



M.I.E.T. ENGINEERING COLLEGE
(Autonomous)
Tiruchirappalli-620007

Curriculum & Syllabus
(Regulations 2024)



Master of
Business Administration



M.I.E.T. ENGINEERING COLLEGE

(AUTONOMOUS)

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)

Accredited by NBA (CIVIL, CSE, ECE, EEE & MECH)

Accredited with 'A+' grade by NAAC

(An ISO 9001:2015 Certified Institution)

(Recognized by UGC under section 2(f) & 12(B) of UGC Act, 1956)

TRICHY - PUDUKKOTTAI MAIN ROAD, TRICHY - 620 007



DEPARTMENT OF MANAGEMENT STUDIES



CURRICULUM AND SYLLABUS

MASTER OF BUSINESS ADMINISTRATION

(Regulations 2024)

Vision

To be a centre for transformation and motivation for the students to learn the modern business skills to serve our society.

Mission

- ❖ Be a center of excellence in management education and recent technologies in accordance with industrial trends.
- ❖ Develop industry ready and effective managers by imparting insightful knowledge and necessary skills.
- ❖ Promote self– employment through entrepreneurship.

Program Outcomes (POs)

1. Apply knowledge of management theories and practices to solve business problems.
2. Foster analytical and critical thinking abilities for data – based decision making.
3. Ability to develop Value based Leadership ability.
4. Ability to understand, analyze and communicate Global, Economic, Legal and Ethical aspects of business.
5. Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment.

Program Educational Objectives (PEOs)

1. Understand and apply management concepts and techniques to resolve the business issues.
2. Encourage analytical and critical thinking skills for decision–making based on existing scientific and statistical data.
3. Capacity to cultivate a value–based leadership.
4. Ability to understand, analyze and communicate global, economic, legal, and ethical aspects of business.
5. Ability to take the initiative and mentoring others to attain corporate goals to promote entrepreneurship.

PEO / PO Mapping

Program Educational Objectives	Program Outcomes				
	PO1	PO2	PO3	PO4	PO5
PEO1	3	3	3	3	3
PEO2	2	3	3	3	2
PEO3	3	3	3	2	3
PEO4	2	2	2	3	2
PEO5	2	3	3	2	3

1–Low, 2 –Medium, 3– High



CHOICE BASED CREDIT SYSTEM
CURRICULUM AND SYLLABUS FOR SEMESTERS I TO IV
SEMESTER I

S. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS PER WEEK	CREDITS
				L	T	P		
1.	24BA1101	Statistics Tools for Management	PCC	4	0	0	4	4
2.	24BA1102	Essentials of Organizational Behavior	PCC	4	0	0	4	4
3.	24BA1103	Economics for Managers	PCC	4	0	0	4	4
4.	24BA1104	Accounting Business Decision	PCC	4	0	0	4	4
5.	24BA1105	Business Law	PCC	4	0	0	4	4
6.	24BA1106	Information Management	PCC	4	0	0	4	4
7.	-	Non-Functional Elective**	NEC	3	0	0	3	3
8.	24BA1201	Indian Ethos (Seminar)	EEC	0	0	4	4	2
9.	24BA1202	Career Skill Development (Laboratory)	EEC	0	0	4	4	2
Total				27	0	8	35	31

** Students need to choose one elective from the Non – Functional.

SEMESTER II

S. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS PER WEEK	CREDITS
				L	T	P		
1.	24BA2101	Operations Research in Management	PCC	4	0	0	4	4
2.	24BA2102	Financial Management	PCC	4	0	0	4	4
3.	24BA2103	Human Resource Management	PCC	4	0	0	4	4
4.	24BA2104	Operations Management	PCC	4	0	0	4	4
5.	24BA2105	Research Design	PCC	4	0	0	4	4
6.	24BA2106	Business Analytics	PCC	4	0	0	4	4
7.	24BA2107	Modern Marketing	PCC	4	0	0	4	4
8.	24BA2201	Business Ethics (Seminar)	EEC	0	0	4	4	2
9.	24BA2202	Data Analysis and Business Modeling (Laboratory)	PCC	0	0	4	4	2
Total				28	0	8	36	32

SEMESTER III

S. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS PER WEEK	CREDITS
				L	T	P		
1.	24BA3101	Strategic Management	PCC	4	0	0	4	4
2.	24BA3102	International Business Management	PCC	4	0	0	4	4
3.	–	Professional Elective I	PEC	3	0	0	3	3
4.	–	Professional Elective II	PEC	3	0	0	3	3
5.	–	Professional Elective III	PEC	3	0	0	3	3
6.	–	Professional Elective IV	PEC	3	0	0	3	3
7.	–	Professional Elective V	PEC	3	0	0	3	3
8.	–	Professional Elective VI	PEC	3	0	0	3	3
9.	24BA3201	Creativity and Innovation (Laboratory)	EEC	0	0	4	4	2
10.	24BA3202	Summer Internship ^{##}	EEC	0	0	4	4	2
Total				26	0	8	34	30

^{##} Students should undergo internship for period of 4 weeks during 2nd semester vacation.

SEMESTER IV

S. NO.	COURSE CODE	COURSE TITLE	CATEGORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS PER WEEK	CREDITS
				L	T	P		
1.	24BA4501	Project Work	EEC	0	0	24	24	12
Total				0	0	24	24	12

PROFESSIONAL CORE COURSES (PCC)

S. NO.	COURSE CODE	COURSE TITLE	CATE GORY	PERIODS			TOTAL CONTACT PERIODS PER WEEK	CREDITS
				L	T	P		
1.	24BA1101	Statistics Tools for Management	PCC	4	0	0	4	4
2.	24BA1102	Essentials of Organizational Behavior	PCC	4	0	0	4	4
3.	24BA1103	Economics for Managers	PCC	4	0	0	4	4
4.	24BA1104	Accounting Business Decision	PCC	4	0	0	4	4
5.	24BA1105	Business Law	PCC	4	0	0	4	4
6.	24BA1106	Information Management	PCC	4	0	0	4	4
7.	24BA2101	Operations Research in Management	PCC	4	0	0	4	4
8.	24BA2102	Financial Management	PCC	4	0	0	4	4
9.	24BA2103	Human Resource Management	PCC	4	0	0	4	4
10.	24BA2104	Operations Management	PCC	4	0	0	4	4
11.	24BA2105	Research Design	PCC	4	0	0	4	4
12.	24BA2106	Business Analytics	PCC	4	0	0	4	4
13.	24BA2107	Modern Marketing	PCC	4	0	0	4	4
14.	24BA3101	Strategic Management	PCC	4	0	0	4	4
15.	24BA3102	International Business Management	PCC	4	0	0	4	4
16.	24BA2202	Data analysis and Business Modeling (Laboratory)	PCC	0	0	4	4	2

EMPLOYABILITY ENHANCEMENT COURSES (EEC)

S. NO.	COURSE CODE	COURSE TITLE	CATE GORY	PERIODS			TOTAL CONTACT PERIODS PER WEEK	CREDITS
				L	T	P		
1.	24BA1201	Indian Ethos (Seminar)	EEC	0	0	4	4	2
2.	24BA1202	Career Skill Development (Laboratory)	EEC	0	0	4	4	2
3.	24BA2201	Business Ethics (Seminar)	EEC	0	0	4	4	2
4.	24BA3201	Creativity and Innovation (Laboratory)	EEC	0	0	4	4	2
5.	24BA3202	Summer Internship	EEC	0	0	4	4	2
6.	24BA4501	Project Work	EEC	0	0	4	4	2

PROFESSIONAL ELECTIVES COURSES (PEC)

FUNCTIONAL SPECIALISATIONS

1. Students can take three elective subjects from **two functional** specializations

Or

2. Students can take six elective subjects from **sectoral** specialization

S. NO.	COURSE CODE	COURSE TITLE	CATE GORY	PERIODS			TOTAL CONTACT PERIODS	CREDITS
				PER WEEK				
				L	T	P	PER WEEK	
NON – FUNCTIONAL ELECTIVE COURSES (NEC)								
1.	24BA1401	Entrepreneurship Development	NEC	3	0	0	3	3
2.	24BA1402	Event Management	NEC	3	0	0	3	3
FUNCTIONAL SPECIALISATIONS								
FINANCIAL MANAGEMENT [7]								
1.	24BA3301	Investment Security Analysis and Portfolio Management	PEC	3	0	0	3	3
2.	24BA3302	Financial Market Dynamics	PEC	3	0	0	3	3
3.	24BA3303	Financial Institutions and Services	PEC	3	0	0	3	3
4.	24BA3304	Financial Derivatives	PEC	3	0	0	3	3
5.	24BA3305	Financial Modeling and Valuation	PEC	3	0	0	3	3
6.	24BA3306	International Finance	PEC	3	0	0	3	3
7.	24BA3307	Behavioral Finance	PEC	3	0	0	3	3
MARKETING MANAGEMENT [7]								
1.	24BA3308	Retail Marketing	PEC	3	0	0	3	3
2.	24BA3309	Consumer Behavior	PEC	3	0	0	3	3
3.	24BA3310	Integrated Marketing Communication	PEC	3	0	0	3	3
4.	24BA3311	Services Marketing	PEC	3	0	0	3	3
5.	24BA3312	Sales and Distribution Management	PEC	3	0	0	3	3
6.	24BA3313	Product and Brand Management	PEC	3	0	0	3	3
7.	24BA3314	Digital Marketing	PEC	3	0	0	3	3

HUMAN RESOURCE MANAGEMENT [6]								
1.	24BA3315	Strategic Human Resource Management	PEC	3	0	0	3	3
2.	24BA3316	Industrial Relations and Labour Legislations	PEC	3	0	0	3	3
3.	24BA3317	Organizational, Design, Change and Development	PEC	3	0	0	3	3
4.	24BA3318	Negotiation and Conflict Management	PEC	3	0	0	3	3
5.	24BA3319	Reward and Compensation Management	PEC	3	0	0	3	3
6.	24BA3320	HR Analytics	PEC	3	0	0	3	3
OPERATIONS MANAGEMENT [6]								
1.	24BA3321	Supply Chain Management	PEC	3	0	0	3	3
2.	24BA3322	Quality Management	PEC	3	0	0	3	3
3.	24BA3323	Materials Management	PEC	3	0	0	3	3
4.	24BA3324	Services Operations Management	PEC	3	0	0	3	3
5.	24BA3325	Supply Chain Analytics	PEC	3	0	0	3	3
6.	24BA3326	Project Management	PEC	3	0	0	3	3
BUSINESS ANALYTICS [5]								
1.	24BA3327	Data Mining for Business Intelligence	PEC	3	0	0	3	3
2.	24BA3328	Deep Learning and Artificial Intelligence	PEC	3	0	0	3	3
3.	24BA3329	Social Media and Web Analytics	PEC	3	0	0	3	3
4.	24BA3330	E-Business Management	PEC	3	0	0	3	3
5.	24BA3331	Enterprise Resource Planning	PEC	3	0	0	3	3

SECTORAL SPECIALIZATION

S. NO.	COURSE CODE	COURSE TITLE	CATE GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS PER WEEK	CREDITS
				L	T	P		
LOGISTICS AND SUPPLY CHAIN MANAGEMENT (12)								
1.	24BA3332	Supply Chain Concepts and Planning	PEC	3	0	0	3	3
2.	24BA3333	Sourcing and Supply Management	PEC	3	0	0	3	3
3.	24BA3334	Supply Chain Inventory Management	PEC	3	0	0	3	3
4.	24BA3335	Supply Chain Information System	PEC	3	0	0	3	3
5.	24BA3336	Ware house Management	PEC	3	0	0	3	3
6.	24BA3337	Transportation and Distribution Management	PEC	3	0	0	3	3
7.	24BA3338	Reverse and Contract Logistics	PEC	3	0	0	3	3
8.	24BA3339	Air Cargo Management	PEC	3	0	0	3	3
9.	24BA3340	Containerization and Allied Business	PEC	3	0	0	3	3
10.	24BA3341	EXIM Management	PEC	3	0	0	3	3
11.	24BA3342	Fundamentals of Shipping	PEC	3	0	0	3	3
12.	24BA3343	Port and Terminal Management	PEC	3	0	0	3	3

SUMMARY OF CREDIT DISTRIBUTION

Course	Semester I		Semester II		Semester III		Semester IV		Total	
	No. of Courses	Credit								
PCC	06	24	08	30	02	08	–	–	16	62
PEC	–	–	–	–	06	18	–	–	06	18
NEC	01	03	–	–	–	–	–	–	01	03
EEC	02	04	01	02	02	04	01	12	06	22
Total	09	31	09	32	10	30	01	12	29	105

TOTAL CREDITS TO BE EARNED FOR THE AWARD OF THE DEGREE = 105

COURSE OBJECTIVES

- To introduce the concepts of basic statistical techniques.
- To acquaint the knowledge of hypothesis testing, using tools such as Z test, F test, ANOVA, chi-square tests and non-parametric tests.
- To introduce the concepts solving regression & correlation problems.

UNIT I INTRODUCTION**12**

Measures of central tendency – Mean – Median – Mode – Measures of Dispersion– Range – Quartile Deviation – Mean Deviation – Standard Deviation and Co-efficient of Variation – Skewness – Bowley’s Co-efficient – Kelley’s Co-efficient.

UNIT II SAMPLING DISTRIBUTION AND ESTIMATION**12**

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.

UNIT III TESTING OF HYPOTHESIS – PARAMETRIC TESTS**12**

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**12**

Chi-square test for single sample standard deviation– Chi-square tests for independence of attributes and goodness of fit– Rank sum test– Comparing two populations – Mann – Whitney U test and Kruskal Wallis test.

UNIT V CORRELATION AND REGRESSION**12**

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

TOTAL: 60 PERIODS**COURSE OUTCOMES**

On successful completion of this course, the student will be able to

CO1:Facilitate objective solutions in business problems.

CO2:Analyse and solve the business problems.

CO3:Apply statistical techniques to data sets, and correctly interpret the results.

CO4:Develop skill-set that is demand in both the research and business.

CO5:Apply the statistical techniques in a work setting.

TEXT BOOKS

1. Richard I. Levin, David S. Rubin, Masood H. Siddiqui, Sanjay Rastogi, Statistics for Management, Pearson Education, 8th Edition, 2017.
2. G C Beri, “Business Statistics”, Tata Mc Graw Hill Publishing Company Ltd., 3rd Edition, 2017.
3. Gupta S.P., “Statistical Method”, Sultan Chand & Sons, New Delhi, 46th Edition, 2019.

REFERENCE BOOKS

1. Prem. S. Mann, Introductory Statistics, Wiley Publications, 9th Edition, 2015.
2. T N Srivastava and Shailaja Rego, Statistics for Management, Tata McGraw Hill, 3rd Edition 2017.
3. 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, 2016.
4. N. D. Vohra, Business Statistics, Tata McGraw Hill, 2nd Edition, 2021.
5. Johnson, R.A., Miller, I and Freund J., “Miller and Freund’s Probability and Statistics for Engineers”, Pearson Education, Asia, 8th Edition, 2015.

ONLINE RESOURCES & MOOCs

1. NPTEL – Statistics for Business Analytics, Prof. M. K. Tiwari, IIT Kharagpur.
<https://nptel.ac.in/courses/110105139>
2. Coursera – Business Statistics and Analysis, Offered by Rice University.
<https://www.coursera.org/specializations/business-statistics-analysis>
3. edX – Introduction to Statistics Stanford Online.
<https://www.edx.org/course/statistics>

Mapping of COs and POs

COs	POs				
	1	2	3	4	5
CO1	3	3	1	2	2
CO2	3	3	2	2	2
CO3	2	3	2	2	2
CO4	3	3	3	2	3
CO5	3	3	3	2	2
AVG	2.80	3.00	2.20	2.00	2.20

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

COURSE OBJECTIVES

- To familiarize the basic concepts of management and to understand the organization functions.
- To get the knowledge about the Organizational and individual behavior at work place.
- To analyze the various management approaches.

UNIT I NATURE AND THEORIES OF MANAGEMENT**12**

Management Concept – Management Approaches – Management Theories – Managerial Functions and Roles– Recent Trends in Management.

UNIT II MANAGEMENT FUNCTIONS**12**

Planning– Organizing – Staffing – Decision Making–Controlling – Organizational Structure and Design – Impact of Technology on organizational design – Mechanistic (vs) Adoption structures.

UNIT III ORGANIZATIONAL BEHAVIOUR**12**

Concept of Organizational Behaviour– Intra Behaviour, Inter Behaviour, Group Behaviour– Attitudes and Beliefs– Emotions– Perception and Learning– Motivation and Job Performance.

UNIT IV GROUP DYNAMICS**12**

Groups and Teams – Group Dynamics – Power and Politics – Organizational Climates and Culture – Stress Management.

UNIT V COMPARATIVE MANAGEMENT**12**

Comparative Management Theories, Styles and Approaches – Japanese Management Practices– Best Management Practices and Diversity in Global – Cross Cultural Organizational Behaviour.

TOTAL: 60 PERIODS**COURSE OUTCOMES**

On successful completion of this course, the student will be able to

- CO1:Implement the conceptual knowledge of fundamental principles in management.
- CO2:Analyze the management functions of organization.
- CO3:Identify the organizational and group behavior.
- CO4:Develop and manage the group behavior in organization.
- CO5:Explore the comparative approaches of management.

TEXT BOOKS

1. S S Khanka, Organizational Behaviour, S.Chand & Co Publications, 4th Edition, 2020.
2. Nahar Amandeep, Rao PCK, Nigah Rajesh Kumar, Sultan Chand & Sons

- Publications, 1st Edition, 2021.
- Dr. Neeru Vasishth, Organisational Behaviour, Taxmann Publications Pvt Ltd, 4th Edition, 2024.

REFERENCE BOOKS

- Koontz – Essentials of Management – MC Graw Hill 11th Edition, 2020.
- Stephen P. Robbins, Timothy A. Judge, Essentials of Organisational Behaviour, Pearson, 13th Edition, 2019.
- Robbins.S.P., Organisational Behaviour: Concepts, Controversies, Prentice Hall 12th Edition, 2002.
- Stephen P. Robbins, Timothy A. Judge, Organisational Behavior–Pearson 18th Edition, 2022.
- Don Hellriegel, Susan E. Jackson and John W, Jr Slocum, Management: A competency–Based Approach, Thompson South Western, 11th edition, 2008.

ONLINE RESOURCES & MOOCs

- NPTEL – Organizational Behaviour. Prof. K. B. Akhilesh, IISC Bangalore
<https://nptel.ac.in/courses/110105146>
- Coursera – Foundations of Management. Offered by IESE Business School
<https://www.coursera.org/learn/management>
- edX – Organizational Behavior. Offered by Doane University
<https://www.edx.org/course/organizational-behavior>

Mapping of COs and POs

COs	POs				
	1	2	3	4	5
CO1	3	3	3	3	3
CO2	2	3	2	2	3
CO3	2	2	3	2	3
CO4	3	2	3	3	3
CO5	3	3	3	3	3
AVG	2.60	2.60	2.80	2.60	3.00

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA1103 ECONOMICS FOR MANAGERS

L T P C

4 0 0 4

COURSE OBJECTIVES

- To give an exposure to managerial economics at enterprise level.
- To learn the mechanism of demand and supply and its elasticity.
- To understand the costing and pricing with respect to market structures.

UNIT I INTRODUCTION

12

Nature and scope of managerial economics– Role of Managerial Economics in decision making – Firm and its objectives– Theories of firm– The themes of economics – scarcity and efficiency– three fundamental economic problems– Productive efficiency Vs economic efficiency– economic growth & stability– Micro economics, Macroeconomics and Migration economics.

UNIT II CONSUMER AND PRODUCER BEHAVIOUR

12

Demand and Supply – Determinants – Market equilibrium – elasticity of demand and supply – consumer behaviour – consumer equilibrium – Approaches to consumer behaviour – Factors of Production – Short–run and long–run – Production Function – Returns to scale – Cost concept– Classification of costs–Analysis of cost –cost function – Relation between Production and cost function– Break even analysis.

UNIT III PRODUCT AND FACTOR MARKET

12

Product market – perfect and imperfect market – different market structures – determination of factor price – Firm’s equilibrium and supply – Market efficiency – Economic costs of imperfect competition – Branding– Game theory– factor market –Interaction of product and factor market.

UNIT IV PERFORMANCE OF AN ECONOMY

12

Macro–economic aggregates – circular flow of macro–economic activity – National income and its determination – Aggregate demand and supply – Macroeconomic equilibrium – Components of aggregate demand– multiplier effect – Demand side management.

UNIT V AGGREGATE SUPPLY AND THE ROLE OF MONEY

12

Inflation, Deflation and Unemployment– Recent and its factors – Okun’s law – Phillips curve – Money market–market equilibrium –monetary policy– Fiscal Policy– Business cycle.

TOTAL: 60 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

- CO1:Gain the knowledge about the concepts of economic.
- CO2:Identify the customer and consumer behavior.
- CO3:Evaluate the product market.
- CO4:Perceive the basics of macroeconomics.
- CO5:Analyze the monetary policy and fiscal policy.

TEXT BOOKS

1. P.Saravanel, G.Kavitha, “Economics Analyses for Business”, Himalaya Publishing House, 1st Edition, 2017.
2. Maheshwari, Yogesh L Managerial Economics, PHI learning 3rd Edition, 2012.
3. Managerial Economics, Maheshwari K. L., Varshney R.L, Sultan Chand & Sons, 22nd Edition, 2014.

REFERENCE BOOKS

1. Paul G Keat, Philip K.Y. Young, “Managerial Economics”. Pearson Education, 5th Edition, 2006.
2. Paul A. Samuelson, William D. Nordhaus, Sudip Chaudhuri and Anindya Sen, Economics,, Tata McGraw Hill, New Delhi, 19th Edition 2011.
3. Mehta P.L, “Managerial Economics, Analysis, Problems and Cases”, Sultan Chand & Sons NewDelhi, 13th Edition. 2016.
4. H. L. Ahuja. “Managerial Economics: Analysis of Managerial Decision Making”. S. Chandand Company Ltd, 8th Edition, 2014.
5. M. Baye. “Managerial Economics and Business Strategy”. Tata McGraw–Hill Publishing, 9th Edition, 2016.

ONLINE RESOURCES & MOOCs

1. NPTEL – Managerial Economics Prof. Trupti Mishra, IIT Bombay.
<https://nptel.ac.in/courses/110101005>
2. Coursera – Managerial Economics offered by University of California, Irvine.
<https://www.coursera.org/learn/managerial–economics>
3. edX – Principles of Economics, Offered by Doane University.
<https://www.edx.org/course/principles–of–economics>

Mapping of COs and POs

COs	POs				
	1	2	3	4	5
CO1	3	3	3	3	3
CO2	3	3	3	2	2
CO3	2	2	2	3	2
CO4	2	3	3	2	2
CO5	2	2	3	3	2
AVG	2.40	2.60	2.80	2.60	2.20

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA1104 ACCOUNTING BUSINESS DECISION

L T P C

4 0 0 4

COURSE OBJECTIVES

- To acquire the basic concept of financial accounting, Cost accounts and Marginal Cost.
- To analyze the financial statements.
- To understand the concept of various budgets.

UNIT I FINANCIAL ACCOUNTING

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 – Reading the financial statements–Accounting standards and accounting disclosure practices in India – Digital Accounting.

UNIT II ANALYSIS OF FINANCIAL STATEMENTS **12**

Accounting ratio– Classification of ratios: Profitability, Liquidity, Financial and Turnover ratio–Comparative statements– common size statements. Cash flow (as per AS 3) and Funds flow statement analysis – SWOT Analysis in Financial statements.

UNIT III COST ACCOUNTING **12**

Cost Accounting: Meaning– Objectives– Classification of cost – Cost sheet preparation– Costing methods: Job cost sheet– Job order costing– Process costing– (excluding Interdepartmental Transfers and equivalent production) – Joint and By Product Costing– ActivityBased Costing, Target Costing.

UNIT IV MARGINAL COSTING **12**

Marginal Costing and profit planning – Cost, Volume, Profit Analysis – Break Even Analysis – Decision making problems –Make or Buy decisions –Determination of sales mix – Exploring newmarkets – Add or drop products –Expand or contract.

UNIT V BUDGETING AND VARIANCE ANALYSIS **12**

Budgetary Control – Sales, Production, fixed and flexible budget –overheads – Standard costingand Variance Analysis.

TOTAL: 60 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

CO1: Perceive the concepts related to accounts.

CO2:Analyze the financial statement of the organization.

CO3:Apply the concept of cost accounting to prepare financial statement.

CO4:Evaluate the marginal cost of the product.

CO5:Prepare a budget for production.

TEXT BOOKS

1. R. Narayanaswamy, Financial Accounting, PHI, 6th Edition, 2017.
2. T.S.Reddy & A. Murthy, Financial Accounting, Margham Publications, 6th Edition, 2014.
3. S.P.Jain and P.K.Narang, Financial Accounting, Kalyan Publisher, 2nd Edition, 2017.

REFERENCE BOOKS

1. M.Y.Khan & P.K.Jain, Management Accounting, Tata McGraw Hill, 8th Edition, 2018.
2. Jan Williams, Susan Haka, Mark S Bettner, Joseph V Carcello, Financial and Managerial Accounting – The basis for business Decisions, Tata McGraw Hill Publishers, 18th Edition, 2017.
3. Charles T. Horngren, Gary L.Sundem, David Burgstahler, Jeff Schatzberg, Introduction to Management Accounting, PHI Learning, 16th Edition , 2014.
4. Marshal B Romney, Paul J Steinbart, Accounting Information System, Pearson, 16th Edition, 2020.
5. Jerry.J, Weygandt, Paul D kimmel, Donald. E.Kieso, Financial Accounting, Wiley, 2020.

ONLINE RESOURCES & MOOCs

1. NPTEL – Accounting for Managers Prof. A. Mukherjee, IIT Kharagpur.
<https://nptel.ac.in/courses/110105147>
2. Coursera – Financial Accounting Fundamentals Offered by University of Virginia.
<https://www.coursera.org/learn/uva-darden-financial-accounting>
3. edX – Introduction to Financial Accounting Offered by University of Pennsylvania.
<https://www.edx.org/course/introduction-to-financial-accounting>

Mapping of COs and POs

COs	POs				
	1	2	3	4	5
CO1	3	2	1	1	1
CO2	2	3	2	1	2
CO3	3	2	3	2	1
CO4	2	3	3	3	2
CO5	3	2	2	2	3
AVG	2.60	2.40	2.20	1.80	1.80

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA1105 BUSINESS LAW

L T P C
4 0 0 4

COURSE OBJECTIVES

- To familiarize the essential understanding of the legal environment in which consumers and businesses operate.
- To develop critical thinking and problem – solving techniques through legal procedures.
- To understand the awareness of various business laws, applications to practical commercial situations.

UNIT I COMMERCIAL LAW

12

Agreement– Contract Law– Contract of Agency– Sales of Goods Act1930– Negotiable Law and Instrument Law– International Business Law– Securities Law.

UNIT II COMPANY LAW AND COMPETITION ACT

12

Enforcement Law– Company Act 1956 and 2013– Competition Act 2002– Merger and Acquisition– Corporate Governance– Ethical Law– Social Responsibilities Act.

UNIT III INDUSTRIAL LAW

12

An Overview of Factories Act – Payment of Wages Act – Payment of Bonus Act – Industrial Disputes Act– Environmental Law.

UNIT IV LAW OF TAXATION

12

Corporate Tax, Laws relating to GST: Levy and collection of CGST & IGST, Basic concept

of time and value of supply, Input tax credit, Computation of GST Liability, Registration, Tax Invoice, Credit & Debit Notes, Electronic Way bill, Returns, Payment of taxes including ReverseCharge.

UNIT V DIGITAL LAW

12

Consumer Protection Act– E Commerce– Cyber crimes, Cyber law and Digital Law 2023– IT Act 2000 and 2002– Intellectual Property Act– Copyrights, Trademarks, Patent Act, Rights Information Act 2005–Legal Technology and Innovation.

TOTAL: 60 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

CO1: Perceive the concepts of commercial law

CO2:Make use of the Company and completion act.

CO3:Apply the various act in Industry.

CO4:Apply corporate tax & GST for products and services.

CO5:Implement consumer protection act, cyber laws and IPR in business.

TEXT BOOKS

1. Kapoor N.D. Business Law, Sultan Chand & Sons, 7th Edition, 2021.
2. P. C. Tulsian, Bharat Tulsian, Business Law, McGraw Hill Education, 4th edition, 2020.
3. K.R. Bulchandani, Solicitor, Advocate Supreme Court, Business Law For Management, Himalaya Publishing House, 1st Edition, 2017.

REFERENCE BOOKS

1. Daniel Albuquerque, Legal Aspects of Business, Oxford, 2nd Edition. 2017.
2. Maathias C. Kettenman, The Law of Global Digitality, Routledge, 2022.
3. N. D. Kapoor, Elements of Mercantile Law, Sultan Chand and Company, India, 39th Edition, 2017.
4. P. K. Goel, Business Law for Managers, Biztantatara Publishers, India, 2nd Edition, 2017.
5. Akhileshwar Pathak, Legal Aspects of Business, Tata McGraw Hill, 6th Edition 2018.

ONLINE RESOURCES & MOOCs

1. NPTEL – Commercial and Industrial Laws Prof. K. S. Jagannathan, IIT Madras.
<https://nptel.ac.in/courses/110105053>
2. Coursera – Business Law and Ethics University of Pennsylvania.
<https://www.coursera.org/learn/business-law>
3. edX – Corporate and Commercial Law I Offered by University of Illinois at Urbana–Champaign.
<https://www.edx.org/course/corporate-and-commercial-law->

Mapping of COs and POs

COs	POs				
	1	2	3	4	5
CO1	3	3	2	3	2
CO2	3	2	2	2	3
CO3	2	3	3	2	2
CO4	2	2	2	3	2
CO5	2	2	2	3	2
AVG	2.40	2.40	2.20	2.60	2.20

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA1106 INFORMATION MANAGEMENT

L T P C

4 0 0 4

COURSE OBJECTIVES

- To understand the importance of information in business.
- To know about the recent information systems and technologies.
- To familiarize with the different methodologies of Information Management.

UNIT I INTRODUCTION

12

Data, Information, Information System, evolution, types based on functions and hierarchy, Enterprise and functional information systems.

UNIT II SYSTEM ANALYSIS AND DESIGN

12

System development methodologies, Systems Analysis and Design, Data flow Diagram (DFD), Decision table, Entity Relationship (ER), Object Oriented Analysis and Design (OOAD), UML diagram.

UNIT III DATABASE MANAGEMENT SYSTEMS

12

DBMS – types and evolution, Classical Approach: RDBMS, OODBMS, RODBMS, Contemporary Approach: Cloud-based databases, NoSQL databases, In-memory databases, Distributed databases, Graph databases, Data warehousing, Data Mart, Data mining.

UNIT IV INTEGRATED SYSTEMS, SECURITY AND CONTROL

12

Knowledge based decision support systems, Integrating social media and mobile technologies in Information system, Security, IS Vulnerability, Disaster Management, Computer Crimes, Securing the Web.

UNIT V NEW IT INITIATIVES

12

Introduction to Deep learning, Big data, Pervasive Computing, Cloud computing, Advancements in AI, IoT, Block chain, Crypto currency, Quantum computing.

TOTAL: 60 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

- CO1: Perceive the concept of Information management.
- CO2: Design the information system using different methodologies.
- CO3: Manage the collected data effectively.
- CO4: Create the control system securely.
- CO5: Apply the latest technologies in information management.

TEXT BOOKS

1. Chatterjee, Indrajit Management Information Systems, PHI learning, 1st Edition, 2010.
2. Dr. Mohammad Salameh Al–Mahairah, Dr. K. Sureshkumar, Dr. Deepak Chahal, Book Rivers, Management Information Systems, 1st Edition 2022.
3. Mr. Dillip Narayan Sahum, Dr. Adilandeswari Devarajan, Artificial Intelligence–A Modern Approach, Book Rivers, 1st Edition, 2022.

REFERENCE BOOKS

1. Robert Schultheis and Mary Sumner, Management Information Systems – The Manager’s View, Tata McGraw Hill, 4th Edition, 2008.
2. Kenneth C. Laudon and Jane P Laudon, Management Information Systems – Managing the Digital Firm, 15th Edition, 2018.
3. Panneerselvam. R, Database Management Systems, PHI Learning, 2018.
4. Pankaj Sharma, Information Storage and Management, Wiley, 2012.
5. Jack T Marchewka, Information Technology Management, 23rd Edition 2015.

ONLINE RESOURCES & MOOCs

1. Coursera – Information Systems Management University of Illinois at Urbana–Champaign.
<https://www.coursera.org/learn/information–systems–management>
2. edX – Introduction to Cloud Computing Offered by IBM.
<https://www.edx.org/course/introduction–to–cloud–computing>
3. NPTEL – Database Management Systems, Prof. B. P. Singh, IIT Roorkee.
<https://nptel.ac.in/courses/106105159>

Mapping of COs and POs

COs	POs				
	1	2	3	4	5
CO1	3	3	3	2	2
CO2	2	3	2	3	2
CO3	3	3	2	3	3
CO4	2	2	1	2	2
CO5	3	3	2	2	3
AVG	2.60	2.80	2.00	2.40	2.40

1 – Low, 2 – Medium, 3 – High, ‘–’ No correlation

COURSE OBJECTIVES

- To enable the learners in understanding of the basic concepts of Indian Ethos.
- To familiarize about ethical behaviour and value systems at work.
- To develop the ethos in leadership skill.

NOTE

- The following is the list of topics suggested for preparation and presentation by students twice during 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.

- 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**

On successful completion of this course, the student will be able to

CO1:Apply the basic concepts of Indian ethos and value systems at work.

CO2:Analyse how to handle issues of business ethics and offer solutions in ethical perspectives.

CO3:Explore the skillful and professional efficient in value based systems and culture.

CO4:Analyze the business ethics towards well being of the society.

CO5: Adapt the social and business responsibilities.

Mapping of COs and POs

COs	POs				
	1	2	3	4	5
CO1	2	2	3	2	2
CO2	3	3	2	3	2
CO3	2	2	2	3	2
CO4	2	2	3	3	2
CO5	2	2	3	2	3
AVG	2.20	2.20	2.60	2.60	2.20

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

COURSE OBJECTIVES

- To help the students to acquire some of the necessary skills to handle day-to-day managerial responsibilities.
- To enable students to make speeches, enriching group activities and processes and giving effective presentations.
- To encourage writing letters, minutes, reports and advertising, and maintaining one's poise in private and in public.

UNIT I INTRODUCTION**12**

Role Play Exercises Based on Workplace Contexts, – talking about competition– discussing progress toward goals–talking about experiences– talking about events in life– discussing past events–Writing: writing emails (formal & semi-formal).

UNIT II BUSINESS COMMUNICATION WRITING MODELS AND TOOLS**12**

Business letters, Resume/CV, job application letters, memos, agenda and minutes, reports. Creative Writing, Poster Making, Framing Advertisements, Slogans, Captions, Preparing Press Release and Press Notes.

UNIT III EFFECTIVE PRESENTATIONS**12**

Self Introduction– Principles of Effective Presentations, use of audiovisual media–short essays and reports–formal/semi formal letters.

UNIT IV INTERVIEW SKILL**12**

Group Discussion– Mastering the art of giving interviews in – placement interviews, appraisal interviews, Exit interviews, writing instructions–writing a short article.

UNIT V REPORT WRITING**12**

Objectives of Report, Types of report, Developing an outline, Logical Sequencing, Graphs, Charts, Executive Summary, Report Writing–job application (Cover letter + Curriculum vitae).

Note: The emphasis of the entire subject should be on practical aspects.

Practical: Module 1

This module introduces both written and spoken communication skills to students to build their confidence in delivering clear and logical messages to their audience. They will develop written communication skills through crafting business messages such as business letters, emails, and meeting minutes. In addition, students will work through presentations and meetings to refine their spoken communication skills, discussion techniques and people skills.

Practical – Module 2

This module builds on the foundation of Business Communication 1 and creates

opportunities for students to strengthen their oral and written communication. Students will be required to enhance their presentation skills through impromptu speeches. Students will also learn how to prepare a formal business report. Students will be taught to write application letters and resumes. Additionally, students will learn job interview techniques through role-plays and simulations.

Practical – Module 3

This practical module aims to help students be persuasive in the business world. Students will learn listening and data gathering skills to better understand their target audience's needs and requirements and persuasive skills to convince the audience to accept a new policy/suggestion/product through role-playing a boardroom presentation. Students will also be taught business networking skills including conversation techniques, dining etiquette and personal branding through role-plays and simulations.

TOTAL: 60 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

- CO1: Develop good managerial communication skills.
- CO2: Excel in different forms of written communication required in a business context.
- CO3: Develop good presentation skills.
- CO4: Perceive the interview skills.
- CO5: Propose an effective Business report.

TEXT BOOKS

1. Rajendra Pal, J.S. Korlahalli, Essentials of Business Communication by, Sultan Chand & Sons, 13th Edition, 2011.
2. Meenakshi Raman, Prakash Singh, Business Communication by, Oxford, 2nd Edition, 2016.
3. Raymond V. Lesikar, Flatley, Basic Business Communication Skills for Empowering the Internet Generation by, M.E., TMGH, New Delhi, 10th Edition, 2016.

REFERENCE BOOKS

1. Ludlow R, Panton, The Essence of Effective Communications, Prentice Hall of India Pvt. Ltd. 1st Edition, 2015.
2. R. C. Sharma, Krishna Mohan, Business Correspondence & Report Writing, TataMcGraw Hill, 5th Edition, 2017.
3. Malcolm Goodale, Developing Communication Skills, Professional Presentations, Cambridge University Press, 2nd Edition, 2005.
4. Supplementary Reading Material Business Communication – Harvard Business Essentials Series, HBS Press, 1st Edition 2005.
5. Adair, J, Effective Communication, Pan Macmillan Excellence in Business Communication by Thill, J. V. & Bovee, G. L, McGraw Hill, New York, 4th Edition 2010.

ONLINE RESOURCES & MOOCs

1. NPTEL – Business Communication Prof. Brinda Jagatheesan, IIT Madras.
<https://nptel.ac.in/courses/109106172>
2. Coursera – Business Communication Offered by University of Colorado Boulder.
<https://www.coursera.org/specializations/effective-business-communication>
3. edX – Business Communications Offered by UBCx.
<https://www.edx.org/course/business-communications>

Mapping of COs and POs

COs	POs				
	1	2	3	4	5
CO1	3	3	3	2	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	2	3	3	1	2
CO5	2	3	3	3	3
AVG	2.60	3.00	3.00	2.40	2.80

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA1401 ENTREPRENEURSHIP DEVELOPMENT

L T P C
3 0 0 3

COURSE OBJECTIVES

- To equip and develop the learners entrepreneurial skills and qualities essential to undertake business and Startup of small business.
- To impart the learners entrepreneurial competencies needed for managing business efficiently and effectively.
- To equip the learners to know about schemes and support from government for startup a new business.

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– Financial Supports.

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 AND STARTUP OF SMALL BUSINESS 9

Finance and Human Resource Mobilization – Operations Planning – Market and Channel Selection – Growth Strategies – Product Launching – Incubation, Venture capital, Start-ups – Incentives and Schemes for Startups, EDI– Central and State level Schemes and Support. Development of Women Entrepreneur– Gen Z.

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

On successful completion of this course, the student will be able to

CO1:Gained the entrepreneurial competence to run the business efficiently.

CO2: Perceive the entrepreneurial environment in business.

CO3:Create the business plan effectively .

CO4:Analyze the financial sources and their schemes and opportunities available.

CO5:Develop and monitoring the business effectively towards growth.

TEXT BOOKS

1. S.S.Khanka, Entrepreneurial Development, S.Chand and Company Limited, New Delhi, 4th Edition, 2020.
2. Dr. Vasant Desai, “Small Scale Industries and Entrepreneurship”, HPH, 9th Edition, 2023.
3. Rajeev Roy, Entrepreneurship, Oxford University Press, 2nd Edition, 2011.

REFERENCE BOOKS

1. Katz, Jerome, “Entrepreneurial Small Business”, McGraw Hill, 7th Edition, 2021.
2. R.D.Hisrich, Entrepreneurship, Tata McGraw Hill, New Delhi, 12th Edition 2024.
3. Donald F Kuratko, T.V Rao. Entrepreneurship: A South Asian perspective. CengageLearning, 1st Edition, 2012.
4. Arya Kumar. Entrepreneurship, Pearson,1st Edition, 2012.
5. Eric Ries, The Lean Startup, 1st Edition, 2018.

ONLINE RESOURCES & MOOCs

1. Coursera – Entrepreneurship: Launching an Innovative Business University of Maryland.
<https://www.coursera.org/learn/entrepreneurship-launching>
2. edX – Entrepreneurial Leadership University of Queensland.
<https://www.edx.org/course/entrepreneurial-leadership>
3. MIT Open Course Ware – Entrepreneurial Marketing.
<https://ocw.mit.edu/courses/sloan-school-of-management/15-390-entrepreneurial-marketing-spring-2017>

Mapping of COs and POs

COs	POs				
	1	2	3	4	5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	2	3	3	3	3
CO5	3	3	3	3	3
AVG	2.80	3.00	3.00	3.00	3.00

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA1402 EVENT MANAGEMENT

L T P C

3 0 0 3

COURSE OBJECTIVES

- To understand the basic concepts of the event management.
- To insight knowledge on the various events and how these events can be organized successfully.
- To evaluate the event operations.

UNIT I EVENT CONTEXT

9

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

9

Conceptualizing the event – Host, sponsor, Media, Guest, Participants, Spectators – Crew – Design of concept – Theme and content development – Visualization – Event objectives – Initial planning – Budgeting – Event design and budget checklist – Preparation of functional sheets – Timing – Contracts and Agreements – Insurance, Regulation, License and Permits – Negotiation.

UNIT III EVENT MARKETING

9

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

9

Site Selection – Types of location – Venue Requirements – Room, Stage, Audi–Visual, Lighting, Performers, Decors, Caterer, Photography & Videography – Protocols – Guest list – Guest demographics – Children at 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

9

Risk assessment – Safety officer, Medical Manager – Venue, Structural safety – Food safety – Occupational safety – Fire Prevention – Sanitary facilities – Vehicle traffic – Waste Management. Event Impact – Event Evaluation Process – Service Quality – Customer Satisfaction.

TOTAL: 45 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

- CO1: Learn about the structure and code of ethics of events.
- CO2: Explore about the event planning and regulations.
- CO3: Perceive about event marketing strategies.
- CO4: Enhance professional skills in event management.
- CO5: Analyze the safety measure of event management.

TEXT BOOKS

1. Judy, Event Planning Ethics and Etiquette: A Principled Approach to the Business of Special Event Management, 1st Edition, 2009.
2. Shannon Kilkenny, The complete guide to successful event planning, Atlantic Publishing Group, Inc., 2nd Edition, 2016.
3. Julia Rutherford Silvers, Professional Event Coordination, The Wiley Event Management Series, Wiley Publications, 2nd Edition, 2012.

REFERENCE BOOKS

1. Lynn Van Der Wagen, Event Management for Tourism, Cultural Business & Sporting Events, Pearson Publications, 4th Edition, 2014.
2. Lynn Van Der Wagen, & Brenda R. Carlos, Successful Event Management, Cengage Learning, 4th Edition, 2010.
3. Judy Allen, Event Planning, Wiley & Sons, Canada, 2nd Edition, 2014.
4. G.A.J. Bowdin, Events Management, Elsevier Butterworth, -Heinemann 3rd Edition, 2011.
5. John Beech, Sebastian Kaiser & Robert Kaspar, The Business of Events Management, Pearson Publication, 1st Edition, 2014.

ONLINE RESOURCES & MOOCs

1. Coursera – Event Management University of California, Irvine.
<https://www.coursera.org/learn/event-management>
2. edX – Event Planning & Management University of Queensland.
<https://www.edx.org/course/event-planning-management>
3. FutureLearn – Event Management University of Derby.
<https://www.futurelearn.com/courses/event-management>

Mapping of COs and POs

COs	POs				
	1	2	3	4	5
CO1	3	3	3	3	3
CO2	2	3	3	2	2
CO3	3	3	3	3	3
CO4	3	3	3	2	2
CO5	2	2	3	3	2
AVG	2.60	2.80	3.00	2.60	2.40

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA2101 OPERATIONS RESEARCH IN MANAGEMENT

L T P C

4 0 0 4

COURSE OBJECTIVES

- To apply quantitative techniques in modeling and solving business related problems.
- To enable the students to understand the various concepts and techniques used in operations Management.
- To enable the students to learn the various quantitative techniques used in Management and decision making and to understand how they are applied in various real time Management Problems.

UNIT I INTRODUCTION TO LINEAR PROGRAMMING (LP)

12

Relevance of quantitative techniques in management decision making – Linear Programming – formulation of LPP – Solution by graphical and simplex methods (Primal – Penalty, Two Phase) – Special cases – Sensitivity Analysis.

UNIT II LINEAR PROGRAMMING EXTENSIONS

12

Transportation Models (Minimizing and Maximizing Problems) – Balanced and unbalanced Problems – 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.

Assignment Models (Minimizing and Maximizing Problems) – Balanced and Unbalanced Problems – Solution by Hungarian and Branch and Bound Algorithms – Travelling Salesman problem – Crew Assignment Models.

UNIT III CPM – PERT

12

Network analysis – Drawing of arrow diagram – Critical path method – Calculation of critical path duration – Total – free and independent floats – PERT problems.

UNIT IV DECISION AND GAME THEORIES

12

Decision making under risk – Decision trees – Decision making under uncertainty – Game Theory – Two–person Zero sum game – saddle point – Dominance Rule – Convex Linear Combination (Averages) – methods of matrices – graphical and LP solutions.

UNIT V QUEUING THEORY AND SIMULATION

12

Queuing Theory – Single and multi – channel models – infinite number of customers and infinite calling source – Monte Carlo simulation – Use of random numbers– application of simulation techniques.

TOTAL: 60 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

CO1:Apply the linear programming in product mix decisions.

CO2:Make use of transportation problems in logistics management.

CO3:Utilize the CPM – PERT problems in cost management.

CO4:Apply Game theory and heuristics of decision making in management.

CO5:Utilize the Queuing and simulation in real time scenario optimization.

TEXT BOOKS

1. Hamdy A. Taha, Introduction to Operations Research, Prentice Hall India, Third Indian Reprint, 10th Edition, 2019.
2. Kanti Swarup, Gupta & Man Mohan, “Operations Research”, Introduction to Management Science, 18th Edition, 2017.
3. N. D Vohra, Quantitative Techniques in Management, Tata McGraw Hill, 6th Edition, 2021.

REFERENCE BOOKS

1. Wayne L. Winston" Operations Research: Applications and Algorithms", Cengage Learning, 4th Edition, 2004.
2. N V S Raju, “Operations Research Theory and Practice”, CRC Press (Taylor and Francis Group) 1st Edition, 2019.
3. K. Nagarajan “Operations Research”, New Age International, 3rd Edition, 2016.
4. Frederick S. Hillier and Gerald J. Lieberman, Bodhibrata Nag, Preetam Basu "Introduction to Operations Research", McGraw Hill, 10th Edition, 2017.
5. B. Mahadevan, “Operations Management –Theory and Practice”, Pearson 3rd Edition, 2018.

ONLINE RESOURCES & MOOCs

1. NPTEL – Quantitative Techniques Prof. G. Srinivasan, IIT Madras
<https://nptel.ac.in/courses/110106062>
2. Coursera – Operations Research (Discrete Optimization)
Offered by University of Melbourne
<https://www.coursera.org/learn/discrete-optimization>
3. edX – Decision-Making and Scenarios Offered by University of Groningen
<https://www.edx.org/course/decision-making-and-scenarios>

Mapping of COs and POs

COs	POs				
	1	2	3	4	5
CO1	2	3	3	2	2
CO2	3	3	2	3	2
CO3	2	2	1	2	2
CO4	3	3	3	2	2
CO5	1	2	1	2	2
AVG	2.20	2.60	2.00	2.20	2.00

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA2102 FINANCIAL MANAGEMENT

L T P C

4 0 0 4

COURSE OBJECTIVES

- To understand the operational nuances of a Finance Manager.
- To comprehend the technique of making decisions related to finance functions.
- To get Knowledge of Investing money in various sectors.

UNIT I FOUNDATIONS OF FINANCE

12

Introduction to finance– Financial Management – Nature, scope and functions of Finance, Cost of Capital and Structure, 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–Digital Asset.

UNIT II INVESTMENT DECISIONS

12

Capital Budgeting: Principles and techniques – Nature of capital budgeting– Identifying relevant cash flows – Evaluation Techniques: Payback, Accounting rate of return, Net Present Value, Internal Rate of Return, Profitability Index – Weighted Average Cost of Capital (WACC) – Concept and measurement of cost of capital – Specific cost and overall cost of capital.

UNIT III FINANCING AND DIVIDEND DECISION

12

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 & Irrelevance 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

12

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

12

Indian capital market– New issues market– Secondary market – Long term finance: Shares, debentures and term loans, lease, hire purchase, venture capital financing, Private Equity.

TOTAL: 60 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

CO1: Perceive the concepts behind the foundation of finance.

CO2: Make sound investment and financing decisions.

CO3: Decide financing and investing money in different sectors.

CO4: Estimate the capital investment.

CO5: Assess the long– and short–term finance in Indian capital market.

TEXT BOOKS

1. Prasanna Chandra, Financial Management, Tata McGraw Hill, 9th Edition, 2017.
2. Srivatsava, Mishra, Financial Management, Oxford University Press, 2nd Edition, 2012.
3. Aswath Damodaran, Corporate Finance Theory and Practice, John Wiley & Sons, 2011.

REFERENCE BOOKS

1. I.M. Pandey Financial Management, Vikas Publishing House Pvt.Ltd., 11th Edition, 2018.
2. M.Y. Khan and P.K. Jain Financial management, Text, Problems and cases Tata McGrawHill, 8th Edition, 2017.
3. James. C. Vanhorne–Fundamentals of Financial Management– PHI Learning, 13th Edition, 2014.
4. Brigham, Ehrhardt, Financial Management Theory and Practice, Cengage Learning, 14th Edition, 2015.
5. Crypto assets: The innovative investor’s guide to bitcoin and beyond, Tata McGraw–Hill 1st Edition, 2017.

ONLINE RESOURCES & MOOCs

1. NPTEL – Financial Management Prof. Prasanna Chandra, IIM Bangalore.
<https://nptel.ac.in/courses/110105035>
2. Coursera – Financial Management Specialization Offered by University of Illinois.
<https://www.coursera.org/specializations/financial-management>
3. edX – Introduction to Corporate Finance, Offered by Columbia University.
<https://www.edx.org/course/introduction-to-corporate-finance>

Mapping of COs and POs

COs	POs				
	1	2	3	4	5
CO1	3	2	1	1	1
CO2	2	3	2	1	1
CO3	2	2	3	2	1
CO4	2	3	3	3	2
CO5	1	3	3	2	2
AVG	2.00	2.60	2.40	1.80	1.40

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA2103 HUMAN RESOURCE MANAGEMENT

L T P C

4 0 0 4

COURSE OBJECTIVES

- To provide knowledge about the concepts and theories of human resource management.
- To analyze and control the management issues.
- To develop the organizational performance using functions of human resource management.

UNIT I PERSPECTIVES IN HUMAN RESOURCE MANAGEMENT

12

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

12

Importance of Human Resource Planning – Forecasting human resource requirement – matching supply and demand – Internal and External sources– Organizational Attraction–. Recruitment, Selection Induction and Socialization – Theories, Methods and Process.

UNIT III TRAINING AND DEVELOPMENT

12

Types of training methods – purpose– benefits – resistance. Executive development programme – Common practices – Benefits – Self development – Knowledge management.

UNIT IV EMPLOYEE ENGAGEMENT AND BENEFITS

12

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. Wage salary, concept, Factors, structure. Employee Benefits.

UNIT V PERFORMANCE EVALUATION AND CONTROL

12

Method of performance evaluation – Feedback – Industry practices. Promotion, Demotion, Transfer and Separation – Implication of job change. The control process – Importance – Methods of PERT analysis 360 & 720 degree – Requirement of effective control systems grievances – Causes – Implications – Redressal methods.

TOTAL: 60 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

CO1:Perceive the key concepts and theories of human resource management.

CO2:Adopt the new human resource planning and recruitment.

CO3:Develop the human resource by different types of training.

CO4:Analyze the concepts involved in employee engagement.

CO5:Evaluate and control the performance of an employee.

TEXT BOOKS

1. Uday Kumar Halder, Juthika Sarkar. Human Resource Management. Oxford. 1st Edition, 2012.
2. P. Subba Rao, Human Resource Management Himalaya Publishing House, 3rd Edition 2012.
3. T.N. Chhabra, Essentials of Human Resource Management T.N. Chhabra, Sun India Publications, 1st Edition, 2014.

REFERENCE BOOKS

1. IIBF, Human Resource Management, Macmillan,1st Edition, 2023.
2. Gary Dessler and Biju Varkkey, Human Resource Management, 14th Edition, Pearson Education Limited, 2015.
3. David A. Decenzo, Stephen. P. Robbins, and Susan L. Verhulst, Human Resource Management, Wiley, International Student Edition, 11th Edition, 2014.
4. Bernadin, Human Resource Management, Tata MC graw Hill ,8th Edition 2012.
5. Wayne Cascio, Managing Human Resource, McGraw Hill,10th Edition, 2015.

ONLINE RESOURCES & MOOCs

1. NPTEL – Human Resource Management Prof. Sushanta Kumar Mishra, IIM Bangalore.
<https://nptel.ac.in/courses/110105146>
2. Coursera – Human Resource Management: HR for People Managers, Offered by University of Minnesota.
<https://www.coursera.org/specializations/human-resource-management>
3. edX – People Management, Offered by IIM Bangalore.
<https://www.edx.org/course/people-management>

Mapping of COs and POs

COs	POs				
	1	2	3	4	5
CO1	3	3	3	2	3
CO2	3	3	3	2	2
CO3	2	2	3	2	2
CO4	2	3	2	1	2
CO5	3	3	2	2	2
AVG	2.60	2.80	2.60	1.80	2.20

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA2104 OPERATION MANAGEMENT

L T P C

4 0 0 4

COURSE OBJECTIVES

- To provide a broad introduction to the field of operations management
- To explain the concepts, strategies, tools and techniques for managing the transformation process that can lead to competitive advantage.
- To get knowledge of design the process of operations.

UNIT I INTRODUCTION TO OPERATION MANAGEMENT 12

Operation Management – Nature, Importance, historical development, transformation, process difference between service and goods system perspective, functions, challenges, current priorities recent trends. Operation strategy – Strategic fit, framework. Productivity; Supply Chain Management.

UNIT II OPERATION AND THE VALUE CHAIN 12

Capacity Planning – Long range, Types, Developing capacity alternatives, tools for capacity planning. Facility Location – Theories, step in selection, Location Models. Sourcing and procurement – Strategic sourcing and procurement process, managing vendors.

UNIT III DESIGNING OPERATION 12

Product Design – Criteria, Approaches, Product development process – Stage– gate approach – tools for efficient development. Process – design, strategy, types. Facility Layout – Principles – Types, Planning tools, Strategies and techniques.

UNIT IV PLANNING AND CONTROL OF OPERATION 12

Demand Forecasting – Need, Types, Objectives and Steps – Overview of Qualitative and Quantitative methods. Operations planning – Resource planning – Inventory Planning and Control. Operations Scheduling – Project Management – Scheduling techniques – PERT – CPM.

UNIT V QUALITY MANAGEMENT

12

Definition of quality, The Quality revolution, quality gurus; TQM Philosophies; Quality Control; Quality Management tools, certification and awards. Lean Management – Philosophy, elements of JIT manufacturing, continuous improvement. Six sigma

TOTAL: 60 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

CO1: Perceive the current trends in operation management

CO2: Analyze the value chain models for effective operation

CO3: Design the process chart for different operation

CO4: Plan and the control the operation for effective management

CO5: Evaluate the total quality management and Project management

TEXT BOOKS

1. Mahadevan Operations Management: Theory and Practise. Pearson Education India, 3rd Edition, 2015.
2. V.S Bagad Total Quality Management Technical Publication 1st Edition, 2011.
3. Panneerselvam. R. Production and Operation Management., PHI Learning, 3rd Edition 2012.

REFERENCE BOOKS

1. Nigel Slack, Alistair Brandon Jones, Nicola Burgess, Operation Management, Pearson Publication, 10th Edition, 2019.
2. Cecil C. Bozarth, Robert B. Handfield, Introduction to Operation and supply Chain Management, Pearson, 4th Edition, 2016.
3. Richard B. Chase, Ravi Shankar, F.Robert Jacobs, Operation and Supply Chain Management, McGraw Hill Education (India) Pvt, 14th Edition.2014.
4. Dr. B. Meghalaya, Dr.M.P Vanitha Rani,et.al, Himalaya Publishing house, 1st Edition, 2018.
5. Chase. R.B., F.B. Jacob, and N.J. Aquilano. Operations Management for a Competitive Advantage, Eleventh Edition. New York: Irwin McGraw–Hill, 11th Edition, 2006.

ONLINE RESOURCES & MOOCs

1. NPTEL – Operations Management Prof. Rajat Agrawal, IIT Roorkee.
<https://nptel.ac.in/courses/110107141>
2. Coursera – Operations Management Offered by University of Illinois.
<https://www.coursera.org/learn/wharton-operations>
3. edX – Operations Management Offered by IIM Bangalore.
<https://www.edx.org/course/operations-management>

Mapping of COs and POs

COs	POs				
	1	2	3	4	5
CO1	3	3	3	3	2
CO2	2	3	3	2	2
CO3	2	2	2	3	3
CO4	3	3	3	2	3
CO5	2	2	3	2	2
AVG	2.40	2.60	2.80	2.40	2.40

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA2105 RESEARCH DESIGN

L T P C

4 0 0 4

COURSE OBJECTIVES

- To understand the importance of Business research methods.
- To familiarize with the data collection techniques
- To evaluate various measurement techniques for preparing business research report.

UNIT I INTRODUCTION

12

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

12

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

12

Types of data – Primary Vs Secondary data – Methods of primary data collection – Survey Vs Observation – Experiments – Construction of questionnaire and instrument – Types of Validity – Sampling plan – Sample size – determinants optimal sample size – sampling techniques – Sampling methods– Sampling Errors– Errors in Research.

UNIT IV DATA PREPARATION AND ANALYSIS

12

Data Preparation – editing – Coding –Data entry – Validity of data – Qualitative Vs Quantitative data analyses – Applications of Bivariate and Multivariate statistical techniques, Factor analysis, Discriminant analysis, Cluster analysis, Multiple regression and Correlation, Multidimensional scaling – Conjoint Analysis – Application of statistical software for data analysis.

UNIT V REPORT DESIGN, WRITING AND ETHICS IN BUSINESS RESEARCH 12

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 — Ethics in research – Subjectivity and Objectivity in research.

TOTAL: 60 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

- CO1: Perceive the concept of business research methods
- CO2: Use the various research design technique to improve the business
- CO3: Apply various techniques for data collection and process of data
- CO4: Analyze the process of data preparation by using statistical techniques
- CO5: Prepare research report for business

TEXT BOOKS

1. Panneerselvam. R, Research Methodology, PHI Learning,, 2nd Edition, 2014.
2. Uma Sekaran and Roger Bougie, Research Methods for Business, 5th Edition, WileyIndia, New Delhi, 2012.
3. C.R. Kothari, Research Methodology: Methods and Techniques",New Age International Publishers, 5th Edition,2023.

REFERENCE BOOKS

1. Donald R. Cooper, Pamela S. Schindler and J K Sharma, Business Research methods, Tata Mc Graw Hill, New Delhi, 11th Edition, 2012.
2. Alan Bryman and Emma Bell, Business Research methods, Oxford University Press, New Delhi, 3rd Edition, 2011.
3. William G Zikmund, Barry J Babin, Jon C. Carr, Atanu Adhikari, Mitch Griffin, Business Research methods, A South Asian Perspective, Cengage Learning, New Delhi, 8th Edition, 2012.
4. Cooper, D.R., Schindler, P.S. and Sun, J. Business Research Methods (Vol. 9). New York: McGraw–Hill Irwin, 9th Edition, 2006.
5. John W. Crewel, Research Design: Qualitative, Quantitative and Mixed Method Approaches, SAGE Publications, 4th Edition, 2014.

ONLINE RESOURCES & MOOCs

1. NPTEL – Research Methodology Prof. Arun Kumar, IIT Roorkee.
<https://nptel.ac.in/courses/110105089>
2. Coursera – Research Methods Offered by University of London.
<https://www.coursera.org/learn/research-methods>
3. Offered by University of Amsterdam.
<https://www.edx.org/course/qualitative-research-methods>

Mapping of COs and POs

COs	POs				
	1	2	3	4	5
CO1	3	3	3	2	3
CO2	3	3	3	2	3
CO3	2	3	2	3	2
CO4	1	2	3	3	2
CO5	2	2	2	2	2
AVG	2.20	2.60	2.60	2.40	2.40

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA2106 BUSINESS ANALYTICS

L T P C

4 0 0 4

COURSE OBJECTIVES

- To understand the business analytics in decision making.
- To apply and solve problems using analytical tools.
- To learn the business practices and influence of Business analytics in organizational growth.

UNIT I INTRODUCTION TO BUSINESS ANALYTICS (BA)

12

Business Analytics– Data Discovery– Data Visualization–Relationship with Organizational Decision Making, BA for Competitive Advantage– Construction Analysis– Basics of R Programming.

UNIT II MANAGING RESOURCES FOR BUSINESS ANALYTICS

12

Organizational Structures aligning BA– Data Governance– Cloud Management– Resource Sharing– Meta Data management– Big data Driven.

UNIT III DESCRIPTIVE ANALYTICS

12

Introduction to Descriptive analytics– Descriptive Statistics– Text Analysis– Geo Spatial Analysis– Survival Analysis– Network Analysis of Descriptive analytics.

UNIT IV PREDICTIVE ANALYTICS

12

Introduction to Predictive analytics– Logic and Data Driven Models– Predictive Analysis Modeling and procedure– Time Series Analysis– Analysis of Predictive analytics

UNIT V PRESCRIPTIVE ANALYTICS

12

Introduction to Prescriptive analytics– Prescriptive Modeling– Non Linear Optimization– Optimization of decision-making– Improve Business Performance – Competitive edge.

TOTAL: 60 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

- CO1: Plan for the organizational decision making process.
- CO2: Allocate human resource by using business analytics.
- CO3: Apply the tools of descriptive analytics for problem solving.
- CO4: Apply prescriptive analytics for the development of organization.
- CO5: Estimate the future demand through predictive analytics.

TEXT BOOKS

1. U. Dinesh Kumar, Business Analytics: The Science of Data–Driven Decision Making, 2nd Edition, 2021.
2. Mathirajan, M, Business Analytics: The Science of Data–Driven Decision Making, Wiley, 2nd Edition, 2019.
3. Rao, Purba Halady, Business Analytics: An Application Focus, 1st Edition, 2013.

REFERENCE BOOKS

1. Marc J. Schniederjans, Dara G. Schniederjans and Christopher M. Starkey, Business Analytics, 1st Edition 2014.
2. Analytics Principles, Concepts, and Applications – What, Why, and How, Pearson 1st Edition, 2014.
3. Christian Albright. S and Wayne. L. Winston, Business Analytics – Data Analysis and Decision Making, Cengage Learning, 5th Edition, 2015.
4. James R. Evans, Business Analytics – Methods, Models and Decisions, Pearson 1st Edition, 2012.
5. Larose, D.T. Data Mining and Predictive Analytics, John Wiley & Sons, 2nd Edition, 2015.

ONLINE RESOURCES & MOOCs

1. Coursera – Business Analytics Specialization – Offered by University of Pennsylvania.
<https://www.coursera.org/specializations/wharton-business-analytics>
2. edX – Data Analytics for Business Offered by Georgia Tech.
<https://www.edx.org/course/data-analytics-for-business>
3. NPTEL – Business Analytics and Data Mining Modeling using R. Prof. Gaurav Dixit, IIT Roorkee. <https://nptel.ac.in/courses/110107129>

Mapping of COs and POs

COs	POs				
	1	2	3	4	5
CO1	3	3	3	2	3
CO2	2	3	3	3	3
CO3	3	3	3	2	3
CO4	3	3	3	2	2
CO5	3	2	2	3	3
AVG	2.80	2.80	2.80	2.40	2.80

1 – Low, 2 – Medium, 3 – High, ‘–’ No correlation

COURSE OBJECTIVES

- To understand the concepts of marketing in theory and practice.
- To develop an understanding of the underlying the marketing strategies.
- To explore the strategies for new product development.

UNIT I INTRODUCTION**12**

Marketing – Core concepts– Evolution – Planning Process – Marketing Environment: Internal and External – Value chain – Core Competencies – PESTEL – SWOT Analysis – Marketing interface with other functional areas –Marketing in global environment – International Marketing – Rural Marketing – Prospects and Challenges.

UNIT II MARKETING STRATEGY**12**

Marketing strategy formulations – Key Drivers – Strategies for Industrial Marketing – Consumer Marketing – Services marketing – Competition Analysis – Analysis of consumer and industrial markets – Influence of Economic and Behavioral Factors – Strategic Marketing Mix components.

UNIT III MARKETING MIX DECISIONS**12**

Marketing Mix: 7P's of marketing– Product planning and development – Product life cycle – New product Development– Pricing – Retailing, Wholesaling– Market Segmentation – Targeting and Positioning – Advertising and Sales Promotions – Brand Positioning and Differentiation – Channel Management – Managing Integrated Marketing Channels – Logistics.

UNIT IV BUYER BEHAVIOUR**12**

Understanding Industrial and Consumer Buyer Behavior – Influencing factors and models– Online buyer behaviour – Building and measuring customer satisfaction – Customer relationships management – Customer acquisition, Retaining, Defection – Creating Long Term Loyalty Relationships.

UNIT V MARKETING RESEARCH & TRENDS IN MARKETING**12**

Marketing Information System (MIS) – Marketing Research Process – Concepts and applications: Product – Advertising – Promotion – Consumer Behaviour – Retail research – Customer driven organizations – Cause related marketing – Ethics in marketing – AI impacts in marketing – social media and digital marketing.

TOTAL: 60 PERIODS**COURSE OUTCOMES**

On successful completion of this course, the student will be able to

- CO1:Distinguish functional areas of marketing management.
- CO2:Apply the marketing strategies for promotion.
- CO3:Access the role of decision making in marketing mix.
- CO4:Analyze the customer behaviour.
- CO5:Access the dynamic marketing trends.

TEXT BOOKS

1. Ramasamy, V.S, Namakumari, S, Marketing Management: Global Perspective Indian Context, Macmillan Education, New Delhi, 6th Edition, 2018.
2. KS Chandrasekar, Marketing management–Text and Cases, Tata McGraw Hill Publication, 2012.
3. Philip T. Kotler and Kevin Lane Keller, Marketing Management, Prentice Hall India, 15th Edition, 2017.

REFERENCE BOOKS

1. Paul Baines, Chris Fill, Kelly Page, Marketing, Asian edition, Oxford University Press, 5th Edition, 2019.
2. Lamb, Hair, Sharma, Mc Daniel– Marketing – An Innovative approach to learning and teaching A south Asian perspective, Cengage Learning, 1st Edition, 2016.
3. V. S. Ramaswamy, S. Namakumari, Marketing Management, Paperback, 2020.
4. SimonKings north Digital Marketing Strategy: An Integrated Approach to Online Marketing, Kogan Page, 3rd Edition, 2024.
5. Kevin Hartman, Digital Marketing Analytics: In Theory and In Practice, 1st Edition, 2020.

ONLINE RESOURCES & MOOCs

1. NPTEL – Marketing Management – I & II, Prof. Jayanta Chatterjee, IIT Kanpur.
<https://nptel.ac.in/courses/110104068>
2. Coursera – Marketing in a Digital World University of Illinois.
<https://www.coursera.org/learn/marketing-digital>
3. edX – Strategic Marketing Management, Offered by Yonsei University.
<https://www.edx.org/course/strategic-marketing-management>

Mapping of COs and POs

COs	POs				
	1	2	3	4	5
CO1	3	3	3	2	2
CO2	3	3	2	3	3
CO3	3	3	3	2	3
CO4	2	3	3	3	2
CO5	3	2	3	2	3
AVG	2.8	2.8	2.8	2.4	2.6

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA2201 BUSINESS ETHICS (SEMINAR)

L T P C

0 0 4 2

COURSE OBJECTIVES

- To enable the learners to have exposure on business ethics and ethical business perspectives.
- To apply the basic concept of Indian ethos at work.
- To understand the corporate social responsibilities of business.

NOTES

- The following is the list of topics suggested for preparation and presentation by students twice during 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.
 - 1) Individual Culture and Ethics
 - 2) Ethical codes of conduct and value Systems
 - 3) Loyalty and Ethical Behaviour, Ethical decision making
 - 4) Ethical business issues and solutions
 - 5) Corporate Social Responsibilities of Business

TOTAL: 60 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

CO1: Analyse to handle issues of business ethics and offer solutions in ethical perspectives

CO2: Apply the basic concepts of Indian ethos and value systems at work.

CO3: Ability to handle issues of business ethics and offer solutions in ethical perspectives.

CO4: Explore the skillful and professional efficient in value based systems and culture.

CO5: Analyze the business ethics towards well being of the society

Mapping of COs and POs

COs	POs				
	1	2	3	4	5
CO1	3	3	2	3	2
CO2	2	2	3	2	2
CO3	2	2	2	3	2
CO4	2	2	3	2	3
CO5	2	2	3	3	2
AVG	2.20	2.20	2.60	2.60	2.20

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA2202 DATA ANALYSIS AND BUSINESS MODELING

L T P C

0 0 4 2

COURSE OBJECTIVES

- To demonstrate and understand the basic concepts in Statistics and preparing the data for Data Analysis.
- To identify the suitable statistical tools for describing data.
- To have the hands-on experience on data analysis for business modeling.

Exp . No	Details of Experiments	Duration
	Name	
1	Descriptive Statistics	4
2	Parametric Tests	4
3	Non- Parametric Tests	4
4	Correlation & Regression	4
5	Forecasting Trends	4
6	Linear Programming	4
7	Portfolio Selection	4
8	Risk Analysis & Sensitivity Analysis	4
9	Revenue Management	4
10	Ratio Analysis	4
11	Transportation & Assignment	4
12	Networking Models	4
13	Queuing Theory	4
14	Inventory Models	4
15	Economic Order Quantity	4

TOTAL: 60 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

CO1:Analyze the descriptive statistics.

CO2:Evaluate parametric and non-parametric model.

CO3:Simulate risk and sensitivity analysis.

CO4:Analyze transportation and Assignment problems.

CO5:Evaluate the inventory models.

TEXT BOOKS

1. Munmun Ghosh, Business Statistics: Using Excel, SPSS, and R Cengage Learning, 1st Edition, 2024.
2. Anil Kumar Mishra, A Hand Book on SPSS for Research Work, Himalaya Publishing House, 2nd Edition, 2023.
3. Ajai S. Gaur, Sanjaya S. Gaur, Statistical Methods for Practice and Research: A Guide to Data Analysis Using SPSS, SAGE Publications , 2nd Edition, 2009.

REFERENCE BOOKS

1. William J. Stevenson, Ceyhun Ozgur, "Introduction to Management Science with Spreadsheet", Tata McGraw Hill, 2009.
2. David R. Anderson, et al, "An Introduction to Management Sciences: Quantitative approaches to Decision Making", South-Western College Pub, 13th Edition, 2011.
3. Hansa Lysander Manohar, "Data Analysis and Business Modelling using Microsoft Excel" PHI, 2017.
4. David M. Levine et al, "Statistics for Managers using MS Excel" Pearson, 6th Edition, 2010.

5. Walker Schmidt, IBM SPSS: Comprehensive Beginners Guide to learn Statistics Using IBM SPSS from A–Z, Independently Published, 2019.

Mapping of COs and POs

COs	POs				
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CO1	2	3	2	3	2
CO2	2	3	3	3	2
CO3	3	2	2	3	2
CO4	2	3	2	3	2
CO5	2	3	3	2	3
AVG	2.2	2.8	2.4	2.8	2.2

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA3101 STRATEGIC MANAGEMENT

L T P C
4 0 0 4

COURSE OBJECTIVES

- To familiarize students with the fundamental concepts and analyze the environments for developing competitive advantages.
- To explore various levels of strategies through frameworks and strategic tools along with the knowledge of strategic implementation and evaluation processes.
- To examine recent trends, challenges, and strategic issues, especially in technological innovation, non-profit organizations, and the digital economy.

UNIT I INTRODUCTION TO STRATEGY

12

Strategy – Strategic Management Process – Developing a Strategic Vision –Mission–Setting Objectives– Strategies and Tactics – Importance of Corporate Strategy – the 7–S Framework Corporate Governance– Board of Directors– Board Functioning – Top Management.

UNIT II COMPETITIVE ADVANTAGE

12

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 – 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.

UNIT III STRATEGIES

12

The generic strategic alternatives – Business level strategy – Strategy in the Global Environment–Corporate Strategy– Strategic analysis and choice – Environment Analysis and diagnosis. Tools and techniques of environment analysis. The role of strategists in analysis and diagnosis, the industry and competitive environment analysis, Internal factors to be analyzed.

UNIT IV STRATEGY FORMULATION & EVALUATION

12

Strategy Formulation – Strategic Factors Analysis Summary Matrix (SFAS) Portfolio Analysis – Business Strategy– TOWS Matrix– Corporate Strategy–Mergers and Acquisitions and Diversifications – Strategic Leadership Strategic Control: Measurement in Performance– Problems in Measurement of Performance– Strategy Audit Strategic Control Process – Du Pont’s Control Model – Balanced Score Card

UNIT V OTHER STRATEGIC ISSUES

12

Managing Technology and Innovation – Strategic issues for Non Profit organisations. New Business Models and strategies for Internet Economy– Recent Trends in Strategic Management: Strategic Thinking, Organisational Culture, Organisational Development and Change, Change Management, Strategic management in a new globalised economy.

TOTAL: 60 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

- CO1: Implement the strategic management process, including the roles of vision, mission objectives, and stakeholder’s involvement.
- CO2: Apply strategic tools and models like Porter’s Five Forces and resource-based views to analyze the external and internal environment.
- CO3: Formulate business and corporate-level strategies and assess strategic choices using various frameworks.
- CO4: Implement strategies through effective resource allocation, structural alignment, and control mechanisms while managing change.
- CO5: Evaluate contemporary issues in strategic management such as innovation, globalization, and new business models in a digital economy.

TEXT BOOKS

1. Azhar Kazmi, Strategic Management and Business Policy, McGraw Hill Education, 4th Edition, 2018.
2. Arthur A. Thompson, A. J. Strickland, John Gamble, Crafting and Executing Strategy: The Quest for Competitive Advantage, Tata McGraw Hill, 20th Edition, 2017.
3. Michael Porter, Competitive Strategy: Techniques for Analyzing Industries and Competitors, Free Press , Special Edition, 2020.

REFERENCE BOOKS

1. Gerry Johnson, Richard Whittington & Kevan Scholes, Exploring Strategy: Text and Cases, Pearson, 12th Edition, 2020.
2. Robert M. Grant, Contemporary Strategy Analysis, Wiley, 9th Edition, 2013.
3. H. Igor Ansoff, Strategic Management, Macmillan, 2018.
4. Wheelen & Hunger, Strategic Management and Business Policy, Pearson, 13th Edition, 2015.
5. Fred R. David, Strategic Management: Concepts and Cases, Pearson Education 16th Edition, 2020.

ONLINE RESOURCES & MOOCs

1. NPTEL – Strategic Management, Prof. C. Raju, IIM Kozhikode.
<https://nptel.ac.in/courses/110108070>
2. Coursera – Strategic Management, Copenhagen Business School.
<https://www.coursera.org/learn/strategic-management>
3. edX – Strategic Management, IIM Bangalore (via edX).
<https://www.edx.org/course/strategic-management>

Mapping of COs and POs

COs	POs				
	1	2	3	4	5
CO1	3	2	2	1	3
CO2	2	3	3	2	2
CO3	2	3	3	2	2
CO4	3	2	3	2	2
CO5	2	2	2	3	3
AVG	2.4	2.4	2.6	2	2.4

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA3102 INTERNATIONAL BUSINESS MANAGEMENT

L T P C
4 0 0 4

COURSE OBJECTIVES

- To understand the fundamental concepts of international business with the theories of international trade, foreign direct investment and their policy implications.
- To analyze global entry strategies, organizational control, and performance measures in international business.
- To evaluate the international human resource management global production, marketing, and financial management strategies in the context of international operations.

UNIT I AN OVERVIEW OF INTERNATIONAL BUSINESS

12

International Business –Definition – Internationalizing business– Advantages –factors causing Globalization of business– Theories of international trade. Regional trade blocks. GATT and World Trade Organization– International Institution: UNCTAD Basic Principles and Major Achievements, Role of IMF, Features of IBRD

UNIT II INTERNATIONAL TRADE THEORIES

12

Theories of International Trade– Product Life Cycle, Eclectic, Market Power, Internationalisation– Instruments of Trade Policy : Voluntary Export Restraints, Administrative Policy, Anti-dumping Policy, Balance of Payment– BRICS, G20 Environment– CARICOM– GSTPGSP–SAPTA–Indian Ocean RIM Initiative– BIMSTEC– Bretton Woods Twins– World Bank & IMF, International Finance Corporation– Multilateral Investment Guarantee Agency (MIGA).

UNIT III GLOBAL ENTRY

12

Recent Trends in India's Foreign Trade– Strategic compulsions– Strategic options – Global portfolio management– Global entry strategy, different forms of international business– 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

12

Global production –Location –scale of operations– cost of production – Make or Buy decisions International Marketing Environment and global marketing strategy – Global Finance – International Sources of fund– Recent Changes in the International finance – Foreign exchange – Exchange rate risk and management– Global HR– selection of expatriate managers– Training and development – compensation.

UNIT V CONTEMPORARY ISSUES

12

Contemporary Issues in International Business– International Sales Contract– Major Laws INCO terms– Standard Clauses of International Sales Contract– Role of Indian Council of Arbitration / International Chamber of Commerce in solving Trade disputes. Export Regulations: Procedure for export of goods– Quality Control and Pre-shipment Inspection Customs Clearance– Port formalities– Exchange regulations for Export – Role of Clearing and Forwarding Agents.

TOTAL: 60 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

- CO1: Describe the scope, trends, and institutions that shape international business and globalization.
- CO2: Apply trade and investment theories to assess global market dynamics and policy tools.
- CO3: Formulate and evaluate global entry strategies and performance control mechanisms.
- CO4: Integrate production, marketing, and financial decisions in global business operations.
- CO5: Manage cross-cultural human resource practices and resolve ethical and strategic conflicts in international business.

TEXT BOOKS

1. Charles W.L. Hill & G. Tomas M. Hult, International Business: Competing in the Global Marketplace, McGraw-Hill Education, 13th Edition, 2021.
2. John D. Daniels, Lee H. Radebaugh & Daniel P. Sullivan, International Business: Environments and Operations, Pearson Education, 16th Edition, 2020.
3. Aswathappa K., International Business, McGraw-Hill Education, 7th Edition, 2017.

REFERENCE BOOKS

1. Ricky W. Griffin & Michael W. Pustay, International Business: A Managerial Perspective, Pearson, 9th Edition, 2020.
2. Paul Krugman, Maurice Obstfeld & Marc Melitz, International Economics: Theory and Policy, Pearson Education, 10th Edition, 2017.
3. Alan M. Rugman & Simon Collinson, International Business, Pearson 2019.
4. Francis Cherunilam, International Business: Text and Cases, PHI Learning Pvt. Ltd , 8th Edition, 2021.
5. Griffin, R., International Business, Pearson Education, 7th Edition 2018.

ONLINE RESOURCES & MOOCs

1. Coursera – International Business Essentials, University of London.
<https://www.coursera.org/learn/international-business>
2. edX – International Business Environment and Global Strategy, University of London.
<https://www.edx.org/course/international-business-environment>
3. MIT Open Course Ware – Global Strategy and Organization.
<https://ocw.mit.edu/courses/sloan-school-of-management>

Mapping of COs and POs

COs	POs				
	1	2	3	4	5
CO1	2	2	2	1	2
CO2	2	3	3	1	2
CO3	2	3	3	2	2
CO4	2	3	3	3	2
CO5	3	2	2	2	3
AVG	2.2	2.6	2.6	1.8	2.2

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA3201 CREATIVITY AND INNOVATION (LABORATORY)

L T P C

0 0 4 2

COURSE OBJECTIVES

- To understand the nuances involved in Creativity & Innovation.
- To get hands on experience in applying Creativity in problem solving.
- To analyse the new Entrepreneurial tools for Creativity and Innovation.

UNIT I INTRODUCTION

12

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 criterion for assessment of creativity & innovation.

UNIT II MECHANISM OF THINKING AND VISUALIZATION **12**

Definitions and theory of mechanisms of mind heuristics and models: attitudes, Approaches and Actions that support creative thinking – Advanced study of visual elements and principles– line, plane, shape, form, pattern, texture gradation, colour symmetry. Spatial relationships and compositions in 2– and 3–dimensional space – procedure for genuine graphical computer animation – Animation aerodynamics – virtual environments in scientific Visualization – Unifying principle of data management for scientific visualization – Visualization benchmarking.

UNIT III CREATIVITY **12**

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 Actions: – Processes in creativity ICEDIP – Inspiration, Clarification, Distillation, Perspiration, Evaluation and Incubation – Creativity and Motivation The Bridge between man creativity and the rewards of innovativeness – Applying Directed Creativity.

UNIT IV CREATIVITY IN PROBLEM SOLVING **12**

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 Creative and Innovative Abilities.

UNIT V INNOVATION **12**

Innovation– radical vs evolutionary, –TRIZ methodology of Inventive Problem Solving – the essential factors – Innovator’s solution – creating and sustaining successful growth – Disruptive Innovation model – Segmentive Models – New market disruption – Managing the Strategy Development Process – The Role of Senior Executive in Leading New Growth – Passing the Baton, Entrepreneurial Tools for Creativity and Innovation.

TOTAL: 60 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

- CO1: Provides insights about approaches to creativity and innovation.
- CO2: Utilize of heuristic models and its applications.
- CO3: Enhances the knowledge of nature of creativity.
- CO4: Ability to apply creativity in problem solving.
- CO5: Knowledge about radical and disruptive models of innovation.

TEXT BOOKS

1. Clayton M. Christensen Michael E. Raynor,” The Innovator’s Solution”, Harvard Business School Press Boston, 2015.
2. Semyon D. Savransky,” Engineering of Creativity – TRIZ”, CRC Press New York USA, 2010.
3. CSG Krishnamacharyalu, Lalitha R Innovation management , Himalaya Publishing House, 2007.

REFERENCE BOOKS

1. Rousing Creativity: Think New Now Floyd Hurt, ISBN 1560525479, Crisp Publications Inc. 2019.
2. Geoffrey Petty, How to be better at Creativity, The Industrial Society 2021.
3. The Creative Habit: Learn It and Use It for Life by Twyla Tharp 2013.
4. The Innovator's Solution by Clayton M. Christensen 2016.
5. Steal Like an Artist: 10 Things Nobody Told You About Being Creative by Austin Kleon 2011.

ONLINE RESOURCES & MOOCs

1. Coursera – Creativity & Innovation.
[https://www.coursera.org/learn/ Creativity & Innovation](https://www.coursera.org/learn/Creativity%20&%20Innovation)
2. edX – Creativity & Innovation, University of London.
[https://www.edx.org/course/ Creativity & Innovation](https://www.edx.org/course/Creativity%20&%20Innovation)
3. MIT Open Course Ware – Creativity & Innovation.
<https://ocw.mit.edu/courses/sloan-school-of-management>

COs	POs				
	1	2	3	4	5
CO1	3	3	3	3	3
CO2	3	3	3	2	3
CO3	3	2	3	2	3
CO4	2	3	3	3	3
CO5	3	3	3	3	3
AVG	2.8	2.8	3	2.6	3

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA3301 INVESTMENT SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT L T P C
3 0 0 3

COURSE OBJECTIVES

- To provide an understanding of the investment environment, types, and evaluation criteria.
- To analyze securities using fundamental approaches, technical analysis and market efficiency.
- To construct and manage portfolios using various models and also to evaluate the portfolios, understand the pricing models and mutual fund performance.

UNIT I INTRODUCTION TO INVESTMENTS

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 Earning – Forecasting Earnings– Applied Valuation Techniques– Graham and Dodds investor ratios.

UNIT III TECHNICAL ANALYSIS

9

Fundamental Analysis Vs Technical Analysis– Dow theory– Charting methods– Chart Patterns Trend – Trend reversals– Market Indicators–Moving Average– Exponential moving Average Oscillators. Efficient Market theory– Forms of market efficiency –weak, semi–strong, strong form– Empirical tests of market efficiency –its application.

UNIT IV PORTFOLIO CONSTRUCTION AND SELECTION

9

Portfolio analysis– Portfolio theory– Portfolio criteria Efficient Set– Portfolio selection and diversification– The shape of the risk function– CAPM model– Technical analysis – Random Walk– Martingale Model.

UNIT V PORTFOLIO EVALUATION

9

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–Return Decomposition and Attribution– Mutual Funds– Portfolio Revision.

TOTAL: 45 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

- CO1: Explain the investment environment, alternatives, and evaluate risk–return characteristics.
- CO2: Apply fundamental analysis tools including economic, industry, and company–level analysis for security selection.
- CO3: Analyze security price movements using technical indicators and assess market efficiency.
- CO4: Construct and optimize investment portfolios using quantitative models like Markowitz and CAPM.
- CO5: Evaluate portfolio performance using Sharpe, Treynor, and Jensen's indices and understand mutual fund performance.

TEXT BOOKS

1. S. Kevin, Security Analysis and Portfolio Management, PHI Learning C.N. Sontaki, Dunne 2015.
2. Prasanna Chandra Investment Analysis and Portfolio Management, Tata McGraw Hill, 4th Edition, 2013.
3. Reilly & Brown, Investment Analysis and Portfolio Management, Cengage Learning, 10th Edition, 2011.

REFERENCE BOOKS

1. Donald E. Fischer & Ronald J. Security Analysis & Portfolio management, PHI, 6th Edition, 1997.
2. Fischer & Jordan, Security Analysis and Portfolio, Pearson Education, 6th Edition 1995.
3. Charles P. Jones, Investments: Analysis and Management, Wiley, 11th Edition, 2010.
4. Damodaran, Aswath, Investment Valuation: Tools and Techniques for Determining the Value of Any Asset, Wiley, 2nd Edition, 2000.
5. Wiley.Zvi Bodie, Alex Kane, Alan Marcus, Investments, McGraw Hill, 8th Edition 2009.

ONLINE RESOURCES & MOOCs

1. NPTEL – Security Analysis and Portfolio Management.
<https://nptel.ac.in/courses/110105121>
2. Coursera – Investment Management Specialization University of Geneva.
<https://www.coursera.org/specializations/investment-management>
3. edX – Asset Pricing University of Chicago Boot.
<https://www.edx.org/course/asset-pricing>

Mapping of COs and POs

COs	POs				
	1	2	3	4	5
CO1	2	3	2	2	1
CO2	3	3	3	2	2
CO3	3	3	3	2	2
CO4	3	3	3	1	2
CO5	2	3	3	2	3
AVG	2.6	3	2.8	1.8	2

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA3302 FINANCIAL MARKET DYNAMICS

L T P C

3 0 0 3

COURSE OBJECTIVES

- To understand an overview of the structure and functioning of the Indian financial system and regulatory framework significance of primary market
- To comprehend the role of secondary market, trading mechanism, stock exchanges, Debt and FOREX markets by understand risk and pricing concepts.
- To examine mutual funds, derivatives, venture capital, and private equity as financial market participants/instruments.

UNIT I FINANCIAL MARKETS IN INDIA **9**

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 Instruments– Debentures– Shares. Placements – Leasing – Hire purchase – Instalment sale.

UNIT II INDIAN CAPITAL MARKET– PRIMARY MARKET **9**

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 **9**

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.

UNIT IV DEBT MARKET AND FOREX MARKET **9**

Bond markets – Pricing of Bonds – Government bond market and its interface with capital market – Components, types of bond market – G–Sec, T–Bills, Corporate Bonds, Yield conventions, Role of primary dealers, Auction Markets – FOREX Markets An Overview – Exchange Rates– Swaps –Options– Futures– FOREX Risks– Exposure Management– Overseas Borrowing– Crypto currency Market

UNIT V MUTUAL FUNDS AND VENTURE CAPITAL **9**

Origin, growth and overview of Mutual Funds in India – Management of mutual funds Types of Mutual Funds – Evaluation of Performance of mutual funds – Regulation of mutual funds in India – AMFI – Venture Capital – Concept, Features, Stages, and Performance of Venture capital funded companies in India.

TOTAL: 45 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

- CO1: Implement the structure, components, and regulatory environment of Indian financial markets.
- CO2: Analyze the capital raising process through primary markets and the role of intermediaries.
- CO3: Evaluate the working of stock exchanges and their regulatory aspects in secondary markets.
- CO4: Analyze the structure and instruments in the debt and forex markets including pricing and risk.
- CO5: Examine the significance of mutual funds, derivatives, and alternative investments like venture capital and private equity.

TEXT BOOKS

1. M.Y. Khan, Indian Financial System, Tata McGraw–Hill Education, 7th Edition, 2011.
2. L.M. Bhole & Jitendra Mahakud, Financial Institutions and Markets, McGraw Hill, 5th Edition, 2017.
3. Bharati V. Pathak, The Indian Financial System, Pearson Education, 4th Edition, 2014.

REFERENCE BOOKS

1. Sundaram & Varshney, Banking and Financial System, Sultan Chand & Sons 2017.
2. Gordon & Natarajan, Financial Markets and Services, Himalaya Publishing House, 7th Edition 2009.
3. Fabozzi, F.J., Bond Markets, Analysis and Strategies, Pearson Education, 8th Edition, 2015.
4. Hull, J.C., Options, Futures, and Other Derivatives, Pearson Education, 8th Edition, 2011.
5. Kevin, S., Security Analysis and Portfolio Management, PHI Learning, 2nd Edition 2000.

ONLINE RESOURCES & MOOCs

1. NPTEL – Indian Financial Markets: A Beginner’s Module.
<https://nptel.ac.in/courses/110106046>
2. Coursera – Financial Markets by Yale University (Robert Shiller).
<https://www.coursera.org/learn/financial-markets-global>
3. SEBI (Securities and Exchange Board of India)
<https://www.sebi.gov.in>

Mapping of COs and POs

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AVG	2.6	2.8	2.6	2.6	2.2

1 – Low, 2 – Medium, 3 – High, ‘–’ No correlation

COURSE OBJECTIVES

- To understand the structure and regulatory framework of the Indian banking system with the financial risk mitigation strategies used by banks.
- To explore the developments in banking technology and examine asset-based financial services offered in India including NBFCs.
- To understand insurance and other fee-based financial services, their regulation and functions.

UNIT I INTRODUCTION TO INDIAN BANKING SYSTEM 9

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/ 2002 – 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 9

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

UNIT III DEVELOPMENT IN BANKING TECHNOLOGY 9

Payment system in India – paper based – e payment –electronic banking –plastic money – E-money –forecasting of cash demand at ATM’s– Digital India Act (DIA), 2023– RBI’s Financial Sector Technology vision document– security threats in E-banking & RBI’s Initiative.

UNIT IV ASSET BASED FINANCIAL SERVICES 9

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– SIP.

UNIT V INSURANCE AND OTHER FEE BASED FINANCIAL SERVICES 9

Insurance– Origin, growth and overview of the Insurance in India– Types of Insurance – life, marine, fire, motor, health, pension plan, annuity, rural Insurance– Regulation of Insurance Industry– Bill discounting –factoring – Merchant Banking – Role of SEBI.

TOTAL: 45 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

- CO1: Comprehend the Indian banking system's structure, functions, and applicable legal framework.
- CO2: Evaluate banking fund management and risk practices including capital adequacy and NPAs.
- CO3: To analyze emerging technologies in banking and related cyber security concerns.
- CO4: Implement the framework and functions of NBFCs and evaluate asset-based financial services.
- CO5: Identify and analyze insurance and fee-based financial services including regulation and offerings.

TEXT BOOKS

1. Indian Institute of Banking and Finance (IIBF), Principles and Practices of Banking, Macmillan Education, 3rd Edition 2021.
2. Gordon & Natarajan, Banking Theory Law and Practice, Himalaya Publishing House, 24th Edition, 2019.
3. Sundaram & Varshney, Banking and Financial System, Sultan Chand & Sons, 2nd Edition, 2014.

REFERENCE BOOKS

1. Chetan Bajaj, Rajnish Tow and Nidhi V. Srivatsava, Retail Management, Oxford University Press, 1st Edition, 2007.
2. Sastry, E.V. Krishna, Banking Law and Negotiable Instruments, Eastern Book Company, 1st Edition, 2010.
3. S. Gurusamy, Financial Services & Systems, TATA McGraw Hill, Latest Edition, 2018.
4. Bhole & Mahakud, Financial Institutions and Markets, McGraw-Hill, 6th Edition, 2019.
5. Tripathy & Pal, Financial Services, PHI Learning, 2nd Edition, 2016.

ONLINE RESOURCES & MOOCs

1. RBI Official Website – Policy guidelines, CRR, CAMEL norms.
<https://www.rbi.org.in>
2. IRDAI (Insurance Regulatory and Development Authority of India).
<https://www.irdai.gov.in>
3. SEBI (Securities and Exchange Board of India)
<https://www.sebi.gov.in>

Mapping of COs and POs

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CO4	3	3	2	2	2
CO5	2	3	2	3	2
AVG	2.6	2.6	2.4	2.6	2.2

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA3304 FINANCIAL DERIVATIVES

L T P C

3 0 0 3

COURSE OBJECTIVES

- To know the derivative instruments and explain futures, pricing, and their application in hedging.
- To understand option markets, valuation models, and payoff mechanisms and examine interest rate and currency swaps, and their valuation.
- To provide an overview of the regulatory framework and derivative instruments traded in India.

UNIT I INTRODUCTION

9

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 Derivatives.

UNIT II FUTURES CONTRACT

9

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

9

Types of options & their characteristics – Application of options – Valuation – The Black scholes model – Merton model – Binomial trees – Risk management using options. – Option payoff, options on Securities, Stock Indices, Currencies and Futures – Options pricing models – Differences between future and Option contracts.

UNIT IV SWAPS

9

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

9

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 – Other derivatives: Credit derivatives, interest rate derivatives, insurance derivatives, exotic options– derivatives pitfalls– Current trends in India.

TOTAL: 45 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

- CO1: Implement the fundamentals, types, and significance of derivative instruments.
- CO2: Analyze futures contracts and apply them in hedging and speculation strategies.
- CO3: Evaluate different types of options, their valuation, and strategies for risk management.
- CO4: Analyze swap contracts including interest rate and currency swaps, and their valuation
- CO5: Comprehend the evolution, regulation, and trading framework of derivatives in India behavior and trends.

TEXT BOOKS

1. Hull, John C., Options, Futures and Other Derivatives, Pearson Education, 9th Edition, 2018.
2. S.L. Gupta, Financial Derivatives: Theory, Concepts and Problems, PHI Learning, 2017.
3. Redhead, Keith, Financial Derivatives: An Introduction to Futures, Forwards, Options and Swaps, Prentice Hall, 2011.

REFERENCE BOOKS

1. Andrew M. Chisholm, Derivatives Demystified, JohnFingrad publication, 2nd Edition, 2010.
2. Satyajit Das, Credit Derivatives: CDOs and Structured Credit Products, Book authority highlights, 3rd Edition, 2005.
3. Irene Perdomo, Leonardo Marroni, Pricing and Hedging Financial Derivatives: A Guide for Practitioners, Wiley, 3rd Edition, 2005.
4. Chance, Don M., An Introduction to Derivatives and Risk Management, Cengage Learning, 9th Edition, 2015.
5. Madhumathi & Ranganathan, Derivatives and Risk Management, Pearson Education, 1st Edition, 2012.

ONLINE RESOURCES & MOOCs

1. NSE India – Derivatives Segment (F&O).
<https://www.nseindia.com/products-services/equity-derivatives>
2. SEBI – Regulations on Derivatives.
<https://www.sebi.gov.in>
3. FIMMDA (Fixed Income Money Market and Derivatives Association of India).
<http://www.fimmda.org>

Mapping of COs and POs

COs	POs				
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CO1	3	2	2	2	2
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AVG	2.6	2.6	2.6	2.2	2

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24BA3305 FINANCIAL MODELING AND VALUATION

L T P C

3 0 0 3

COURSE OBJECTIVES

- To introduce the fundamentals and tools for effective financial modelling using spreadsheets and build practical models for bond and equity valuation.
- To construct corporate financial models for valuation and decision-making, model portfolios based on risk, return, and optimization strategies.
- To develop derivative-based models for options and hedging.

UNIT I INTRODUCTION TO FINANCIAL MODELLING & BUILT IN FUNCTIONS USING SPREAD SHEETS 9

Introduction to Financial Modelling– Need for Financial Modelling– Steps for effective financial modelling– Introduction to Time value of money Look up array functions: FV, PV, PMT, RATE, NPER, Vlookup, Hlookup ,if, count if etc – Time value of Money Models: EMI with Single & Two Interest rates –Loan amortization modelling– Debenture redemption modeling.

UNIT II BOND & EQUITY SHARE VALUATION MODELLING 9

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 valuation modelling with and without growth rates.

UNIT III CORPORATE FINANCIAL MODELLING 9

Alt Man Z score Bankruptcy Modelling–Indifference point modelling – Financial Break even modelling –Corporate valuation modelling (Two stage growth)– Business Modelling for capital budgeting evaluation: Payback period, NPV ,IRR and MIRR.

UNIT IV PORTFOLIO MODELLING 9

Risk, Beta and Annualised Return– Security Market Line Modelling– Portfolio risk calculation (Equal Proportions)– Portfolio risk optimisation (varying proportions)– Portfolio construction modeling.

UNIT V DERIVATIVE MODELLING

9

Option pays off modelling: Long and Short Call & Put options – Option pricing modeling (B–S Model)– Optimal Hedge Contract modeling.

TOTAL: 45 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

- CO1: Apply spreadsheet tools and functions to create financial models including time value of money and loan structures.
- CO2: Develop models to evaluate bonds and equity securities including YTM and growth–based valuation.
- CO3: Construct models for financial forecasting, break–even analysis, and business investment decisions.
- CO4: Design and analyze portfolio models for return optimization and risk assessment.
- CO5: Model option pricing and payoff strategies including hedging using derivatives.

TEXT BOOKS

1. Chandan Sengupta, Financial Analysis and Modelling Using Excel and VBA, Wiley India, 2nd Edition, 2011.
2. Simon Benninga, Financial Modeling, MIT Press, 3rd Edition 2014.
3. Paul Pignataro, Financial Modeling and Valuation: A Practical Guide to investment Banking and Private Equity, Wiley , 1st Edition, 2013.

REFERENCE BOOKS

1. Craig W. Holden, Excel Modeling in Corporate Finance, Pearson Education, 2015.
2. S. R. Vishwanath, Corporate Finance: Theory and Practice, Sage Publications, 2019.
3. Dayal, Ishwar, Spreadsheet Modeling and Decision Analysis, Cengage Learning, 2017.
4. T. S. Reddy & Y. Hari Prasad Reddy, Financial Accounting using Excel Spreadsheet, Margham Publications, 2016.
5. Prasanna Chandra, Financial Management: Theory and Practice, McGraw–Hill Education, 10th Edition, 2019.

ONLINE RESOURCES & MOOCs

1. NPTEL – Financial Modelling and Analysis by Prof. R. Srinivasan, IIM Bangalore.
<https://nptel.ac.in/courses/110105165>
2. Coursera – Business and Financial Modeling Specialization by Wharton. (University of Pennsylvania)
<https://www.coursera.org/specializations/wharton–business–financial–modeling>
3. Wall Street Prep – Financial Modeling Courses.
<https://www.wallstreetprep.com>

Mapping of COs and POs

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CO5	3	3	3	2	2
AVG	3	2.8	3	1.2	2

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA3306 INTERNATIONAL FINANCE

L T P C

3 0 0 3

COURSE OBJECTIVES

- To understand the fundamental concepts and evolution of international finance, including the role of institutions and the international monetary multinational corporations (MNCs) in global expansion and investment.
- To gain knowledge of international monetary markets, including foreign exchange and the Eurocurrency market and explore borrowing, lending options including bond markets, syndicated loans, and ADRs/GDRs.
- To assess international financial risks and understand the functioning of international markets for investment, futures, and options.

UNIT I INTERNATIONAL TRANSACTIONS

9

Overview and Evolution of International Finance –Institutions for International Finance – Internationalization process –International Monetary and Financial System – Balance of Payments – Exchange rate and money supply – International parity relations – Purchasing power parity – interest rate parity – Forward rate parity.

UNIT II MULTINATIONAL FINANCIAL MANAGEMENT

9

Process of overseas expansion – Reasons for cross-border investing – The theory of investment – techniques of project evaluation – Approaches for investment under uncertainty – FDI – Measuring and Managing Risk – International M&A – Financial Techniques in M&A – Regulations of M&A in major countries.

UNIT III INTERNATIONAL MONETARY SYSTEM AND DIGITAL CURRENCIES

9

Introduction to the Foreign Exchange Interbank Market – Foreign Exchange Spot Transactions – forward market — Hedging and Speculation – Hedging FX Transaction Exposure – The Eurocurrency market – international banking – structure and instruments. Blockchain and new age financial opportunities, Cryptocurrency Wallets – Bitcoins– Altcoins – Open Banking Use of Quantum Computing in Finance – Decentralised Finance (DeFi) – FinTech as a Service.

UNIT IV BORROWING AND LENDING **9**

Bond Markets of various countries – Fixed and floating rate notes – Syndicate loans – Syndicated Euro credits – ADR – GDR – Managing interest rate risk – Bond prices and yields – Bond Management – tools and techniques

UNIT V INTERNATIONAL RISK ASSESSMENT AND OTHER INTERNATIONAL MARKETS **9**

Country and political risk analysis – benefits and risks of international portfolio investment – assessing country creditworthiness – futures markets and instruments – option markets and instruments – option pricing – option pricing theory in financial risk assessment.

TOTAL: 45 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

- CO1: Implement the process of international finance, institutions involved, and various international financial systems and parity relations.
- CO2: Evaluate multinational financial management techniques, FDI, and international mergers & acquisitions (M&A).
- CO3: Analyze the foreign exchange market and the operations of the Eurocurrency market, hedging techniques, and international banking.
- CO4: Analyse international sources of finance, including bond markets, syndicated loans, and ADR/GDR mechanisms.
- CO5: Assess international financial risks, political risks, and understand the operation of futures and options in the international financial markets.

TEXT BOOKS

1. P. G. Apte, International Financial Management, McGraw Hill Education, 7th Edition, 2017.
2. Alan C. Shapiro, Multinational Financial Management, Wiley 10th Edition, 2013.
3. Eun & Resnick, International Financial Management, McGraw Hill Education, 8th Edition, 2017.

REFERENCE BOOKS

1. Jeff Madura, International Corporate Finance, Cengage Learning, 12th Edition, 2018.
2. Maurice D. Levi, International Finance: The Markets and Financial Management of Multinational Business, Routledge, 5th Edition, 2009.
3. V. A. Avadhani, International Finance: Theory and Practice, Himalaya Publishing House, 1st Edition 2016.
4. Peter Borovykh, Block chain Driven and Application in Finance, 2nd Edition 2021.
5. Cheol Eun & Bruce Resnick, Global Financial Markets and Institutions, Pearson 1st Edition, 2020.

ONLINE RESOURCES & MOOCs

1. NPTEL – International Finance by Prof. Prashant Das, IIM Ahmedabad.
<https://nptel.ac.in/courses/110105139>
2. Coursera – International Business Essentials (University of London).
<https://www.coursera.org/specializations/international-business>
3. edX – International Finance (University of Maryland).
<https://www.edx.org/course/international-finance>

Mapping of COs and POs

COs	POs				
	1	2	3	4	5
CO1	3	2	3	2	2
CO2	3	3	2	2	2
CO3	3	2	3	2	2
CO4	3	3	3	2	2
CO5	3	3	3	2	2
AVG	3	2.6	2.8	2	2

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA3307 BEHAVIORAL FINANCE

L T P C
3 0 0 3

COURSE OBJECTIVES

- To understand the traditional finance theories, role of security prices, EMH, arbitrage in financial markets and decision-making theories.
- To understand cognitive biases and heuristics in investment decisions to impact the market stability and pricing.
- To evaluate managerial decisions influenced by behavioural biases in relation to security supply and firm investment characteristics.

UNIT I INTRODUCTION TO BEHAVIORAL FINANCE

9

The role of security prices in the economy – EMH – Failing EMH – EMH in supply and demand framework – Equilibrium expected return models – Investment decision under uncertainty – Introduction to neoclassical economics and expected utility theory – Return predictability in stock market – Limitations to arbitrage.

UNIT II DECISION AND BEHAVIORAL THEORIES

9

Nash Equilibrium: Keynesian Beauty Context and The Prisoner's Dilemma – The Monthly Hall Paradox– The St. Petersburg Paradox – The Allais Paradox – The Ellsberg Paradox – Prospects theory – CAPM – behavioral portfolio theory – SP/A theory – brief history on rational thought – PASACL – Fermat to Friedman – savage.

UNIT III BEHAVIORAL BIASES

9

Cognitive Biases – Confirmation Bias, Anchoring, Framing Bias, Cognitive Dissonance, Mental Accounting, Hindsight bias – Case Studies. Emotional Biases – Loss aversion, overconfidence bias, Self-control, Status quo, Endowment, and regret aversion – Case Studies.

UNIT IV ARBITRAGEURS

9

Definition of arbitrageur – Long–short trades – Risk vs. Horizon – Transaction costs and short–selling costs – Fundamental risk – Noise–trader risk – Professional arbitrage – Destabilizing informed trading.

UNIT V MANAGERIAL DECISIONS

9

Supply of securities and firm investment characteristics (market timing, catering) by rational firms –Associated institutions – Relative horizons and incentives – Biases in CEO Selection; Biases in CEO Decisions – Biases in Investment Decision, Biases in Financing Decisions; Biases in Corporate Governance; Biases in M&A deals – Case Studies.

TOTAL: 45 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

- CO1: Analyse the role of security prices in the economy and the limitations of the Efficient Market Hypothesis (EMH).
- CO2: Analyse decision–making theories like Nash Equilibrium, Paradoxes, and Prospect Theory in financial markets.
- CO3: Evaluate decision–making biases in investment processes, including cognitive, forecasting, and emotional biases.
- CO4: Examine the role of arbitrageurs in financial markets and their impact on market stability.
- CO5: Analyse how managerial biases influence supply of securities and firm investment decisions, and their impact on financial outcomes.

TEXT BOOKS

1. Hersh Shefrin, Beyond Greed and Fear: Understanding Behavioral Finance and the Psychology of Investing, Harvard Business Review Press, 1st Edition, 2002.
2. Richard H. Thaler, Misbehaving: The Making of Behavioral Economics, W. W. Norton & Company, 1st Edition, 2015.
3. Parag Parikh, Value Investing and Behavioral Finance, McGraw–Hill Education, 1st Edition, 2017.

REFERENCE BOOKS

1. Daniel Kahneman, Thinking, Fast and Slow, Penguin Books , 1st Edition, 2011.
2. Nicholas Barberis and Richard Thaler, A Survey of Behavioral Finance, Handbook of the Economics of Finance 2003.
3. Robert Shiller, Irrational Exuberance, Princeton University Press, 3rd Edition, 2015.
4. Meir Statman, Behavioral Finance: The Second Generation, CFA Institute Research Foundation, 2019.
5. Prasanna Chandra, Behavioral Finance, McGraw–Hill Education India, 1st Edition 2020.

ONLINE RESOURCES & MOOCs

1. NPTEL – Behavioral and Personal Finance by Prof. Ashok Banerjee, IIM Calcutta.
<https://nptel.ac.in/courses/110105121>
2. Coursera – Behavioral Finance by University of Chicago (Prof. Richard Thaler).
<https://www.coursera.org/learn/behavioral-finance>
3. edX – Behavioral Finance by University of Toronto.
<https://www.edx.org/course/behavioral-finance>

Mapping of COs and POs

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CO5	3	3	3	2	2
AVG	3	2.8	2.4	2	2

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA3308 RETAIL MARKETING

L T P C
3 0 0 3

COURSE OBJECTIVES

- To understand the global and Indian retail landscape, challenges, opportunities, influences on retail management and retail formats
- To explore key retail decisions, including location choice, atmospherics, store image, retail shop management, including visual merchandising, space management, inventory control, and retail advertising.
- To evaluate consumer behavior in retail settings, including shopping decision processes, complaints management, and challenges faced in retailing.

UNIT I INTRODUCTION

9

Retailing – Functions of retailing – Types of retailing – Forms of retailing – Global Challenges and opportunities – Retail trends in India – Socio economic and technological Influences on retail management – Government of India policy implications on retails.

UNIT II RETAIL FORMATS

9

Organized and unorganized formats – Different organized retail formats – Characteristics of each format – Emerging trends in retail formats – MNC's role in organized retail formats– Virtual Marketing.

UNIT III RETAILING DECISIONS **9**

Choice of retail locations – Positioning of retail shops –Building retail store Image – Retail service quality management – Retail Supply Chain Management – Retail Pricing Decisions. Merchandizing and category management.

UNIT IV RETAIL SHOP MANAGEMENT **9**

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 .

UNIT V RETAIL SHOPPER BEHAVIOUR **9**

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.

TOTAL: 45 PERIODS

COURSE OUTCOMES

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

- CO1: Verify the global and Indian retailing landscape, including trends, challenges, and government policies affecting retail
- CO2: Analyze different retail formats, their characteristics, and emerging trends in organized retailing.
- CO3: Evaluate critical retailing decisions such as location choice, store positioning, pricing decisions, and supply chain management.
- CO4: Understand the aspects of retail shop management, including inventory, merchandising, advertising, and retail MIS.
- CO5: Examine consumer behavior in retail, including factors influencing shopping decisions and effective complaints management.

TEXT BOOKS

1. Michael Havy, Baston, Aweitz and Ajay Pandit, Retail Management, Tata Mcgraw Hill, 6th Edition, 2007.
2. Ramkrishnan and Y.R. Srinivasan, Indian Retailing Text and Cases, Oxford University Press, 1st Edition, 2008.
3. Ogden, Integrated Retail Management, Biztantra, India, 2008.

REFERENCE BOOKS

1. Chetan Bajaj, Rajnish Tow and Nidhi V. Srivatsava, Retail Management, Oxford University Press, 1st Edition 2007.
2. Swapna Pradhan, Retail Management –Text and Cases, Tata McGraw Hill, 3rd Edition, 3rd Edition, 2009.
3. C. N. Sontaki, Dunne, Retail Management, Text Cases, Himalaya Publishing House, 1st Edition, 2014.
4. V. S. Ramaswamy & S. Namakumari, Retail Marketing , Kogent solution, 1st Edition, 2015.
5. David Gilbert, Retail Marketing Management, by Pearson Education, 2003.

ONLINE RESOURCES & MOOCs

1. NPTEL – Retail Management by Prof. Sangeeta Sahney, IIT Kharagpur.
<https://nptel.ac.in/courses/110105029>
2. Coursera – Retail Marketing Strategy by IE Business School.
<https://www.coursera.org/learn/retail-strategy>
3. edX – Retail and Omni channel Management by Dartmouth X.
<https://www.edx.org/course/retail-and-omnichannel-management>

Mapping of COs and POs

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CO1	3	2	2	3	2
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CO3	3	3	3	2	2
CO4	3	3	3	2	2
CO5	3	3	2	2	3
AVG	3	2.6	2.6	2.2	2.2

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA3309 CONSUMER BEHAVIOR

L T P C
3 0 0 3

COURSE OBJECTIVES

- To understand the significance of consumer behavior and the factors influencing consumer decisions in various contexts.
- To analyze the internal psychological influences such as motivation, perception, and learning that shape consumer behavior.
- To evaluate the external influences on consumer behavior, such as socio-cultural factors, reference groups, and communication.

UNIT I INTRODUCTION

9

Nature of Consumer behavior– Consumption, Consumer orientation, Interpretive and Quantitative approaches – Effects of Technology, Demographics and Economy on Consumer behavior.

UNIT II INTERNAL INFLUENCES

9

Individual Psychological factors– Influences on consumer behavior– motivation– perception – Attitudes and Beliefs– Learning and Experience– Personality & Self Image.

UNIT III EXTERNAL INFLUENCES

9

Socio-Cultural, Cross Culture– Family group– Reference group– Communication – Influences on Consumer behavior.

UNIT IV CONSUMER BEHAVIOR MODELS

9

Major models in consumer behavior– Traditional and Contemporary Consumer behavior model for Individual and industrial buying behavior and decision making.

UNIT V PURCHASE DECISION PROCESS

9

Consumer decision making process– Steps, Levels and decision rules– Evolving Indian consumers– Opinion Leadership– Diffusion and Adoption.

COURSE OUTCOMES

On successful completion of this course, the student will be able to

- CO1: Analyse the factors that affect consumer behavior, including technological, demographic, and economic influences.
- CO2: Analyse the internal psychological factors that influence consumer behavior, such as motivation, perception, and attitudes.
- CO3: Evaluate the external socio-cultural factors and reference groups that influence consumer behavior.
- CO4: Study and apply consumer behavior models to understand individual and industrial buying behaviour.
- CO5: Analyse the consumer decision-making process and identify the key factors affecting purchase decisions.

TEXT BOOKS

1. Ramanuj Majumdar, Consumer Behaviour – Insights from Indian Market, Prentice Hall 1st Edition 2011.
2. Leon G.Schiffman and Leslie Lasar Kanuk, Consumer Behavior, Pearson Education, India, 9th Edition 2007.
3. Barry J.B., Eric G.H., Ashutosh M., Consumer Behaviour – A South Asian Perspective, Cengage Learning, 1st Edition, 2013.

REFERENCE BOOKS

1. Paul Peter et al., Consumer Behavior and Marketing Strategy, Tata McGraw Hill, Indian Edition, 7th Edition 2008.
2. Wayne D. Hoyer, Consumer Behavior, South Western Educational Publishing, 1st Edition, 2012.
3. Leon Schiffman, Consumer Behavior, Global Edition by Pearson Education, 2014.
4. Michael R. Solomon, Consumer Behavior: Buying, Having, and Being, 12th Edition, 2017.
5. Building Marketing Strategy : Consumer Behavior, McGrawHill, 14th Edition 2019.

ONLINE RESOURCES & MOOCs

1. NPTEL – Consumer Behavior by Prof. Ashis Mishra, IIM Bangalore.
<https://nptel.ac.in/courses/110105074>

2. Coursera – The Neuro marketing Toolbox by Copenhagen Business School.
<https://www.coursera.org/learn/neuromarketing>
3. Future Learn – Consumer Behavior and Psychology.
<https://www.futurelearn.com/courses/consumer-behaviour>

Mapping of COs and POs

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CO3	3	2	3	2	2
CO4	3	2	3	2	2
CO5	3	3	2	2	3
AVG	2.8	2.8	2.8	2.4	2.6

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA3310 INTEGRATED MARKETING COMMUNICATION

L T P C

3 0 0 3

COURSE OBJECTIVES

- To understand the role of Integrated Marketing Communication (IMC) in the marketing process with different tools of IMC communication process.
- To explore the planning and budgeting process for marketing communication programs.
- To develop creative strategies for implementing IMC programs across different media, communication tools, digital media and advertising in modern marketing.

UNIT I AN INTRODUCTION TO INTEGRATED MARKETING COMMUNICATION 9

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 behavior.

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 Belding (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 mar com– 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

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

- CO1:Analyse the concept of IMC and its role in the marketing process, including the tools used in IMC.
- CO2:Learn the communication process, including various communication models and how they influence consumer behavior.
- CO3:Develop the ability to plan and set objectives for marketing communication programs, as well as budget for promotional activities.
- CO4:To Develop creative strategies for effective communication through advertising, sales promotion, and other IMC tools
- CO5:Gain insights into digital media, its evolution, and the role of e–commerce, mobile advertising, and social media in modern IMC.

TEXT BOOKS

1. George Belch & Keyoor Purani, Advertising & Promotion– An Integrated Marketing Communications Perspective, TATA McGraw Hill , 11th Edition 2018.
2. Wells, Moriarty & Burnett, Advertising, Principles & Practice, Pearson Education, 7th Edition, 2007.
3. Terence A. Shimp and J.Craig Andrews, Advertising Promotion and other aspects of Integrated Marketing Communications, CENGAGE Learning, 9th Edition,2016.

REFERENCE BOOKS

1. S. H. H. Kazmi and Satish K Batra, Advertising & Sales Promotion, Excel Books, New Delhi, 3rd Revised Edition 2008.
2. Julian Cummings, Sales Promotion: How to Create, Implement and Integrate Campaigns that Really Work, Kogan Page, London, 5th Edition 2010.
3. Jaishri Jefhwaney, Advertising Management, Oxford University Press, 2013.

4. Dr Niraj Kumar, Integrated Marketing Communication, Himalaya Publication 1st Edition, 1st Edition , 2015.
5. Donald Baack, Integrated Advertisements, Promotion and Marketing communication, Prentice Hall of India, New Delhi, 3rd Edition 2010.

ONLINE RESOURCES & MOOCs

1. NPTEL – Integrated Marketing Communication by Prof. Tapan Panda, IIM. Kozhikode.
<https://nptel.ac.in/courses/110105121>
2. Coursera – Digital Advertising Strategy by University of Colorado Boulder.
<https://www.coursera.org/learn/digital-advertising>
3. edX – The Science of Digital Media by University System of Maryland.
<https://www.edx.org/course/the-science-of-digital-media>

Mapping of COs and Pos

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CO2	3	2	3	2	3
CO3	3	3	3	2	3
CO4	3	2	3	2	3
CO5	3	2	3	2	3
AVG	2.8	2.8	2.8	2.4	2.6

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA3311 SERVICES MARKETING

L T P C
3 0 0 3

COURSE OBJECTIVES

- To understand the nature, scope, service positioning, service channels, pricing, and unique characteristics of services to manage the demand and supply.
- To assess service marketing opportunities, including market segmentation, targeting, and positioning.
- To learn the processes involved in service design, development, and quality measurement, along with key models like the GAP and SERVQUAL models.

UNIT I INTRODUCTION

9

Introduction– Definition– Service Economy – Nature, Need , Evolution and growth of service sector– Nature and Scope of Services– Difference between services and tangible products– Unique characteristics of services– Challenges and issues in Services Marketing.

UNIT II SERVICE MARKETING OPPORTUNITIES

9

Assessing service market potential – Classification of services – Expanded marketing mix – Service marketing – Environment and trends – Service market segmentation, targeting and positioning.

UNIT III SERVICE DESIGN AND DEVELOPMENT

9

Service Life Cycle – New service development – Service Blue Printing – GAP model of service quality – Measuring service quality – SERVQUAL – Service Quality function development.

UNIT IV SERVICE DELIVERY AND PROMOTION

9

Positioning of services– Designing service delivery System, Service Channel– Pricing of services, methods– Service marketing triangle– Managing demand, Managing supply, managing Demand and Supply of Service– Integrated Service marketing communication.

UNIT V SERVICE STRATEGIES

9

Service Marketing Strategies for Health– Hospitality– Tourism– Financial– Logistics– Educational– Marketing of Online Services– Entertainment & public utility Information technique Services

TOTAL: 45 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

- CO1:Analyse the characteristics of services and the challenges involved in marketing services.
- CO2:Assess service marketing opportunities, including identifying market potential and applying the expanded marketing mix for services.
- CO3:Understand service life cycles, new service development, and the measurement of service quality using frameworks like SERVQUAL.
- CO4:Develop strategies for service positioning, delivery systems, pricing methods, and managing demand and supply.
- CO5:Apply service marketing strategies in different sectors, such as health, hospitality, tourism, and online services.

TEXT BOOKS

1. Christopher Lovelock & Jochen Wirtz, Services Marketing: People, Technology, Strategy, Pearson Education, 8th Edition, 2016.
2. Valarie A. Zeithaml, Mary Jo Bitner & Dwayne Gremler, Services Marketing: Integrating Customer Focus Across the Firm, McGraw–Hill, 7th Edition, 2018.
3. Ravi Shankar, Services Marketing, Excel Books, 2008.

REFERENCE BOOKS

1. Valarie Zeithaml et al, Services Marketing, 5th International Edition, Tata McGraw Hill, 7th Edition, 2008.
2. Christian Gronroos, Services Management and Marketing a CRM in service Competition, 3rd Edition, Wiley 2007.
3. R. Srinivasan, Services Marketing, Prentice Hall of India Private Limited, 4th Edition, New Delhi 2008.
4. Vinnie Jauhari & Kirti Dutta, Services Marketing, Text and cases, 2nd Edition 2010.
5. Adrian Payne, The Essence of Services Marketing, PHI Learning, 1st Edition 1993.

ONLINE RESOURCES & MOOCs

1. NPTEL – Services Marketing by Prof. J. Ramachandran, IIM Bangalore.
<https://nptel.ac.in/courses/110105040>
2. Coursera – Marketing in a Digital World by University of Illinois.
<https://www.coursera.org/learn/marketing-digital>
3. edX – Customer-Centric Marketing for Entrepreneurs by Babson College.
<https://www.edx.org/course/customer-centric-marketing>

Mapping of COs and POs

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CO5	3	2	3	2	3
AVG	3	2.4	3	2	3

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA3312 SALES AND DISTRIBUTION MANAGEMENT

L T P C

3 0 0 3

COURSE OBJECTIVES

- To understand the nature and scope of sales management, personal selling, sales forecasting, online selling and sales territories design for effective sales strategies.
- To manage a sales force including recruitment, training, compensation, and motivation.
- To understand the inventory management, transportation, and the role of information technology in online selling for retailing and wholesaling.

UNIT I INTRODUCTION

9

Sales management – nature and scope. Sales management positions. Personal Selling – Scope, theories and strategies. Sales forecasting and budgeting decisions. Online selling – scope, potential, Merits and Demerits.

UNIT II PERSONAL SELLING PROCESS, SALES TERRITORIES & QUOTAS

9

Selling process and relationship selling. Designing Sales Territories and quotas. Sales organization structures.

UNIT III MANAGING THE SALES FORCE

9

Sales force – recruitment, selection, training, motivating, compensation and control.

UNIT IV MANAGING DISTRIBUTION CHANNELS

9

Distribution Management – Introduction need and scope. Channels –Strategies and levels, retailing and wholesaling. Designing channel systems and channel management.

UNIT V BASICS OF LOGISTICS AND SUPPLY CHAIN MANAGEMENT 9

Logistics – Scope, definition and components. Managing FG Inventory & warehousing. Transportation – Scope, Modes and role in Supply Chain effectiveness. Use of Information Technology in Online Selling and Goods tracking.

.TOTAL: 45 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

- CO1: Utilize the fundamental concepts of sales management, including personal selling strategies, sales forecasting, and online selling.
- CO2: Learn the personal selling process, how to design sales territories and quotas, and develop sales organizational structures.
- CO3: Understand how to recruit, select, train, motivate, and compensate sales teams effectively.
- CO4: Gain insights into distribution management strategies, retailing, wholesaling, and designing and managing sales channels.
- CO5: Implement the logistics and supply chain management, focusing on inventory management, warehousing, transportation, and information technology.

TEXT BOOKS

1. Krishna K. Havaldar, Vasant M. Cavale, Sales and Distribution Management – Text and Cases, McGraw Hill Education, 3rd Edition, 2017.
2. Gupta S.L., Sales and Distribution Management – Text and Cases – An Indian Perspective, Excel Books 2009.
3. Pingali Venugopal, Sales and Distribution Management – An Indian Perspective, Response Books from Sage Publications 2008.

REFERENCE BOOKS

1. P.K. Sahu, Vikas Sales and Distribution Management, Publishing House, 2009.
2. Bert Rosenbloom, Marketing Channels, 8th Edition 2012.
3. Logistics and Supply Chain Management by Martin Christopher, Pearson Education, 5th Edition 2016.
4. K.K. Bajaj & Rajeev Batra, Sales Management: Concepts and Cases Excel Books, 1st Edition, 2004.
5. Sales and Distribution Management by V.S. Ramaswamy & S. Namakumari, Macmillan India, 1st Edition, 2009.

ONLINE RESOURCES AND MOOCs

1. Coursera: Sales Management – Sales Management Course.
[https://www.coursera.org/learn/ Sales Management](https://www.coursera.org/learn/Sales%20Management)
2. edX: Logistics and Supply Chain Management – edX Course on Supply Chain.
<https://www.edx.org/course/customer-centric-marketing>
3. LinkedIn Learning Sales and Distribution Management Fundamentals.
Sales Fundamentals.

Mapping of COs and POs

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CO5	3	2	3	2	3
AVG	3	2.6	3	2	3

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA3313 PRODUCT AND BRAND MANAGEMENT

L T P C

3 0 0 3

COURSE OBJECTIVES

- To understand the product development process, product life cycle, brand communication, positioning, branding elements and valuation.
- To explore the management of brands over time, brand extension strategies, and brand portfolio management.
- To examine critical factors in advertising, pricing, distribution systems, and marketing in both domestic and international contexts for brand management.

UNIT I INTRODUCTION

9

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.

UNIT II BRAND MANAGEMENT CONCEPT

9

Product Plans– Elements of Branding– Brand Identity –Brand Communication –Brand Positioning –Brand Image and Personality – Valuation of Brands– Brand Valuation –Brand Tracking and Monitoring.

UNIT III BRAND ELEMENTS

9

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

UNIT IV BRANDING DECISIONS

9

Managing Brand Experience – Digital Branding–Employment Branding – Co-branding– Brand extension scorecard–Culture and branding–Brand flashbacks–Future brand priorities.

UNIT V PRODUCT AND BRAND

9

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.

TOTAL: 45 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

- CO1:Implement the fundamental concepts of sales management, including personal selling strategies, sales forecasting, and online selling.
- CO2:Learn the personal selling process, how to design sales territories and quotas, and develop sales organizational structures.
- CO3:Understand how to recruit, select, train, motivate, and compensate sales teams effectively.
- CO4:Gain insights into distribution management strategies, retailing, wholesaling, and designing and managing sales channels.
- CO5:Implement the logistics and supply chain management, focusing on inventory management, warehousing, transportation, and information technology.

TEXT BOOKS

1. Kevin lane Keller; Ambi M. G. Parameswaran; Issac Jacob; Strategic Brand Management: Building, Measuring, and Managing Brand Equity by Pearson Education India, 4th Edition 2018.
2. Tapan K. Panda, Product and Brand Management Paperback: 888 pages Publisher: Oxford University Press; 1st Edition January 2016.
3. U. C. Mathur, Product and brand management by Publisher, Excel Books December, 1st Edition 2012.

REFERENCE BOOKS

1. Kumar, K. L., Product and Brand Management, IK International Publishing House, 1st Edition, 2007.
2. Keller, Kevin Lane, Strategic Brand Management, Pearson Education, 4th Edition, 2012.
3. Hedning, Tilde, Knudtzen, Charlotte. F and Bjerre, Mogens, Brand Management: Research, Theory and Practice, Routledge, 3rd Edition, 2009.
4. Kapferer, Jean-Noël, The New Strategic Brand Management: Advanced Insights and Strategic Thinking, Kogan Page, 5th Edition 2012.
5. Neumeier, Marty, The Brand Gap: How to Bridge the Distance Between Business Strategy and Design, New Riders, Revised Edition, 2005.

ONLINE RESOURCES AND MOOCs

1. Coursera: Sales Management. Sales Management Course
2. edX:Logistics and Supply Chain Management. edX Course on Supply Chain
3. LinkedIn Learning Sales and Distribution Management Fundamentals. Sales Fundamentals

Mapping of COs and POs

COs	POs				
	1	2	3	4	5
CO1	3	2	3	2	3
CO2	3	3	3	2	3
CO3	3	3	3	2	3
CO4	3	3	3	2	3
CO5	3	2	3	2	3
AVG	3	2.6	3	2	3

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA3314 DIGITAL MARKETING

L T P C

3 0 0 3

COURSE OBJECTIVES

- To develop an understanding of digital marketing strategies and components, including opportunities for brand building and content marketing.
- To understand Search Engine Optimization (SEO) and Search Engine Marketing (SEM), along with their components, techniques, and success factors.
- To explore social media marketing, leveraging channels for brand conversations, digital transformation, channel attribution in developing and refining digital marketing strategies.

UNIT I DIGITAL MARKETING STRATEGY

9

Online Market space– Digital Marketing Strategy– Components –Opportunities for building Online marketing mix – E-products – STP – E-price – E-Promotion– Brand– Website– Planning and Creation– Content Marketing.

UNIT II SEO

9

Search Engine Optimization – Keyword Strategy– SEO Strategy – SEO success factors – On–Page Techniques – Off–Page Techniques. Search Engine Marketing– How Search Engine works– SEM components– PPC advertising –Display Advertisement

UNIT III EMAIL AND MOBILE MARKETING

9

E-Mail Marketing – Types of E-Mail Marketing – Email Automation – Lead Generation – Integrating Email with Social Media and Mobile– Measuring and maximizing email campaign effectiveness. Mobile Marketing– Mobile Inventory/channels– Location based; Context based; Coupons and offers, Mobile Apps, Mobile Commerce, SMS Campaigns– Profiling and targeting.

UNIT IV SOCIAL MEDIA MARKETING

9

Social Media Marketing– Social Media Channels– Leveraging Social media for brand conversations and buzz. Successful /benchmark Social media campaigns. Engagement Marketing– Conversion Optimization Monitoring– trends analysis– dashboards– segmentation– Navigation analysis. Building Customer relationships– Creating Loyalty drivers– Influencer Marketing.

UNIT V SEARCH AND WEB ANALYTICS

9

Digital Transformation & Channel Attribution– Analytics– Ad–words, Email, Mobile, Social Media, Web Analytics – Changing your strategy based on analysis– Recent trends in Digital marketing. web mining & predictive analytics – Understanding the key fabric of the Web – Sources of data: click stream data, online surveys, usability research

TOTAL: 45 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

- CO1:Analyse the role of online market space, digital marketing strategies, and the components of website planning and content marketing.
- CO2:Learn SEO strategies, success factors, and components of SEM, including PPC advertising and display ads.
- CO3:Explore various types of email marketing, mobile marketing techniques, and the integration of email with social media and mobile platforms.
- CO4:Utilize the social media marketing strategies, including successful campaigns, engagement marketing, and influencer marketing.
- CO5:Implement the analytics for digital marketing strategies, including channel attribution, AdWords, and trends in digital marketing.

TEXT BOOKS

1. M Bala, D Verma, A Critical Review of Digital Marketing, 2018.
2. YJ Wind, V Mahajan Digital marketing: Global Strategies, 2020.
3. A Charles worth in Digital marketing: A practical approach, 4th Edition, 2021.

REFERENCE BOOKS

1. Stokes, Rob, e–marketing: The Essential Guide to Digital Marketing, Quirk Education, 5th Edition, 2013.
2. Chaffey, Dave, Ellis–Chadwick, Fiona, Mayer, Richard, Johnston, Kevin, Internet Marketing: Strategy, Implementation and Practice, Pearson Education, 5th Edition 2009.
3. Ahuja, Vandana, Digital Marketing, Oxford University Press, 1st Edition, 2015.
4. Kaushik, Avinash, Web Analytics 2.0: The Art of Online Accountability and Science of Customer Centricity, Wiley, 2009.
5. Joe Pulizzi & Brian Solis, Epic Content Marketing, McGraw-Hill Publication, 1st Edition, 2013.

ONLINE RESOURCES AND MOOCs

1. Coursera: Digital Marketing Specialization by the University of Illinois.
Coursera Digital Marketing Course
2. Google Digital Garage: Fundamentals of Digital Marketing.
Google Digital Garage
3. LinkedIn Learning: SEO Foundations.
LinkedIn Learning on SEO

Mapping of COs and POs

COs	POs				
	1	2	3	4	5
CO1	3	2	3	2	3
CO2	3	2	3	2	3
CO3	3	2	3	2	3
CO4	3	2	3	3	3
CO5	3	2	3	3	3
AVG	3	2	3	2.4	3

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA3315 STRATEGIC HUMAN RESOURCE MANAGEMENT

L T P C

3 0 0 3

COURSE OBJECTIVES

- To understand the context, models, and challenges of Strategic Human Resource Management.
- To explore the framework of Human Resource Development and its alignment with E-HRM, including virtual HR functions and HRIS for organisational goals.
- To learn and examine about career and competency development systems for the employee welfare as strategic HR functions.

UNIT I CONTEXT OF SHRM

9

SHRM - SHRM models - strategic HRM vs Traditional HRM - Barriers to Strategic HR- Adopting an Investment Perspective – Future of SHRM- Understanding and Measuring Human capital - Human side of Corporate Strategies - strategic work redesign - Strategic Capability – Benchmarking-Managing workforce diversity.

UNIT II HUMAN RESOURCE DEVELOPMENT

9

Meaning – Strategic framework for HRM and HRD – Vision, Mission and Values – Importance – Challenges to Organizations – HRD Functions - Roles of HRD Professionals - HRD Needs Assessment- HRD practices – Measures of HRD performance – Links to HR, Strategy and Business Goals – HRD Program Implementation and Evaluation – Recent trends –HRD Audit & Accounting.

UNIT III E-HRM

9

E- Employee profile – E- selection and recruitment - Virtual learning and Orientation – E - training and development – E-learning strategies- E- Performance management - and Compensation design - Use of mobile applications in HR functions–Recent tools in HRIS- Development and Implementation of HRIS – Designing HR portals – Issues in employee privacy – Employee surveys online.

UNIT IV CAREER & COMPETENCY DEVELOPMENT

9

Career Concepts – Roles – Career stages – 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 – Equity and Competency based Compensation.

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 and Welfare Programs.

TOTAL: 45 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

- CO1: Analyze SHRM concepts, models, and strategies to align HR with business strategy.
- CO2: Apply HRD frameworks and practices for performance improvement and strategic HR alignment.
- CO3: Evaluate the role of digital tools and e-HRM systems in modern HR functions.
- CO4: Design effective career planning, development, and competency mapping systems.
- CO5: Demonstrate understanding of coaching, counseling, and employee welfare practices to enhance employee well-being.

TEXT BOOKS

1. Jeffrey A. Mello, Strategic Human Resource Management, Cengage Learning, 4th Edition, 2014.
2. John Bratton and Jeffrey Gold, Human Resource Management: A Strategic Approach, Red Globe Press, 6th Edition, 2017.
3. Charles R. Greer, Strategic Human Resource Management: A General Managerial Approach, Pearson Education, 2nd Edition, 2001.

REFERENCES BOOKS

1. Randy L. Desimone, Jon M. Werner – David M. Mathis, Human Resource Development, Cengage Learning, 7th Edition, 2016.
2. Jeffrey A Mello, Strategic Human Resource Management, Cengage Learning, 3rd Edition, 2011.
3. Paul Boselie. Strategic Human Resource Management. Tata McGraw Hill, 1st Edition, 2011.
4. Robert L. Mathis and John H. Jackson, Human Resource Management, Cengage Learning, 12th Edition, 2007.
5. Pulak Das. Strategic Human Resource Management- A Resource Driven Perspective- Cengage Learning, Indian Reprint, 4th Edition, 2013.

ONLINE RESOURCES AND MOOCS

1. Coursera: Human Resource Management: HR for People Managers by the University of Minnesota – Coursera HR Course.

2. LinkedIn Learning: Strategic Human Resources.
LinkedIn Learning HR Course.
3. SHRM (Society for Human Resource Management).
SHRM Certification Preparation – SHRM Official Resources.

Mapping of COs and POs

COs	POs				
	1	2	3	4	5
CO1	3	2	2	3	3
CO2	3	2	3	3	3
CO3	3	2	3	2	3
CO4	3	2	3	3	3
CO5	3	2	2	3	3
AVG	3	2	2.6	2.8	3

1 - Low, 2 - Medium, 3 - High, '-' No correlation

24BA3316 INDUSTRIAL RELATIONS AND LABOUR REGISTRATIONS L T P C
3 0 0 3

COURSE OBJECTIVES

- To understand the concept, scope, and approaches to Industrial Relations (IR), and the role of trade unions in India.
- To analyze the causes and mechanisms of industrial disputes with key labour legislations related to wages, working conditions, and worker benefits.
- To gain knowledge of employment-related laws governing standing orders, apprenticeships, and employee compensation for social security and protection of vulnerable labour groups.

UNIT I INDUSTRIAL RELATIONS 9

Concept, scope- objectives- Importance - Approaches to IR- Industrial relations system in India. Trade Unions Act,1926- Factories Act 1948- 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 9

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 9

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-Bonus in Case of New Establishment (Up to Seven Years) 1965- Workmen's Compensation Act 1923 and Employees' State Insurance Act 1948-Womens Workers Act.

UNIT IV LABOUR LEGISLATIONS-II

9

The Industrial employment (standing orders) Act, 1946 - The Apprentices act, 1961-The Equal Remuneration act, 1976- Payment of Gratuity act 1972- Employee compensation act in 2013.

UNIT V LABOUR LEGISLATIONS-III

9

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.

TOTAL: 45 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

- CO1: Demonstrate understanding of industrial relations systems and the legal framework governing trade unions.
- CO2: Evaluate industrial conflicts, dispute resolution mechanisms, and labour welfare practices.
- CO3: Apply knowledge of key labour laws to ensure workplace compliance and ethical HR practices.
- CO4: Analyze employment-related legislations for effective HR policy formulation.
- CO5: Interpret and apply social security laws for protecting employee welfare and rights.

TEXT BOOKS

1. Mamoria C.B. and SathishMamoria, Dynamics of Industrial Relations, Himalaya Publishing House, 16th Edition, 2016.
2. Kapoor N. D , Elements of Mercantile Law, Sultan Chand & Sons, 36th Edition, 2014.
3. Arun Monappa, Ranjeet Nambudiri, Patturaja Selvaraj. Industrial relations &Labour Laws. Tata McGraw Hill, 2nd Edition, 2012.

REFERENCE BOOKS

1. P.K. Padhi, Industrial Laws, PHI Learning Pvt. Ltd, 1st Edition, 2017.
2. P.R.N Sinha, InduBala Sinha, Seema Priyadarshini Shekhar. Industrial Relations, Trade Unions and Labour Legislation. Pearson Education India, 2nd Edition, 2017.
3. Tax Mann, Labour Laws, Taxmann Publications Pvt. Ltd, 1st Edition, 2018.
4. Srivastava, Industrial Relations and Labour laws, Vikas Publishing House, 6th Edition, 2015.
5. P.N.Singh, Neeraj Kumar. Employee relations Management. Pearson Education India, 1st Edition, 2010.

ONLINE RESOURCES & MOOCS

1. SWAYAM (NPTEL): Industrial Relations and Labour Laws by Prof. S. Srinivasan (IIT Kharagpur).
<https://onlinecourses.nptel.ac.in/noc24-mg32>

2. MOOC on IR and Labour Laws (IGNOU eGyanKosh).
<https://egyankosh.ac.in>
3. Legislative Resources: India Code - Complete list of central acts including labour legislations. <https://www.indiacode.nic.in>.

Mapping of COs and POs

COs	POs				
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CO1	3	2	2	3	3
CO2	3	2	2	3	3
CO3	3	3	3	3	3
CO4	3	2	3	3	3
CO5	3	2	2	3	3
AVG	3	2.2	2.4	3	3

1 - Low, 2 - Medium, 3 - High, '-' No correlation

24BA3317 ORGANIZATIONAL DESIGN, CHANGE AND DEVELOPMENT L T P C

3 0 0 3

COURSE OBJECTIVES

- To understand the determinants and challenges of organizational design and its implications, evolution, learning, innovation, and sustenance for long-term success.
- To examine the nature, types, and models of organizational change and the strategies for managing resistance.
- To introduce the concepts, evolution, OD interventions, diagnosis techniques and process of Organizational Development.

UNIT I ORGANIZATIONAL DESIGN

9

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

9

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

9

Introduction- evolution- basic values and assumptions- foundations of OD- Process of OD- managing the phases of OD- Organizational diagnosis-Process-stages- Techniques- Questionnaire, interview, workshop, task-force- collecting, analyzing- feedback of diagnostic information.

UNIT IV OD INTERVENTION

9

Human process interventions-Individual, group and inter-group human relations- structure and technological 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

On successful completion of this course, the student will be able to

- CO1: Explain the key elements and challenges of organizational design and its role in organizational success.
- CO2: Analyze the drivers and processes of organizational change and recommend appropriate change management techniques.
- CO3: Apply OD concepts and diagnostic tools to assess organizational health and readiness for development.
- CO4: Evaluate the effectiveness of various OD interventions in fostering individual and organizational development.
- CO5: Assess the organizational life cycle and strategies for innovation, learning, and sustainability.

TEXT BOOKS

1. Thomas G. Cummings, Christopher G. Worley: Organization Development And Change, Thomson Learning, 12th Edition, 2024.
2. Wendell L. French, Cecil H. Bell, Jr, Veena Vohra - Organization Development: Behavioral Science Interventions for Organizational Improvement, 4th Edition.
3. W. Warner Burke , Organization Change: Theory and Practice, SAGE, 2nd Edition, 2008.

REFERENCE BOOKS

1. S. Ramnarayan, T. Venkateswara Rao, Kuldeep Singh: Organization Development: Interventions And Strategies, Sage Publications, 1st Edition, 2011.
2. French & Bell: Organizational Development, McGraw-Hill, 6th Edition, 1998.
3. Wendell French, Cecil H. Bell, Veena, Organization Development, behavioral science interventions for Organization Improvement, Pearson Education. 6th Edition.
4. Change & Knowledge Management-R.L. Nandeshwar, Bala Krishna Jayasimha, Excel Books, 2nd Edition, 2011.
5. K Harigopal, Management of Organizational Change, Sage Publications Response, 2nd Edition, 2006.

ONLINE RESOURCES & MOOCS

1. SWAYAM (NPTEL): Organizational Behaviour by Prof. Mukesh Patra (IIT Roorkee) <https://onlinecourses.nptel.ac.in/noc24-mg42>
2. Coursera (University of Illinois) Designing the Organization: From Strategy to Organizational Structure, <https://www.coursera.org/learn/organization-design>.
3. Harvard Business Review (HBR): Articles on Organizational Design, Culture, and OD Case Studies. <https://hbr.org/topic/organizational-culture>.

Mapping of COs and POs

COs	POs				
	1	2	3	4	5
CO1	3	2	2	2	3
CO2	3	2	2	2	3
CO3	3	2	3	3	3
CO4	3	2	3	3	3
CO5	3	2	2	2	3
AVG	3	2	2.4	2.4	3

1 - Low, 2 - Medium, 3 - High, '-' No correlation

24BA3318 NEGOTIATION AND CONFLICT MANAGEMENT

L T P C

3 0 0 3

COURSE OBJECTIVES

- To understand the nature, process, and techniques of negotiation.
- To analyze various strategies and tactics for effective negotiation, conflict including ethical and cross-cultural perspectives within an organization.
- To develop skills in managing interpersonal, group, and organizational conflicts for conflict resolution and assess the cost implications of conflict in the workplace.

UNIT I FUNDAMENTALS OF NEGOTIATION

9

Nature, Characteristics of negotiation- Dimensions of Negotiation-Structure- Norms & values-Types of Negotiation- Negotiation process- Perception and Preparation- Communication and Influence- Techniques of Negotiation- Issues in negotiation.

UNIT II NEGOTIATION STRATEGIES

9

Strategy and planning for negotiation- Strategy and Tactics for distributive bargaining - Integrative negotiation-Negotiation power- source of power- Cross culture Negotiation-Ethics in negotiation.

UNIT III INTRODUCTION TO CONFLICT MANAGEMENT

9

Understanding conflict, components, perspective of conflict- Types of conflict- Models of conflict (Process & Structural)-Sources of conflict- Contingency approach, conflict management process, conflict domain, conflict trends, conflict distribution, conflict mapping and tracking -conflict & performance - Advantages & Disadvantages of Conflict.

UNIT IV MANAGING INTERPERSONAL, GROUP AND ORGANIZATIONAL CONFLICT

9

Individual difference- Personalities & abilities- Interpersonal conflict- Group conflict- Organizational conflict- Dealing with difficult subordinates & boss-Technique to resolve team conflict- organizational conflict strategies.

UNIT V CONFLICT RESOLUTION AND COST

9

Conflict resolution models- framework model-classical ideas- new developments in conflict resolution- Environmental conflict resolution-gender and conflict resolution-Assessing the cost of workplace conflict.

TOTAL: 45 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

- CO1: Demonstrate understanding of the negotiation process and key influencing factors.
- CO2: Apply negotiation strategies effectively in distributive and integrative contexts with cultural and ethical considerations.
- CO3: Identify and analyze sources and types of conflict and their implications on organizational dynamics.
- CO4: Recommend appropriate conflict management techniques for resolving individual, group, and organizational disputes.
- CO5: Evaluate different conflict resolution models and assess the economic and operational costs of workplace conflicts.

TEXT BOOKS

1. Roy J. Lewicki, David M. Saunders, and Bruce Barry – Negotiation, McGraw Hill Education, 9th Edition, 2024.
2. Holt, Rinehart & Winston Thomas J. D’Zurilla and Allen S. Goldfried – Problem Solving and Behavior Modification, 1st Edition, 2000.
3. Michael Spangle Negotiation- Communication for diverse settings-, Sage Publication, 1st Edition, 2008.

REFERENCE BOOKS

1. Daniel Dana, Conflict Resolution: Mediation Tools for Everyday Worklife, McGraw Hill, 1st Edition, 2001.
2. Barbara A Budjac Corvette Conflict Management: Practical guide to develop negotiation strategies, Pearson Prentice Hall, 2006.
3. M. Afzalur Rahim, Managing Conflict in Organizations, Transaction Publishers, 4th Edition 2011.
4. David Oliver, How to negotiate effectively, Kogan Page, 3rd Edition, 2010.
5. William Ury – Getting Past No: Negotiating in Difficult Situations, Bantam, 1st Edition, 1993.

ONLINE RESOURCES & MOOCS

1. SWAYAM/NPTEL: Conflict Management by Dr. Rajen Gupta (IIM Ahmedabad).
<https://onlinecourses.nptel.ac.in/noc24-mg43>
2. Harvard Law School – PON (Program on Negotiation): Resource library with negotiation case studies and research. <https://www.pon.harvard.edu>
3. LinkedIn Learning: Conflict Resolution Foundations by Lisa Gates.
<https://www.linkedin.com/learning/conflict-resolution-foundations>

Mapping of COs and POs

COs	POs				
	1	2	3	4	5
CO1	3	1	2	2	3
CO2	3	2	3	3	3
CO3	3	2	2	2	3
CO4	3	2	3	2	3
CO5	3	3	2	2	3
AVG	3	2	2.4	2.2	3

1 - Low, 2 - Medium, 3 - High, '-' No correlation

24BA3319 REWARD AND COMPENSATION MANAGEMENT

L T P C
3 0 0 3

COURSE OBJECTIVES

- To understand the fundamental concepts, principles, and strategies of compensation management.
- To analyze labour market dynamics and economic theories influencing compensation decisions.
- To manage various employee benefits and rewards, including statutory and non-monetary components.

UNIT I INTRODUCTION

9

Compensation- Definition- objectives- principles of compensation formulation- Types of compensation plan- Compensation Design and strategy- theories of wage determination- Wage Structure- types of wages- wage boards- wage policy. Compensation decisions- compensation benchmarking- compensation trends and reward system in India.

UNIT II EMPLOYEE COMPENSATION AND LABOUR MARKET

9

Macroeconomics of Labour markets- Unemployment and its impact on labour market- Neoclassical microeconomics of labour markets-models, supply and demand-economic model Implications on employee compensation- economic theories and employee compensation- trade -offs - valuation of employee compensation.

UNIT III MANAGING EMPLOYEE BENEFITS AND REWARDS

9

Nature and types of employee benefits- statutory employee benefits in India- Deferred compensation plan- Non-monetary benefits. Reward- Meaning, Elements, Types- Basic concepts of reward management- Designing reward system- Approaches to reward system- Difference between reward and compensation.

UNIT IV PERFORMANCE RELATED COMPENSATION

9

Performance management system- performance objectives- indicators- standards and metric - effective performance modeling-dimensions of performance- competency based pay. Team Compensation- Gain Sharing Incentive Plan- Enterprise Incentive Plan- Profit Sharing Plan- ESOPs.

UNIT V EXECUTIVE AND SALES COMPENSATION PLAN

9

Executive Compensation– Components, Theories, Design- Relationship between Fixed and variable pay-Executive Incentive Programmes. Sale Compensation plan- Designing a compensation plan- sales incentives and motivations. Compensation Management in Multi-National organizations.

TOTAL: 45 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

- CO1: Explain compensation concepts, structure, policies, and contemporary reward systems in India.
- CO2: Analyze the economic implications of labour markets and their influence on compensation strategy.
- CO3: Evaluate statutory and non-statutory benefits and develop integrated reward systems.
- CO4: Design and assess performance-linked pay, gain sharing, profit sharing, and competency-based pay plans.
- CO5: Develop compensation strategies for executives, sales roles, and multinational organizations.

TEXT BOOKS

1. Richard.I. Henderson: Compensation Management In A Knowledge Based World – Prentice Hall, 10th Edition, 2007.
2. Henderson, Richard I. – Compensation Management in a Knowledge-Based World, Pearson Education, 10th Edition, 2007
3. Armstrong, Michael and Marlis, Reward Management: A Handbook of salary administration Kogan page business books, 5th Edition, 2007.

REFERENCE BOOKS

1. Thomas.P. Plannery, David.A. Hofrichter & Paul.E.Platten: People Performance & Pay – Free Press, 1st Edition, 2003.
2. Joseph.J. Martocchio: Strategic Compensation, A Human Resource Management Approach, Prentice-Hall, 10th Edition, 2017.
3. Edwarde.E.Lawler III: Rewarding Excellence (Pay Strategies for the New Economy) – Jossey-Bass, 1st Edition, 2000.
4. R.C. Sharma , Sulabh Sharma, Compensation and Reward Management: Wage & Salary, Administration and benefits Asia Edition, May 2024.
5. Sanjeev P. Sahni & Jeevan Deep Sehgal, Strategic Compensation Management & Design, Bloomsbury Prime, 1st Edition, 2020.

ONLINE RESOURCES & MOOCS

1. SWAYAM/NPTEL: Human Resource Development – Covers compensation and reward planning.
<https://onlinecourses.nptel.ac.in/noc24-mg48>
2. Coursera (University of Minnesota): Managing Employee Compensation.
<https://www.coursera.org/learn/employee-compensation>

3. LinkedIn Learning: Compensation and Benefits by Wayne Cascio.
<https://www.linkedin.com/learning/compensation-and-benefits>

Mapping of COs and POs

COs	POs				
	1	2	3	4	5
CO1	3	2	2	3	2
CO2	3	3	2	2	2
CO3	3	3	3	3	3
CO4	3	3	3	2	3
CO5	3	3	2	2	3
AVG	3	2.8	2.4	2.4	2.6

1 - Low, 2 - Medium, 3 - High, '-' No correlation

24BA3320 HR ANALYTICS

L T P C
3 0 0 3

COURSE OBJECTIVES

- To understand the evolution, importance, and Frameworks for HR Analytics.
- To Apply the Analytical Tools in HR.
- To understand how to use insights from HR analytics to make evidence-based decisions on policies, programs, and employee interventions.

UNIT I INTRODUCTION TO HUMAN RESOURCE ANALYTICS 9

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 9

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 9

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 9

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 9

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

COURSE OUTCOMES

On successful completion of this course, the student will be able to

- CO1: Gain clarity on the concept of HR Analytics.
- CO2: Explore on statistics and toolkits.
- CO3: Contrasting and assimilating best practices in HR analytics.
- CO4: Demonstrate in analyzing optimal methods for measuring HR contribution.
- CO5: Design and construct HR regulations and reporting requirements.

TEXT BOOKS

1. Bassi, L., Carpenter, R., and McMurrer, D., HR Analytics Handbook, Reed Business, McBassi& Company, 1st Edition, 2024.
2. Pease G., Beresford B., Walker L., Developing Human Capital: Using Analytics to Plan and Optimize your Learning and Development Investments, Wiley, 1st Edition, 2014.
3. Fitz-Enz, J., The New HR Analytics: Predicting the Economic Value of Your Company's Human Capital Investments, American Management Association Amacom, 1st Edition, 2010.

REFERENCE BOOKS

1. Dipak Kumar Bhattacharyya, Hr Analytics: Understanding Theories and Applications, Sage Publications India Private Limited, 1st Edition, 2017.
2. Martin Edwards, Kirsten Edwards, Predictive HR Analytics: Mastering the HR Metric, Kogan Page, 2nd Edition, 2019.
3. P L Rao, International Human resource Management- Text and Cases, Excel Books, 1st Edition, 2008.
4. 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, 2013.
5. Anne WilHar Zing, Ashly Pinnington, International human Resource Management, Sage Publication, 3rd Edition, 2011

ONLINE RESOURCES & MOOCS

1. NPTEL / SWAYAM: International Human Resource Analytics
<https://swayam.gov.in>
2. Coursera (University of London): Human Resource Analytics
<https://www.coursera.org/learn/human-resources-analytics>
3. LinkedIn Learning: Human Resource Analytics
<https://www.linkedin.com/learning>

Mapping of COs and POs

COs	POs				
	1	2	3	4	5
CO1	3	2	1	2	3
CO2	2	3	2	2	3
CO3	3	2	3	2	3
CO4	2	1	2	3	2
CO5	2	2	1	2	3
AVG	2.4	2	1.8	2.2	2.8

1 - Low, 2 - Medium, 3 - High, '-' No correlation

24BA3321 SUPPLY CHAIN MANAGEMENT

L T P C

3 0 0 3

COURSE OBJECTIVES

- To understand the fundamentals, performance measures, logistics operations, outsourcing, and international logistics management of supply chains.
- To analyze distribution networks, supply chain network design, logistics operations, outsourcing, and international logistics management
- To manage demand, inventory, and supply considering uncertainty and lifecycle constraints.

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 supply chain 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 STRATEGIC SOURCING

9

Outsourcing – Make Vs buy – Identifying core processes – Market Vs Hierarchy – Make Vs buy continuum –Sourcing strategy – Supplier Selection and Contract Negotiation. Creating a world class supply base– Supplier Development – World Wide Sourcing.

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, Block chain.

TOTAL: 45 PERIODS

COURSE OUTCOMES:

On successful completion of this course, the student will be able to

- CO1: Describe the evolution, role, and strategic importance of supply chain management and assess supply chain performance.
- CO2: Design and evaluate distribution and network strategies based on influencing factors and uncertainty.
- CO3: Analyze inventory and supply planning decisions with emphasis on risk pooling and short life-cycle products.
- CO4: Evaluate transportation and logistics models including outsourcing and international operations.
- CO5: Apply modern innovations and technologies in optimizing and transforming supply chains.

TEXT BOOKS

1. Sunil Chopra & Peter Meindl – Supply Chain Management: Strategy, Planning and Operation, Pearson Education, 7th Edition, 2019.
2. Janat Shah – Supply chain Management: Text and Cases, Pearson Education, 2nd Edition, 2016.
3. David Simchi – Level, Philip Kaminsky, & Edit simchi – Levi – Designing and Managing the Supply chain, McGraw Hill, 4th Edition, 2007.

REFERENCE BOOKS

1. Pierre David, International Logistics, Biztantra, 1st Edition, 2003.
2. Sunil Chopra, Peter Meindland Dharam VirKalra, Supply Chain Management, Strategy Planning and Operation, Pearson Education, 6th Edition. 2016.
3. Janat Shah, Supply Chain Management–Text and Cases, Pearson Education, 1st Edition, 2009.
4. Ballou RonaldH, Business Logistics and Supply Chain Management, Pearson Education, 5th Edition, 2003.
5. David Simchi– Levi, Philip Kaminsky, Edith Simchi–Levi, Designing and Managing the Supply Chain: Concepts, Strategies, and Cases, Tata McGraw–Hill 3rd Edition, 2008.

ONLINE RESOURCES & MOOCs

1. NPTEL / SWAYAM: Supply Chain Management by Prof. R. D. Shukla, IIT Kanpur.
<https://swayam.gov.in>

2. Coursera (Rutgers University): Supply Chain Management Specialization. <https://www.coursera.org/specializations/supply-chain-management>
3. edX (MITx): Micro Masters Program in Supply Chain Management. <https://micromasters.mit.edu/scm>

Mapping of Cos and POs

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CO4	3	2	3	3	3
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AVG	3	2.2	2.8	2.2	3

1–Low, 2–Medium, 3–High, ‘–’No correlation

24BA3322 QUALITY MANAGEMENT

L T P C

3 0 0 3

COURSE OBJECTIVES

- To understand the fundamentals, evolution, modern quality tools and techniques to enhance organizational performance.
- To explore quality philosophies, statistical quality control techniques, application in process and product improvement.
- To understand the implement quality management systems and employee/supplier involvement frameworks.

UNIT I INTRODUCTION

9

Introduction – Need, Evolution, Definition, Concept, different perspectives of quality, Concept of total Quality – Design, inputs, process and output – TQM framework, 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

Overview of the contributions of Quality Gurus – Crosby, Deming, Masaaki Imai, Feigenbaum, Ishikawa, Juran, Oakland, Shigeo Shingo, and Taguchi. Concepts of Quality circle, Japanese 5S principles and 8D methodology.

UNIT III STATISTICAL PROCESS CONTROL

9

Statistical Process Control (SPC) –construction of control charts for variables and attributes. Process capability –significance and measurement. Six sigma– concepts of process capability. Reliability concepts –reliability in series and parallel, product life characteristics curve. Total productive maintenance (TMP), Tero technology. 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– ISO 14000– 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 successful completion of this course, the student will be able to

- CO1: Describe the concept of quality, its dimensions, evolution, and cost implications.
- CO2: Analyze various quality management philosophies and methodologies from renowned quality experts.
- CO3: Apply statistical process control methods and reliability concepts to assess and improve process performance.
- CO4: Use quality tools like Six Sigma, FMEA, QFD, and benchmarking to drive process and product excellence.
- CO5: Demonstrate understanding of ISO standards, quality audits, and the role of employee and supplier engagement in TQM.

TEXT BOOKS

1. Dale H. Besterfield – Total Quality Management, Pearson Education , 5th Edition , 2011.
2. Kanishka Bedi – Quality Management, Oxford University Press, 1st Edition, 2006.
3. E.V. Feigenbaum – Total Quality Control, McGraw–Hill, 1983.

REFERENCE BOOKS

1. J.M. Juran & Joseph A. Defeo – Juran’s Quality Handbook, McGraw–Hil, 7th Edition, 2016.
2. Gregory H. Watson – Six Sigma for Business Excellence, Pearson 2013.
3. Subburaj Ramasamy – Total Quality Management, McGraw–Hill Education 2012.
4. James R. Evans & William M. Lindsay – Managing for Quality and Performance Excellence, Cengage Learning , 11th Edition, 2020.
5. Ross, Joel E. – Total Quality Management: Text, Cases and Readings, CRC Press 3rd Edition, 2017.

ONLINE RESOURCES & MOOCs

1. NPTEL / SWAYAM: Total Quality Management by Prof. Inderdeep Singh, IIT. Roorkee. <https://swayam.gov.in>
2. Coursera (Technische Universität München): Six Sigma and the Organization. (Advanced) <https://www.coursera.org>
3. ASQ – American Society for Quality: Tools, articles, and training on quality. improvement <https://asq.org>

Mapping of Cos and POs

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CO5	3	2	3	3	3
AVG	3	2.2	2.6	2.4	3

1–Low, 2–Medium, 3–High, ‘–’No correlation

24BA3323 MATERIALS MANAGEMENT

L T P C
3 0 0 3

COURSE OBJECTIVES

- To understand the concepts and techniques of materials planning and scheduling in warehouse and stores management.
- To apply inventory control models and policies for efficient inventory management.
- To gain insight into purchasing management and its strategic significance.

UNIT I INTRODUCTION

9

Introduction to Materials Management, Operating environment–Production planning system – manufacturing planning and control system–manufacturing resource planning–enterprise resource planning–making the production plan – Master scheduling– Developing MPS.

UNIT II MATERIALS PLANNING

9

Materials requirements planning– bill of materials– planning process– manufacturing resource planning– capacity management– Capacity Requirements Planning (CRP)– scheduling orders production activity control–Scheduling – Load Levelling– Theory of Constraints– Control.

UNIT III INVENTORY MANAGEMENT

9

Aggregate Inventory Management – Item inventory Management – Flow of materials Objectives of Inventory Management – Costs – ABC Analysis –Inventory Policy Decisions– objectives–control –Retail Discounting Model, Newsvendor Model;– Quantity discount models. Probabilistic inventory models.

UNIT IV PURCHASING MANAGEMENT

9

Establishing specifications– selecting suppliers– price determination–forward buying– mixed buying strategy–price forecasting– buying seasonal commodities– purchasing under uncertainty– demand management–price forecasting– purchasing under uncertainty– purchasing of capital equipment– international purchasing.

UNIT V WAREHOUSE MANAGEMENT

9

Warehousing functions – types – Stores management–stores systems and procedures– incoming materials control– stores accounting and stock verification– Obsolete, surplus and scrap–value analysis– material handling–transportation and traffic management– operational efficiency– productivity– cost effectiveness– performance measurement.

TOTAL: 45 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

- CO1: Explain the role of materials management in production and enterprise resource planning.
- CO2: Apply materials and capacity planning techniques to enhance operational effectiveness.
- CO3: Use deterministic and probabilistic models to manage inventory efficiently.
- CO4: Develop purchasing strategies under various market and demand conditions.
- CO5: Manage warehouse operations and evaluate materials handling and storage performance.

TEXT BOOKS

1. P. Gopalakrishnan & M. Sundaresan – Materials Management: An Integrated Approach, PHI Learning, 2nd Edition, 2017.
2. A.K. Datta – Materials Management Procedures, Text and Cases, PHI Learning 2nd Edition, 2020.
3. Arnold, Chapman & Clive Mukhophadyay – Introduction to Materials Management, Pearson Education, 8th Edition, 2013.

REFERENCE BOOKS

1. Dutta A.K. – Materials Management, Prentice Hall of India 2003.
2. Tony Arnold & Stephen N. Chapman – Introduction to Materials Management, Pearson, 2016.
3. K. Shridhara Bhat – Materials and Logistics Management, Himalaya Publishing, 4th Edition, 2020.
4. Monczka, Handfield, Giunipero & Patterson – Purchasing and Supply Chain Management, Cengage Learning, 6th Edition, 2021.
5. Stephen Chapman "Introduction to Materials Management" Pearson Education, 7th Edition, 2016.

ONLINE RESOURCES & MOOCs

1. NPTEL / SWAYAM: Operations and Materials Management by Prof. Rajat Agrawal, IIT Roorkee.
<https://nptel.ac.in/courses/110/107/110107236>
2. Coursera (Rutgers University): Supply Chain Management Specialization
<https://www.coursera.org/specializations/supply-chain-management>
3. MIT Open Course Ware: Logistics Systems (ESD.260J / 1.260J / 15.770J).
<https://ocw.mit.edu/courses/1-260j-logistics-systems-fall-2006/>

Mapping of Cos and POs

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AVG	3	2.6	3	2.2	3

1–Low, 2–Medium, 3–High, ‘–’No correlation

24BA3324 SERVICES OPERATIONS MANAGEMENT

L T P C
3 0 0 3

COURSE OBJECTIVES

- To develop and design effective service systems, facilities, locations and experiences for operational efficiency.
- To apply quality models and tools for service quality improvement.
- To manage service capacity and demand, including queuing and inventory decisions.

UNIT I INTRODUCTION

9

Services – Importance, role in economy, service sector – nature, growth. Nature of services – distinctive characteristics, Service Package, Service classification, service–dominant logic, open–systems view. Service Strategy –Strategic service vision, competitive environment, generic strategies, winning customers; Role of information technology; stages in service firm competitiveness.

UNIT II SERVICE DESIGN

9

New Service Development – Design elements – Service Blue–printing – process structure – generic approaches. Service Encounter – triad, creating service orientation, service profit chain; Front–office Back–office Interface– service decoupling. Technology in services – self–service, automation, e-commerce, e-business, technology innovations.

UNIT III SERVICE QUALITY

9

Service Quality– Dimensions, Service Quality Gap Model; Measuring Service Quality – SERVQUAL, Walk–through Audit, Quality service by design , Service Recovery, Service Guarantees. Process Improvement– productivity improvement– DEA, quality tools, benchmarking, Quality improvement programs.

UNIT IV SERVICE FACILITY

9

Supporting facility –Service scopes, Facility design – nature, objectives, process analysis, Service facility layout. Service Facility Location – considerations, facility location techniques – metropolitan metric, Euclidean, centre of gravity, retail outlet location, location set covering problem. Vehicle routing and Scheduling.

UNIT V MANAGING CAPACITY AND DEMAND

9

Managing Demand – strategies; Managing capacity – basic strategies, supply management tactics, operations planning and control; Yield management; Inventory Management in Services– Retail Discounting Model, Newsvendor Model; Managing Waiting Lines – Queuing systems, psychology of waiting; Managing for growth– expansion strategies, franchising , globalization.

TOTAL: 45 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

- CO1: Analyze the characteristics of services and the strategic role of service operations.
- CO2: Apply service design techniques such as blueprinting and technology integration.
- CO3: Use quality models like Servqual and Six Sigma to evaluate and improve service quality.
- CO4: Develop efficient service facility layout and location strategies using analytical methods.
- CO5: Formulate strategies for managing demand, capacity, and waiting lines in service settings.

TEXT BOOKS

1. James A. Fitzsimmons & Mona J. Fitzsimmons – Service Management: Operations, Strategy, Information Technology, McGraw–Hill, 10th 2023.
2. Robert Johnston & Graham Clark – Service Operations Management: Improving Service Delivery, Pearson Education 5th Edition, 2020.
3. Richard Metters et al. – Successful Service Operations Management, Cengage Learning, 2nd Edition, 2014.

REFERENCE BOOKS

1. Christopher Lovelock & Jochen Wirtz – Services Marketing: People, Technology, Strategy, Pearson, 8th Edition, 2016.
2. Helen Peck, Service Operations Management: A Strategic Perspective, 1st Edition, 2001.
3. Haksever et al. – Service Management and Operations, Pearson, 3rd Edition, 2003.
4. Kasper, Helsdingen & Gabbott – Services Marketing Management, Wiley, 1st Edition, 2006.
5. Sunil Chopra & Peter Meindl – Supply Chain Management, Pearson Education, 7th Edition, 2018.

ONLINE RESOURCES & MOOCs

1. NPTEL / SWAYAM: Operations Management – Services by Prof. Janat Shah, IIM Bangalore.
<https://nptel.ac.in/courses/110/101/110101146>
2. Coursera (University of Virginia): Fundamentals of Service Management.
<https://www.coursera.org/learn/service-management>
3. LinkedIn Learning: Service Operations Management Essentials.
<https://www.linkedin.com/learning>

Mapping of Cos and POs

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1–Low, 2–Medium, 3–High, ‘–’No correlation

24BA3325 SUPPLY CHAIN ANALYTICS

L T P C
3 0 0 3

COURSE OBJECTIVES

- To introduce various types of analytics in supply chain management and understand their applications.
- To apply mathematical programming models and advanced analytical methods like AHP, DEA, and Fuzzy Logic for decision-making in supply chains.
- To use optimization models for inventory and transportation network management in supply chains.

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

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, Travelling 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.

TOTAL: 45 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

- CO1: Expand and differentiate between descriptive, predictive, and prescriptive analytics in supply chains.
- CO2: Apply mathematical programming methods for warehousing decisions and layout optimization.
- CO3: Analyze and optimize inventory models, incorporating risk analysis and multi–echelon inventory management.
- CO4: Implement transportation network models and algorithms, including vehicle routing and scheduling.
- CO5: Utilize decision–making models like AHP, DEA, Fuzzy Logic, and ANP for complex supply chain problems.

TEXT BOOKS

1. S. Chopra and P. Meindl – Supply Chain Management: Strategy, Planning, and Operation, Pearson Education, 6th Edition, 2016.
2. D. Simchi–Levi, P. Kaminsky, E. Simchi–Levi – Designing and Managing the Supply Chain, McGraw–Hill, 4th Edition, 2018.
3. Nicolas Vandeput, “Data Science for Supply Chain Forecasting”, 1st Edition, 2010.

REFERENCE BOOKS

1. Jeremy F. Shapiro – Modeling the Supply Chain, Duxbury Press, 1st Edition, 2006.
2. Ravindran, A. R. – Operations Research and Management Science Handbook, CRC Press, 1st Edition, 2008.
3. Peter W. Robertson Supply Chain Analytics: Using Data to Optimise Supply Chain Processes, Kogan Page, 1st Edition, 2020.
4. Chandrashekar P. & A. Muralidharan – Supply Chain Analytics, Pearson, 1st Edition, 2018.
5. Kumar, U. Dinesh – Business Analytics: The Science of Data–Driven Decision Making, Wiley, 1st Edition, 2017.

ONLINE RESOURCES & MOOCs

1. NPTEL (IIT Madras): Supply Chain Analytics by Prof. G. Srinivasan.
<https://nptel.ac.in/courses/110/106/110106152/>
2. Coursera (Rutgers University): Supply Chain Analytics Specialization.
<https://www.coursera.org/specializations/supply-chain-analytics>
3. MIT Open Course Ware: Analytics for a Better World (Supply Chain Focus).
<https://ocw.mit.edu/>

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1–Low, 2–Medium, 3–High, ‘–’No correlation

24BA3326 PROJECT MANAGEMENT

L T P C
3 0 0 3

COURSE OBJECTIVES

- To gain knowledge of project management, planning processes, budgeting techniques, and risk management in projects.
- To apply scheduling techniques and resource allocation methods like PERT, CPM, and simulation.
- To learn project control processes, monitoring, performance evaluation, and reporting for successful project completion.

UNIT I INTRODUCTION TO PROJECT MANAGEMENT

9

Project Management– Definition– Goal– Lifecycles. Project Environments. Project Manager – Roles– Responsibilities and Selection. Definition and examples of projects, Key features of projects, Typical project problems, Human issues in Projects, Project identification and screening: (Brainstorming, Strength, and weaknesses in the system, environmental opportunities and threats, Identification and screening) – Project Appraisal and Selection.

UNIT II SCOPE AND TIME MANAGEMENT

9

Scope Management – Defining the Project – SOW – WBS and PBS – Time Management – Network Diagram – Forward Pass and Backward Pass Critical path – PERT and CPM – AOA and AON methods – tools for Project Network – Estimation Techniques.

UNIT III RESOURCE AND COST MANAGEMENT

9

Scheduling Resources – Resource Allocation methods – Reducing Project duration: Project Crashing – resource– levelling methods – Simulation for resource allocation. Goldratt’s Critical Chain– Cost Management – Earned Value Method.

UNIT IV PROJECT ORGANISATION & CONFLICT MANAGEMENT 9

Project Organization Structure,– Formal Organisation Structure – Organisation Design – Types of project organizations. Culture – Conflict – Origin & Consequences. Project Teams. Managing conflict – Team methods for resolving conflict. Risk identification: types of risk, risk checklists–Risk prioritization –Risk management tactics, Including risk avoidance, risk transfer, risk reduction, risk mitigation and contingency planning.

UNIT V PERFORMANCE MANAGEMENT 9

Project Integration – Progress and Performance measurement and evaluation – Project monitoring information system, developing a status report and other control issues – Project audit and closure – audit process, project closure, team, team member and project manager evaluations – International Projects – environmental factors, cross-cultural considerations, selection and training for international projects – Future likely trends in Project management.

TOTAL: 45 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

- CO1: Explore the project management, including the project lifecycle and roles of project managers.
- CO2: Apply planning, budgeting, and risk management processes for effective project execution.
- CO3: Utilize scheduling and resource allocation methods like PERT, CPM, and simulation to optimize project timelines and resources.
- CO4: Analyze project organization structures, types, and manage conflicts within project teams.
- CO5: Implement control mechanisms, performance monitoring, and project evaluation techniques to ensure successful project completion.

TEXT BOOKS

1. Harold Kerzner – Project Management: A Systems Approach to Planning, Scheduling, and Controlling, 11th Edition, Wiley 2015.
2. Clifford F. Gray & Erik W. Larson – Project Management: The Managerial Process, McGraw–Hill, 8th Edition, 2019.
3. Prasanna Chandra – Projects: Planning, Analysis, Selection, Implementation and Review, McGraw–Hill Education, 8th Edition, 2013.

REFERENCE BOOKS

1. Jack R. Meredith & Samuel J. Mantel – Project Management: A Managerial Approach, Wiley, 9th Edition, 2017.
2. Pinto, Jeffrey K. – Project Management: Achieving Competitive Advantage, Pearson, 5th Edition, 2019.
3. Shtub, Avraham, Bard, Jonathan F., Globerson, Shlomo – Project Management: Processes, Methodologies, and Economics, Pearson, 2nd Edition, 2010.
4. Scott Berkun, Making Things Happen: Mastering Project Management , 1st Edition, 2008.
5. Terry Schmidt ,Strategic Project Management Made Simple: Practical Tools for Leaders and Teams, John Wiley & Sons, 1st Edition, 2009.

ONLINE RESOURCES & MOOCs

1. Coursera (University of California, Irvine): Introduction to Project Management Principles and Practices.
<https://www.coursera.org/specializations/project-management>
2. edX (RIT): Project Management Life Cycle.
<https://www.edx.org/professional-certificate/ritx-project-management>
3. PMI.org – Project Management Institute: Free resources, toolkits, certifications (CAPM, PMP).
<https://www.pmi.org/>

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24BA3327 DATA MINING FOR BUSINESS INTELLIGENCE

L T P C

3 0 0 3

COURSE OBJECTIVES

- To introduce the fundamental concepts of data mining and its types such as text, web, spatial, various data mining processes, performance metrics, and validation techniques.
- To apply prediction techniques including time series, multivariate regression and clustering algorithms for forecasting business applications.
- To explore machine learning and artificial intelligence methods used in data mining and optimization.

UNIT I INTRODUCTION

9

Data mining, Text mining, Web mining, Spatial mining, Process mining, Data ware house and DataMart.

UNIT II DATAMINING PROCESS & TOOLS

9

Data mining 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 cross–validation, LOOCV, random subsampling, and bootstrapping.

UNIT III PREDICTION TECHNIQUES

9

Data visualization, Time series, ARIMA, Winter Holts, Vector Autoregressive analysis, Multivariate regression analysis.

UNIT IV CLASSIFICATION AND CLUSTERING TECHNIQUES 9

Classification– Decision trees, Bayesian Classification, k nearest neighbor, Logistic regression, Discriminant analysis, Clustering, Market basket analysis.

UNIT V MACHINE LEARNING AND AI 9

Genetic algorithms, Neural network, Fuzzy logic, Support Vector Machine, Optimization techniques, AntColony, Particle Swarm, DEA

TOTAL:45 PERIODS

COURSE OUTCOMES

- CO1:Utilize the concepts of data mining and differentiate between various types such as text, web, and spatial mining.
- CO2:Evaluate and apply data mining processes and performance measures using suitable validation techniques.
- CO3:Apply forecasting techniques like ARIMA and multivariate regression for business prediction.
- CO4:Implement classification and clustering methods for pattern recognition and customer segmentation.
- CO5:Utilize machine learning and AI models to optimize business decisions and intelligence systems.

TEXT BOOKS

1. Jiawei Han, Micheline Kamber, and Jian Pei Data Mining: Concepts and Techniques, Morgan Kaufmann, 3rd Edition, 2012.
2. Ian H. Witten, Eibe Frank, and Mark A. Hall Data Mining: Practical Machine Learning Tools and Techniques, Morgan Kaufmann, 4th Edition, 2016.
3. Galit Shmueli, Peter C. Bruce, and Inbal Yahav Data Mining for Business Analytics, 3rd Edition, 2019.

REFERENCE BOOKS

1. Krzysztof J. Cios, Witold Pedrycz, and Roman W. Swiniarski Data Mining: A Knowledge Discovery Approach, 1st edition, 2007.
2. Kevin P. Murphy Machine Learning: A Probabilistic Perspective, MIT Press, 1st Edition, 2012.
3. Stuart Russell and Peter Norvig , Artificial Intelligence: A Modern Approach, Pearson, 4th Edition, 2020.
4. Galit Shmueli, Nitin R. Patel and Peter C. Bruce, Data Mining for Business Intelligence—Concepts, Techniques and Applications Wiley, India, 1st Edition, 2010.
5. Efraim Turban, Ramesh Sharda, Jay E. Aronson and David King, Business Intelligence, Prentice Hall, 1st Edition, 2008.

ONLINE RESOURCES & MOOCs

1. NPTEL (IIT Roorkee): Data Mining by Prof. Partha Pratim Roy.
<https://nptel.ac.in/courses/106/107/106107220/>

2. Coursera (University of Illinois):Data Mining Specialization.
<https://www.coursera.org/specializations/data-mining>
3. edX (Columbia University):Machine Learning for Data Science and Analytics.
<https://www.edx.org/course/machine-learning-for-data-science-and-analytics>

Mapping of Cos and POs

COs	POs				
	1	2	3	4	5
CO1	3	2	3	1	3
CO2	3	3	3	2	3
CO3	3	3	3	2	3
CO4	3	2	3	2	3
CO5	3	3	3	2	3
AVG	3	2.6	3	1.8	3

1 – Low, 2 – medium, 3 – high, ‘-’ no correlation

24BA3328 DEEP LEARNING AND ARTIFICIAL INTELLIGENCE

L T P C
3 0 0 3

COURSE OBJECTIVES

- To introduce deep neural networks and modern practices in deep learning and explore optimization techniques and strategies used in training deep models.
- To understand the foundational concepts and applications of Artificial Intelligence and intelligent systems.
- To examine knowledge representation methods and advanced problem-solving paradigms with expert systems of learning paradigms and practical applications of AI.

UNIT I INTRODUCTION TO DEEP LEARNING AND AI

9

Deep learning: Definition, characteristics of Deep Learning, Key Concepts in Deep Learning, Deep Learning Frameworks, Applications of Deep Learning, Deep Learning for Business, AI and Deep Learning in Business Functions.

UNIT II ENHANCEMENT FOR DEEP MODEL TRAINING

9

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 ARTIFICIAL INTELLIGENT SYSTEMS

9

Introduction to Artificial Intelligence: Intelligent Systems – Foundations of AI – Adopting data-driven culture: Leadership and change management for business optimization– Strategies for AI adoption– Problem Solving: Introduction – General Problem Solving – Exhaustive Searches – Heuristic Search Techniques – Artificial Intelligence in Business

UNIT IV KNOWLEDGE REPRESENTATION IN AI

9

Knowledge Representation in AI and its types – Knowledge Representation Techniques in AI – Approaches to Knowledge Representation – Knowledge Representation using Semantic Network – Knowledge Representation using Frames.

UNIT V EXPERT SYSTEMS AND MACHINE LEARNING PARADIGMS

9

Expert Systems and Applications: Blackboard Systems– Truth Maintenance Systems– Applications of Expert Systems– Machine– Learning Paradigms: Machine– Learning Systems– Supervised and Unsupervised Learnings– Natural intelligence and social aspects of AI– based decisions.

TOTAL: 45 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

- CO1: Explore the architecture and training of deep neural networks, including regularization and gradient–based learning.
- CO2: Apply optimization algorithms and strategies to train deep models effectively.
- CO3: Analyze the role of intelligent systems and AI in solving complex decision–making problems.
- CO4: Demonstrate knowledge representation techniques and planning strategies in AI–based systems.
- CO5: Evaluate expert systems, supervised and unsupervised learning paradigms in business applications.

TEXT BOOKS

1. François Chollet, Deep Learning with Python, Manning Publications, 1st Edition, 2017.
2. Elaine Rich, Kevin Knight, Shivashankar B. Nair – Artificial Intelligence, McGraw–Hill Education 2015.
3. Stuart Russell & Peter Norvig – Artificial Intelligence: A Modern Approach, Pearson, 3rd Edition, 2013.

REFERENCE BOOKS

1. Yoshua Bengio & Aaron Courville, I am Good fellow, Deep Learning, MIT Press 1st Edition, 2016.
2. Andrew Ng and others , Artificial Intelligence for Business, 1st Edition, 2022.
3. C.V..Negoita, Expert Systems: The Technology of Knowledge Management, Springer, 2005.
4. Ronald J. Brachman and Hector J. Levesque, Knowledge Representation and Reasoning, Morgan Kaufmann, 1st Edition, 2004.
5. Huyen, Chip, Designing Machine Learning Systems: An Iterative Process for Production–Ready Applications, O'Reilly Media, 2022.

ONLINE RESOURCES & MOOCs

1. NPTEL – IIT Madras: Deep Learning by Prof. Mitesh Khapra.
<https://nptel.ac.in/courses/106/106/106106202/>
2. Coursera – DeepLearning.AI: Deep Learning Specialization by Andrew Ng.
<https://www.coursera.org/specializations/deep-learning>
3. edX – Columbia University: Artificial Intelligence (AI).
<https://www.edx.org/professional-certificate/columbiacx-artificial-intelligence>

Mapping of Cos and POs

COs	POs				
	1	2	3	4	5
CO1	3	2	3	2	3
CO2	3	3	3	2	3
CO3	3	2	3	3	3
CO4	3	3	3	3	3
CO5	3	2	3	2	3
AVG	3	2.4	3	2.4	3

1 – Low, 2 – medium, 3 – high, ‘-’ no correlation

24BA3329 SOCIAL MEDIA AND WEB ANALYTICS

L T P C
3 0 0 3

COURSE OBJECTIVES

- To provide foundational understanding of the evolution in social media, online communities for community building and engagement in digital platforms.
- To explore social media governance, measurement, and ethical considerations to develop skills in web analytics for measuring business performance.
- To understand search analytics, SEO strategies, and user engagement analysis.

UNIT I INTRODUCTION

9

Introduction to social media, social media landscape, Social Media Analytics & its need, Evolution of online communities, History and Evolution of social media, social media vs. traditional media, Understanding social media: Strong and weak ties, Influencers, Virality, technological determinism in popular discourse on social media technologies.

UNIT II COMMUNITY BUILDING AND MANAGEMENT

9

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 in social media, Identity in social media: formation of identities, communities, activist movements, and consumer markets, social media as business.

UNIT III SOCIAL MEDIA POLICIES AND MEASUREMENTS

9

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

9

Web Analytics, Different mediums of Web analytics, Data Collection Methods, Web analytics tools, Web Analytics Fundamentals, Concepts, Proposals & Reports, Metrics used in Web analysis, Overview of Qualitative Analysis, KPI and Planning, Critical Components of a Successful Web Analytics Strategy.

UNIT V SEARCH ANALYTICS

9

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 PERIODS

COURSE OUTCOMES

After the completion of this course, the student will be able to

- CO1: Explore the evolution, dynamics, and influence of social media in a business context.
- CO2: Apply strategies for effective digital community building, branding, and viral marketing.
- CO3: Evaluate social media policies, ethical issues, and methods of campaign performance measurement.
- CO4: Utilize web analytics tools and KPIs to assess digital performance and user behavior.
- CO5: Apply SEO and search analytics techniques for content optimization and audience engagement.

TEXT BOOKS

1. Tracy Tuten and Michael Solomon, Social Media Marketing , Sage Publications, 5th Edition, 2020.
2. Avinash Kaushik, Web Analytics: An Hour a Day , Sybex, 1st edition, 2007.
3. Peter Kent, Search Engine Optimization for Dummies, Wiley, 7th Edition, 2020.

REFERENCE BOOKS

1. Lon Safko, The Social Media Bible, 3rd Edition, 2012.
2. Brian Halligan and Dharmesh Shah, Inbound Marketing, John Wiley & Sons, 3rd Edition, 2014.
3. Avinash Kaushik Web Analytics 2.0, Sybex, 1st Edition, 2010.
4. David Clinton, SEO: The Definitive Guide , Independently published, 2nd Edition, 2019.
5. Jeffrey Gitlin , Social Media: A Comprehensive Guide, Atlantic Publishers and Distributors, 2nd Edition, 2020.

ONLINE RESOURCES & MOOCs

1. NPTEL – IIT Roorkee: Digital Marketing (Includes modules on Web & Social Media Analytics).
<https://nptel.ac.in/courses/110/107/110107081/>
2. Coursera – Northwestern University.
<https://www.coursera.org/specializations/deep-learning>
3. Social Media Marketing (Specialization).
<https://www.coursera.org/specializations/social-media-marketing>

Mapping of Cos and POs

COs	POs				
	1	2	3	4	5
CO1	3	2	3	2	3
CO2	3	2	3	2	3
CO3	3	3	3	3	3
CO4	3	3	3	2	3
CO5	3	3	3	3	3
AVG	3	2.6	3	2.4	3

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA3330 E-BUSINESS MANAGEMENT

L T P C
3 0 0 3

COURSE OBJECTIVES

- To understand the fundamentals and evolution of E-business, E-commerce technological infrastructure that supports the E-business platforms.
- To explore various E-business applications in B2C, B2B, and E-Governance environments.
- To understand electronic payment systems and security mechanisms and examine the legal, ethical, and privacy issues in the E-business ecosystem.

UNIT I INTRODUCTION TO E-BUSINESS

9

E-business, E-business vs E-commerce, Electronic business Framework, design, develop and manage E-business, Virtual Enterprises, Web 2.0, Web 3.0 and Social Networking, Mobile Commerce, S-commerce, T-Commerce.

UNIT II TECHNOLOGICAL BACKGROUND

9

Internet and World Wide Web, 2 and 3-tier models, Content Management Systems, FTP, intranet and extranet, information publishing technology– basics of web server hardware and software.

UNIT III APPLICATIONS OF E-BUSINESS

9

Consumer oriented E-business, E-tailing and models, Marketing on web, advertising, E-mail marketing, affiliated programs, E-CRM; online services, Business oriented E-business, E-governance, EDI on the internet, Delivery management system, Web Auctions, Virtual communities and Web portals, social media marketing.

UNIT IV ONLINE PAYMENTS AND SECURITY

9

E-payments, Characteristics of payment of systems, Payment Protocols, Payment Gateways, E-cash, E-cheque and Micro payment systems, internet security, cryptography, security protocols, network security.

UNIT V LEGAL AND PRIVACY ISSUES

9

Legal, Ethics and privacy issues, Protection needs and methodology, consumer protection, Indian e-Commerce Scenario, contracts and warranties, Firewalls and transaction security, Taxation and encryption policies. Cyber security and Cyber Appellate and public key infrastructure (PKI), Hype Cycle, Attribution Modeling.

TOTAL:45 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

- CO1: Explain E-business concepts, types, models, and emerging trends like mobile and social commerce.
- CO2: Utilize the internet technologies, protocols, and infrastructure essential for E-business operations.
- CO3: Evaluate business applications such as E-CRM, E-tailing, digital marketing, and delivery systems.
- CO4: Identify and analyze different E-payment systems, protocols, and cyber-security mechanisms.
- CO5: Examine legal frameworks, ethical concerns, and privacy policies applicable to E-business activities.

TEXT BOOKS

1. Dave Chaffey, E-Business & E-Commerce Management, Pearson Education, 5th Edition, 2019.
2. Kenneth C. Laudon and Carol Guercio Traver E-Commerce: Business, Technology, Society, Pearson Education, 12th Edition, 2019.
3. Efraim Turban, David King, Jae Lee, Ting-Peng Liang, and Deborrah Electronic Commerce: A Managerial Perspective, Pearson Education 7th Edition, 2018.

REFERENCE BOOKS

1. Bharat Bhaskar, E-commerce: Framework, Technologies and applications. McGraw Hill Education (India) pvt ltd, 4th Edition, 2017.
2. Harvey M. Deitel, Paul J. Deitel & Kate Steinbuhler, E-Business and E-Commerce For Managers, Pearson, 1st Edition, 2011.
3. Kalakota R- Electronic Commerce – Frontiers of E-Commerce, Pearson Education, 3rd Edition, 2007.
4. Kenneth C. Laudon and Carol Guercio Traver, E Commerce: Business, Technology, Society, Pearson Education, 3rd Edition, 2019.
5. Krishnamurthy S, E-Commerce Management: Text and Cases, Cengage South, Western, 2006.

ONLINE RESOURCES AND MOOCs

1. NPTEL – IIT Kharagpur: E–Business.
<https://nptel.ac.in/courses/110/105/110105142/>
2. Coursera – University of London: Digital Business Models.
<https://www.coursera.org/learn/digital-business>
3. edX – Indian Institute of Management Bangalore (IIMB): Digital Transformation Strategy.
<https://www.edx.org/course/digital-transformation-strategy>

Mapping of Cos and POs

COs	POs				
	1	2	3	4	5
CO1	3	2	3	2	3
CO2	3	2	3	2	3
CO3	3	3	3	2	3
CO4	3	3	3	3	3
CO5	2	2	2	3	3
AVG	2.8	2.4	2.8	2.4	3

1 – Low, 2 – medium, 3 – high, ‘-’ no correlation

24BA3331 ENTERPRISE RESOURCE PLANNING

L T P C

3 0 0 3

COURSE OBJECTIVES:

- To familiarize learners with various ERP software solutions and functional modules.
- To understand ERP implementation processes, methodologies, stakeholder roles, post-implementation issues and the impact of ERP on organizations.
- To explore the emerging trends and technologies in the ERP ecosystem.

UNIT I INTRODUCTION

9

Overview of enterprise systems– Evolution– Risks and benefits– Fundamental technology – Three– Tier Architecture of ERP system.

UNIT II ERP SOLUTIONS AND FUNCTIONAL MODULES

9

Overview of ERP software solutions, Business Processing Reengineering (BPR), Functional Modules: Project management, Plant Maintenance, Quality Management, Materials Management, warehouse management, Organizational data, master data and document flow.

UNIT III ERP IMPLEMENTATION

9

Planning Evaluation and selection of ERP systems– Implementation life cycle– ERP implementation, Methodology and Frame work– Post Evaluation & Maintenance– End user training & Going Live Training and Data Migration, Consultants, Vendors and Employees.

UNIT IV POST IMPLEMENTATION

9

ROI Analytics– Organizational and Industrial impact; Post factors of ERP Implementation– Maintenance of ERP.

UNIT V EMERGING ERP TRENDS

9

Extended ERP systems and ERP Modules– CRM, SCM, Business analytics – Future trends in ERP systems–web enabled, Wireless technologies, cloud computing and Augmented reality.

TOTAL:45 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

CO1:Explain the fundamentals, evolution, risks, and benefits of ERP systems.

CO2:Analyze ERP software, modules, and their integration with business processes.

CO3:Evaluate ERP implementation strategies, frameworks, and stakeholder involvement.

CO4:Assess post–implementation processes and critical success/failure factors.

CO5:Identify recent trends in ERP including CRM, SCM, analytics, cloud, and mobile integrations.

TEXT BOOKS

1. Enterprise Resource Planning: Concepts, Methodologies, Tools, and Applications by Information Resources Management Association, 3rd Edition, 2019.
2. Thomas F. Wallace and Michael H. Kremzar, ERP: Making It Happen, 4th Edition, 2017.
3. L.Murphy Smith and David Paper, Enterprise Systems for Management, 2nd Edition, 2018.

REFERENCE BOOKS

1. Bernard Grabot, Anne Mayère, and Isabelle Bazet, ERP Systems and Organizational Change, 1st Edition, 2016.
2. Mary Sumner, ERP in A Managerial Perspective, 2nd Edition, 2018.
3. Avinash Kaushik by Web Analytics 2.0, 1st Edition, 2010.
4. Vinod Kumar & N. K. Maheshwari, ERP Implementation: A Step–by–Step Approach 1st Edition, 2019.
5. Kenneth C. Laudon and Carol Guercio Traver, E Commerce: Business, Technology, Society, Pearson Education, 3rd Edition, 2019.

ONLINE RESOURCES & MOOCs

1. MIT Open Course Ware – Enterprise Resource Planning.
<https://ocw.mit.edu/courses/sloan-school-of-management/>
2. Coursera – Enterprise Resource Planning Specialization (Rutgers University).
<https://www.coursera.org/specializations/supply-chain-management>
3. ERP World Knowledge Hub (by Gartner).
[https://www.gartner.com/en/insights/ Enterprise Resource Planning](https://www.gartner.com/en/insights/Enterprise-Resource-Planning)

Mapping of Cos and POs

COs	POs				
	1	2	3	4	5
CO1	3	2	3	2	3
CO2	3	3	3	2	3
CO3	3	3	3	2	3
CO4	3	3	3	3	3
CO5	3	2	3	2	3
AVG	3	2.6	3	2.2	3

1 – Low, 2 – medium, 3 – high, ‘-’ no correlation

24BA3332 SUPPLY CHAIN CONCEPTS AND PLANNING

L T P C

3 0 0 3

COURSE OBJECTIVES

- To know the evolution, concepts, recent trends, challenges, and strategic issues especially in technological innovation, non-profit organizations, and the digital economy.
- To explore various supply chain processes, strategies, models for effective integration.
- To analyze performance drivers, apply forecasting techniques in supply chain operations and its role in decision making also gain practical knowledge planning, scheduling and enterprise systems in supply chains.

UNIT I CONCEPTS OF SUPPLY CHAIN

9

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

9

Integrated supply chains design– Customer relationship process– Order fulfillment process– Supplier relationship process– Supply chain strategies – Strategic focus– Mass customization – Lean supply chains– Outsourcing and off shoring– Virtual supply chains.

UNIT III SUPPLY CHAIN PERFORMANCE DRIVERS AND FORECASTING

9

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

9

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

9

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

On successful completion of this course, the student will be able to

- CO1: Describe key concepts and differentiate between service and manufacturing supply chains.
- CO2: Analyze and apply integrated supply chain processes and develop appropriate strategies.
- CO3: Evaluate logistics and cross–functional drivers influencing supply chain performance and forecasting.
- CO4: Formulate effective sales and operations plans using decision support tools.
- CO5: Design resource planning and scheduling systems for efficient management of supply chain operations.

TEXT BOOKS

1. Chopra, S., & Meindl, P., Supply Chain Management: Strategy, Planning, and Operation, Pearson Education, 7th Edition 2019.
2. Stadtler, H., Kilger, C., & Meyr, H., Supply Chain Management and Advanced Planning: Concepts, Models, Software, and Case Studies. Springer, 2015.
3. Matthew J. Liberatore & Tan Miller Publisher: Business Expert Press Supply Chain Planning, 2nd Edition, April 2021.

REFERENCE BOOKS

1. Simchi–Levi, D., Kaminsky, P., & Simchi–Levi, E., . Designing and Managing the Supply Chain: Concepts, Strategies, and Case Studies, McGraw–Hill, 3rd Edition 2007.
2. Hugos, M. Essentials of Supply Chain Management, Wiley, 4th Edition 2018.
3. Shah, Supply Chain Management: Text and Cases, Pearson Education India, 2nd Edition, May 17, 2016.
4. Subhash C. Ray, Supply Chain Management: Process, System and Practice, Publisher: Oxford University Press (India), 1st Edition, August 18, 2010.
5. Hartmut Stadtler & Christoph Kilger, Supply Chain Management and Advanced Planning Concepts, Models, Software and Case Studies, Springer 4th Edition 2012.

ONLINE RESOURCES & MOOCs

1. MIT Open Course Ware – Supply Chain Management.
<https://ocw.mit.edu/courses/sloan-school-of-management/>
2. Coursera – Supply Chain Management Specialization (Rutgers University).
<https://www.coursera.org/specializations/supply-chain-management>
3. SCM World Knowledge Hub (by Gartner).
<https://www.gartner.com/en/insights/supply-chain>

Mapping of COs and POs

COs	POs				
	1	2	3	4	5
CO1	2	1	1	1	1
CO2	3	3	2	2	1
CO3	2	3	3	2	1
CO4	2	2	3	3	2
CO5	3	2	3	3	2
AVG	2.4	2.2	2.4	2.2	1.4

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA3333 SOURCING AND SUPPLY MANAGEMENT

L T P C
3 0 0 3

COURSE OBJECTIVES

- To understand the fundamentals of purchasing and apply strategic sourcing techniques supply chain management.
- To evaluate supplier performance using relevant tools and methodologies.
- To understand legal, ethical, contractual aspects of purchasing and also future trends such as green sourcing, sustainability, and lean supply chains.

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

On successful completion of this course, the student will be able to

- CO1: Explain the purchasing process and its strategic role in supply chains.
- CO2: Develop commodity strategies and manage supplier relationships effectively.
- CO3: Apply strategic sourcing tools, negotiate, and manage contracts ethically.
- CO4: Assess supplier performance using advanced evaluation techniques.
- CO5: Identify and apply emerging trends in purchasing and sustainable supply management.

TEXT BOOKS

1. Monczka, R.M., Handfield, R.B., Giunipero, L.C., & Patterson, J.L. Purchasing and Supply Chain Management, Cengage Learning, 7th Edition 2020.
2. Burt, D.N., Petcavage, S.D., & Pinkerton, R.L., Supply Chain Management: A Strategic Perspective, Pearson, 1st Edition, 2010,
3. Lysons, K., & Farrington, B., Purchasing and Supply Chain Management, Pearson Education Limited, 9th Edition 2016.

REFERENCE BOOKS

1. Monczka, R.M., Handfield, R.B., Giunipero, L.C., & Patterson, J.L. Purchasing and Supply Chain Management, Cengage Learning, 5th Edition 2015.
2. Institute for Supply Management (ISM). ISM Supply Management Resources, ISM Publications, 2024.
3. Lysons, K., & Farrington, B., Purchasing and Supply Chain Management, Pearson 10th Edition 2016.
4. Council of Supply Chain Management Professionals (CSCMP). CSCMP Supply Chain Management Definitions and Standards, CSCMP, Year varies by document latest definitions guide published in 2023.
5. Burt, D.N., Petcavage, S.D., & Pinkerton, R.L., Supply Chain Management: A Strategic Perspective, Pearson 2nd Edition 2013.

ONLINE RESOURCES & MOOCs

1. Supply Chain Digital.
<https://www.supplychaindigital.com>
2. SWAYAM Link: Purchasing and Supply Chain Management.
SWAYAM Courses
3. Coursera: Supply Chain Management Specialization.
Rutgers University

Mapping of COs and POs

COs	POs				
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CO1	3	2	2	1	2
CO2	3	2	3	1	2
CO3	3	3	3	2	3
CO4	2	3	3	2	1
CO5	3	2	3	2	3
AVG	2.8	2.4	2.8	1.6	2.2

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA3334 SUPPLY CHAIN INVENTORY MANAGEMENT

L T P C

3 0 0 3

COURSE OBJECTIVES

- To understand the role of inventory and key performance metrics in supply chain Management.
- To analyse the inventory models for managing uncertainties and improving strategies.
- To optimize inventory through distribution planning and vendor–managed inventory Practices and examine the latest trends and best practices in inventory management

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

On successful completion of this course, the student will be able to

- CO1: Explain inventory's role in cash-to-cash cycle time and working capital management.
- CO2: Apply Q-models, P-models, and safety stock calculations in different demand scenarios.
- CO3: Evaluate and design inventory strategies for dynamic and fashion supply chains.
- CO4: Integrate inventory management with distribution and vendor systems to enhance service levels.
- CO5: Analyze and apply current industry initiatives and best practices in inventory management

TEXT BOOKS

1. Chopra, S., & Meindl, P. Supply Chain Management: Strategy, Planning, and Operation, Pearson, 8th Edition, 2021.
2. Simchi-Levi, D., Kaminsky, P., & Simchi-Levi, E. Designing and Managing the Supply Chain: Concepts, Strategies, and Case Studies. McGraw Hill, 3rd Edition, 2007.
3. Silver, E.A., Pyke, D.F., & Thomas, D.J. Inventory and Production Management in Supply Chains. CRC Press, 2016.

REFERENCE BOOKS

1. Matthew A. Waller, Terry L. Esper (Council of Supply Chain Management Professionals) Definitive Guide to Inventory Management: Principles and Strategies for the Efficient Flow of Inventory Across the Supply Chain, Pearson FT Press, 2014.
2. Steven Nahmias Strategy, Planning, and Operation, Sunil Chopra, Peter Meindl, 6th Edition, Pearson, April 2024.
3. Wallace Hopp, Mark Spearman, Factory Physics: Foundations of Manufacturing Management 2017.
4. Steven Nahmias, Production and Operations Analysis Waveland Press (previously McGraw-Hill), 7th Edition, with iterative updates through 2015.
5. Pengzhong Li, Supply Chain Management, An academic volume covering lean, agile, resilience, green paradigms, 2011.

ONLINE RESOURCES & MOOCs

1. MIT Center for Transportation and Logistics:
<https://ctl.mit.edu>
2. Logistics Management:
<https://www.logisticsmgmt.com>

3. SWAYAM Link:Supply Chain Management.
NPTEL SWAYAM Course

Mapping of COs and POs

COs	POs				
	1	2	3	4	5
CO1	3	3	2	1	2
CO2	3	3	3	2	1
CO3	3	3	3	2	2
CO4	3	2	3	3	2
CO5	3	2	3	2	3
AVG	3	2.6	2.8	2	2

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA3335 SUPPLY CHAIN INFORMATION SYSTEM

L T P C
3 0 0 3

COURSE OBJECTIVES

- To Understand the E–SCM framework, importance and explore the structure of communication networks in supply chains.
- To Analyze system development methodologies and Develop skills for effective deployment, risk, and infrastructure management of supply chain systems.
- To Integrate information across enterprises to achieve supply chain visibility and informed decision–making.

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 network – Role of communication networks in supply chains– Over view 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.

UNITIII SCM SYSTEMS DEVELOPMENT, DEPLOYMENTAND 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

On successful completion of this course, the student will be able to

- CO1:Explain E–SCM frameworks, communication networks, and data security in supply chains.
- CO2:Describe enterprise information systems architecture and evaluate enterprise application packages.
- CO3:Design and manage supply chain information systems considering various stakeholders.
- CO4:Deploy information systems and manage associated risks, IT operations, and value realization.
- CO5:Apply information integration techniques to enhance supply chain visibility and decision support.

TEXT BOOKS

1. Turban, E., McLean, E., & Wetherbe, J. Information Technology for Management: Advancing Sustainable, Profitable Business Growth, Wiley 4th Edition, 2016.
2. Hugos, M.. Essentials of Supply Chain Management. Wile, 4th Edition, 2018.
3. Stadtler, H., Kilger, C., & Meyr, H. Supply Chain Management and Advanced Planning, Springer, 4th Edition, 2015.

REFERENCE BOOKS

1. Bozarth, Cecil, and Robert Handfield, Introduction to Operations and Supply Chain Management, Pearson Education, 4th Edition, 2016.
2. Simchi–Levi, David, Philip Kaminsky, and Edith Simchi–Levi, Designing and Managing the Supply Chain, McGraw–Hill Education, 3rd Edition, 2007
3. Chopra, Sunil, and Peter Meindl, Supply Chain Management: Strategy, Planning, and Operation, Pearson Education, 7th Edition, 2018.
4. Christopher, Martin, Logistics & Supply Chain Management, Pearson Education, 5th Edition, 2016.
5. Ivanov, Dmitry, Alexander Tsipoulanis, and Jörn Schönberger, Global Supply Chain and Operations Management, Springer, 2nd Edition, 2019.

ONLINE RESOURCES & MOOCs

1. APICS Supply Chain Council:
<https://www.apics.org>

2. Oracle SCM Solutions Overview
<https://www.oracle.com/scm/>
3. edX: Information Systems – University of Washington
Supply Chain Systems – Rutgers University

Mapping of COs and POs

COs	POs				
	1	2	3	4	5
CO1	3	3	2	3	2
CO2	3	2	3	3	1
CO3	3	3	3	3	2
CO4	3	3	3	3	2
CO5	3	3	3	3	2
AVG	3	2.8	2.8	3	1.8

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA3336 WARE HOUSE MANAGEMENT

L T P C

3 0 0 3

COURSE OBJECTIVES

- To understand fundamental warehousing concepts, operations, and design considerations.
- To analyze inventory management strategies and their role in supply chain competitiveness with inventory control techniques and technology-driven warehouse management systems.
- To evaluate material handling systems and equipment for effective warehouse operations.

UNIT I INTRODUCTION WARE HOUSING

9

Introduction Warehousing– Basic Warehousing Decisions– Warehouse Operations– Types of Warehouses– Functions– Centralized & Decentralized– Stage Systems– Warehousing Cost Analysis – Warehouse Layout – Characteristics if Ideal Warehouse– Warehouse Hub.

UNIT II INVENTORY MANAGEMENT

9

Inventory: Basic Concepts– Role in Supply Chain– Role in Competitive Strategy – Independent Demand Systems– Dependent Demand Systems – Functions– Types of Cost – Need for Inventory– Just in Time.

UNIT III INVENTORY CONTROL

9

Inventory Control– ABC Inventory Control– Multi–Echelon Inventory Systems– Distribution Requirement Planning– Bull Whip Effect– Using WMS for Managing Warehousing Operations.

UNIT IV MATERIALS HANDLING

9

Principles and Performance Measures Of Material Handling Systems– Fundamentals of Material Handling– Various Types of Material Handling Equipment– Types of Conveyors– Refrigerated Warehouses– Cold Chain– Agri SCM.

UNIT V MODERN WAREHOUSING METHODS

9

Modern Warehousing– Automated Storage & Retrieval Systems & their Operations– Bar Coding Technology & Applications in Logistics Industry – RFID Technology & Applications – Advantages of RFID

TOTAL:45 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

- CO1: Explain warehousing operations, types, functions, and cost analysis techniques.
- CO2: Assess the role of inventory and implement inventory management strategies in supply chains.
- CO3: Apply inventory control models and use Warehouse Management Systems (WMS) to optimize operations.
- CO4: Utilize material handling principles and recommend suitable equipment and systems.
- CO5: Analyze and implement modern warehousing technologies such as ASRS, RFID, and bar-coding.

TEXT BOOKS

1. Gwynne Richards , Warehouse Management, 4th edition, 2021.
2. Vinod. V. Sople, Logistics Management, Pearson Education, 2004.
3. Arnold, Introduction Materials Management, Pearson Education, 2009.

REFERENCE BOOKS

1. Frazelle, World Class Warehousing & Material Handling, TataMcGraw–Hill, 2008.
2. Satish K.Kapoor and Purva Kansal, Basics of Distribution Management– A Logistical Approach, Prentice Hall, 2003.
3. Richards, G. Warehouse Management: A Complete Guide to Improving Efficiency and Minimizing Costs in the Modern Warehouse 2nd Edition, 2017.
4. Satish K. Kapoor and PurvaKansal Marketing, Logistics – A Supply Chain Approach, Pearson Education, 2005.
5. Bartholdi, J. J., & Hackman, S. T. Warehouse & Distribution Science. Free online book, 2014.

ONLINE RESOURCES & MOOCs

1. Council of Supply Chain Management Professionals (CSCMP).
<https://cscmp.org>
2. Warehouse Education and Research Council (WERC).
<https://www.werc.org>
3. SWAYAM Link: Logistics and Supply Chain Management.
NPTEL /SWAYAM Course.

Mapping of Cos and POs

COs	POs				
	1	2	3	4	5
CO1	3	2	2	2	1
CO2	3	3	3	2	1
CO3	3	3	3	3	1
CO4	2	3	2	2	1
CO5	3	3	3	3	1
AVG	2.8	2.8	2.6	2.4	1

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA3337 TRANSPORTATION AND DISTRIBUTION MANAGEMENT **L T P C**
3 0 0 3

COURSE OBJECTIVES

- To understand the role and operations of distribution within the supply chain.
- To analyse distribution network design and decision-making models, the functions and modes of transportation in business and logistics.
- To manage international transportation, fleet operations, and freight systems with IT tools and communication systems.

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 INTERNATIONAL 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

On successful completion of this course, the student will be able to

- CO1: Explain the functions, resources, and operations of distribution networks.
- CO2: Plan and manage effective distribution networks and apply Distribution Requirements Planning (DRP).
- CO3: Identify transportation modes, select carriers, and optimize routing and scheduling.
- CO4: Manage international transportation operations and implement transportation management systems (TMS).
- CO5: Use IT applications like E-commerce, ITMS, GIS, and AVL systems to support transportation and distribution functions.

TEXT BOOKS

1. Raghuramand N. Rangaraj, Logistic sand Supply chain Management– Leveraging Mathematical and Analytical Models: Cases and Concepts, New Delhi: Macmillan, 2015.
2. Janat Shah, Supply Chain Management, Pearson Education India, 2013.
3. Jiang Chang Bing Transportation and Distribution Management: Theory and Practice, 1st Edition on January 4, 2011.

REFERENCE BOOKS

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, 2011.
3. Alan Rushton, John Oxley, Hand book of Logistics & Distribution Management, Kogan Page Publishers 2018.
4. Ballou, R. H.. Business Logistics/Supply Chain Management, Pearson Education, 5th Edition, 2004.
5. Chopra, S, & Meindl, P. Supply Chain Management: Strategy, Planning, and Operation, Pearson, 5th Edition, 2019.

ONLINE RESOURCES & MOOCs

1. Council of Supply Chain Management Professionals (CSCMP).
<https://cscmp.org>
2. Transportation Research Board (TRB).
<https://www.trb.org>
3. SWAYAM Link: Supply Chain and Logistics Management.
NPTEL SWAYAM Course

Mapping of COs and POs

COs	POs				
	1	2	3	4	5
CO1	3	2	2	2	1
CO2	3	3	3	2	1
CO3	3	3	3	3	1
CO4	3	3	3	3	1
CO5	3	3	3	3	1
AVG	3	2.8	2.8	2.6	1

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA3338 REVERSE AND CONTRACT LOGISTICS

L T P C

3 0 0 3

COURSE OBJECTIVES

To understand the evolution, structure, and services of third-party logistics (3PL) providers.

- To explain closed-loop supply chain models and the significance of product returns the analyze business and market factors influencing reverse logistics practices.
- To explore emerging trends and technologies in reverse and contract logistics across sectors and manage reverse logistics processes and
- To understand their business economic and strategic impact.

UNIT I INTRODUCTION OF REVERSE AND CONTRACT LOGISTICS 9

Reverse logistics– contract logistics –3PL& 4PL industry overview– A framework for strategic alliances– 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

On successful completion of this course, the student will be able to

- CO1: Describe the evolution and integration of contract logistics services across industries.
- CO2: Analyze the concepts of closed-loop supply chains and the strategic management of returns.
- CO3: Explain life cycle management, market dynamics, and opportunities in reverse logistics.
- CO4: Evaluate the impact of emerging trends and technologies in various industry sectors.
- CO5: Develop strategies to manage reverse logistics processes and link them to broader economic goals.

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.
3. Koppala Venugopal & A. V. Satyanarayana, Reverse Logistics for Small Business: A Theoretical and Practical Exploration, Forum for Intellectual Academicians and Researchers, 2024

REFERENCE BOOKS

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, 2016.
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
5. Rommert Dekker (with Moritz Fleischmann, Karl Inderfurth, Luk N. van Wassenhove), Quantitative Models for Closed-Loop Supply Chains, Publication, Hardcover 2019.

ONLINE RESOURCES & MOOCs

1. Reverse Logistics Association:
<https://www.reverselogistics.com>
2. Supply Chain and Logistics Fundamentals.
NPTEL SWAYAM Course

3. Coursera: Supply Chain Logistics.
Rutgers the State University of New Jersey

Mapping of COs and POs

COs	Pos				
	1	2	3	4	5
CO1	3	2	2	1	1
CO2	3	3	3	2	1
CO3	3	3	3	2	1
CO4	3	3	3	3	1
CO5	3	3	3	2	2
AVG	3	2.8	2.8	2	1.2

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA3339 AIR CARGO MANAGEMENT

L T P C
3 0 0 3

COURSE OBJECTIVES

- To understand the functioning of airports, ground handling, and air shipment processes.
- To perform volume-based and weight-based freight calculations and to manage air cargo documentation and familiarize with airway bills, the role of FIATA and IATA, and air cargo licensing procedures.
- To analyze the operations and advantages of major cargo villages like Dubai Cargo Village Handle Dangerous Goods (DG) cargo classification, labelling, packing, and transportation requirements.

UNIT I AIRPORTS AND SHIPMENT

9

Ground Handling Agencies – Air Craft – Advantage of Air shipment–Economics of Air Shipment– Sensitive Cargo by Air shipment – Do's and Don'ts in Air Cargo Business.

UNIT II AIR CARGO

9

Air Cargo Console – Freight of Air Cargo–Volume based Calculation of Freight–Weight based Calculation of Freight – Import Documentation – Export Documentation.

UNIT III AIRWAY BILLS

9

Airway Bills– FIATA–IATA– History of IATA– Mission of IATA – Price setting by IATA–Licensing of Agencies – Sub Leasing of Agencies – freight carriers by scheduled freight tonne kilo meters flown.

UNIT IV CARGO VILLAGE

9

History of Dubai Cargo Village – Location of DCV – Equipment and Handling at DCV– Operations – Advantage of Sea Air Cargo – Reasons for Sea Air Cargo is Cheaper and Air freight from Dubai is Cheaper.

UNIT V DG CARGO

9

DG Cargo by Air–Classification and labeling –Types of Labels according Cargo –Samples of Labels– Packing and Transportation of DG Goods by Air.

TOTAL:45 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

- CO1:Describe airport operations, aircraft handling, and best practices for sensitive air cargo.
- CO2:Perform air cargo freight calculations and prepare import/export documentation.
- CO3:Explore the significance of airway bills, FIATA, and IATA’s regulatory roles.
- CO4:Analyze the structure, operations, and economic advantages of cargo villages.
- CO5:Handle DG cargo, including proper labelling, classification, and safe transportation methods.

TEXT BOOKS

1. Yoon Seok Chang, Air Cargo Management, CRC Press, 2015.
2. Xie Chun Xun Zhu, Air Cargo Management Introduction– Aviation Logistics, Management Series (Chinese Edition), Southeast University Press, 2006.
3. Hampton Simon Taylor, Air transport logistics, CRC Press, 2000.

REFERENCE BOOKS

1. Paul, Air cargo distributions : Management analysis of its economic and marketing benefits, Jackson and William Brackenridge (Gower Press) 2020.
2. PeterS .Smith, Air freight: operations, marketing and economics ,Chu (Boston: Kluwer Academic Publishers) 2019.
3. John Walterwood, Airports; some elements of designs and future development, Chu (Boston: Kluwer Academic Publishers) 2018.
4. R. Thangamani, Air Cargo Management, Published by Bhavatharani Publication(Indian edition)s (Karnataka, India), 2021
5. Michael Sales and Sebastiaan Scholte, Air Cargo Management: Air Freight and the Global Supply Chain, 3rd Edition – Published by Taylor & Francis, April 13, 2023

ONLINE RESOURCES & MOOCs

1. International Air Transport Association (IATA)
<https://www.iata.org>
2. Air Transport Management.
NPTEL SWAYAM Course
3. Coursera: Aviation Management Course.
University of Geneva

Mapping of Cos and POs

COs	POs				
	1	2	3	4	5
CO1	3	2	2	1	1
CO2	2	3	3	3	1
CO3	3	2	2	1	2
CO4	3	3	3	2	1
CO5	3	3	3	2	3
AVG	2.8	2.6	2.6	1.8	1.6

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA3340 CONTAINERIZATION AND ALLIED BUSINESS

L T P C

3 0 0 3

COURSE OBJECTIVES

- To understand the concept and evolution of containerization with impact on the shipping industry, as well as to analyze the freight strategies for Full Container Load (FCL) and Less than Container Load (LCL) cargo.
- To evaluate the infrastructure and operations of container terminals and inland container depots (ICDs) for leasing, maintenance, and tracking.
- To explore the multimodal transport options for containerized cargo and associated management strategies.

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– Freighting of FCL and LCL cargo– Slot utilization strategies– Estimation of optimum container fleet size– Multiport LCL consolidation.

UNIT III CHARACTERISTICS AND PHYSICAL OPERATIONS 9

Containerization: Concept, Classification, Process, 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 MULTI MODAL TRANSPORT

9

Alternate uses of containers– marketing of used containers– carriage of shipper own containers– multi modal transport options for containers– Insurance for containers– strategies for managing container imbalance.

TOTAL:45 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

- CO1: Explain the principles and history of containerization and the various types of containers used in shipping.
- CO2: Identify the methods for optimizing container fleet size and strategies for efficient slot utilization.
- CO3: Discuss the role of container terminals, ICDs, CFS, and the types of chartering practices in container operations.
- CO4: Expand the container leasing business and the various types of containers, their maintenance, and tracking methods.
- CO5: Evaluate the use of containers in multimodal transport and strategies for managing container imbalances.

TEXT BOOKS

1. Miler, Gostomski & Nowosielski, Containerization in Maritime Transport in 2022.
2. Rolf Neise, Container Logistics, The Role of the Container in the Supply Chain, 2018.
3. Zhanibek Kozhimbayev & Richard Sinnott, Containerization and its Architectures: A Study in 2016.

REFERENCE BOOKS

1. Marc Levinson, The Box: How the Shipping Container Made the World Small and the World Economy Bigger, Princeton University Press, 2008.
2. Dr. K. V. Hariharan, Containerisation, Multi modal Transport & Infrastructure Development In India, Shroff Publishers and Distributors, 6th Edition, 2015.
3. Lee, C.-Y., Meng, Q.(Eds.), Hand book of Ocean Container Transport Logistics Making Global Supply Chains Effective, Springer, 2015
4. Coyle et. al, Management Of Transportation, 7th Edition, Cengage Learning, 2011.
5. Containerization in Cloud: Docker, Kubernetes, and Beyond, 2019.

ONLINE RESOURCES & MOOCs

1. World Shipping Council (WSC).
<https://www.worldshipping.org>
2. Containerization International (CI Online).
<https://www.ci-online.com>
3. SWAYAM Link: Maritime Logistics.
NPTEL SWAYAM Course.

Mapping of Cos and POs

COs	POs				
	1	2	3	4	5
CO1	3	2	2	1	1
CO2	2	3	3	2	1
CO3	3	3	3	2	1
CO4	3	2	2	3	2
CO5	3	3	3	3	1
AVG	2.8	2.6	2.6	2.2	1.2

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA3341 EXIM MANAGEMENT

L T P C

3 0 0 3

COURSE OBJECTIVES

- To understand the fundamentals of import and export trade with the impact on the economy and navigate the EXIM policy framework to understand the role of various trade-related organizations.
- To develop expertise in export marketing, negotiation, and finalization of export contracts and to analyze the documentation, customs clearance, payment methods in foreign trade.
- To examine the role of service providers in EXIM transactions, including logistics, freight forwarding, and customs clearance.

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 Oriented Unit (EOU)–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.

UNITV 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

On successful completion of this course, the student will be able to

- CO1:Define the role of import/export trade and key institutions in the global trade process.
- CO2:Formulate export marketing strategies and manage export documentation and insurance.
- CO3:Comprehend import documentation processes and customs clearance procedures
- CO4:Evaluate various payment methods and financing strategies used in international trade.
- CO5:Identify key service providers and their functions in EXIM transactions.

TEXT BOOKS

1. Singh, Ram, Export and Import Management: Text and Cases, Kalyani Publishers, 2nd Edition, 2016.
2. Paul, Justin & Aserkar, Rajiv, Export Import Management, Oxford University Press, 2013.
3. Lall, Sanjiv & Ahmad, Mohammad, Export Import: Procedure and Documentation, Himalaya Publishing House, 2006.

REFERENCE BOOKS

1. Justin Paul and Rajiv A serkar, Export Import Management, Oxford University Press, 2nd Edition, 2013.
2. Usha Kiran Rai, Export–Import and Logistics Management, PHI Learning, 2nd Edition, 2010.
3. Director General of Foreign Trade, Foreign Trade Policy and Handbook of Procedures, 2015
4. Coyleet.al,Management of Transportation, Cengage Learning, 7th Edition, 2011
5. Export–import and Logistics Management by Usha Kiran Rai, 2013.

ONLINE RESOURCES & MOOCs

1. Director General of Foreign Trade (DGFT) India.
<https://www.dgft.gov.in>
2. SWAYAM Link: International Trade and Finance.
NPTEL SWAYAM Course
3. Coursera: Global Trade and Export Management.
University of London

Mapping of COs and POs

COs	POs				
	1	2	3	4	5
CO1	3	2	2	1	1
CO2	3	3	3	2	1
CO3	3	3	2	1	1
CO4	3	3	3	1	1
CO5	3	2	2	1	1
AVG	3	2.6	2.4	1.2	1

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA3342 FUNDAMENTALS OF SHIPPING

L T P C

3 0 0 3

COURSE OBJECTIVES

- To understand the role of shipping in international trade and identify different types of liner shipping for its business dynamics, including cargo types and documentation.
- To examine the structure of dry bulk shipping, including major ports, cargoes, liquid bulk shipping, including tanker types, freighting systems, and environmental considerations.
- To evaluate the ship building and repair industry, and comprehend the role of service providers in shipping, including insurance and financing.

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 bulk ports 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 (world scale) –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

On successful completion of this course, the student will be able to

- CO1:Define the role of shipping in international trade and describe the functions of global shipping organizations.
- CO2:Explore the structure and operations of liner shipping, including different service types and pricing.
- CO3:Analyze the dry bulk shipping industry, including the types of ships and port operations.
- CO4:Examine the dynamics of tanker operations, including market factors and environmental regulations.
- CO5:Identify key service providers in the shipping industry, and understand the processes of ship building and marine insurance.

TEXT BOOKS

1. Alan E. Branch, Shipping Business Management, Publisher: Thompson Learning 2007.
2. Introduction to Shipping by John F. Wilson, Publisher: Lloyd's Practical Shipping Guides 2007.
3. Shipping Business Management by Alan E. Branch, Publisher: Pearson Education 2018.

REFERENCE BOOKS

1. Michael Robarts, Branches Elements of Shipping, Routledge, 9th Edition, 2014.
2. Peter Brodie, Commercial Shipping Handbook, Inform a Law from Routledge, 3rd Edition, 2014.
3. UNCTAD, Review of Maritime Transport, 2014.
4. Coyleet.al, Management of Transportation, Cengage Learning, 7th Edition, 2011.
5. Alan F. Poole, Fundamentals of Shipping, Institute of Chartered Shipbrokers, 2010.

ONLINE RESOURCES & MOOCs

1. International Maritime Organization (IMO).
<https://www.imo.org>
2. SWAYAM Link.
Shipping and Maritime Industry.
3. Coursera: Shipping and Maritime Industry: An Introduction – University of London.
NPTEL SWAYAM Course

Mapping of Cos and POs

COs	POs				
	1	2	3	4	5
CO1	3	2	1	1	1
CO2	3	3	2	1	1
CO3	3	3	2	1	1
CO4	3	3	2	1	1
CO5	3	2	2	1	1
AVG	3	2.6	1.8	1	1

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation

24BA3343 PORT AND TERMINAL MANAGEMENT

L T P C

3 0 0 3

COURSE OBJECTIVES

- To understand the strategic role of ports and terminals in global trade with the impact on regional economies to gain insights into port operations..
- To analyze the marketing and pricing strategies of port services using key metrics and understand the role of technology in enhancing port efficiency.
- To evaluate port security, environmental, and health safety issues, and the role of international regulations like the ISPS Code.

UNIT I INTRODUCTION TO PORT AND TERMINAL

9

Role of ports in international trade and transport – Economic impact of ports on the regional economy – Multiplier effect – Location characteristics of ports –Different types of ports(natural, manmade, river, estuary).

UNIT II PORT OPERATIONS

9

Design features of facilities imports for handling various cargoes –Organization structure in Ports –Delivery of port services and the relationship between various departments – Marine Department –Traffic Department – other departments.

UNIT III PORT MARKETING AND SERVICES

9

Marketing of Port services – Pricing of Port services – Components of port tariff – Concept of hinterland – Identifying the needs of ship owners and operators, ship agents, forwarders, truckers, rail and barge operators – Concept of Total Logistics cost.

UNIT IV PORT PERFORMANCE

9

Measurement of port performance – vessel turn round time, cargo volume, speed of cargo handling –Information flow requirements of the port, statutory bodies and port users – Port community computer systems and EDI applications.

UNIT V PORT SECURITY AND ISSUES

9

Environmental issues connected with Ports & Terminals – Health and safety issues – Port security issues – International Ships and Port facility security (ISPS) code – Role of national, regional and local governments in owning / operating / managing ports.

TOTAL:45 PERIODS

COURSE OUTCOMES

On successful completion of this course, the student will be able to

- CO1: Explain the role and economic impact of ports in international trade, and describe different types of ports.
- CO2: Identify the key organizational components within ports and how port services are delivered.
- CO3: Analyze the pricing structure of port services, understand port tariffs, and identify logistics needs.
- CO4: Measure port performance using operational data such as cargo volume, vessel turnaround time, and cargo handling speed.
- CO5: Assess port security, health, safety, and environmental concerns, and understand the regulatory frameworks governing port operations.

TEXT BOOKS

1. Notteboom, T., Pallis, A.A., & Rodrigue, J-P., Port Economics, Management and Policy, Routledge, 1st Edition, 2022.
2. Jennings & Heward, Port and Terminal Regulations, 2nd Edition, 2015.
3. Böse, J.W. (Ed.), Handbook of Terminal Planning, Springer, 1st Edition, 2011.

REFERENCE BOOKS

1. Maria G.Burns, Port Management and Operations, CRC Press, 2014.
2. Patrick Alderton, Port Management and Operations, Lloyd's Practical Shipping Guides, 3rd Edition, 2008
3. H.Ligteringen, H.Velsink, Ports and Terminals, VSSD Publishers, 2012.
4. Coyle et al, Management of Transportation, Cengage Learning, 7th Edition, 2011.
5. Bill Chalmers, Port and Terminal Management, Lloyd's Practical Shipping Guides, 2nd Edition, 2010.

ONLINE RESOURCES & MOOCs

1. International Maritime Organization (IMO).
<https://www.imo.org>
2. SWAYAM Link: Port Management and Logistics.
NPTEL SWAYAM Course
3. Coursera: Ports and Shipping-
University of Strathclyde

Mapping of Cos and POs

COs	POs				
	1	2	3	4	5
CO1	3	2	1	1	1
CO2	3	2	2	1	1
CO3	3	3	2	1	1
CO4	3	3	3	2	1
CO5	3	2	2	1	3
AVG	3	2.4	2	1.2	1.4

1 – Low, 2 – Medium, 3 – High, ‘-’ No correlation



