Supply Chain Management for The 21st Century by B S SAHAY. Macmillan Education, 2001 		

PPMB3PE33	SUPPLY CHAIN INVENTORY MANAGEMENT	L T P C 3 0 0 3
COURSE OBJECTIVE:		
This course provides you the basic concepts and advanced models in inventory management. This course discusses issues related to inventory in a supply chain context. It also gives a multi-dimensional view to approach a problem with case studies.		
UNIT I INTRODUCTION TO INVENTORY MANAGEMENT 9		
Inventory in SCM, Cash to cash cycle time, measure of inventory in terms of days, Inventory turnover ratio and its relationship with working capital, Review of models, Q-models and P-models Aggregation of Inventory, Cycle stock concepts, Ordering multiple items in a single order to reduce cycle stock		
UNIT II INVENTORY MODELS 9		
Safety stock issues Safety stock with lead time and demand uncertainty (for Q-models), Short term discounting & Forward Buying, Periodic review models with safety stock, Comparison of P and Q systems		
UNIT III INVENTORY MANAGEMENT STRATEGIES 9		
Single period models, Inventory management for fashion supply chains, Postponement strategies to reduce inventory, Examples of Fashion supply chains: NFL Reebok, ZARA and Sport Obermeyer Risk Pooling, Applications, Risk pooling in different forms-Substitution, Specialisation, Postponement and Information pooling		
UNIT IV INVENTORY OPTIMIZATION 9		
Distribution resource planning techniques, Inventory and transportation integration decisions, Vendor Managed Inventory, Product availability measures, Product fill rate, order fill rate, Cycle service level.		
UNIT V LATEST TRENDS IN INVENTORY MANAGEMENT SYSTEMS 9		
Industry initiatives, Efficient consumer Response and Quick response ,CPFR and other industry initiatives, Inventory reduction strategies, Managing inventory in Reverse Logistics and Remanufacturing situations , Best practices in Inventory Management in a Supply Chain		
TOTAL: 45 PERIODS		
COURSE OUTCOMES:		
At the end of this course, the students can confidently approach their supply chain inventory issues and they can use different tools appropriately to solve the problems and enhance the performance of their supply chains.		
TEXT BOOKS:		
1. Sunil Chopra, Peter Meindl, Supply Chain Management: Strategy, Planning, and Operation, Pearson, 2010.		
2. Janat Shah, Supply Chain Management, Pearson Education India, 2009		
3. Supply chain management, Chandrasekaran,N., Oxford University Publications, 2010		
4. Supply Chain Management For The 21st Century by B S SAHAY. Macmillan Education,2001		

PPMB3PE34	SUPPLY CHAIN INFORMATION SYSTEM	L T P C 3 0 0 3
COURSE OBJECTIVES:		
<ul style="list-style-type: none"> To explain the various technological aspects that are described in the different logistical background To explain the real time description updated technologies in the logistics sector and supply chain industry 		
UNIT - I ELECTRONIC SCM, COMMUNICATION NETWORKS 9		
Introduction e-SCM – e-SCM framework - Key success factors for e-SCM - Benefits of e-SCM-Positioning information in Logistics - Strategic information linkage - Supply chain communication networks - Role of communication networks in supply chains - Overview of telecommunication networks –EDI - Data security in supply chain networks - Overview of internet able models		
UNIT - II ENTERPRISE INFORMATION SYSTEMS 9		
Overview of enterprise information systems - Information functionality and principles -Introduction enterprise information systems -Classification of enterprise information systems- Information architecture -Framework for managing supply chain information - Describe on popular enterprise application packages -Benefits of enterprise information systems		
UNIT - III SCM SYSTEMS DEVELOPMENT, DEPLOYMENT AND MANAGEMENT 9		
Stakeholders in supply chain information systems - Stakeholders in SCM - Stakeholders in supply chain information systems - Information systems development- Logistics information systems design- Defining enterprise architecture - Choosing appropriate system development methodologies - Adopting relevant systems development model		
UNIT - IV DEPLOYMENT AND MANAGEMENT 9		
Information systems deployment - IT Operations and infrastructure management - Portfolio, programme and project management - Management of risk - Management of value		
UNIT - V INFORMATION INTEGRATION 9		
Enterprise application integration and supply chain visibility - Enterprise application integration - Supply chain visibility - Supply chain event management -Supply chain performance -Planning and design methodology - Problem definition and planning - Data collection and analysis - Recommendations and implementation -Decision support systems		
TOTAL: 45 PERIODS		
COURSE OUTCOMES:		
The students will be able to understand the various enterprise information system and its architecture and benefits. Students can gain knowledge about various e-commerce models, e-SCM, benefits and communication networks.		
TEXT BOOKS:		
<ol style="list-style-type: none"> Bowersox & Closs, Logistical Management, McGraw-Hill Companies, 1996. R.H.Ballou, Business Logistics Management, Prentice-Hall, 2004. 		

REFERENCES:

1. Strauss, E-Marketing, 4/e, Pearson Education 2008
2. Chaffey, E- Business and E- Commerce Management, 3/e, Pearson Education 2008
3. Blanchard, Logistics Engineering & Management, 6/e, Pearson Education 2008
4. Statistics for Managers Using MS Excel, 4/e, Levine, Pearson Education 2007
5. Donald J. Bowersox and David J. Closs, Logistical Management - The Integrated Supply chain

D.



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PPMB3PE35	TRANSPORTATION AND DISTRIBUTION MANAGEMENT	L T P C 3 0 0 3
OBJECTIVES:		
<ul style="list-style-type: none"> To explore the fundamental concepts of transportation and distribution management To gain knowledge in network planning, routing and scheduling and application of IT in transportation and distribution management. 		
UNIT - I DISTRIBUTION 9		
Role of Distribution in Supply chain, Distribution channels – Functions, resources, Operations in Distribution, Designing Distribution network models - its features - advantages and disadvantages.		
UNIT - II PLANNING 9		
Distribution network planning, Distribution network decisions, Distribution requirement planning (DRP)		
UNIT - III TRANSPORTATION 9		
Role of Transportation in Logistics and Business, Principle and Participants-Scope and relationship with other business functions, Modes of Transportation - Mode and Carrier selection, Routing and scheduling.		
UNIT - IV TRANSPORTATION 9		
International transportation, Carrier, Freight and Fleet management, Transportation management systems- Administration, Rate negotiation, Trends in Transportation.		
UNIT - V INFORMATION TECHNOLOGY (IT) 9		
Usage of IT applications -E commerce – ITMS, Communication systems-Automatic vehicle location systems, Geographic information Systems.		
TOTAL: 45 PERIODS		
COURSE OUTCOMES: The students will be able to:		
<ul style="list-style-type: none"> Gain knowledge about the distribution requirements planning. Predict the scope and relationship of transportation with other business functions Make use of the advantages and disadvantages of the various models. 		
TEXT BOOKS:		
1. Raghuram and N. Rangaraj, Logistics and Supply chain Management – Leveraging Mathematical and Analytical Models: Cases and Concepts, New Delhi: Macmillan, 2000. 2. Janat Shah, Supply Chain Management, Pearson Education India, 2009.		
REFERENCES:		
1. Sunil Chopra, Peter Meindl, Supply Chain Management: Strategy, Planning, and Operation, Pearson, 2010. 2. Michael B Stroh, Practical Guide to Transportation and Logistics, Logistics Network, 2006. 3. Alan Rushton, John Oxley, Handbook of Logistics & Distribution Management, Kogan Page Publishers, 2000.		

COURSE OBJECTIVES:

- ☐ To prepare students successfully implement a contract logistics and closed supply chain in Retail, FMCG and Automobile sectors.
- ☐ To explain the concept and principle of contract logistics and closed supply chain

UNIT - I CONTRACT LOGISTICS 9

Third party logistics industry overview - A framework for strategic alliances - Evolution of contract logistics - Types of third party logistics providers – Automobile, FMCG and Retail-Third party services and integration

UNIT - II CLOSED LOOP SUPPLY CHAINS AND LOGISTICS 9

Introduction closed loop supply chains and logistics – Logistics and closed loop supply chain service - Overview of return logistics and closed loop supply chain models – Introduction product returns - Product Vs Parts returns - Strategic issues in closed loop supply chains

UNIT - III BUSINESS AND MARKET 9

Overview - Introduction life cycle management - Trends and opportunities – Auto Warranty management, return process and benchmarks - Market overview - Reasons for using reverse logistics - General characteristics - Consumer goods Depot repair and value added services - Operating dynamics - Competitive evaluation - Secondary markets and final disposal.

UNIT - IV EMERGING TRENDS 9

Emerging trends in Retail, E-Commerce- FMCG and Automobile sectors- Systems and technology - For consumer goods operations, High tech logistics system - Impact and value of advanced logistics

UNIT - V MANAGING PROCESSES 9

Managing processes - Step by step process - Use of third party service providers - Additional factors – Contemporary issues – Make in India and its impact on Countries GDP and Economic Growth.

TOTAL: 45 PERIODS**COURSE OUTCOMES:**

The students will be able to understand the basics of contract logistics, third party logistics industry and third party logistics providers. And it helps to gain knowledge about Make in India concept and its impact on the GDP growth

TEXT BOOKS:

1. Janat Shah, Supply Chain Management: Text and Cases, Pearson Education India, 2009
2. John Manners-Bell, Logistics and Supply Chains in Emerging Markets, Kogan Page, 2014.

REFERENCES:

1. Coyle et.al, Management Of Transportation, 7th Edition, Cengage Learning, 2011
2. D. F. Blumberg, Reverse Logistics & Closed Loop Supply Chain Processes, Taylor and Francis, 2005
3. Hsin-I Hsiao, Wageningen, Logistics Outsourcing in the Food Processing Industry, Academic Pub, 2009.
4. Surendra M. Gupta, Sustainability in Supply Chain Management Casebook: Applications in SCM, McGraw Hill, 2013

PPMB3PE37	CONTAINERIZATION AND ALLIED BUSINESS	L T P C 3 0 0 3
COURSE OBJECTIVES:		
<input type="checkbox"/> To provide an overview of the various elements of containerization and allied businesses <input type="checkbox"/> To realize the potential of containerization and allied businesses		
UNIT –I BASIC CONCEPT OF CONTAINERIZATION 9		
Introduction to Liner Shipping industry - Unitization concept and methods - Malcolm Mclean and the birth of containerization - Generations of container ships and their specification - Container types, their specifications and cargoes carried in them.		
UNIT –II FREIGHTING AND SIZE OF CONTAINER 9		
Container shipping business - FCL and LCL sea freight products - Freight of FCL and LCL cargo - Slot utilization strategies - Estimation of optimum container fleet size - Multiport LCL consolidation		
UNIT – III CHARACTERISTICS AND PHYSICAL OPERATIONS 9		
Containerisation: Concept, Classification, Benefits and Constraints, Container terminal business- World's leading container terminals and location characteristics - container terminal infrastructure - container terminal productivity and profitability-Inland container Depots(ICD)Roles and functions - Container Freight Stations(CFS),Clearance at ICD, CONCOD,ICD's under CONCOD, Charting: Kinds of Charter, Charter Party and Arbitration.		
UNIT – IV CONTAINER TYPES AND BUSINESS 9		
Container manufacturing trends - Container leasing business - Types of container leasing and their terms - maintenance and repair of containers - tracking of container movements - Container interchange.		
UNIT – V MULTIMODAL TRANSPORT 9		
Alternate uses of containers -marketing of used containers -carriage of shipper own containers - multimodal transport options for containers -Insurance for containers -strategies for managing container imbalance.		
TOTAL: 45 PERIODS		
COURSE OUTCOMES:		
<input type="checkbox"/> The students will learn the practices and ways to promote containerization and allied businesses <input type="checkbox"/> The learners will have a complete idea about the different concepts, trends and strategies used for containerization and allied businesses		
REFERENCES:		
1. Marc Levinson, The Box: How the Shipping Container Made the World Smaller and the World Economy Bigger, Princeton University Press, 2008. 2. Dr. K. V. Hariharan, Containerisation, Multimodal Transport & Infrastructure Development In India, Sixth Edition, Shroff Publishers and Distributors, 2015. 3. Lee, C.-Y., Meng, Q. (Eds.), Handbook of Ocean Container Transport Logistics Making Global Supply Chains Effective, Springer, 2015 4. Coyle et.al, Management Of Transportation, 7th Edition, Cengage Learning, 2011		

PPMB3PE38	EXIM MANAGEMENT	LTPC 3003
COURSE OBJECTIVES:		
<input type="checkbox"/> To enlighten the students about the major functions in export and import processes. <input type="checkbox"/> To provide the expertise for solving issues related to requirements in EXIM management.		
UNIT – I FUNDAMENTALS OF IMPORT AND EXPORT 9		
Role of Import and Export Trade in an Economy - Institutional Framework for Foreign trade in India -Role of Director General of Foreign Trade and Commerce - Objectives of EXIM Policy - Global trade flows - Contract of International Sale of Goods - INCOTERMS 2010		
UNIT - II OVERVIEW OF EXPORT AND IMPORT 9		
Marketing for Exports - Negotiation and finalization of Export contract - Export Documentation Procedures - Cargo Insurance - Export Promotion Councils and incentive schemes- Role of Logistics in Exports- Export Houses / Trading Houses		
UNIT - III DOCUMENTATION FRAMEWORK 9		
Import for industrial use / trading - Import Documentation and Customs clearance procedures - Types of Imports - Import Licenses - Cargo Insurance - Role of Logistics in Import		
UNIT - IV CREDIT AND PAYMENTS 9		
Payment methods in Foreign Trade - Documentary Credit / Letter of Credit–LOU-UCP 600 with respect to Shipping Documents and L/C Negotiation – Export / import financing strategies - Managing payment risks.		
UNIT - V CUSTOMS CLEARANCE AND AGENCIES 9		
Roles of Service providers in EXIM transactions – Global Traders – Commodity Brokers - Custom House Agents – Transport Operators – Freight Forwarders – Warehousing and 3PL service providers – Liners /Ship Agencies – Container Freight Stations - Port – Inspection Agencies/ surveyors – Quarantine Agencies – Pest Control Agencies – Chamber of Commerce.		
TOTAL: 45 PERIODS		
COURSE OUTCOMES:		
<input type="checkbox"/> The students would be aware about the formalities of export and import industry <input type="checkbox"/> The students will be able to comprehend the importance of exim management.		
REFERENCES:		
1. Justin Pauland Rajiv Aserkar, Export Import Management, Second Edition, Oxford University Press, 2013. 2. UshaKiranRai, Export - Import and Logistics Management, Second Edition, PHI Learning, 2010. 3. Director General of Foreign Trade, Foreign Trade Policy and Handbook of Procedures, 2015 4. Coyle et.al, Management Of Transportation, 7th Edition, Cengage Learning, 2011		

PPMB3PE39	FUNDAMENTALS OF SHIPPING	L T P C 3 0 0 3
COURSE OBJECTIVES:		
<input type="checkbox"/> To provide the knowledge about fundamentals of shipping management		
<input type="checkbox"/> To equip the students with the knowledge of shipping, ship building and repair		
UNIT I INTERDICTION OF SHIPPING 9		
Role of Shipping in International trade-Types of ships and cargoes carried by them - International Organizations serving the shipping industry (IMO, BIMCO, ICS, IACS, IAPH)- Ship Registration and Classification.		
UNIT II LINER SHIPPING OPERATIONS 9		
Liner shipping business - Types of Liner services - Container shipping lines and their services - Break bulk, Ro-Ro and project cargo services - Liner freight rates - Liner cargo documentation - Liner agency functions		
UNIT III DRY BULK BUSINESS 9		
Dry Bulk shipping business- World's leading dry bulkports and cargoes handled by them - Types of Dry bulk ships and the Dry Bulk industry structure - Dry bulk market indices - Types of Chartering - Port agency functions.		
UNIT IV TANKER OPERATIONS AND BUSINESS 9		
Liquid Bulk shipping business - World's leading wet bulk ports and cargoes handled by them- Types of tankers and gas carriers - Tanker freighting system (worldscale) -Factors affecting Tanker markets-Marine pollution conventions.		
UNIT V SHIP BUILDING AND REPAIR 9		
Service providers to shipping industry -Ship management companies -Ports, inland terminals and Container Freight Stations- Ship building and repair yards -Financing the Shipping industry - Marine insurance providers.		
TOTAL: 45 PERIODS		
COURSE OUTCOMES:		
<input type="checkbox"/> The students would be acquainted with the basics of shipping management		
<input type="checkbox"/> The students will learn the skills needed for shipping industry		
REFERENCES:		
1. Michael Robarts, Branch's Elements of Shipping, Ninth Edition, Routledge, 2014.		
2. Peter Brodie, Commercial Shipping Handbook, Third Edition, Informa Law from Routledge, 2014.		
3. Review of Maritime Transport, UNCTAD, 2014.		
4. Coyle et.al, Management Of Transportation, 7th Edition, Cengage Learning, 2011		

S.N O.	COURSE CODE	COURSE NAME	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
Sectoral Specialization: Infrastructure & Real Estate Management								
1	PPMB3PE40	Infrastructure Planning Scheduling and Control	PE	3	-	-	3	3
2	PPMB3PE41	Contracts and Arbitration	PE	3	-	-	3	3
5	PPMB3PE42	Disaster Mitigation and Management	PE	3	-	-	3	3
7	PPMB3PE43	Urban Environmental Management	PE	3	-	-	3	3
8	PPMB3PE44	Smart Materials, Techniques and Equipment's for Infrastructure	PE	3	-	-	3	3
9	PPMB3PE45	Strategic Airport Infrastructure Management	PE	3	-	-	3	3
10	PPMB3PE46	Real Estate Marketing and Management	PE	3	-	-	3	3
11	PPMB3PE47	Infrastructure and Real Estate Entrepreneurship	PE	3	-	-	3	3
12	PPMB3PE48	Valuation of Real Estate and Infrastructure Assets	PE	3	-	-	3	3

PPMB3PE40	INFRASTRUCTURE PLANNING, SCHEDULING AND CONTROL	L T P C 3 0 0 3
COURSE OBJECTIVE:		
<input type="checkbox"/> To give an exposure to the students on the concept and the principles of planning, scheduling and control about infrastructure industry.		
UNIT I INTRODUCTION 9		
Introduction to infrastructure - Need and importance of infrastructure in India - Overview of power sector - Overview of water supply and sanitation sector-Overview of road, rail, air and port transportation sectors- Overview of telecommunication sector-Overview of rural and urban infrastructure-Introduction to special economic zones-Organizations and players in infrastructure field -Overview of infrastructure project finance.		
UNIT II INFRASTRUCTURE PRIVATIZATION 9		
Privatization of infrastructure in India - Benefits of privatization-Problems with privatization- Challenges in privatization of water supply projects- Challenges in privatization of power sector projects – Challenges in privatization of road transportation projects.		
UNIT III RISKS IN INFRASTRUCTURE PROJECTS 9		
Economic and demand risks, political risks, socio-economic risks and cultural risks in infrastructure projects - Legal and contractual issues in infrastructure projects- Challenges in construction of infrastructure projects.		
UNIT IV RISK MANAGEMENT FRAMEWORK 9		
Planning to mitigate risk-Designing sustainable contracts-Introduction to fair process and negotiation- Negotiation with multiple stakeholders - Sustainable development- Information technology and systems for successful management.		
UNIT V DESIGN & MAINTENANCE OF INFRASTRUCTURE 9		
Innovative design and maintenance of infrastructure facilities- Modeling and life cycle analysis techniques- Capacity building and improving Government's role in implementation- Integrated framework for successful planning and management.		
TOTAL :45 PERIODS		
COURSE OUTCOMES		
On successful completion of the course, students will be able to <input type="checkbox"/> Explain the basic concepts related to infrastructure and understand management. <input type="checkbox"/> Explain the benefits and problems with infrastructure <input type="checkbox"/> Identify the challenges and strategies for successful planning and implementation of infrastructure. <input type="checkbox"/> Apply the above concepts to various infrastructure domains.		

REFERENCES

1. Raina V.K, "Construction Management Practice – The inside Story", Tata McGraw Hill Publishing Limited, 2005
2. Leslie Feigenbaum, "Construction Scheduling With Primavera Project Planner", Prentice Hall, 2002
3. W.Ronald Hudson, Ralph Haas, Waheed Uddin, "Infrastructure Management: Integrating, Design, Construction, Maintenance, Rehabilitation and renovation", McGraw Hill Publisher, 2013
4. Prasanna Chandra, "Projects – Planning, Analysis, Selection, Implementation Review", Tata McGraw Hill Publishing Company Ltd., New Delhi. 2006.
5. Joy P.K., "Total Project Management - The Indian Context", Macmillan India Ltd., 1992
6. Report on Indian Urban Infrastructure and Services – The High Powered Expert Committee for estimating the Investment Requirements for Urban Infrastructure Services, March 2011
7. Urban Water Development in India 2011 – Published and Distributed by India Infrastructure Research
8. Manual on sewerage and sewage treatment, CPHEEO, Ministry of urban affairs and employment, Govt.of India, New Delhi, 2012
9. Manual of National Highway Authority of India, 1988



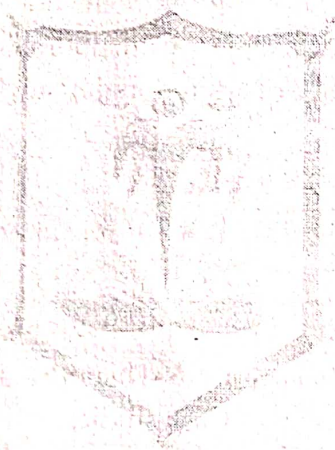
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PPMB3PE41	CONTRACTS AND ARBITRATION	LTPC 3003
COURSE OBJECTIVE:		
<input type="checkbox"/> To create awareness on contracts for construction industry, impart knowledge on tender preparation, tendering process, laws on arbitration, arbitration procedure and laws on dispute resolution in India.		
UNIT I INTRODUCTION TO CONTRACTS IN CONSTRUCTION INDUSTRY 9		
Brief details of engineering contracts -Definition, types and essentials of contracts and clauses for contracts - Preparation of tender documents and contract documents - Issues related to tendering process- Awarding contract, e-tendering process - Time of performance - Provisions of contract law - Breach of contract - Performance of contracts - Discharge of a contract- Indian contract Act 1872 - Extracts and variations in engineering contracts - Risk management in contracts.		
UNIT II LAWS RELATED TO CONSTRUCTION INDUSTRY 9		
Labor and industrial laws - Payment of wages act, contract labor - Workmen's compensation act - Insurance, industrial dispute act- Role of RERA		
UNIT III ARBITRATION OF ENGINEERING CONTRACTS 9		
Background of Arbitration in India - Indian Arbitration Act 1937 - UNCITRAL model law - Forms of arbitration - Arbitration agreement - Commencement of arbitral proceedings - Constitution of arbitral tribunal - Institutional procedure of arbitration -Impartiality and independence of arbitrators jurisdiction of arbitral tribunal - Interim measures - Enforcement of awards.		
UNIT IV NEGOTIATION, MEDIATION AND CONCILIATION 9		
Concepts and purpose - Statutory back ground ADR and mediation rules - Duty of mediator and disclose facts - Power of court in mediation.		
UNIT V ALTERNATE DISPUTE RESOLUTION 9		
Structure of Indian Judicial - The arbitration and reconciliation ordinance 1996 -Dispute resolution mechanism under the Indian judicial system - Litigation in Indian courts - Case studies.		
TOTAL :45 PERIODS		
COURSE OUTCOMES:		
On successful completion of the course, students will be able to <input type="checkbox"/> understand the laws on contracts for construction industry in india <input type="checkbox"/> apply knowledge of contracts in preparation of contract document and tendering process <input type="checkbox"/> apply appropriate methods to assess the critical factors in contracts leading to arbitration and disputes between the parties <input type="checkbox"/> suggest suitable type of arbitration or dispute resolution for the situation of problem		

REFERENCES

1. American Arbitration Association, "Construction industry arbitration rules and mediation procedures", 2007
2. Case study of Southern Railway Arbitration Cases wiki.iricen.gov.in/doku/lib/exe/fetch.php
3. Collex.K, "Managing Construction Contracts", Reston publishing company, Virginia, 1982
4. Eastern Book Company "Arbitration and Conciliation Act 1996", June 2008
5. International Federation of Consulting Engineers (FIDIC) documents, Geneva, 2009 (<http://www.fidic.org>)
6. Gajaria. G.T., "Laws relating to building and Engineer's Contracts", M.M. Tripathi Pvt Ltd., Mumbai, 1985
7. Horgon.M.O and Roulstion F.R., "Project Control of Engineering Contracts" E and FN, SPON, Norway, 1988
8. Krishna Sharma, Momota Oinam and Angshuman Kaushik, "Development and Practice of Arbitration in India- Has it evolved as an effective legal Institution", CDDRL, Stanford, 103, Oct 2009
9. Park.W.B., "Construction Bidding for Projects", John Wiley, Norway, 1978
10. Roshan Namavati, "Professional Practice", Anuphai Publications, Lakhani Book Depot, 2013
11. Vasavada.B.J. "Engineering Contracts and Arbitration", March 1996



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PPMB3PE42	DISASTER MITIGATION AND MANAGEMENT	L T P C 3 0 0 3
COURSE OBJECTIVES:		
<ul style="list-style-type: none"> To create an awareness on the various types of disasters and to expose the students about the measures, its effect against built structures, and hazard assessment procedure in India. To impart knowledge on the methods of mitigating various hazards such that their impact on communities is reduced. 		
UNIT I INTRODUCTION 9		
Difference between hazards and disaster -Types of disasters-Phases of disaster management -Hazards - Classification of hazards - Hazards affecting buildings - Building safety against hazards - Floods - Cyclone - Landslides -Tsunami - Fire.		
UNIT II EARTHQUAKE DISASTER 9		
Earthquake hazard map -Causes of earthquakes -Classification of earthquakes -Seismic waves -Energy release - Inertia forces - Natural period - Resonance - Damping -Seismic response of free vibration -Seismic response of damped vibration -Performance of ground and buildings in past earthquakes-Earthquake resistant measures in RC and masonry buildings - Potential deficiencies of RC and masonry buildings.		
UNIT III OTHER DISASTERS 9		
Landslides-Landslide zoning map - Causes -Protection measures Floods -Flood zone map - Effects on buildings -Protection measures from damage to buildings -Mitigation strategies - Tropical cyclones - Effects on buildings -Protection measures from damage to buildings - Tsunami -Tsunami wave characteristics - Peculiarities of tsunami deposits -Tsunami impact on coastal lines-Effects of Tsunami on built structures - Fire disaster - Causes and effects of fire disaster - Preventive mechanism .		
UNIT IV HAZARD ASSESSMENT 9		
Visual inspection and study of available documents -Detailed in-situ investigation planning and interpretation of results-Foundation capability -Non-structural components - Seismic strengthening of buildings -Repairs, restoration and strengthening of existing buildings - Strengthening materials - Retrofitting of load bearing wall buildings - Retrofitting of RC Buildings-RVS method of screening - RC and masonry structures -Seismic hazard assessment - Deterministic seismic hazard analysis - PSHA.		
UNIT V LAND USE ZONING REGULATIONS, QUALITY CONTROL AND DISASTER MANAGEMENT POLICY 9		
Introduction-Community planning - Community contingency plan - Report building and initial awareness - Recommendations for land use zoning regulations - Construction quality control -Evolution of quality management -Reasons for poor construction -Construction of quality control in masonry structures - Disaster management policy and procedure -Legal frame work - Institutional mechanism - Schemes and Grants on DM - Recommendation of 13th finance commission -Plan schemes - Non plan schemes - Externally aided schemes Role of NDRF in Disaster Management - Medical First Responder - Flood Rescue Relief Management.		
TOTAL :45 PERIODS		

COURSE OUTCOMES:

On successful completion of the course, students will be able to

- ☐ Understand the various types of disaster viz hydrological, coastal and marine disasters, atmospheric disasters, geological, mass movement and land disasters, wind and water driven disasters.
- ☐ To identify the potential deficiencies of existing buildings for eq disaster and suggest suitable remedial measures.
- ☐ Derive the guide lines for the precautionary measures and rehabilitation measures for eq disaster.

- ☐ Understand the effects of disasters on built structures
- ☐ Derive the protection measures against floods, cyclone and land slides
- ☐ Understand the hazard assessment procedure
- ☐ Get the awareness regarding landuse zoning regulations & quality control

REFERENCES

1. Annual Report, Ministry of Home Affairs, Government of India, 2009-10
2. Ayaz Ahmad, "Disaster Management: Through the New Millennium" Anmol Publications, 2003
3. Berg.GV, "Seismic Design codes and procedures", EERI, CA, 1982
4. Booth, Edmund, "Concrete Structures in earthquake regions; Design and Analysis", Longman, 1994
5. Dowrick. D.J, "Earthquake resistant design for Engineers and Architects", John Wiley & Sons, Second Edition, 1987.
6. Ghosh G.K. "Disaster Management", A.P.H. Publishing Corporation, 2006
7. Goel, S. L. "Encyclopaedia of Disaster Management", Deep & Deep Publications Pvt Ltd., 2006
8. Jaikrishna & A.R.Chandrasekaran, "Elements of Earthquake Engineering", Sarita Prakashan, Meerut, 1996
9. Singh R.B, "Disaster Management", Rawat Publications, 2008
10. Thirteenth Finance Commission Report, Ministry of Finance, Government of India, 2010-15

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PPMB3PE43	URBAN ENVIRONMENT MANAGEMENT	L T P C 3 0 0 3
COURSE OBJECTIVES:		
<input type="checkbox"/> To create an awareness on the various environmental issues in an urban scenario and give an exposure to the urban water resources and its management. <input type="checkbox"/> To impart knowledge on the stages of works involved in a water supply project of a city, safe wastewater collection system for generated wastewater and its management, solid waste and their safe disposal beyond urban limit to be free from pollution is also addressed in the course work.		
UNIT I URBAN ENVIRONMENTAL ISSUES 9		
Urbanization- Population growth scenario -Migration - Pollution of surface water resources - Rivers, tanks, channels -Ground water exploitation - Waste water -Characteristics -Pollution problems - Solid waste -Air pollution - CPCB norms.		
UNIT II URBAN MASTER PLANS 9		
Planning and organizational aspects -Urban waste resources management - Water in urban ecosystem - Urban water resources planning and organization aspects -Storm water management practices -Types of storage -Magnitude of storage -Storage capacity of urban components - Percolation ponds -Temple tanks - Rainwater harvesting -Urban water supply - Demand estimation - Population forecasting -Source identification -Water conveyance -Storage reservoirs -Fixing storage capacity - Distribution network - Types -Analysis -Computer applications - Conservation techniques - Integrated urban water planning - Smart city project planning - Green Building - LEED certification - Green audit		
UNIT III URBAN WASTEWATER MANAGEMENT 9		
Sewage generation -Storm drainage estimation -Industry contribution -Wastewater collection system - Separate and combined system -Hydraulic design of sewer and storm drain -Wastewater treatment - Disposal methods -Concept of decentralization - 3R concepts.		
UNIT IV MUNICIPAL SOLID WASTE MANAGEMENT 9		
Sources of solid waste -Characteristics -Rate of generation -Segregation at source -Collection of solid waste -Methods of collection -Route analysis -Transfer and transfer stations -Processing and disposal of solid waste.		
UNIT V CASE STUDIES 9		
Environmental economics- Social and physiological aspects of pollution - Successful urban management - Models- Urban management-Case studies from developed nations -Software.		
TOTAL :45 PERIODS		
COURSE OUTCOMES:		
On successful completion of the course, students will be able to <input type="checkbox"/> understand planning of a city and identify various urban environmental issues <input type="checkbox"/> apply and prepare project plans to integrate urban water resource <input type="checkbox"/> develop water resource management using available water resources <input type="checkbox"/> understand and apply the principles of solid waste management		

REFERENCES

1. George Tchobanoglous, Hilary Theisen and Samuel A, Vigil "Integrated Solid Waste Management", McGraw Hill Publishers, New York, 1993.
2. McGhee J., "Water supply and sewerage", McGraw Hill Publishers, 1991
3. Martin P. Wanelista and Yousef. "Storm Water Management and Operations", John Wiley and Sons, 1993.
4. Neil S. Grigg., "Urban Water Infrastructure Planning – Management and Operations", John Wiley and Sons, 1986.

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PPMB3PE44	SMART MATERIALS, TECHNIQUES AND EQUIPMENTS FOR INFRASTRUCTURE	L T P C 3 0 0 3
COURSE OBJECTIVE:		
<input type="checkbox"/> To give an exposure on the advanced materials, techniques and equipments used in infrastructure industry.		
UNIT I SPECIAL CONCRETES 9		
Concrete -Behavior of concrete - High strength and high performance concrete - Fibre reinforced concrete - Self compacting concrete - Bacterial concrete -Reactive powder concrete - Ready mix concrete - Geopolymer concrete -Alternative materials for concrete.		
UNIT II METALS 9		
Steels - New alloy steels - Coatings to reinforcement - Cold formed steel -Aluminum and its products - Applications. Composites: Plastics - Reinforced polymers- FRP -Applications. Smart and intelligent materials: smart and intelligent materials for intelligent buildings - Special features.		
UNIT III ADVANCED CONSTRUCTION TECHNIQUES 9		
Sub structure construction: Box jacking- Pipe jacking- Under water construction of diaphragm walls and basement- Tunneling techniques-Cable anchoring and grouting- Driving diaphragm walls, sheet piles, laying operations for built up offshore system- Shoring for deep cutting- Large reservoir construction - Trenchless technology.		
UNIT IV SUPERSTRUCTURE CONSTRUCTION FOR BUILDINGS 9		
Vacuum dewatering of concrete flooring- Concrete paving technology- Techniques of construction for continuous concreting operation in tall buildings of various shapes and varying sections -Launching techniques suspended form work -Erection techniques of tall structures, large span structures- Launching techniques for heavy decks -Inset pre-stressing in high rise structures, aerial transporting, handling, erecting lightweight components on tall structures.		
UNIT V CONSTRUCTION OF SPECIAL STRUCTURES 9		
Erection of lattice towers and rigging of transmission line structures- Construction sequence in cooling towers, silos, chimney, sky scrapers, bow string bridges, cable stayed bridges - Launching and pushing of box decks -Advanced construction techniques of offshore structures- Construction sequence and methods in domes and prestress domes -Support structure for heavy equipment and conveyor and machinery in heavy industries -Erection of articulated structures, braced domes and space decks. Demolition Techniques -Advanced techniques and sequence in demolition and dismantling.		
TOTAL :45 PERIODS		
COURSE OUTCOMES:		
On successful completion of the course, students will be able to		
<input type="checkbox"/> explain the properties and applications of special concretes, composites, smart and intelligent materials		
<input type="checkbox"/> identify and explain advanced construction techniques used for sub structure construction		
<input type="checkbox"/> select appropriate techniques for super structure construction of buildings		
<input type="checkbox"/> select suitable techniques for construction of special structures		
<input type="checkbox"/> choose relevant technique for demolition and dismantling works		
REFERENCES		
1. Jerry Irvine, "Advanced Construction Techniques", C.A. Rocketr, 1984		
2. Patrick Powers, "Construction Dewatering: New Methods and Applications", John Wiley & Sons, 1992		
3. Robertwade Brown, "Practical foundation Engineering handbook", McGraw Hill Publications, 1995.		
4. Sankar S.K. and Saraswathi. S, "Construction Technology", Oxford University Press, New Delhi, 2008.		

PPMB3PE45	STRATEGIC AIRPORT INFRASTRUCTURE MANAGEMENT	L T P C 3 0 0 3
COURSE OBJECTIVE:		
<input type="checkbox"/> To provide the participants with a good knowledge on strategic planning and marketing in airport organizations.		
UNIT I INTRODUCTION TO AIRPORT INFRASTRUCTURE 9		
Growth of air transport, Airport organization and associations, Classification of airports airfield components, Air traffic zones and approach areas. Context of airport system planning - Development of airport planning process - Ultimate consumers - Airline decision - Other airport operations.		
UNIT II AIRPORT INFRASTRUCTURE CAPACITY DESIGN 9		
Components, size, turning radius, speed, airport characteristics. Capacity and Delay - Factors affecting capacity, determination of runway capacity related to delay, gate capacity and taxiway capacity.		
UNIT III AIRPORT INFRASTRUCTURE PLANNING AND SURVEYS 9		
Runway length and width, sight distances, longitudinal and transverse, runway intersections, taxiways, clearances, aprons, numbering, holding apron. Planning and design of the terminal area: Operational concepts, space relationships and area requirements, noise control, vehicular traffic and parking at airports. Air traffic control and aids: Runways and taxiways markings, day and night landing aids, airport lighting and other associated aids.		
UNIT IV AIRPORT INFRASTRUCTURE ENTERPRISE 9		
The economic impact on countries and regions - the main governance patterns in the airport business - The International path of evolution in the airport business - Airport transport value chain - Air enterprises - two primary actors in the air transport value chain - Skipping peripheral positions in the value chain. Rise of airport marketing for the aviation related business - Airport revenue management- Airport alliances- management contract.		
UNIT V THE DEVELOPMENT OF THE NON AVIATION INFRASTRUCTURE 9		
Related value Proposition. Evolution of traditional Airport - Evolutionary patterns for airport enterprises- Commercial Airport Philosophy - tourist and conference service - logistic services-property management-consulting services - BAA and the non aviation business]- best airport in the world: The case of Singapore Airport - Role and meaning of loyalty for a service company- Bench marking airline experience - Provider - Customer relational link - benefits from ALPS implementation of ALPS.		
TOTAL :45 PERIODS		
COURSE OUTCOMES:		
On the successful completion of the course, students will be able to:		
<input type="checkbox"/> Explain the classification of airports airfield components <input type="checkbox"/> Explain the main governance patterns in the airport business <input type="checkbox"/> Identify the evolutionary patterns for airport enterprises. <input type="checkbox"/> Explain the primary actors in the air transport value chain		
REFERENCES		
1. Aviation Safety Programs A Management Hand Book: Richard H. Wood - Jeppesen Sanderson Inc. 2. Airport Systems,: Planning, Design and Management, Second Edition, Richard L. De Neufville , Amedeo R. Odoni, Peter Belobaba,& Tom G. Reynolds), 2013. 3. Airport Planning and Management, Sixth Edition, Seth B. Young, Ph.D., Alexander T. Wells, Ed.D., McGraw-Hill Education, 2011. 4. Asset and Infrastructure Management for Airports—Primer and Guidebook, The national academic press.		

PPMB3PE46	REAL ESTATE MARKETING AND MANAGEMENT	L T P C 3 0 0 3
COURSE OBJECTIVE:		
<input type="checkbox"/> To provide the participants with a good knowledge on real estate marketing and management.		
UNIT I CONCEPT 9		
Fundamental concepts and techniques involved in real estate development process- Role of various organizations - CREDAI- BAI etc		
UNIT II EVENTS AND PRE-PROJECT STUDIES 9		
Modeling sequential events in real estate development process - Site evaluation - Land procurement - Development Team assembly - Market study		
UNIT III DEVELOPMENT PLANNING & APPROVAL PROCESS 9		
Identifying technical inputs required, planning objectives, front end clearances from various authorities, timing of the project and scheduling		
UNIT IV CONSTRUCTION AND PROJECT MANAGEMENT 9		
Identifying the elements of infrastructure and the resource mobilization, disaggregating the project components, mobilizing the human and fiscal resources procuring and storing materials		
UNIT V PROJECT MARKETING & HANDING OVER 9		
Over of the completed project- Communication tools required for presenting the project -In house sales promotion -Franchisee system -Joint venture and sharing issues - Procedure and laws relating to transfer of completed project.		
TOTAL :45 PERIODS		
COURSE OUTCOMES:		
On successful completion of the course, students will be able to		
<input type="checkbox"/> Explain the fundamental concepts and techniques involved in real estate development process		
<input type="checkbox"/> Explain the procedure and laws relating to transfer of completed project		
<input type="checkbox"/> Identify the fiscal resources procuring and storing materials process.		
REFERENCES:		
1. Gerald R. Cortesi, "Mastering real estate principles" (2001); Dearborn Trade Publising, New York, USA.		
2. Fillmore W Galaty, "Modern real estate practice" (2002); Dearborn Trade publishing, New York, USA		
3. Tanya Davis, "Real estate developer's handbook" (2007), Atlantic pub company, Ocala, USA.		
4. Mike E. Miles, "Real estate development - Principles & process 3rd edition" (2000); Urban Land Institute, ULI, Washington DC		

PPMB3PE47	INFRASTRUCTURE AND REAL ESTATE ENTREPRENEURSHIP	LTPC 3003
COURSE OBJECTIVES:		
<input type="checkbox"/> To develop and strengthen entrepreneurial quality and motivation in students. <input type="checkbox"/> To impart basic entrepreneurial skills and understandings to run a business efficiently and effectively.		
UNIT I ENTREPRENEURIAL COMPETENCE 9		
Entrepreneurship concept - Entrepreneurship as a Career - Entrepreneurial Personality - Characteristics of Successful, Entrepreneur - Knowledge and Skills of Entrepreneur.		
UNIT II ENTREPRENEURIAL ENVIRONMENT 9		
Business Environment - Role of Family and Society - Entrepreneurship Development Training and Other Support Organizational Services - Central and State Government Industrial Policies and Regulations - International Business.		
UNIT III BUSINESS PLAN PREPARATION 9		
Sources of Product for Business - Prefeasibility Study - Criteria for Selection of Product - Ownership - Capital - Budgeting Project Profile Preparation - Matching Entrepreneur with the Project - Feasibility Report Preparation and Evaluation Criteria.		
UNIT IV LAUNCHING OF SMALL BUSINESS 9		
Finance and Human Resource Mobilization Operations Planning - Market and Channel Selection - Growth Strategies - Product Launching -Incubation, Venture capital, IT startups.		
UNIT V MANAGEMENT OF SMALL BUSINESS 9		
Monitoring and Evaluation of Business - Preventing Sickness and Rehabilitation of Business Units- Effective Management of small Business.		
TOTAL :45 PERIODS		
COURSE OUTCOME:		
Students will gain knowledge and skills needed to start and run an enterprise.		
REFERENCES		
1. Hisrich, Entrepreneurship, Tata McGraw Hill, New Delhi, 2001. 2. S.S.Khanka, Entrepreneurial Development, S.Chand and Company Limited, New Delhi, 2001. 3. Mathew Manimala, Entrepreneurship Theory at the Crossroads, Paradigms & Praxis, Biztrantra ,2nd Edition ,2005 4. Prasanna Chandra, Projects – Planning, Analysis, Selection, Implementation and Reviews, Tata McGraw-Hill, 1996. 5. P.Saravanel, Entrepreneurial Development, Ess Pee kay Publishing House, Chennai -1997. 6. Arya Kumar. Entrepreneurship. Pearson. 2012 7. Donald F Kuratko, T.V Rao. Entrepreneurship: A South Asian perspective. Cengage Learning. 2012		

2.

PPMB3PE48

**VALUATION OF REAL ESTATE AND
INFRASTRUCTURE ASSETS****L T P C**
3 0 0 3**COURSE OBJECTIVE:**

- ☐ To gain knowledge about the valuation of different infrastructure assets

UNIT I REAL ESTATE VALUATION 9

Scope and objectives - Concepts of valuation - Types of value - Value vs Price vs Cost-Different methods of valuation- SWOT analysis

UNIT II APPROACHES TO REAL ESTATE VALUATION 9

Sales comparison approach - Cost approach - Income approach - SWOT analysis

UNIT III VALUATION OF VARIOUS CATEGORIES OF REAL ESTATE 9

Residential real estate valuation - Commercial real estate valuation - Industrial real estate valuation - Retail real estate valuation- Mixed-use real estate valuation

UNIT IV INFRASTRUCTURE ASSET VALUATION 9

Objective and approaches-Different categories of infrastructure assets- Valuation methodology- Key operational and financial parameters -Valuation framework and models.

UNIT V SECTORAL INFRASTRUCTURE VALUATION 9

Power sector- IT sector - Telecom sector - Aviation-Education sector- Other service sectors- Plant and Machinery -Case studies

TOTAL :45 PERIODS**COURSE OUTCOMES:**

- ☐ Students will gain knowledge and skills in connection to the valuation of different types of real estates and infrastructure assets.

REFERENCES:

1. Infrastructure valuation –Frederic Blanc - Brude and Majid Hasan, EDHEC Risk Institute
2. Infrastructure Asset Management - Frederic Blanc - Brude and Majid Hasan, EDHEC Risk Institute
3. Valuation techniques for infrastructure investment decisions, Michael J. Garvin, Department of Civil Engineering and Engineering Mechanics , Columbia University
4. <https://www.thebalance.com/different-types-of-real-estate-investments-you-can-make-357986>
5. http://rbsa.in/valuation_of_infrastructure_assets_specialized_assets.html
6. http://edhec.infrastructure.institute/wp-content/uploads/publications/blanc-brude_2015a.pdf
7. Application of Real Options in Infrastructure Projects Charles Y.J. Cheah, PhD, CFA



S.N O.	COURSE CODE	COURSE NAME	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
Sectoral Specialization: Tourism Management								
1	PPMB3PE49	Tourism Principles and Practices	PE	3	-	-	3	3
2	PPMB3PE50	Travel Management	PE	3	-	-	3	3
4	PPMB3PE51	Tourism Geography	PE	3	-	-	3	3
5	PPMB3PE52	Culture and Heritage	PE	3	-	-	3	3
6	PPMB3PE53	Tourism Products in India	PE	3	-	-	3	3
7	PPMB3PE54	Accommodation and House Keeping Management	PE	3	-	-	3	3
8	PPMB3PE55	Travel Media and Public Relations	PE	3	-	-	3	3
10	PPMB3PE56	Tour Operations	PE	3	-	-	3	3
12	PPMB3PE57	Medical Tourism	PE	3	-	-	3	3

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PPMB3PE49	TOURISM PRINCIPLES AND PRACTICES	L T P C 3 0 0 3
COURSE OBJECTIVES:		
<input type="checkbox"/> To comprehend the conceptual dimensions of tourism industry <input type="checkbox"/> To understand the dynamics of tourism businesses and its impacts		
UNIT I INTRODUCTION 9		
Tourist/ Visitor/ Traveler/ Excursionist, Early and Medieval Period of Travel: Renaissance and Its Effects on Tourism - Birth of Mass Tourism, Old and New Age Tourism, Concept of Tourism: Nature - Scope - Characteristics - Components - Significance of Tourism - Tourism System: Interdisciplinary Approaches - Motivations and Deterrents to Travel –Emerging Areas and Practices.		
UNIT II FORMS OF TOURISM 9		
Inbound, Outbound, National, International- Alternative Tourism – Inclusive Tourism, Current Trends in Domestic and Global Tourism: Tourism Statistics- Need for Measurement of Tourism - Tourism Demand and Supply.		
UNIT III TOURISM INDUSTRY 9		
Structure, Functions and Constituents - Direct, Indirect and Support Services - Basic Components of Tourism: Transport - Accommodation- Facilities & Amenities, Horizontal and Vertical Integration in Tourism Business, Infrastructure & Superstructure.		
UNIT IV TOURISM THEORY 9		
Leiper's Geo-Spatial Model - Mill-Morrison's Tourism Policy Model - Mathieson & Wall's Travel Buying Behaviour Model - Butler's Tourism Area Life Cycle (TALC) Model - Doxey's Irridex Model – Crompton's Push and Pull Theory- Stanley Plog's Psychographic Model- Gunn's Tourism Planning Model		
UNIT V TOURISM ORGANIZATIONS 9		
UNWTO, IATA, ICAO, WTTC, IHA, TAAI, FHRAI, ITDC, ICPB, IATO, IRCTC, State Tourism Development Corporations, Airport Authority of India, Archaeological Survey of India, Ministries of Tourism and Culture, Director General of Civil Aviation, Government of India.		
TOTAL: 45 PERIODS		
COURSE OUTCOME:		
<input type="checkbox"/> Students will learn the practices and ways to promote the tourism industry.		
REFERENCES:		
1. Rajat Gupta, Nishant Singh, Ishita Kirar and Mahesh Kumar Bairwa, Hospitality and Tourism Management, Vikas Publishing House Pvt. Ltd., 2015 2. Charles R. Goeldner and J. R. Brent Ritchie, Tourism: Principles, Practices, Philosophies, 12th Edition, Wiley, 2016 3. Sampad Kumar Swain and Jitendra Mohan Mishra, Tourism: Principles and Practices (Oxford Higher Education), Nov 2011 4. Chris Cooper, John Fletcher, Alan Fyall, David Gilbert and Stephen Wanhill, Tourism: Principles and Practice, 5th Edition, Pearson Education Limited, 2013 5. Renu Malra, Tourism Principles Practices Concepts And Philosophies, Anmol Publications Pvt. Ltd., 2013		

COURSE OBJECTIVE:

- ☐ To enable the students to enhance the skills and knowledge on travel industry and its types.

UNIT I INTRODUCTION 9

Travel Industry – modes of Travel – Air, Rail, Road, Sea, Authorities; Classification of travels- Inbound& Outbound Tours- Classification

UNIT II TRAVEL AGENCY 9

Introduction to Travel Trade: Historical Background of Travel Trade, Significance of Travel Agency Business, Meaning of Travel Agency- Types of Travel Agent- Full Service Agency, Commercial Agency, Implant Agency, Group / Incentive Agency, Types of Tour Operator- Inbound, Outbound , Domestic, Ground and Specialized.

UNIT III COMPONENTS OF TRAVEL MANAGEMENT 9

Market Survey and Research , A Guide to Marketing of Leisure Activities, Marketing Techniques of a Travel management - Marketing of Conferences, Congress, Conventions, Incentive Travel, Workshops, Seminars, MICE, Fare constructions and Scheduling - railway and airlines, consumer mix, Rules and regulations for registration - International Travel Formalities- Foreign Exchange Regulations, passport, visas, Clearances and other Procedures.

UNIT IV CARGO MANAGEMENT 9

Air & Sea ,Pre-requisites, Different types of Cargo, Documentations, Cargo Rates, Loading, Manifestation, Transshipment, Handling at Destination, Regulations.

UNIT V MODERNIZATION AND TRENDS IN TRAVEL INDUSTRY 9

Impact of Liberalization, Strategic trends in Travel Industry- Disinvestments, Takeovers, Consolidations, and Acquisitions in Travel Industry.

TOTAL : 45 PERIODS

COURSE OUTCOME:

- ☐ The learners will have a complete idea about the different concepts, trends and strategies used in this industry.

REFERENCES:

1. Chand, M. (2009), Travel Agency Management: An Introductory Text. Anmol Publications Pvt. Ltd., New Delhi.
2. Swain, S.K. & Mishra, J.M.(2012). Tourism: Principles & Practices. Oxford University Press, New Delhi.
3. Holloway, J.C. (2012), The Business of Tourism, Prentice Hall, London,
4. Roday. S, Biwal. A & Joshi. V. (2009), Tourism Operations and Management, Oxford University Press, New Delhi.
5. Goeldner, R & Ritchie. B (2010), Tourism, Principles, Practices and Philosophies, John Wiley & Sons, London.
6. Negi. J (2009), Travel Agency Operations: Concepts and Principles, Kanishka, New Delhi.
7. Walker, J.R. & Walker, J.J.(2011). Tourism Concepts and Practices, Pearson, New Delhi.

PPMB3PE51	TOURISM GEOGRAPHY	LTPC 3003
COURSE OBJECTIVE:		
<input type="checkbox"/> To introduce the students to the various geographical locations across the world with a tourism perspective.		
UNIT I BASIC GEOGRAPHY 9		
Definition, scope and importance of Tourism geography, Impact of weather and climate on Tourist destinations. Study of maps, longitude & latitude, international date line, time variations, time difference, GMT variations, concepts of elapsed time, flying time, ground time. Standard time and summer time (day light saving time).		
UNIT II INDIA 9		
Physical Factors – Relief, Climate, Vegetation, wildlife, water Bodies. Socio-cultural and economic factors influencing tourism in India - Political boundaries and major tourist attractions. Modes of travel to the places of tourism in India		
UNIT III ASIA, CANADA AND EUROPE 9		
An overview of the physical features, political boundaries, tourism destinations and best time to visit the following countries in Asia and Europe, the states in Canada, and available modes of travel to these destination countries/states from India.		
Asia: China, Mongolia, Japan, Korea, Thailand, Philippines, Singapore, Malaysia, Bangladesh, Maldives, Nepal, Pakistan, Sri Lanka. Canada: Ontario, Ottawa, Montreal, British Columbia. Europe - England, France, Italy, Spain, Ireland, Turkey, Spain, Netherlands, Czech Republic, Austria, Germany, Greece, Switzerland, Russia, Ukraine		
UNIT IV UNITED STATES OF AMERICA, CENTRAL AND SOUTH AMERICA 9		
An overview of the physical features, political boundaries, tourism destinations, best time to visit the following states in USA, Central and South America and available modes of travel to these destinations from India. United States of America: California, New York, Texas, Pennsylvania, Florida, Virginia, Massachusetts, Ohio, Washington, Florida, Nevada, Georgia, Hawaii, North and South Carolina and Rhode Island. Central America - Costa Rica, Panama, Nicaragua, Guatemala, Honduras, Belize. South America: Peru, Ecuador, Venezuela, Chile, Bolivia, Brazil.		
UNIT V AFRICA, UAE AND AUSTRALIA 9		
An overview of the physical features, political boundaries, tourism destinations, best time to visit the following countries in Africa, UAE and Australia and the available modes of travel to these destinations from India.		
Africa: Kenya, Zimbabwe, Zambia, Egypt, Mali, South Africa, Morocco, Ethiopia, Uganda, Rwanda, Congo, Tanzania, Mauritius, Gambia. Middle East: United Arab Emirates, Israel, Saudi Arabia, Iran, Syria, Lebanon, Jordan. Australia, New Zealand and Papua New Guinea		
TOTAL: 45 PERIODS		
COURSE OUTCOMES:		
<input type="checkbox"/> General knowledge of worldwide tourism flows <input type="checkbox"/> Ability to Plan a trip to a tourism destination		
REFERENCES:		
1. Alan A. Lew, Colin Michael Hall, Dallen J. Timothy, World Geography of Travel and Tourism: A Regional Approach, Butterworth-Heinemann, 2008. 2. Robinson H.: A Geography of Tourism, Mac Donald & Evans London, 1978 3. Douglas Pearce, Topics in Applied Geography, Tourism Development, Longman Scientific Technical, New York, 1995. 4. Majid Husain, Geography of India, Tata McGraw Hill, 2012.		

PPMB3PE52

CULTURE AND HERITAGE

L T P C
3 0 0 3

COURSE OBJECTIVES:

- ☐ To provide the background of Indian culture and heritage
- ☐ To give students a solid foundation for understanding and managing cultural diversity in the workplace.

UNIT I INTRODUCTION TO INDIAN CULTURE AND HERITAGE 9

Salient features of Indian culture – socio, ethnic historical and religious perspectives of Indian culture;
Cultural transition, Indian cultural heritage.

UNIT II CULTURAL DIMENSIONS AND REFLECTIONS 9

Key elements of Indian cultural dimensions –Tangible and intangible culture- Dimensions of national cultures -Distinctiveness of Indian culture in personal life, social life and work life – languages and literature- Cultural traits under major religious background – Reflection in arts, paintings, dance, music – Ceremonies celebrations – Place of worships – Belief, attitude and perception – Museum – Special interest – Tourism

UNIT III CULTURAL MIX 9

Cultural dissimilarities across world – across nation; Major issues – challenges to hospitality industry; Influence of global culture – Relationship between national culture and organization structure; International dimensions of organizational culture; Impact on personal and work life – Impact on tourist.

UNIT IV CROSS CULTURAL MANAGEMENT 9

Frameworks of cross cultural management- Cultural shock and acculturation- Cross- cultural training- Managing multicultural teams- Cultural negotiations- Global leadership and motivational issues-Cultural differences in ethics and decision making

UNIT V GLOBAL APPROACH 9

UNESCO – criteria, fairs and festivals, funding, committee and convention, reporting and monitoring, approved heritage sites-challenges, Impact of IT, Trends.

TOTAL: 45 PERIODS

COURSE OUTCOMES:

- ☐ The learners should be able to describe Indian culture and heritage.
- ☐ The learners are competent to explain how different national cultures can influence
- ☐ The individuals and groups in social and business settings.

REFERENCES:

1. F.r. Allchin, Conservation of Indian Heritage, Cosmo publications, New Delhi
2. David C. Thomas, Cross-cultural management- Essential concepts, Sage Publications, 2008
3. S.M.Dewan, Corporate governance in public sector enterprises, Pearson Longman, 2006.
4. G. Hofstede, Culture and organizations: intercultural cooperation and its importance for survival, Harper Collins, London, 2010.
5. Rajiv Desai , Indian business culture - An Insider's guide , Butterworth and Heinemann, 19
6. Ananda Das gupta , Human values in Management , Ashgate publishing limited, 2004.

PPMB3PE53	TOURISM PRODUCTS IN INDIA	L T P C 3 0 0 3
COURSE OBJECTIVE		
<input type="checkbox"/> To enable the students to understand the tourist resources in India, prepare a theme based tour itinerary and manage the tourist destinations travel.		
UNIT I INTRODUCTION 9		
Tourism Products: Definition, Concept, Characteristics and Classification. Cultural Heritage of India — Stages of evolution, continuity. Heritage - Types of Heritage Tourism, Heritage Management Organizations.		
UNIT II NATURAL RESOURCES 9		
Natural resources: Wildlife sanctuaries - National parks - Biosphere reserves – Back water Tourism - Mountain and Hill Tourist Destinations – Islands, Beaches, Caves & Deserts of India.		
UNIT III TOURISM CIRCUITS 9		
Major tourism circuits of India: Inter State and Intra-State Circuits - Religious Circuits - Heritage Circuits - Wildlife Circuits.		
UNIT IV MANMADE DESTINATIONS AND THEME PARKS 9		
Manmade Destinations: Locations of Adventure sports - Commercial attractions - Amusement Parks – Gaming - Shopping - Live Entertainments - Supplementary accommodation - House boats – Tree houses - Home stays - Tourism by rail - Palace on wheels - Zoological and Botanical Garden.		
UNIT V CONTEMPORARY DESTINATIONS IN INDIA 9		
Places and Packages for Ecotourism, Rural Tourism, Golf Tourism, Medical Tourism and Pilgrimage Tourism - Camping Tourism.		
TOTAL: 45 PERIODS		
COURSE OUTCOMES:		
<input type="checkbox"/> The students would be able to understand the needs of the tourists and manage their destination requirements.		
REFERENCES:		
1. S.P. Gupta (2003), Cultural Tourism in India, Indraprastha Museum of Art and Archaeology, New Delhi. 2. Jacob, R. (2012). Indian Tourism Products. Abhijeet publications. 3. Hussain.A.K (2000). The National Culture of India. National Book Trust, New Delhi. 4. Sahai, S. (2006), Indian Architecture: Hindu Buddhist and Jain. Prakash Books. 5. The Gazette of India: History and Culture, Vol.2 6. Incredible India website and Tourism websites of individual states like Tamilnadu, Kerala, etc.		

PPMB3PE54	ACCOMMODATION AND HOUSE KEEPING MANAGEMENT	L T P C 3 0 0 3
COURSE OBJECTIVES:		
<input type="checkbox"/> To study the flow of activities and functions in lodging operations. <input type="checkbox"/> To make the learner to understand about the operation and the management of front office and Housekeeping departments in hotels.		
UNIT I INTRODUCTION 9		
Hotel Industry – Classification of hotels – Other types of lodging – Types of rooms – Tariff Plans – Duties & Responsibilities of front office personnel – Inter-department coordination.		
UNIT II FRONT OFFICE MANAGEMENT 9		
Room Reservation – Types of reservation – Front office accounting – Registration – Lobby and well desk operations – Guest Services – Settlements – Safety & Security – Night Audit - Yield Management – Budgetary Control.		
UNIT III HOUSE KEEPING MANAGEMENT 9		
Importance of housekeeping – Departmental Structures – Coordination with other departments – Duties & Responsibilities of Executive housekeeper, Asst. Executive house keeper, floor supervisor, room attendant – House Keeping Control desk.		
UNIT IV HOUSE KEEPING FUNCTION 9		
Linen & Uniform – Laundry: Equipment, detergents, Stain removal, Laundry Process flow – Sewing – Cleaning Practice: Equipment, Cleaning agents, Cleaning methods – Pest Control – Public area cleaning and maintenance.		
UNIT V INFRASTRUCTURE MANAGEMENT & OTHER SOURCES 9		
Elements of Interior Decoration & Design – Colours – Furniture – Floor – Lighting – Floral art – Textiles – Carpets – Catering Services – Wellness & Fitness Services – Leisure & Travel Services – Business Services – Concierge services - Innovative ideas.		
TOTAL: 45 PERIODS		
COURSE OUTCOMES:		
<input type="checkbox"/> The learners shall be competent in handling Front Office and Housekeeping management operations. <input type="checkbox"/> The learners will be equipped with knowledge on a wide range of front office and housekeeping tasks and situations in a commercial environment.		
REFERENCES:		
1. James , Hotel Front Office Management, 5th Edition, Wiley, 2014. 2. Sudhir Andrews. Text book of Hotel Housekeeping Management & Operations, Tata Mcgraw Hill, 2008. 3. Jatashankar R. Tiwari, Hotel Front office & Operations management, Oxford University Press, 2009. 4. Anutosh Bhakta. Professional Hotel Front Office Management. Tata McGraw Hill 2012. 5. Ahmed Ismail. Front Office Operations and Management. Cengage Learning. 6. Raghubalan and Smritee Raghubalan. Hotel Housekeeping Operations and Management. Second Edition. Oxford 2007. 7. Casado, M. Housekeeping Management. John Wiley and Sons, Inc. 2 nd edition, 2011.		

COURSE OBJECTIVES:

- To facilitate in the understanding of travel media and its role in tourism promotion through public relations.
- To impart and equip the students with practical know-how on travel writing and dynamics of making of travelogues.

UNIT I HISTORICAL UNDERSTANDING OF MASS MEDIUMS 9

History of print media – Global and Indian context, Advent of printing; British and American streams of journalism; Overview of world mass media -- Sky Invasion, Newspapers and Globalization, Role of Travel Media

UNIT II COMMUNICATION MESSAGE AND ITS CONSTRUCTION 9

Idea of a successful message; Ethics, Standards and Practices; Relevance of effective messages, interpretation of cues; How and what you communicate; Self-awareness in travel communication –Power of message/words; Organization – converting information into convenient understandable messages, Interpretation – how easily the thoughts of the source is organized for the receiver to interpret it correctly

UNIT III TRAVEL WRITING 9

News Worthiness of developed Ideas; Writing Travel Pieces; Writing and Submitting Stories for Travel Mediums; Articles and Short Pieces, Travel Magazines, Travel Newsletters, Travel and Guide Books; Travel Reviews; the Internet; Coffee Table Books and Anthologies; Preparing Scripts for Travel Programs; Conducting Interviews; Visual support

UNIT IV GENERAL INTRODUCTION TO PUBLIC RELATIONS 9

Public Relations Fundamentals – Definitions, Practices, Strengths -Duties and responsibilities of a Public relations manager, Code of ethics, Emergence of Public Relations –from ancient times to Modern- the changing role of PR. Grunig and Hunt's four models. Public Relations in India – a historical perspective- pre and post independence era-liberalised economy and corporate -PR in India growth and challenges.

UNIT V ROLE OF PUBLIC RELATIONS 9

Standard PR Tools and Most Common Travel/Tourism PR Tools, PR at Hotels and Lodging Establishments, Restaurant Public Relations, Transportation Public Relations, Destination and Tourist Attraction PR, What Travel and Tourism Employers Should Understand About PR

TOTAL: 45 PERIODS**COURSE OUTCOME:**

- The students will understand about Travel Media and Public Relations field.

REFERENCES :

1. Seema Hasan, Mass Communication Principles and Concepts, 2nd Edition, CBS Publishers & Distributors Pvt Ltd, 2016
2. Dennis E. Deuschl, Travel and Tourism Public Relations – An Introductory Guide for Hospitality Managers, Routledge, 2011
3. Keval J. Kumar, Mass Communication in India, 4th Edition, JAICO Publishing House, 2010
4. Annamulai Murguan, Tourism and Public Relations, Kalpaz Publications, 2013

PPMB3PE56	TOUR OPERATIONS	L T P C 3 0 0 3
COURSE OBJECTIVE:		
<input type="checkbox"/> To make the students knowledgeable in tour operations and its related documentation. The student will study the tour preparation, marketing tour products and the role of guides and escorts in tour operations.		
UNIT I TOUR INDUSTRY 9		
Tour operations business – definition, evolution; Types of tours – inbound, outbound, escorted, guided, types of package tours and operators; factors affecting tour design and selection; Tourism intermediaries - mass-market package holidays, specialist tour operators, domestic & international, collaborative tourism.		
UNIT II ITINERARY PREPARATION 9		
Itinerary Preparation -meaning, types, Resources and steps of preparation, Do's and don'ts of itinerary preparation; Tour Formulation and Designing Process - Starting of tour operations business, departments of tour operations, tour departure procedure, activities.		
UNIT III TOUR OPERATIONS BUSINESS 9		
Tour operations process, research, planning, costing, costing elements; Tour operations business – role, relevance, tour operational techniques – Booking a tour, reservations, hotel booking procedures, boarding bus/coach, emergency procedures, finance details, travel insurance, Foreign Exchange, Cargo, documentation, food and beverages, transportation delays; Recognition - IATA Accreditation - Recognition from Government; Travel trade organizations – Objectives, activities and functions.		
UNIT IV MARKETING AND PROMOTION OF TOUR 9		
Marketing and promotion of tour – marketing strategies of tour operation business, tour brochure, how to prepare a tour brochure, items to be included in tour brochure, tools used to market tour packages, Indian and world tourism day; Promotion of Tour Operation - Mix and Media, Types of media, Selection criteria; Tour Pricing - Calculation of Tour Price - Pricing Strategies.		
UNIT V GUIDING AND ESCORTING 9		
Guiding and escorting – meaning, concepts, golden rules of guiding, difference between guide and escort, skills, responsibilities of guides, interpreting sites, escorts, personal hygiene, grooming, pre, post, and during tour responsibilities, checklist, safety and security, insurance, first aid, emergency handling, leading a group, code of conduct.		
TOTAL:45 PERIODS		
COURSE OUTCOME:		
<input type="checkbox"/> The students will have good learning on tour operations. They can prepare and market tour itinerary. They will know the importance of tour operators, guides and escorts.		
REFERENCES:		
1. K. Bhatia, Business of Travel Agency & Tour Operations Management, Sterling Publishers, 2012. 2. JagmohanNegi, Travel Agency and Tour Operation Concepts and Principles, Kanishka Publishers & Distributors, 2006. 3. Lalita Sharma, Travel Agency & Tour Operation Concepts and Principles, Centrum Press, 2010. 4. Dennis L. Foster, The Business of Travel: Agency Operations and Administration, Glencoe Division, Macmillan/McGraw-Hill, 1991. 5. SunetraRoday, Archana Biwaland Vandana Joshi, Tourism: Operations and Management, Oxford University Press, 2009.		

PPMB3PE57	MEDICAL TOURISM	L T P C 3 0 0 3
COURSE OBJECTIVE:		
To give an overview of global health care practices and strategies for marketing and communications in India with focus on international tourists.		
UNIT I INTRODUCTION TO HEALTH CARE IN INDIA 9		
Historical Review – Health care services: Level & Types — Disease burden - Public Services in India - Private health care sector growth: a retrospective & road ahead— Pharmaceutical, Biotechnology - Health Insurance- Financing and delivery of health services: Issues & Challenges.		
UNIT II MEDICAL TOURISM 9		
Concept, typology Genesis and growth of Medical Tourism - benefits of medical tourism, Factors responsible for growth of health and medical tourism. Medical Tourism Business- Global medical tourism scenario, Stakeholders, countries promoting medical tourism – Health and Medical Tourism markets at global level.		
UNIT III MEDICAL TOURISM PRODUCT AND PACKAGE 9		
Factors and Steps for designing product and tour package, development, issues and considerations, Approvals and formalities, Pre-tour arrangements, tour operations and post-tour management, Health Insurance, Claiming Health Insurance		
UNIT IV LEGAL ASPECTS OF MEDICAL TOURISM 9		
Certification and Accreditation in health and medical tourism, Ethical, legal, economic and environmental issues in health and medical tourism. An Introduction to National Accreditation Board for Hospitals & Healthcare (NABH) and Joint Commission International (JCI).		
UNIT V MEDICAL TOURISM IN INDIA 9		
Centres/Destinations, Current and futuristic trends, Potentials, Issues and Challenges, Trousing the challenges, Government Support.		
TOTAL : 45 PERIODS		
COURSE OUTCOME:		
The students will have an overview of contemporary tourism practices and global perspectives.		
REFERENCES:		
1. MilicaZ. Bookman Karla R. Bookman, Medical Tourism in developing countries, palgrave Macmillan 2007.		
2. Raj Pruthi, Medical Tourism in India , Arise publishers & Distributors, 2006		
3. RNCOS, Opportunities in Medical Tourism in India(2007), RNCOS E-Services Pvt. Ltd., 2006.		
4. Michael D. Horowitz Jeffrey A. Rosensweig, Medical Tourism – Health Care in The global economy Trends), American College of Physician Executive, 2007.		
5. Sonali Kulkarni, Medical Tourism in India, Book Enclave, 2008		
6. Glenn Cohen, Patients with Passports: Medical Tourism, Law, and Ethics, Oxford University Press, 2015		