

# **PROGRAM CURRICULUM**

**MASTER OF BUSINESS ADMINISTRATION**

**for**

**MASTER OF BUSINESS ADMINISTARTION  
(INTEGRATED)**

**FOUR YEARS DEGREE PROGRAM**

(Applicable for the batches admitted from A.Y 2024-25)



**ADITYA UNIVERSITY**

Aditya Nagar, ADB Road, Surampalem - 533 437

## VISION & MISSION OF THE UNIVERSITY

### VISION

Aditya University aspires to be a globally recognised academic institution dedicated to quality education, cutting-edge research, and technological service to our country, and envisions itself as a beacon of holistic advancement and long-term impact, remaining dynamic in the ever-changing worlds of society, ecology, and economics.

### MISSION

- Aditya University pushes boundaries to design high-quality curricula and to provide students with a vibrant and relevant education that prepares them for a changing world. Our industry insights and creative teaching methods attempt to equip our students to be lifelong learners.
- Aditya University's learning environment encourages intellectual curiosity, critical thinking, and cooperation, with the goal of providing students with an immersive education that fosters creativity and innovation. Our cutting-edge facilities, interactive classrooms, and supportive faculty aim to motivate students to realise their full potential and contribute to society.
- Aditya University promotes cross-disciplinary inquiry and discovery and leads cutting-edge research and innovation. Through strategic partnerships, research grants, and a dedicated faculty, we aim to advance science, technology, and social sciences and empower students and faculty to conduct transformative research that solves real-world problems and elevates our institution globally.
- Aditya University is committed to producing world-changing business leaders and entrepreneurs through its emphasis on entrepreneurship, mentoring, and business incubation programmes.

## VISION & MISSION OF THE DEPARTMENT

### VISION:

To cultivate future business leaders who are not only equipped with cutting-edge knowledge and skills but are also driven by innovation, ethical leadership, and a commitment to global sustainability. We envision our MBA graduates as transformative leaders who excel in diverse, dynamic environments, leveraging their holistic business acumen to drive organizational success, societal impact, and personal growth.

### MISSION:

- To develop ethical and innovative leaders with the skills to transform businesses and create long-term value. We focus on building responsible leaders who drive growth and positive change.
- To prepare adaptable, globally-minded leaders who excel in diverse business environments. We aim to empower students to lead with innovation and make a lasting impact.

## PROGRAM OUTCOMES (PO)

**After successful completion of the program, the students will be able to:**

- PO1** Understand and use the principles of management to provide solutions to the multifaceted business issues.
- PO2** Apply analytical and critical thinking abilities through quantitative methods for decision-making.
- PO3** Interpret cross-cultural business environment to give value-based benefits to society at large.
- PO4** Communicate effectively in diverse groups and exhibit leadership skills.
- PO5** Lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment

## PROGRAM SPECIFIC OUTCOMES (PSO)

**After successful completion of the program, the students will be able to:**

- PSO1** Apply the fundamental management concepts to handle dynamic business environment, develop value driven leadership abilities with effective communication, design strategic financial plans and execute talent management initiatives, market driven business strategies to optimize supply chain operations, manage global logistics networks for Organizational growth and sustainability.
- PSO2** Design and implement technology-driven business solutions, leverage data-driven insights, Omni channel marketing strategies in a digital landscape to inform strategic decision-making, drive business growth through innovative solutions with analytical, critical thinking and problem-solving capability.

## PROGRAM EDUCATIONAL OUTCOMES (PEO)

**After successful completion of the program, the students will be able to:**

- PEO1** Acquire comprehensive business knowledge and skills to effectively solve complex challenges in various industries.
- PEO2** Apply creative and strategic approaches to drive business growth and maintain a competitive edge in dynamic environments, and contribute to socially responsible and sustainable business practices.



**DEPARTMENT OF MANAGEMENT STUDIES**  
**Master of Business Administration (Integrated)**  
**Program Curriculum-2024**

**Credit Division:**

S.No.	Category of Courses	Credits
1	Program Core Courses (PCC)	87
2	Program Elective Courses (PEC)	27
3	Ability Enhancement Courses (AEC)	3
4	Multi-Disciplinary Elective Course (MDEC)	6
5	Value Added Courses (VAC)	10
6	Skill Enhancement Courses (SEC)	14
7	Internship (INT)	2
8	Project (PROJ)	3
9	Summer Internship (SI)	2
10	Major Project (MP)	4
11	Article Publication (AP)	2
12	Mandatory Courses (MC)	0
	<b>Total</b>	<b>160</b>

**FC- Foundation Courses**

**IC- Intermediate Level Courses**

**AC- Advanced Courses**

Program Core Courses (PCC)										Prerequisite
Course Code	Course Title	Level	L	T	P	C	CIE	SEE	Total	
245MS001	Principles and Practices of Management	FC	3	0	0	3	50	50	100	-
245MS002	Financial Accounting	FC	2	1	0	3	50	50	100	-
245MS003	Business Statistics and Analysis for Decision Making	FC	2	1	0	3	50	50	100	-
245MS004	Business Environment	FC	3	0	0	3	50	50	100	-
245MS005	Banking Theory and Practice	FC	3	0	0	3	50	50	100	-
245MS006	Micro Economics	FC	3	0	0	3	50	50	100	-
245MS007	Human Behavior and Organization	FC	3	0	0	3	50	50	100	-
245MS008	Macro Economics	IC	3	0	0	3	50	50	100	MIE
245MS009	Marketing Management	IC	3	0	0	3	50	50	100	-
245MS010	Cost Accounting	IC	2	1	0	3	50	50	100	FA
245MS011	Legal Aspects of Business	IC	3	0	0	3	50	50	100	BE
245MS012	Human Resource Management	IC	3	0	0	3	50	50	100	HBO
245MS013	Entrepreneurship and Startup Eco-System	IC	3	0	0	3	50	50	100	-
245MS014	Operations Management	IC	3	0	0	3	50	50	100	-
245MS015	Financial Management	IC	2	1	0	3	50	50	100	FA
245MS016	Business Research Methodology	IC	2	1	0	3	50	50	100	-
245MS017	Strategic Management	IC	3	0	0	3	50	50	100	-
245MS018	Business Ethics and Corporate Governance	IC	3	0	0	3	50	50	100	-
245MS019	Rural Marketing	IC	3	0	0	3	50	50	100	MM
245MS020	Project Management	IC	3	0	0	3	50	50	100	-
245MS021	Logistics & Supply chain Management	AC	3	0	0	3	50	50	100	MM
245MS022	Business Taxation	AC	2	1	0	3	50	50	100	
245MS023	Entrepreneurial Leadership	AC	3	0	0	3	50	50	100	E&SE

245MS024	E-Commerce	AC	3	0	0	3	50	50	100	MM
245MS025	Intellectual Property Rights	AC	2	0	0	2	50	50	100	-
245MS026	Knowledge Management	AC	2	0	0	2	50	50	100	-
245MS027	Tourism Management	AC	3	0	0	3	50	50	100	-
245MS028	Health Care Management	AC	3	0	0	3	50	50	100	-
245MS029	International Business	AC	3	0	0	3	50	50	100	-
245MS030	MSME Management	AC	2	0	0	2	50	50	100	E&SE
<b>Total</b>						<b>87</b>				

**Program Elective Courses (PEC)**  
**Finance (FIN)**

<b>Course Code</b>	<b>Course Title</b>	<b>Level</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>	<b>CIE</b>	<b>SEE</b>	<b>Total</b>	<b>Pre-Requisite</b>
245MS050	Investment Analysis and Portfolio Management	AC	3	0	0	3	50	50	100	FM
245MS051	Banking and Financial Institutions	AC	3	0	0	3	50	50	100	
245MS052	Financial Modelling	AC	2	0	1	3	50	50	100	
245MS053	Mergers, Acquisitions and Corporate Restructuring	AC	3	0	0	3	50	50	100	
245MS054	Financial Risk Management and Financial Derivatives	AC	3	0	0	3	50	50	100	
245MS055	International Finance	AC	3	0	0	3	50	50	100	
245MS056	Behavioral Finance	AC	3	0	0	3	50	50	100	
245MS057	Financial Analytics	AC	2	0	1	3	50	50	100	
245MS058	Strategic Financial Management	AC	3	0	0	3	50	50	100	

**Marketing (MKTG)**

<b>Course Code</b>	<b>Course Name</b>	<b>Level</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>	<b>CIE</b>	<b>SEE</b>	<b>Total</b>	<b>Pre-Requisite</b>
245MS059	Sales and Retail Management	AC	3	0	0	3	50	50	100	MM
245MS060	Consumer Behavior and Customer Relationship Management	AC	3	0	0	3	50	50	100	
245MS061	Marketing Analytics	AC	2	0	1	3	50	50	100	
245MS062	Strategic Marketing Management	AC	3	0	0	3	50	50	100	
245MS063	Digital and Social Media Marketing	AC	3	0	0	3	50	50	100	
245MS064	Service Marketing	AC	3	0	0	3	50	50	100	
245MS065	Marketing Research	AC	3	0	0	3	50	50	100	
245MS066	Brand Management	AC	3	0	0	3	50	50	100	
245MS067	Green Marketing	AC	3	0	0	3	50	50	100	

**Human Resource Management (HR)**

Course Code	Course Name	Level	L	T	P	C	CIE	SEE	Total	Pre-Requisite
245MS068	Performance Management	AC	3	0	0	3	50	50	100	HRM
245MS069	International Human Resource Management	AC	3	0	0	3	50	50	100	
245MS070	HR Analytics	AC	2	0	1	3	50	50	100	
245MS071	Organization Change and Development	AC	3	0	0	3	50	50	100	
245MS072	Contemporary Practices in HRM	AC	3	0	0	3	50	50	100	
245MS073	Industrial Relations	AC	3	0	0	3	50	50	100	
245MS074	Labour Welfare and Legislation	AC	3	0	0	3	50	50	100	
245MS075	Compensation and Reward Management	AC	3	0	0	3	50	50	100	
245MS076	Strategic Human Resource Management	AC	3	0	0	3	50	50	100	

**Business Analytics (BA)**

Course Code	Course Name	Level	L	T	P	C	CIE	SEE	Total	Pre-Requisite
245MS077	Data Analysis with R	AC	2	0	1	3	50	50	100	IBA
245MS078	Marketing Analytics	AC	2	0	1	3	50	50	100	
245MS079	Financial Analytics	AC	2	0	1	3	50	50	100	
245MS080	HR Analytics	AC	2	0	1	3	50	50	100	
245MS081	Predictive Analytics	AC	2	0	1	3	50	50	100	
245MS082	Big Data Analytics	AC	2	0	1	3	50	50	100	
245MS083	Web Analytics	AC	2	0	1	3	50	50	100	
245MS084	Data Mining and Machine Learning	AC	2	0	1	3	50	50	100	
245MS085	CRM Analytics	AC	2	0	1	3	50	50	100	

**Logistics and Supply Chain (LSC)**

Course Code	Course Name	Level	L	T	P	C	CIE	SEE	Total	Pre-Requisite
245MS086	Logistics Management	AC	3	0	0	3	50	50	100	MM
245MS087	Store Keeping and Warehousing Management	AC	3	0	0	3	50	50	100	
245MS088	Transportation and Infrastructure Management for SCM	AC	3	0	0	3	50	50	100	
245MS089	Purchasing and Material Management	AC	3	0	0	3	50	50	100	
245MS090	Reverse Logistics	AC	3	0	0	3	50	50	100	
245MS091	Supply Chain Risk Management	AC	3	0	0	3	50	50	100	
245MS092	Enterprise Resource Planning	AC	3	0	0	3	50	50	100	
245MS093	International Logistics Management	AC	3	0	0	3	50	50	100	
245MS094	Green Supply Chain Management	AC	3	0	0	3	50	50	100	

**Information Systems Management (ISM)**

Course Code	Course Name	Level	L	T	P	C	CIE	SEE	Total	Pre-Requisite
245MS095	Data Mining for Business Decisions	AC	2	0	1	3	50	50	100	IT&AI
245MS096	Managing Software Projects	AC	2	0	1	3	50	50	100	
245MS097	Web Designing	AC	2	0	1	3	50	50	100	
245MS098	Business Analytics	AC	2	0	1	3	50	50	100	
245MS099	Managing Digital Innovation and Transformation	AC	2	0	1	3	50	50	100	
245MS100	Big Data Analytics	AC	2	0	1	3	50	50	100	
245MS101	Cyber Laws and Security	AC	2	0	1	3	50	50	100	
245MS102	Information Systems Audit	AC	2	0	1	3	50	50	100	
245MS103	Artificial Intelligence and Machine Learning	AC	2	0	1	3	50	50	100	

### Digital Marketing (DM)

Course Code	Course Name	Level	L	T	P	C	CIE	SEE	Total	Pre-Requisite
245MS104	Digital Startup and New Venture Management	AC	3	0	0	3	50	50	100	MM
245MS105	Consumer Analytics	AC	2	0	1	3	50	50	100	
245MS106	E- Mail Marketing	AC	3	0	0	3	50	50	100	
245MS107	Mobile Marketing	AC	3	0	0	3	50	50	100	
245MS108	Search Engine Optimization	AC	3	0	0	3	50	50	100	
245MS109	Social Media Marketing	AC	3	0	0	3	50	50	100	
245MS110	Content Marketing	AC	3	0	0	3	50	50	100	
245MS111	Affiliate Marketing and Google AdSense	AC	3	0	0	3	50	50	100	
245MS112	Neuro Marketing	AC	3	0	0	3	50	50	100	

Ability Enhancement Courses (AEC)										Prerequisite
Course Code	Course Name	Level	L	T	P	C	CIE	SEE	Total	
245MS031	Fundamental Cognitive Skills for Managers	FC	0	0	1	1	100	-	100	-
245MS032	Advanced Cognitive Skills for Managers	IC	0	0	1	1	100	-	100	FCEM
245MS113	Employability Skills-V	AC	0	0	3	1	100	-	100	ES-IV
	<b>TOTAL</b>					<b>3</b>				

Multi-Disciplinary Elective Courses (MDEC)										Prerequisite
Course Code	Course Name	Level	L	T	P	C	CIE	SEE	Total	
245MS033	IT and AI Skills	FC	1	0	2	3	50	50	100	-
245MS034	Business Intelligence	IC	1	0	2	3	50	50	100	IT&AIS
	<b>TOTAL</b>					<b>6</b>				

Value Added Courses (VAC)										Prerequisite
Course Code	Course Name	Level	L	T	P	C	CIE	SEE	Total	
245MS035	NCC/NSS/Yoga and Sports	FC	0	0	1	1	100	-	100	-
245MS036	Indian Cultural Heritage and Fine Arts	FC	0	0	1	1	100	-	100	-
245MS037	Insurance Promotion	IC	3	0	0	3	50	50	100	-
245MS038	Event Management	IC	3	0	0	3	50	50	100	-
245MS039	Community Service Project	IC	-	-	2	2	100	-	100	-
	<b>TOTAL</b>					<b>10</b>				

Skill Enhancement Courses (SEC)										Prerequisite
Course Code	Course Name	Level	L	T	P	C	CIE	SEE	Total	
245MS040	Emerging Technologies and Application	IC	3	0	0	3	50	50	100	IT&AIS
245MS041	Managing Information Systems	IC	2	0	1	3	50	50	100	-
245MS042	Design Thinking and Innovation	IC	2	0	0	2	50	50	100	-
245MS043	Introduction to Digital Marketing	IC	3	0	0	3	50	50	100	MM
245MS044	Introduction to Business Analytics	IC	2	0	1	3	50	50	100	-
	<b>TOTAL</b>					<b>14</b>				

<b>Internship, Project, Summer Internship, Major Project, Article Publication</b>										<b>Prerequisite</b>
<b>Course Code</b>	<b>Course Name</b>	<b>Level</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>	<b>CIE</b>	<b>SEE</b>	<b>Total</b>	
245MS045	Internship	AC	-	-	-	2	100	-	100	-
245MS046	Project	AC	-	-	-	3	50	50	100	-
245MS047	Summer Internship	AC	-	-	-	2	100	-	100	-
245MS048	Major Project	AC	-	-	-	4	50	50	100	-
245MS049	Article Publication	AC	-	-	-	2	100	-	100	-
<b>TOTAL</b>						13				

<b>Mandatory Courses (MC)</b>										<b>Prerequisite</b>
<b>Course Code</b>	<b>Course Name</b>	<b>Level</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>	<b>CIE</b>	<b>SEE</b>	<b>Total</b>	
245AC001	Environmental Science and Sustainability	FC	0	0	0	0	100	-	100	-
245AC002	Indian Constitution	FC	0	0	0	0	100	-	100	-
245AC003	Media Literacy and Critical Thinking	FC	0	0	0	0	100	-	100	-
245AC004	Employability Skills-I	FC	0	0	0	0	100	-	100	-
245AC005	Employability Skills- II	IC	0	0	0	0	100	-	100	ES-I
245AC006	Employability Skills- III	AC	0	0	0	0	100	-	100	ES-II
245AC007	Employability Skills-IV	AC	0	0	0	0	100	-	100	ES-III

<b>Foundation Courses (FC)</b>						
S.No.	Course Title	Category	L	T	P	C
1	Principles and Practices of Management	PCC	3	0	0	3
2	Financial Accounting	PCC	2	1	0	3
3	Business Statistics and Analysis for Decision Making	PCC	2	1	0	3
4	Business Environment	PCC	3	0	0	3
5	Banking Theory and Practice	PCC	3	0	0	3
6	Micro Economics	PCC	3	0	0	3
7	Fundamental Cognitive Skills for Managers	AEC	0	0	1	1
8	IT and AI Skills	AEC	1	0	2	3
9	NCC/NSS/ Yoga and Sports	VAC	0	0	1	1
10	Indian Cultural Heritage and Fine Arts	VAC	0	0	1	1
11	Environmental Science and Sustainability	MC	0	0	0	0
12	Indian Constitution	MC	0	0	0	0
13	Media Literacy and Critical Thinking	MC	0	0	0	0
14	Human Behavior and Organization	PCC	3	0	0	3

<b>Intermediate Level Courses (IC)</b>						
S.No.	Course Title	Level	L	T	P	C
1	Macro Economics	PCC	3	0	0	3
2	Marketing Management	PCC	3	0	0	3
3	Cost Accounting	PCC	2	1	0	3
4	Legal Aspects of Business	PCC	3	0	0	3
5	Human Resource Management	PCC	3	0	0	3
6	Entrepreneurship and Startup Eco-System	PCC	3	0	0	3
7	Operations Management	PCC	3	0	0	3

8	Financial Management	PCC	2	1	0	3
9	Business Research Methodology	PCC	2	1	0	3
10	Strategic Management	PCC	3	0	0	3
11	Business Ethics and Corporate Governance	PCC	3	0	0	3
12	Rural Marketing	PCC	3	0	0	3
13	Project Management	PCC	3	0	0	3
14	Advanced Cognitive Skills for Managers	AEC	0	0	1	1
15	Business Intelligence	MDEC	1	0	2	3
16	Insurance Promotion	VAC	3	0	0	3
17	Event Management	VAC	3	0	0	3
18	Community Service Project	VAC	-	-	2	2
19	Emerging Technologies and Application	SEC	3	0	0	3
20	Management Information System	SEC	2	0	0	3
21	Design Thinking and Innovation	SEC	2	0	0	2
22	Introduction to Digital Marketing	SEC	3	0	0	3
23	Introduction to Business Analytics	SEC	2	0	1	3

<b>Advanced Courses (AC)</b>						
<b>S.No.</b>	<b>Course Name</b>	<b>Category</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
1	Logistics & Supply chain Management	PCC	3	0	0	3
2	Business Taxation	PCC	2	1	0	3
3	Entrepreneurial Leadership	PCC	3	0	0	3
4	E-Commerce	PCC	3	0	0	3
5	Intellectual Property Rights	PCC	2	0	0	2
6	Knowledge Management	PCC	2	0	0	2
7	Tourism Management	PCC	3	0	0	3
8	Health Care Management	PCC	3	0	0	3
9	International Business	PCC	3	0	0	3
10	MSME Management	PCC	2	0	0	2
11	Investment Analysis and Port Folio Management	PEC	3	0	0	3
12	Banking and Financial Institutions	PEC	3	0	0	3
13	Financial Modeling	PEC	2	0	1	3
14	Mergers, Acquisitions and Corporate Restructuring	PEC	3	0	0	3
15	Financial Risk Management and Financial Derivatives	PEC	3	0	0	3
16	International Finance	PEC	3	0	0	3
17	Behavioral Finance	PEC	3	0	0	3
18	Financial Analytics	PEC	2	0	1	3
19	Strategic Financial Management	PEC	3	0	0	3
20	Sales and Retail Management	PEC	3	0	0	3
21	Consumer Behavior & Customer Relationship Management	PEC	3	0	0	3
22	Marketing Analytics	PEC	2	0	1	3

23	Strategic Marketing Management	PEC	3	0	0	3
24	Digital & Social Media Marketing	PEC	3	0	0	3
25	Service Marketing	PEC	3	0	0	3
26	Marketing Research	PEC	3	0	0	3
27	Brand Management	PEC	3	0	0	3
28	Green Marketing	PEC	3	0	0	3
29	Performance Management	PEC	3	0	0	3
30	International Human Resource Management	PEC	3	0	0	3
31	HR Analytics	PEC	2	0	1	3
32	Organization Change and Development	PEC	3	0	0	3
33	Contemporary Practices in HR	PEC	3	0	0	3
34	Industrial Relations	PEC	3	0	0	3
35	Labor Welfare and Legislation	PEC	3	0	0	3
36	Compensation and Reward Management	PEC	3	0	0	3
37	Strategic Human Resource Management	PEC	3	0	0	3
38	Data Analysis with R	PEC	2	0	1	3
39	Marketing Analytics	PEC	2	0	1	3
40	Financial Analytics	PEC	2	0	1	3
41	HR Analytics	PEC	2	0	1	3
42	Predictive Analytics	PEC	2	0	1	3
43	Big Data Analytics	PEC	2	0	1	3
44	Web Analytics	PEC	2	0	1	3

45	Data Mining& Machine Learning	PEC	2	0	1	3
46	CRM Analytics	PEC	2	0	1	3
47	Logistics Management	PEC	3	0	0	3
48	Store Keeping and Warehousing Management	PEC	3	0	0	3
49	Transportation and Infrastructure Management for SCM	PEC	3	0	0	3
50	Purchasing and Material Management	PEC	3	0	0	3
51	Reverse Logistics	PEC	3	0	0	3
52	Supply Chain Risk Management	PEC	3	0	0	3
53	Enterprise Resource Planning	PEC	3	0	0	3
54	International Logistics Management	PEC	3	0	0	3
55	Green Supply Chain Management	PEC	3	0	0	3
56	Data Mining for Business Decisions	PEC	2	0	1	3
57	Managing Software Projects	PEC	2	0	1	3
58	Web Designing	PEC	2	0	1	3
59	Business Analytics	PEC	2	0	1	3
60	Managing Digital Innovation and Transformation	PEC	2	0	1	3
61	Big Data Analytics	PEC	2	0	1	3
62	Cyber Laws & Security	PEC	2	0	1	3
63	Information Systems Audit	PEC	2	0	1	3
64	Artificial Intelligence and Machine Learning	PEC	2	0	1	3
65	Digital Startup and New Venture Management	PEC	3	0	0	3

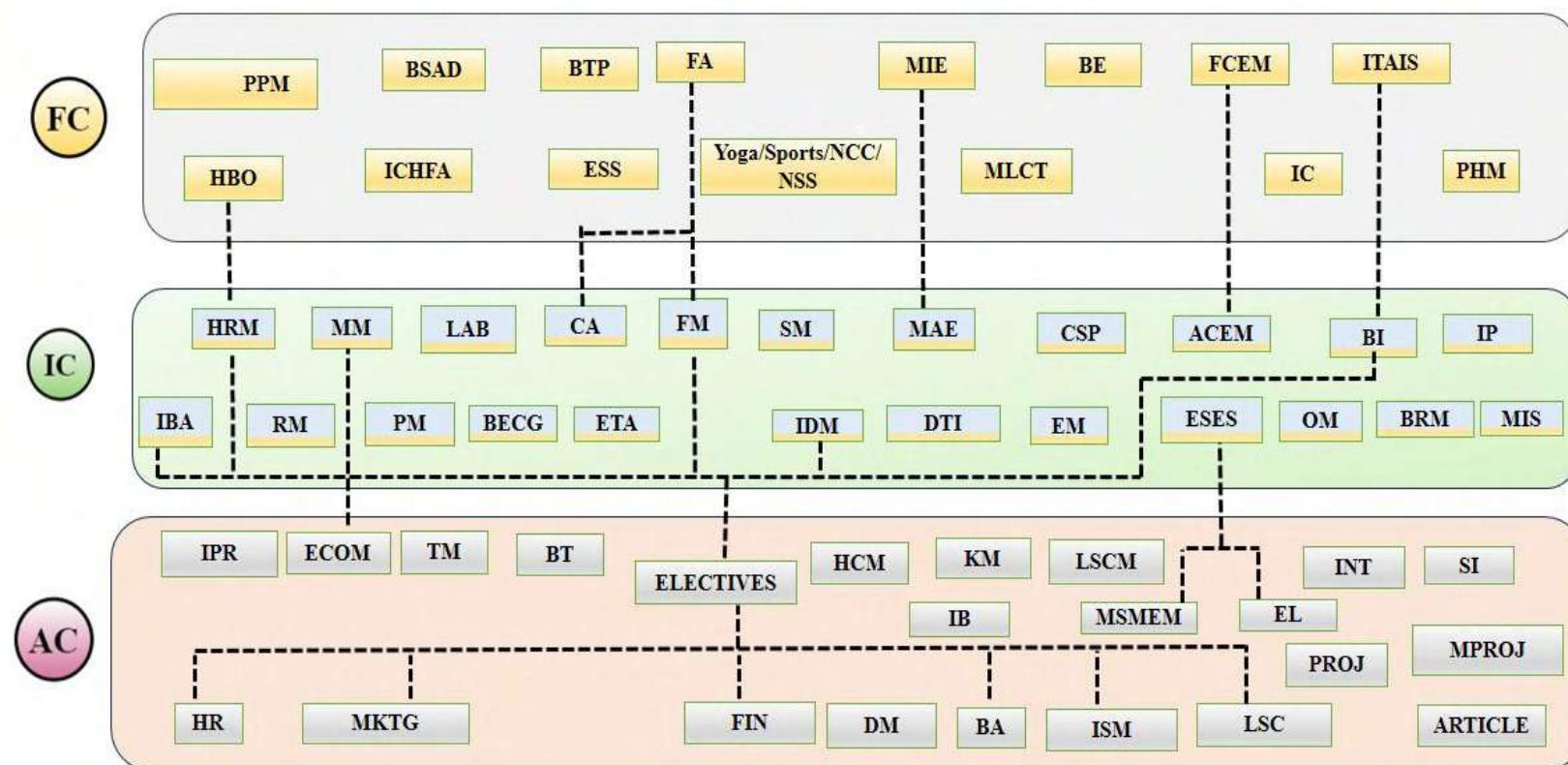
66	Consumer Analytics	PEC	2	0	1	3
67	E- Mail Marketing	PEC	3	0	0	3
68	Mobile Marketing	PEC	3	0	0	3
69	Search Engine Optimization	PEC	3	0	0	3
70	Social Media Marketing	PEC	3	0	0	3
71	Content Marketing	PEC	3	0	0	3
72	Affiliate Marketing and Google Ad sense	PEC	3	0	0	3
73	Neuro Marketing	PEC	3	0	0	3
74	Internship	INT	-	-	-	2
75	Project	PROJ	-	-	-	3
76	Summer Internship	SI	-	-	-	2
77	Major Project	MP	-	-	-	4
78	Article Publication	AP	-	-	-	2

**NOTE:**

- Student has to acquire 120 credits during his 3years of the study, to acquire a Degree in Bachelor of Business Administration. If a student opts for MBA (Integrated), he has to acquire remaining 40 credits.
- Students have to take Advanced Courses in the III and IV years only.
- Students have an option to acquire 40% of the credits through MOOCS (NPTEL-SWAYAM).

## 2024 MBA(INTEGRATED) CURRICULUM

### Prerequisite Flow Chart



**Suggestive Semester Wise Curriculum**

SEMESTER-I								
Course Code	Course Title	Course		Credits			Total Hours	
		Category	Level	L	T	P		
245MS001	Principles and Practices of Management	PCC	FC	3	0	0	3	3
245MS003	Business Statistics and Analysis for decision making	PCC	FC	2	1	0	3	3
245MS004	Business Environment	PCC	FC	3	0	0	3	3
245MS005	Banking Theory and Practice	PCC	FC	3	0	0	3	3
245MS006	Micro Economics	PCC	FC	3	0	0	3	3
245MS033	IT and AI Skills	AEC	FC	1	0	2	3	5
245MS031	Fundamental Cognitive Skills for Managers	AEC	FC	0	0	1	1	2
245MS035	NCC/NSS/ Yoga & Sports	VAC	FC	0	0	1	1	2
245AC004	Employability Skills-I	MC	FC	0	0	0	0	3
<b>Total</b>							<b>20</b>	<b>27</b>

SEMESTER-II								
Course Code	Course Title	Course		Credits			Total Hours	
		Category	Level	L	T	P		
245MS002	Financial Accounting	PCC	FC	2	1	0	3	3
245MS008	Macro Economics	PCC	IC	3	0	0	3	3
245MS009	Marketing Management	PCC	IC	3	0	0	3	3
245MS012	Human Resource Management	PCC	IC	3	0	0	3	3
245MS032	Advanced Cognitive Skills for Managers	AEC	IC	0	0	1	1	2
245MS040	Emerging Technologies and Application	SEC	IC	3	0	0	3	3
245MS036	Indian Cultural Heritage and Fine Arts	VAC	FC	0	0	1	1	2
245MS037	Insurance Promotion	VAC	IC	3	0	0	3	3
245AC005	Employability Skills-II	MC	FC	0	0	0	0	3
<b>Total</b>							<b>20</b>	<b>25</b>

SEMESTER-III								
Course Code	Course Title	Course		Credits			Total Hours	
		Category	Level	L	T	P		
245MS010	Cost Accounting	PCC	IC	2	1	0	3	3
245MS011	Legal Aspects of Business	PCC	IC	3	0	0	3	3
245MS007	Human Behavior and Organization	PCC	IC	3	0	0	3	3
245MS020	Project Management	PCC	IC	3	0	0	3	3
245MS041	Managing Information Systems	SEC	IC	3	0	0	3	3
245MS038	Event Management	VAC	IC	3	0	0	3	3
245MS039	Community Service Project	VAC	IC	-	-	2	2	-
245MS049	Environmental Science and Sustainability	MC	FC	0	0	0	0	2
245AC006	Employability Skills-III	MC	IC	0	0	0	0	3
<b>Total</b>							<b>20</b>	<b>23</b>

SEMESTER-IV								
Course Code	Course Title	Course		Credits			Total Hours	
		Category	Level	L	T	P		
245MS015	Financial Management	PCC	IC	2	1	0	3	3
245MS014	Operations Management	PCC	IC	3	0	0	3	3
245MS019	Rural Marketing	PCC	IC	3	0	0	3	3
245MS016	Business Research Methodology	PCC	IC	2	1	0	3	3
245MS043	Introduction to Digital Marketing	SEC	IC	3	0	0	3	3
245MS044	Introduction to Business Analytics	SEC	IC	2	0	1	3	4
245MS042	Design Thinking and Innovation	SEC	IC	2	0	0	2	2
245AC007	Employability Skills-IV	MC	IC	0	0	0	0	3
<b>Total</b>							<b>20</b>	<b>24</b>

SEMESTER-V								
Course Code	Course Title	Course		Credits			Total Hours	
		Category	Level	L	T	P		
245MS017	Strategic Management	PCC	IC	3	0	0	3	3
245MS021	Logistics and Supply chain Management	PCC	AC	3	0	0	3	3
245MS024	E-Commerce	PCC	AC	3	0	0	3	3
245MS013	Entrepreneurship and Startup Eco-system	PCC	IC	3	0	0	3	3
-	Program Elective Course-I	PEC	AC	3	0	0	3	3
-	Program Elective Course-II	PEC	AC	3	0	0	3	3
245MS045	Internship	INT	AC	-	-	-	2	-
245AC002	Indian Constitution	MC	FC	0	-	-	0	2
245MS113	Employability Skills-V	MC	AC	0	0	0	1	3
<b>Total</b>							<b>21</b>	<b>23</b>

SEMESTER-VI								
Course Code	Course Title	Course		Credits				Total Hours
		Category	Level	L	T	P	Total	
245MS026	Knowledge Management	PCC	AC	2	0	0	2	2
245MS022	Business Taxation	PCC	AC	2	1	0	3	3
245MS025	Intellectual Property Rights	PCC	AC	2	0	0	2	2
245MS018	Business Ethics and Corporate Governance	PCC	AC	3	0	0	3	3
-	Program Elective Course -III	PEC	AC	3	0	0	3	3
-	Program Elective Course -IV	PEC	AC	3	0	0	3	3
245MS046	Project	PROJ	AC	-	-	3	3	-
245AC003	Media Literacy and Critical Thinking	MC	FC	0	-	-	0	2
<b>Total</b>							<b>19</b>	<b>18</b>

SEMESTER-VII								
Course Code	Course Title	Course		Credits				Total Hours
		Category	Level	L	T	P	Total	
245MS034	Business Intelligence	MDE	AC	1	0	2	3	5
245MS023	Entrepreneurial Leadership	PCC	AC	3	0	0	3	3
245MS028	Health Care Management	PCC	AC	3	0	0	3	3
245MS027	Tourism Management	PCC	AC	3	0	0	3	3
-	Program Elective Course -V	PEC	AC	3	0	0	3	3
-	Program Elective Course -VI	PEC	AC	3	0	0	3	3
245MS047	Summer Internship	SI	AC	-	-	2	2	-
<b>Total</b>							<b>20</b>	<b>20</b>

SEMESTER-VIII								
Course Code	Course Title	Course		Credits				Total Hours
		Category	Level	L	T	P	Total	
245MS030	MSME Management	PCC	AC	2	0	0	2	2
245MS029	International Business	PCC	AC	3	0	0	3	3
-	Program Elective Course -VII	PEC	AC	3	0	0	3	3
-	Program Elective Course -VIII	PEC	AC	3	0	0	3	3
-	Program Elective Course -IX	PEC	AC	3	0	0	3	3
245MS048	Major Project	MP	AC	-	-	4	4	-
245MS049	Article Publication	AP	AC	-	-	2	2	-
<b>Total</b>							<b>20</b>	<b>14</b>

## PRINCIPLES AND PRACTICES OF MANAGEMENT

**Course Code: 245MS001**

**L      T      P      C**  
**3      0      0      3**

### **Course Outcomes:**

**At the end of the course, Student will be able to:**

- CO1:** Explain theoretical aspects, processes and principles, the scope of Management and its application to modern management practice
- CO2:** Identify the Decision-making process in Business organizations
- CO3:** Differentiate the functions of Line and Staff management
- CO4:** Understand and apply different leadership styles
- CO5:** Apply different controlling techniques in different situations

### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	1	-	-	-	-
<b>CO2</b>	1	-	-	-	-
<b>CO3</b>	1	-	-	-	-
<b>CO4</b>	1	-	-	-	-
<b>CO5</b>	1	-	-	-	-

### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### **UNIT – I**

**Management:** Nature, Concept, Scope and Significance; Functions; Management: Art or Science or Profession; Organization vs. Administration vs. Management, Schools of Management: Contributions of F.W. Taylor, Henry Fayol, Elton Mayo; Roles of Managers; Social Responsibility and Business Ethics.

### **UNIT – II**

**Planning:** Concept, Objectives, Types, Steps and Techniques; Making Planning Effective; Decision Making: Steps in Decision Making and Types; Management by Objectives (MBO).

### **UNIT – III**

**Organizing & Staffing:** Structure, Nature, Types of Organizations, Principles of Organizing; Departmentalization; Delegation; Decentralization of Authority; Span of Control - Line and Staff Functions; Staffing: Concept, Significance and Functions.

### **UNIT – IV**

**Leading:** Introduction, Characteristics of a Leader, Functions of a Leader; Leadership and

Management; Principles of Leadership, Styles of Leaders.

#### **UNIT – V**

**Controlling:** Introduction, Concept of Controlling, Purpose of Controlling; Types of Control; Steps in Controlling; Techniques in Controlling.

#### **Text Books:**

1. Harold Koontz & Heinz Weirich, Management, a Global and Entrepreneurial Perspective, New Delhi: Tata McGraw Hill Publishing company. ISBN-10. 9780070700727 · ISBN-13. 978-0070700727 · Edition. 13th ·
2. Dipak Kumar Bhattacharyya, Principles of Management: Text and Cases, New Delhi: Pearson Publications. ISBN-13. 978-8131754214

#### **Reference Books:**

1. Balasubramanian. N, Management Perspectives, New Delhi: MacMillan India Ltd.; ISBN-10. 0333932897; ISBN-13. 978-0333932896
2. Charles Hill, Steven Mc Shane, Principles of Management, New Delhi: Tata Mac Graw HillISBN-10. 0333932897; ISBN-13. 978-0333932896

#### **Web Links:**

1. [https://onlinecourses.nptel.ac.in/noc23\\_mg33/preview](https://onlinecourses.nptel.ac.in/noc23_mg33/preview)
2. <https://archive.nptel.ac.in/courses/110/107/110107150/>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## FINANCIAL ACCOUNTING

**Course Code:245MS002**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>2</b>	<b>1</b>	<b>0</b>	<b>3</b>

### **Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Identify and explain key concepts and principles of financial accounting.
- CO2:** Assess accounting concepts, principles, standards, and policies.
- CO3:** Apply the accounting process to record transactions and compute depreciation.
- CO4:** Simplify Trading, Profit & Loss Accounts, and Balance Sheets for sole proprietary businesses.
- CO5:** Analyze final accounts of companies in line with the Companies Act, 2013.

### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	1	-	-	-	-
<b>CO2</b>	1	-	-	-	-
<b>CO3</b>	1	-	-	-	-
<b>CO4</b>	1	-	-	-	-
<b>CO5</b>	1	-	-	-	-

### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### **UNIT – I**

**Introduction to Financial Accounting:** Definition and Scope, objectives of Financial Accounting, Accounting v/s Book Keeping, Terms used in accounting, users of accounting, limitations of Financial Accounting, branches of accounting, Double entry system of accounting and its advantages; types of accounts, rules of accounting, accounting equation.

### **UNIT – II**

**Conceptual Frame work:** Accounting Concepts, Principles and Conventions, Accounting Standards-concept, objectives, benefits, brief review of Accounting Standards in India, Accounting Policies, GAAP (Generally Accepted Accounting Principles) and IFRS (International Financial Reporting Standards)

### **UNIT – III**

**Recording of Transactions:** Voucher system; Accounting Process, Journal, Subsidiary Books, Ledger, Cash Book, Bank Reconciliation Statement, Trial Balance. Rectification of Errors; Depreciation: Meaning, need & importance of depreciation, methods of charging depreciation (SLM & WDV, Sum of years digits method, Annuity method). Capital and Revenue Expenditure & Income.

## **UNIT – IV**

**Preparation of Final Accounts:** Preparation of Trading and Profit & Loss Account and Balance Sheet of sole proprietary business (with adjustments).

## **UNIT – V**

**Company Final Accounts:** Important provisions of Companies Act, 2013 in respect of preparation of Final Accounts. Understanding of final accounts of a Company. Joint Stock Company-Definition, Characteristics, types of companies, Shares, Share Capital, rights shares, bonus shares.

### **Text Books:**

1. Fundamentals of Accounting & Financial Analysis: By Anil Chowdhry (Pearson Education) ISBN, 8131702022, 9788131702024.
2. Financial accounting: By Jane Reimers (Pearson Education) ISBN-10. 9780136115274 · ISBN-13. 978-0136115274 ·

### **Reference Books:**

1. Accounting Made Easy by Rajesh Agarwal & R Srinivasan (Tata McGraw – Hill) ISBN-10. 0070700982; ISBN-13. 978-0070700987
2. Financial Accounting for Management: By Amrish Gupta (Pearson Education) ISBN-10. 9356060819; ISBN-13. 978-9356060814

### **Web Links:**

1. [https://onlinecourses.nptel.ac.in/noc23\\_mg65/preview](https://onlinecourses.nptel.ac.in/noc23_mg65/preview)
2. <https://archive.nptel.ac.in/courses/110/101/110101131/>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## BUSINESS STATISTICS AND ANALYSIS FOR DECISION MAKING

Course Code:245MS003

L	T	P	C
2	1	0	3

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Explain the types of data and types of variables
- CO2:** Interpret various concepts of descriptive statistics
- CO3:** Analyze the theories of probability
- CO4:** Solve the problems related to Linear programming.
- CO5:** Develop various transportation models and game theory.

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	1	-	-	-
<b>CO2</b>	-	1	-	-	-
<b>CO3</b>	-	1	-	-	-
<b>CO4</b>	-	1	-	-	-
<b>CO5</b>	-	1	-	-	-

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
<b>CO1</b>	-	1
<b>CO2</b>	-	1
<b>CO3</b>	-	1
<b>CO4</b>	-	1
<b>CO5</b>	-	1

### UNIT – I

**Introduction to Business Statistics:** Introduction to Statistics, Statistics in Business, Types of data – Nominal, Ordinal, Interval, Ratio. Types of variables – Dependent, independent, moderating, intervening, extraneous. Discrete / continuous. Charts and Graphs.

### UNIT – II

**Descriptive Statistics:** Measure of central tendency – mean, median, quartile, mode (for Group and ungrouped data) Measure of variability – Range, interquartile range, standard deviation, variance, coefficient of variation, (for Group and ungrouped data) Measures of shape – kurtosis, skewness, boxplot.

### UNIT – III

**Introduction to Probability:** Theories of probability – Classical, Relative frequency and subjective. Laws of probability – addition, multiplication. Inverse Probability. Revision of probability: BAYES' RULE, Discrete distribution – Binomial, Poisson, Continuous distribution – Uniform, normal.

**UNIT – IV**

**Introduction to Linear Programming Problems (LP)** – LP Formulations – Graphical Solution – Simplex Method

**UNIT – V**

**Classification of Models-** Introduction –Transportation Models NWCR, LCM, VAM – MODI Method- Assignment Problem- Game theory: Saddle Point Determination, Dominance Property, Two Person Zero-sum Game

**Text Books:**

1. T N Srivastava, Shailaja Rego, Statistics for Management Paperback, TMH Publications, ISBN-10. 8184959966.
2. Ken Black, Business Statistics for Contemporary Decision making, Wiley Publications, ISBN-10. 1119905443; ISBN-13. 978-1119905448

**Reference Books:**

1. Richard I. Levin and David S. Rubin, Statistics for Management, Pearson Publications, ISBN 9789332581180
2. Sanjiv Jaggia, Alison Kelly, Business Statistics, McGraw Hill Publications, ISBN-10. 0073373664S.

**Web Links:**

1. <https://archive.nptel.ac.in/courses/110/107/110107114/>
2. <https://archive.nptel.ac.in/noc/courses/noc21/SEM1/noc21-mg07/>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## BUSINESS ENVIRONMENT

Course Code:245MS004

L	T	P	C
3	0	0	3

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1: Understand the concept of business environment
- CO2: Identify the composition of Indian economy
- CO3: Explain the demographic and societal environment of business
- CO4: Examine the industrial and legal environment of business
- CO5: Perceive the technological and international business environment

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
CO1	-	-	1	-	-
CO2	-	-	1	-	-
CO3	-	-	1	-	-
CO4	-	-	1	-	-
CO5	-	-	1	-	-

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
CO1	1	-
CO2	1	-
CO3	1	-
CO4	1	-
CO5	1	-

### UNIT – I

**Business Environment:** Meaning-Scope and Characteristics; Factors affecting micro and macro environment, Significance for economic policies and decisions in organizations, ethical issues in business. Environmental Scanning

### UNIT – II

**Composition of Indian Economy:** Primary, Secondary, Tertiary Sectors, Issues in Agriculture sector in India, land reforms, Green Revolution and agriculture policies of India, Industrial development, small scale and cottage industries, Industrial Policy, Public sector in India, Services sector in India. LPG Model of Development, NITI Analog, Public Versus Private Sector Debate, Unorganized Sector and India's Informal Economy.

### UNIT – III

**Demographic and Societal Environment:** Size of Population, Age Structure, Other demographic trends, population control policy, human development. Impact of foreign culture on business. Business and society. Social responsibility of business, social audit, consumer rights and business.

## **UNIT – IV**

**Industrial & Legal Environment:** Industrial policy up to 1991, the new industrial policy, Public, private, joint and cooperative sectors, privatization through disinvestment, village and small industries, industrial sickness, Regulatory role of the government, MRTP act, trade practices act, FEMA, patents and trade mark. Competition act 2000. Rational and extent of state intervention.

## **UNIT – V**

**Technological and International Business Environment:** Features of Technological Environment, Its impact on Business, Restraints on Technological Growth. Definition of International Business Environment, Evaluation of WTO, function of WTO, Doha declaration, significance of foreign investment, FDI in India trends and pattern, FII, cross-border M&As. Globalization of world economy, trend in globalization, EXIM policy, EPZs, EOUs, TPs & SEZs.

### **Text Books:**

1. K. Aswathappa: Essentials of Business Environment, Himalaya Publishing House ISBN-10. 8183189156; ISBN-13. 978-8183189156
2. Francis Cherunilam: Business Environment, Himalaya Publishing House ISBN-10. 9352994426; ISBN-13. 978-9352994427

### **Reference Books:**

1. Dr S Sankaran: Business Environment, Margham Publications, ISBN 10: 9381430896
2. S.K. Mishra and V.K. Puri: Economic Environment of Business, HPH, ISBN. 978-93-5596-596-7.

### **Web Links:**

1. [https://onlinecourses.swayam2.ac.in/imb22\\_mg02/preview](https://onlinecourses.swayam2.ac.in/imb22_mg02/preview)
2. [https://ugcmoocs.inflibnet.ac.in/index.php/courses/view\\_pg/389](https://ugcmoocs.inflibnet.ac.in/index.php/courses/view_pg/389)

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## BANKING THEORY AND PRACTICE

Course Code:245MS005

L	T	P	C
3	0	0	3

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Outline the basic concepts of banking
- CO2:** Classify the different banking systems
- CO3:** Identify various types of bank accounts
- CO4:** Analyze the banker customer relationship
- CO5:** Develop the different E banking initiatives

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	1	-	-	-	-
<b>CO2</b>	1	-	-	-	-
<b>CO3</b>	1	-	-	-	-
<b>CO4</b>	1	-	-	-	-
<b>CO5</b>	1	-	-	-	-

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### UNIT – I

**Introduction to Banking:** History of Banking- Indian Banking System-Phases of development-Banking structure in India- Commercial Banking; Definition-Classification of banks. Commercial Banking functions-Role of Banks in Economic Development. Central Banking-Definition –Need, Principles, Functions of Central bank.

### UNIT – II

**Banking Systems:** Unit banking, branch banking, Investment banking - innovations in banking - online and offshore banking, RTGS, NEFT. NBFC- Role of NBFC, RBI Regulations-Financial sector reforms-Sukhmoy committee 1985-Narasimham committee I and II-Prudential norms: capital adequacy norms-classification of assets and provisioning.

### UNIT – III

**Bank Account:** Opening – Types of Accounts-FDR-Steps in opening Account-Saving vs Current Account- Passbook-Bank Customer Relationship-Special Types of currents-KYC norms. Bank Lending –Lending Sources-Bank Lending Principles-Forms of lending-Loan evaluation process-securities of lending-Factors influencing bank lending

#### **UNIT – IV**

**Banker and Customer Relationship:** Banker and Customer - Relationship - Special features - Opening and closing of accounts - Different types of accounts – Forms used in the operation of bank account - Cheque book, Pass book, Mistakes in the pass book - Special types of account holders.

#### **UNIT – V**

**E Banking:** Meaning, Services, e-banking and financial services-Initiatives-Opportunities-Internet banking Meaning-Internet banking Vs Traditional Banking-Services-Drawbacks Frauds in Internet banking. Mobile banking–Anywhere Banking-Any Time Banking-Electronic Mobile Wallets. ATM Evolution -Concept-Features - Types-. Electronic money- Meaning-Categories-Merits of e-money Electronic Funds Transfer (EFT)system - Meaning- Steps-Benefits

#### **Text Books:**

1. Banking Theory: Law & Practice: K P M Sundram and V L Varsheney, Sultan Chand & Sons.ISBN-10. 9351611493; ISBN-13. 978-9351611493
2. Banking Theory, Law and Practice: B. Santhanam; Margam Publications. ISBN-13: 978-9381430774 ISBN-10: 9381430772.

#### **Reference Books:**

1. Banking Theory and Practice, Jagroop Singh, Kalyani Publishers. ISBN 10: 9327267265 ISBN 13: 9789327267266.
2. Banking Theory and Practice, Seven Hills International Publishers, Hyderabad.ISBN-10. 932596905X; ISBN-13. 978-9325969056

#### **Web Links:**

1. <https://financialservices.gov.in/beta/en/banking-overview>
2. [https://rbi.org.in/Scripts/bs\\_viewcontent.aspx?Id=159](https://rbi.org.in/Scripts/bs_viewcontent.aspx?Id=159)

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## MICRO ECONOMICS

Course Code:245MS006

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Understand the fundamentals of Micro Economics
- CO2:** Apply the knowledge of the mechanics of supply and demand to explain working of markets.
- CO3:** Explain relationships between production and costs.
- CO4:** Analyze the key characteristics and consequences of different forms of markets.
- CO5:** Examine the choices made by a rational consumer.

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	1	-	-	-	-
<b>CO2</b>	1	-	-	-	-
<b>CO3</b>	1	-	-	-	-
<b>CO4</b>	1	-	-	-	-
<b>CO5</b>	1	-	-	-	-

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### UNIT – I

**Introduction to Economics:** Definition, Nature and Scope of Economics. Micro and Macro Economics, Role of Economics in Decision Making, Wealth, Welfare, Scarcity and Growth Definitions.

### UNIT – II

**Demand Analysis and Supply Analysis:** Meaning of Demand, Types of Demand, Law of demand, Determinants of Demand, Demand Function, Elasticity of demand- price elasticity of demand. Income elasticity of demand, Cross Elasticity of demand, Law of Supply, Supply Schedule, Supply Curve, Price elasticity of supply, Equilibrium Price.

### UNIT – III

**Production, Revenue and Cost Analysis:** Production function, Factors of Production, Types of Production Function, Law of Returns, Law of variable proportions, Isoquants and Iso cost Curves, Producers Equilibrium. Revenue Concepts; Cost Concepts, Cost Output Relation (Short Run & Long Run costs), Economies & Diseconomies of scale.

**UNIT – IV**

**Market Structures:** Perfect competition: basic features, equilibrium price, short run equilibrium of firm/industry, long run equilibrium of firm/industry, monopoly: basic features, equilibrium price determination, comparison with perfect competition, price discrimination; monopolistic competition: basic features, short run equilibrium, long run equilibrium; oligopoly: kinked demand curve model, dominant price leadership model.

**UNIT – V**

**Consumer's Behavior:** Law of diminishing Marginal Utility Analysis, Indifference Curve Analysis and its Properties; Marginal rate of Substitution, Budget Line, Consumer Equilibrium.

**Text Books:**

1. Microeconomics, 6ed, An Indian Adaptation by David Besanko (Author), and Ronald Braeutigam ISBN-10. 9354249132 · ISBN-13. 978-9354249136
2. Microeconomics by Robert S. Pindyck and Daniel L. Rubinfeld ISBN-10. 9789332585096, ISBN-13. 978-9332585096

**Reference Books:**

1. Principles of Economics by N G Mankiw, Thomson Press, Sanat Printers, Kundli Haryana ISBN: 9789355734112.
2. Microeconomics for Management Students by Ravindra H Dholkiya & Ajay N Oza, Oxford University Press, ISBN-10. 019563974X.

**Web Links:**

1. <https://archive.nptel.ac.in/courses/110/104/110104093/>
2. <https://archive.nptel.ac.in/courses/109/104/109104125/>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## HUMAN BEHAVIOR AND ORGANIZATION

Course Code:245MS007

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Outline the overall perspective on human behavior in the work place.
- CO2:** Demonstrate the importance of motivation in at work place.
- CO3:** Examine the nature of group conflict and its resolution.
- CO4:** Identify the impact of culture on individual performance.
- CO5:** Analyze the impact of change, assess and manage work stress.

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	-	-	-	1
<b>CO2</b>	-	-	-	-	1
<b>CO3</b>	-	-	-	1	-
<b>CO4</b>	-	-	1	-	-
<b>CO5</b>	-	-	-	1	-

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### UNIT – I

**The Nature of Organizational Behavior** – History and Background; Ability – Physical Abilities and their influence on performance; Ability – Intellectual Abilities; Attitude – its nature and components; Major Job Attitudes – Job Satisfaction.

### UNIT – II

**Perception and Decision-Making;** Motivation – the nature and process of motivation; Theories of Motivation – Maslow, Herzberg; Theories of Motivation – Goal-Setting, Vroom's Expectancy Theory, Equity Theory; Applications of Motivation – Job Characteristics Model.

### UNIT – III

**Group Behavior** – Nature, Types of Groups, Stages of Group Development; Group Properties – Roles, Norms, Status, Size, Cohesiveness and Diversity; Leadership – Behavioral Theories, Blake & Mouton's Managerial Grid; Conflict – The Conflict Process.

### UNIT – IV

**Organizational Culture** – Functions and Dysfunctions; Creating and Sustaining Culture; How Employees Learn Culture; Creating a Positive Organizational Culture.

**UNIT – V**

**Organizational Change** – Forces for Change, Planned Change; Resistance to Change – Overcoming resistance; Approaches to Managing Organizational Change – Lewin’s Three Step Model, Kotter’s Eight-Step Plan for Implementing Change; Work Stress and its Management – Potential Sources of Stress, Individual Differences, Consequences of Stress, Managing Stress

**Text Books:**

1. Robbins, S. P., Judge, T., & Vohra, N., “Organizational Behavior” 15th Ed., Pearson Education, New Delhi ISBN-13: 978-9332500334 ISBN-10: 9332500339.
2. Organizational Behaviour, India Edition, Nelson & Quick, Cengage learning ISBN-10. 8131503844; ISBN-13. 978-8131503843.

**Reference Books:**

1. Organisation Behaviour, A modern approach – Arun Kumar & N. Meenakshi Vikas publishing House PVT Ltd. ISBN-10. 8125930930; ISBN-13. 978-8125930938
2. Behaviour in organizations, Indian Edition, Jerald Green Berg and Robert A. Baron – PHI Learning PVT Ltd.ISBN-10. 8120338359; ISBN-13. 978-8120338357

**Web Links:**

1. <https://archive.nptel.ac.in/courses/110/106/110106145/>
2. [https://onlinecourses.nptel.ac.in/noc20\\_mg51/preview](https://onlinecourses.nptel.ac.in/noc20_mg51/preview)

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## MACRO ECONOMICS

Course Code:245MS008

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Explain the concepts of National Income
- CO2:** Identify the Basics of Fiscal policy and its importance
- CO3:** Compare the relationships between monetary policy and flow of cash in economy.
- CO4:** Analyze the key characteristics and consequences of Business cycles and Balance of Payments.
- CO5:** Examine the concepts of inflation and unemployment

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	1	-	-	-	-
<b>CO2</b>	1	-	-	-	-
<b>CO3</b>	1	-	-	-	-
<b>CO4</b>	1	-	-	-	-
<b>CO5</b>	1	-	-	-	-

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### UNIT – I

**Introduction to Macro Economics and National Income:** Introduction Meaning and Scope of Macro Economics, introduction to Classical and Keynesian theory, Definition, Concepts of National income; GNP, NNP, NDP, Per Capita Income, Personal Income and Disposal Income; Circular flow of National Income, Measurement of National Income: income method, expenditure method, value added method; Difficulties in Measurement of National Income.

### UNIT – II

**Monetary Policy:** meaning, objectives and components; credit creation; money multiplier; tools of monetary policy- open market operation, variable cash reserve ratio, statutory liquidity ratio, bank rate policy, liquidity adjustment facility, marginal standing facility, repo rate, reverse repo rate, quantitative easing; fiscal responsibility and budget management.

### UNIT – III

**Fiscal Policy:** meaning, objectives and components; revenue receipts, capital receipts, revenue expenditure, capital expenditure, government deficit, revenue deficit, effective

revenue deficit, fiscal deficit, primary deficit

#### **UNIT – IV**

**Business Cycles and Balance of Payments:** Business cycle; phases of business cycle, measures to control Business cycles. Balance of trade, Trade Deficit, Balance of Payments: current account and capital account.

#### **UNIT – V**

**Inflation and Unemployment:** Concept of inflation; determinants of inflation; types of inflation; relationship between inflation and unemployment: Phillips Curve in short run and long run.

#### **Text Books:**

1. Macroeconomics |12th Edition Paperback by Rudiger Dornbusch (Author), Stanley Fischer (Author), Richard Startz (Author), ISBN-13: 978-0-07-709947-3, ISBN: 0-07-709947-8
2. Abel, A., Bernanke, B. Macroeconomics, 9th ed. Pearson Education. ISBN-10: 0134167392 · ISBN-13: 978-0134167398

#### **Reference Books:**

1. Jones, C. Macroeconomics, 4th ed. W. W. Norton. ISBN-10, 0393603768. ISBN-13, 978-0393603767
2. Blanchard, O. Macroeconomics, 7th ed. Pearson Education ISBN-10. 0133780589, ISBN-13. 978-0133780581

#### **Web Links:**

1. [https://onlinecourses.swayam2.ac.in/cec22\\_hs08/preview](https://onlinecourses.swayam2.ac.in/cec22_hs08/preview)
2. <https://archive.nptel.ac.in/courses/130/104/130104114/>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## MARKETING MANAGEMENT

**Course Code:245MS009**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### **Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Explain marketing and analyze the core marketing concepts
- CO2:** Assess and select market segments based on effective segmentation criteria
- CO3:** Classify products, analyze the product life cycle, and propose strategies for new product development
- CO4:** Develop pricing strategies, explain the relevance of the value chain to marketing, and assess customer lifetime value
- CO5:** Design integrated marketing channels, manage retailing and logistics, and evaluate the effectiveness of various promotional strategies

### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	1	-	-	-	-
<b>CO2</b>	1	-	-	-	-
<b>CO3</b>	1	-	-	-	-
<b>CO4</b>	1	-	-	-	-
<b>CO5</b>	1	-	-	-	-

### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### **UNIT – I**

**Understanding marketing world:** Defining Marketing for the New Realities - The Scope of Marketing - Core Marketing Concepts - Marketing Environment; Selling Vs Marketing; Company Orientation toward the Marketplace; Marketing Mix.

### **UNIT – II**

**Segmentation, Targeting and Positioning:** Segmentation - Bases for Segmenting Consumer Markets - Geographic Segmentation - Demographic Segmentation - Psychographic Segmentation - Behavioral Segmentation - Market Targeting; Effective Segmentation Criteria - Evaluating and Selecting the Market Segments – Positioning.

### **UNIT – III**

**Product Concept and Brand Management:** Setting Product Strategy - Product Classification, Product Levels, Product Line and Mix Concept, Product Life Cycle and New Product Development - Introducing New Market Offerings - Building Loyalty - Brand Communities - Win-Backs - Cultivating Customer Relationships - Customer Relationship

Management.

#### **UNIT – IV**

**Pricing, Value Chain and Customer Value:** Developing Pricing Strategies and Programs – Understanding the Value Chain and its Relevance to Marketing – Managing Customer Value; The Value Delivery Process – The Value Chain – Building Customer Value, Satisfaction, and Loyalty – Measuring Customer Life Time Value and – Retaining Customers.

#### **UNIT – V**

**Distribution and Promotion:** Designing and Managing Integrated Marketing Channels – Managing Retailing, Wholesaling and Logistics. Designing and Managing Integrated Marketing Communications – Managing Mass Communications: Advertising, Sales Promotions, Events and Experiences and Public Relations.

#### **Text Books:**

1. Kotler, P., Keller, K. L., Chernev. A., Sheth. J.N., Shainesh.G., (2022), Marketing Management, 16th Edition. ISBN-10. 9356062668; ISBN-13. 978-9356062665
2. Hair, J. F., Lamb, C. W., McDaniel, C. MKTG, United States: Cengage Learning. ISBN-10. 1337407593; ISBN-13. 978-1337407595

#### **Reference Books:**

1. Hartley, S. W., Kerin, R. A. (2021), Marketing, 15th Edition, United States: McGrawHill Education. ISBN-10. 1260260364; ISBN-13. 978-1260260366
2. Harris, L. C., He, H., Armstrong, G., Piercy, N., Kotler, P. T. (2019), Principles of Marketing, 8th Edition, United Kingdom: Pearson Education. ISBN, 1292269618, 9781292269610

#### **Web Links:**

1. [https://onlinecourses.nptel.ac.in/noc22\\_mg57/preview](https://onlinecourses.nptel.ac.in/noc22_mg57/preview)
2. <https://archive.nptel.ac.in/courses/110/104/110104068/>

**Relevant cases have to be discussed in each unit and in examination case is compulsory from any unit.**

## COST ACCOUNTING

**Course Code:245MS010**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>2</b>	<b>1</b>	<b>0</b>	<b>3</b>

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Explain the Concept of Cost Accounting
- CO2:** Select the Elements of Cost Accounting
- CO3:** Identify with the different costing methods used in business
- CO4:** Analyze the Concept of Standard Costing and analyze the variances
- CO5:** Apply Marginal Costing concepts for Business Decisions

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	1	-	-	-
<b>CO2</b>	-	1	-	-	-
<b>CO3</b>	-	1	-	-	-
<b>CO4</b>	-	1	-	-	-
<b>CO5</b>	-	1	-	-	-

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### UNIT – I

**Introduction to Cost Accounting:** Definition, Nature, Scope, and Advantages of Cost–Cost Accounting Vs. Financial Accounting– Cost Accounting Vs. Management Accounting - Cost Concepts – Classification of Cost -Elements of Cost – Cost Sheet (Simple problems in Cost Sheet)

### UNIT – II

**Material Cost and Labour Cost–** Direct and indirect material cost, Inventory Valuation (LIFO, FIFO & Weighted Average Cost), EOQ, Setting of Reorder Level, Maximum Level, Minimum Level-Direct and indirect labour cost; Methods of payment of wages Time base and Piece Base – Incentive plans (Halsey, Rowan, Merrick Multiple Piece Rate System, Taylors Differential Piece Rate System simple problems)

### UNIT – III

**Overheads And Methods of Costing** Overheads – Classification – Allocation, apportionment and absorption of overheads. **Methods of Costing:** Single or Output Costing, Contract Costing (Simple Numerical Problems on Preparation of Tenders and Contract Costing)

**UNIT – IV**

**Standard Costing:** Standard Cost and Standard Costing – Types of Standards – Advantages and Limitations of Standard Costing – Steps involved in Standard Costing.

**Marginal Costing:** Definition of Marginal Costing and Absorption Costing – Difference between Marginal and Absorption Costing – Marginal Cost Equation - CVP Analysis – Simple Problems in Calculation of Contributions, P/V Ratio, Break- Even Point, Margin of Safety

**UNIT – V**

**Performance Evaluation Techniques:** Introduction to Budgeting and Budgetary Control; Performance Budgeting; Classification of Budget; Fixed and Flexible Budgets, Zero Based Budgeting, Standard Costing and Variance Analysis; Balanced Scorecard; Responsibility Accounting

**Text Books:**

1. Jain S.P., Narang K.L., Agrawal Simmi, Cost & Management Accounting, Kalyani Publishers, ISBN-10. 9327285263 · ISBN-13. 978-9327285260
2. BBM Sharma R.K., Gupta Shashi Cost & Management Accounting, Kalyani Publishers, ISBN 10 932726746X; ISBN 13 9789327267464

**Reference Books:**

1. S.N.Maheswari - Cost and Management Accounting – Sultan Chand Publications ISBN-10. 8180549755; ISBN-13. 978-8180549755
2. Shashi K Gupta and Sharma, Management Accounting – Kalyani Publishers ISBN-10. 9327282558; ISBN-13. 978-9327282559

**Web Links:**

1. <https://archive.nptel.ac.in/courses/110/101/110101132/>
2. [https://onlinecourses.nptel.ac.in/noc20\\_mg53/preview](https://onlinecourses.nptel.ac.in/noc20_mg53/preview)

**Relevant cases have to be discussed in each unit and in examination case is compulsory from any unit.**

## LEGAL ASPECTS OF BUSINESS

Course Code:245MS011

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Identify fundamental legal principal behind contractual Agreements
- CO2:** Explain the salient features of Sale of Goods Act and Negotiable Instruments Act
- CO3:** Assume the consequences of applicability of Companies Act and Partnership Act in business situations.
- CO4:** Build critical thinking through the use of Consumer Rights.
- CO5:** Develop awareness in respect of rules and regulations for Environment Protection.

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	-	1	-	-
<b>CO2</b>	-	-	1	-	-
<b>CO3</b>	-	-	1	-	-
<b>CO4</b>	-	-	1	-	-
<b>CO5</b>	-	-	1	-	-

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### UNIT – I

**The Indian Contract Act 1872:** Meaning and Essentials of contract; Kinds of contract based on validity, formation & performance; law relating to offer and acceptance, consideration, competency to contract, free consent, void agreements, performance of contracts, discharge of contracts, breach of contracts and quasi contract; Special contracts: contract of indemnity and guarantee, bailment and pledge, and agency.

### UNIT – II

**Sale of Goods Act 1930:** Sale and agreement to sell, implied conditions and warranties, Transfer of property, Finder of goods, sale by non-owners, rights of unpaid seller.

**Negotiable Instruments Act 1881:** Meaning and types of negotiable instruments, Parties to negotiable instrument, Dishonor and Discharge of Negotiable Instruments, promissory note, bill of exchange and cheque.

### UNIT – III

**The Companies Act 2013:** Meaning and types, Incorporation, Memorandum & Articles of association, Prospectus, Issue of shares and bonus shares, rights issue, sweat equity, role of directors, share qualification, company meetings. **The Limited Liability Partnership Act 2008:** Meaning and nature of limited partnership, formation, partners & their relations, extent and limitation of liability.

#### **UNIT – IV**

**Consumer Protection Act 1986:** Introduction, Consumer & consumer disputes, Consumer protection council, consumer disputes redress agencies, rights of consumers. **Right to Information Act 2005:** Salient features and coverage of the act, definition of terms information, right, record, public authority; obligations of public authorities, requesting information and functions of PIO.

#### **UNIT – V**

**Information Technology Act 2000:** The rationale behind the act, Digital signature and electronic signature, Electronic Governance. **Environment Protection Act – 1986:** Water, Air Pollution, Green Tribunal in Protecting Environment, Sustainability Reporting Practices.

#### **Text Books:**

1. Rajdeep Banerjee, Joyeeta Banerjee, Legal Aspects of Business, Sage Publications, 1e, 2022. ISBN 10: 9354793177 - ISBN 13: 9789354793172.
2. Ravinder Kumar, Legal Aspects of Business, Cengage Learning, 5e, 2021. ISBN-10: 9353506212 · ISBN-13: 978-9353506216

#### **Reference Books:**

1. Kapoor G. K. & Dhamija Sanjay, Company Law and Practice-A comprehensive text book on Companies Act, Taxman; ISBN-13: 978-9353163754
2. Akhileshwar Patha, Legal Aspects of Business, TMH, 7e, 2019. ISBN-10: 9353163757.

#### **Web Links:**

1. [https://onlinecourses.swayam2.ac.in/cec21\\_mg02/preview](https://onlinecourses.swayam2.ac.in/cec21_mg02/preview)
2. <https://www.classcentral.com/course/swayam-fundamentals-of-legal-aspects-of-business-22987>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## HUMAN RESOURCE MANAGEMENT

Course Code:245MS012

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Explain the evolution, functions, and current trends in HRM
- CO2:** Discover the factors affecting HRP, analyze job analysis techniques, and critique recruitment and selection methods
- CO3:** Assess training needs, design training programs, and evaluate executive development techniques
- CO4:** Appraise employee performance using various methods and evaluate wage administration principles and incentive plans
- CO5:** Evaluate concept of industrial relations, causes of disputes, and propose measures to enhance trade union effectiveness

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	-	-	1	1
<b>CO2</b>	-	-	-	1	1
<b>CO3</b>	-	-	-	1	1
<b>CO4</b>	-	-	-	1	1
<b>CO5</b>	-	-	-	1	1

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### UNIT – I

**Introduction to Human Resource Management:** Introduction, Meaning and Definitions, Nature, Scope, Importance and Objectives of HRM, Evolution of HRM, Functions of HRM, Roles and responsibilities of HR Manager, current trends in HR.

### UNIT – II

**HR Planning, Recruitment and Selection:** Meaning, Objectives, Importance and Process of HRP. Factors Affecting HRP, Job Analysis, Job description and job specification, Recruitment- Purpose, Process, Sources and Methods of Recruitment, Selection-Importance and processes of selection, Types and uses of Tests in selection, Interview-Types and Methods of Selection Interview. Importance and Process of employee Induction/Orientation.

### UNIT – III

**Training and Development:** Meaning, Objectives, Importance of training, Assessment of training needs, Process of training. Methods of Training, Designing a Training Program,



Executive Development, Methods and techniques of Executive Development, Promotion, Transfer, Demotion and Separation, Career Planning, Process, Career Development

#### **UNIT – IV**

**Performance Appraisal:** Meaning, Objectives, Need and Importance of Performance Appraisal, Process of performance appraisal, Different Methods of appraising employee performance. **Wage and Salary Administration:** Objectives and Principles, Essentials of a sound wage structure, Methods of wage payments, Incentive Plans, Types of Incentive Plans, and Profit Sharing, Job evaluation, Fringe benefits and Employee Welfare.

#### **UNIT – V**

**Industrial Relations:** Concept, Meaning, Characteristics, Objectives and Approaches of Industrial Relations, Causes and measures for Industrial Relations, Factors influencing Industrial Relations, Role of Trade Unions, Nature, Problems of Trade Unions, Measures to Strengthen Trade Union Movement in India, Causes for Industrial Disputes, Settlement of Industrial Disputes.

#### **Text Books:**

1. Gary Dessler, Biju Varkkey, (2020), Human Resource Management, 15th edition, Pearson Education. ISBN-10. 9789352862658; ISBN-13. 978-9352862658
2. S.S. Khanka (2019), Human Resource Management, S. Chand & Company Ltd., New Delhi. ISBN-10. 812192300X; ISBN-13. 978-8121923002

#### **Reference Books:**

1. C.B. Mamoria & V.S.P. Rao, Personnel Management (Text and Cases), Himalaya Publishing Houses Pvt. Ltd., Mumbai. ISBN-10. 9350244519; ISBN-13. 978-9350244517
2. Aswathappa K (2021), Human Resource Management: Text and Cases, Tata McGraw-Hill. ISBN-10. 9354600212; ISBN-13. 978-9354600210

#### **Web Links:**

1. <https://archive.nptel.ac.in/courses/110/105/110105069/>
2. [https://onlinecourses.nptel.ac.in/noc21\\_mg21/preview](https://onlinecourses.nptel.ac.in/noc21_mg21/preview)

**Relevant cases have to be discussed in each unit and in examination case is compulsory from any unit.**

## ENTREPRENEURSHIP AND STARTUP ECO-SYSTEM

Course Code:245MS013

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Understand the concept of entrepreneurship and identify the role of entrepreneurship in economic development.
- CO2:** Identify the entrepreneurial strategies and various business models, and develop the entrepreneurial competencies.
- CO3:** Analyze the schematic of the new venture's environment and understand the elements of business plan.
- CO4:** Compare various sources of finance for a new venture and role of central and state government in promoting entrepreneurship
- CO5:** Interpret the institutions supporting the business enterprises at central& state level institutions, and other agencies.

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	-	1	-	-
<b>CO2</b>	-	-	1	-	-
<b>CO3</b>	-	-	1	-	-
<b>CO4</b>	-	-	1	-	-
<b>CO5</b>	-	-	1	-	-

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### UNIT – I

**Foundations of Entrepreneurship:** Concept of Entrepreneur - Types -Functions - Entrepreneurship – Characteristics- Evolution - Entrepreneurial process - Social Entrepreneur - Women Entrepreneur - Role of entrepreneurship in economic development - Constraints for the growth of entrepreneurial culture - Start-up success stories.

### UNIT – II

**Entrepreneurial Strategies and Competencies:** Business Models and Strategy - Entry Wedges - Resource-Based Strategies - Information Rules Strategies - Strategy and Industry Environments - Entrepreneurship competencies - qualities of a successful entrepreneur - Entrepreneurial traits- Institutional Framework - Role of SSI Sector in the Economy.

### UNIT – III

**Start-Up Environment and Business Plan:** Schematic of the New Venture's Environment - Process of Business Environment Analysis - Competitive and Competitor Analysis - Elements of Business plan - Feasibility study – Critiquing the plan - Formalities

and procedures in registration of a business - Regulatory norms and legal aspects - Format and presentation of report – Marketing strategies.

#### **UNIT – IV**

**Managing New Venture and Financing:** Preparing for the new venture launch - new venture expansion strategies - Venture Capital and Angel Investment - Importance and Benefits - Sources of Investment - Role of Central Government and State Government in promoting Entrepreneurship - Introduction to various incentives, subsidies and grants - Export Oriented Units - Fiscal and Tax concessions.

#### **UNIT – V**

**Institutional Financial Support:** Institutions supporting the small business enterprises: Central level institutions, state level institutions, other agencies. DICs - IDC - SFCs - SSIDCs - KVIC – TCO - SISI - NSIC - SIDBI - NBFC's in India

#### **Text Books:**

1. Robert Hisrich, Michael Peters, and Dean Shepherd, Entrepreneurship, 11th Edition, McGraw Hill Education, 2019. ISBN-10. 939011330X · ISBN-13. 978-9390113309
2. Fabio Greco, Startup Ecosystems, Springer publications, 2023, ISBN-13-978-3031344138

#### **Reference Books:**

1. Norman M. Scarborough & Jeffery R. Cornwall, Essentials of Entrepreneurship and Small; ISBN, 0133849791, 9780133849790
2. Business Management IBID Press; Standard Edition ISBN: 10-1921917822.

#### **Web Links:**

1. [https://onlinecourses.nptel.ac.in/noc20\\_mg35/preview](https://onlinecourses.nptel.ac.in/noc20_mg35/preview)
2. [https://onlinecourses.swayam2.ac.in/imb23\\_mg27/preview?ref=schoolokay.in](https://onlinecourses.swayam2.ac.in/imb23_mg27/preview?ref=schoolokay.in)

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## OPERATIONS MANAGEMENT

Course Code:245MS014

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Understand the Relationship of Operations management with other functional areas and different types of Production Systems.
- CO2:** Apply stages of the product design process, analyze value analysis techniques, and critique facility location and layout decisions
- CO3:** Evaluate methods of forecasting, design operation planning strategies, and assess capacity planning techniques including MRP and scheduling
- CO4:** Analyze factors affecting productivity, apply job design principles, and evaluate process flow charts and methods study
- CO5:** Examine the techniques of Statistical Quality Control and Total Quality Management.

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	1	-	-	-
<b>CO2</b>	-	1	-	-	-
<b>CO3</b>	-	1	-	-	-
<b>CO4</b>	-	1	-	-	-
<b>CO5</b>	-	1	-	-	-

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### UNIT – I

**Introduction to Operation Management:** Nature & Scope of Operations Management, Relationship with other functional areas, Recent trends in Operation Management, Manufacturing & Theory of Constraint, Types of Production System, Just in Time (JIT) & lean system.

### UNIT – II

**Product Design & Process Selection:** Stages in Product Design process, Value Analysis, Facility location & Layout: Types, Characteristics, Advantages and Disadvantages, Work measurement, Job design.

### UNIT – III

**Forecasting & Capacity Planning:** Methods of Forecasting, Overview of Operation Planning, Aggregate Production Planning, Production strategies, Capacity Requirement Planning, MRP, Scheduling, Supply Chain Management, Purchase Management, Inventory Management.

## **UNIT – IV**

**Productivity:** Factors Affecting Productivity – Job Design – Process Flow Charts – Methods Study – Work Measurement – Engineering and Behavioral Approaches.

## **UNIT – V**

**Quality Management:** Quality- Definition, Dimension, Cost of Quality, Quality Circles Continuous improvement (Kaizen), ISO (9000&14000 Series), Statistical Quality Control: Variable & Attribute, Process Control, Control Charts -Acceptance Sampling Operating Characteristic Curve (AQL, LTPD, Alpha & Beta risk), Total Quality Management (TQM).

### **Text Books:**

1. Krajewski & Ritzman Operation Management -Strategy and Analysis. Prentice Hall of India. ISBN-13: 9780134742342
2. Panner Selvem, Production and Operation Management, Prentice Hall of India.ISBN-13. 978-8120345553

### **Reference Books:**

1. Charry, S.N, Production and Operation Management- Concepts, Methods Strategy. John Willy & Sons Asia Pvt Limited. ISBN-10. 9353164818; ISBN-13. 978-9353164812
2. K Aswathappa & Sridhar Bhatt, Production & Operations Management, Himalaya, Mumbai.ISBN-10. 9350971887 · ISBN-13. 978-9350971888

### **Web Links:**

1. [https://onlinecourses.nptel.ac.in/noc20\\_me30/preview](https://onlinecourses.nptel.ac.in/noc20_me30/preview)
2. <https://archive.nptel.ac.in/courses/112/107/112107238/>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## FINANCIAL MANAGEMENT

**Course Code:245MS015**

**L      T      P      C**  
**2      1      0      3**

**Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Demonstrate the concept of time value of money.
- CO2:** Explain about the capital budgeting techniques and cost of capital.
- CO3:** Analyze the significance of Capital structure vs. financial structure.
- CO4:** Assess dividend policies of Indian companies, determinants of working capital, analysis of investment in inventory.
- CO5:** Examine the Concepts and Applications of Working Capital Management and Management of Current Assets.

**Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	1	-	-	-	-
<b>CO2</b>	1	-	-	-	-
<b>CO3</b>	1	-	-	-	-
<b>CO4</b>	1	-	-	-	-
<b>CO5</b>	1	-	-	-	-

**Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### **UNIT – I**

**The Finance Function:** Nature and Scope, Evolution of Finance Function, Its New Role in the Contemporary Scenario, Goals of Finance Function, Profit Maximization and Wealth Maximization, the Agency Relationship and Costs; Risk-Return Trade off; Concept of Time Value of Money, Future Value and Present Value and the Basic Valuation Model.

### **UNIT – II**

**The Investment Decision:** Investment Decision Process, Project Generation, Evaluation, Selection, Implementation. Developing Cash Flow, Data for New Projects, Capital Budgeting Techniques: Traditional and DCF Methods. The NPV vs. IRR Debate, Approaches for Reconciliation. Capital Budgeting Decision under Conditions of Risk and Uncertainty.

### **UNIT – III**

**Capital Structure and Cost of Capital:** Capital Structure vs. Financial Structure, Capital Structure Theories: The Modigliani Miller Theory, NI, NOI Theory and Traditional Theory, Cost of Capital: Concept, Importance and Measurement of Cost of Capital, Weighted Average and Marginal Cost of Capital. Financial Leverage, Operating Leverage-and Composite Leverage. EBIT-EPS Analysis, Indifference Point/Break-even Analysis of

Financial Leverage,

#### **UNIT – IV**

**Dividend Decisions:** Dividends and Value of the Firm, Relevance of Dividends, the MM Hypothesis, Factors Determining Dividend Policy, Dividends and Valuation of the Firm, the Basic Models, Forms of Dividend. Declaration and Payment of Dividends. Bonus Shares, Rights Issue, Share splits, Major Forms of Dividends, Cash and Bonus Shares. Dividends and Valuation. Major Theories centered on the works of Gordon, Walter and Lintner.

#### **UNIT – V**

**Working Capital Management:** Working Capital Management: Components of Working Capital, Gross vs. Net Working capital, Determinants of Working Capital Needs, the Operating Cycle Approach. Financing of Working Capital through Bank Finance and Trade Credit, Management of Current Assets, Management of Inventory: Process, Inventory Control Systems, and Analysis of Investment in Inventory.

#### **Text Books:**

1. Prasanna Chandra, Financial Management, 10e, McGraw Hill. ISBN-10. 9353166527 · ISBN-13. 978-9353166526
2. M.Y Khan, P K Jain, Financial Management-Text and Problems, McGraw Hill, ISBN-10. 007106785X · ISBN-13. 978-0071067850

#### **Reference Books:**

1. I M Pandey, Financial Management, Vikas Publications, 11e. ISBN-10. 9325982293 ISBN-13. 978-9325982291
2. James Cvan Horne, Sanjay Dhamija, Financial Management and Policy, Pearson Education, New Delhi, 12e. ISBN 10-9788131754467

#### **Web Links:**

1. [https://onlinecourses.nptel.ac.in/noc20\\_mg31/preview](https://onlinecourses.nptel.ac.in/noc20_mg31/preview)
2. <https://archive.nptel.ac.in/courses/110/107/110107144/>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## BUSINESS RESEARCH METHODOLOGY

Course Code:245MS016

L	T	P	C
2	1	0	3

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Explain the nature and importance of business research, differentiate between types of research and evaluate ethical issues in business research
- CO2:** Apply tools and techniques for collecting primary and secondary data, design appropriate sampling methods, and critique the design of questionnaires and scales
- CO3:** Select appropriate survey research designs, manage fieldwork effectively, and analyze data through editing, coding, and graphical presentation
- CO4:** Formulate hypotheses, apply tests of hypothesis (parametric and non-parametric), and interpret results using statistical tests
- CO5:** Classify and apply multivariate techniques, analyze dependencies and interdependencies among variables

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	1	-	-	-	-
<b>CO2</b>	1	-	-	-	-
<b>CO3</b>	1	-	-	-	-
<b>CO4</b>	1	-	-	-	-
<b>CO5</b>	1	-	-	-	-

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### UNIT – I

**Introduction:** Nature and Importance of Research, the role of Business Research, Types of Research- Pure research vs. Applied research, Qualitative research vs. Quantitative research, Exploratory research, Descriptive research and Experimental research, ethical issues in business research- Defining Research Problem, Steps in Research process, Formulation of Hypothesis, Introduction to Null hypothesis vs. alternative hypothesis.

### UNIT – II

**Data Collection:** Discussion on primary data and secondary data, tools and techniques of collecting data. Methods of collecting data. Sampling design and procedures. Random vs. Non-random sampling techniques, determination of sample size and an appropriate sampling design. Designing of Questionnaire, Measurement and Scaling, Nominal Scale, Ordinal Scale, Interval Scale, Ratio Scale, Guttman Scale, Likert Scale, Schematic, Differential Scale.

### **UNIT – III**

**Survey Research and Data Classification:** Selection of an appropriate survey research design, the nature of field work and Field work management. Media used to communicate with Respondents, Personal Interviews, Telephone interviews, Self-administered Questionnaires, Editing, Coding, Classification of Data, Tables and Graphic Presentation, Preparation and Presentation of Research Report.

### **UNIT – IV**

**Statistical Inference:** Tests of Hypothesis, parametric vs. non-parametric tests, procedure for testing of hypothesis, tests of significance for small samples, application, t-test, Chi Square test.

### **UNIT – V**

**Multivariate Analysis:** Nature of multivariate analysis, classifying multivariate techniques, analysis of dependence, analysis of interdependence. Bi-Variate analysis tests of differences, t test for comparing two means and z-test for comparing two proportions and ANOVA for complex experimental designs

#### **Text Books:**

1. William GZikmund, Adhkari: —Business Research Methods®, Learning, New Delhi ISBN-10. 9353503264 · ISBN-13. 978-9353503260.
2. C.R. Kothari: Research Methodology, methods and Techniques New Age International Publisher. ISBN-10. 9386649225; ISBN-13. 978-9386649225

#### **Reference Books:**

1. Navdeep and Guptha: —Statistical Techniques & Research Methodology®, Kalyani Publishers ISBN-10. 8127245550; ISBN-13. 978-8127245559
2. A.N. Sadhu, Amarjit singh, Research methodology in social sciences, 7th Edition Himalaya Publications.ISBN 978-93-5202-295-3.

#### **Web Links:**

1. [https://onlinecourses.swayam2.ac.in/cec20\\_mg14/preview](https://onlinecourses.swayam2.ac.in/cec20_mg14/preview)
2. <https://archive.nptel.ac.in/courses/110/107/110107080/>

**Relevant cases have to be discussed in each unit and in examination case is compulsory from any unit.**

## STRATEGIC MANAGEMENT

**Course Code:245MS017**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### **Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Elaborate the basic concepts and characteristics of Strategic management.
- CO2:** Build skills to develop strategic vision, mission objectives.
- CO3:** Develop knowledge on types of strategies to implement.
- CO4:** Build awareness on various strategy evaluation and controlling approaches
- CO5:** Visualize various strategies for managing global competition

### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	1	-	-	-	-
<b>CO2</b>	1	-	-	-	-
<b>CO3</b>	1	-	-	-	-
<b>CO4</b>	1	-	-	-	-
<b>CO5</b>	1	-	-	-	-

### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### **UNIT – I**

**Strategic Planning:** Strategic Context and Terminology, Definition of Strategy, Difference between policy, Strategy and Tactic, Difference between Long Range Planning and Strategic Planning, Characteristics of Strategic Decisions, Introduction of strategic management.

### **UNIT – II**

**Strategy Formulation:** Company Mission & Vision Statements, Company goals, features of strategic goals, analyzing the business environment: External environment; Porter's Industry Analysis; Five forces Model. Internal Analysis of the firm, value chain analysis. Strategic Analysis: BCG-Growth Share Matrix- SWOT Analysis, PIMS, Product Market Matrix. Formulating Long-Term Strategies: Concentration, Market Development, Product Development, Horizontal and Vertical Integration, Diversification, Liquidation, Sell-off.

### **UNIT – III**

**Strategy Implementation & Corporate Restructuring:** Strategy and structure; managing strategic change; establishing strategic controls; Management tools in strategy: Benchmarking; Benchmarking practices worldwide; Reengineering:- Systematic approach, clean sheet approach, Reverse Engineering, Balanced Score card. Forms of corporate restructuring; Rational for existence of firms; Organizational forms; Turnaround management; Joint Ventures & Strategic Alliances: Generic motives for a strategic alliance-

types of strategic alliances; managing the alliances; Mergers & Acquisitions.

#### UNIT – IV

**Strategic Evaluation and Control:** Establishing strategic controls - Role of the strategist - benchmarking to evaluate performance - strategic information systems – Guidelines for proper control- Strategic surveillance -strategic audit - Strategy and Corporate Evaluation and feedback in the Indian and international context.

#### UNIT – V

**Global Issues in Strategic Management:** Global challenges, Advantages & Disadvantages of international operations, Communication differences across countries, worldwide tax rates & their impact, Participation of international institutions for international business.

#### Text Books:

1. Managing Business Enterprises: Strategies, Structures and Systems, Bhattacharya, S.K. and N. Venkataraman, Vikas Publishing House. ISBN 0706921984
2. Cases in Strategic Management, Budhiraja, S.B. and M.B. Athreya, Tata McGraw Hill ISBN-13: 978-0074620977 ISBN-10: 0074620975.

#### Reference Books:

1. Strategic Management in Action, Coulter, Mary K, Prentice Hall, 9<sup>th</sup>Edition ISBN-10. 9780132620673; ISBN-13. 978-0132620673
2. Strategic Management, David, Fred R, Prentice Hall.ISBN-10. 8120343387; ISBN-13. 978-8120343382

#### Web Links:

1. <http://tjsec.digimat.in/nptel/courses/video/110108047/L21.html>
2. <https://archive.nptel.ac.in/courses/110/108/110108047/>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## BUSINESS ETHICS AND CORPORATE GOVERNANCE

Course Code:245MS018

L      T      P      C  
 3      0      0      3

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Explain the concept of Business Ethics to provide best practices of business ethics.
- CO2:** Develop adequate knowledge in ethical issues in corporate governance.
- CO3:** Analyze the concepts of ethical decision making in business.
- CO4:** Evaluate the factors facilitating globalization.
- CO5:** Interpret various corporate social responsibilities and practice in professional life.

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	-	1	-	-
<b>CO2</b>	-	-	1	-	-
<b>CO3</b>	-	-	1	-	-
<b>CO4</b>	-	-	1	-	-
<b>CO5</b>	-	-	1	-	-

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### UNIT – I

**Introduction to Business Ethics:** Definition – Principles of Personal Ethics – Principles of Professional Ethics – The Development of Business Ethics – Importance and Need for Business Ethics – Significance of Business Ethics – Values and Ethics in Business.

### UNIT – II

**Corporate Governance** – Definitions – Historical Perspective of Corporate Governance – Significance of Corporate Governance in Developing Countries – Issues in Corporate Governance – Major thrust areas of Corporate Governance – Indian model of Corporate Governance.

### UNIT – III

**Ethical Decision Making in Business** – Ethical Decision making with Cross – holder conflicts and competition – Applying Moral philosophy to Ethical decision making – Kohlberg's Model of Cognitive Moral development – Influences on Ethical Decision making

### UNIT – IV

**Globalization and Business Ethics** – Growth of Global Corporations – Factors Facilitating Globalization – Role of Multinational Corporations – International Business

Issues – International Codes of Business conduct – Challenges of Globalization in the context of Growing market economies – Key Global issues for Business – Corporate Governance is a pre-requisite for Globalization.

## **UNIT – V**

**Corporate Social Responsibility:** Definitions of CSR – Models for implementation of CSR – CSR as a business strategy for sustainable development – Advantages of CSR – Scope of CSR – Understanding Social Responsibility of Business – Protecting and Promoting stake holder's interests.

### **Text Books:**

1. M.G. Velasquez, Business Ethics, Prentice Hall India Limited, New Delhi.ISBN-10. 8120346475. ISBN-13. 978-8120346475.
2. Andrew Crane and Diark Matten, Business Ethics, Oxford Publication, New Delhi.ISBN-10. 0198755961 · ISBN-13. 978-0198755968.

### **Reference Books:**

1. Business Ethis – A Case perspective – O.C. Ferrell, John Fraedrich and Linda Ferrell Cengage Leachery ISBN-10. 8131511197; ISBN-13. 978-8131511190.
2. Business Ethics – An Indian Perspective – A.C. Fernando. Pearson ISBN 9789353437442.

### **Web Links:**

1. <https://archive.nptel.ac.in/courses/110/105/110105079/>
2. [https://onlinecourses.swayam2.ac.in/cec19\\_mg24/preview](https://onlinecourses.swayam2.ac.in/cec19_mg24/preview)

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## RURAL MARKETING

Course Code:245MS019

L      T      P      C  
 3      0      0      3

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Familiarize with the rural economy along with development exercises
- CO2:** Build awareness about the concept and nature of marketing in rural context.
- CO3:** Analyze the concept of product mix decisions.
- CO4:** Interpret the working of pricing policies in rural marketing.
- CO5:** Identify the problems encountered in distribution of logistics.

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	1	-	-	-	-
<b>CO2</b>	1	-	-	-	-
<b>CO3</b>	1	-	-	-	-
<b>CO4</b>	1	-	-	-	-
<b>CO5</b>	1	-	-	-	-

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### UNIT – I

**Rural Economy** - Rural - Urban disparities-policy interventions required - Rural face to Reforms - The Development exercises in the last few decades.

### UNIT – II

**Rural Marketing** - Concept and Scope - Nature of rural markets - attractiveness of rural markets - Rural vs. Urban Marketing - Characteristics of Rural consumers - Buying decision process - Rural Marketing Information System - Potential and size of the Rural Markets.

### UNIT – III

**Selection of Markets** - Product Strategy - Product mix Decisions - Competitive product strategies for rural markets.

### UNIT – IV

**Pricing Strategy** - pricing policies - innovative pricing methods for rural markets - promotion strategy - appropriate media - Designing right promotion mix - promotional campaigns.

## UNIT – V

**Distribution Logistics Management** - Problems encountered - selection of appropriate channels - new approaches to reach out rural markets – Electronic choupal applications.

### Text Books:

1. Balaram Dogra& Karminder Ghuman, RURAL MARKETING: CONCEPT & CASES, Tata McGraw-Hill Publishing Company, New Delhi. ISBN-10. 007066000X · ISBN-13. 978-0070660007
2. A.K. Singh & S. Pandey, RURAL MARKETING: INDIAN PERSPECTIVE. ISBN-10. 8122416837 · ISBN-13. 978-8122416831

### Reference Books:

1. CSG Krishnamacharylu & Laitha Ramakrishna, - RURAL MARKETING, Pearson Education Asia.ISBN 9788131732632
2. Philip Kotler, MARKETING MANAGEMENT, Prentice - Hall India Ltd. New Delhi ISBN-9788131716830

### Web Links:

1. <https://drmcet.digimat.in/nptel/courses/video/110107080/L34.html>
2. [https://onlinecourses.nptel.ac.in/noc20\\_mg49/preview](https://onlinecourses.nptel.ac.in/noc20_mg49/preview)

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## PROJECT MANAGEMENT

Course Code:245MS020

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Explain the basic concepts of project Management
- CO2:** Estimate project planning and risk.
- CO3:** Interpret project financing through techniques
- CO4:** Analyze the concept of Project controlling
- CO5:** Summarize stress management, conflict management and team building

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	1	-	-	-
<b>CO2</b>	-	1	-	-	-
<b>CO3</b>	-	1	-	-	-
<b>CO4</b>	-	1	-	-	-
<b>CO5</b>	-	1	-	-	-

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
<b>CO1</b>	-	1
<b>CO2</b>	-	1
<b>CO3</b>	-	1
<b>CO4</b>	-	1
<b>CO5</b>	-	1

### UNIT – I

**Introduction to Project Management:** Project Characteristics – Project Life Cycle – Project Identification, Formulation and Implementation – Project Management in Different Sectors: Construction, Services Sector, Public Sector and Government Projects. Systems Approach to Project Management.

### UNIT – II

**Project Appraisal:** Project Planning – Steps in Project Planning – Scheduling – Project Appraisal – Feasibility Study – Technical, Commercial, Economic, Financial, Management, Social Cost Benefit Analysis – Project Risk Analysis

### UNIT – III

**Project Finance:** Project Cost Estimation, Project Financing – Investment Criteria, Project Evaluation Techniques – Pay Back Period, Accounting Rate of Return, Net Present Value, Internal Rate of Return, Profitability Index, Cash Flows Estimation for New and Replacement Projects – Cost of Capital, Risk Analysis.

### UNIT – IV

**Project Control:** Network Diagrams, Network Analysis, Critical Path, Quality Management, Project Execution, Monitoring and Control, Agile Project Management, Scrum, Lean Production and Project Management.

**UNIT – V**

**Organizational Behavior and Project Management:** Organizational Structure and Integration, Role of Project Manager, Roles in the Project Team, Project Stakeholder Engagement, Leadership in Project Management, Participative Management, Team Building Approach, Conflict Management in Projects, Stress Management.

**Text Books:**

1. Clifford F. Grey, Erik W. Larson, Gautam V. Desai “Project Management the Managerial Process” Tata Mcgraw Hill, Fourth Edition ISBN-13: 978-9339212032.
2. Pinto K. J. Project Management Pearson Education Second Edition ISBN, 013509755X.

**Reference Books:**

1. John M. Nicholas “Project Management for Business and technology “Pearson Education Second edition. ISBN-13. 978-0130183286
2. Kerzner Harold, “Project Management: A System Approach to Planning, Scheduling, and Controlling” CBS Publishers & Distributors, New Delhi, Second Edition ISBN-13: 978-0470546031 ISBN-10: 0470546034

**Web Links:**

1. [https://onlinecourses.nptel.ac.in/noc23\\_mg124/preview](https://onlinecourses.nptel.ac.in/noc23_mg124/preview)
2. [https://onlinecourses.nptel.ac.in/noc24\\_mg01/preview](https://onlinecourses.nptel.ac.in/noc24_mg01/preview)

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## LOGISTICS AND SUPPLY CHAIN MANAGEMENT

Course Code:245MS021

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Explain the concepts of logistics and supply chain management
- CO2:** Explore the characteristics of different modes of transportation and their roles in the supply chain.
- CO3:** Identify the benefits and constraints of containerization.
- CO4:** Familiarize with essentials and types of packing and packaging.
- CO5:** Summarize the concepts of import and export logistics

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	1	-	-	-	-
<b>CO2</b>	1	-	-	-	-
<b>CO3</b>	1	-	-	-	-
<b>CO4</b>	1	-	-	-	-
<b>CO5</b>	1	-	-	-	-

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### UNIT – I

**Logistics Management and Supply Chain Management** - Definition, Evolution, Importance. The concepts of logistics and Supply Chain Management, Key Drivers of Supply Chain Management and Logistics relationships.

### UNIT – II

**Basics of Transportation-** Transportation Functionality and Principles; Multimodal Transport: Modal Characteristics; Modal Comparisons; International Air Cargo Transport; Coastal and Ocean transportation, Characteristics of shipping transport- Types of Ships.

### UNIT – III

**Containerization:** Genesis, Concept, Classification, Benefits and Constraints; Inland Container Depot (ICD): Roles and Functions, CFS, Export Clearance at ICD; CONCOR; ICDs under CONCOR;

### UNIT – IV

**Packing and Packaging:** Meaning, Functions and Essentials of Packing and Packaging, Packing for Storage- Overseas Shipment- Inland-Transportation- Product content Protection, Packaging Types: Primary, Secondary and Tertiary- Requirements of Consumer Packaging, Channel Member Packaging and Transport Packaging - Shrink packaging -Identification



codes, bar codes, and electronic data interchange (EDI)- Universal Product Code- GS1 Standards- package labels- Symbols used on packages and labels.

## UNIT – V

**Special Aspects of Export Logistics:** Picking, Packing, Vessel Booking [Less-than Container Load (LCL) / Full Container Load (FCL)], Customs, Documentation, Shipment, Delivery to distribution centers, distributors and lastly the retail outlets- Import Logistics: Documents Collection- Valuing- Bonded Warehousing- Customs Formalities

### Text Books:

1. Supply Chain Logistics Management, Bowersox, Closs, Cooper, McGraw Hill. 5<sup>th</sup> Edition, (9<sup>th</sup> reprint), 2021. ISBN-10-0078096642. ISBN-13.9780078096648.
2. World Class Supply Management, Burt, Dobbler, Starling,TMH., 2019. ISBN-10. 0070499330 · ISBN-13. 978-0070499331 ·

### Reference Books:

1. Logistical Management, Donald J Bowersox, David J Closs, TMH,9<sup>th</sup>Edition ISBN-10. 0070068836 · ISBN-13. 978-0070068834.
2. Pierre David, International Logistics, Biztantra. ISBN-13: 978-8177224306 ISBN-10: 8177224301.

### Web Links:

1. <https://archive.nptel.ac.in/courses/110/105/110105141/>
2. <https://www.youtube.com/watch?v=Nrl0CtS1mY>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## BUSINESS TAXATION

**Course Code:245MS022**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>2</b>	<b>1</b>	<b>0</b>	<b>3</b>

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Analyze the tax system in India, including the structure and powers of the Union and States to levy taxes.
- CO2:** Identify the provisions related to small-scale industries and exports under Central Excise.
- CO3:** Explain various infringements of customs law, including offenses and penalties.
- CO4:** Demonstrate the impact of GST on businesses, including the impact on pricing, supply chain, and tax compliance.
- CO5:** Summarize the assessment proceedings under GST, including the filing of returns and refunds.

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	1	-	-	-
<b>CO2</b>	-	1	-	-	-
<b>CO3</b>	-	1	-	-	-
<b>CO4</b>	-	1	-	-	-
<b>CO5</b>	-	1	-	-	-

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
<b>CO1</b>	-	1
<b>CO2</b>	-	1
<b>CO3</b>	-	1
<b>CO4</b>	-	1
<b>CO5</b>	-	1

### UNIT – I

**Introduction:** Objectives of Taxation - Canons of Taxation - Tax system in India - Direct and Indirect Taxes - Meaning and Types - Powers of Union and States to levy taxes.

### UNIT – II

**Central Excise Duty:** Classification - Levy and Collection of Excise Duty - Clearance of Excisable goods - Exemption from Excise Duty - Excise and Small-Scale Industries - Excise and Exports - Demand, Refund, Rebate of Central Excise Duty - Offences and Penalties - Settlement - Appellate Provisions.

### UNIT – III

**Customs Duty:** Meaning - Levy and Collection of Customs Duty - Organization of the Customs Department - Officers of the Customs - Powers - Appellate machinery - Infringement of the law - Offences and Penalties - Exemption from Duty - Customs Duty Drawback - Duty Free Zones.

**UNIT – IV**

**GST** - Background behind implementing GST - The need for GST- Business impact Benefits of GST-SGST-CGST and IGST - Taxes covered by GST- Definitions - Scope and Coverage Scope of supply-Levy of tax - Rate Structure -Taxable Events.

**UNIT – V**

**GST** - Assessment Proceedings - Return - Refunds - Input Tax Credit - Reverse charge Mechanism, Transitional Provisions composition under GST- Administrative structure of GST - Officers as per CGST Act - Officers as per SGST Act - Jurisdiction - Appointment Powers.

**Text Books:**

1. Students' Guide to Income Tax, Dr. Vinod K. Singhania & Dr. Monica Singhania, ISBN-13: 978-9391596415 ISBN-10: 939159641X.
2. Direct taxes law & practice, Dr. Vinod K. Singhania & Dr. Kapil Singhania Ahuja Girish and Ravi Gupta, Bharat Law House, Delhi ISBN: 9789357780186

**Reference Books:**

1. "GST Made Easy", Haldia, Arpit, Taxmann Publications. ISBN 9789356223646.
2. Students' Handbook on Goods and Services Tax, Hiregange, Jain and Naik, Puliani and Puliani. ISBN: 978-1-25-902685-0.

**Web Links:**

1. <https://www.youtube.com/watch?v=swrzarYcMvY>
2. [https://www.youtube.com/watch?v=QUI\\_OevD3yw](https://www.youtube.com/watch?v=QUI_OevD3yw)

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## ENTREPRENEURIAL LEADERSHIP

**Course Code:245MS023**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### **Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Explain the concepts of entrepreneurial characteristics
- CO2:** Identify the opportunities for entrepreneurs in India and abroad
- CO3:** Illustrate the fundamentals of entrepreneurial leadership.
- CO4:** Analyze the Integration of leadership qualities with entrepreneurial qualities
- CO5:** Choose the various entrepreneurial challenges.

### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	-	-	1	-
<b>CO2</b>	-	-	-	1	-
<b>CO3</b>	-	-	-	1	-
<b>CO4</b>	-	-	-	1	-
<b>CO5</b>	-	-	-	1	-

### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### **UNIT – I**

**Introduction to Entrepreneurship:** Definition of Entrepreneur, Entrepreneurial traits, Entrepreneurial Culture, Administrative culture Vs Entrepreneurial Culture; Entrepreneur vs. Manager, Entrepreneur vs. Intrapreneur; The Entrepreneurial decision process; Role of Entrepreneurship in Economic Development; Ethics and Social Responsibility of Entrepreneurs; Opportunities for Entrepreneurs in India and abroad; Woman as Entrepreneur.

### **UNIT – II**

**Opportunities for Entrepreneurs in India and Abroad:** Business Excellence: Global developments and strategic business options, achieving sales success in modern B2B markets, Creating and implementing business models 4.0, Looking at some crucial managerial issues over investment management, focusing on the latest techniques in investment decisions, considering some unique problems/issues regarding in mergers and acquisitions.

### **UNIT – III**

**Fundamentals of Leadership:** Definition &meaning of Leadership, Leadership traits& Skills, Effectuation, Lean Start-up and Cognitive Ambiguity, What's different about entrepreneurial leadership? Leadership and you.

**UNIT – IV**

**Leadership Excellence:** Generating team spirit in a high-performance culture, developing a culture to learn and benefit from errors, the ethical dimensions of leadership, optimizing cross-cultural cooperation, Understanding the corporate contexts of business and leadership, Integration of leadership qualities with entrepreneurial qualities

**UNIT – V**

**Challenges for Leaders:** Leadership and Uncertainty, Leadership and Innovation, Leading Diversity and Change, Prediction, Risk and Uncertainty.

**Text Books:**

1. Yulk, Gary, Leadership in Organizations, 7th e Pearson Education ISBN-10, 0132424312; ISBN-13, 978-0132424318.
2. Du Brin, Andrew J, Leadership Principles, Cengage Learning, New Delhi ISBN-10. 9386858738 · ISBN-13. 978-9386858733.

**Reference Books:**

1. Allio, Robert J. Leadership Myths and Realities, Tata McGraw Hill. ISBN-10. 007463125X; ISBN-13. 978-0074631256.
2. Peter G Northouse, Leadership: Theory and Practice, 6ed. Sage.ISBN-10. 1452203407; ISBN-13. 978-1452203409

**Web Links:**

1. [https://onlinecourses.nptel.ac.in/noc21\\_mg70/preview](https://onlinecourses.nptel.ac.in/noc21_mg70/preview)
2. [https://onlinecourses.nptel.ac.in/noc23\\_mg28/preview](https://onlinecourses.nptel.ac.in/noc23_mg28/preview)

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## E-COMMERCE

**Course Code:245MS024**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### **Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Explain the concepts of E commerce and internet terminology
- CO2:** Examine the benefits and issues related to EDI
- CO3:** Identify Various network security threats
- CO4:** Classify different consumer-oriented applications
- CO5:** Differentiate different electronic payment systems

### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	1	-	-	-	-
<b>CO2</b>	1	-	-	-	-
<b>CO3</b>	1	-	-	-	-
<b>CO4</b>	1	-	-	-	-
<b>CO5</b>	1	-	-	-	-

### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	-	1
<b>CO2</b>	-	1
<b>CO3</b>	-	1
<b>CO4</b>	-	1
<b>CO5</b>	-	1

### **UNIT – I**

**Introduction to E-Commerce:** Framework-Classification of electronic commerce -Anatomy of E-Commerce Applications- Components of the I way- Network Access Equipment-Internet Terminology.

### **UNIT – II**

**Electronic Data Interchange-** Benefits-EDI Legal, Security & privacy issues- EDI software implementation- Value added networks-Internal Information Systems- automation of Work flow and Coordination-Customization and Internal Commerce.

### **UNIT – III**

**Network Security and Firewalls-** Client Server Network Security- Emerging client server security threats- Firewalls and network security- Data and message security- Encrypted documents and electronic mail- Hypertext publishing- Technology behind the web- Security and the web.

### **UNIT – IV**

**Consumer Oriented Electronic Commerce:** Consumer Oriented Applications-Mercantile Process Models-Mercantile Models from the Consumers Perspective- Mercantile Models from the Merchants Perspective.

## UNIT – V

**Electronic Payment Systems:** Types-Digital Token Based Electronic Payment System-Smart Cards & Credit Card Electronic Payment Systems -Risk -Designing electronic payment system.

### Text Books:

- 1 Ravi Kalakota & Andrew b.Whinston , “Frontiers of Electronic Commerce”, Dorling Kindersley (India) Pvt.Ltd. ISBN, 8177583921, 9788177583922.
- 2 Bharat Bhasker, “Electronic Commerce”, Tata Mc Graw Hill Publishing Co Ltd, New Delhi.ISBN-13: 978-0070264328 ISBN-10: 0070264325

### Reference Books:

- 1 Daniel Minoli, Emma Minoli “Web Commerce Technology Handbook”, Tata McGraw Hill Publishing, New Delhi.ISBN-13: 978-0074637425 ISBN-10: 0074637428.
- 2 Dr.C.S.Rayudu, ”E-Commerce & E-Business”, Himalaya Publishing House, New Delhi. ISBN-81-203-2432-3

### Web Links:

- 1 [https://www.techtarget.com/searchcio/definition/e-commerce#%3A~%3Atext%3DE%2Dcommerce%20\(electronic%20commerce\)%20is%20the%20buying%20and%20selling%2C%20consumer%2Dto%2Dbusiness](https://www.techtarget.com/searchcio/definition/e-commerce#%3A~%3Atext%3DE%2Dcommerce%20(electronic%20commerce)%20is%20the%20buying%20and%20selling%2C%20consumer%2Dto%2Dbusiness)
- 2 <https://www.techtarget.com>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## INTELLECTUAL PROPERTY RIGHTS

**Course Code:245MS025**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>

### **Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Compare different IP laws and need for protecting IP
- CO2:** Explain different theories on the concept of property
- CO3:** Identify various functions of WIPO
- CO4:** Analyze the IP laws in India
- CO5:** Differentiate various forms of IPR

### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	1	-	-	-	-
<b>CO2</b>	1	-	-	-	-
<b>CO3</b>	1	-	-	-	-
<b>CO4</b>	1	-	-	-	-
<b>CO5</b>	1	-	-	-	-

### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### **UNIT – I**

**Introduction:** Origin and Development of IPR – Historical and theoretical basis for protection of IPR – Analyzing and understanding the Interpretation of IP laws – Need for Protecting IP

### **UNIT – II**

**Concept of Property:** Theories on concept of property – Nature – Public Vs. Private – Tangible Vs. Intangible – Industrial Vs. Intellectual

### **UNIT – III**

**International IP Regime:** World Intellectual Property Organization (WIPO) – Functions of WIPO – Membership – GATT Agreement – Major Conventions on IP – Berne Convention – Paris Convention – TRIPS agreement.

### **UNIT – IV**

**Indian IP Regime:** Overview of IP laws in India – Major IP Laws in India – International treaties signed by India. IPR and Constitution of India.

## **UNIT – V**

**Forms of IPR:** Forms of IPR – Copyright – Trademark – Patents – Industrial Designs – Trade Secrets – Geographical Indications - Application of different forms of IPR.

### **Text Books:**

- 1 International Encyclopedia of Laws: Intellectual Property (Kluwer Law International) (looseleaf). I, MON K 1401ISBN-10. 8184730683; ISBN-13. 978-8184730685
- 2 V.K.Ahuja, Law relating to Intellectual Property rights, 2nd Edition, LexisNexis. ISBN-10. 8131251659; ISBN-13. 978-8131251652

### **Reference Books:**

- 1 Barrett, Margreth, Intellectual Property,3nd, New York Aspen publishers. ISBN-10. 073559807X; ISBN-13. 978-0735598072
- 2 Nard, Craig Allen, Law of Intellectual Property, 2 nd, New York Aspen publishersSBN-10. 0735579156; ISBN-13. 978-0735579156

### **Web Links:**

- 1 [https://onlinecourses.nptel.ac.in/noc22\\_hs59/preview](https://onlinecourses.nptel.ac.in/noc22_hs59/preview)
- 2 <https://archive.nptel.ac.in/courses/110/105/110105139/>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## KNOWLEDGE MANAGEMENT

**Course Code:245MS026**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>

### **Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Explain the basic concepts of Knowledge Management
- CO2:** Analyze the role of knowledge management in organizational effectiveness
- CO3:** Examine the role of rewarding knowledge within the organization
- CO4:** Identify the role of ICT in KBOs
- CO5:** Explore different technologies to manage knowledge

### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	1	-	-	-	-
<b>CO2</b>	1	-	-	-	-
<b>CO3</b>	1	-	-	-	-
<b>CO4</b>	1	-	-	-	-
<b>CO5</b>	1	-	-	-	-

### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### **UNIT – I**

**Introduction to Knowledge Management:** Knowledge Society - Types of Knowledge - An Introduction to life in organizations - Concept and Characteristics of KBOs - Dimensions of HRM in KBOs - New Role and Challenges for HRM in the KBOs.

### **UNIT – II**

**Managing Knowledge for Organizational Effectiveness:** Process and Methods- Concept of Intellectual Capital and Learning Orientation in the Organizations - Knowledge and Role related issues - Performance Appraisal in a KBO

### **UNIT – III**

**Managing Knowledge and Personnel & Organizational Health** - Rewarding Knowledge - Management of Retention.

### **UNIT – IV**

**ICTs in KBOs** - HRIS for KBOs - Concept, Mechanisms, and Software Orientation - Performance Management – Mechanisms.

## **UNIT – V**

**Technologies to Manage Knowledge:** Artificial Intelligence – Digital Libraries – Repositories – Knowledge Discovery – Creating Systems that Utilize Knowledge - Knowledge Process Outsourcing - Innovation Clusters.

### **Text Books:**

1. Frances Horibe, Managing Knowledge Workers, John Wiley & Sons, ISBN-10. 0471643181. ISBN-13. 978-0471643180.
2. Fernandez & Leidner, knowledge management, PHI Learning, New Delhi ISBN-10. 0765616378; ISBN-13. 978-0765616371

### **Reference Books:**

1. Ganesh Natarajan and Sandhya Shekhar, knowledge management - enabling business growth, Tata McGraw-Hill, New Delhi ISBN-10. 0074637703; ISBN-13. 978-0074637708
2. Mruthyunjaya, knowledge management, PHI Learning, New Delhi. ISBN: 9788120341784

### **Web Links:**

1. [https://onlinecourses.nptel.ac.in/noc23\\_mg96/preview](https://onlinecourses.nptel.ac.in/noc23_mg96/preview)
2. <https://archive.nptel.ac.in/courses/110/105/110105076/>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## TOURISM MANAGEMENT

**Course Code:245MS027**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### **Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Explain different basic concepts of travel and tourism.
- CO2:** Analyze the various types of Tourism
- CO3:** Assess the various forms of Tourism
- CO4:** Explore different tourism marketing strategies
- CO5:** Identify various HRD issues and problems in tourism

### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	1	-	-	-	-
<b>CO2</b>	1	-	-	-	-
<b>CO3</b>	1	-	-	-	-
<b>CO4</b>	1	-	-	-	-
<b>CO5</b>	1	-	-	-	-

### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### **UNIT – I**

**Tourism Overview:** Definition and Historical Development of Tourism, its Structure, Components and Elements. Nature, Characteristics and Significance of Tourism Industry, Approaches to the Study of Tourism. Definition and Distinction between Travelers, Visitors, Excursionist, Tourist and Transit visitor. Travel Motivators and Deterrents.

### **UNIT – II**

**Types of Tourism:** Inter-regional and Intra-regional Tourism, Inbound and Outbound Tourism, Domestic, International Tourism.

### **UNIT – III**

**Forms of Tourism:** Religious, Historical, Social, Adventure, Health, Business, Conferences, Conventions, Incentives, Sports and Adventure, Senior Tourism, Special Interest tourism like Culture or Nature Oriented, Ethnic, Concept of Sustainable Tourism.

### **UNIT – IV**

**Tourism Marketing:** Need for Marketing in Tourism, Defining Tourism Marketing, The Tourist Product, Special Features of Tourism Marketing, Marketing Process, Marketing Research, Market Segmentation, Market Targeting, Tourism Promotion, Advertising, Public Relations.

## UNIT – V

**Human Resource Development for Tourism:** Introduction of HRD Meaning, Concept and Significance, HRD Systems, Models and Practices in Travel Industry, Tourism Manpower Strategies, Training and Development, HRD Problems and Issues in Travel Industry.

### Text Books:

1. Jayapalan. N., An Introduction to Tourism. Atlantic Publishers.ISBN-10. 8171569773.
2. Bhatia, A K., The Business of Tourism – Concepts and Strategies. Sterling Publishers Private Limited ISBN, 8120731182, 9788120731189.

### Reference Books:

1. Aggarwal, A. Travel and Tourism in India. Sublime PublishersISBN-10. 8181921259; ISBN-13. 978-8181921253.
2. Gupta, V. K., Tourism in India. Neha Publishers and Distributors ISBN 10: 8121201241 - ISBN 13: 9788121201247.

### Web Links:

1. [https://onlinecourses.swayam2.ac.in/cec20\\_ge19/preview](https://onlinecourses.swayam2.ac.in/cec20_ge19/preview)
2. [https://onlinecourses.swayam2.ac.in/cec19\\_mg29/preview](https://onlinecourses.swayam2.ac.in/cec19_mg29/preview)

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## HEALTH CARE MANAGEMENT

Course Code:245MS028

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Explain the basic concepts of hospital
- CO2:** Analyze the health care system in India
- CO3:** Identify various health care regulations
- CO4:** Explore ethical issues pertaining to hospitals
- CO5:** Examine the medical auditory procedures

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	1	-	-	-	-
<b>CO2</b>	1	-	-	-	-
<b>CO3</b>	1	-	-	-	-
<b>CO4</b>	1	-	-	-	-
<b>CO5</b>	1	-	-	-	-

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### UNIT – I

**Hospital as a System:** Definition of hospital – classification of hospitals – changing role of hospitals – role of hospital administrator – hospital as a system – hospital & community.

### UNIT – II

**Overview of Health Care Sector in India** – Primary care – Secondary care – Tertiary care – Rural Medical care – urban medical care – curative care – Preventive care – General & special Hospitals-Understanding the Hospital Management – Role of Medical, Nursing Staff, Paramedical and Supporting Staff - Health Policy - Population Policy - Drug Policy – Medical Education Policy

### UNIT – III

**Health Care Regulation** – WHO, International Health regulations, IMA, MCI, State Medical Council Bodies, Health universities and Teaching Hospitals and other Health care Delivery Systems

### UNIT – IV

**Medical Ethics-** Ethical principles, Civic rights, Consumer Protection Act, Patient complaints powers & procedures of the district forum, State and National commission, Patient appeals, Autopsy, Tort liability, Vicarious liability, medical negligence, Central-

& state laws.

#### **UNIT – V**

**Medical Auditory Procedures-** Introduction/need & procedures for medical audit, Audit administration & Regulating Committees-Confidentiality and professional secrecy, ethics of trust and ethics of rights – autonomy and informed consent, under trading of patient rights – universal accessibility – equity and social justice, human dignity.

#### **Text Books:**

1. Peter, Z& Fredrick, B. HEALTH ECONOMICS, Oxford Publications, New York. ISBN-10:0195108132. ISBN-13:978-0195108132.
2. Shanmugan sundaram, Y., HEALTH ECONOMICS, Oxford Publications New York ISBN-10: 1622659775. ISBN-13: 978-1622659775.

#### **Reference Books:**

1. BM Sakharkar, PRINCIPLES OF HOSPITAL ADMINISTRATION AND PLANNING – Jaypee brothers PublicationsISBN:97881884486322
2. Francis CM,Mario C de Souza ; HOSPITAL ADMINISTRATION – Jaypee brothers Medical Publishers.ISBN-10:8171797210. ISBN-13:978817179729

#### **Web Links:**

1. <https://nptel.ac.in/courses/110104095>
2. <https://archive.nptel.ac.in/courses/110/104/110104095/>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## INTERNATIONAL BUSINESS

Course Code:245MS029

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Explain the fundamental theories, purposes and practices of international business, and better understand why companies engage in it
- CO2:** Analyze the international monetary system
- CO3:** Compare the relationship between government (foreign and domestic) and international business
- CO4:** Identify the different entry strategies in international business
- CO5:** Differentiate relationship between strategy and structure in international context and strategizing with social responsibility

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	-	1	-	-
<b>CO2</b>	-	-	1	-	-
<b>CO3</b>	-	-	1	-	-
<b>CO4</b>	-	-	1	-	-
<b>CO5</b>	-	-	1	-	-

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### UNIT – I

**An Overview of International Business-** Background for International Business - the definition international business - the rise of globalization – India's position in international trade. Theories of International Trade & Investment - the advantages of specialization - the concept of comparative advantage.

### UNIT – II

**Monetary System and Financial Markets-** The International Monetary System - the role of the International Monetary Fund (IMF) - fixed and floating exchange rates - the impact of European currency (EURO) and US Dollar. International Financial Markets - how a foreign exchange market function.

### UNIT – III

**Integration and Trade Policies-** Economic Integration among Countries - the levels of economic integration - the various arguments of economic integration. Trade and Investment Policies - the role of foreign aid in international trade and investment - the goals and function of WTO.

#### **UNIT – IV**

**International Operations & Logistics-** Starting International Operations- various entry strategies used by firms to initiate international business activity - indirect exporting and importing - advantages and disadvantages of licensing. International Logistics - international logistics - the usefulness of free trade zones.

#### **UNIT – V**

**Organization Structure in MNCs and Social Responsibility-** Implementing International strategy: Organizational structure in MNC's; relationship between strategy and structure in international context; strategizing with social responsibility.

#### **Text Books:**

1. Han, Jerry C. Y., Wild, John J., Wild, Kenneth L., International Business: The Challenges of Globalization, 4th Edition, Prentice Hall.ISBN:0135032814, ISBN:9780135032817
2. William H. A. Johnson, Global Strategy: Developing an effective strategy in global business, 2020, Routledge.ISBN-13:978-0367468552

#### **Reference Books:**

1. Charles W. Hill, International Business: Competing in the Global Marketplace, 11th Edition, McGraw-Hill Custom Publishing, North Ryde.ISBN-10:9789353162382, ISBN-13:978-9353162382.
2. George Stonehouse, David Campbell, Jim Hamill, Tony Purdie, Global Transnational Business, Strategy and Management, 2nd Edition, Wiley.ISBN:978-1-119-21952-1.

#### **Web Links:**

1. [https://onlinecourses.nptel.ac.in/noc20\\_mg54/preview](https://onlinecourses.nptel.ac.in/noc20_mg54/preview)
2. <https://archive.nptel.ac.in/courses/110/107/110107145/>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## MSME MANAGEMENT

**Course Code:245MS030**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>

### **Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Outline the basic concepts of MSMEs
- CO2:** Analyze various Government Schemes for MSMEs
- CO3:** Assess the MSME policy initiatives
- CO4:** Identify the problems of entrepreneurs, starting an enterprise & its professional management.
- CO5:** Evaluate the emerging trends and institutions supporting MSMEs

### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	1	-	-	-	-
<b>CO2</b>	1	-	-	-	-
<b>CO3</b>	1	-	-	-	-
<b>CO4</b>	1	-	-	-	-
<b>CO5</b>	1	-	-	-	-

### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### **UNIT – I**

**MSMEs In India** Concept of Entrepreneur & Entrepreneurship, Qualities of Successful Entrepreneurs, MSMEs: Definition (2020), Features, MSME Registration, Steps involved in setting up MSMEs, Performance, Role& Importance of MSMEs in India and Key Challenges

### **UNIT – II**

**Government Schemes for MSMEs:** Atma-Nirbhar Bharat Government Schemes for MSMEs Udyog, Aadhaar Memorandum scheme, Incubation, Women Entrepreneurship, Grievance Monitoring System, Zero Defect, Zero Effect scheme, Credit Linked Capital Subsidy scheme, Quality Management Standards and Quality technology tools, Atma-Nirbhar Bharat -Introduction Economic Package

### **UNIT – III**

**Policy Initiatives for MSMEs ASPIRE-** A Scheme for Promotion of Innovation, Rural Industry & Entrepreneurship, The MSME Development Act, 2006 (Salient Features), The MSME Development Act (Amendment) Bill, 2015, E-Governance Initiatives/ Digital Initiatives.

#### **UNIT – IV**

**Management of MSME:** Management of Product Line; Communication with clients - Credit Monitoring System - Management of NPAs - Restructuring, Revival and Rehabilitation of MSME, Problems of entrepreneurs – sickness in SMI – Reasons and remedies — Evaluating entrepreneurial performance

#### **UNIT – V**

**Emerging Trends & Institutions Supporting MSMEs** Overview of World Trade Organization (WTO), Intellectual Property Rights (IPR), International SME Network (INSME), Bar Coding and Visit to nearby MSMEs

##### **Text Books:**

1. Vasant Desai, Small Scale Industries and Entrepreneurship, Himalaya Publishing House.ISBN-10: 935024862X, ISBN-13:978-9350248621
2. Poornima M Charanthimath, Entrepreneurship Development Small Business Enterprises, Pearson.ISBN-10: 9353066263, ISBN-13: 978-935066260

##### **Reference Books:**

1. Entrepreneurship and small Business Management: C B Gupta & S S Khanka.ISBN-10:9351610942, ISBN-13:978-9351610946
2. Small Business Entrepreneurship: Paul Burns & Jim Dewhunt. ISBN: 0333914740, 9780333914748.

##### **Web Links:**

1. <http://www.msme.gov.in/>
2. <https://youtu.be/e9fC3choW2M>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## INVESTMENT ANALYSIS AND PORTFOLIO MANAGEMENT

**Course Code:245MS050**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### **Course Outcomes:**

#### **At the end of the Course, Student will be able to:**

- CO1:** Identify the Indian Financial System, investment distinctions, and SEBI's roles.
- CO2:** Analyze risk and return, and evaluate portfolios using the CAPM.
- CO3:** Examine bond valuation and analyze bond management strategies.
- CO4:** Apply equity valuation models and analyze equity using various analytical methods.
- CO5:** Assess mutual fund performance and evaluate using performance models

#### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	1	-	-	-
<b>CO2</b>	-	1	-	-	-
<b>CO3</b>	-	1	-	-	-
<b>CO4</b>	-	1	-	-	-
<b>CO5</b>	-	1	-	-	-

#### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### **UNIT – I**

**Introduction to Investment:** Introduction, Indian Financial System and Structure, Investment, Speculation and Gambling, Features of Investment, Investment Avenues, Investment Process. The Investment Environment, Securities Market of India, Securities Trading and Settlement, Types of Orders, Margin Trading, Roles and Responsibilities of SEBI.

### **UNIT – II**

**Portfolio Analysis:** Risk and Return Analysis, Markowitz Portfolio Theory, Mean – Variance Approach, Portfolio Selection, Efficient Portfolios, Single Index Model, Capital Asset Pricing Model, Arbitrage Pricing Theory.

### **UNIT – III**

**Bond Valuation:** Classification of Fixed Income Securities, Types of Bonds, Interest Rates, Term Structure of Interest Rates, Measuring Bond Yields, Yield to Maturity, Yield to Call, Holding Period Return, Bond Pricing Theorems, Bond Duration, Modified Duration. Active and Passive Bond Management Strategies, Bond immunization, Bond Volatility, Bond Convexity.

**UNIT – IV**

**Equity Valuation:** a) Intrinsic Value versus Market Value, Equity Valuation Models-Delayed Cash Flow Techniques, Dividend Discount Models (DDM), Growth Rate cases for DDM, Free Cash Flow Valuation Approaches, Relative Valuation Techniques, Earnings Multiplier Approach, Price/ Earnings, Price/ Book Value, Price/ Sales Ratio, EVA. b) Fundamental Analysis, Technical Analysis, Efficient Market Hypothesis.

**UNIT – V**

**Performance Evaluation:** Mutual Funds, Types of Mutual Funds Schemes, Structure, Trends in Indian Mutual Funds, Net Asset Value, Risk and Return, Performance Evaluation Models: Sharpe Model, Treynor Model, Jensen Model, Fama's Decomposition

**Text Books:**

1. ZVI Bodie, Alex Kane, Alan J Marcus, Pitabas Mohanty Investments, Mc Graw Hill, 11 e. ISBN-10:8194113857, ISBN-13:978-8194113850.
2. Shalini Talwar, Security Analysis and Portfolio Management, Cengage Learning, ISBN-10:9788131524497, ISBN-13:978-8131524497.

**Reference Books:**

1. Punithavathy Pandian, Security Analysis & Portfolio Management, Vikas.ISBN-10: 9325963086, ISBN-1113:978-9325963085.
2. William. F. Sharpe, Gordon J Alexander & Jeffery V Bailey: Fundamentals of Investments, Prentice Hall.ISBN-10:0132926172, ISBN-13:978-0132926171.

**Web Links:**

1. [https://onlinecourses.nptel.ac.in/noc21\\_mg99/preview](https://onlinecourses.nptel.ac.in/noc21_mg99/preview)
2. [https://onlinecourses.nptel.ac.in/noc23\\_mg62/preview](https://onlinecourses.nptel.ac.in/noc23_mg62/preview)

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## BANKING AND FINANCIAL INSTITUTIONS

Course Code:245MS051

L	T	P	C
3	0	0	3

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Identify the evolution of banking and role of RBI in the Indian financial system.
- CO2:** Analyze and evaluate the structure and functions of RBI and commercial banks
- CO3:** Apply asset/liability management practices and analyze credit risk management models.
- CO4:** Choose the origin, growth, and lending policies of term lending institutions.
- CO5:** Develop new financial instruments and evaluate SEBI and RBI guidelines.

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	1	-	-	-	-
<b>CO2</b>	1	-	-	-	-
<b>CO3</b>	1	-	-	-	-
<b>CO4</b>	1	-	-	-	-
<b>CO5</b>	1	-	-	-	-

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### UNIT – I

**Financial System in India:** Introduction - Evolution of Banking - Phases of development - RBI and the Financial System - Committees on Banking Sector Reforms - Prudential Banking -RBI Guidelines and directions.

### UNIT – II

**RBI and Commercial Banks:** Introduction - Origination, Structure and Functions of RBI and Commercial Banks - Role of RBI and Commercial Banks - Lending and Operation policies - Banks as Intermediaries - NBFCs - Growth of NBFCs - FDI in Banking Sector - Banking Regulations - Law and Practice

### UNIT – III

**Risk Management in Banks:** Introduction - Asset/Liability Management Practices - Credit Risk Management - Credit Risk Models - Country Risk Management - Insurance Regulations and Development Authority (IRDA).

### UNIT – IV

**Financial Institutions and Development Banking:** Introduction - Origin, Growth and Lending Policies of Terms lending Institutions - Working of IDBI - IFCI - STCs - SIDBI - LIC - GIC - UTI - Role of Financial Institutions in Capital Market.

## **UNIT – V**

**New Financial Instruments and Institutions:** Private Banks - Old generation and new generation private banks - Foreign Banks - NSE - Depositories - DFHI - New Equity and Debt Instruments - SEBI and RBI guidelines.

### **Text Books:**

1. Koch W Timothy and Scott S Macdonald, "Bank Management" Thomson (South-Western), Bangalore (Text Book) ISBN-13: 978-0-8144-1643-3
2. Khan M Y., "Indian Financial System", Tata Mc Graw Hill, New Delhi ISBN-10:9353167302, ISBN-13: 978-93533167301.

### **Reference Books:**

1. Srivastava, RM., "Management of Indian Financial Institutions", Himalaya Publishing House, Mumbai ISBN-13: 978-93-5097-911-2
2. Avadhani V A., "Investments and Securities Markets in India", Himalaya Publishing House, Mumbai. ISBN-10. 8183186920.

### **Web Links:**

1. <https://archive.nptel.ac.in/courses/110/105/110105121/>
2. [https://onlinecourses.nptel.ac.in/noc22\\_hs72/preview](https://onlinecourses.nptel.ac.in/noc22_hs72/preview)

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## FINANCIAL MODELLING

**Course Code:245MS052**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>2</b>	<b>0</b>	<b>1</b>	<b>3</b>

**Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Apply tools and techniques of financial modelling using MS Excel.
- CO2:** Analyze financial statements and perform financial ratio analysis
- CO3:** Estimate project finance decisions using time value of money and cost of capital concepts.
- CO4:** Assess the financial statements for equity research analysis.
- CO5:** Apply discounted cash flow and relative valuation methods to prepare valuation models.

**Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	1	-	-	-
<b>CO2</b>	-	1	-	-	-
<b>CO3</b>	-	1	-	-	-
<b>CO4</b>	-	1	-	-	-
<b>CO5</b>	-	1	-	-	-

**Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

**UNIT – I**

**Financial Modelling:** Definition, Tools or Techniques of Financial Modelling – Uses and Limitations– Applications and Types of Financial Models - Process of Financial Model Development.MS Excel for financial Modelling: Formatting of Excel Sheets - Use of Excel Formula Function - Advanced Modelling Techniques- Extrapolation, Histogram - Data Filter and Sort- Charts and Graphs- Table formula and Scenario building. Lookups: VLOOKUP, Match & offset, pivot tables

**UNIT – II**

**Analysis of Financial Statements:** Introduction to Financial Statement Analysis - Financial Reporting Mechanics - Understanding Income Statement, Balance Sheet - Cash Flow Statement - Financial Analysis Techniques - Inventories, Long Lived Assets - Non-Current Liabilities - Financial Statement Application. Financial Ratios: Ratio analysis of industries - Du point Analysis - Peer to peer analysis - Preparation of Financial Analysis report on an industry

### **UNIT – III**

**Business Finance:** Time value of money - long term financing - Cost of capital - Measure of Leverage Project Finance - Project evaluation; stage of project; construction & development phase; funding during investment phase - Costs during investment phase - Life of project - Decision making - Cash flow waterfall & resolve circular reference problem in interest during construction.

### **UNIT – IV**

**Equity Research Modelling:** Prepare an Income Statement, Balance sheet, Cash Flow Statement, Geographic Revenue Sheet, Segment Revenue Sheet, Cost Statement, Debt Sheet, Analyze Revenue Drivers - Forecast Geographic & Segment Revenues, Cost Statement, Debt, Income Statement, Balance Sheet, and Cash Flow Statement. - Performa Adjustments, Income Statement - Compute Margins, Balance Sheet -Compute Ratios - Cash Flow Statement Projection.

### **UNIT – V**

**Valuation:** Discounted Cash Flow Method (DCF), Valuation – Relative Valuation (Football Field Chart) - Valuation – Assumptions for Valuation Model, Prepare Valuation Model, Prepare Presentation Sheet, Prepare Company Overview, Sector Overview

#### **Text Books:**

1. Building Financial Models with Microsoft Excel: A Guide for Business Professionals, by K. Scott Proctor.ISBN-10: 0471661031, ISBN-13:978-0471661030
2. Principles of Financial Modelling: Model Design and Best Practices Using Excel and VBA, by Michael Rees.ISBN-13:978-1118904015

#### **Reference Books:**

1. Financial Modelling by Simon Banning. ISBN-13:978-0262046428
2. Financial Modelling by Paul Pignataro.ISBN-10:1118558766, ISBN-13:1118558768

#### **Web Links:**

1. <https://www.coursera.org/specializations/wharton-business-financial-modeling>
2. [https://onlinecourses.nptel.ac.in/noc21\\_mg93/preview](https://onlinecourses.nptel.ac.in/noc21_mg93/preview)

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## MERGERS, ACQUISITIONS AND CORPORATE RESTRUCTURING

Course Code:245MS053

L	T	P	C
3	0	0	3

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Compare the impact of different types of mergers on stakeholders
- CO2:** Develop strategic M&A decisions using industry life cycle, product life cycle analysis
- CO3:** Construct a comprehensive merger process plan, incorporating target identification
- CO4:** Analyze methods of financing mergers and their implications on capital budgeting decisions
- CO5:** Assess the significance and various forms of corporate restructuring.

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	1	-	-	-	-
<b>CO2</b>	1	-	-	-	-
<b>CO3</b>	1	-	-	-	-
<b>CO4</b>	1	-	-	-	-
<b>CO5</b>	1	-	-	-	-

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### UNIT – I

**Mergers-** types of mergers– theories of mergers- operating, financial and managerial synergy of mergers – value creation in horizontal, vertical and conglomerate mergers – internal and external change forces contributing to M & A activities- Impact of M & A on stakeholders.

### UNIT – II

**M & A – A strategic perspective-** industry life cycle and product life cycle analysis in M&A decision, strategic approaches to M&A- SWOT analysis, BCG matrix. Takeovers, types, takeover strategies, - Takeover defenses – financial defensive measures – methods of resistance – anti-takeover amendments – poison pills Legal aspects of Mergers/amalgamations and acquisitions/takeovers- Combination and Competition Act- Competition Commission of India (CCI), The SEBI Substantial Acquisition of Shares and Takeover code

### UNIT – III

**Merger Process:** Dynamics of M&A process - identification of targets – negotiation – closing the deal. Five-stage model – Due diligence- Types - due diligence strategy and process - due diligence challenges. Process of merger integration – organizational and

human aspects – managerial challenges of M & A.

#### **UNIT – IV**

**Methods of Financing Mergers** – cash offer, share exchange ratio – mergers as a capital budgeting decision Synergies from M&A: Operating and Financial synergy Accounting for amalgamation – amalgamation in the nature of merger and amalgamation in the nature of purchase- pooling of interest method, purchase method – procedure laid down under Indian companies act of 2013.

#### **UNIT – V**

**Corporate Restructuring** – significance - forms of restructuring – joint ventures – sell off and spin off – divestitures – equity carve out – leveraged buy outs (LBO) – management buy outs – master limited partnership– Limited Liability Partnership (LLP) in India: Nature and incorporation of LLP-De merger- strategic alliance buyback of shares.

#### **Text Books:**

1. Value Creation from Mergers and Acquisitions, Sudi Sudarsanam – 1/e, Pearson Education. ISBN-10:0273715399, ISBN-13:978-0273715399
2. Merger Acquisitions & Corporate Restructuring – Chandrashekhar Krishna Murthy & Vishwanath. S. R – Sage Publication. ISBN-10:9780761935865, ISBN-13:978-0761935865.

#### **Reference Books:**

1. Mergers, acquisitions and Corporate Restructuring, Nishikant Jha, Himalaya Publishing House. ISBN:9789350510353
2. Corporate Restructuring, Bhagaban Das, Debdas Raskhit and Sathya Swaroop Debasish, Himalaya Publishing. ISBN-10: 9350516853, ISBN-13:978-9350516850.

#### **Web Links:**

1. <https://nptel.ac.in/courses/110105165>
2. <https://www.coursera.org/specializations/mergersandacquisitions>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## FINANCIAL RISK MANAGEMENT AND FINANCIAL DERIVATIVES

Course Code:245MS054

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Analyze various types of risks and their measurement, and evaluation.
- CO2:** Apply concepts of Economic Capital and RAROC to measure and manage credit.
- CO3:** Estimate the use of forward and futures contracts.
- CO4:** Explain the mechanics and types of swaps, and assess their application.
- CO5:** Compare and analyze options and their pricing.

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	1	-	-	-	-
<b>CO2</b>	1	-	-	-	-
<b>CO3</b>	1	-	-	-	-
<b>CO4</b>	1	-	-	-	-
<b>CO5</b>	1	-	-	-	-

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### UNIT – I

**Introduction:** The concept of Risk- Nature- Need and scope of risk. Source- measurement-identification and evaluation of Risk. Types of risk–Credit, Market, operational risk, Possible Risk events- Risk Indicators. Risk management approaches and methods. Risk reporting process–internal and external.

### UNIT – II

**Risk Measurement at Corporate Level:** Economic capital and RAROC. -Introduction- Meaning of Economic Capital-Probability of Default-Using Risk Adjusted Performance for Business Decisions- Measuring Credit Risk-Measuring Market Risk and measuring operational risk Value at risk (VaR): The concept, Historical Simulation, Monte Carlo simulation, stress testing, back testing

### UNIT – III

**Forwards:** Definition- features and pay-off profile of Forward contract. Valuation of forward contracts. Forward Contracts to manage Commodity price risk- Interest rate risk and exchange rate risk. Limitations of Forward contract. **Futures:** Definition. Clearing house- margin requirements- marking to the market. Basis and convergence of future price to spot price. Valuation of Futures contract. Differences between forward contracts and futures contracts. Risk management with Futures contracts–hedge ratio and the portfolio approach to a risk-minimizing hedge.

#### **UNIT – IV**

**Swaps:** Definition- Introduction to types of swaps like Simple Plain Swaps, Interest rate swaps, currency swaps, and others like Accrediting, Amortizing and Roller Coaster Swaps, Basis Swap, CMT Swaps, Total Return Swaps, Credit Default Swaps. Mechanics of Interest rate Swaps and currency swaps.

#### **UNIT – V**

**Options:** Definition - Types - call option- put option- American option and European option. Options- in the money-at the money and out of the money. Option premium-intrinsic value and time value of options. Pricing of call and put options at expiration and before expiration. Options on stock indices and currencies. Introduction to Greeks, Black & Scholes option pricing model (BSOPM): assumptions.

#### **Text Books:**

1. Dun and Bradstreet, Financial Risk Management, Tata Mc Graw hill. ISBN-10: 0070611491, ISBN-13: 9780070611498
2. John C. Hull Sankarshan Basu, Options, Futures and Other Derivatives, Pearson Education. ISBN-10: 933258656X, ISBN-13: 9789332586567

#### **Reference Books:**

1. Paul Hopkins, Kogan Page, Fundamentals of Risk Management, Institute of Risk Management.ISBN-10:0749483075, ISBN-13:978-0749483074
2. Robert A Strong: Derivatives – An Introduction, Thomson.ISBN- 100324273029,ISBN-13:978-0324273021.

#### **Web Links:**

1. <https://archive.nptel.ac.in/courses/110/107/110107128/>
2. [https://onlinecourses.nptel.ac.in/noc22\\_mg91/preview](https://onlinecourses.nptel.ac.in/noc22_mg91/preview)

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## INTERNATIONAL FINANCE

Course Code:245MS055

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Explain the nature, scope, and challenges of International Financial Management
- CO2:** Analyze the evolution and current structure of the International Monetary System
- CO3:** Identify the function and structure of the foreign exchange market
- CO4:** Apply knowledge of exchange rate movements, government influence, and arbitrage.
- CO5:** Develop strategies for effective asset-liability management, international capital budgeting, and financing, including portfolio and cash management techniques.

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	1	-	-	-	-
<b>CO2</b>	1	-	-	-	-
<b>CO3</b>	1	-	-	-	-
<b>CO4</b>	1	-	-	-	-
<b>CO5</b>	1	-	-	-	-

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### UNIT – I

**Introduction:** Nature and Scope of International Financial Management, Domestic FM Vs. IFM, Challenges in International Financial Management. International Flow of Funds: Balance of Payments (BOP), Accounting Components of BOP, Factors affecting International Trade Flows, Agencies that facilitate International Flows. Payment methods of International Trade, Trade Finance Methods, EXIM Bank of India, Amendments in EXIM policy, Regulations and Guidelines.

### UNIT – II

**International Monetary System:** Evolution, Gold Standard, Bretton Woods's System, the Flexible Exchange Rate Regime, Evaluation of Floating Rates, the Current Exchange Rate arrangements, the Economic and Monetary Union (EMU) and Developments.

### UNIT – III

**Foreign Exchange Market:** Function and Structure of the Forex Markets, Major Participants, Types of Transactions and Settlements Dates, Foreign Exchange Quotations. Process of Arbitrage, Speculation in the Forward Market. Currency Futures and Options Markets, Overview of the other markets, Euro Currency Market, Euro Credit Market, Euro Bond Market, International Stock Market.

**UNIT – IV**

**Exchange Rates:** Measuring Exchange Rate Movements, Factors influencing Exchange Rates. Government influence on Exchange Rates, Exchange Rate Systems. Managing Foreign Exchange Risk. International Arbitrage and Interest Rate Parity. Relationship between Inflation, Interest Rates and Exchange Rates, Purchasing Power Parity, International Fisher Effect, Fisher Effect, Interest Rate Parity, Expectations Theory

**UNIT – V**

**Asset-Liability Management:** Foreign Direct Investment, International Capital Budgeting, International Capital Structure and Cost of Capital. International Portfolio Management. International Financing: Equity, Bond Financing, Parallel Loans, International Cash Management, Accounts Receivable Management, Inventory Management.

**Text Books:**

1. O P Agarwal International Financial Management, 3rd Edition HPH ISBN. 978-93-5273-866-3.
2. Gupta Shashi K., Rangi Praneet International Finance 2nd Edition, Kalyani Publishers ISBN 9789353594763

**Reference Books:**

1. Eun C.S., Resnick B.G., "International Financial Management", Tata McGraw Hill Education Pvt. Ltd., 4th Ed. Special Indian Edition. ISBN 978-1-264-41309-6
2. Shailaja G, "International Finance", 2nd Ed. Orient Black Swan. ISBN: 978-0-912503-57.

**Web Links:**

1. [https://ugcmoocs.inflibnet.ac.in/index.php/courses/view\\_pg/733](https://ugcmoocs.inflibnet.ac.in/index.php/courses/view_pg/733)
2. [https://onlinecourses.nptel.ac.in/noc23\\_mg30/preview](https://onlinecourses.nptel.ac.in/noc23_mg30/preview)

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## BEHAVIORAL FINANCE

**Course Code:245MS056**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### **Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Explain the nature, scope, objectives, and applications of behavioral finance
- CO2:** Analyze Expected Utility Theory and other decision-making theories under risk and uncertainty
- CO3:** Estimate the impact of behavioral factors on financial markets
- CO4:** Apply behavioral factors to corporate finance decisions
- CO5:** Identify the experimental approaches to measure and understand the emotional and neurophysiological mechanisms

### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	1	-	-	-	-
<b>CO2</b>	-	1	-	-	-
<b>CO3</b>	1	-	-	-	-
<b>CO4</b>	1	-	-	-	-
<b>CO5</b>	1	-	-	-	-

### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### **UNIT – I**

**Introduction to Behavioral Finance:** Nature, scope, objectives and application; Investment Decision Cycle: Judgment under Uncertainty :Cognitive information perception - Peculiarities (biases) of quantitative and numerical information perception - Weber law Subjective probability – Representativeness – Anchoring - Asymmetric perception of gains and losses framing and other behavioral effects - Exponential discounting - Human economic behavior - Discount factors for short and long horizons - Experimental measurement of the discount factor - Hyperbolic discounting.

### **UNIT – II**

**Utility/ Preference Functions:** Expected Utility Theory [EUT] and Rational Thought: Decision making under risk and uncertainty - Expected utility as a basis for decision-making – Theories based on Expected Utility Concept – Decision making in historical prospective - Allais and Elsberg ‘s Paradoxes - Rationality from an economics and evolutionary prospective – Herbert Simon and bounded rationality- Investor rationality and market efficiency - Empirical data that questions market efficiency.

### **UNIT – III**

**Behavioral Factors and Financial Markets:** The Efficient Markets Hypothesis – Fundamental Information and Financial Markets - Information available for Market Participants and Market Efficiency -Market Predictability –The Concept of limits of Arbitrage Model - Asset management and behavioral factors - Active Portfolio Management: return statistics and sources of systematic underperformance. - Fundamental information and technical analysis – the case for psychological influence

### **UNIT – IV**

**Behavioral Corporate Finance:** Behavioral factors and Corporate Decisions on Capital Structure and Dividend Policy - Capital Structure dependence on Market Timing - Mergers and Acquisitions. Systematic approach to using behavioral factors in corporate decision making. External Factors and Investor Behaviour: Mechanisms of the External Factor influence on risk perception and attitudes - Connection to human psychophysiology and emotional regulation Active portfolio management – the source of the systematic underperformance.

### **UNIT – V**

**Emotions and Decision – Making:** Experimental measurement of risk-related - Measuring Risk - Emotional mechanisms in modulating risk-taking attitude - Neurophysiology of risk taking. Personality traits and risk attitudes in different domains.

#### **Text Books:**

1. Behavioral Finance: Psychology, Decision-Making, and Markets", by Ackert and Deaves.ISBN 10-0324661177, ISBN 13-978-0324661170
2. What Investors Really Want - Learn the lessons of behavioral Finance, Meir Statman, McGraw-Hill ISBN-10. 0071741658 · ISBN-13. 978-0071741651

#### **Reference Books:**

1. Understanding Behavioral Finance by Ackert Nofsinger, Pearson Prentice Hall, (4th Edition) ISBN 10-8131515443 ISBN 13-978-8131515440
2. The Psychology of Investing by John R. ISBN 10-1138714801 ISBN 13-978-1138714809

#### **Web Links:**

1. [https://onlinecourses.nptel.ac.in/noc23\\_mg38/preview](https://onlinecourses.nptel.ac.in/noc23_mg38/preview)
2. <https://www.coursera.org/learn/duke-behavioral-finance>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## FINANCIAL ANALYTICS

**Course Code:245MS057**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>2</b>	<b>0</b>	<b>1</b>	<b>3</b>

**Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Identify financial statements to interpret organizational financial health.
- CO2:** Apply time value of money and risk-return measures to make financial decisions.
- CO3:** Analyze investment opportunities using capital budgeting techniques
- CO4:** Assess equity valuations and perform industry, economic, and technical analysis.
- CO5:** Examine bond valuation and immunization strategies to manage fixed-income portfolios effectively.

**Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	1	-	-	-
<b>CO2</b>	-	1	-	-	-
<b>CO3</b>	-	1	-	-	-
<b>CO4</b>	-	1	-	-	-
<b>CO5</b>	-	1	-	-	-

**Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	-	1
<b>CO2</b>	-	1
<b>CO3</b>	-	1
<b>CO4</b>	-	1
<b>CO5</b>	-	1

**UNIT – I**

**Techniques of Financial Statement:** Horizontal, Vertical Analysis, Trend Analysis, Ratio Analysis, Liquidity, Profitability, Solvency and Turnover Ratio, Valuation of Ratios, Statement of Cash Flow, Classification of Cash Flow, Computing Net Cash Flow: Operating, Investing and Financing Activities. Reporting and Interpretation using Spreadsheet.

**UNIT – II**

**Time Value of Money:** Future Value: Simple, Compound Interest and Annuity, Present Value: Discounted, Annuity, Equated Loan Amortization, Perpetuity using Spreadsheets. **Risk and Return:** Holding Period Returns, Arithmetic Mean vs Geometric Mean, Risk: Standard Deviation, Coefficient of Variation, Beta, and Covariance of Stock.

**UNIT – III**

**Capital Budgeting Techniques:** Payback Period, Accounting Rate of Return, Net Present Value, Internal Rate of Return, Profitability Index, Decision Tree, Cash Flow in Capital Budgeting, Cost of Capital, Advance Capital Budgeting Techniques, Adjusted Present Value Approach, Competing Project Risk using Spreadsheets.

**UNIT – IV**

**Equity Valuation:** Calculation of Portfolio Mean and Variance, Capital Asset Pricing Model (CAPM), Variance: Covariance Matrix, Estimating Beta and Security Market Line. Industry Analysis, Economic Analysis and Technical Analysis in Stock, Real Option in Capital Budgeting.

**UNIT – V**

**Bond Valuation:** Duration, Duration of Bond with Uneven Payments, Immunization Strategies, Modelling the Term Structure, Calculating Expecting Bond Return in a Single and Multi-period Framework, Semi-annual Transition Matrix, Computation of Bond Beta.

**Text Books:**

1. Financial analytics with R by Mark J. Bennett, Dirk L. Hugen, Cambridge university Press.ISBN 9781316584460
2. Haskell Financial Data Modelling and Predictive Analytics Paperback – Import, by Pavel Ryzhov.ISBN 978-1-78216-943-7

**Reference Books:**

1. Quantitative Financial Analytics: The Path to Investment Profits Paperback – Import by Edward E Williams (Author), John A Dobelman.ISBN 10:9813224258 ISBN 13:9789813224254
2. N R Parasuraman, Financial Management-step by step approach, Cengage, 1e. ISBN 10:9386668556 ISBN 13:978-9386668554

**Web Links:**

1. [https://onlinecourses.nptel.ac.in/noc23\\_mg12/preview](https://onlinecourses.nptel.ac.in/noc23_mg12/preview)
2. <https://www.udemy.com/course/intro-to-business-models-financial-modelling-valuation/>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## STRATEGIC FINANCIAL MANAGEMENT

**Course Code:245MS058**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

**Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Develop and implement strategic financial plans by analyzing financial policies and planning processes.
- CO2:** Apply techniques for investment decision-making under risk and uncertainty
- CO3:** Assess corporate restructuring strategies, like mergers, acquisitions, and divestitures.
- CO4:** Analyze stock exchanges' structures, regulations, and functions'
- CO5:** Discover financial strategies incorporating innovative and hybrid financial instruments

**Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	1	-	-	-	-
<b>CO2</b>	1	-	-	-	-
<b>CO3</b>	1	-	-	-	-
<b>CO4</b>	1	-	-	-	-
<b>CO5</b>	1	-	-	-	-

**Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

**UNIT – I**

**Financial Policy and Strategic Planning** – Strategic Planning Process – Objective and Goals – Major Kinds of Strategies and Policies – Corporate Planning – Process of Financial Planning – Types of Financial Plan

**UNIT – II**

**Investments Decisions Under Risk and Uncertainty** – Techniques of Investment Decision – Risk Adjusted Discount Rate, Certainty Equivalent Factor, Statistical Method, Sensitivity Analysis and Simulation Method – Corporate Strategy and High Technology Investments.

**UNIT – III**

**Expansion and Financial Restructuring** – Corporate Restructuring Mergers and Amalgamations – reasons for mergers, Benefits and Cost of Merger – Takeovers – Business Alliances – Managing an Acquisition – Divestitures – Ownership Restructuring – Privatisation – Dynamics of Restructuring – Buy Back of Shares – Leveraged buy-outs (LBOs) – Divestiture – Demergers.

#### **UNIT – IV**

**Stock Exchanges:** Constitution, Control, functions, Prudential Norms, SEBI Regulations, Sensitive Indices, Investor Services, Grievance Redressal Measures.

#### **UNIT – V**

**Financial Strategy** – Innovative Sources of Finance – Asset Backed Securities – Hybrid Securities namely Convertible and Non-Convertible Debentures, Deep Discount Bonds, Secured Premium Notes, Convertible Preference Shares – Option Financing, Warrants, Convertibles and Exchangeable Commercial Paper.

#### **Text Books:**

- 1 Rajni Sofat & Preeti Hiro, Strategic Financial Management, Phi, Delhi.ISBN 9788120351608
- 2 Weaver & Weston, Strategic Corporate Finance, Cengage Learning, Delhi.ISBN 10:9788131505144 ISBN 13:978-8131505144

#### **Reference Books:**

- 1 Chandra, Prasanna, Financial Management, Tata McGraw Hill, Delhi. ISBN 10.9789339222574 ISBN 13.978-9339222574
- 2 Financial Markets and Institutions, S Gurusamy, Thomson. ISBN 981-254-264-7

#### **Web Links:**

- 1 <https://nptel.ac.in/courses/110108047>
- 2 <https://archive.nptel.ac.in/courses/110/107/110107144/>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## SALES AND RETAIL MANAGEMENT

Course Code:245MS059

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Explain the scope and evolution of retail management.
- CO2:** Differentiate between store-based and non-store-based retail formats.
- CO3:** Apply site analysis techniques for selecting retail locations.
- CO4:** Analyze merchandise buying systems and apply market segmentation concepts in retailing.
- CO5:** Compare traditional and e-retailing methods and assess the impact of in-store technologies.

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
CO1	1	-	-	-	-
CO2	1	-	-	-	-
CO3	1	-	-	-	-
CO4	1	-	-	-	-
CO5	1	-	-	-	-

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
CO1	1	-
CO2	1	-
CO3	1	-
CO4	1	-
CO5	1	-

### UNIT – I

**Introduction** - Definition - scope – Characteristics – Evolution – Functions – The retailing process - Managing a retail store / chain - Classification of retail formats - Private label brands or store brands - Retail industry in India - Principles – Retail Sales Goals – Retailing in India – Retailing across the Globe – Global Retailing Trends – Reasons for Retail Growth – Emerging Trends

### UNIT – II

**Delivering Value Through Retail Formats:** Store Based Retail Formats – Retail Sale by Ownership – On the Basis of Merchandise Offered (Food Based Retailer and General Merchandise Retailers). Non– Store Based (Traditional) Retail Mix and Non– Traditional Selling – Traditional Retailing, Non – Traditional Retailing and Emerging Retail Formats.

### UNIT – III

**Deciding Location:** Store Location – Introduction – Importance – Target and Store Location – Selection of Loyalty – Site Analysis – Trading Area Analysis – Demand Density – Supply Density – Site Availability – Common Errors – Recent Trends in Store Location. Supply Chain Management – The Supply Chain – Evolution – Why SCM –

Innovation in SCM – Hierarchy of Supply Chain Decisions – Warehousing – Major Drivers of Supply Chain – Components of Supply Chain.

#### **UNIT – IV**

**Retail Buying/Merchandise Buying Systems:** Buying System for Staple and Fashion Merchandise – Merchandise Budget Plan – Evaluation of Merchandise Budget Plan – Open-To-Buy System – Allocation of Merchandise to Stores – Analyzing Merchandise Performance – Global Sourcing Decisions – Costs Associated with Global Souring – Managerial Issues – Ethical and Legal issues – Counterfeit Merchandise. Retail Marketing Segmentation: Concept, Significance and Philosophies of Market Segmentation – Identification of Target Market – Market Segmentation Process – Understanding Target Market – Market Demand Potential – market Supply Factors – Key Retail Segments

#### **UNIT – V**

**E-retailing and Technology in Retailing**– Retailing through Internet – Factors Affecting Internet Buying Decisions – Traditional Retailing Vs Cyber Retailing. In Store Technologies, Electronic retailing, Technology. Human Interface, Challenges etc.: Objectives in HRM in Retailing – Functions – Job Analysis Process – Creating Organizational Structure – Forms of Organization – Setting Up a Retail Organization. Category Management: Definition – Significance – Essentials/Prerequisite of Category Management – Category Management Process – Store layout and Design – Establishing a Pricing Strategy: Concept of Merchandise Pricing – Pricing Options – Setting the Retail Price – Price Objectives – Pricing Strategies – Types of Pricing – Price Adjustments and Discrimination.

#### **Text Books:**

1. Retail Management: A Global Perspective –Harjit Singh. Chand Publishing. ISBN-13. 978-8121932073
2. Chetan Bajaj, Rajnish Tuli, Nidhi V Srivastava, ‘Retail Management’, Oxford University Press ISBN-13. 978-0199467440

#### **Reference Books:**

1. Barry Berman, Joel R. Evans ‘Retail management, a strategic approach’ 8th edition, Pearson Education Asia ISBN-10. 0130263346 · ISBN-13. 978-0130263346
2. Arif Sheikh, Kaneez Fatima ‘Retail Management’, 4th edition, Himalaya Publishing House ISBN-10. 8184881932 · ISBN-13. 978-8184881936

#### **Web Links:**

1. [https://onlinecourses.nptel.ac.in/noc22\\_mg51/preview](https://onlinecourses.nptel.ac.in/noc22_mg51/preview)
2. <https://archive.nptel.ac.in/courses/110/105/110105158/>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## CONSUMER BEHAVIOR AND CUSTOMER RELATIONSHIP MANAGEMENT

Course Code:245MS060                      L      T      P      C  
 3      0      0      3

### Course Outcomes:

#### At the end of the Course, Student will be able to:

- CO1: Apply research methods to analyze consumer trends in diverse economic and rural settings.
- CO2: Compare and contrast various consumer behaviour models for strategic application.
- CO3: Examine CRM strategies and their integration with business operations.
- CO4: Assess CRM implementation frameworks and barriers.
- CO5: Analyze the role of call centres and multimedia contact centres in CRM operations.

#### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
CO1	1	-	-	-	-
CO2	1	-	-	-	-
CO3	1	-	-	-	-
CO4	1	-	-	-	-
CO5	1	-	-	-	-

#### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
CO1	1	-
CO2	1	-
CO3	1	-
CO4	1	-
CO5	1	-

### UNIT – I

**Understanding Consumer Behaviour:** Defining Consumer Behaviour, need for Consumer Behaviour, Understanding Consumer through Research Process, Consumer Behaviour in a world of economic instability, Rural Consumer Behaviour, Consumer Segmentation, Targeting and Positioning, Segmentation & Branding, Rural Markets.

### UNIT – II

**Environmental Influences on Consumer Behaviour:** Influence of Culture, Sub Culture, Social Class, Social Group, Family and Personality, Cross-Cultural Consumer Behaviour. Consumer Behaviour Models: Advert Sheth Model, EKB Model, Howard Sheth Model, Family Decision-making Model, Pavlovian Model and Economic Model

### UNIT – III

**Customer Relationship Management Fundamentals:** Definition and Significance of Customer Relationship Marketing, Theoretical perspectives of relationship, Evolution of Relationship marketing, Stages of relationship, Issues of relationship, Purpose of relationship marketing, Approach towards marketing: A paradigm shift, Historical Perspectives, CRM Definitions, Emergence of CRM practice, CRM cycle, Significance of CRM, CRM Strategy, Customer Life Time Value, Relationship Life Cycle.

#### **UNIT – IV**

**Building Customer Relationship Management:** Requisites for Effective Customer acquisition, Customer Knowledge Management for Effective CRM, Customer Retention Process, Strategies to Prevent Defection and Recover Lapsed Customers, CRM Implementation: CRM framework for Implementation, Implementing CRM process, Integration of CRM with ERP System, Barriers to effective CRM Gartner's Competency model of CRM.

#### **UNIT – V**

**Functional Components of CRM:** Database Management- Database Construction, Data Warehousing, architecture, Data Mining. Characteristics, Data Mining tools and techniques, Meaning, Significance, Advantages, Call Centre, Multimedia Contact Centre, Important CRM software

#### **Text Books:**

1. Leon G. Schiffman, Leslie lazer Kanuk, S. Ramesh Kumar, 10e, Pearson ISBN: 9788131731567.
2. Alok Kumar, Chabbi Sinha & Rakesh Kumar, Customer Relationship Management: Concepts & Application Biztantra, Delhi ISBN 9788177226225

#### **Reference Books:**

1. David I. Loudon and Albert J.Della Bitta, Consumer behaviour- concepts and applications, TMH,4e. ISBN 13: 978-0070473812 ...
2. Zubin Sethna, Jim Blythe, Consumer Behavior, Sage Publications, 4e, 2019 ISBN, 1526471078, 9781526471079

#### **Web Links:**

1. <https://archive.nptel.ac.in/courses/110/105/110105074/>
2. <https://archive.nptel.ac.in/courses/110/105/110105145/>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## MARKETING ANALYTICS

Course Code:245MS061

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
2	0	1	3

### Course Outcomes:

#### At the end of the Course, Student will be able to:

- CO1:** Explain the Concepts of Marketing Analytics and their relevance in business,
- CO2:** Make use of MS Excel to deal with Marketing Data at basic level,
- CO3:** Appreciate Customer's journey through Product Selection Process and Customer Lifetime Value,
- CO4:** Develop Analysis in Determining the Pricing Strategies
- CO5:** Analyze the Process of Optimizing Clusters and Measure the Effectiveness of Promotion

#### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	1	-	-	-
<b>CO2</b>	-	1	-	-	-
<b>CO3</b>	-	1	-	-	-
<b>CO4</b>	-	1	-	-	-
<b>CO5</b>	-	1	-	-	-

#### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
<b>CO1</b>	-	1
<b>CO2</b>	-	1
<b>CO3</b>	-	1
<b>CO4</b>	-	1
<b>CO5</b>	-	1

### UNIT – I

**Introduction to Marketing Analytics:** Definition, Need and Scope of Marketing Analytics, Marketing Analytics Vs Marketing Research, Levels in Marketing Analytics, Adoption and Application of Marketing Analytics, Marketing Analytics and Business Intelligence. MS Excel as a Tool for conduction of Marketing Analytics. Using MS Excel to Organize and Summarize Marketing Data: Creation of Pivot Tables and Organizing Data.

### UNIT – II

**Summarizing Marketing Data:** Summarizing Revenue Data: Month-wise and Product-wise. Slicing & Dicing of Data: Pareto Principle, Report Filters and Slicers. Demographic Analysis: Analyzing Sales Data by Age, Gender, Income and Location, Construction of Crosstabs of Two Demographic Variables. Using GETPIVOT Function for Pulling Data. Adding Data Labels and Data Tables.

### UNIT – III

**Customer Analytics:** Customer Journey Mapping and the Process of Mapping (How to). Metrics for Tracking Customer Experience: Customer Feedback Metrics & Behaviour Derived Customer Metrics. Customer Persona, Building a Customer Persona and its

Benefits, Parts of Buyer Persona. What Customer Wants: Using Conjoint Analysis for Levels in Consumer Decision Process in Product Choices and Product Attributes. Customer Lifetime Value (CLV). Calculating Customer Lifetime Value: Creating the Basic Customer Value Template, Measuring Sensitivity Analysis with Two-Way Tables, Estimating the Chance if Customer is still Active.

#### **UNIT – IV**

**Pricing Analytics:** Pricing, Goals of Pricing, Price Elasticity, Estimating Linear and Power Demand Curves, Using Excel Solver to Optimize Price, Incorporating Complementary Products, Using Solver Table to Price Multiple Products and Finding Demand Curve for All Products. Price Bundling, Bundling Prices to Extract Consumer Surplus, Mixed Bundling, Using Evolutionary Solver to Find Optimal Bundle Prices. Price Skimming.

#### **UNIT – V**

**Segmentation & Promotion Analytics:** Segmentation Analytics- Cluster Analysis and its Applications, Location-wise Clustering, Using Solver to find Optimal Clusters. Using Conjoint Analysis to Segment a Market, Using Decision Trees for Segmenting the Market. **Promotion Analytics:** Promotions and Types of Promotions, Discounting & Types of Discounting. Measuring the Effectiveness of Advertising: The Adstock Model. **Media Selection Models:** Linear Media Allocation Model, Quantity Discounts, Monte Carlo Media Allocation Simulation. Pay per Click Advertising.

#### **Text Books:**

1. Seema Gupta & Avadhoot Jathar, Marketing Analytics, Wiley, 2021. ISBN-10: 9354242626 · ISBN-13: 978-9354242625 ·
2. Wayne L. Winston, Marketing Analytics: Data Driven Techniques with Microsoft Excel. ISBN 13-978-1118373439.

#### **Reference Books:**

1. Mike Grigsby, Marketing Analytics, Kogan Page, ISBN-13: 978-0749482169
2. Robert Kozielski, Measuring Marketing Analytics, Emerald Publishing, ISBN: 978-1-78714-836-9

#### **Web Links:**

1. [https://onlinecourses.nptel.ac.in/noc20\\_mg30/preview](https://onlinecourses.nptel.ac.in/noc20_mg30/preview)
2. <https://archive.nptel.ac.in/courses/110/105/110105142/>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## STRATEGIC MARKETING MANAGEMENT

**Course Code:** 245MS062

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### **Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Explain the concepts of vision, mission, objectives, and goals in relation to marketing strategies
- CO2:** Estimate the need for and forms of corporate restructuring.
- CO3:** Interpret marketing strategies across FMCG, industrial, and services sectors, and analyze constraints in effective marketing strategy implementation.
- CO4:** Develop marketing audits to assess strategic effectiveness and measure marketing performance.
- CO5:** Determine the growing importance of public-private partnerships, and assess strategies linking CSR with profitability and sustainability

### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	1	-	-	-	-
<b>CO2</b>	1	-	-	-	-
<b>CO3</b>	1	-	-	-	-
<b>CO4</b>	1	-	-	-	-
<b>CO5</b>	1	-	-	-	-

### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### **UNIT – I**

**Introduction to Strategic Marketing Management:** Strategic marketing process. Concept of strategic marketing. Levels of Strategies-Corporate, Business and Operational level. Strategy Formulation – Vision, Mission, Objectives and Goals of business and their relationship with Strategic Marketing Management. Considerations for formulation of marketing strategies for all components of Product, Price, Promotion and Distribution.

### **UNIT – II**

**Corporate Restructuring and Strategy Evaluation:** Introduction to corporate restructuring, need for corporate restructuring and its forms. Evaluation of strategic alternatives, types of strategic alternatives like portfolio analysis and its techniques. Model as basic foundation of Strategic Marketing - McKinsey's 7s framework for analyzing and improving organizational effectiveness.

### **UNIT – III**

**Marketing Strategy Implementation:** Integration of Marketing Strategies and their application to different business sectors – FMCG, Industrial, & Services. Constraints in marketing strategy implementation.

### **UNIT – IV**

**Marketing Strategy Evaluation:** Marketing Audits & their scope – Measurement of Marketing Performance and its feedback to next year ‘s Marketing strategy formulation. Economic losses due to disasters-Issues and Strategies for preventing disasters and preparedness measures.

### **UNIT – V**

**Recent Trends in Strategic Marketing Management** - Eco-friendly strategies. Growing need of public private partnership. Corporate Social Responsibility (CSR), strategies of linking CSR with profit and sustainability.

#### **Text Books:**

1. Thompson/Strickland, Strategic Management: Concepts and Cases, McGrawHill Companies; 11th edition ISBN-10. 0073037141.ISBN-13. 978-0073037141.
2. David Hunger and Thomas L. Wheelen "Strategic Management" Addison Wesley; 6 Sub edition, ISBN 10: 0201345951

#### **Reference Books:**

1. William F. Glueck, Business Policy and Strategic Management, McGraw-Hill **ISBN-** 13. 978-0070323476
2. Azhar Kazmi, Strategic Management and Business Policy, Third Edition **ISBN** · 9780070263628, 0070263620

#### **Web Links:**

1. <https://archive.nptel.ac.in/courses/110/104/110104055/>
2. <https://nptel.ac.in/courses/110104055>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## DIGITAL AND SOCIAL MEDIA MARKETING

**Course Code:**245MS063

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### **Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Explain the concept, scope, and benefits of digital marketing and compare digital marketing with traditional marketing
- CO2:** Compare various digital marketing channels including website marketing, search engine marketing, social media marketing, and mobile marketing
- CO3:** Develop a digital marketing plan including situational analysis, goals, objectives, marketing strategy, action plan, and budget
- CO4:** Analyze the importance of SEM and online advertising and compare payment methods in online advertising.
- CO5:** Assess the role of social media platforms like Facebook, LinkedIn, and Twitter in customer reach and retention.

### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	1	-	-	-
<b>CO2</b>	-	1	-	-	-
<b>CO3</b>	-	1	-	-	-
<b>CO4</b>	-	1	-	-	-
<b>CO5</b>	-	1	-	-	-

### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	-	1
<b>CO2</b>	-	1
<b>CO3</b>	-	1
<b>CO4</b>	-	1
<b>CO5</b>	-	1

### **UNIT – I**

**Understanding Digital Marketing:** Concept, Need and Scope of Digital Marketing, Comparison of Marketing and Digital Marketing, Components of Digital Marketing, Benefits of Digital Marketing, Digital Marketing Platforms and Strategies, Digital Marketing Trends.

### **UNIT – II**

**Channels of Digital Marketing:** Digital Marketing: Website Marketing, Search Engine Marketing, Online Advertising, Email Marketing, Blog Marketing, Social Media Marketing, Audio, Video and Interactive Marketing, Online Public Relations, Mobile Marketing, Migrating from Traditional Channels to Digital Channels. Marketing in the Digital Era: Segmentation: Importance of Audience Segmentation, Use of Digital Media by different Segments. Organizational Characteristics, Purchasing Characteristics, Using Digital Media for Reach, Acquisition and Retention of New Customers, Digital Media for Customer Loyalty.

### **UNIT – III**

**Digital Marketing Plan:** Need of a Digital Marketing Plan, Elements of a Digital Marketing Plan: Marketing Plan, Executive Summary, Mission, Situational Analysis. Opportunities and Issues, Goals and Objectives, Marketing Strategy, Action Plan, Budget, Writing the Marketing Plan and Implementing the Plan.

### **UNIT – IV**

**Search Engine Marketing (SEM) and Online Advertising:** Importance of SEM, Understanding Web Search: Key Words, HTML Tags, Inbound Links. Online Advertising vs. Traditional Advertising. Payment Methods of Online Advertising: CPM (Cost-per-Thousand) and CPC (Cost-per click). Display of Ads: Choosing a Display Ad Format, Landing Page and its Importance.

### **UNIT – V**

**Social Media Marketing:** Understanding social media, Social Networking with Face book, LinkedIn, Blogging as a Social Medium, Micro blogging with Twitter, Social Sharing with YouTube and social media for Customer Reach, Acquisition and Retention. Measurement of Digital Media: Analyzing Digital Media Performance, Analyzing Website Performance, Analyzing Advertising Performance.

#### **Text Books:**

1. Dinesh Kumar, Marketing in the Digital Age, Sage Publications, 2021. ISBN-10: 9353887682; ISBN-13: 978-9353887681
2. Annmarie Hanlon, Digital Marketing: Strategic Planning & Integration, Sage Publications, 1e, 2019. ISBN-10: 1526426676.

#### **Reference Books:**

1. Chuck Hemann & Ken Burbary, Digital Marketing Analytics, Pearson, 2e. ISBN-10: 9353430194 · ISBN-13: 978-9353430191
2. Judy Strauss & Raymond Frost, E-Marketing, Pearson. ISBN-13: 978-0132953443

#### **Web Links:**

1. [https://onlinecourses.nptel.ac.in/noc22\\_mg109/preview](https://onlinecourses.nptel.ac.in/noc22_mg109/preview)
2. [https://onlinecourses.swayam2.ac.in/ugc19\\_hs26/preview](https://onlinecourses.swayam2.ac.in/ugc19_hs26/preview)

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## SERVICES MARKETING

Course Code:245MS064

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Explain the concepts of services and service marketing.
- CO2:** Identify and explain the key characteristics of services and differentiate the Segmentation, Targeting, Positioning process in services.
- CO3:** Estimate service quality management using models like SERVQUAL and the gap model
- CO4:** Analyze strategies to address the challenges of intangibility, inconsistency, and inseparability of services.
- CO5:** Assess current trends and innovations in services marketing including e-commerce, e-CRM, self-service technologies, and marketing strategies for diverse service categories.

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	1	-	-	-	-
<b>CO2</b>	1	-	-	-	-
<b>CO3</b>	1	-	-	-	-
<b>CO4</b>	1	-	-	-	-
<b>CO5</b>	1	-	-	-	-

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### UNIT – I

**Understanding Services:** Introduction - meaning of service concepts, nature and scope of services, marketing of services versus physical goods, growth of services sector in India, Classification of services. Customer involvement in service process and managing service encounters

### UNIT – II

**Services Marketing:** The distinguishing key characteristics of services, Consumer behaviour in services. Services marketing mix - Product, Pricing, Place, Promotion, People, Physical Evidence and Process. - Service triangle - Segmenting, Targeting and positioning for services marketing.

### UNIT – III

**Role of Quality in Service** – Service Quality management, Dimensions of service quality, – gap model - SERVQUAL – demand management services strategies– service blue printing - Service failures and Recovery strategies, etc.

#### **UNIT – IV**

**Overview of Strategies for Services Marketing** - strategies to deal with intangibility, inventory inconsistency and inseparability of Services - basic service package – new service development stages. Pricing objectives and strategies – service distribution

#### **UNIT – V**

**Contemporary Issues in Service Marketing** - Current trends in services marketing. Ecommerce and e-marketing – e-CRM - Innovations in services marketing- self-service technologies - Marketing of varied services.

##### **Text Books:**

1. Zeithmal, v. A., Bitner, M. J., Gremler, D. D., & Pandit, A, Service Marketing: Integrating Customer Focus Across the Firm, 7TH Edition, McGraw Hill Education. ISBN-13: 978-0132953443
2. Christopher Lovelock, Services Marketing, 8th Edition, Pearson Education. ISBN-10: 1259061043 · ISBN-13: 978-9332587687

##### **Reference Books:**

1. Shankar, R. Services Marketing: The Indian Perspective, Excel. ISBN-10: 8174462678
2. Joachen Wirtz, Patricia Chew and Christopher Lovelock, Essentials of Services Marketing, 2nd Edition, Pearson Education ISBN-10: 9810686188; ISBN-13: 978-9810686185

##### **Web Links:**

1. <https://archive.nptel.ac.in/courses/110/105/110105078/>
2. [https://onlinecourses.nptel.ac.in/noc20\\_mg12/preview](https://onlinecourses.nptel.ac.in/noc20_mg12/preview)

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## MARKETING RESEARCH

**Course Code:245MS065**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

**Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Explain the entry and editing of marketing research data.
- CO2:** Develop the marketing research design and develop a marketing research proposal
- CO3:** Identify the sample design for the marketing research.
- CO4:** Examine the measurement scales and questionnaire design.
- CO5:** Analyze hypothesis testing and data presentation.

**Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	1	-	-	-
<b>CO2</b>	-	1	-	-	-
<b>CO3</b>	-	1	-	-	-
<b>CO4</b>	-	1	-	-	-
<b>CO5</b>	-	1	-	-	-

**Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### **UNIT – I**

**Introducing Spreadsheet:** Choosing the correct tool; Creating and Saving; Spreadsheet workspace; Managing the workspace; Entering and editing data; Data entry; Selecting cells; Saving time when entering data. Presenting a spreadsheet; Number and date/time format tools; Percentages; Dates and Times; Currency; Text; Performing calculations; Basic arithmetic; Using functions; Replicating formulae; Absolute cell addressing; References between worksheets.

### **UNIT – II**

**Marketing Research Design:** The Process of Defining the Problem and Developing an Approach, Defining a Marketing Research Problem, Exploratory, Descriptive, Casual Research Design and Marketing Research Proposal.

### **UNIT – III**

**Sampling and Data Collection:** Sampling Design Process, Classification of Sampling Techniques, Probability and Non-Probability Sampling Techniques, Internet Sampling, Sampling Distribution, Sample Size Determination, Non-Response Issues in Sampling, Sources of Data Collection, Methods of Data Collection.

#### **UNIT – IV**

**Measurement and Scaling:** Concept of Measurement, Types of Measurement Scales: Likert, Semantic Differential, Guttman, Interval, Q-Sort, Nature of Measurement, Characteristics of a Good Measurement, Nature of Attitude Scale, Rating Scale, Ranking Scale, Questionnaire Design, Editing, Coding and Tabulation of data.

#### **UNIT – V**

**Analysis and Presentation of Data:** Data Preparation, Data Preparation Process, Statistically Adjusting Data, Frequency Distribution, Cross Tabulation, Hypothesis Testing, Bi-Variate Analysis, Correlation, Regression, Multi-Variate Analysis, Discriminant, Logit Analysis, Factor Analysis, Cluster Analysis. Report Writing, Report Preparation and Presentation.

#### **Text Books:**

1. Naresh Malhotra, Satyabhushan Dash, Marketing Research, Pearson, 7e, 2019. ISBN-10. 9353433290; ISBN-13. 978-9353433291
2. GC Beri, Marketing Research, 4e, Mc Graw Hill. ISBN 10: 0070620229 / ISBN 13: 9780070620223.

#### **Reference Books:**

1. Donald R Cooper, Pamela S Schindler, Marketing Research Concepts and Cases, Mc Graw Hill. ISBN-13. 978-0070600911
2. David J Luck, Ronald S Rubin, Marketing Research, 9e, PHI. ISBN-13: 978-8120304840 ISBN-10: 8120304845.

#### **Web Links:**

1. <https://archive.nptel.ac.in/courses/110/107/110107080/>
2. [https://onlinecourses.nptel.ac.in/noc20\\_mg49/preview](https://onlinecourses.nptel.ac.in/noc20_mg49/preview)

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## BRAND MANAGEMENT

**Course Code:245MS066**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### **Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Explain the basic concepts of branding,
- CO2:** Analyze brand-related terms and brand positioning
- CO3:** Build brand equity through strategic marketing, brand value, planning, and potential.
- CO4:** Develop and manage brand portfolios, architecture models, and addressing challenges.
- CO5:** Identify extensions' pros and cons, leveraging various secondary brand associations effectively.

### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	1	-	-	-	-
<b>CO2</b>	1	-	-	-	-
<b>CO3</b>	1	-	-	-	-
<b>CO4</b>	1	-	-	-	-
<b>CO5</b>	1	-	-	-	-

### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### **UNIT – I**

**Branding Concepts:** Introduction to Brand, Brand and Branding Basics, Relationship of Brands with Customers, Building Successful Brands. Benefits of branding, Inputs for branding, Model (David Aker's) to develop brand strategy, Brand management process.

### **UNIT – II**

**Terms Associated with Brands:** Understanding Various Terms, Brand Names and Brand Extensions, Co-Branding and Corporate Branding, Brand Associations and Brand Image.

**Brand Positioning:** Definition and importance of positioning. Positioning Strategy: Target market, defining competition, updating positioning overtime.

### **UNIT – III**

**Brand Equity:** Meaning, Relevance of brand equity to business, Brand elements to build brand equity. Designing marketing programme (Product, Price, Distribution channel and IMC strategy) to build brand equity. Brand Processing Brand Evolution: Value of Brand, Brand Planning and Brand Potential.

## **UNIT – IV**

**Brand Portfolio:** Meaning and Objectives of portfolio, Developing portfolio, Challenges in brand portfolio management. **Brand Architecture:** Models of brand architecture, Developing brand architecture, Indicators of brand architecture issues.

## **UNIT – V**

**Product and Brand Extensions:** Advantages of Extensions, Disadvantages of Brand Extensions, Brand Extension Guidelines. **Leveraging Secondary Brand Associations:** Company, Country of origin, Channels of Distribution, Co-Branding, Licensing, Celebrity Endorsement and Events.

### **Text Books:**

1. Strategic Brand Management, 4th Edition. Kevin Lane Keller, Pearson. ISBN-10. 0132664259 · ISBN-13. 978-0132664257
2. Kirti Dutta, Brand Management –Principles and Practices, Oxford Higher Education, New Delhi. ISBN-10. 0198069863 · ISBN-13. 978-0198069867

### **Reference Books:**

1. Philip Kotler, Kevin Lane Keller, Abraham Koshy and Mithileshwar Jha, "Marketing Management", Pearson 14th Edition New Delhi, ISBN: 9788131716830
2. Brand Management: Principles and Practices, Kalyan Chatterjee, Pearson. ISBN: 9780198069867

### **Web Links:**

1. [https://onlinecourses.nptel.ac.in/noc23\\_mg117/preview](https://onlinecourses.nptel.ac.in/noc23_mg117/preview)
2. <https://archive.nptel.ac.in/courses/110/107/110107161/>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## GREEN MARKETING

**Course Code:245MS067**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

**Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Explain the fundamental concepts of green marketing.
- CO2:** Identify the concepts of green products.
- CO3:** Examine the purchase decision of consumer on green products.
- CO4:** Develop the environmental awareness on green products.
- CO5:** Assess the green marketing initiatives.

**Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	1	-	-	-	-
<b>CO2</b>	1	-	-	-	-
<b>CO3</b>	1	-	-	-	-
<b>CO4</b>	1	-	-	-	-
<b>CO5</b>	1	-	-	-	-

**Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

**UNIT – I**

**Green Marketing and Green Product:** Introduction to green marketing-strategic green planning environment and consumption- Green Product- Green Behaviour- Green consumer ‘s motives-Buying strategies - Green Business Opportunities- Designing green products-eco-design to eco- innovation- Fundamentals of green marketing-Establishing Credibility-Green distribution and Packaging Contemporary Government policies and subsidies that aids green product development.

**UNIT – II**

**Green Marketing Concepts:** Green Spinning – Green Selling – Green Harvesting – Enviropreneur Marketing - Compliance Marketing – Green Washing – Climate Performance Leadership Index

**UNIT – III**

**Purchase Decision:** Meaning of Purchase decision – Factors affecting Purchase decision - Steps in the decision-making process - Five stages of consumer buying decision process - Models of buyer decision-making.

#### **UNIT – IV**

**Environmental Consciousness:** Introduction of Environment - Importance of environmentalism - Environmental movement - Benefits of green environment to the society - E-waste exchange - Extended Producer Responsibility Plan - Guidelines for Collection and Storage of E-Waste - Guidelines for Transportation of E-Waste - Guidelines for Environmentally Sound Recycling of E-Waste.

#### **UNIT – V**

**Green Marketing Initiatives:** Green Firms – HCL ‘s Green Management Policy – IBM‘s Green Solutions – IndusInd Bank‘s Solar Powered ATMs – ITCs Paper kraft – Maruti‘s Green Supply Chain – ONCGs Mokshada Green Crematorium – Reva‘s Electric Car – Samsung‘s Eco-friendly handsets- Wipro Infotech‘s Eco-friendly computer peripherals.

#### **Text Books:**

1. Green Marketing and Environmental Responsibility in Modern Corporations, Esakki and Thangasamy, IGI Global.ISBN-10. 1522523316
2. Green Marketing Management, Robert Dahlstrom, Cengage Learning. ISBN · 9780324789140, 0324789149.

#### **Reference Books:**

1. Green Marketing: Challenges and Opportunities for the New Marketing Age, Jacquelyn A. Ottman, NTC Business Books.ISBN 10: 0844232505 / ISBN 13: 9780844232508.
2. The new Rules of Green Marketing, Jacquelyn A. Ottman, Berrett-Koehler Publishers. ISBN-10. 1605098663 · ISBN-13. 978-1605098661

#### **Web Links:**

1. <https://nptel.ac.in/courses/110104055>
2. [https://onlinecourses.nptel.ac.in/noc24\\_mg56/preview](https://onlinecourses.nptel.ac.in/noc24_mg56/preview)

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## PERFORMANCE MANAGEMENT

**Course Code:245MS068**

**L      T      P      C**  
**3      0      0      3**

### **Course Outcomes:**

**At the end of the Course, Student will be able to**

- CO1:** Explain the key concepts of Performance Management.
- CO2:** Identify the process of Performance Management by comparing with Human Resource Management.
- CO3:** Examine the planning and process of Performance Analysis.
- CO4:** Develop the process of Performance Review Discussions and Ratings.
- CO5:** Implement Performance Management System to selected Organizations.

### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	-	-	-	1
<b>CO2</b>	-	-	-	-	1
<b>CO3</b>	-	-	-	-	1
<b>CO4</b>	-	-	-	-	1
<b>CO5</b>	-	-	-	-	1

### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### **UNIT – I**

**Introduction to Performance Management:** Definition of Performance Management, Evolution of Performance Management, Definitions and Differentiation of Terms Related to Performance Management. Role, Importance and Dimensions of Performance Management in organizations, Linkage of Performance Management to Other HR Processes, Performance Management in today's scenario.

### **UNIT – II**

**Performance Management Process:** Relevance of objectives in organizations and Performance Management, organizational and Individual performance in Performance Management, process of Performance Management, Performance Management and Human Resource Management.

### **UNIT – III**

**Performance Planning and Analysis:** Concept of Performance Planning, Performance Planning and Performance Analysis, KPAs and Performance Planning, Components of Performance Planning, Objectives of Performance Analysis, Performance Analysis Process.

## **UNIT – IV**

**Performance Review and Discussion:** Significance of Performance Review in Performance Management, Process of Performance Review, Performance Ratings: Factors affecting appraisals, Methods and Errors, Reducing Rater Biases. Performance Review Discussions: Objectives, Requisites, Process, Role of Mentoring and Coaching in Performance Review Discussions.

## **UNIT – V**

**Implementing Performance Management System:** Operationalizing change through Performance Management Process, Factors affecting Implementation, Pitfalls of Implementation, Experiences in Performance Management: Traditional Practices in the Industry, Recent approaches in practice, Case studies of Performance Management Systems in selected organizations

### **Text Books:**

1. Rao, T.V., "Performance Management and Appraisal Systems – HR Tools for Global competitiveness" Response Books, New Delhi, ISBN 13-978-0761998471.
2. Herman Aguinis, "Performance Management", Pearson Education, 2nd edition ISBN-13: 978-8131725641 ISBN-10: 8131725642.

### **Reference Books:**

1. Kohli A S and Deb T, "Performance Management", Oxford University Press, ISBN-13: 978-0195693379 ISBN-10: 9780195693379
2. Chadha Prem, "Performance Management – It's about Performing – Not just Appraising", Macmillan India Limited, New Delhi, ISBN-13: 978-0333937969

### **Web Links:**

1. <https://archive.nptel.ac.in/courses/110/105/110105137/>
2. <http://digimat.in/nptel/courses/video/110105137/L03.html>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## INTERNATIONAL HUMAN RESOURCE MANAGEMENT

**Course Code:245MS069**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### **Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Explain the concepts of International HRM by comparing with Domestic HRM.
- CO2:** Identify and manage various assignments in international context.
- CO3:** Demonstrate Cross Culture Communication and Negotiation
- CO4:** Analyze different Approaches of Compensation in Global Assignments
- CO5:** Apply the IHRD concepts through Global strategic advancements.

### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	1	-	-	-	-
<b>CO2</b>	1	-	-	-	-
<b>CO3</b>	-	-	1	-	-
<b>CO4</b>	-	-	1	-	-
<b>CO5</b>	-	-	1	-	-

### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### **UNIT – I**

**Introduction:** A Global HR Perspective in New Economy-Challenges of Globalization - Implications of Managing People and Leveraging Human Resource - Strategic Role of International HRM – Distinction between Domestic and International HRM – HR Challenges at International Level.

### **UNIT – II**

**Managing International Assignments:** Significance -Global HR Planning – Staffing policy – Training and development – performance appraisal –International Labour relations – Industrial democracy - Positioning Expatriate – Repatriate – factors of consideration - Strategies - Legal content of Global HRM- International assignments for Women - Problems.

### **UNIT – III**

**Cross Culture Management:** Importance – Concepts and issues – theories, considerations - Problems – Skill building methods – Cross Culture Communication and Negotiation – Cross Culture Teams. Talent crunch – Indian MNCs and Challenges.

#### **UNIT – IV**

**Compensation Management:** Objectives -Importance – Concepts- Trends - Issues – Methods – Factors of Consideration – Models – incentive methods – Approaches of Compensation in Global Assignments - global compensation implications on Indian systems - Performance Management.

#### **UNIT – V**

**Global Strategic Advantages Through HRD:** Measures for creating global HRD Climate – Strategic Framework of HRD and Challenges - Globalization and Quality of Working Life and Productivity – Challenges in Creation of New Jobs through Globalization, New Corporate Culture.

#### **Text Books:**

1. Subba Rao P: —International Human Resource Management, Himalaya Publishing House, Hyderabad. ISBN-10. 9352028376; ISBN-13. 978-9352028375;
2. Nilanjan Sen Gupta: —International Human Resource Management Text and cases, Excel Books, New Delhi · ISBN-10. 8174465197 · ISBN-13. 978-8174465191

#### **Reference Books:**

1. Aswathappa K, Sadhana Dash: —International Human Resource Management, TMH, New Delhi, ISBN-13: 978-0071077941
2. Monir H Tayeb: —International Human Resource Management, Oxford Universities Press, Hyderabad, ISBN: 9780199258093.

#### **Web Links:**

1. <https://www.youtube.com/watch?v=7ea8l0vM0OU>
2. <https://www.youtube.com/watch?v=bxkgpfh58rU>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## HR ANALYTICS

**Course Code:245MS070**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>2</b>	<b>0</b>	<b>1</b>	<b>3</b>

### **Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Gain an understanding of the relevance of HR Analytics in the current scenario.
- CO2:** Develop an understanding of the models of conducting HR Analytics
- CO3:** Use MS Excel for conduction of HR Analytics for key HR Processes
- CO4:** Compare various tools and software technologies used for conduction of descriptive HR Analytics and Visualization of HR Data.
- CO5:** Appreciate the significance of Predictive and Prescriptive Analytics.

### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	1	1	-	-	-
<b>CO2</b>	1	1	-	-	-
<b>CO3</b>	-	1	-	-	-
<b>CO4</b>	-	1	-	-	-
<b>CO5</b>	-	1	-	-	-

### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	-	1
<b>CO2</b>	-	1
<b>CO3</b>	-	1
<b>CO4</b>	-	1
<b>CO5</b>	-	1

### **UNIT – I**

**Introduction to HR Analytics:** History of Different HRM Perspectives, Transition from HRM to HCM and Gaining Sustainable Advantage through HCM. HR Analytics and Changing Role of HR Professionals. Importance, Scope and Benefits of HR Analytics. Levels of Analysis and Conducting analytics. Key Influencers of HR Analytics Process. Big Data Era in HR Analytics, HR Analytics – Linkage to Business Outcomes.

### **UNIT – II**

**Understanding HR Analytics:** Conducting HR Analytics: Models of HR Analytics, How to Conduct HR Analytics. Understanding HR Data: Importance of Data, Types and Scales of Data, Methods of Capturing Data, Data Examination & Purification. Understanding various HR Metrics from the perspective of HR Analytics.

### **UNIT – III**

**Analytics for Key HR Processes Using MS Excel:** HR Analytics for Recruitment & Selection, Training & Development, Performance Appraisal, Talent Management, Employee Engagement, Compensation Management and Expatriate Management.

**UNIT – IV**

**Descriptive Analytics:** Overview of Select Tools for Conduction HR Analytics: MS Excel, R, Tableau, Power BI, Python, SPSS & PSPP. Descriptive Analytics in HR: HR Dashboards using MS Excel, Slicing and Dicing of HR Data using MS Excel Pivot Table Applications, Data Visualization for Key HR processes.

**UNIT – V**

**Predictive & Prescriptive HR Analytics:** Predictive HR Analytics: Correlation, Linear and Multiple Regression, Factor Analysis and Cluster Analysis, Comparison of Means and Analysis of Variance for Manpower Demographics, Employee Satisfaction, And Training Effectiveness etc. Prescriptive HR Analytics, Predictive vs Prescriptive HR Analytics, Future of HR Analytics.

**Text Books:**

1. Rama Shankar Yadav& Sunil Maheshwari, HR Analytics, Wiley, 2021.ISBN: 9789390421558
2. Pratyush Banerjee, Jatin Pandey & Manish Gupta, HR Analytics: Practical Applications of HR Analytics, Sage, 2019. ISBN-13: 978-9353282967

**Reference Books:**

1. Nishant Uppal, Human Resource Analytics, Pearson, 2021. ISBN-10. 9390168406, ISBN-13. 978-9390168408
2. Bharti Motwani, HR Analytics: Practical Approach Using Python, Wiley, 2021. ISBN-10. 935424002X · ISBN-13. 978-9354240027

**Web Links:**

1. [https://onlinecourses.nptel.ac.in/noc24\\_hs126/preview](https://onlinecourses.nptel.ac.in/noc24_hs126/preview)
2. <https://www.coursera.org/learn/human-resources-analytics>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## ORGANIZATION CHANGE AND DEVELOPMENT

**Course Code:**245MS071

**L      T      P      C**  
**3      0      0      3**

### **Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Explain the concepts, types, and models of organizational change.
- CO2:** Identify reasons for resistance to change.
- CO3:** Explain the history, process, and key components of OD.
- CO4:** Develop appropriate intervention strategies for specific organizational contexts.
- CO5:** Analyze different perspectives and concepts of learning organizations, knowledge management, and work culture.

### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	-	-	-	1
<b>CO2</b>	-	-	-	-	1
<b>CO3</b>	-	-	-	-	1
<b>CO4</b>	-	-	-	-	1
<b>CO5</b>	-	-	-	-	1

### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### **UNIT – I**

**Organizational Change:** Introduction, Meaning, Nature and Types of Change, Models of Change - Lewis's Force field, Systems Model, Action research model, organizational vision and strategic planning, Dynamics of planned change, Change and its Impact.

### **UNIT – II**

**Resistance to Change:** Reasons for the resistance, overcoming resistance for the change, Systematic approach to make change, Factors for effective change, Strategies and Skills of leaders for Communicating Change, Designing the change, Implementing Change, Consolidating Change.

### **UNIT – III**

**Organization Development (OD):** Introduction to Organization Development, History of OD, evolution of OD, Process of OD, Challenges to OD, entering into OD relationship, developing a contract, Diagnosing Organizations, Diagnostic Strategies and Skills, Power, Politics and Ethics in OD, Evaluating change and future of Organizational Development, OD Change Agents.

#### **UNIT – IV**

**Organization Development Interventions:** Definition, Types and Process of OD Intervention, Results of OD, Actors to be considered, Choosing and sequencing intervention activities, Typology of interventions based on target groups, Human Process interventions, Structural and Miscellaneous OD Interventions, IT and OD, TQM and OD, Organizational Creativity, OD in International Context.

#### **UNIT – V**

**Perspectives of Organisation Development:** Learning Organisation, Knowledge Management and OD, Organisational Design and Work Culture, Organisational Restructuring.

#### **Text Books:**

1. NilanjanSengupta: Managing Changing Organisations, PHI Learning, New Delhi.ISBN 9788120329652
2. Adrian Thornhill: Managing Change, Pearson Education, New Delhi. Radha R Sharma: Change Management, TMH, New Delhi. ISBN-10. 1259001652; ISBN-13. 978-1259001659.

#### **Reference Books:**

1. Cummings: “Theory of Organisation Development and Change”, Cengage Learning, New Delhi ISBN 9788131516201
2. Robert A Paton: Change Management, Sage Publications, New Delhi.ISBN 1849205256

#### **Web Links:**

1. <https://archive.nptel.ac.in/courses/110/101/110101146/>
2. <https://archive.nptel.ac.in/courses/110/101/110101146/>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## CONTEMPORARY PRACTICES IN HRM

Course Code:245MS072

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Explain Contemporary trends towards a new HR
- CO2:** Develop knowledge on regulations and public policy influenced by social trends, change management and people's completion in labour market.
- CO3:** Identify HR expectations and help to enhance their knowledge and engagement
- CO4:** Determine the management of international workforce and build knowledge on how to opt ethical decision and strategies.
- CO5:** Examine various functions to evaluate and manage Human Resources.

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	-	-	-	1
<b>CO2</b>	-	-	-	-	1
<b>CO3</b>	-	-	-	-	1
<b>CO4</b>	-	-	-	-	1
<b>CO5</b>	-	-	-	-	1

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### UNIT – I

**Introduction:** Contemporary trends towards a new HR, Future agendas, Competition and choice– Introduction, Competitive intensity, Financialization, The impact of increased competitive intensity. People and skills - Demand for people, Supply of people, Demand for skills, Supply of skills, The hourglass metaphor.

### UNIT – II

**Regulation and Public Policy-** A regulatory revolution, Contemporary debates, Likely future developments, The wider public policy agenda. Social trends- Affluence and inequality, Individualism, Ethical awareness. Flexibility and change-Change management, Managing the consequences of change, Flexible working. Competing for people-Reward, Employer branding, Labour market segmentation.

### UNIT – III

**Managing Expectations** -Hopes and expectations, Expectancy theory, Equity theory, psychological contracts, managing expectations in practice, are expectations changing. Engaging people- Defining engagement, Current interest in engagement, Benefits for employees, Benefits for employers, improving levels of employee engagement,

Criticisms of employee engagement initiatives, Line management Managing; knowledge and learning-Human capital, Knowledge management, learning organizations, Managing knowledge workers

#### **UNIT – IV**

**Managing an International Workforce:** Convergence and divergence, Cultural differences, Institutional differences, Expatriates, culturally diverse teams, Structural issues. Managing ethically -Ethical decision-making in HRM, theory, Ethical decision-making in HRM, practice, Equality and diversity. Developing HR strategies- Alternative conceptions of HR strategy, Contingency models, Positioning an organization in the labour market, Contemporary approaches to human resource planning.

#### **UNIT – V**

**Managing the HR Function-**Adding value, Outsourcing, Ulrich's models Evaluating the HR contribution, Evaluation criteria, Evaluation methods and Cutting-edge approaches to evaluation.

#### **Text Books:**

1. Contemporary Issues in Human Resource Management By: Stephen Taylor, Publisher: Chartered Institute of Personnel and Development. ISBN: 9781843980582.
2. Contemporary Human Resource Management Text and Cases, sixth edition, Sage publications. ISBN-10. 1529758270 · ISBN-13. 978-1529758276.

#### **Reference Books:**

1. People Resourcing: Contemporary HRM in Practice: 3rd Paperback by Stephen Pilbeam (Author), Marjorie Corbridge (Author) ISBN, 027370379X, 9780273703792
2. Contemporary Human Resource Practices by Arthy Infanta A. ISBN-13. 979-8887498232

#### **Web Links:**

1. <https://srmuniv.digimat.in/nptel/courses/video/122105020/L22.html>
2. <https://www.youtube.com/watch?v=E5mvG6jrDjo>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## INDUSTRIAL RELATIONS

**Course Code:245MS073**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

**Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Explain the concept and background of industrial relations in India.
- CO2:** Identify the growth, objectives, and legal framework of trade unions in India.
- CO3:** Analyze the concept and levels of workers' participation in management.
- CO4:** Assess the provisions of the Workmen Compensation Act and Employees' State Insurance Act concerning social security.
- CO5:** Discover the causes of employee grievances.

**Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	-	-	1	-
<b>CO2</b>	-	-	-	1	-
<b>CO3</b>	-	-	-	1	-
<b>CO4</b>	-	-	-	1	-
<b>CO5</b>	-	-	-	1	-

**Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

**UNIT – I**

**Industrial Relations Management:** Concept- Evaluation –Background of industrial Relations in India- Influencing factors of IR in enterprise and the consequences. Economic, Social and Political environments- Employment Structure –Social Partnership-Wider approaches to industrial relations- Labour Market.

**UNIT – II**

**Trade Unions:** Introduction-Definition and objectives-growth of Trade Unions in India- trade Unions Act, 1926 and Legal framework-Union recognition-Union Problems-Employees Association-introduction, Objective Membership, Financial Status.

**UNIT – III**

**Quality of Work Life:** Workers' Participation in Management - Worker's Participation in India, shop floor, Plant Level, Board Level- Workers' Welfare in Indian scenario-Collective bargaining concepts & Characteristics –Promoting peace. Wage and Salary administration: Nature & Significance of wage, salary administration, essentials- Minimum wage- Fair wage, Real wage, Incentives & fringe benefits. Issues and Constraints in Wage Determination in India.

#### **UNIT – IV**

**Social Security:** Introduction and types –Social Security in India, Health and Occupational safety programs- Salient features of Workmen Compensation Act and Employees' State Insurance Act relating to social security – Workers' education objectives -Rewarding.

#### **UNIT – V**

**Employee Grievances:** Causes of Grievances –Conciliation, Arbitration and Adjudication procedural aspects for Settlement of Grievances –Standing Orders- Code Discipline. Industrial Disputes: Meaning, nature and scope of industrial disputes - Cases and Consequences of Industrial Disputes –Prevention and Settlement of industrial disputes in India.

#### **Text Books:**

1. Mamoria: "Dynamics of Industrial Relations", Himalaya Publishing House, New Delhi. ISBN-13: 978-9352621699.
2. B.D. Singh: "Industrial Relations" Excel Books, New Delhi. ISBN 10: 8174466193 ISBN 13: 9788174466198.

#### **Reference Books:**

1. Arun Monappa: "Industrial Relations", TMH, New Delhi. ISBN 9780074517703
2. C.S Venkataratnam: "Industrial Relations", Oxford University Press, New Delhi ISBN-13: 978-0199456550

#### **Web Links:**

1. <https://nptel.ac.in/courses/110103506>
2. <https://enine.digimat.in/nptel/courses/video/122102007/L21.html>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## LABOUR WELFARE AND LEGISLATION

Course Code:245MS074

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Explain the key provisions and implications of major welfare legislations in India.
- CO2:** Identify the fundamental aspects of industrial relations legislation, including the Industrial Disputes Act, Industrial Employment Act, and Trade Unions Act.
- CO3:** Examine the main provisions of wage and social security legislation.
- CO4:** Analyze the role of the Indian constitution and various agencies in promoting labour welfare.
- CO5:** Classify statutory and non-statutory labour welfare programs.

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	-	-	1	-
<b>CO2</b>	-	-	-	1	-
<b>CO3</b>	-	-	-	1	-
<b>CO4</b>	-	-	-	1	-
<b>CO5</b>	-	-	-	1	-

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### UNIT – I

**Welfare Legislation:** Factories Act 1948, Mines Act 1952, Plantation Labour Act 1951, Contract Labour (Regulation and Abolition) Act 1970 and A.P. Shops and Establishments Act

### UNIT – II

**Industrial Relations Legislation:** Industrial Disputes Act 1947; Industrial Employment (standing orders) Act 1946 and Trade Unions Act 1926.

### UNIT – III

**Wage and Social Security Legislation:** Payment of wages Act 1936 - Minimum wages Act 1948 - Payment of Bonus Act 1966 -. Payment of Gratuity Act 1972 - Workmen's Compensation Act 1923 - Employees State Insurance Act 1948 - Maternity Benefit Act 1961 and Employees Provident Fund and Miscellaneous Provisions Act 1952.

### UNIT – IV

**Labour Welfare:** Concept, scope and philosophy, principles of labour welfare, Indian constitution on labour, Agencies of labour welfare and their role. Impact of ILO on labour



welfare in India. Labour problems – Indebtedness, Absenteeism, Alcoholism, Personal and Family Counselling.

#### **UNIT – V**

**Labour Welfare Programmes:** Statutory and non-statutory, extra mural and intra mural, Central Board of Workers' Education; Workers' Cooperatives; Welfare Centers, Welfare Officers' Role, Status and Functions. Role of social work in industry

#### **Text Books:**

1. Malik, P.L: "Industrial Law", Eastern Book Company. Lucknow. ISBN 8170129060
2. Moorthy, M.V: "Principles of Labour Welfare", Oxford University Press, New Delhi ISBN 9783659909047

#### **Reference Books:**

1. Pant, S.C: "Indian Labour Problems", Chaitanya Pub. House. Allahabad. ISBN-9780324581621
2. Labour And Industrial Laws, Fourth Edition, ADHIPHI Learning Pvt. Ltd., 1 Jul 2019 ISBN-13-978-9388028936

#### **Web Links:**

1. [https://onlinecourses.nptel.ac.in/noc24\\_mg104/preview](https://onlinecourses.nptel.ac.in/noc24_mg104/preview)
2. <https://www.youtube.com/watch?v=KpsTCmK6TbU>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## COMPENSATION AND REWARD MANAGEMENT

**Course Code:245MS075**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### **Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Explain the fundamental concepts and theories of compensation management
- CO2:** Analyze various pay structures based on job analysis and evaluation.
- CO3:** Identify different types of employee benefits and rewards
- CO4:** Examine the key provisions of Legislation and Compensation Acts.
- CO5:** Simplify the concept of expatriate Compensation.

### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	-	-	-	1
<b>CO2</b>	-	-	-	-	1
<b>CO3</b>	-	-	-	-	1
<b>CO4</b>	-	-	-	-	1
<b>CO5</b>	-	-	-	-	1

### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### **UNIT – I**

**Compensation Management:** An Introduction to Compensation Management, Theories of Compensation management, 3-P Concept in Compensation Management, Strategic Compensation Management, Strategic and Tactical Compensation Issues.

### **UNIT – II**

**Job Design, Job Evaluation and Compensation Structures:** Job Analysis & Design, Job evaluation and methods, understanding market pay and benchmarking, Base pay, Performance based pay, Competency based pay and Team based pay.

### **UNIT – III**

**Benefits and Services:** Employee benefits and rewards, long-term and Short-term benefits and rewards, Administration of benefits and the influencing factors, Employee welfare and services,

### **UNIT – IV**

**Legalization and Compensation:** The legislative process – Payment of Wages Act 1936, Employees Insurance Act 1948, Workers Compensation Act 1923, Employees Provident Fund Act 1952.

## **UNIT – V**

**Executive and International Compensation:** Executive compensation – concepts and elements, Quantitative tools, Expatriate Compensation and its Objectives, Elements of Expatriate's Compensation Package, Laws relating compensation.

### **Text Books:**

1. Compensation Management– by Dipak Kumar Bhattacharyya ISBN 10.9780199456543 ISBN-13.9780199456543
2. Compensation Management in a Knowledge – based World 10th Edition (English, Paperback, Richard I. Henderson), PEARSON ISBN-10. 8131711102; ISBN-13. 978-8131711101

### **Reference Books:**

1. Compensation Management 2nd Edition (English, Paperback, Dipak Kumar Bhattacharyya), Oxford ISBN-10. 9780199456543; ISBN-13. 978-0199456543
2. Compensation and Reward Management Wage and Salary Administration and Benefits by R. C. Sharma, Sulabh Sharma ISBN 9781032626116.466

### **Web Links:**

1. <https://dituniversity.digimat.in/nptel/courses/video/110105069/L10.html>
2. [https://www.youtube.com/watch?v=iY6e\\_NDCJgM](https://www.youtube.com/watch?v=iY6e_NDCJgM)

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## STRATEGIC HUMAN RESOURCE MANAGEMENT

**Course Code:245MS076**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### **Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Explain the concept and importance of Strategic Human Resource Management
- CO2:** Identify the objectives and benefits of strategic HR planning.
- CO3:** Determine the workforce utilization, resourcing, and retention strategies for strategic implementation.
- CO4:** Analyze the levels of strategic HRD planning.
- CO5:** Compare various approaches to HR evaluation.

### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	-	-	-	1
<b>CO2</b>	-	-	-	-	1
<b>CO3</b>	-	-	-	-	1
<b>CO4</b>	-	-	-	-	1
<b>CO5</b>	-	-	-	-	1

### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### **UNIT – I**

**Human Resource Strategy:** Introduction to Strategic Human Resource Management – Evaluation, objectives and Importance of Human Resources Strategy- Strategic fit – A conceptual framework -Human Resources contribution to strategy - Strategy driven role behaviours and practices – Theoretical Perspectives on SHRM approaches - Linking business strategies to HR strategies.

### **UNIT – II**

**Strategic Human Resource Planning:** Objectives, benefits, levels of strategic planning, Activities related to strategic HR Planning-Basic overview of various strategic planning models- Strategic HR Planning Model-Components of the strategic plan.

### **UNIT – III**

**Strategy Implementation:** Strategy implementation as a social issue-The role of Human Resource-Work force utilization and employment practices-Resourcing and Retention Strategies-Reward and Performance management strategies.

## **UNIT – IV**

**Strategic Human Resource Development:** Concept of Strategic Planning for HRD Levels in Strategic HRD planning-Training and Development Strategies-HRD effectiveness.

## **UNIT – V**

**Human Resource Evaluation:** Overview of evaluation, Approaches to evaluation, Evaluation strategic contribution of traditional areas, Evaluating strategic contribution of emerging areas, HR as a profit centre and HR outsourcing,

### **Text Books:**

1. Charles R. Greer: “Strategic Human Resource Management” - A General Manager Approach - Pearson Education, Asia. ISBN 9788177582062
2. Tanuja Agarwala “Strategic Human Resource Management” Oxford University Press, New Delhi. ISBN-13: 978-0195683592 ISBN-10: 9780195683592.

### **Reference Books:**

1. Fombrum Charles & Tichy: “Strategic Human Resource Management” - John Wiley Sons. ISBN-13: 978-0471810797 ISBN-10: 9780471810797.
2. Srinivas R Kandula “Strategic Human Resource Development” PHI Learning PVT Limited, New Delhi. ISBN:9788120318120

### **Web Links:**

1. <https://archive.nptel.ac.in/courses/110/101/110101164/>
2. [https://onlinecourses.nptel.ac.in/noc23\\_mg64/preview](https://onlinecourses.nptel.ac.in/noc23_mg64/preview)

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## DATA ANALYSIS WITH R

Course Code:245MS077

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
2	0	1	3

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Configure and utilize the R environment to import and manage data for analytical purposes.
- CO2:** Apply R data structures and variables to organize and manipulate different types of data effectively.
- CO3:** Implement loops, functions, and control structures in R.
- CO4:** Extract and process web data, and perform text mining using R packages.
- CO5:** Apply data mining and machine learning techniques.

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	1	-	-	-
<b>CO2</b>	-	1	-	-	-
<b>CO3</b>	-	1	-	-	-
<b>CO4</b>	-	1	-	-	-
<b>CO5</b>	-	1	-	-	-

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
<b>CO1</b>	-	1
<b>CO2</b>	-	1
<b>CO3</b>	-	1
<b>CO4</b>	-	1
<b>CO5</b>	-	1

### UNIT – I

**Introduction to R:** Introduction to data analytics, data types and data models, History and Evolution of R, R Features, R environment setup, R basic syntax, R command prompt, R script file, how to import data into R and R packages

### UNIT – II

**R Data Structures, Data Types and Variables:** Studying Vectors, defining factors, defining list, data frames, Matrixes, and arrays, understanding R variables, Data type of variable, Type of operators, what is R decision making, Understanding R if statement, R switch statement.

### UNIT – III

**R- Loops, Functions, Strings, Vectors, Arrays and Factors:** Loops, User defined function, Control structures, data manipulation using r, String construction, R vector creation, access, Manipulate and merge list, Access array elements, Studying R factors, Generate factor levels.

### UNIT – IV

**R Web Data and Text Mining:** Write read Binary file, understanding XML files, Studying R data bases, understanding R my SQL, Query, update tables and rows, create/

drop table using MySQL, Text mining using RQDA and JGR package.

## UNIT – V

**Data Mining and Machine Learning:** Introduction to data mining and machine learning, Support vector machines (SVM), neural networks and deep learning, Model evaluation and hyper parameter tuning.

### Text Books:

1. R for Data science, Dan Toomy, Packt Publishing Ltd2014,ISBN 978-1-78439-086 0
2. Sandip Rakshit, R Programming for Beginners, McGraw Hill Education (India). ISBN-13: 978-9352604555 ISBN-10: 9352604555.

### Reference Books:

1. "Text Mining with R: A Tidy Approach" by Julia Silge and David Robinson Silge, Julia, and David Robinson. Text Mining with R: A Tidy Approach. O'Reilly Media, ISBN-13-978-1491981658
2. Introductory Statistics with R, Peter Dalgaard, Springer Science + Business Media, LLC, ISBN:978-0-387-79053-4

### Web Links:

1. [https://onlinecourses.nptel.ac.in/noc22\\_ma34/preview](https://onlinecourses.nptel.ac.in/noc22_ma34/preview)
2. <https://www.coursera.org/learn/data-analysis-r>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## MARKETING ANALYTICS

Course Code:245MS078

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>2</b>	<b>0</b>	<b>1</b>	<b>3</b>

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Explain the Concepts of Marketing Analytics and their relevance in business,
- CO2:** Make use of MS Excel to deal with Marketing Data at basic level,
- CO3:** Appreciate Customer's journey through Product Selection Process and Customer Lifetime Value,
- CO4:** Conduct Analysis in Determining the Pricing Strategies
- CO5:** Analyze the Process of Optimizing Clusters and Measure the Effectiveness of Promotion

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	1	-	-	-
<b>CO2</b>	-	1	-	-	-
<b>CO3</b>	-	1	-	-	-
<b>CO4</b>	-	1	-	-	-
<b>CO5</b>	-	1	-	-	-

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
<b>CO1</b>	-	1
<b>CO2</b>	-	1
<b>CO3</b>	-	1
<b>CO4</b>	-	1
<b>CO5</b>	-	1

### UNIT – I

**Introduction to Marketing Analytics:** Definition, Need and Scope of Marketing Analytics, Marketing Analytics Vs Marketing Research, Levels in Marketing Analytics, Adoption and Application of Marketing Analytics, Marketing Analytics and Business Intelligence. MS Excel as a Tool for conduction of Marketing Analytics. Using MS Excel to Organize and Summarize Marketing Data: Creation of Pivot Tables and Organizing Data.

### UNIT – II

**Summarizing Marketing Data:** Summarizing Revenue Data: Month-wise and Product-wise. Slicing & Dicing of Data: Pareto Principle, Report Filters and Slicers. Demographic Analysis: Analyzing Sales Data by Age, Gender, Income and Location, Construction of Crosstabs of Two Demographic Variables. Using GETPIVOT Function for Pulling Data. Adding Data Labels and Data Tables.

### UNIT – III

**Customer Analytics:** Customer Journey Mapping and the Process of Mapping (How to). Metrics for Tracking Customer Experience: Customer Feedback Metrics &Behaviour Derived Customer Metrics. Customer Persona, Building a Customer Persona and its

Benefits, Parts of Buyer Persona. What Customer Wants: Using Conjoint Analysis for Levels in Consumer Decision Process in Product Choices and Product Attributes. Customer Lifetime Value (CLV). Calculating Customer Lifetime Value: Creating the Basic Customer Value Template, Measuring Sensitivity Analysis with Two-Way Tables, Estimating the Chance if Customer is still Active.

#### **UNIT – IV**

**Pricing Analytics:** Pricing, Goals of Pricing, Price Elasticity, Estimating Linear and Power Demand Curves, Using Excel Solver to Optimize Price, Incorporating Complementary Products, Using Solver Table to Price Multiple Products and Finding Demand Curve for All Products. Price Bundling, Bundling Prices to Extract Consumer Surplus, Mixed Bundling, Using Evolutionary Solver to Find Optimal Bundle Prices. Price Skimming.

#### **UNIT – V**

**Segmentation & Promotion Analytics:** Segmentation Analytics- Cluster Analysis and its Applications, Location-wise Clustering, Using Solver to find Optimal Clusters. Using Conjoint Analysis to Segment a Market, Using Decision Trees for Segmenting the Market. Promotion Analytics: Promotions and Types of Promotions, Discounting & Types of Discounting. Measuring the Effectiveness of Advertising: The Adstock Model. Media Selection Models: Linear Media Allocation Model, Quantity Discounts, Monte Carlo Media Allocation Simulation. Pay per Click Advertising.

#### **Text Books:**

1. Seema Gupta & Avadhoot Jathar, Marketing Analytics, Wiley, 2021. ISBN-10.9354242626 ISBN-13-978-9354242625
2. Wayne L. Winston, Marketing Analytics: Data Driven Techniques with Microsoft Excel. ISBN-10. 111837343X · ISBN-13. 978-1118373439 ·

#### **Reference Books:**

1. Mike Grigsby, Marketing Analytics, Kogan Page. ISBN-13: 978-0749482169
2. Robert Kozielski, Measuring Marketing Analytics, Emerald Publishing. ISBN: 978-1-78714-836-9.

#### **Web Links:**

1. [https://onlinecourses.nptel.ac.in/noc20\\_mg30/preview](https://onlinecourses.nptel.ac.in/noc20_mg30/preview)
2. <https://archive.nptel.ac.in/courses/110/105/110105142/>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## FINANCIAL ANALYTICS

Course Code:245MS079

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
2	0	1	3

### **Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Examine financial statements to interpret organizational financial health.
- CO2:** Apply time value of money and risk-return measures to make financial decisions.
- CO3:** Analyze investment opportunities using capital budgeting techniques
- CO4:** Assess equity valuations and perform industry, economic, and technical analysis.
- CO5:** Interpret bond valuation and immunization strategies to manage fixed-income portfolios effectively.

### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	1	-	-	-
<b>CO2</b>	-	1	-	-	-
<b>CO3</b>	-	1	-	-	-
<b>CO4</b>	-	1	-	-	-
<b>CO5</b>	-	1	-	-	-

### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	-	1
<b>CO2</b>	-	1
<b>CO3</b>	-	1
<b>CO4</b>	-	1
<b>CO5</b>	-	1

### **UNIT – I**

**Techniques of Financial Statement:** Horizontal, Vertical Analysis, Trend Analysis, Ratio Analysis, Liquidity, Profitability, Solvency and Turnover Ratio, Valuation of Ratios, Statement of Cash Flow, Classification of Cash Flow, Computing Net Cash Flow: Operating, Investing and Financing Activities. Reporting and Interpretation using Spreadsheet.

### **UNIT – II**

**Time Value of Money:** Future Value: Simple, Compound Interest and Annuity, Present Value: Discounted, Annuity, Equated Loan Amortization, Perpetuity using Spreadsheets.

**Risk and Return:** Holding Period Returns, Arithmetic Mean vs Geometric Mean, Risk: Standard Deviation, Coefficient of Variation, Beta, Covariance of Stock.

### **UNIT – III**

**Capital Budgeting Techniques:** Payback Period, Accounting Rate of Return, Net Present Value, Internal Rate of Return, Profitability Index, Decision Tree, Cash Flow in Capital Budgeting, Cost of Capital, Advance Capital Budgeting Techniques, Adjusted Present Value Approach, Competing Project Risk using Spreadsheets.

#### **UNIT – IV**

**Equity Valuation:** Calculation of Portfolio Mean and Variance, Capital Asset Pricing Model (CAPM), Variance: Covariance Matrix, Estimating Beta and Security Market Line. Industry Analysis, Economic Analysis and Technical Analysis in Stock, Real Option in Capital Budgeting.

#### **UNIT – V**

**Bond Valuation:** Duration, Duration of Bond with Uneven Payments, Immunization Strategies, Modelling the Term Structure, Calculating Expecting Bond Return in a Single and Multi-period Framework, Semi-annual Transition Matrix, Computation of Bond Beta.

#### **Text Books:**

1. Vijay Gupta, Financial Analysis using Excel, VJ Books Inc, Canada. ISBN-10. 9395783109
2. Timothy Mayes, Financial Analysis with MS Excel, Cengage, 7e. ISBN-10. 8131533999 · ISBN-13. 978-8131533994

#### **Reference Books:**

1. Sheeba Kapil, Financial Valuation and Modeling, Wiley, 1e,2022. ISBN-10. 9354246036; ISBN-13. 978-9354246036
2. R. Narayanaswamy, Financial Accounting-Managerial Perspective, PHI,7e,2022. ISBN-10. 9354437656 · ISBN-13. 978-9354437656 ·

#### **Web Links:**

1. <https://www.coursera.org/learn/applying-data-analytics-business-in-finance>
2. <https://www.udemy.com/course/financial-analytics-excel-tableau/>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## HR ANALYTICS

**Course Code:245MS080**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>2</b>	<b>0</b>	<b>1</b>	<b>3</b>

### **Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Develop an understanding of the relevance of HR Analytics in the current scenario.
- CO2:** Explain the models of conducting HR Analytics
- CO3:** Make use of MS Excel for conduction of HR Analytics for key HR Processes
- CO4:** Classify various tools and software technologies used for conduction of descriptive HR Analytics and Visualization of HR Data.
- CO5:** Assess the significance of Predictive and Prescriptive Analytics.

### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	1	-	-	-
<b>CO2</b>	-	1	-	-	-
<b>CO3</b>	-	1	-	-	-
<b>CO4</b>	-	1	-	-	-
<b>CO5</b>	-	1	-	-	-

### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	-	1
<b>CO2</b>	-	1
<b>CO3</b>	-	1
<b>CO4</b>	-	1
<b>CO5</b>	-	1

### **UNIT – I**

**Introduction to HR Analytics:** History of Different HRM Perspectives, Transition from HRM to HCM and Gaining Sustainable Advantage through HCM. HR Analytics and Changing Role of HR Professionals. Importance, Scope and Benefits of HR Analytics. Levels of Analysis and Conducting analytics. Key Influencers of HR Analytics Process. Big Data Era in HR Analytics, HR Analytics – Linkage to Business Outcomes.

### **UNIT – II**

**Understanding HR Analytics:** Conducting HR Analytics: Models of HR Analytics, How to Conduct HR Analytics. Understanding HR Data: Importance of Data, Types and Scales of Data, Methods of Capturing Data, Data Examination & Purification. Understanding various HR Metrics from the perspective of HR Analytics.

### **UNIT – III**

**Analytics for Key HR Processes Using MS Excel:** HR Analytics for Recruitment & Selection, Training & Development, Performance Appraisal, Talent Management, Employee Engagement, Compensation Management and Expatriate Management.

**UNIT – IV**

**Descriptive Analytics:** Overview of Select Tools for Conduction HR Analytics: MS Excel, R, Tableau, Power BI, Python, SPSS & PSPP. Descriptive Analytics in HR: HR Dashboards using MS Excel, Slicing and Dicing of HR Data using MS Excel Pivot Table Applications, Data Visualization for Key HR processes.

**UNIT – V**

**Predictive & Prescriptive HR Analytics:** Predictive HR Analytics: Correlation, Linear and Multiple Regression, Factor Analysis and Cluster Analysis, Comparison of Means and Analysis of Variance for Manpower Demographics, Employee Satisfaction, And Training Effectiveness etc. Prescriptive HR Analytics, Predictive vs Prescriptive HR Analytics, Future of HR Analytics.

**Text Books:**

1. Rama Shankar Yadav & Sunil Maheshwari, HR Analytics, Wiley, 2021. ISBN: 9789390421558.
2. Pratyush Banerjee, Jatin Pandey & Manish Gupta, HR Analytics: Practical Applications of HR Analytics, Sage, 2019. ISBN-13: 978-9353282967

**Reference Books:**

1. Nishant Uppal, Human Resource Analytics, Pearson, 2021. ISBN-10. 9390168406, ISBN-13. 978-9390168408.
2. Bharti Motwani, HR Analytics: Practical Approach Using Python, Wiley, 2021. ISBN-10. 935424002X · ISBN-13. 978-9354240027

**Web Links:**

1. [https://onlinecourses.nptel.ac.in/noc24\\_hs126/preview](https://onlinecourses.nptel.ac.in/noc24_hs126/preview)
2. <https://www.coursera.org/learn/human-resources-analytics>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## PREDICTIVE ANALYTICS

**Course Code:245MS081**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>2</b>	<b>0</b>	<b>1</b>	<b>3</b>

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Explain descriptive, predictive, and prescriptive analytics, and assess their applications.
- CO2:** Examine qualitative forecasting methods to make informed predictions and distinguish them.
- CO3:** Implement linear regression techniques using Excel to analyze and predict relationships between variables.
- CO4:** Apply moving averages for forecasting and evaluate their effectiveness using Excel.
- CO5:** Simplify and structure various types of documents using various tools.

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	1	-	-	-
<b>CO2</b>	-	1	-	-	-
<b>CO3</b>	-	1	-	-	-
<b>CO4</b>	-	1	-	-	-
<b>CO5</b>	-	1	-	-	-

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
<b>CO1</b>	-	1
<b>CO2</b>	-	1
<b>CO3</b>	-	1
<b>CO4</b>	-	1
<b>CO5</b>	-	1

### UNIT – I

**Introduction to Predictive Analytics:** Definition of Analytics advantage and limitation of analytics – Definition of predictive analytics –Introduction to Descriptive analytics, Predictive analytics, Prescriptive analytics (theory only) - Applications and limitation of predictive analytics.

### UNIT – II

**Forecasting with Qualitative Methods:** Meaning of Qualitative forecasting – Methods of Qualitative forecasting – Criteria to select method of forecasting - Application areas of Qualitative methods - Differentiation between Qualitative and Quantitative forecasting methods.

### UNIT – III

**Linear Regression:** Correlation and Regression - Charting the Relationship - Calculating Pearson's Correlation Coefficient- Simple Regression – Array - Entering Formulas-Multiple Regression – LINEST function with Multiple Predictors - Using Excel.

**UNIT – IV**

**Forecasting with Moving Averages:** About Moving Averages – Types of moving averages Signal and Noise- Lost Periods -Smoothing Versus Tracking - Criteria for Judging Moving Averages - Mean Absolute Deviation - Least Squares – Using Excel.

**UNIT – V**

**Working with Documents:** Defining purpose and scope documents, Understanding structure of documents – case studies, articles, white papers, technical reports, minutes of meeting Documentation formats and Styles. Document preparation tools – PowerPoint, Word, Excel.

**Text Books:**

1. "Essentials of Business analytics descriptive predictive prescriptive", cengage publishing house. (Student's Handbook for Associate Analytics - III). ISBN-10. 8131527654; ISBN-13. 978-8131527658
2. Kotu, Vijay, Bala Desh pande, "Predictive Analytics and Data Mining: Concepts and Practice with Rapid Miner", 1st Edition. ISBN-13. 978-0128014608

**Reference Books:**

1. Eric Siegel, "Predictive Analytics: The Power to Predict Who Will Click, Buy, Lie, or Die Paperback – Illustrated, Wiley Publications. ISBN-13. 978-1119145677
2. Conrad Carlberg, "Predictive Analytics: Microsoft Excel Paperback – Illustrated. ISBN-10, 0789749416; ISBN-13, 978-0789749413.

**Web Links:**

1. [https://onlinecourses.nptel.ac.in/noc23\\_ma46/preview](https://onlinecourses.nptel.ac.in/noc23_ma46/preview)
2. <https://www.coursera.org/learn/predictive-analytics>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

**Course Code:245MS082**
**L      T      P      C**  
**2      0      1      3**
**Course Outcomes:**
**At the end of the Course, Student will be able to:**

- CO1:** Explain big data futures and classification of analytics
- CO2:** Develop knowledge on analytics flow for big data and big data stack
- CO3:** Analyze big data tool using Hadoop
- CO4:** Identify the security related aspects in big data
- CO5:** Discover various application areas of big data

**Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	1	-	-	-
<b>CO2</b>	-	1	-	-	-
<b>CO3</b>	-	1	-	-	-
<b>CO4</b>	-	1	-	-	-
<b>CO5</b>	-	1	-	-	-

**Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	-	1
<b>CO2</b>	-	1
<b>CO3</b>	-	1
<b>CO4</b>	-	1
<b>CO5</b>	-	1

**UNIT – I**

**Introduction to Big Data:** What is Analytics- Descriptive Analytics, Diagnostic Analytics, Predictive Analytics, Prescriptive Analytics. What is Big Data- Characteristics of Big Data- Volume, Velocity, Variety, Veracity, Value.

**UNIT – II**

**Analytics Flow and Big Data Stack:** Analytics Flow for Big Data- Data Collection, Data Preparation, Analysis Types, Analysis Modes, Visualizations, Big Data Stack- Raw Data Sources, Data Access Connectors, Data Storage, Batch Analytics, Real-time Analytics, Interactive Querying, Serving Databases, Web & Visualization Frameworks

**UNIT – III**

**Big Data -Hadoop:** NoSQL, Comparison of SQL and NoSQL, Hadoop -RDBMS Versus Hadoop -Distributed Computing Challenges – Hadoop Overview - Hadoop Distributed File System – Processing Data with Hadoop - Managing Resources and Applications with Hadoop YARN - Interacting with Hadoop Ecosystem

**UNIT – IV**

**Security in Big Data:** Security, compliance, auditing, and protection pragmatic steps to securing/ big data -classifying data- protecting big data analytics- big data and compliance-the intellectual property challenge

**UNIT – V**

**Big Data Applications:** Business Specification Examples of Big Data- Financial, Web, Healthcare, Internet of Things, Environment, Logistics & Transportation, Industry, Retail.

**Text Books:**

1. Anand Rajaraman and Jeffrey David Ullman, "Mining of Massive Datasets", Cambridge University Press. ISBN-13: 978-1107077232.
2. David Loshin, "Big Data Analytics: From Strategic Planning to Enterprise Integration with Tools, Techniques, NoSQL, and Graph", Morgan Kaufmann/Elsevier Publisher. ISBN-13: 978-0124173194.

**Reference Books:**

1. EMC Education Services, "Data Science and Big Data Analytics: Discovering, Analyzing, Visualizing and Presenting Data", Wiley publishers. ISBN-13: 978-1118876138
2. Bart Baesens, "Analytics in a Big Data World: The Essential Guide to Data Science and its Applications", Wiley Publishers. ISBN 9788126551071

**Web Links:**

1. [https://onlinecourses.swayam2.ac.in/arp19\\_ap60/preview](https://onlinecourses.swayam2.ac.in/arp19_ap60/preview)
2. <https://www.coursera.org/specializations/big-data>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## WEB ANALYTICS

**Course Code:245MS083**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>2</b>	<b>0</b>	<b>1</b>	<b>3</b>

### **Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Explain the importance of analytics in the context of social media and websites, emphasizing the role of data - driven decision – making.
- CO2:** Familiarize participants with fundamental metrics used in web analytics and social media analytics.
- CO3:** Identify the key performance indicators (KPIs) for social media and web analytics.
- CO4:** Show how to set up and track conversions on websites and social media platforms and understand the customer journey and optimize for conversion goals.
- CO5:** Analyze the concepts of social listening and monitoring and use tools to monitor brand mentions, track sentiment, and stay informed about industry trends.

### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	1	-	-	-
<b>CO2</b>	-	1	-	-	-
<b>CO3</b>	-	1	-	-	-
<b>CO4</b>	-	1	-	-	-
<b>CO5</b>	-	1	-	-	-

### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	-	1
<b>CO2</b>	-	1
<b>CO3</b>	-	1
<b>CO4</b>	-	1
<b>CO5</b>	-	1

### **UNIT – I**

**Introduction:** Introduction to Web - Limitations of current Web – Development of Semantic Web– Emergence of the Social Web – Statistical Properties of Social Networks - Network analysis -Development of Social Network Analysis - Key concepts and measures in network analysis -Discussion networks - Blogs and online communities - Web-based networks.

### **UNIT – II**

**Modelling and Visualization:** Visualizing Online Social Networks - A Taxonomy of visualizations - Graph Representation - Centrality- Clustering - Node-Edge Diagrams - visualizing Social Networks with Matrix-Based Representations- Node-Link Diagrams – Hybrid Representations - Modelling and aggregating social network data – Random Walks and their Applications –Use of Hadoop and Map Reduce – Ontological representation of social individuals and relationships.

**UNIT – III**

**Mining Communities:** Aggregating and reasoning with social network data- Advanced Representations - Extracting evolution of Web Community from a Series of Web Archive - Detecting Communities in Social Networks - Evaluating Communities – Core Methods for Community Detection & Mining - Applications of Community Mining Algorithms – Node Classification in Social Networks.

**UNIT – IV**

**Text and Opinion Mining:** Text Mining in Social Networks -Opinion extraction – Sentiment classification and clustering - Temporal sentiment analysis - Irony detection in opinion mining -Wish analysis - Product review mining – Review Classification – Tracking sentiments towards topics over time.

**UNIT – V**

**Tools for Social Network Analysis:** UCINET – PAJEK – ETDRAW – Stoc NET – Splus –R – Node XL – SIENA and RSIENA – Real world Social Networks (Facebook- Twitter etc.)

**Text Books:**

1. Charu C. Aggarwal, “Social Network Data Analytics”, Springer. ISBN-13: 978-1441984616 ISBN-10: 1441984615.
2. Peter Mika, “Social Networks and the Semantic Web”, 1st edition, Springer. ISBN-13: 978-1441984616 ISBN-10: 1441984615.

**Reference Books:**

1. Guandong Xu, Yanchun Zhang and Lin Li, “Web Mining and Social Networking – Techniques and applications”, 1st edition, Springer. ISBN-13. 9781461427186
2. Giles, Mark Smith, John Yen, “Advances in Social Network Mining and Analysis”, Springer. ISBN 978-3-642-19157-2

**Web Links:**

1. [https://onlinecourses.nptel.ac.in/noc22\\_mg68/preview](https://onlinecourses.nptel.ac.in/noc22_mg68/preview)
2. <https://www.coursera.org/professional-certificates/google-data-analytics>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## DATA MINING AND MACHINE LEARNING

**Course Code:245MS084**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>2</b>	<b>0</b>	<b>1</b>	<b>3</b>

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Explore the kinds of data that can be mined, major issues in data mining, and the societal impact of data mining.
- CO2:** Determine reasons for data preprocessing, major tasks involved, and techniques for data cleaning, reduction, transformation, and discretization.
- CO3:** Analyze the machine learning concepts, types of algorithms, and specific supervised learning algorithms.
- CO4:** Illustrate the user-based and item-based similarity in recommender systems, calculate cosine similarity, and address challenges with similarity measures.
- CO5:** Summarize the decision trees, building classifiers using gini criteria and entropy criteria. Measure test accuracy, display decision trees, find optimal criteria,

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	1	-	-	-
<b>CO2</b>	-	1	-	-	-
<b>CO3</b>	-	1	-	-	-
<b>CO4</b>	-	1	-	-	-
<b>CO5</b>	-	1	-	-	-

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
<b>CO1</b>	-	1
<b>CO2</b>	-	1
<b>CO3</b>	-	1
<b>CO4</b>	-	1
<b>CO5</b>	-	1

### UNIT – I

**Introduction to Data Mining:** Data Mining; Kinds of data that can be mined-Database Data, Data Warehouses, Transactional Data, Other Kinds of Data; Major Issues in Data Mining-Mining Methodology, User Interaction, Efficiency and Scalability, Diversity of Database Types, Data Mining and Society.

### UNIT – II

**Data Preprocessing:** An Overview-Reasons to process the data, Major Tasks in Data Preprocessing; Data Cleaning-Missing Values, Noisy Data, Data Cleaning as a Process; Data Reduction-Principal Component Analysis, Histograms, Clustering, Sampling, Data Cube Aggregation; Data Transformation and Data Discretization-Data Transformation by Normalization, Discretization by Binning, Discretization by Histogram Analysis.

### UNIT – III

**Machine Learning:** What is Machine Learning; Types of Machine Learning Algorithms-Supervised, Unsupervised and Reinforcement Learning. Supervised Learning-K Nearest Neighbors, Random Forest and Boosting

**UNIT – IV**

**Recommender Systems Using Machine Learning:** User Based Similarity-Calculating Cosine Similarity Between Users, Filtering Similar Users, Challenges with User Based Similarity. Item Based Similarity-Calculating Cosine Similarity between Movies, Finding Most Similar Movies. Matrix Factorization.

**UNIT – V**

**Decision Tree Classification:** Introduction to Decision Tree; Building Decision Tree Classifier using Gini Criteria; Measuring Test Accuracy; Displaying the Tree; Building Decision Tree Classifier using Entropy Criteria. Finding Optimal Criteria; Maximum Depth of the Tree and Benefits and Disadvantages of Decision Tree Case Study: Applying Decision Tree Classification on German Credit Data.

**Text Books:**

- 1 Max Bramer and Springer “Principles of Data Mining 2020” 8th edition, 2020. ISBN-10. 1447174925; ISBN-13. 978-1447174929.
- 2 Sergio’s Theodoratos, Elsevier “Machine Learning a Bayesian and Optimization Perspective”, 1st edition, 2020. ISBN: 13-978-0128015223

**Reference Books:**

- 1 Shalev-Shwartz, Ben-David, “Understanding ML from Theory to Algorithms”, 1st edition, Cambridge University Press. ISBN 978-1484236178.2
- 2 Stephen Marsland, Machine Learning - An Algorithmic Perspective, 2nd edition, CRC Press. ISBN-10. 9781466583283; ISBN-13. 978-1466583283

**Web Links:**

- 1 [https://onlinecourses.nptel.ac.in/noc21\\_cs06/preview](https://onlinecourses.nptel.ac.in/noc21_cs06/preview)
- 2 <https://www.coursera.org/specializations/machine-learning-introduction>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## CRM ANALYTICS

**Course Code:245MS085**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>2</b>	<b>0</b>	<b>1</b>	<b>3</b>

**Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Explain the fundamental concepts of Customer Relationship Management
- CO2:** Classify various methods and techniques for collecting customer data.
- CO3:** Analyse customer segmentation, profiling, and clustering techniques.
- CO4:** Integrate CRM analytics with existing business processes for enhanced decision-making.
- CO5:** Propose ethical considerations and strategies to address challenges in CRM analytics.

**Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	1	-	-	-
<b>CO2</b>	-	1	-	-	-
<b>CO3</b>	-	1	-	-	-
<b>CO4</b>	-	1	-	-	-
<b>CO5</b>	-	1	-	-	-

**Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	-	1
<b>CO2</b>	-	1
<b>CO3</b>	-	1
<b>CO4</b>	-	1
<b>CO5</b>	-	1

**UNIT – I**

**Introduction to CRM and Data Foundation:** Overview of Customer Relationship Management (CRM), Importance of CRM in business strategy, Types and sources of customer data, Data integration and management strategies for CRM, Introduction to CRM analytics: goals and benefits.

**UNIT – II**

**Data Collection and Preparation for CRM Analytics:** Methods and techniques for collecting customer data, Data quality issues and data cleansing techniques, Data preprocessing: normalization, transformation, and aggregation, Customer data privacy and ethical considerations, Case studies and examples of successful data collection strategies

**UNIT – III**

**Analytical Techniques for CRM:** Exploratory data analysis (EDA) for CRM, Descriptive analytics: customer segmentation, profiling, and clustering, Predictive analytics: customer lifetime value (CLV), churn prediction, and cross-selling, Prescriptive analytics: recommendations and personalized marketing strategies, Tools and software for CRM analytics.

#### **UNIT – IV**

**Implementing CRM Analytics:** Steps in implementing CRM analytics projects, Integration of CRM analytics with business processes, Creating actionable insights and recommendations, Performance metrics and KPIs for CRM analytics, Case studies of successful CRM analytics implementations

#### **UNIT – V**

**Advanced Topics in CRM Analytics:** Real-time analytics and personalized customer interactions, Machine learning applications in CRM: sentiment analysis, recommendation systems, social media analytics and CRM, Ethical considerations and challenges in CRM analytics, Future trends and emerging technologies in CRM analytics

#### **Text Books:**

1. Data Mining Techniques: For Marketing, Sales, and Customer Relationship Management by Gordon S. Linoff and Michael J. A. Berry, Wiley.ISBN-13:978-0470650936.
2. Customer Relationship Management: A Strategic Approach by Adrian Payne and Pennie Frow. ISBN-13. 978-1107014961.

#### **Reference Books:**

1. Customer Relationship Management: Concepts and Tools by V. Kumar and Werner Reinartz, Routledge Publishing. ISBN-10. 3662553805 · ISBN-13. 978-3662553800
2. Customer Analytics for Dummies by Jeff Sauro and Jim Sterne. ISBN-13. 978-1118937594

#### **Web Links:**

1. [https://onlinecourses.nptel.ac.in/noc22\\_mg93/preview](https://onlinecourses.nptel.ac.in/noc22_mg93/preview)
2. <https://www.coursera.org/learn/customer-relationship-management>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## LOGISTICS MANAGEMENT

**Course Code:245MS086**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### **Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Analyze the interdependencies between logistics and other business functions (e.g., marketing, production, finance).
- CO2:** Explore the different logistical activities.
- CO3:** Identify the development of supply chain strategy
- CO4:** Examine the logistical operational integration and supply chain relationships
- CO5:** Assess the role of Supply Chain in e-business and b2b practices

### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	1	-	-	-	-
<b>CO2</b>	1	-	-	-	-
<b>CO3</b>	1	-	-	-	-
<b>CO4</b>	1	-	-	-	-
<b>CO5</b>	1	-	-	-	-

### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### **UNIT – I**

**Logistics Management and Supply Chain Management** - Definition, Evolution, Importance. The concepts of logistics. Logistics relationships. Functional applications – HR, Marketing, Operations, Finance, IT. Logistics Organization - Logistics in different industries

### **UNIT – II**

**Logistics Activities:** – functions, objectives, solution. Customer Service, Warehousing and Material Storage, Material Handling, order processing, information handling and procurement Transportation and Packaging. Third party and fourth party logistics - Reverse Logistics - Global Logistics

### **UNIT – III**

**Fundamentals of Supply Chain and Importance:** Development of SCM concepts and Definitions Supply chain strategy, Strategic Supply Chain Management and Key components. Drivers of Supply Chain Performance – key decision areas – External Drivers of Change.

### **UNIT – IV**

**Modelling Logistics Systems** - Simulation of logistic systems - Dimensions of Logistics & SCM – The Macro perspective and the macro dimension – Logistic system analysis strategy, Logistical Operations Integration, Customer service – Supply Chain Relationships

**UNIT – V**

**Framework and Role of Supply Chain in E-business and B2B practices:** Value of information in logistics & SCM - E-logistics, E-Supply Chains - International and global issues in logistics - Role of government in international logistics and Principal characteristics of logistics in various countries and regions

**Text Books:**

1. Supply Chain Logistics Management, Bowersox, Closs, Cooper, McGraw Hill. 5<sup>th</sup> Edition, (9<sup>th</sup> reprint), 2021. ISBN-10. 0078096642 · ISBN-13. 978-0078096648
2. World Class Supply Management, Burt, Dobbler, Starling, TMH., 2019. ISBN-10. 0070499330 · ISBN-13. 978-0070499331.

**Reference Books:**

1. Logistical Management, Donald J Bowersox, David J Closs, TMH, 9<sup>th</sup> Edition ISBN-10. 9780070435544 ISBN-13. 978-0070435544.
2. Reguram G, Rangaraj N., Logistics and Supply Chain Management Cases and Concepts: Macmillan India Ltd., New Delhi. ISBN: 0333933427

**Web Links:**

1. <https://archive.nptel.ac.in/courses/110/105/110105141/>
2. <https://www.youtube.com/watch?v=Nrl0CtS1m8Y>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## STORE KEEPING AND WAREHOUSING MANAGEMENT

Course Code:245MS087

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Explain the aspects of store house operations.
- CO2:** Develop the layout of container terminals and equipment used in container terminals.
- CO3:** Discover the benefits and issues in logistics outsourcing
- CO4:** Prioritize the objectives of warehousing management and automation in warehouse operations
- CO5:** Analyze warehouse layout and design and understand sustainable warehousing practices.

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	1	-	-	-	-
<b>CO2</b>	1	-	-	-	-
<b>CO3</b>	1	-	-	-	-
<b>CO4</b>	1	-	-	-	-
<b>CO5</b>	1	-	-	-	-

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### UNIT – I

**Storehouse Operations and Control:** Introduction, Objectives, Store house Operations and its Objectives, Daily Activities of Stores, Organizing a Store, Store Location and Layout, Selecting appropriate storage system, Centralization, Decentralization and variety reduction of stores, Store Housekeeping, Stores Accounting.

### UNIT – II

**Infrastructure and Layout of Container Terminals:** Infrastructure and layout of container terminals - Berth and quay characteristics- Apron width, quay crane rails - Container yard size, layout and markings - Container Freight Station (CFS) -Gates, offices, maintenance facilities, fencing and traffic control. Types and purpose of equipment used in container terminals - Ship to shore handling equipment - Yard equipment for transfer, storage and delivery - CFS and other terminal equipment Terminal automation

### UNIT – III

**Logistics Outsourcing:** Introduction, Objectives, Concept of Logistics Outsourcing, Catalyst for logistics outsourcing, Benefits of logistics outsourcing, Issues in logistics outsourcing, Third-Party Logistics, Fourth-Party Logistics, Selection of Logistics Service Provider, Logistics Service Contract, Outsourcing-Value Proposition.

## UNIT – IV

**Warehousing Operations and Management:** Objectives of warehousing management; Physical control and security; Automation and IT systems in warehouse operations and management.

## UNIT – V

**Warehouse Layout and Design:** Warehouse layout and design, Optimal space utilization, workflow efficiency, and ergonomic design. Improving storehouse speed, space optimization, Sustainable Warehousing- Integrating green processes and eco-friendly materials. Reducing the industry's carbon footprint.

### Text Books:

1. David Simchi, Levi, Philip Kaminsky, Ravi Shankar. Designing & Managing the Supply Chain: Tata McGraw Hill. 14th Edition. ISBN-10-9355321783 · ISBN-13- 978-9355321787
2. Managing Supply Chains: A Logistics Approach, Coyle, J.J., Jr. Langley, C.J., Novack, R.A, & Gibson, B.J. (9th ed.), McGraw Hill. ISBN-1285400941, 9781285400945

### Reference Books:

1. World-Class Warehousing and Material Handling. Edward, F. (International ed.), McGraw-Hill. Muller ISBN-10. 0071842829 · ISBN-13. 978-0071842822
2. Designing and Managing the Supply Chain: Concepts, Strategies and Case Studies, Simchi-Levi, D., Kaminsky, P., & Simchi-Levi, E. (3rd ed.), McGraw-Hill. ISBN-10. 9386601990 · ISBN-13. 978-9386601995

### Web Links:

1. <https://archive.nptel.ac.in/courses/110/105/110105095/>
2. <http://acl.digimat.in/nptel/courses/video/110105141/L29.html>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## TRANSPORTATION AND INFRASTRUCTURE MANAGEMENT FOR SCM

**Course Code:245MS088**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### **Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Identify the features of logistics transportation.
- CO2:** Interpret the features of railway logistics.
- CO3:** Examine the features, Facilities and suitability of roadways
- CO4:** Explain the port operations and services.
- CO5:** Apply knowledge of air transport to develop efficient and effective air cargo operations.

### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	1	-	-	-	-
<b>CO2</b>	1	-	-	-	-
<b>CO3</b>	1	-	-	-	-
<b>CO4</b>	1	-	-	-	-
<b>CO5</b>	1	-	-	-	-

### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### **UNIT – I**

**Transportation and Logic:** significance of transportation logistics: utility created by transportation in logistics transportation as a means of conquering time and space features of inbound, outbound, local and medium, long and continental transportation- features of logistics Transportation.

### **UNIT – II**

**Railway and Logistics Contours:** Features and facilities offered by Railways Factors influencing growth in Rail Logistics- Suitability for different Cargo and distance Ranges segments – Innovative.

### **UNIT – III**

**Roadways and Logistics Contours:** Roadways as a primary mode and complementary mode of transportation in Logistics – Features, Facilities and suitability- Innovations in road ways to make it Logistics-friendly- Factors influencing choice- Factors influencing growth in Road Logistics- Suitability for different Cargo and distance Ranges segments –Innovative schemes/facilities to popularize rail logistics in India- Share of Railways in Cargo movement in India and world-wide. Role of National Highways and the Toll highways- Outsourcing Fleets from others-Technology, Cost, Speed, Security and Dynamics- Competition with other

Modes

#### **UNIT – IV**

**Water Transport and Port Operations:** Introduction to water transport, Main services, Services and facilities for ships -Administrative formalities - Cargo transfer - Services and facilities for cargo Berths and Terminals - Berth Facilities and Equipment -ship Operation – Pre shipment planning, the stowage plan and on-board stowage - cargo positioning and stowage on the terminal - Developments in cargo/container handling and terminal operation - Safety of cargo operations - Cargo security: Measuring and evaluating performance and productivity.

#### **UNIT – V**

**Air Transport:** Introduction to Air Transport – Air Freight – IATA –Cargo Handling at Goods at Air Port – Information Management of Air Cargo – System and Modules – Distribution of Goods.

#### **Text Books:**

1. MB. Stroh., A Practical Guide to Transportation and Logistics: Logistics Network Inc. ISBN 10: 0970811519 ISBN 13: 9780970811516
2. MOSWest., Transportation and Cargo Security: Prentice Hall. ISBN-10. 0131703560 · ISBN-13. 978-0131703568.

#### **Reference Books:**

1. Ritter, Barrett and Wilson, Securing Global Transportation Networks: McGraw Hill.ISBN-10, 0071477519; ISBN-13, 978-0071477512.
2. Port Management and Operations, MARIA G. BURNS., CRS Press, U.K ISBN-13: 978-1482206753 ISBN-10: 1482206757.

#### **Web Links:**

1. <https://archive.nptel.ac.in/courses/110/106/110106045/>
2. <https://elearn.nptel.ac.in/shop/iit-workshops/completed/supply-chain-management/?v=c86ee0d9d7ed>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## PURCHASING AND MATERIAL MANAGEMENT

Course Code:245MS089

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Apply the role of purchasing and materials planning in push and pull system.
- CO2:** Simplify pricing models, negotiation techniques, and cost analysis.
- CO3:** Analyze the purpose and significance of inventory within organizations.
- CO4:** Explore the objectives and types of materials handling.
- CO5:** Differentiate between packing and packaging.

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	1	-	-	-	-
<b>CO2</b>	1	-	-	-	-
<b>CO3</b>	1	-	-	-	-
<b>CO4</b>	1	-	-	-	-
<b>CO5</b>	1	-	-	-	-

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### UNIT – I

**Role of Purchasing and Materials Management-** objectives, organization and Inter relationships, Determination and Description of material Quantity, Material planning in push and pull system, MRP and JIT.

### UNIT – II

**Purchase System and Procedures:** - objectives, purchasing function, Purchasing polices and decisions, make or Buy vendor selection and Rating, Timing of purchase, price determination, purchase procedures and system public purchasing and tendering.

### UNIT – III

**Inventory Management** – Introduction of inventory system, Function of Inventory and Relevant cost concept, classification of Inventory systems, Inventory Models: Deterministic Discount, EOQ EBQ, MRP – I, selective Inventory Management ABC, VED, FSN, PQR.

### UNIT – IV

**Materials Handling:** Materials handling systems and objectives; Types of handling equipment; Selection of the most appropriate equipment in specific situations, Traffic and Transportation, Disposal of Scrap, waste management waste reduction approach, waste collection, Recycling waste disposal system, materials information system.

## **UNIT – V**

**Packing and Packaging:** Meaning, Functions and Essentials of Packing- Packaging: Meaning, Functions and Essentials of Packaging- Difference between Packing and Packaging-Packing for Storage- Packing for Overseas Shipment- Packing for Inland Transportation- Packaging for Product content Protection - Test of packaging: Mechanical, Climatic & Lab test- International Care labelling code - Packaging cost.

### **Text Books:**

1. Integrated Materials Management, Putta, A.K, New McGraw Hill. ISBN: 08769238310
2. Handbook of Materials Management, Gopala krishan P. and Sanderashan M New Delhi prentice Hall of India.ISBN-13. 978-8120307094

### **Reference Books:**

1. Proactive Procurement, Burt, David N, Englewood Cliffs, New Jersey, Prentice Hall Inc. ISBN-13. 978-0137114658.
2. Purchasing and Material Management, Dobler, D.W. etc., New York, McGraw Hill, ISBN-10. 0070370478; ISBN-13. 978-0070370470

### **Web Links:**

1. <https://archive.nptel.ac.in/courses/110/105/110105095/>
2. [https://onlinecourses.nptel.ac.in/noc20\\_mg17/preview](https://onlinecourses.nptel.ac.in/noc20_mg17/preview)

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## REVERSE LOGISTICS

Course Code:245MS090

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Explain the differences between forward and reverse logistics
- CO2:** Develop the commercial reverse logistics in the field of apparel, aviation, retail, automotive, electronics, food, beverage and sporting goods
- CO3:** Analyze the importance of customer service returns and after service customer support as applied to reverse logistics
- CO4:** Assess how green buildings enhance energy efficiency, reduce environmental impact, and improve occupant well-being.
- CO5:** Estimate the influence of organizational culture on reverse logistics practices.

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	1	-	-	-	-
<b>CO2</b>	1	-	-	-	-
<b>CO3</b>	1	-	-	-	-
<b>CO4</b>	1	-	-	-	-
<b>CO5</b>	1	-	-	-	-

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### UNIT – I

**Reverse Logistics and Forward Logistics:** Commercial logistics and the military, Measuring reverse logistics and improvement best practices of military reverse logistics, Management of complex systems and reverse logistics

### UNIT – II

**Reverse Logistics Principles:** Successful management principles are successful reverse logistics principles, best practices in retail, apparel, electronics, food, beverage, and sporting goods

### UNIT – III

**Customer Service Returns:** RMA and other elements of returns best practices in customer service and after sales customer support Reverse logistics concerns of the secondary market.

### UNIT – IV

**Green Reverse Logistics:** Green reverse logistics practices green buildings that support logistics (LEED Certification) Successful global projects.

**UNIT – V**

**Organizational Culture and Reverse Logistics:** organizational culture and review how it applies to reserve logistics Review cultural design to support reverse logistics Reduction of risk in the reverse supply chain Securing the supply chain.

**Text Books:**

1. Quantitative Models for Closed-Loop Supply Chains, Rommert Dekker, Moritz Fleischmann, Karl Inderfurth, and Luk N., 5<sup>th</sup> Edition (9<sup>th</sup> reprint), 2019. ISBN-9783642073809
2. Supply Chain Management: A Logistics Perspective, John J. Coyle, C. John Langley Jr., Robert A. Novack, Brian Gibson, 5<sup>th</sup> Edition, 2020. ISBN 9789355738066

**Reference Books:**

1. Donald J. Bowerson., Logistic and Supply Chain Management: Prentice Hall of India. ISBN-10. 0071276173 · ISBN-13. 978-0071276177
2. Business Logistics/Supply Chain Management, H. K Das, Er. Rajnish Verma, S. Chand Publications, Pearson Education India; 5th edition ISBN:10-9355831234.

**Web Links:**

1. [https://onlinecourses.nptel.ac.in/noc24\\_hs128/preview](https://onlinecourses.nptel.ac.in/noc24_hs128/preview)
2. [https://ocw.mit.edu/courses/esd-s43-green-supply-chain-management-spring-2014/resources/mitesd\\_s43s14\\_lecture4/](https://ocw.mit.edu/courses/esd-s43-green-supply-chain-management-spring-2014/resources/mitesd_s43s14_lecture4/)

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## SUPPLY CHAIN RISK MANAGEMENT

**Course Code:245MS091**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

**Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Identify and assess potential risks in a supply chain, including operational, financial, and reputational risks.
- CO2:** Design and implement a supply chain risk management framework that aligns with industry best practices.
- CO3:** Assess the effects of natural disasters, pandemics, and climate change on supply chain operations.
- CO4:** Explain key risk management concepts, including risk assessment, mitigation, and transfer, with relevant examples.
- CO5:** Apply the key principles of designing a resilient supply chain, including flexibility, agility, and adaptability.

**Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	1	-	-	-	-
<b>CO2</b>	1	-	-	-	-
<b>CO3</b>	1	-	-	-	-
<b>CO4</b>	1	-	-	-	-
<b>CO5</b>	1	-	-	-	-

**Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

**UNIT – I**

**Introduction of Risks Management Risk Management:** Concept and Process, An Action-Based Framework for Supply Chain Risk, Identification of Operational Hazards, Risk Assessment and Valuation, Tactical Risk Decisions and Crisis Management, Strategic Risk Mitigation, Four Operational Hedging Strategies.

**UNIT – II**

**Operational Strategy for Managing Supply Chain Risks:** Introduction, Stockpile Inventory, Diversify Supply, Backup Supply, Manage Demand, Ambiguity in Risks. Decentralised Risks Management Strategy. Shared risks; Achieving an integrated approach; Identifying risks, Analysing and responding to risks

### **UNIT – III**

**Managing Supply Chain:** Disruption Economic Risks to Supply Chain-Demand Shock, Currency Fluctuation, Supply Shock, Industrial Unrest, Impacts of Natural Disasters, pandemics and Climate Change, Societal Risks to Supply chain, Risks and Security in Air Cargo Supply chain, Time-Based Risk Management-Response Time and Impacts, Risk and Reward Considerations.

### **UNIT – IV**

**Approaches to Risk Management:** Identifying Risks and its Types, Tools for Analysing Past Events, Tools to Collect Opinions, Tools to Analyse Operations, Problems with Risks Identification, Conceptual Explanations with Examples, Development of Risk Management Techniques, Supply Chain Risk Management (SCRM) and aims of SCRM.

### **UNIT – V**

**Creating Resilient Supply Chains:** Concept of Resilient Supply Chain, Principles of Designing a Resilient Supply Chain, Physical Features of a Resilient Supply Chain, relationships within a Resilient Supply Chain, Risk Compensation and Business Continuity. Latest updates in Resilient Supply Chain.

#### **Text Books:**

- 1 Supply Chain Risks Management, Donald Water, (Kogan Pages). ISBN: 9780749463939, 9780749463939
- 2 Handbook for Supply Chain and Risks Management (Meri Pustak), Omra Khan & George Zsidis, ISBN 9788131521878, 9788131521878

#### **Reference Books:**

- 1 Supply Chain Risk Management: Advanced Tools, Models, and Developments, Yacob Khojasteh, (Springer) ISBN 10: 9811041059 / ISBN 13: 9789811041051.
- 2 Managing Supply Chain Risk: Integrating with Risk Management, Bret Wagner, Sime Curkovic, and Thomas Scannell, ISBN-10. 1498707106; ISBN-13. 978-1498707107.

#### **Web Links:**

- 1 [http://ndl.iitkgp.ac.in/he\\_document/nptel/nptel/courses\\_110\\_108\\_110108056\\_video\\_lec9](http://ndl.iitkgp.ac.in/he_document/nptel/nptel/courses_110_108_110108056_video_lec9)
- 2 [http://ndl.iitkgp.ac.in/he\\_document/nptel/courses\\_110\\_108\\_110108056\\_video\\_lec11](http://ndl.iitkgp.ac.in/he_document/nptel/courses_110_108_110108056_video_lec11)

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## ENTERPRISE RESOURCE PLANNING

**Course Code:245MS092**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### **Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Make use of Enterprise software, and its role in integrating business function
- CO2:** Analyze the strategic options for ERP identification and adoption
- CO3:** Design the ERP implementation strategies.
- CO4:** Apply reengineering business processes for successful ERP implementation.
- CO5:** Summarize emerging trends in Enterprise Resource Planning

### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	1	-	-	-	-
<b>CO2</b>	1	-	-	-	-
<b>CO3</b>	1	-	-	-	-
<b>CO4</b>	1	-	-	-	-
<b>CO5</b>	1	-	-	-	-

### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### **UNIT – I**

**Introduction:** Overview of enterprise systems – Evolution - Risks and benefits - Fundamental technology -Issues to be consider in planning design and implementation of cross functional integrated ERP systems

### **UNIT – II**

**ERP Solutions and Functional Modules:** Overview of ERP software solutions- small, medium and large enterprise vendor solutions, BPR, and best business practices - Business process Management

### **UNIT – III**

**ERP Implementation:** Planning Evaluation and selection of ERP systems - Implementation life cycle - ERP implementation, Methodology and Frame work- Data Migration. People Organization in implementation.

### **UNIT – IV**

**Post Implementation:** Maintenance of ERP- Organizational and Industrial impact; Success and Failure factors of ERP Implementation.

**UNIT – V**

**Emerging Trends on ERP:** Extended ERP systems and ERP add-ons -CRM, SCM, Business analytics - Future trends in ERP systems

**Text Books:**

1. Enterprise Resource Planning, Alexis Leon, second edition, Tata McGraw-Hill.ISBN-10. 0070656800; ISBN-13. 978-0070656802.
2. ERP in Practice, Mahadeo Jaiswal and Ganesh Vanapalli, Tata McGraw-Hill. ISBN 1403927456

**Reference Books:**

1. Manufacturing Resource Planning (MRP II) with Introduction to ERP; SCM; Khalid Sheikh, McGraw-Hill, ISBN-13: 978-0071392303, ISBN-10: 0071392300.
2. The Impact of Enterprise Systems on Corporate Performance, K.B.Hendricks; V.R. Singhal ,Elsevier, ISBN 978-0-85729-777-8

**Web Links:**

1. <https://www.coursera.org/learn/understanding-the-enterprise-systems-environment>
2. <https://www.coursera.org/learn/enterprise-systems>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## INTERNATIONAL LOGISTICS MANAGEMENT

**Course Code:245MS093**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### **Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Explain the concept of logistics integration and barriers to integration.
- CO2:** Identify the international marketing and channels and modes of transport.
- CO3:** Develop the multimodal transport characteristics and tariff structures.
- CO4:** Assess the benefits and constraints of containerization and Chartering Containerization
- CO5:** Prepare and manage customs documentation, including commercial invoices, bills of lading, and certificates of origin.

### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	1	-	-	-	-
<b>CO2</b>	1	-	-	-	-
<b>CO3</b>	1	-	-	-	-
<b>CO4</b>	1	-	-	-	-
<b>CO5</b>	1	-	-	-	-

### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### **UNIT – I**

**Overview Logistics:** Definition, Evolution, Concept, Components, Importance, Objectives; Logistic Subsystem; The work of Logistics; Integrated Logistics; Barrier to Internal Integration.

### **UNIT – II**

**Marketing and Logistics:** Customer Focused Marketing; International Marketing: Introduction, Definition, Basis for International Trade, Process, Importance; International Marketing Channel: Role of Clearing Agent, Various Modes of Transport, Choice and Issues for Each Mode, Transport Cost Characteristics

### **UNIT – III**

**Basics of Transportation:** Transportation functionality and Principles; Multimodal Transport: Modal Characteristics; Modal Comparisons; Legal Classifications; International Air Transport; Air Cargo Tariff Structure; Freight: Definition, Rate; Freight Structure and Practice

#### **UNIT – IV**

**Containerization and Chartering** Containerization: Genesis, Concept, Classification, Benefits and Constraints; Inland Container Depot (ICD): Roles and Functions, CFS, Export Clearance at ICD; CONCOR; ICDs under CONCOR; Chartering: Kinds of Charter, Charter Party, and Arbitration.

#### **UNIT – V**

**Special Aspects of Export Logistics:** Picking, Packing, Vessel Booking [Less-than Container Load (LCL) / Full Container Load (FCL)], Customs, Documentation, Shipment, Delivery to distribution centres, distributors and lastly the retail outlets- Import Logistics: Documents Collection- Valuing- Bonded Warehousing- Customs Formalities

#### **Text Books:**

1. Supply Chain Logistics Management, Bowersox, Closs, Cooper, McGraw Hill. ISBN-10. 0071276173 · ISBN-13. 978-0071276177 ·
2. World Class Supply Management, Burt, Dobbler, Starling, TMH. ISBN, 0071123105, 9780071123105.

#### **Reference Books:**

1. Logistical Management, Donald J Bowersox, David J Closs, TMH ISBN-10 9780070435544 ISBN-13. 978-0070435544
2. “International Logistics”, Pierre David, Biztantra. ISBN-10. 0989490602. ISBN-13. 978-0989490603.

#### **Web Links:**

1. <https://www.vskills.in/certification/certified-international-logistics-management-professional-course-outline>
2. <https://archive.nptel.ac.in/courses/110/108/110108056/>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## GREEN SUPPLY CHAIN MANAGEMENT

Course Code:245MS094

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Identify and compare traditional supply chain management practices with green supply chain management practices.
- CO2:** Manage organizational change towards a more sustainable and environmentally responsible logistics approach.
- CO3:** Develop a statement on sustainable development strategy that aligns with organizational vision and mission.
- CO4:** Apply vehicle routing techniques to optimize logistics operations and reduce environmental impacts.
- CO5:** Analyse and improve labour/management relations to foster a positive and productive work environment.

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	1	-	-	-	-
<b>CO2</b>	1	-	-	-	-
<b>CO3</b>	1	-	-	-	-
<b>CO4</b>	1	-	-	-	-
<b>CO5</b>	1	-	-	-	-

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### UNIT – I

**Green Supply Chain Management:** Introduction – Traditional Supply Chain and Green Supply Chain – Environmental Concern and Supply Chain – Closed-loop Supply Chain – Corporate Environmental Management – Green Supply Chain (GSCM): Definition, Basic Concepts – GSCM Practices. Case Studies

### UNIT – II

**Green Logistics** Green Logistics and Transportation – Definitions of Green Logistics – Critical drivers of Green Logistics – Green transportation and logistics practices – Environmental impacts of transportation and logistics – Closing the Loop: Reverse Logistics. Case Studies

### UNIT – III

**Sustainability Strategies** - best practices, Statement on sustainable development strategy, Policy commitments Embedding policy commitments, Processes to remediate negative impacts, Mechanisms for seeking advice and raising concerns, Compliance with laws and

regulations 28 Membership associations. Cases, examples,

#### **UNIT – IV**

**Sustainable Logistics** - best practices, Activities, stakeholders, Types and Environmental Management, Concept of Green Logistics, Green Transportation, Carbon Foot print Analysis, Vehicle Routing, Tools For modelling environmental Impacts LCA. Cases, examples,

#### **UNIT – V**

**Social (including safety) Dimension** - Employment, Labor/Management Relations, Occupational Health and Safety, Training and Education, Diversity and Equal Opportunity, Non-discrimination, Freedom of Association and Collective Bargaining, Child Labor, Forced or Compulsory Labor, Security Practices, Rights of Indigenous Peoples, Local Communities, Supplier Social Assessment.

#### **Text Books:**

1. Green Supply Chain Management: A Concise Introduction, Routledge, Joseph Sarkis, Yijie Dou. ISBN: 9781138302815, 9781138292321.
2. Green Supply Chain Management, Charisios Achillas, Dionysis D. Bochtis, Dimitrios Aidonis, Dimitris Folinas, Routledge. ISBN-10: 1138644617, ISBN-13: 978-1138644618

#### **Reference Books:**

1. Total Quality Management, Charantimath, P.M. (Pearson Education, 3rd Edition) ISBN, 8131732622, 9788131732625
2. Production & Operations Management, Bedi, Kanishka, (Oxford University Press, 3rd Edition) ISBN-10, 9780198072096. ISBN-13, 978-0198072096.

#### **Web Links:**

1. <http://acl.digimat.in/nptel/courses/video/110108056/lec28.pdf>
2. <https://archive.nptel.ac.in/courses/110/108/110108056/>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## DATA MINING FOR BUSINESS DECISIONS

Course Code:245MS095

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
2	0	1	3

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Explain the fundamental concepts and principles of data mining and its applications.
- CO2:** Differentiate between Business Intelligence and Data Mining.
- CO3:** Identify and interpret clustering results using appropriate metrics and visualization techniques.
- CO4:** Analyze the principles and techniques of Web Mining, including web content mining, web structure mining, and web usage mining.
- CO5:** Determine the importance of data mining in transforming raw data into actionable knowledge.

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	1	-	-	-
<b>CO2</b>	-	1	-	-	-
<b>CO3</b>	-	1	-	-	-
<b>CO4</b>	-	1	-	-	-
<b>CO5</b>	-	1	-	-	-

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
<b>CO1</b>	-	1
<b>CO2</b>	-	1
<b>CO3</b>	-	1
<b>CO4</b>	-	1
<b>CO5</b>	-	1

### UNIT – I

**Introduction to Data Mining:** Introduction-- Scope of Data Mining- What is Data Mining- How does Data Mining Works- Predictive Modelling- Data Mining and Data Warehousing- Architecture for Data Mining: Profitable Applications- Data Mining Tools.

### UNIT – II

**Business Intelligence:** Introduction, Business Intelligence-Business Intelligence tools- Business Intelligence Infrastructure- Business Intelligence Applications- BI versus Data Warehouse-BI versus Data Mining- Future of BI. Data Preprocessing: Introduction- Data Preprocessing Overview- Data Cleaning- Data Integration and Transformation- Data Reduction- Discretization and Concept Hierarchy Generation.

### UNIT – III

**Data Mining Techniques an Overview:** Introduction- Data Mining- Data Mining Versus Database Management System- Data Mining Techniques- Association rules- Classification- Regression-Clustering-Neural networks. Clustering—Introduction— Clustering-- Cluster Analysis-- Clustering Methods- K means-- Hierarchical clustering-- Agglomerative

clustering-- Divisive clustering-- clustering and segmentation software-- evaluating clusters.

#### **UNIT – IV**

**Web Mining:** Introduction—Terminologies-- Categories of Web Mining – Web Content Mining-- Web Structure Mining-- Web Usage Mining-- Applications of Web Mining and Agent based and Data base approaches-- Web mining Software.

#### **UNIT – V**

**Applications of Data mining:** Introduction-- Business Applications Using Data Mining Risk management and targeted marketing--Customer profiles and feature construction-- Medical applications (diabetic screening) --Scientific Applications using Data Mining-- Other Applications.

##### **Text Books:**

1. Introduction to data mining by Tan, Steinbach & Kumar.ISBN-10:9332571406, ISBN-13:978-9332571402.
2. Data Mining: Concepts and Techniques, Third Edition by Han, Kamber & Pei.ISBN-10:9780123814791, ISBN-13:978-9380931913

##### **Reference Books:**

1. Data Mining and Analysis Fundamental Concepts and Algorithms by Zaki & Meira. ISBN-10:0521766338, ISBN-13:978-0521766333.
2. Data Mining: The Textbook by Aggarwal.ISBN-10:9783319141411, ISBN-13:978-3319141411

##### **Web Links:**

1. [https://onlinecourses.nptel.ac.in/noc21\\_cs06/preview](https://onlinecourses.nptel.ac.in/noc21_cs06/preview)
2. <https://ggsestc.digimat.in/nptel/courses/video/110105089/L39.html>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## MANAGING SOFTWARE PROJECTS

Course Code:245MS096

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>2</b>	<b>0</b>	<b>1</b>	<b>3</b>

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Demonstrate leadership skills, including stakeholder management, communication, and conflict resolution, essential for project success.
- CO2:** Apply cost estimation, resource allocation, and budgeting techniques to manage project finances effectively.
- CO3:** Conduct qualitative and quantitative risk analysis to evaluate the likelihood and impact of risks on project objectives.
- CO4:** Navigate legal and regulatory frameworks governing procurement, contracting, and outsourcing activities.
- CO5:** Develop leadership qualities necessary for guiding and motivating project teams.

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	1	-	-	-
<b>CO2</b>	-	1	-	-	-
<b>CO3</b>	-	1	-	-	-
<b>CO4</b>	-	1	-	-	-
<b>CO5</b>	-	1	-	-	-

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
<b>CO1</b>	-	1
<b>CO2</b>	-	1
<b>CO3</b>	-	1
<b>CO4</b>	-	1
<b>CO5</b>	-	1

### UNIT – I

**Introduction:** What is project, what is project Management -The role of project Manager, the project Management Profession, Project life cycle - A system view of project management - Understanding organizations, Stakeholder management - Project phases and the project life cycle -The context of information technology projects.

### UNIT – II

**Developing the Project Schedule:** Project management software tools-Developing the project budget, Finalizing the project schedule and budget -Monitoring and controlling the project -The project communications plan -Project metrics- Reporting performance and progress - Information distribution.

### UNIT – III

**Risk Management Planning:** Common sources of risk on information technology projects, Risk identification, Qualitative risk analysis - Quantitative risk analysis, Risk response planning-Risk monitoring and control, using software to assist in project risk management

## **UNIT – IV**

**Planning Purchase and Acquisitions:** Planning contracting, requesting seller responses  
Selecting sellers, Administering the contract- Closing the contract - Using software to assist in project management - Outsourcing

## **UNIT – V**

**Project Leadership:** Ethics in projects -Multicultural projects- Project implementation, administrative closure - Project evaluation

### **Text Books:**

1. Information Technology Project Management: Kathy Schwalbe Thomson Publication, ISBN-10:9781337101356, ISBN-13: 978-1337101356
2. Information Technology Project Management providing measurable organizational value Jack Marchewka Wiley India. ISBN-10:1118911016, ISBN-13:978-1118911013.

### **Reference Books:**

1. Applied software project management Stellman & Greene SPD. ISBN-10:0596009488, ISBN-13:978-0596009489.
2. Software Engineering Project Management by Richard Thayer, Edward Yourdon WILEY INDIA.ISBN-10:9812530959, ISBN-13:978-9812530950.

### **Web Links:**

1. <http://www.digimat.in/nptel/courses/video/106105218/L01.html>
2. [https://onlinecourses.nptel.ac.in/noc19\\_cs70/preview](https://onlinecourses.nptel.ac.in/noc19_cs70/preview)

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## WEB DESIGNING

**Course Code:245MS097**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>2</b>	<b>0</b>	<b>1</b>	<b>3</b>

### **Course Outcomes:**

#### **At the end of the Course, Student will be able to:**

- CO1:** Explain the history and evolution of the web and its underlying technologies.
- CO2:** Develop the HTTP message format and differentiate between persistent and non-persistent connections.
- CO3:** Construct web pages using HTML, including text, lists, links, images, tables, forms, frames, and meta tags.
- CO4:** Design and develop visually appealing web pages using CSS layout techniques.
- CO5:** Apply advanced JavaScript techniques, such as event handling and DOM manipulation.

### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	1	-	-	-
<b>CO2</b>	-	1	-	-	-
<b>CO3</b>	-	1	-	-	-
<b>CO4</b>	-	1	-	-	-
<b>CO5</b>	-	1	-	-	-

### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	-	1
<b>CO2</b>	-	1
<b>CO3</b>	-	1
<b>CO4</b>	-	1
<b>CO5</b>	-	1

### **UNIT – I**

**Web Fundamentals:** Introduction To the Web, History of the Web, Protocols Governing the Web, Creating Websites for Individuals and the Corporate World, Web Applications, Writing Web Projects, Identification of Objects, Target User, Web Team, Planning and Process Development, Web Architecture, Major Issues in the Web Solutions Development, Web Servers (Apache Web Server), Web Browsers, Internet Standards, TCP/IP Protocol Suite, IP Addresses, MIME, Cyber Laws.

### **UNIT – II**

**Hyper Text Transfer Protocol (HTTP):** Introduction - Web Server and Clients, Resources, URL and its Anatomy – Examples, Message Format, Persistent and Non-Persistent Connections, Web Caching, Proxy. Java Network Programming- Java and the Net, Java Networking Classes and Interfaces, Looking up Internet Address, Client/Server Programs, Socket Programming, E-mail Client. (lab sessions to be conducted)

### **UNIT – III**

**Hyper Text Markup Language (HTML):** Introduction, Structure, Text, Lists, Links, Images, Tables, Forms, Frames, Images, and Meta Tags. (lab sessions to be conducted)

## **UNIT – IV**

**Cascading Style Sheets (CSS):** Introduction, Advantages, Color, Text, Boxes, Lists, Tables and Forms, Layout, Images, HTML5 Layout. (Lab Sessions to be conducted)

## **UNIT – V**

**JavaScript:** Introduction, Variables, Literals, Operators, Control Structure, Conditional Statements, Arrays, Functions, Objects, JavaScript and HTML DOM, Advanced JavaScript and HTML Forms (Lab sessions to be conducted).

### **Text Books:**

- 1 Uttam K Roy: Web Technologies, Oxford University Press.ISBN-10: 9780198066224, ISBN-13:978-0198066224.
- 2 Jon Duckett: HTML & CSS: Design and Build Websites – John Wiley & Sons.ISBN-10:9780198066224, ISBN-13:978-0198066224.

### **Reference Books:**

- 1 Web Design with HTML & CSS: HTML & CSS Complete Beginner's Guide, Prem Kumar (Author), Notion Press,31 October 2021.ISBN-10:1684878276, ISBN-13:978-1684878277.
- 2 Web Designing and Development Training Guide, Jain/ Rai/ Geetha, BPB,2021. ISBN-10:8183335799, ISBN-13:978-8183335799.

### **Web Links:**

- 1 <https://nptel.ac.in/courses/106106222>
- 2 <https://nptel.ac.in/courses/106106156>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## BUSINESS ANALYTICS

**Course Code:245MS098**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
2	0	1	3

### **Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Trace the historical development of business analytics from its origins to the present day.
- CO2:** Demonstrate proficiency in using Excel for data manipulation, formula application, and data queries.
- CO3:** Formulate and solve linear optimization models using spreadsheet software.
- CO4:** Analyze market data using frameworks like PESTLE and Porter's Five Forces to gain strategic insights.
- CO5:** Implement strategies for effective Master Data Management to ensure data consistency and accuracy across organizations.

### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	1	-	-	-
<b>CO2</b>	-	1	-	-	-
<b>CO3</b>	-	1	-	-	-
<b>CO4</b>	-	1	-	-	-
<b>CO5</b>	-	1	-	-	-

### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	-	1
<b>CO2</b>	-	1
<b>CO3</b>	-	1
<b>CO4</b>	-	1
<b>CO5</b>	-	1

### **UNIT – I**

**Introduction to Business Analytics:** Evolution of Business analytics, scope, Data for Business Analytics, Models in Business Analytics, problem solving with business analytics-Types of data, Integrating Analytics with business, Business Analytics for Competitive Advantage, Descriptive, Predictive, and Prescriptive Analytics, Dashboards Business Analytics Process Cycle.

### **UNIT – II**

**Analytics on Spreadsheets:** Basic Excel, Excel Formulas, Excel Functions, Data Queries. **Descriptive Analytics:** Descriptive Statistical measures - Populations and samples, Statistical notations, Measures of Location, Measures of Dispersion, and Measures of Association. **Statistical Inference:** Hypothesis testing, one-Sample Test, Two-Sample Test, Two tailed Hypothesis for mean, ANOVA. **Predictive Analytics:** Simple Linear regression, Multiple Linear regression, Residual Analysis, Building regression models, Regression with categorical independent variables.

### **UNIT – III**

**Machine Learning:** Supervised Learning and Unsupervised Learning, Clustering & Segmentation, Affinity/ Association Analysis, Data Reduction, Visual Analytics and Data Visualization  
**Prescriptive Analytics:** Building Linear Optimization models, Implementing Linear Optimization models on spreadsheets, Solving Linear Optimization models.

### **UNIT – IV**

**Marketing Analytics:** Models and metrics- Market Insight – Market data sources, sizing, PESTLE trend analysis, and porter five forces analysis - Market basket Analysis, Text Analytics, Spreadsheet Modelling - Sales Analytics: E Commerce sales mode, sales metrics, profitability metrics and support metrics.

### **UNIT – V**

**Introduction to Big Data:** Master Data Management. Data Mining on what kind of data, what kinds of patterns can be mined, Which technologies are used, Which kinds of applications are targeted, Major issues in Data Mining. Getting to know your Data: Data Objects and Attribute Types, Basic Statistical Descriptions of Data, Data Visualization, Measuring data Similarity and Dissimilarity.

#### **Text Books:**

1. Analytics at Work by Thomas H. Davenport, Jeanne G.Harris and Robert Morison, Harvard Business Press.ISBN-10:9781422177693,ISBN-13:978-1422177693.
2. Getting Started with Business Analytics: Insightful Decision – Making by David Hardoon, Galit Shmueli, Chapman & Hall/CRC.ISBN-10:1439896534, ISBN-13:978-1439896532.

#### **Reference Books:**

1. Business Intelligence: A Managerial Approach by Efraim Turban, Ramesh Sharda, Dursun Delen and Daid King, Pearson PublicationISBN-10: 8131764435, ISBN-13:978-8131764435.
2. Business Intelligence Making Decision through Data Analytics, Jerzy Surma, Business Expert Press.ISBN-10:1606491857, ISBN-13:978-1606491850.

#### **Web Links:**

1. <https://archive.nptel.ac.in/courses/110/105/110105089/>
2. [https://onlinecourses.nptel.ac.in/noc24\\_cs65/preview](https://onlinecourses.nptel.ac.in/noc24_cs65/preview)

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## MANAGING DIGITAL INNOVATION AND TRANSFORMATION

**Course Code:245MS099**

**L      T      P      C**  
**2      0      1      3**

### **Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Explain the concept of digital transformation and its importance in today's business environment.
- CO2:** Examine the requirements for social media transformation.
- CO3:** Identify and address challenges associated with building digital capabilities.
- CO4:** Analyse the need for re-organisation to bridge the gap to digital customers.
- CO5:** Perceive the impact of digital transformation on enterprise innovation.

### **Mapping of Course Outcomes with Program Outcomes:**

<b>CO/PO</b>	<b>PO 1</b>	<b>PO 2</b>	<b>PO 3</b>	<b>PO 4</b>	<b>PO 5</b>
<b>CO1</b>	-	1	-	-	-
<b>CO2</b>	-	1	-	-	-
<b>CO3</b>	-	1	-	-	-
<b>CO4</b>	-	1	-	-	-
<b>CO5</b>	-	1	-	-	-

### **Mapping of Course Outcomes with Program Specific Outcomes:**

<b>CO/PSO</b>	<b>PSO1</b>	<b>PSO2</b>
<b>CO1</b>	-	1
<b>CO2</b>	-	1
<b>CO3</b>	-	1
<b>CO4</b>	-	1
<b>CO5</b>	-	1

### **UNIT – I**

**Introduction to Digital Transformations:** The five domains of digital transformations—customer, competition, data, innovation, and value, 1-farness customer networks, turn data into assets, adapt value proposition

### **UNIT – II**

**Classification of Digital Transformations:** Business Model, product development, data, processes, knowledge, self-service, and organizational culture; Social Media Transformation: understand requirements, document goals, objective and social media tactics, establish potential future state operating model, gap analysis and recommendations.

### **UNIT – III**

**Building Digital Capabilities:** challenges ongoing digital, handling employee during digital transformations, developing companywide strategy; Digital transformations in the space of cloud computing: prepare and drive digital transformations.

## **UNIT – IV**

**Digitalization of Professional Services:** Re-Organisation in Order to Bridge the Gap to Digital Customers - Value Creation in Virtual Law Firms - Digital Transformation Supporting Public Service Innovation: Business Model Challenges and Sustainable - Development Opportunities

## **UNIT – V**

**Areas of IT Management and its Challenges:** IT services, IT organisation - Enterprise Innovation and the Digital Transformation - Industry, development trends, business competitiveness due to Technology - Using Technology as Innovation, Integration and Interconnection of business - IT strategy, IT governance, IT sourcing and controlling

### **Text Books:**

1. Herbert, Lindsay; Digital Transformation: Build your organization's Future for the Innovation Age, Bloomsbury Publication.ISBN-10:1472940377, ISBN-13:978-1472940377.
2. Venkatraman, V; The Digital Matrix: New rules for business transformation through technology; Lifetree Media Ltd.ISBN-10:1928055206, ISBN-13:978-1928055204.

### **Reference Books:**

1. Velte, A. T; Velte, T. J; and Elsenpeter, R; Cloud Computing: A Practical Approach, McGraw Hill Education (India) Private Limited.ISBN-10:0070683514, ISBN-13:978-0070683518.
2. Rogers, David, The Digital Transformation Playbook — Rethink your Business for the Digital Age (Columbia Business School Publishing). ISBN-10:0231163843, ISBN-13:978-0231175449.

### **Web Links:**

1. [https://onlinecourses.nptel.ac.in/noc24\\_mg74/preview](https://onlinecourses.nptel.ac.in/noc24_mg74/preview)
2. [https://onlinecourses.swayam2.ac.in/imb23\\_mg69/preview](https://onlinecourses.swayam2.ac.in/imb23_mg69/preview)

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## BIG DATA ANALYTICS

**Course Code:245MS100**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
2	0	1	3

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Explain the importance of Big Data and SQL databases with Hadoop.
- CO2:** Simplify how HDFS ensures data reliability and availability.
- CO3:** Relate Hive with traditional RDBMS systems and understand the differences.
- CO4:** Compare HBase with traditional RDBMS systems and understand when to use HBase.
- CO5:** Solve common graph-related problems using MapReduce.

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	1	-	-	-
<b>CO2</b>	-	1	-	-	-
<b>CO3</b>	-	1	-	-	-
<b>CO4</b>	-	1	-	-	-
<b>CO5</b>	-	1	-	-	-

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
<b>CO1</b>	-	1
<b>CO2</b>	-	1
<b>CO3</b>	-	1
<b>CO4</b>	-	1
<b>CO5</b>	-	1

### UNIT – I

**Introduction to Big Data:** Big Data-definition, Characteristics of Big Data (Volume, Variety, Velocity, Veracity, Validity), Importance of Big Data , Patterns for Big Data Development, Data in the Warehouse and Data in Hadoop [Zikopoulos] - Introduction to Hadoop: Hadoop- definition, Understanding distributed systems and Hadoop, Comparing SQL databases and Hadoop, Understanding MapReduce, Counting words with Hadoop-running your first program, History of Hadoop, Starting Hadoop - The building blocks of Hadoop, Name Node, Data Node, Secondary Name Node, Job Tracker and Task Tracker.

### UNIT – II

**HDFS:** Components of Hadoop -Working with files in HDFS, Anatomy of a Map Reduce program, Reading and writing the Hadoop Distributed File system -The Design of HDFS, HDFS Concepts, The Command-Line Interface, Hadoop Filesystem, The Java Interface, Data Flow, Parallel Copying with distcp, Hadoop Archives. Hadoop I/O: Compression-Serialization-- Avro and File-Based Data structures.

**UNIT – III**

**Map Reduce Programming:** Writing basic Map Reduce programs - Getting the patent data set, constructing the basic template of a Map Reduce program, counting things, adapting for Hadoop's API changes, Streaming in Hadoop. **Map Reduce Advanced Programming:** Advanced Map Reduce - Chaining Map Reduce jobs, joining data from different sources.

**UNIT – IV**

**Hadoop Eco System:** User Defined Functions-- Data Processing operators. Hive: Hive Shell-Hive Services-Hive Meta Store-Comparison with Traditional Databases-HiveQL-Tables, Querying Data and User Defined Functions. HBase: H Basics- Concepts- Clients- Example-Hbase Versus RDBMS. Big SQL: Introduction

**UNIT – V**

**Graph Representation in Map Reduce:** Modeling data and solving problems with graphs, Shortest Path Algorithm, Friends-of-Friends Algorithm, PageRank Algorithm, Bloom Filters. Data Analytics with R Machine Learning: Introduction, Supervised Learning, Unsupervised Learning, Collaborative Filtering. Big Data Analytics with BigR.

**Text Books:**

1. Tom White — Hadoop: The Definitive Guide| Third Edit on, O 'reily Media, ISBN-10:1449311520, ISBN-13:978-1449311520.
2. Seema Acharya, Subhasini Chellappan, "Big Data Analytics" Wiley.ISBN-10:812657951X, ISBN-13:978-8126579518.

**Reference Books:**

1. Michael Berthold, David J. Hand, "Intelligent Data Analysis", Springer.ISBN-10:3540430601, ISBN-13:978-3540430605.
2. Jay Liebowitz, —Big Data and Business Analytics| Auerbach Publications, CRC press. ISBN-10:1466565780, ISBN-13:978-1466565784.

**Web Links:**

1. <https://archive.nptel.ac.in/courses/106/104/106104189/>
2. [https://onlinecourses.nptel.ac.in/noc20\\_cs92/preview](https://onlinecourses.nptel.ac.in/noc20_cs92/preview)

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## CYBER LAWS AND SECURITY

**Course Code:245MS101**

**L      T      P      C**  
**2      0      1      3**

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Explain the meaning and concepts of cyber security.
- CO2:** Identify the importance of Secure System Planning and administration
- CO3:** Distinguish Information security policies and procedures in organizations
- CO4:** Compare and contrast the practical applications of Information security systems.
- CO5:** Conduct survey on Organizational and Human Security.

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	-	1	-	-
<b>CO2</b>	-	-	1	-	-
<b>CO3</b>	-	-	1	-	-
<b>CO4</b>	-	-	1	-	-
<b>CO5</b>	-	-	1	-	-

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
<b>CO1</b>	-	1
<b>CO2</b>	-	1
<b>CO3</b>	-	1
<b>CO4</b>	-	1
<b>CO5</b>	-	1

### UNIT – I

**Introduction to Computer Security:** Definition, Threats to security, Government requirements, Information Protection and Access Controls, Computer security efforts, Standards, Computer Security mandates and legislation, Privacy considerations, international security activity.

### UNIT – II

**Secure System Planning and Administration:** Introduction to the orange book, Security policy requirements, accountability, assurance and documentation requirements, Network Security, The Red book and Government network evaluations.

### UNIT – III

**Information Security Policies and Procedures:** Corporate policies- Tier 1, Tier 2 and Tier3 policies - process management-planning and preparation-developing policies-asset classification policy-developing standards.

### UNIT – IV

**Information Security:** fundamentals-Employee responsibilities- information classification Information handling- Tools of information security- Information processing-secure program administration.

**UNIT – V**

**Organizational and Human Security:** Adoption of Information Security Management Standards, Human Factors in Security- Role of information security professionals.

**Text Books:**

1. Debby Russell and Sr. G. T Gangemi, "Computer Security Basics (Paperback) ||, 2nd Edition, O 'Reilly Media.ISBN-10:0596006691, ISBN-13:978-0596006693.
2. Thomas R. Peltier, -Information Security policies and procedures: A Practitioner 's Reference||, 2nd Edition Prentice Hall.ISBN-10:0849319587, ISBN-13:978-0849319587.

**Reference Books:**

1. Kenneth J. Knapp, Cyber Security and Global Information Assurance: Threat Analysis and Response Solutions|, IGI Global.ISBN-10:1605663263, ISBN-13:978-1605663265.
2. Jonathan Rosener, Cyber law: the Law of the Internet||, Springer-verlag. ISBN-10:0387948325, ISBN-13:978-0387948324.

**Web Links:**

1. <http://acl.digimat.in/nptel/courses/video/106106248/L14.html>
2. [https://onlinecourses.swayam2.ac.in/nou19\\_cs08/preview](https://onlinecourses.swayam2.ac.in/nou19_cs08/preview)

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## INFORMATION SYSTEMS AUDIT

**Course Code:245MS102**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>2</b>	<b>0</b>	<b>1</b>	<b>3</b>

### **Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Explain the meaning and concepts of Information System Auditing.
- CO2:** Analyze the importance of Management Control Framework.
- CO3:** Distinguish Management Control Framework for establishing effective controls.
- CO4:** Compare and contrast Evidence Evaluation systems.
- CO5:** Justify corporate governance issues in Indian context.

### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	1	-	-	-
<b>CO2</b>	-	1	-	-	-
<b>CO3</b>	-	1	-	-	-
<b>CO4</b>	-	1	-	-	-
<b>CO5</b>	-	1	-	-	-

### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	-	1
<b>CO2</b>	-	1
<b>CO3</b>	-	1
<b>CO4</b>	-	1
<b>CO5</b>	-	1

### **UNIT – I**

**Overview of Information System Auditing:** Effect of Computers on Internal Controls, Effects of Computers on Auditing, Foundations of information Systems Auditing, Conducting an Information Systems Audit.

### **UNIT – II**

**The Management Control Framework-I:** Introduction, Evaluation the Planning Function, Leading Function and Controlling Function, Systems Development - Management Controls, Approaches to Auditing Systems Development, Normative Models of the Systems Development Process, Evaluating the Major phases in the Systems Development Process, Programming Management Controls, Data Resource Management Controls.

### **UNIT – III**

**The Management Control Framework-II:** Security Management Controls, Operations Management Controls Quality Assurance Management Controls- Case Studies.

### **UNIT – IV**

**Evidence Collection:** Audit Software, Code Review, Test Data, and Code Comparison, Concurrent Auditing techniques, Interviews, Questionnaires, and Control Flowcharts. Performance Management tools- Case Studies.

**UNIT – V**

**Evidence Evaluation:** Evaluating Asset Safeguarding and Data Integrity, Evaluating System Effectiveness, Evaluating System Efficiency. Information Systems Audit and Management: Managing the Information Systems Audit Function.

**Text Books:**

1. Ron Weber: Information Systems Control and Audit, Pearson Education.ISBN-10:9788131704721, ISBN-13:978-8131704721.
2. D P Dube: Information System Audit and Assurance, TMH, New Delhi.ISBN-10:0070585695, ISBN-13:978-0070585690.

**Reference Books:**

1. Auditing Information Systems, Jack J. Champlain, Wiley, ISBN-10:0471281174, ISBN-13:978-0471281177.
2. Auditor's Guide to Information Systems Auditing, Richard E. Cascarino, Wiley.ISBN-10: 0470009896.ISBN-13:978-0470009896.

**Web Links:**

1. <https://archive.nptel.ac.in/noc/courses/noc15/SEM1/noc15-cs03/>
2. <https://www.coursera.org/learn/information-systems-audit/reviews?page=9>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

**Course Code:245MS103**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>2</b>	<b>0</b>	<b>1</b>	<b>3</b>

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Explain the fundamental concepts and theories of AI and ML.
- CO2:** Utilize auto encoders for unsupervised and semi-supervised learning tasks.
- CO3:** Implement and evaluate different clustering methods, including K-Means K-Medoids, k-Mode, hierarchical, and density-based clustering.
- CO4:** Optimize KNN models using techniques like Wilson editing and appropriate distance metrics with decision trees using algorithms like ID3, C4.5, and CART.
- CO5:** Discover and apply various algorithms for association rule mining, including Apriori, FP-Growth, and Eclat.

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	1	-	-	-
<b>CO2</b>	-	1	-	-	-
<b>CO3</b>	-	1	-	-	-
<b>CO4</b>	-	1	-	-	-
<b>CO5</b>	-	1	-	-	-

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
<b>CO1</b>	-	1
<b>CO2</b>	-	1
<b>CO3</b>	-	1
<b>CO4</b>	-	1
<b>CO5</b>	-	1

### UNIT – I

**What is Artificial Intelligence (AI):** Definitions, The Foundations of AI, The History of AI, Agents and Environments, The Concept of Rationality, The Nature of Environments, The Structure of Agents, Problem Solving Agents, Example Problems, Searching for Solutions, Uninformed Search Strategies: Breadth First, Depth First, Depth Limited; Informed Search Strategies: Greedy Best First, A\*Algorithms

### UNIT – II

**Convolution Neural Networks:** Image classification- Text classification- Image classification and hyper-parameter tuning - Emerging NN architectures - Recurrent Neural Networks -Building recurrent Neural Networks- Long Short-Term Memory -Time Series Forecasting. - Deep Learning - Auto-encoders and unsupervised learning - Stacked auto encoders and semi-supervised learning- Regularization - Dropout and Batch normalization.

### UNIT – III

**Foundations for Machine Learning (ML):** ML Techniques overview -Validation Techniques (Cross-Validations) - Feature Reduction/Dimensionality reduction - Principal components analysis (Eigen values, Eigen vectors, Orthogonality). - Clustering - Distance

measures -Different clustering methods (Distance, Density, Hierarchical) - Iterative distance-based clustering-Dealing with continuous, categorical values in K-Means-Constructing a hierarchical cluster-K-Medoids-k-Mode and density-based clustering, Measures of quality of clustering

#### **UNIT – IV**

**Classification Naïve Bayes Classifier:** Model Assumptions-Probability estimation - Required data processing - M-estimates--Feature selection-Mutual information -Classifier K-Nearest Neighbors, Computational geometry-Voronoi Diagrams-Delaunay Triangulations -K nearest Neighbor algorithm-Wilson editing and triangulations -Aspects to consider while designing K-Nearest Neighbor Support Vector Machines, Linear learning machines and Kernel space-Making Kernels and working in feature space, SVM for classification and regression problems. Decision Trees -ID4-C4.5-CART-Ensembles methods -Bagging & boosting and its impact on bias and variance -C5.0 boosting -Random forest -Gradient Boosting Machines and XGBoost.

#### **UNIT – V**

**Association Rule Mining:** The applications of Association Rule Mining: Market Basket-- Recommendation Engines, etc.-- A mathematical model for association analysis-- Large item sets-- Association Rules -- Apriori-- Constructs large item sets with mini sup by iterations-- Interestingness of discovered association rules-- Application examples-- Association analysis vs. classification -- FP-trees. - Machine Learning Applications across Industries--- Healthcare— Retail—Financial Services—Manufacturing—Hospitality—Cloud Based ML Offerings--Top 10 AI Startups---Flashcards (Tips, Tricks, Definitions)

#### **Text Books:**

- 1 Artificial Intelligence: A Modern Approach. Stuart Russell, Peter Norvig, Pearson Education 2nd Edition. ISBN-10:8120323823, ISBN-13:978-8120323827
- 2 Expert Systems: Principles and Programming. Joseph C Giarratano, Gary D Riley Thomson Publication, 4th Edition.ISBN-10:0534384471, ISBN-13:978-0534384470.

#### **Reference Books:**

- 1 Elaine Rich and Kevin Knight: Artificial Intelligence, Tata McGraw Hill.ISBN-10:9780070087705, ISBN-13:978-0070087705.
- 2 Dan W.Patterson, Introduction to Artificial Intelligence and Expert Systems, Prentice Hall of India.ISBN-10:9332551944,ISBN-13:978-0134771007.

#### **Web Links:**

- 1 <https://nptel.ac.in/courses/106105077>
- 2 <https://archive.nptel.ac.in/courses/106/105/106105152/>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## DIGITAL STARTUP AND NEW VENTURE MANAGEMENT

**Course Code:245MS104**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### **Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Identify various types of digital startups.
- CO2:** Estimate the capital and resource requirements for digital startups.
- CO3:** Examine the financial feasibility of digital startups.
- CO4:** Analyze the stages of growth for new ventures.
- CO5:** Develop strategies for dealing with failure.

### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	1	-	-	-
<b>CO2</b>	-	1	-	-	-
<b>CO3</b>	-	1	-	-	-
<b>CO4</b>	-	1	-	-	-
<b>CO5</b>	-	1	-	-	-

### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	-	1
<b>CO2</b>	-	1
<b>CO3</b>	-	1
<b>CO4</b>	-	1
<b>CO5</b>	-	1

### **UNIT – I**

**Introduction to Digital Startup:** Definition and types of startups-Digital startup ecosystem-The startup lifecycle-Identifying opportunities and ideation techniques-Role of innovation in digital startups-Case studies of successful digital startups

### **UNIT – II**

**Startup Capital Requirements and Legal Environment:** Identifying Startup capital Resource requirements - estimating Startup cash requirements - Develop financial assumptions, constructing a Process Map - Positioning the venture in the value chain - Launch strategy to reduce risks- Startup financing metrics - The Legal Environment- Approval for New Venture Taxes or duties payable for new ventures

### **UNIT – III**

**Starting-Up Financial Issues:** Feasibility Analysis - The cost and process of raising capital – Unique funding issues of a high-tech ventures - Funding with Equity, Financing with Debt- Funding startups with bootstrapping- crowd funding- strategic alliances.

### **UNIT – IV**

**Start-Up Survival and Growth:** Stages of growth in a new venture- Growing with the market - Growing within the industry- Venture life patterns- Reasons for new venture failures Scaling Ventures – preparing for change - Leadership succession, Support for growth and sustainability of the venture.

## UNIT – V

**Planning for Harvest and Exit:** Dealing with Failure: Bankruptcy, Exit Strategies Selling the business - Cashing out but staying in-being acquired- Going Public (IPO) – Liquidation.

### Text Books:

1. Kathleen R Allen, Launching New Ventures, An Entrepreneurial Approach, Cengage Learning.ISBN-10:1305102509, ISBN-13:978-1305102507.
2. Anjan Rai chaudhuri, Managing New Ventures Concepts and Cases, Prentice Hall International.ISBN-13:978-8120341562.

### Reference Books:

1. S. R. Bhowmik& M. Bhowmik, Entrepreneurship, New Age International.ISBN-10:8122419062, ISBN-13:978-8122419061.
2. Steven Fisher, Ja-nae' Duane, The Startup Equation -A Visual Guidebook for Building Your Startup, Indian Edition, McGraw Hill Education India Pvt. Ltd. ISBN-13:978-0071832366.

### Web Links:

1. [https://onlinecourses.swayam2.ac.in/imb20\\_mg22/preview](https://onlinecourses.swayam2.ac.in/imb20_mg22/preview)
2. <https://archive.nptel.ac.in/courses/110/106/110106141/>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## CONSUMER ANALYTICS

**Course Code:245MS105**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>2</b>	<b>0</b>	<b>1</b>	<b>3</b>

### **Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Apply the key concepts of the marketing management process, linking them to consumer analytics and insights.
- CO2:** Analyze and design non-linear pricing strategies for profit maximization.
- CO3:** Make use of conjoint analysis techniques.
- CO4:** Measure consumer value using metrics.
- CO5:** Compare consumer analytics in various domains like advertising, retailing, and internet & social marketing.

### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	1	-	-	-
<b>CO2</b>	-	1	-	-	-
<b>CO3</b>	-	1	-	-	-
<b>CO4</b>	-	1	-	-	-
<b>CO5</b>	-	1	-	-	-

### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	-	1
<b>CO2</b>	-	1
<b>CO3</b>	-	1
<b>CO4</b>	-	1
<b>CO5</b>	-	1

### **UNIT – I**

**Marketing Management and Consumer Analytics:** The Marketing Management Process and its link to Consumer Analytics and Consumer Insights, Correlation, Simple linear regression, Trend, seasonality, Exponential smoothing.

### **UNIT – II**

**Pricing:** Non-linear pricing strategies for profit maximization, rice skimming and sales, optimal pricing, price bundling, demand curve and the willingness to pay.

### **UNIT – III**

**Consumer Insights:** Conjoint analysis, product attributes and levels, full profile conjoint analysis, choice based conjoint analysis, random utility theory.

### **UNIT – IV**

**Consumer Value:** Lifetime Consumer value, relation between spending, customer acquisition and customer retention, Market basket analysis, RFM analysis

### **UNIT – V**

**Market Segmentation:** Cluster analysis, collaborative filtering and classification trees for segmentation, Application of Consumer Analytics in Advertising, Retailing and Internet &

Social Marketing.

**Text Books:**

1. Consumer Behaviour and Analytics by Andrew Smith, 2020.Routledge Publications.ISBN-10:113859265X, ISBN-13:978-1138592650.
2. Damian Ryan. Understanding Digital Marketing: Marketing Strategies for Engaging the Digital Generation (3rd Edition). Kogan Page Publishers.ISBN-10:0749453893, ISBN-13:978-0749453893.

**Reference Books:**

1. Winston, Wayne L, Marketing Analytics: Data-Driven Techniques with Microsoft Excel, 1st ed. Wiley.ISBN-10:111837343X, ISBN-13:978-1118373439.
2. Malhotra, Naresh, Marketing Research – An Applied Orientation, 7th ed., Pearson Education Vandana Ahuja. Digital Marketing. Oxford University Press India.ISBN-10:9353433290, ISBN-13:978-9353433291.

**Web Links:**

1. <https://archive.nptel.ac.in/courses/110/105/110105142/>
2. <https://www.coursera.org/learn/quantitative-customer-insights>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## E-MAIL MARKETING

**Course Code:245MS106**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### **Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Explain the fundamental concepts, history, and the significance of email marketing.
- CO2:** Analyze the elements and strategies involved in organizing and managing mailing lists.
- CO3:** Develop compelling and effective email content, including newsletters and announcements.
- CO4:** Examine the benefits and strategies for email automation.
- CO5:** Apply techniques for tracking and analyzing email marketing performance.

### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	1	-	-	-
<b>CO2</b>	-	1	-	-	-
<b>CO3</b>	-	1	-	-	-
<b>CO4</b>	-	1	-	-	-
<b>CO5</b>	-	1	-	-	-

### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	-	1
<b>CO2</b>	-	1
<b>CO3</b>	-	1
<b>CO4</b>	-	1
<b>CO5</b>	-	1

### **UNIT – I**

**Introduction to E-mail Marketing:** Meaning, Importance, Email Marketing Goals, History of Email Marketing, Advantages and Dis Advantages of Email Marketing and reasons for increase in email marketing. Popular Email Marketing Tools.

### **UNIT – II**

**Organizing the Mailing List:** Mailing List elements and concepts, Developing E-mails to Drive Results, Critical Design Factors, Utilize and Optimization of Preheader, Headline, and Call-to-Action and Subject Lines. Subscriber List Management Strategies & related Issues.

### **UNIT – III**

**Email Content:** Composing various types of e-mails, Newsletters and Announcements Using images & videos, how to write Effective content and subject line, Landing Pages-Meaning, design & Factors to be considered. Development of a Brand Strategy through E-mail Marketing and integration with other digital tools.

#### **UNIT – IV**

**Automating Emails and Spam Compliance:** Marketing Automation, Why Email automation is required, Designing an effective Email campaign, The Demonstrated Value of Automated Emails, Welcome e-mails. Date-Based Triggers, Action and Event Triggers. SPAM Testing and minimizing related complaints, Blacklisting.

#### **UNIT – V**

**Analyzing and Tracking Email Marketing:** Tracking Email Marketing Reports, Types of Tracking reports, Bounce Rates /Non-bounce rates, Open Rates & Click through rates. Tracking email data, Optimization of Call-to-action and Lead Capture.

#### **Text Books:**

1. Email Marketing in a Digital World: The Basics and Beyond by Jason Smith ISBN-10:1606499920, ISBN-13:978-1606499924.
2. Hillstrom's Email Marketing Excellence by Kevin Hillstrom. ISBN-10:1480232432, ISBN-13:978-1480232433.

#### **Reference Books:**

1. The Rebel's Guide to Email Marketing: Grow Your List, Break the Rules, and Win by DJ Waldow, Jason Falls ISBN-10-0789749696.
2. 300 Email Marketing Tips: Critical Advice and strategy to turn subscribers into buyers and grow a six-figure business by Meera Kothand. ISBN-10:1098935470, ISBN-13:978-1098935474.

#### **Web Links:**

1. <https://www.coursera.org/learn/think-outside-the-inbox>
2. <https://www.coursera.org/projects/mailchimp-build-email-marketing-campaign>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## MOBILE MARKETING

**Course Code:245MS107**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

**Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Explain the history, definition, scope, and importance of mobile marketing and mobile commerce.
- CO2:** Analyze different types of mobile applications.
- CO3:** Differentiate between various mobile payment methods.
- CO4:** Develop effective mobile marketing strategies.
- CO5:** Identify the major concerns related to privacy and security in mobile marketing.

**Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	1	-	-	-
<b>CO2</b>	-	1	-	-	-
<b>CO3</b>	-	1	-	-	-
<b>CO4</b>	-	1	-	-	-
<b>CO5</b>	-	1	-	-	-

**Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	-	1
<b>CO2</b>	-	1
<b>CO3</b>	-	1
<b>CO4</b>	-	1
<b>CO5</b>	-	1

**UNIT – I**

**Introduction to Mobile Marketing:** History, Definition, Scope, and Importance of Mobile marketing. Mobile Commerce - Definition, History, Scope, Characteristics, Applications, attributes and benefits of M-commerce. Growth and Future Prospects of M-Commerce.

**UNIT – II**

**Mobile Applications:** Mobile apps- Meaning, types & Importance. Mobile Gaming concept, Scenario in India and Future scope of online gaming. Text Message Marketing, Mobile advertising, Concept, types, advantages and limitations, Features of a good Mobile Marketing programme.

**UNIT – III**

**Mobile Payments and Mobile Entertainment:** Mobile payments: Mobile wallets, mobile browser payments, in-app mobile payments and mobile or wireless credit card transfers. Mobile Payment Models, Mobile Payment Service Providers. Mobile entertainment: Definition, Indian Scenario, OTT platforms, Mobile TV and Live TV, Mobile music. Mobile banking- Features, types and benefits. Mobile FinTech.

**UNIT – IV**

**Mobile Marketing Strategies:** Mobile marketing vs. traditional marketing, Integration of traditional marketing with mobile marketing campaigns. Mobile marketing campaign-Planning, Implementation and Optimization. Mobile engagement.

**UNIT – V**

**Privacy and security in Mobile marketing:** Major concerns/issues related to privacy and security in mobile marketing. Challenges and Best Practices in Mobile Marketing. Future scope for mobile marketing.

**Text Books:**

1. Social media and Mobile Marketing, Puneet Singh Bhatia, Wiley, New Delhi, ISBN-13:978-8126578078.
2. A Beginners Guide to Mobile Marketing, Molly Garris and Karen Mishra, Business Expert press, New York, ISBN-13:978-1606498408.

**Reference Books:**

1. Digital Marketing 2.0, Rushen Chahal, Prof. Jayanta Chakraborti, Himalaya Publication, India. ISBN-10:9352994140, ISBN-13:978-9352994144.
2. Go Mobile, Jeanne Hopkins, Jamie Turner, Wiley Publications, New Jersey, ISBN-10:151184425, ISBN-13:978-1511384421.

**Web Links:**

1. <https://www.coursera.org/learn/mobile-marketing-optimization-tactics-and-analytics>
2. <https://www.udemy.com/course/how-to-create-grow-a-mobile-app-iphone-android-business/?couponCode=NVDIN35>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## SEARCH ENGINE OPTIMIZATION

**Course Code:**245MS108
**L**
**T**
**P**
**C**

**3**
**0**
**0**
**3**

### **Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Explain the basic concepts and significance of search engine optimization (SEO).
- CO2:** Make use of different tools like Google Search Console for SEO analysis and issue resolution.
- CO3:** Discover the importance and influence factors of on-page SEO
- CO4:** Differentiate between ethical and unethical linking practices
- CO5:** Apply SEO techniques for blogs, content management systems, local search, and mobile search

### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
CO1	-	1	-	-	-
CO2	-	1	-	-	-
CO3	-	1	-	-	-
CO4	-	1	-	-	-
CO5	-	1	-	-	-

### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
CO1	-	1
CO2	-	1
CO3	-	1
CO4	-	1
CO5	-	1

### **UNIT – I**

**Introduction to SEO:** Concepts of search engine optimization (SEO), Relevance, Importance, Popularity, Trust, Authority, Search engines and directories, how search engines work, Crawlers, robots, spiders, Algorithms, Search engine indexing, Ranking, Directories, Website architecture, Static pages, Dynamic pages.

### **UNIT – II**

**Search Engine Friendliness and Specific Rankings:** Page coding, managing spiders/robots, Crawlability, Rewriting pages, Subdomains, Alexa ranking, Image optimization, Google search console analysis, crawler issues, remove urls, sitemap submission.

### **UNIT – III**

**On-page SEO:** Importance, influence factors, Optimizing Web Page, Website Optimization, title, description and keyword tags, header tags, Anchor Text, Navigation Links, Contextual links, Canonical URLs, Page Nations, keyword research, meta tag optimization, SEO content optimization, sitemap creation submission,

robots.txt

#### **UNIT – IV**

**Off-page SEO:** Importance, influence factors, Right and wrong ways to link, Reciprocal links, three-way links, purchased links, link networks, Redirected links, Link bait, Trust rank and worthless links, Quality directories Performing and Implementing SEO, SEO goals, and Commercial intent, fixing broken links, Sitemaps, Useful directory links, complaining to search engines, How to address a copyright violation

#### **UNIT – V**

**Web 2.0 and Other Important Considerations:** Website ecosystem, Micro sites, RSS feeds, Blogosphere, social media, Google calendar, Press releases, SEO for blogs, SEO for content management systems, SEO for local search, SEO for mobile search, Measurements, Google API, SEO tools, Free tools, Research and resources, Google my business listing, Google places

#### **Text Books:**

- 1 Internet Marketing, Dave Chaffey, Fiona Ellis-Chadwick, Kevin Johnston, Richard Mayer, Pearson Education.ISBN-10:0273717405, ISBN-13:978-0273717409.
- 2 SEO For Dummies, by Peter Kent, 7th Edition, For Dummies. ISBN-10:1119579570, ISBN-13:978-1119579571.

#### **Reference Books:**

- 1 Online Marketing, Gerry T. Warner and Joe Wilson Schaefer. ISBN-10:1790528437, ISBN-13:978-1790528431.
- 2 Search Engine Optimization: An Hour a Day-Jennipe grappone, Gradiva Cousin-Wiley.ISBN-10:0471787531, ISBN-13:978-0471787532.

#### **Web Links:**

- 1 <https://www.coursera.org/learn/search-engine-optimization>
- 2 <https://www.coursera.org/specializations/seo>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## SOCIAL MEDIA MARKETING

**Course Code:245MS109**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### **Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Explain the meaning and definition of digital and social media marketing.
- CO2:** Identify best practices and pitfalls in sharing content on social media and bookmarking websites.
- CO3:** Develop a social media strategy by setting goals, planning, and choosing appropriate strategies.
- CO4:** Perceive the use of major social media platforms like Facebook, LinkedIn, Twitter, and YouTube for marketing purposes.
- CO5:** Assess the role of social analytics in measuring social media performance.

### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	1	-	-	-
<b>CO2</b>	-	1	-	-	-
<b>CO3</b>	-	1	-	-	-
<b>CO4</b>	-	1	-	-	-
<b>CO5</b>	-	1	-	-	-

### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	-	1
<b>CO2</b>	-	1
<b>CO3</b>	-	1
<b>CO4</b>	-	1
<b>CO5</b>	-	1

### **UNIT – I**

**Introduction to Social Media Marketing**-Meaning-Definition-Types of Social Media Websites-Mobile Apps-Email- social media-Various Social Media Websites; Blogging-Types, Platforms.

### **UNIT – II**

**Social Media Management**-Social Media and Target Audience-Sharing content on social media-Book marking websites; DO's and Don'ts of social media.

### **UNIT – III**

**Social Media Strategy**-Goals, Planning, Strategies, Monitoring Analysis; Tips of Social Media Marketing-Customization; Social Media Optimization; Social Media Promotion-paid advertising – other methods-social media ROI.

### **UNIT – IV**

**Social Media for Marketing** -Facebook, LinkedIn, Twitter, YouTube. Establishing Relationship with customers social media.

## **UNIT – V**

**Social Analytics-** Automation and social media- social media and other types of Marketing, Managing Tools of social media.

### **Text Books:**

1. Social Media Marketing: Tracy L. Tuten (2021). ISBN-10:1529731992, ISBN-13:978-1529731996.
2. Social Media Marketing 1st Edition, Michael R. Solomon, Tracy Tuten - Pearson Education.ISBN-13:978-1292023533.

### **Reference Books:**

1. Social media & Mobile Marketing: (Includes Online Worksheets), Puneet Singh Bhatia – Wiley.ISBN-13:978-8126578078.
2. Social Media Marketing, Kristina Lane - Lap Lambert Publishing.ISBN-13:978-3330007062.

### **Web Links:**

1. <https://www.coursera.org/learn/social-media-marketing-introduction>
2. <https://www.udemy.com/course/best-social-media-marketing-training-course/?couponCode=LETSLEARNNOWPP>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## CONTENT MARKETING

**Course Code:245MS110**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

**Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Explain the definition, history, and evolution of content marketing.
- CO2:** Identify various tools of content marketing, such as blogs, social media, webinars, videos, newsletters, and podcast.
- CO3:** Develop the content marketing strategy.
- CO4:** Utilize Content Management Systems (CMS).
- CO5:** Analyze content marketing strategies used in different sectors.

**Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	1	-	-	-
<b>CO2</b>	-	1	-	-	-
<b>CO3</b>	-	1	-	-	-
<b>CO4</b>	-	1	-	-	-
<b>CO5</b>	-	1	-	-	-

**Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	-	1
<b>CO2</b>	-	1
<b>CO3</b>	-	1
<b>CO4</b>	-	1
<b>CO5</b>	-	1

### **UNIT – I**

**Introduction to Content Marketing:** Definition, history, evolution, objectives, importance, role of content marketing in businesses. Challenges and opportunities.

### **UNIT – II**

**Tools of Content Marketing:** Blogs, branch guide/folder, social media, Case study, Webinars, Video publications, articles, Newsletters, Mobile Apps, Info-graphic, e-book, Whitepapers, podcasts, audio publications, websites and E-mails. Merits and challenges in using these tools. Content marketing and online marketing, influencer marketing.

### **UNIT – III**

**Content Marketing Strategy:** Definition, objectives, strategic plan, Analysis of Business and understanding customers, Content marketing mix, timelines, budget and optimizing and content, Role of SEO in content marketing.

### **UNIT – IV**

**Content Management:** Definition, Phases, CMS, Distribution of Content, Strategies in content distribution - guest blogging, repurposing and republishing, Importance of content Management, Metrics to monitor content.

## UNIT – V

**Cases in Content Marketing:** Content Strategies used in sectors like Automobile, Services, FMCG, Pharmaceuticals, Airline, Future Trends in Content Marketing.

### Text Books:

1. Content Marketing Fundamentals-SeanR. Mitchell, Create space Independent Pub.ISBN-10:1503232557, ISBN-13:978-1503232556
2. Managing Content Marketing: The Real-World Guide for Creating Passionate Subscribers to Your Brand-Robert Rose and Joe Pulizzi, CMI Books, Division of Z Squared Media, LLC. ISBN-10:0983330719, ISBN-13:978-0983330714.

### Reference Books:

1. Digital Marketing MBA: Guiding Principles for Researching, Planning, and Managing a Marketing Strategy to Transform Your Business-David J Bradley, The Bradly Business Group. 2019.ISBN-10:1731015844, ISBN-13:978-1731015846.
2. Getting Digital Marketing Right-David J Bradley, Create space Independent Publishing Platform.ISBN-10:1507642245, ISBN-13:978-1507642245.

### Web Links:

1. <https://www.coursera.org/learn/content-marketing>
2. <https://www.coursera.org/learn/digital-content-planning-and-management>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## AFFILIATE MARKETING AND GOOGLE ADSENSE

**Course Code:**245MS111

**L      T      P      C**  
**3      0      0      3**

### **Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Explain the history, definition, and mechanisms of affiliate marketing.
- CO2:** Categorize the different types of affiliate marketing.
- CO3:** Examine the process of setting up an affiliate marketing program.
- CO4:** Analyze the importance of keyword research.
- CO5:** Develop Google Ads account by choosing appropriate campaign types and goals.

### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
CO1	-	1	-	-	-
CO2	-	1	-	-	-
CO3	-	1	-	-	-
CO4	-	1	-	-	-
CO5	-	1	-	-	-

### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
CO1	-	1
CO2	-	1
CO3	-	1
CO4	-	1
CO5	-	1

### **UNIT – I**

**Fundamentals of Affiliate Marketing:** History, Definition and working of affiliate marketing, parties involved in Affiliate Marketing, Pros and Cons of Affiliate Marketing, the basis of Affiliate Marketing, How Affiliate Marketing works, Affiliate Program payment methods, Cookies and Affiliates, Tiered Affiliate Marketing, Cross selling and up selling, multi-tier marketing and commissions, List of affiliate marketing software

### **UNIT – II**

**Types of Affiliate Marketing** - Search affiliates - Price comparison service website - Loyalty websites - Cause related and coupon websites - Content and niche market website - Personal weblogs and website syndicates - Email marketing and shopping directories - Registration or co-registration affiliates - File sharing affiliates.

### **UNIT – III**

**Setting Up Affiliate Marketing Program** - How to attract affiliates-Hosting and implementing an affiliate program-Growing you're Affiliate Numbers. Setting up an affiliate program-Affiliate network service agreement-Data feeds and customer returns. Merchants/publisher management- Setting up an Affiliate Marketing Software-Affiliate program promotion and content pages, Screen Affiliates-Combating

affiliate fraud.

#### **UNIT – IV**

**Introduction to Google Ads:** Introduction to Google Ads, Google Ads Terminology, The Role of Google Ads, Understanding the Google Network, How Paid Search Works, The Pillars of Google Ad Success, Keyword Research: Meaning of Keyword, Types of Keywords, Keyword Research Keyword Research Methodology, How to Choose the Right Keywords to Target.

#### **UNIT – V**

**Creating a Google Ads Account:** Campaign, Campaign Types, Campaign Goals, Naming Your Campaign, Choosing Campaign Types, Location, Targeting, Languages, Budget, Delivery Method, Bid Strategies: Manual vs. Automated, Keyword Match Types, Ad Creation, Ad Rank & Quality Score, Landing Pages, Conversion Tracking.

#### **Text Books:**

1. Affiliate Marketing: The Beginner's Step by Step Guide to Making Money Online with Affiliate Marketing by Kevin Ulaner.ISBN-10:1974108643, ISBN-13:978-1974108640.
2. AdSense Made Easy: What is Google AdSense, · 2020. ISBN-13. 9798685113528

#### **Reference Books:**

1. The Complete Guide to Affiliate Marketing on the Web- by Bruce C. Brown.ISBN-10:1601381255.
2. The Google Adsense Handbook, The Introductory Guide to the Web's Most Famous and Popular Advertising Programme: the Basics and Key Points to Know, By Stefano Calicchio, ISBN-13:978-1601381255.

#### **Web Links:**

1. <https://www.udemy.com/course/free-affiliate-marketing-course-for-beginners/>
2. <https://www.coursera.org/projects/google-ads-beginner>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## NEURO MARKETING

Course Code:245MS112

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Explain the basics of neuroscience and its relationship to marketing.
- CO2:** Identify key neuro-marketing tools.
- CO3:** Examine the impact of design elements like color and typography on consumer choices.
- CO4:** Analyze the concept of neurasthenics and its impact on the effectiveness of visuals in advertisements.
- CO5:** Select the research areas that may be disrupted by neuroscience advancements.

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
CO1	-	1	-	-	-
CO2	-	1	-	-	-
CO3	-	1	-	-	-
CO4	-	1	-	-	-
CO5	-	1	-	-	-

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
CO1	-	1
CO2	-	1
CO3	-	1
CO4	-	1
CO5	-	1

### UNIT – I

**Introduction to Neuro Marketing:** Basics of neuroscience and how it relates to marketing, Inside the consumers brain, attention and consciousness, biometric and history of lie detection, neuroscience to better understand the consumer, emotional advertising works to build brands

### UNIT – II

**Tools of Neuro Marketing:** Learning and memory, eye tracking – monitoring the consumer's needs, decoding facial micro expressions, emotions & feelings, wanting and liking, Electroencephalogram, Functional magnetic resonance imaging (fMRI), sensory marketing

### UNIT – III

**Neuro Insights for Marketing Strategies:** Using neuroscience findings to optimize marketing campaigns. Incorporating sensory marketing and multisensory experiences. Decision-making biases and how to counteract them. Consumer The role of color, typography, and design in influencing consumer choices.

## **UNIT – IV**

**Neuro Marketing in Advertising:** Neurasthenics and the impact of visuals on ad effectiveness. Neurolinguistics and the psychology of persuasive language in advertising.

## **UNIT – V**

**Neuro Ethics and Applications in Market Research:** Euro ethics and consumer aberrations, applying neuro-insights into communication, neuroscience in the workplace, barriers that exist(ed) with the use of neuroscience in marketing, research areas are most likely to be disrupted by neuroscience,

### **Text Books:**

1. Lee, N., & Chamberlain, L. Neuromarketing: Exploring the Brain of the Consumer. Kogan Page. ISBN-10: 9783540778288 · ISBN-13: 978-3540778288
2. Genco, S., Pohlmann, A., & Steelmaker, P. (Eds.). Neuromarketing and Big Data Analytics for Strategic Consumer Engagement. IGI Global. ISBN-10:1522548343, ISBN-13:978-1522548348.

### **Reference Books:**

1. Dooley, R. Brainfluence: 100 Ways to Persuade and Convince Consumers with Neuromarketing. Wiley. ISBN-13:978-1118113363.
2. Lindstrom, M. Bugology: Truth and Lies About Why We Buy. Crown Business. ISBN-10:0385523882, ISBN-13:978-0385523882.

### **Web Links:**

1. <https://www.coursera.org/learn/neuromarketing-toolbox>
2. <https://www.coursera.org/learn/neuromarketing>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## FUNDAMENTAL COGNITIVE SKILLS FOR MANAGERS

**Course Code: 245MS031**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>

**Course Outcomes:**

**At the end of the course, student will be able to:**

- CO1:** Recognize the different aspects of the English language proficiency with emphasis on LSRW skills.
- CO2:** Apply communication skills through various language learning activities
- CO3:** Analyze the English speech sounds, stress, rhythm, intonation and syllable division for better listening and speaking comprehension.
- CO4:** Enable them to learn and apply fundamentals of English grammar concepts for improved language
- CO5:** Make use of various types of vocabulary in different academic and professional careers

**Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO1	PO2	PO3	PO4	PO5
<b>CO1</b>	-	1	-	1	-
<b>CO2</b>	-	1	-	1	-
<b>CO3</b>	-	1	-	1	-
<b>CO4</b>	-	1	-	1	-
<b>CO5</b>	-	1	-	1	-

**Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

**List of the Topics**

**UNIT – I**

**Outstanding people A/B/C/D**

<b>Listening</b>	Conversation about Jocelyn Bell- Burnell, Podcast: The 30-day challenge, Starting a new job, Conversation about technology
<b>Speaking</b>	Discussing inspiring people, Asking and answering questions about challenges, explaining a process; Checking understanding, Discussing technology.
<b>Reading</b>	Articles: <i>Protector of the sea and the woman who reinvented children's TV, Interviews: 30-day challenge, Article: Tech free!</i>
<b>Writing</b>	Article Organizing an article
<b>Grammar</b>	Review of Tenses, Questions
<b>Vocabulary</b>	Character adjectives, trying and succeeding
<b>Pronunciation</b>	The letter e; Word stress, Rapid speech

## UNIT – II

### Survival A/B/C/D

<b>Listening</b>	Conversation about a survival situation, Interview: The Tiger, Cooking for a friend, Talking about getting lost
<b>Speaking</b>	Telling a survival story, Giving advice; Asking questions, Giving compliments and responding, Discussing the natural environment
<b>Reading</b>	Article: Lost at sea, Leaflet: <i>How to survive...an animal attack</i> , Leaflet: <i>Be wise and survive</i>
<b>Writing</b>	Guidelines, organizing guidelines in a leaflet
<b>Grammar</b>	Narrative tenses, Future time clauses and conditionals
<b>Vocabulary</b>	Expressions with <i>get</i> , Animals and the environment
<b>Pronunciation</b>	Sound and Spelling: <i>g</i> , Intonation in question tags

## UNIT – III

### Talent A/B/C/D

<b>Listening</b>	Conversation: learning experiences, Radio Programme: The sports gene, Making wedding plans, Interviews about sport
<b>Speaking</b>	Talking about something you have put a lot of effort into, Discussing sport and ways to improve performance, planning a party, Talking about popular sports
<b>Reading</b>	Text about learning; <i>Learning to learn</i> , Article: <i>Born to be the best</i> ; Three articles about athletes, Article: <i>Fitness: Seattle snapshot</i>
<b>Writing</b>	Article describing data
<b>Grammar</b>	Multi-word verbs, Present perfect and present perfect continuous
<b>Vocabulary</b>	Ability and achievement, word connected with sport
<b>Pronunciation</b>	Word stress, sound and spelling consonant sounds

## UNIT – IV

### Life Lessons A/B/C/D

<b>Listening</b>	Interview: Psychology of money; Two monologues: Life-changing events, Two monologues; training for a job, Presenting photos, Three monologues; living in different places
<b>Speaking</b>	Talking about how your life has changes, Discuss experiences of training and rules, Describing photos: Expressing careful disagreement, Discussing living in a different country
<b>Reading</b>	Two texts about life-changing events that helped people become rich, Article: <i>Training for the emergency frontline</i> , Advert for being an international student ‘buddy’
<b>Writing</b>	Job application, Giving a positive impression
<b>Grammar</b>	<i>Used to</i> and <i>would</i>
<b>Vocabulary</b>	Cause and result, Talking about difficulty
<b>Pronunciation</b>	Sound and spelling: <i>u</i>

## UNIT – V

### Chance A/B/C/D

<b>Listening</b>	Monologue: What are your chances?, Conversation: Talking about work, Money problems, News reports: environmental problems
<b>Speaking</b>	Discussing possible future events, Role Play: job interview,

Explaining and responding to an idea for a café, Giving opinions on environmental problems

<b>Reading</b>	Quiz: <i>Are you an optimist or a pessimist?</i> ; Article: <i>Why we think we're going to have a long and happy life</i> , Quiz: <i>The unknown continent</i> ; Article: <i>Cooking in Antarctica</i> , Essay about protecting the environment
<b>Writing</b>	For and against essay, Arguing for and against an idea
<b>Grammar</b>	Future probability, Future perfect and future continuous
<b>Vocabulary</b>	Adjectives describing attitude, The natural world
<b>Pronunciation</b>	Sound and spelling : <i>th</i> , Intonation groups

**Text Book:**

1. Cambridge Empower – Second Edition B2 Level - Adrian Doff, Craig Thaine, Herbert Puchta, Jeff Stranks, Peter Lewis – Jones. ISBN-10. 9781107468726; ISBN-13. 978-1107468726

**Suggested Software:**

1. Cambridge Empower
2. Soft X (K-Van Solutions)

**Reference Books:**

1. M Ashraf Rizvi: Effective Technical Communication. ISBN 10-9352605780
2. Raymond Murphy: English Grammar in Use, Cambridge University Press. Fifth Edition, ISBN-978-1-108-45765-1
3. J. Sethi & P.V. Dhamija. A Course in Phonetics and Spoken English, (2nd Ed), Kindle, 2013, ISBN-13: 9.78812E+12.

**Web links:**

1. <https://www.cambridgeone.org/login>
2. <https://www.britishcouncil.in/english/online>
3. [www.englishmedialab.com](http://www.englishmedialab.com)

## ADVANCED COGNITIVE SKILLS FOR MANAGERS

**Course Code:** 245MS032

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>

### **Course Outcomes:**

**At the end of the course, student will be able to:**

- CO1:** Recognize the basics of communication and summarize formal and informal expressions in all aspects.
- CO2:** Establish and maintain interpersonal relationships and transmit the message through different language activities.
- CO3:** Use language effectively to prepare and demonstrate proficiency in facing various interviews.
- CO4:** Demonstrate and exhibit professionalism in participating in various public activities like debates, group discussions and presentation skills.
- CO5:** Identify the basic elements of writing and apply the fundamentals to compositions catering to different professional needs.

### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO1	PO2	PO3	PO4	PO5
<b>CO1</b>	-	1	-	1	-
<b>CO2</b>	-	1	-	1	-
<b>CO3</b>	-	1	-	1	-
<b>CO4</b>	-	1	-	1	-
<b>CO5</b>	-	1	-	1	-

### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### **List of the Topics**

#### **UNIT – I**

#### **Around the globe A/B/C/D**

<b>Listening</b>	Two monologues about sightseeing tours, Interview: disappearing languages, Asking for a favour, conversation: a trip to the Grand Canyon
<b>Speaking</b>	Comparing different tourist destinations, Agreeing and disagreeing, Asking for a favour, Discussing local tourist destinations.
<b>Reading</b>	Website bout four tourist destinations; Website: Where to go?
<b>Writing</b>	Travel blog, Using descriptive language
<b>Grammar</b>	Infinitives and -ing forms
<b>Vocabulary</b>	Travel and tourism, Describing changes
<b>Pronunciation</b>	Consonant clusters, Consonant sounds

## UNIT –II

### City living A/B/C/D

<b>Listening</b>	Interview: ‘Smart’ cities: Two monologues talking about ‘smart’ cities, Two monologues: house renovations, Flat hunting, Interviews about a new shopping centre
<b>Speaking</b>	Discussing good and bad points about a city
<b>Reading</b>	Article: <i>Quick-slow down!</i> , Article: <i>Who puts the ‘real’ in reality TV?</i> Email: Complaining about an important issue.
<b>Writing</b>	Email of complaint, Using formal language
<b>Grammar</b>	<i>Too/enough; so/such</i> , Causative <i>have/get</i>
<b>Vocabulary</b>	Describing life in cities, Film and TV; Houses
<b>Pronunciation</b>	Sound and spelling: o, Stress in compound nouns

## UNIT – III

### Dilemmas A/B/C/D

<b>Listening</b>	Radio programme: person finance, Three monologues about honesty, Going to the bank, Conversation about a TV programme
<b>Speaking</b>	Giving opinions on financial matters, Discussing moral dilemmas, Talking about hopes and worries Discussing programmes about crime
<b>Reading</b>	Article: <i>Is it time to give up on cash?</i> , Newspaper article: <i>The honesty experiment</i> , Review: <i>Crime with a smile</i>
<b>Writing</b>	Review, Organising a review
<b>Grammar</b>	First and second conditionals, Third conditional; <i>should have+past participle</i>
<b>Vocabulary</b>	Money and finance, Crime
<b>Pronunciation</b>	Stressed and unstressed words; Sound and spelling: l, Word groups

## UNIT –IV

### Discoveries A/B/C/D

<b>Listening</b>	Conversation about inventions, Conversation about an email hoax, Finding the perfect flat, Four monologues about alternative medicine
<b>Speaking</b>	Talking about inventions, describing a hoax or a scam or a case of fraud, Giving and receiving surprises
<b>Reading</b>	Article: <i>Too good to be true?</i> , Article: <i>The rise and fall of Barry Minkow</i> , Essay: <i>The Value of alternative medicine</i>
<b>Writing</b>	Opinion essay, Presenting a series of arguments
<b>Grammar</b>	Relative clauses, Reported speech; Reporting verbs
<b>Vocabulary</b>	Health, Verbs describing thought and knowledge
<b>Pronunciation</b>	Sound and spelling : ui, Linking and intrusion

## UNIT – V

## Possibilities A/B/C/D

<b>Listening</b>	Interview about Dan Cooper, Two monologues: pursuing a dream, Celebrating good news, conversation about goals
<b>Speaking</b>	Telling stories about coincidences, Describing and comparing brave or amazing people, Telling an important piece of news, Talking about performing
<b>Reading</b>	Story: The man who disappeared; Blog: <i>The Wreck of the Titan</i> , Article: <i>Dream to help</i> , Story: Rosa's diary: <i>The ultimate goal</i>
<b>Writing</b>	Story, Making a story interesting
<b>Grammar</b>	Past modals of deduction, Wishes and regrets
<b>Vocabulary</b>	Adjectives with prefixes, Verbs of effort
<b>Pronunciation</b>	Word stress, Linking, Consonant clusters

### Text Book:

1. Cambridge Empower – Second Edition B2 Level - Adrian Doff, Craig Thaine, Herbert Puchta, Jeff Stranks, Peter Lewis – Jones. ISBN-9789357260022.

### Suggested Softwares:

1. Cambridge Empower
2. Soft X (K-Van Solutions)

### Reference Books:

1. Raman Meenakshi, Sangeeta-Sharma. Technical Communication. Oxford University Press.2018. ISBN-13-978-1108958080
2. Michael Swan- Practical English Usage, ISBN-10-0199457492
3. Taylor Grant: English Conversation Practice, Tata McGraw-Hill Education India,2016 ISBN-978-0070096038

### Web links:

1. <https://www.cambridgeone.org/login>
2. <https://www.coursera.org/>
3. <https://www.skillshare.com/>
4. <https://www.mindtools.com/cawh8bu/communication-tools>

## IT & AI SKILLS

**Course Code:** 245MS033

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
1	0	2	3

### **Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Explain the fundamentals of computers and their applications in business.
- CO2:** Build and format professional documents using MS Word.
- CO3:** Design and present impactful business presentations in MS PowerPoint.
- CO4:** Integrate and apply AI tools across MS Excel applications
- CO5:** Analyze and visualize business data using MS Excel's functions.

### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
CO1	-	1	-	-	-
CO2	-	1	-	-	-
CO3	-	1	-	-	-
CO4	-	1	-	-	-
CO5	-	1	-	-	-

### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
CO1	-	1
CO2	-	1
CO3	-	1
CO4	-	1
CO5	-	1

### **UNIT – I**

**Introduction to Computers:** Definition, Components, Types; generations of computer; Computer Memory, Software and Hardware, Operating Systems. Window features. Introduction to Internet-benefit and limitation, IP address, Browser, E-mail.

### **UNIT – II**

**MS Word:** Interface and Navigation; Document Formatting, Text Formatting, Paragraph Formatting, Advanced Features, Tables, Charts, and SmartArt, Mail Merge; AI Tools for MS Word.

### **UNIT – III**

**MS PowerPoint:** Interface and Navigation; Slide Design and Layout, Adding and Formatting Text, Using Themes and Templates, Multimedia in Presentations, Presentation Tools, Slide Master and Custom Layouts, Slide Show Setup and Presentation Delivery; AI Tools for MS PowerPoint.

### **UNIT – IV**

**MS Excel:** Interface and Navigation, Creating, Saving, and, Opening Workbooks, Basic Spreadsheet Operations, Entering and Formatting Data, Basic Formulas and Functions, Sorting and Filtering Data, Data Visualization, Creating and Customizing Charts,

Conditional Formatting; AI Tools for MS Excel.

#### **UNIT – V**

**Advanced Excel:** Lookup Functions: VLOOKUP, HLOOKUP, and XLOOKUP; Logical Functions: IF, AND, OR; Text Functions: CONCATENATE, LEFT, RIGHT; Date and Time Functions: DATE, TODAY, NETWORKDAYS.

**Data Analysis and Visualization:** PivotTables-Creating and analyzing data with PivotTables; Charts and Graphs: Designing and customizing basic charts; Conditional Formatting: Applying rules to highlight key data points.

**Data Cleaning Techniques:** Using Text to Columns and Remove Duplicates; Data Validation: Setting up rules to ensure data accuracy; Importing Data: Importing data from external sources like CSV and databases.

#### **Text Books:**

1. "Information Technology for Managers" by George Reynolds and Judith S. Reynolds (2022). Pearson Education.ISBN-10:1305482492, ISBN-13: 978-1305482494.
2. "Computer Fundamentals and Information Technology" by Alexis Khosla (2022). BPB Publications. ISBN-13. 9781305389830

#### **Reference Books:**

1. "Information Technology for Management" by C.S.V. Murthy (2022). Himalaya Publishing House. ISBN 81-7866-201-9.
2. " India Information Technology: An Introduction" by K.C. Laudon and Jane P. Laudon (2021). Pearson Education.ISBN-10:9789352865475, ISBN-13:978-9352865475.

#### **Web Links:**

1. [https://onlinecourses.swayam2.ac.in/cec20\\_cs05/preview](https://onlinecourses.swayam2.ac.in/cec20_cs05/preview)
2. [https://onlinecourses.nptel.ac.in/noc22\\_mg35/preview](https://onlinecourses.nptel.ac.in/noc22_mg35/preview)

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## BUSINESS INTELLIGENCE

Course Code:245MS034

L T P C  
1 0 2 3

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Utilize Power BI for data analysis, visualization, and reporting.
- CO2:** Apply various data analysis techniques in Excel and Power BI to extract meaningful insights from datasets
- CO3:** Build clear and compelling visualizations using Excel and Power BI to communicate data-driven insights.
- CO4:** Develop data models in Power BI to organize and analyze data efficiently.
- CO5:** Design interactive dashboards in Power BI to facilitate data exploration and decision-making.

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
CO1	-	1	-	-	-
CO2	-	1	-	-	-
CO3	-	1	-	-	-
CO4	-	1	-	-	-
CO5	-	1	-	-	-

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
CO1	-	1
CO2	-	1
CO3	-	1
CO4	-	1
CO5	-	1

### UNIT – I

**Introduction to Power BI:** Power BI and its advantages over Excel for large datasets, Installing Power BI Desktop, Understanding the Power BI interface: Navigation, ribbons, and panes, Importing data into Power BI Desktop from various sources

### UNIT – II

**Data Preparation in Power BI-** Introduction to Power Query for data transformation; Cleaning, shaping, and filtering data in Power Query Editor; Combining data from different sources, Loading data into Power BI model.

### UNIT – III

**Data Modelling in Power BI-** Understanding relationships between tables, Creating calculated columns and measures using DAX; Introduction to DAX functions: CALCULATE, FILTER, RELATED, etc., Working with date and time functions in DAX; Visualization Basics in Power BI-Creating basic visualizations: Bar charts, line charts, pie charts, etc., Customizing visualizations: Formatting, titles, legends, etc.

## **UNIT – IV**

**Using Slicers and Filters** to interact with visualizations, Adding drill-down capabilities to visualizations; Advanced Visualizations and Dashboards in Power BI: Exploring advanced visualizations: Tree Map, Waterfall chart, KPIs, etc., Creating custom visuals from the marketplace.

## **UNIT – V**

**Designing Effective Dashboards:** Layout, arrangement, and organization, Adding interactivity with bookmarks and drill-through.

### **Text Books:**

1. "Power BI Step-by-Step Part 1: Up and Running: Power BI Mastery Through Hands-On Tutorials" by Grant Gamble, 2020. ISBN -13 979-8224581627
2. "Power BI Beginner: Zero to Hero in Power BI Desktop" by Philip Seamark, 2022. ISBN-10:1484234766, ISBN-13:978-1484234761.

### **Reference Books:**

1. "Power BI Quick Start Guide: Build dashboards and visualizations to make your data come to life" by Devin Knight and Siddharth Mehta. ISBN: 9781800569942
2. "Learn Power BI: A Beginner's Guide to Analyzing Data and Creating Reports with Power BI" by Murilo Miranda. ISBN-13: 978-0-226-49442-5

### **Web Links:**

1. <https://cce.sydney.edu.au/course/MSE1>
2. <https://cce.sydney.edu.au/course/PBBA>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

**Course Outcomes:**
**After completion of the course the student will be able to:**

- CO1:** Identify their physical and mental health, including their concentration, motivation, and productivity
- CO2:** Demonstrate the need for health-related fitness requirements.
- CO3:** Develop an appreciation of physical activity as a lifetime pursuit and a means to better health.
- CO4:** Apply current personal fitness levels in their day-to-day lifestyle.
- CO5:** Recall specific facts about safety measurements, and efficiently use the techniques to minimize the risk of injury.

**Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	-	-	1	-
<b>CO2</b>	-	-	-	1	-
<b>CO3</b>	-	-	-	1	-
<b>CO4</b>	-	-	-	1	-
<b>CO5</b>	-	-	-	1	-

**Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

**1. Physical Training:**

Includes exercises, drills, and workouts focusing on improving physical fitness, strength, and endurance.

**2. First Aid Training:**

Instruction on basic first aid techniques such as CPR, wound care, and emergency response.

**3. Navigation and Orienteering:**

Learning how to use maps, compasses, and GPS devices for navigation in outdoor environments.

**4. Camp craft and Survival Skills:**

Teaching essential skills for outdoor survival, including shelter building, fire starting, and foraging.

**5. Sports and Games:**

Participation in various sports and games to develop teamwork, coordination, and sportsmanship.

## Sports & Yoga

### PRACTICE:

#### 1.B.M.I (Measurement and Chat Preparation)

Height

Weight

Age

#### AAHPER Fitness Test (American Alliance for Health, Physical Education and Recreation)

50mts

Shuttle run

Pull Ups

Standing Broad Jump

Sit-ups

600mts

#### 2. Surya Namaskar (Indoor)

Pranamasana (Prayer Pose)

Hasta Uttanasana (Raised Arms Pose)

Hasta Padasana (Hand to Foot Pose)

Ashwa Sanchalanasana (Equestrian Pose)

Dandasana (Stick Pose)

Ashtanga Namaskara (Salute with Eight Parts or Points)

Bhujangasana (Cobra Pose)

Parvatasana (Mountain Pose)

Ashwa Sanchalanasana (Equestrian Pose)

Hasta Padasana (Hand to Foot Pose)

Hasta Uttanasana (Raised Arms Pose)

Pranamasana (Prayer Pose)

#### 3 . CPR Training for Emergency (Indoor/Outdoor)

#### 4 . Recreation Games: (Outdoor)

Shuttle Run relay

Dodge Ball

Tug of War

#### 5 . Asanas (Indoor)

Sitting Postures,

Supine Postures,

Abdominal Postures,

Hand Postures,

Knee Postures,

Leg Postures,

Head Postures

#### 6 .Games Activities (Outdoor)

Kabaddi

Volleyball

Basketball

Cricket

Tennikoit  
Shuttle Badminton  
Hand ball  
Kho Kho

**7. Indoor Activities (Indoor)**

Chess  
Caroms  
Quizzes  
Debates Etc.,

**8.JCR Test (Jumping, Chinning, Running) (Outdoor)**

100mts-(Shuttle Run)  
Vertical Jump  
Chin up

**9.Kriyas,Bandas & Mudras (Indoor)**

Dhouti,  
Basti  
Neti,  
Navali  
Kapalabati  
Trataka  
Jnana  
Chinmaya

**10.Sports Activities:(Athletics Throws & Jumps) (OutDoor)**

Shotput  
Discuss  
Javelin  
Long jump  
Triple jump  
High jump

**11.Pranayama & Meditation (Indoor)**

Nadi Shodhana (Alternate Nostril Breathing)  
Ujjayi Pranayama (Victorious Breath)  
Kapalabhati (Skull Shining Breath)  
Bhastrika Pranayama (Bellows Breath)  
Sheetali Pranayama (Cooling Breath)  
Sheetkari Pranayama (Hissing Breath)  
Bhramari Pranayama (Bee Breath)  
Sitali Pranayama (Cooling Breath)  
Anulom Vilom (Alternate Nostril Breathing with Retention)  
Mantras  
Japas

**12.Sports Activities :( Athletics-Runs) (Outdoor)**

100Mts  
200Mts

400Mts  
800Mts  
5000Mts

**Reference Books:**

1. Health & Wellness, Yoga Education, Sports and Fitness-S.Chand Publication-2024 ISBN : 9789358704372
2. Health and Wellness, Gordon Edlin, Eric Golanty. 14th Edn. Jones & Bartlett Learning 2022, ISBN-13, 978-1284235197
3. First Aid- Dr.Rajeev Sharma, Diamond Pocket Books Pvt Ltd 2023, ISBN: 978-8128824371
4. Gordon Edlin, Eric Golanty. Health and Wellness, 14th Edn. Jones & Bartlett Learning,2022, ISBN: 978-1284235197
5. A Text book Yoga-Dr.Guneet Monga Bhargava Richa Talreja. ISBN-9789357260022

## INDIAN CULTURAL HERITAGE AND FINE ARTS

**Course Code:245MS036**

**L      T      P      C**  
**0      0      1      1**

### **Course Outcomes:**

#### **At the end of the Course, Student will be able to:**

- CO1:** Explain facts and basic concepts of Indian classical dance forms.
- CO2:** Apply wider horizon in the field of art and design, skilful use of elements and principles of graphic design.
- CO3:** Develop Communication Skills by participating in various language learning activities on Indian Cultural Heritage.
- CO4:** Design the layout, compose, paint: natural and manufactured forms of different traditions and cultures of India
- CO5:** Infer knowledge about costumes, makeup of dance forms

#### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	1	-	-	-	-
<b>CO2</b>	1	-	-	-	-
<b>CO3</b>	-	-	-	1	-
<b>CO4</b>	-	-	1	-	-
<b>CO5</b>	-	-	1	-	-

#### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### **Practice:**

1. JAM (Just A Minute) Sessions on Indian Cultural Heritage (Speaking)
2. Role-plays on Indian Itihasas and Puranas
3. Painting: Competition on ancient Indian Architectures and civilizations.
4. Talent shows in singing patriotic songs-paintings- any other contribution.
5. Story Narration about Ancient Historical Issues.
6. Poster Presentations on Epics, Puranas and Architecture of the Indian Temple.
7. Seminars on the importance and significance of our Indian Culture. (Speaking)
8. Craft works- Displaying different models of architectures
9. Musical instruments: Talent in playing different musical instruments
10. Drawing: Theme based art on Ancient Historical Issues.
11. Dancing: Performance on various dance forms of Indian culture
12. Article Writing: On Indian Ancient Period/Heritage and Culture. (Writing)

**Reference Books:**

1. History of India and Culture. -Telugu Academy. ISBN: 9788172765194
2. R.S.Sharma., Ancient India, New Delhi.ISBN-10:9354977529, ISBN-13:978-9354977527
3. D.D. Kosambi., The Culture and Civilization of Ancient India in Historical Outline, Vikas Publishing.ISBN-10:070698613X, ISBN-13:978-0706986136
4. V.Rama Krishna, Social Reform Moment Andhra,Vikas Publications.ISBN-10:070692349,ISBN-13: 978-0706923490.
5. RomilaThaper., History of India, Penguin.ISBN-10:9780143029892, ISBN-13: 978-0143029892.

## INSURANCE PROMOTION

**Course Code:245MS037**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

**Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Understand the basic concepts, principles, and benefits of insurance
- CO2:** Apply knowledge to identify life insurance plans, understand their features
- CO3:** Analyze various types of general insurance and manage customer relationships
- CO4:** Evaluate insurance company operations and customer retention strategies.
- CO5:** Assess the regulatory framework and grievance redressal mechanisms

**Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	1	-	-	-	-
<b>CO2</b>	1	-	-	-	-
<b>CO3</b>	1	-	-	-	-
<b>CO4</b>	1	-	-	-	-
<b>CO5</b>	1	-	-	-	-

**Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

**UNIT – I**

**Fundamentals of Insurance:** Definition, Characteristics, Types of insurances, evolution of insurance in India, Principles of Insurance, Risk Vs Uncertainty, Requirements of Insurance Contract, Parties of Insurance Contract, Benefits of Insurance to Society.

**UNIT – II**

**Life Insurance:** Principles, Types of Life Insurance, Life Insurance plans. Health insurance plans. Products and features. Contents of documents, Sales Promotion methods, finding prospective customers, Counseling, helping customers in filing, Extending post-insurance service to customers.

**UNIT – III**

**General Insurance:** Principles of General Insurance, Fire, Marine, Motor, Engineering, Miscellaneous, Liability and Agricultural Insurance. Contents of documents. Dealing with customers, Explaining Products to Customers - Promoting Customer loyalty. Maintenance of Records.

#### **UNIT – IV**

**Insurance Company Operations:** Insurance Pricing, Underwriting, Claim Settlement; Reinsurance: concept and importance, Claims processing steps and documentation, Fraud detection and prevention in claims, Procedures for policy renewal and lapsation, Customer retention strategies, Distribution channels (agents, brokers, banc assurance, direct marketing)

#### **UNIT – V**

**Regulatory Mechanism in India:** (IRDA), Its functions, Rules and regulations, enforcement actions, Grievance redressal mechanism.

#### **Text Books:**

1. George E. Rejda, Principles of Risk Management and Insurance Tenth Edition, New Delhi: Pearson Education.ISBN-10:9789332584921, ISBN-13:978-9332584921.
2. Dr. P. Gupta, Insurance and Risk Management, New Delhi: Himalaya Publications.ISBN-10: 9350246724, ISBN-13: 978-9350246726.

#### **Reference Books:**

1. Practice of Life Insurance, Mumbai: Insurance Institute of India, ISBN-10: 8191034239 · ISBN-13: 978-8191034233
2. Practice of General Insurance Mumbai: Insurance Institute of India.ISBN-10:8191034220, ISBN-13:978-8191034226.

#### **Web Links:**

1. [https://onlinecourses.swayam2.ac.in/cec20\\_mg24/preview](https://onlinecourses.swayam2.ac.in/cec20_mg24/preview)
2. [https://onlinecourses.swayam2.ac.in/imb24\\_mg50/preview](https://onlinecourses.swayam2.ac.in/imb24_mg50/preview)

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## EVENT MANAGEMENT

**Course Code:245MS038**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

**Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Acquire knowledge about event management and identify its key components.
- CO2:** Explain the importance of Event Planning and Execution.
- CO3:** Classify the different types of corporate events.
- CO4:** Identify the key skills required for event management team to organize an event.
- CO5:** Analyze appropriate marketing and advertising techniques which event's organizers can use.

**Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	-	-	1	-
<b>CO2</b>	-	-	-	1	-
<b>CO3</b>	-	-	-	1	-
<b>CO4</b>	-	-	-	1	-
<b>CO5</b>	-	-	-	1	-

**Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

**UNIT – I**

**Introduction to Event Management:** Meaning and Definition of Event Management, Significance of EM in various industries, Scope and opportunities in the field of EM, Understanding the key components of EM.

**UNIT – II**

**Event Planning:** Event Production, Role of event planner and Qualities of good event planner, Importance of organizing events, role of event planning in establishing objectives, managing resources, sponsorships, budgeting and negotiation, event logistics, challenges in Event Planning.

**UNIT – III**

**Corporate Events:** Introduction, Exhibitions and Trade Fairs, Scope, Types, elements of exhibitions and Trade Fairs, duties and responsibilities of key trade fair and exhibition personnel, Players of exhibition, Exhibition fees, Shipping methods, Marketing and promotional plan for exhibitions. Production of Special, Social and Sports events.

## **UNIT – IV**

**Team Management:** Define team management and its significance in event planning, Benefits of effective team management, Importance of clear communication and delegation of tasks, Team Building and Leadership.

## **UNIT – V**

**Event Marketing and Advertising:** Meaning and definition of Event Marketing, Role of marketing and advertising in attracting attendees and promoting events, Digital Marketing Techniques, Event Photography and Video Arrangement, Reporting and Analysis.

### **Text Books:**

1. Event Planning by Jude Allen. ISBN 9780470738627
2. Event Management by Lynn Van Der Wagen and Brenda Carlos. ISBN:9788177580655

### **Reference Books:**

1. Successful Event Management – A Practical Handbook by Anton Shone & Bryn Parry 2nd Edition.ISBN:9781408075999
2. The Art of Successful Event Management by Tanaz Basrur.ISBN-10: 8129110636, ISBN-13: 978-8129110633.

### **Web Link**

1. [https://onlinecourses.swayam2.ac.in/nou20\\_ge01/preview](https://onlinecourses.swayam2.ac.in/nou20_ge01/preview)
2. [https://onlinecourses.swayam2.ac.in/nou20\\_ge02/preview](https://onlinecourses.swayam2.ac.in/nou20_ge02/preview)

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## EMERGING TECHNOLOGIES AND APPLICATION

**Course Code:245MS040**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### **Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Identify different emerging technologies
- CO2:** Explain the Basics of data science.
- CO3:** Identify fundamentals of Artificial Intelligence
- CO4:** Assess the latest developments in the area of technology to support business
- CO5:** Analyze the basic concepts of AR & VR

### **Mapping of Course Outcomes with Program Outcomes:**

<b>CO/PO</b>	<b>PO 1</b>	<b>PO 2</b>	<b>PO 3</b>	<b>PO 4</b>	<b>PO 5</b>
<b>CO1</b>	-	1	-	-	-
<b>CO2</b>	-	1	-	-	-
<b>CO3</b>	-	1	-	-	-
<b>CO4</b>	-	1	-	-	-
<b>CO5</b>	-	1	-	-	-

### **Mapping of Course Outcomes with Program Specific Outcomes:**

<b>CO/PSO</b>	<b>PSO1</b>	<b>PSO2</b>
<b>CO1</b>	-	1
<b>CO2</b>	-	1
<b>CO3</b>	-	1
<b>CO4</b>	-	1
<b>CO5</b>	-	1

### **UNIT – I**

**Basics of Emerging Technologies:** Evolution of technologies; Introduction to Industrial revolution; Historical background of the Industrial Revolution; Introduction to Fourth industrial revolution (IR 4.0); Role of data for Emerging technologies; Human to Machine Interaction; Future trends in emerging technologies. Technology and ethics, Digital privacy, Accountability and trust, Treats and challenges.

### **UNIT – II**

**Basics of Data Science:** Overview for Data Science; Definition of data and information; Data types and representation; Data Value Chain; Data Acquisition; Data Analysis; Data Curating; Data Storage; Data Usage; Basic concepts of Big Data.

### **UNIT – III**

**Basics of Artificial Intelligence (AI):** Concept of AI, meaning of AI, History of AI, Levels of AI, Types of AI, Applications of AI in Agriculture, Health, Business (Emerging market), Education.

### **UNIT – IV**

**Basics of Internet of Things (IOT):** Overview of IOT; meaning of IOT; History of IOT; Advantages of IOT; Challenges of IOT; IOT working process; Architecture of IOT;

Devices and network; Applications of IOT at Smart home; Smart grid; Smart city; Wearable devices; Smart farming; IOT tools and platforms.

## UNIT – V

**Basics of Augmented Reality (AR) and Virtual Reality (VR):** Introduction to AR, Virtual reality (VR), Augmented Reality (AR) vs mixed reality (MR), Architecture of AR systems. Application of AR systems (education, medical, assistance, entertainment).

### Text Books:

1. Digital Economy. Emerging Technologies and Business Innovation, Mohamed Anis Bach Tobji, Rim Jallouli, Yamen Koubaa, Anton Nijholt.ISBN-10:9783319977485, ISBN-13:978-3319977485.
2. Augmented Reality and Virtual Reality: Empowering Human, Place and Business, Timothy Jung, M. Claudia tom Dieck 2019. ISBN-10: 3319877038, ISBN-13: 978-3319877037

### Reference Books:

1. Virtual & Augmented Reality for Dummies Paul Mealy. ISBN-13:9978-1119481348.
2. Emerging Technology by Dr. Sanjay Sharma 2022, ISBN: 9789392549151.

### Web Links:

1. <https://nptel.ac.in/courses/106105166>
2. [https://onlinecourses.nptel.ac.in/noc22\\_cs53/preview](https://onlinecourses.nptel.ac.in/noc22_cs53/preview)

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## MANAGING INFORMATION SYSTEMS

**Course Code:245MS041**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>2</b>	<b>0</b>	<b>1</b>	<b>3</b>

### **Course Outcomes:**

#### **At the end of the Course, Student will be able to:**

- CO1:** Explain the information needs of an organization and a business function
- CO2:** Identify the effectiveness of decision-making process and MIS design
- CO3:** Utilize DSS techniques for making effective decisions
- CO4:** Design parameters for information systems process and application
- CO5:** Apply DBMS to attain the goals of the organization

#### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	1	-	-	-
<b>CO2</b>	-	1	-	-	-
<b>CO3</b>	-	1	-	-	-
<b>CO4</b>	-	1	-	-	-
<b>CO5</b>	-	1	-	-	-

#### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	-	1
<b>CO2</b>	-	1
<b>CO3</b>	-	1
<b>CO4</b>	-	1
<b>CO5</b>	-	1

### **UNIT – I**

**Management Information System;** Basic Concepts – Organization Structure – Business Functions – Role of MIS – MIS in Business - MIS Developing Process Models - Simon's Model in Information System – Major Trends in Information Technology.

### **UNIT – II**

**Managerial Decision Making and MIS Design:** Decision Making Process; Relationship between Decision-Making and MIS; Group Decision Making - Integrating Managerial Levels and Functional areas by MIS-Components of MIS. System and Design; Systems Development Initiate

### **UNIT – III**

**Different Methodologies:** System Life Cycle Design - Prototype Approach - System Implementation. Decision Support System; Definitions of DSS – Architecture of DSS - Scope of DSS - Characteristic and Capabilities of DSS - Components of DSS – Modules in DSS- Classification of DSS – Steps in Designing a DSS.

## UNIT – IV

**Information System Applications and Process:** MIS applications, DSS – GDSS - DSS applications in E enterprise - Knowledge Management System and Knowledge Based Expert System, Enterprise Model System and E-Business, E- Commerce, E-communication, Business Process Reengineering. Technology of information system: Data process- Transaction and application process; Unified communication and network; Security challenges in E-enterprises; Security threats and vulnerability-Controlling security threat and vulnerability.

## UNIT – V

**Data Base Management System:** Objectives of data base approach- Characters of database, Management systems- Data processing system- Components of DBMS packages, Data base administration, Data models, Data warehouse.

### Text Books:

1. Jawadekar, Management Information System, Tata McGraw Hill, 7th Edition, New Delhi.ISBN-10:9389949343, ISBN-13:978-9389949346.
2. Arora, Management Information System, Excel Books, 4th Edition, New Delhi.ISBN-10:8174462538, ISBN-13:978-8174462534.

### Reference Books:

1. C.S.V. Murthy, Management Information System, Himalaya Publishing House, 11 Edition, Mumbai.ISBN-10:8184882750, ISBN-13: 978-8184882759
2. Goyal, D.P.: “Management Information System”, MACMILLAN India Limited, New Delhi. ISBN-10:1403930996, ISBN-13: 978-1403930996

### Web Links:

1. [https://onlinecourses.nptel.ac.in/noc20\\_mg60/preview](https://onlinecourses.nptel.ac.in/noc20_mg60/preview)
2. <https://archive.nptel.ac.in/courses/122/105/122105022/>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## DESIGN THINKING AND INNOVATION

**Course Code:** 245MS042

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
2	0	0	2

### **Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Explain the core concepts and historical evolution of Design Thinking.
- CO2:** Apply empathy research methods to gather user insights and create problem statements and journey maps.
- CO3:** Analyze ideation techniques and develop prototypes using various tools.
- CO4:** Evaluate user feedback and implement iterative design improvements.
- CO5:** Examine the principles and processes of innovation and differentiate between types of innovation.

### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	1	-	-	-
<b>CO2</b>	-	1	-	-	-
<b>CO3</b>	-	1	-	-	-
<b>CO4</b>	-	1	-	-	-
<b>CO5</b>	-	1	-	-	-

### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### **UNIT – I**

**Design Thinking:** Definition, Historical background and evolution, Benefits, Applications of Design Thinking; The Design Thinking Process (Empathize, Define, Ideate, Prototype, and Test), Cultivating creativity, empathy, and problem-solving skills.

### **UNIT – II**

**Empathy Research Methods:** Interviews, observations, and user personas, Understanding User Needs: Techniques for gathering and analyzing user insights.

**Problem Definition:** Framing and articulating the problem statement. Journey Mapping: Visualizing user experiences and identifying pain points. (Tools and Techniques: Empathy maps, user journey maps, and personas.)

### **UNIT – III**

**Ideation Techniques:** Brainstorming, mind mapping, SCAMPER, and role-playing. Encouraging Creativity: Techniques to foster an innovative mindset.

**Prototyping Methods:** Low-fidelity and high-fidelity prototypes, wireframes, and mock-ups. Rapid Prototyping: Iterative development and testing of prototypes. (Tools and Resources: Prototyping tools and software; e.g., Sketch, In Vision, Figma)

## **UNIT – IV**

**User Testing Methods:** Usability testing, A/B testing, and feedback loops. Gathering and Analyzing Feedback: Techniques for collecting and interpreting user feedback. Iterative Design: Refining solutions based on user feedback and testing results.

**Implementation Strategies:** Planning and executing the rollout of new solutions.

## **UNIT – V**

**Innovation:** -Meaning, Concept, Characteristics, Importance, Principles of Innovation, Process of Innovation, Factors Influencing Innovation, Types of innovation (incremental, disruptive, open, and radical)

### **Text Books:**

1. Gavin Ambrose, Paul Harris, “Basics Design - 8: Design Thinking”, illustrated, reprint, AVA Publishing.ISBN-10:2940411174, ISBN-13: 978-2940411177.
2. Christian Müller-Roterberg, “Handbook of Design Thinking”, Kindle Direct Publishing ISBN: 978-1790435371.

### **Reference Books:**

1. Innovation Management by C S G Krishnamacharyulu& Lalitha R, Himalaya Publishing House.ISBN-10:9350979209, ISBN-13: 978-9350979204.
2. Vinnie Jauhari, Sudanshu Bhushan, Innovation Management, Oxford Higher Education.ISBN-10: 0198080980, ISBN-13: 978-0198080985.

### **Web Links:**

1. [https://onlinecourses.nptel.ac.in/noc22\\_mg32/preview](https://onlinecourses.nptel.ac.in/noc22_mg32/preview)
2. [https://onlinecourses.swayam2.ac.in/imb23\\_mg65/preview](https://onlinecourses.swayam2.ac.in/imb23_mg65/preview)

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## INTRODUCTION TO DIGITAL MARKETING

**Course Code:245MS043**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

### **Course Outcomes:**

#### **At the end of the Course, Student will be able to:**

- CO1:** Explain the fundamentals, evolution, and significance of Digital Marketing.
- CO2:** Examine marketing automation and its tools for enhancing customer experience.
- CO3:** Apply various digital marketing techniques, including PPC, SEO, and social media marketing.
- CO4:** Analyze the digital marketing strategies and the digital advertising market in India.
- CO5:** Develop and optimize blogs using various platforms and techniques.

### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	1	-	-	-	-
<b>CO2</b>	1	-	-	-	-
<b>CO3</b>	1	-	-	-	-
<b>CO4</b>	1	-	-	-	-
<b>CO5</b>	1	-	-	-	-

### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	-	1
<b>CO2</b>	-	1
<b>CO3</b>	-	1
<b>CO4</b>	-	1
<b>CO5</b>	-	1

### **UNIT – I**

**Introduction to Digital Marketing:** Fundamentals of Digital Marketing (DM)- Meaning, Definition, Need, Scope, significance of DM, Evolution of Digital Marketing, Concept and approaches to DM, Traditional marketing Vs Digital Marketing, Digital Marketing Landscape, Key Drivers, Digital Consumer & Communities, Gen Z & Netizen's expectation & influence wrt Digital Marketing, Examples of good practices in DM.

### **UNIT – II**

**Marketing Automation:** Definition, Advantages, Marketing Automation Softwares: CRM, Sales force, Analytics; Customer Experience (CX), How does marketing automation help marketers, Marketing automation tools.

### **UNIT – III**

**Terminology Used in Digital Marketing:** PPC and online marketing through social media, Social Media Marketing, SEO techniques, Keyword advertising, Lead generation, content and copywriting, Google web-master and analytics overview, Affiliate Marketing, Email Marketing, Mobile Marketing, Influencer Marketing.

**UNIT – IV**

**Digital Users in India:** Focus on Digital users in India, Digital marketing Strategy-Consumer Decision journey, POEM Framework, Segmenting & Customizing messages, Digital advertising Market in India, Skills in Digital Marketing, Digital marketing Plan.

**UNIT – V**

**Blogs & Tags:** What are Blogs, Importance of Blogs, Personal Blogs, Corporate Blogs, Popular Blog Platforms, what are Tags, Widgets, Blog Optimization, and Blog Stats.

**Text Books:**

1. Digital Marketing –Kamat and Kamat-Himalaya ISBN-13:978-9353677848.
2. Digital Marketing, S.Gupta, McGraw-Hill. ISBN-10:9355320404X, ISBN-13:978-9355320407.

**Reference Books:**

1. How To Build a Blog by Joseph Robinson, 2020, ISBN: 9798603879710
2. George Pain. Marketing Automation and Online Marketing: Automate Your Business through Marketing Best Practices such as Email Marketing and Search Engine Optimization.ISBN-10: 1922300624, ISBN-13:978-1922300621.

**Web Links:**

1. [https://onlinecourses.nptel.ac.in/noc22\\_mg109/preview](https://onlinecourses.nptel.ac.in/noc22_mg109/preview)
2. [https://onlinecourses.swayam2.ac.in/ugc19\\_hs26/preview](https://onlinecourses.swayam2.ac.in/ugc19_hs26/preview)

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## INTRODUCTION TO BUSINESS ANALYTICS

**Course Code:245MS044**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>2</b>	<b>0</b>	<b>1</b>	<b>3</b>

**Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Explain the historical overview and importance of business analytics in practice.
- CO2:** Organize various sources of data and data visualization.
- CO3:** Analyze data mining and multi-dimensional data analysis.
- CO4:** Apply the concepts of machine learning.
- CO5:** Apply the concepts of analytics in business areas such as retail, marketing, finance, health care and supply chain.

**Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	1	-	-	-
<b>CO2</b>	-	1	-	-	-
<b>CO3</b>	-	1	-	-	-
<b>CO4</b>	-	1	-	-	-
<b>CO5</b>	-	1	-	-	-

**Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	-	1
<b>CO2</b>	-	1
<b>CO3</b>	-	1
<b>CO4</b>	-	1
<b>CO5</b>	-	1

**UNIT – I**

**Introduction:** What is business analytics? Historical Overview of data analysis, Data Scientist vs. Data Engineer vs. Business Analyst, Career in Business Analytics, what is data science, Why Data Science, Applications for data science, Data Scientists Roles and Responsibility

**UNIT – II**

**Data:** Data Collection, Data Management, Big Data Management, Organization/sources of data, Importance of data quality, Dealing with missing or incomplete data, Data Visualization, Data Classification Data Science Project Life Cycle: Business Requirement, Data Acquisition, Data Preparation, Hypothesis and Modeling, Evaluation and Interpretation, Deployment, Operations, Optimization.

**UNIT – III**

**Introduction to Data Mining:** The origins of Data Mining, Data Mining Tasks, OLAP and Multidimensional data analysis, Basic concept of Association Analysis and Cluster Analysis.

**UNIT – IV**

**Introduction to Machine Learning:** History and Evolution, AI Evolution, Statistics Vs Data Mining Vs, Data Analytics Vs, Data Science, Supervised Learning, Unsupervised Learning, Reinforcement Learning, Frameworks for building Machine Learning Systems.

**UNIT – V**

**Application of Business Analytics:** Retail Analytics, Marketing Analytics, Financial Analytics, Healthcare Analytics, Supply Chain Analytics.

**Text Books:**

- 1 Anil Maheswari, Big Data, Tata McGraw Hill, New Delhi, 2e, 2019. ISBN-10: 9353167957, ISBN-13:978-9353167950.
- 2 James Evans, Business Analytics, Pearson Education,2e. ISBN-10: 0321997824, ISBN-13:978-0321997821.

**Reference Books:**

- 1 Camm, Cochran, Fry, Ohlmann, Anderson, Sweeney, Williams Essential of Business Analytics, Cengage Learning.ISBN-10:8131527654, ISBN-13:978-8131527658.
- 2 Foster Provost and Tom Fawcett, Data Science for Business, Shroff Publisher, ISBN: 9789351102670.

**Web Links:**

- 1 <https://nptel.ac.in/courses/110106050>
- 2 <https://archive.nptel.ac.in/courses/110/105/110105089/>

**Relevant cases have to be discussed in each unit and in examination case study is compulsory from any unit.**

## ENVIRONMENTAL SCIENCE AND SUSTAINABILITY

**Course Code:245AC001**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>

### **Course Outcomes:**

**At the end of the Course, Student will be able to:**

- CO1:** Explain the functions of environment, ecosystems and biodiversity and their conservation.
- CO2:** Identify the causes, effects of environmental pollution and natural disasters and contribute to the preventive measures in the society.
- CO3:** Apply the understanding of renewable and non-renewable resources and contribute to the sustainable measures to preserve them for future generations.
- CO4:** Describe various environmental acts
- CO5:** Recognize the different goals of sustainable development and apply them for suitable technological advancement and societal development.

### **Mapping of Course Outcomes with Program Outcomes:**

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	-	1	-	-
<b>CO2</b>	-	-	1	-	-
<b>CO3</b>	-	-	1	-	-
<b>CO4</b>	-	-	1	-	-
<b>CO5</b>	-	-	1	-	-

### **Mapping of Course Outcomes with Program Specific Outcomes:**

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### **UNIT – I**

**Environment and Biodiversity:** Definition, scope and importance of environment – need for public awareness. Eco-system and Energy flow– ecological succession. Types of biodiversity: genetic, species and ecosystem diversity– values of biodiversity, India as a mega-diversity nation – hot-spots of biodiversity – threats to biodiversity: habitat loss, poaching of wildlife, man-wildlife conflicts – endangered and endemic species of India – conservation of biodiversity: Insitu and ex-situ.

### **UNIT – II**

**Environmental Pollution:** Causes, Effects and Preventive measures of Water, Soil, Air and Noise Pollutions. Solid, Hazardous and E-Waste management. Case studies on Occupational Health and Safety Management system (OHASMS). Environmental protection, Environmental protection acts.

### **UNIT – III**

**Renewable Sources of Energy:** Energy management and conservation, New Energy Sources: Need of new sources. Different types new energy sources. Applications of Hydrogen energy, Ocean energy resources, Tidal energy conversion. Concept, origin and power plants of geothermal energy.

### **UNIT – IV**

**Environmental Acts:** The Water (Prevention and Control of Pollution) Act, 1974-The Air (Prevention and Control of Pollution) Act, 1981-The Environment (Protection) Act, 1986 Objectives, Definition of Pollution under this act, Powers and Functions of Boards-Environmental Impact Assessment: Concept and Benefits

### **UNIT – V**

**Sustainability Practices:** Zero waste and R concept, Circular economy, ISO 14000 Series, Material Life cycle assessment, Environmental Impact Assessment. Sustainable habitat: Green buildings, green materials, Energy efficiency, Sustainable transports. Sustainable energy: Non-conventional Sources, Energy Cycles- carbon cycle, emission and sequestration, Green Engineering: Sustainable urbanization- Socio- economic and technological change

#### **Text Books:**

1. Benny Joseph, Environmental Science and Engineering ', Tata McGraw-Hill, New Delhi.ISBN-10:9387432351, ISBN-13: 978-9387432352.  
Anubha Kaushik and C. P. Kaushik's —Perspectives in Environmental Studies||,  
2. 6th Edition, New Age International Publishers.ISBN-10:9789386418630, ISBN-13:978-9386418630.

#### **Reference Books:**

1. R.K. Trivedi, Handbook of Environmental Laws, Rules, Guidelines, Compliances and Standards, Vol. I and II, Enviro Media. ISBN-10: 8178002213, ISBN-13:978-8178002217.
2. Cunningham, W.P. Cooper, T.H. Gorhani, Environmental Encyclopedia, Jaico Publ., House, Mumbai.ISBN-10:8172247869, ISBN-13: 978-8172247867.

#### **Web Links:**

1. [https://onlinecourses.nptel.ac.in/noc23\\_hs155/preview](https://onlinecourses.nptel.ac.in/noc23_hs155/preview)
2. [https://onlinecourses.swayam2.ac.in/nou20\\_ag12/preview](https://onlinecourses.swayam2.ac.in/nou20_ag12/preview)

## INDIAN CONSTITUTION

Course Code:245AC002

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>

### Course Outcomes:

#### At the end of the Course, Student will be able to:

- CO1:** Identify and explore the basic features and modalities about Indian constitution
- CO2:** Explain the fundamental and administrative structure of various branches of government
- CO3:** Differentiate and relate the functioning of Indian parliamentary system at the centre and state level.
- CO4:** Examine different aspects of Indian Legal System and its related bodies.
- CO5:** Understand and abide the federal distribution and powers of the Indian constitution

#### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	-	1	-	-
<b>CO2</b>	-	-	1	-	-
<b>CO3</b>	-	-	1	-	-
<b>CO4</b>	-	-	1	-	-
<b>CO5</b>	-	-	1	-	-

#### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### UNIT – I

**Constitution:** Meaning & Constitutionalism, Historical perspective :- 1909 Act, 1919 Act & 1935 Act, Salient features & nature of the Constitution,

### UNIT – II

**Fundamental Rights:** Introduction & its scheme, Right to Equality (Art.14), Right to Fundamental Freedoms (Art. 19), Right to Life (Art. 21), Directive Principles of State Policy: importance and implementation, Fundamental Duties and its legal status.

### UNIT – III

**Union Government** – Structures of the Union Government and Functions – President – Vice President – Prime Minister – Cabinet – Parliament – Supreme Court of India – Judicial Review.

### UNIT – IV

**State Government** – Structure and Functions – Governor – Chief Minister – Cabinet – State Legislature – Judicial System in States – High Courts and other Subordinate Courts.

**UNIT – V**

**Federal structure:** Federal structure & distribution of legislative and financial powers between the Union and the States.

**Text Books:**

1. D.D. Basu, Introduction to the Constitution of India, Lexis Nexis, New Delhi, ISBN 10-9388548868.
2. Indian Constitution by Subhash C. Kashyap, National Book Trust, New Delhi.ISBN-10: 9352704428, ISBN-13:978-8123707341.

**Reference Books:**

1. Constitution of India and Professional Ethics, Dr. G. B. Reddy & Mohd. Suhaib, Dream tech Press.ISBN-10:818986601X, ISBN-13:978-8189866013.
2. B.Z. Fadia & Kuldeep Fadia, Indian Government &Politics, Lexis Nexis, New Delhi.ISBN-10: 9384885622, ISBN-13: 978-9384885625.

**Web Links:**

1. <https://archive.nptel.ac.in/courses/129/106/129106003/>
2. [https://onlinecourses.nptel.ac.in/noc24\\_lw05/preview](https://onlinecourses.nptel.ac.in/noc24_lw05/preview)

## MEDIA LITERACY AND CRITICAL THINKING

Course Code:245AC003

L	T	P	C
2	0	0	0

### Course Outcomes:

**At the end of the Course, Student will be able to:**

- CO1:** Explain the notions of media, media literacy, main media types and formats
- CO2:** Identify the benefits and drawbacks of traditional and new media
- CO3:** Estimate the role and strategies of the media market players
- CO4:** Analyze the impact of different types of media content and narratives
- CO5:** Evaluate multimedia messages based on journalistic standards.

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5
<b>CO1</b>	-	1	-	-	-
<b>CO2</b>	-	1	-	-	-
<b>CO3</b>	-	1	-	-	-
<b>CO4</b>	-	1	-	-	-
<b>CO5</b>	-	1	-	-	-

### Mapping of Course Outcomes with Program Specific Outcomes:

CO/PSO	PSO1	PSO2
<b>CO1</b>	1	-
<b>CO2</b>	1	-
<b>CO3</b>	1	-
<b>CO4</b>	1	-
<b>CO5</b>	1	-

### UNIT – I

**Introduction to Media.:** The notions of media and media literacy, History of media evolution, Forms and formats of media

### UNIT – II

**Traditional vs New media:** Role and functions of Traditional and New Media, Social Media Platforms, Access to information

### UNIT – III

**Media Market Game:** Rules and players- Media market players, Ownership and control of mass media market, Journalistic standards

### UNIT – IV

**Media content:** Types and Narratives: The notion and types of media content, The notion and modes of narrative, Media narrative power

### UNIT – V

**Multimedia content:** Types and Technologies: Multimedia terms and features, Multimedia formats and components, Multimedia messages

**Text Books:**

- 1 Introduction to Media Literacy by Potter, W. James - ISBN 10: 1483379582 - ISBN 13: 9781483379586 - SAGE Publications, Inc - 2015.
- 2 McQuail D. McQuail's Mass Communication Theory. 6th Edition. Sage Publications.ISBN-10:1849202923, ISBN-13: 978-1849202923

**Reference Books:**

- 1 Potter, W.J. Media Literacy. 10th edition. SAGE Publishing, 2021. 504 p. ISBN-10: 1071814451, ISBN-13:978-1071814451
- 2 Scheibe, C. and Rogow, F. The Teacher's Guide to Media Literacy. SAGE Publishing. ISBN-10:1412997585, ISBN-13: 978-1412997584.

**Web Links:**

- 1 <https://mediasmarts.ca/digital-media-literacy/general-information/digital-media-literacyfundamentals/media-literacy-fundamentals>
- 2 <http://www.hks.harvard.edu/fs/pnorris/Conference/Conference%20papers/Coronel%20Watchdog.pdf>

## EMPLOYABILITY SKILLS- I

**Course Code: 245AC004**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>

**Aptitude:**

Number System, LCM & HCF, Ratio and Proportion, Averages

**Reasoning:**

Number Series, Letter Series, Number Analogy, Letter Analogy, Odd Man Out, Logical Sequence of Words.

**Verbal:**

Introduction to soft skills, how to improve communication? Parts of Speech, Mind your language towards better English, Vocabulary Expansion

**Text Books:**

1. Quantitative Aptitude for Competitive Examinations - Dr. R. S. Aggarwal, S. Chand Publishing, ISBN: 978-9352534029
2. A Modern Approach to Verbal and Non-Verbal Reasoning - Dr. R. S. Aggarwal, Publication: S. Chand Publishing, ISBN: 978-9352832163

**Reference Books:**

1. Quick Learning Objective General English - Dr. R. S. Aggarwal, Vikas Aggarwal, S. Chand Publishing, ISBN: 978-9352837564
2. Quantitative Aptitude for Competitive Examinations, Abhijit Guha, McGraw Hill Education, ISBN: 978-9353160180
3. Analytical Reasoning - M. K. Pandey, Arihant Publications, ISBN: 978-9350947982

**Web Links:**

1. [www.indiabix.com](http://www.indiabix.com)
2. [www.bankersadda.com](http://www.bankersadda.com)

## EMPLOYABILITY SKILLS- II

**Course Code: 245AC005**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>

**Aptitude:**

Problems on Ages, Partnership, Percentages, Profit and Loss

**Reasoning:**

Coding and Decoding, Ranking Test, Alphabet Test, Direction Test

**Verbal:**

Written communication skill practice, Grammatical use, Concept of 4 step method for presentation, Present Tense

**Text Books:**

1. Quantitative Aptitude for Competitive Examinations - Dr. R. S. Aggarwal, S. Chand Publishing, ISBN: 978-9352534029
2. A Modern Approach to Verbal and Non-Verbal Reasoning - Dr. R. S. Aggarwal, Publication: S. Chand Publishing, ISBN: 978-9352832163

**Reference Books:**

1. Quick Learning Objective General English - Dr. R. S. Aggarwal, Vikas Aggarwal, S. Chand Publishing, ISBN: 978-9352837564
2. Quantitative Aptitude for Competitive Examinations, Abhijit Guha, McGraw Hill Education, ISBN: 978-9353160180
3. Analytical Reasoning - M. K. Pandey, Arihant Publications, ISBN: 978-9350947982

**Web Links:**

1. [www.indiabix.com](http://www.indiabix.com)
2. [www.bankersadda.com](http://www.bankersadda.com)

### **EMPLOYABILITY SKILLS- III**

**Course Code: 245AC006**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>

**Aptitude:**

Simple Interest, Compound Interest, Time and Work, Pipes and Cisterns

**Reasoning:**

Blood Relations, Calendar, Clocks, Cubes and Dice, Coded Inequalities

**Verbal:**

Grammar in use, Group discussion, Reading Comprehension, Past Tense, Future Tense

**Text Books:**

1. Quantitative Aptitude for Competitive Examinations - Dr. R. S. Aggarwal, S. Chand Publishing, ISBN: 978-9352534029
2. A Modern Approach to Verbal and Non-Verbal Reasoning - Dr. R. S. Aggarwal, Publication: S. Chand Publishing, ISBN: 978-9352832163

**Reference Books:**

1. Quick Learning Objective General English - Dr. R. S. Aggarwal, Vikas Aggarwal, S. Chand Publishing, ISBN: 978-9352837564
2. Quantitative Aptitude for Competitive Examinations, Abhijit Guha, McGraw Hill Education, ISBN: 978-9353160180
3. Analytical Reasoning - M. K. Pandey, Arihant Publications, ISBN: 978-9350947982

**Web Links:**

1. [www.indiabix.com](http://www.indiabix.com)
2. [www.bankersadda.com](http://www.bankersadda.com)



## EMPLOYABILITY SKILLS- IV

Course Code: 245AC007

L T P C  
0 0 3 0

### Aptitude:

Time, Speed and Distance, Problems on Trains, Boats and Streams, Mensuration-I, Mensuration - II

### Reasoning:

Venn Diagrams, Syllogisms, Non - Verbal Reasoning, Seating Arrangement

### Verbal:

Grammatical use, Self-introduction, Letters, E-Mail & Report writing, Error correction, Effective Communication

### Text Books:

1. Quantitative Aptitude –Dr. R. S. Aggarwal, S CHAND.
2. A Modern Approach to Verbal and Non-Verbal Reasoning – Dr. R. S. Aggarwal.
3. Quick Learning Objective General English – Dr. R. S. Aggarwal, S CHAND.

### Reference Books:

1. Quantitative Aptitude – Abhijit Guha Mc Graw Hill Publications.
2. Analytical Reasoning – Jaikishan and Premkishan Arihant Publications.
3. A New Approach to Objective English – R. S. Dhillon DGP Publications.

### Web Links:

1. [www.indiabix.com](http://www.indiabix.com)
2. [www.bankersadda.com](http://www.bankersadda.com)



## EMPLOYABILITY SKILLS- V

Course Code: 245MS113

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### Aptitude:

Permutations and Combinations, Probability, Data Interpretation, Logarithms, Statistics

### Reasoning:

Puzzle Tests, Eligibility Test, Data Sufficiency, Statements – Arguments, Statements – Assumptions, Statements - Course of Action, Statements - Conclusions

### Verbal:

Interview skills, Grammar in use, Interpersonal Skills, Negotiation Skills, Social Skills, Problem-Solving Skills, Time Management Skills

### Text Books:

1. Quantitative Aptitude –Dr. R. S. Aggarwal, S CHAND.
2. A Modern Approach to Verbal and Non-Verbal Reasoning – Dr. R. S. Aggarwal.
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