

# **PROGRAM CURRICULUM**

(Applicable for the batches admitted from A.Y 2026-27)

## **TWO YEAR P.G PROGRAM**

**MASTER OF BUSINESS ADMINISTRATION  
(HEALTH CARE MANAGEMENT)**



**A D I T Y A**  
**U N I V E R S I T Y**

Aditya Nagar, ADB Road, Surampalem, Andhra Pradesh



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## VISION & MISSION OF THE UNIVERSITY

### VISION

To be a globally recognized University through excellence in Education, Innovation, and Sustainable Growth

### MISSION

Deliver collaborative education to prepare students for global challenges through

1. Transformative learning.
2. Vibrant research ecosystem.
3. Sustainable and inclusive community

## VISION & MISSION OF THE SCHOOL OF BUSINESS

### VISION

To be a world-class business school advancing academic excellence, innovation, and global talent to develop responsible leaders shaping an inclusive and sustainable future

### MISSION

**M1:** Deliver transformative business education that blends academic rigor with real-world relevance and ethical grounding.

**M2:** Nurture globally competent, entrepreneurial leaders through innovation, research, and interdisciplinary learning.

**M3:** Champion sustainability, social impact, and inclusive growth through collaborative industry and community engagement

## PROGRAM OUTCOMES (POs)

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

- PO1: Application of Management Principles:** Demonstrate the ability to apply foundational and advanced management concepts to address real-world business challenges with practical and effective solutions.
- PO2: Analytical and Critical Reasoning:** Develop strong analytical and critical thinking skills to support data-driven decision-making in dynamic business environments.
- PO3: Value-Centered Leadership:** Cultivate leadership capabilities rooted in integrity, ethics, and a commitment to creating long-term value for organizations and society.
- PO4: Global and Ethical Awareness:** Exhibit a deep understanding of global business dynamics, including economic, legal, and ethical considerations, and communicate these effectively in diverse business contexts.
- PO5: Collaborative Leadership:** Demonstrate the ability to lead and contribute meaningfully in team settings, effectively driving organizational objectives through shared vision and cooperation.
- PO6: Innovation and Research Orientation:** Identify emerging business opportunities, generate research insights, and implement innovative ideas across varied functional and sectorial domains.
- PO7: Tech-Driven Business Adaptability:** Stay abreast of disruptive and emerging technologies, applying them strategically to modernize and enhance business processes and models.
- PO8: Community Engagement and Impact:** Foster meaningful engagement with underserved communities through socially responsible outreach, aiming to create inclusive and transformative business solutions.

## PROGRAM SPECIFIC OUTCOMES (PSOs)

After successful completion of the program,

- PSO1: Strategic and Functional Integration:** Graduates will be able to integrate knowledge across core business functions (marketing, finance, HR, operations, analytics) to solve complex business challenges and design effective organizational strategies.
- PSO2: Innovation, Entrepreneurship, and Business Transformation:** Graduates will demonstrate the ability to identify market opportunities, develop innovative solutions, and lead entrepreneurial ventures or transformational initiatives within existing organizations.
- PSO3: Data-Driven Decision-Making and Digital Agility:** Graduates will proficiently apply analytical tools, digital technologies, and data-driven insights to enhance organizational decision-making and drive competitive advantage in a technology-enabled global environment

## PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

**After successful completion, this program will support**

- PEO 1: Strengthen Business Foundations:** To equip students with a comprehensive understanding of core business functions and processes. This includes fostering an integrated perspective of value-creating activities within an organization and how they interact to drive overall business success.
- PEO 2: Nurture Strategic Thinking:** To develop students' ability to think critically and strategically by analyzing multifaceted business challenges, exploring feasible solutions, and making sound decisions that align with long-term organizational goals.
- PEO 3: Build Leadership Excellence:** To cultivate essential leadership competencies such as effective communication, collaboration, team management, motivation, and ethical judgment—empowering students to take on leadership roles and guide organizations with confidence and integrity.
- PEO 4: Develop a Global Outlook:** To prepare students to navigate the complexities of the international business landscape by enhancing their awareness of diverse cultures, global market dynamics, and emerging business trends, thereby fostering a truly global mindset.
- PEO 5: Instill Ethical and Social Responsibility:** To instill a deep understanding of ethical standards and social responsibility in business, enabling graduates to make decisions that reflect accountability, stakeholder sensitivity, and a commitment to sustainable practices.

## **SCHOOL OF BUSINESS**

### **Program Curriculum – 2026**

**(Applicable for the batches admitted from A. Y. 2026-27)**

#### **U.G. Programs Offered**

- Bachelor of Business Administration in knowledge partnership with Deloitte
- Bachelor of Business Administration in Business Analytics in knowledge partnership with KPMG
- Bachelor of Business Administration in Global Finance in knowledge partnership with PwC
- Bachelor of Business Administration in FinTech in knowledge partnership with EY
- Bachelor of Business Administration in Health Care Management in knowledge partnership with Red Versity

#### **P.G. Programs Offered**

- Master of Business Administration in knowledge partnership with Deloitte
- Master of Business Administration in Business Analytics in knowledge partnership with KPMG
- Master of Business Administration in Global Finance in knowledge partnership with PwC
- Master of Business Administration in FinTech in knowledge partnership with EY
- Master of Business Administration in Health Care Management in knowledge partnership with Red Versity
- Master of Business Administration for Working Professionals

**Master of Business Administration (Health Care Management)**  
**Program Curriculum-2026**

**Credit Division:**

<b>S. No</b>	<b>Category of Courses</b>	<b>Credits</b>
<b>1</b>	Program Core Courses (PCC)	62
<b>2</b>	Discipline Core Courses (DSC)	24
<b>3</b>	Ability Enhancement Course (AEC)	02
<b>4</b>	Summer Internship (SI)	4
<b>5</b>	Capstone Project (CPROJ)	4
<b>6</b>	Mandatory courses (MC)	0
<b>Total Credits</b>		<b>96</b>

### Program Core Courses (PCC)

Course Code	Course Title	L	T	P	C	CIE	SEE	Total	Pre-requisite
2608MS01	Management & Organizational Behavior	2	0	1	3	50	50	100	-
2608MS02	Accounting for Managers	2	1	0	3	50	50	100	-
2608MS06	Marketing Management	2	0	1	3	50	50	100	-
2608MS09	Human Resource Management	2	0	1	3	50	50	100	MOB
2608MS11	Corporate Finance	3	0	1	4	50	50	100	-
2608MS12	Business Communication & Soft Skills	3	0	0	3	50	50	100	-
2625MS01	Research Methodology & Biostatistics	2	1	0	3	50	50	100	-
2625MS02	Logistics & Supply Chain Management	2	0	1	3	50	50	100	-
2625MS03	Operations Research & Decision Science	3	1	0	4	50	50	100	RM & BS
2625MS04	Disaster Management	2	0	1	3	50	50	100	-
2625MS05	Managerial Economics & Health Economics	2	0	1	3	50	50	100	-
2625MS06	Hospital Architecture, Planning & Design	3	0	1	4	50	50	100	-
2625MS07	Clinical Services Management	2	0	1	3	50	50	100	-
2625MS08	Hospital Operations Management	3	0	1	4	50	50	100	-
2625MS09	Strategic Management in Healthcare	2	0	1	3	50	50	100	-
2625MS10	Legal & Ethical Issues in Healthcare	2	0	1	3	50	50	100	-
2625MS11	Quality Management & Accreditation (NABH, JCI, ISO)	3	0	1	4	50	50	100	-
2625MS12	Health Insurance, Billing & Revenue Cycle Mgmt	2	0	1	3	50	50	100	-
2625MS13	Innovations & Entrepreneurship in Healthcare	2	0	1	3	50	50	100	-
	<b>Total</b>				<b>62</b>				

### Discipline Specific Courses (DSC)

<b>Health Care Management (HCM)</b>									
<b>Course Code</b>	<b>Course Title</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>
2625MS14	Healthcare Systems & Policy (Indian & Global)	3	0	1	4	50	50	100	-
2625MS15	Epidemiology & Public Health Administration	3	0	1	4	50	50	100	-
2625MS16	IT in Healthcare (HIS, EMR, EHR)	3	0	1	4	50	50	100	-
2625MS17	Medical Tourism / Pharma Management	3	0	1	4	50	50	100	-
2625MS18	International Health Systems & Global Health	3	0	1	4	50	50	100	HCS & P
2625MS19	Digital Health / Analytics	3	0	1	4	50	50	100	ITIHC
<b>Total</b>					<b>24</b>				

<b>Ability Enhancement Course (CPROJ)</b>									
<b>Course Code</b>	<b>Course Title</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>
2608MS80	Student Activity Based Learning	-	-	2	2	50	50	100	-
<b>Total</b>					<b>2</b>				

<b>Summer Internship (SI)</b>									
<b>Course Code</b>	<b>Course Title</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>
2608MS81	Summer Internship	-	-	4	4	100	-	100	-
<b>Total</b>					<b>4</b>				

<b>Capstone Project (CPROJ)</b>									
<b>Course Code</b>	<b>Course Title</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>
2608MS82	Capstone Project	-	-	4	4	50	50	100	-
	<b>Total</b>				<b>4</b>				

<b>Mandatory Courses (MC)</b>									
<b>Course Code</b>	<b>Course Title</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>
2608MS83	Corporate Readiness-I	2	0	0	0	100	-	100	-
2608MS84	Corporate Readiness-II	2	0	0	0	100	-	100	CR-I
2608MS85	Corporate Readiness-III	2	0	0	0	100	-	100	CR-II
2608MS86	Project Management	2	0	0	0	100	-	100	-
	<b>Total</b>				<b>0</b>				

**Suggestive Semester- Wise Curriculum**

<b>SEMESTER-I</b>								
<b>Course Code</b>	<b>Course Title</b>	<b>Course Category</b>	<b>Credits</b>				<b>Total Hours</b>	<b>Pre-requisite</b>
			<b>L</b>	<b>T</b>	<b>P</b>	<b>Total</b>		
2608MS01	Management & Organizational Behavior	PCC	2	0	1	3	4	-
2608MS02	Accounting for Managers	PCC	2	1	0	3	3	-
2608MS12	Business Communication and Soft Skills	PCC	3	0	0	3	3	-
2625MS05	Managerial Economics & Health Economics	PCC	2	0	1	3	4	-
2625MS06	Hospital Architecture, Planning & Design	PCC	3	0	1	4	5	-
2625MS14	Healthcare Systems & Policy (Indian & Global)	DSC	3	0	1	4	5	-
2625MS15	Epidemiology & Public Health Administration	DSC	3	0	1	4	5	-
2608MS83	Corporate Readiness-I	MC	0	0	1	0	2	-
<b>Total</b>						<b>24</b>	<b>31</b>	

<b>SEMESTER-II</b>								
<b>Course Code</b>	<b>Course Title</b>	<b>Course Category</b>	<b>Credits</b>				<b>Total Hours</b>	<b>Pre-requisite</b>
			<b>L</b>	<b>T</b>	<b>P</b>	<b>Total</b>		
2608MS11	Corporate Finance	PCC	3	0	1	4	5	-
2608MS09	Human Resource Management	PCC	2	0	1	3	4	MOB
2608MS06	Marketing Management	PCC	2	0	1	3	4	-
2625MS01	Research Methodology & Biostatistics	PCC	2	1	0	3	3	-
2625MS07	Clinical Services Management	PCC	2	0	1	3	4	-
2625MS16	IT in Healthcare (HIS, EMR, EHR)	DSC	3	0	1	4	5	-
2625MS17	Medical Tourism / Pharma Management	DSC	3	0	1	4	5	-
2608MS84	Corporate Readiness -II	MC	0	0	1	0	2	CR-I
<b>Total</b>						<b>24</b>	<b>32</b>	

SEMESTER-III								
Course Code	Course Title	Course Category	Credits				Total Hours	Pre-requisite
			L	T	P	Total		
2625MS02	Logistics & Supply Chain Management	PCC	2	0	1	3	4	-
2625MS09	Strategic Management in Healthcare	PCC	2	0	1	3	4	-
2625MS10	Legal & Ethical Issues in Healthcare	PCC	2	0	1	3	4	-
2625MS03	Operations Research & Decision Science	PCC	3	1	0	4	4	RM & BS
2625MS11	Quality Management & Accreditation (NABH, JCI, ISO)	PCC	3	0	1	4	5	-
2625MS08	Hospital Operations Management	PCC	3	0	1	4	5	-
2608MS81	Summer Internship	SI	-	-	4	4	-	-
2608MS85	Corporate Readiness -III	MC	0	0	1	0	2	CR-II
<b>Total</b>						<b>25</b>	<b>28</b>	

SEMESTER-IV								
Course Code	Course Title	Course Category	Credits				Total Hours	Pre-requisite
			L	T	P	Total		
2625MS04	Disaster Management	PCC	2	0	1	3	4	-
2625MS13	Innovations & Entrepreneurship in Healthcare	PCC	2	0	1	3	4	-
2625MS12	Health Insurance, Billing & Revenue Cycle Management	PCC	2	0	1	3	4	-
2625MS18	International Health Systems & Global Health	DSC	3	0	1	4	5	HCS & P
2625MS19	Digital Health / Analytics	DSC	3	0	1	4	5	ITIHC
2608MS82	Capstone Project	CPROJ	0	0	4	4	-	-
2608MS86	Project Management	MC	2	0	0	0	2	-
2608MS80	Student Activity Based Learning	AEC	-	-	-	2	-	-
<b>Total</b>						<b>23</b>	<b>24</b>	

**PROGRAM CORE COURSES  
MANAGEMENT AND ORGANIZATION BEHAVIOR**

	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>Course Code: 2608MS01</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, functions, and evolving challenges of management in 21st-century organizations.
- CO2:** Apply foundational theories of Organizational Behavior to assess individual and group dynamics within organizations.
- CO3:** Analyze various motivation theories and recommend suitable strategies to enhance workplace motivation and performance.
- CO4:** Differentiate between leadership styles and evaluate their effectiveness across diverse and virtual team environments.
- CO5:** Apply techniques to manage organizational culture, conflict, stress, and change for improving organizational effectiveness.

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

CO / PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
<b>CO1</b>	3	1	1	1	1	1	1	1
<b>CO2</b>	3	3	2	1	2	1	1	1
<b>CO3</b>	3	3	3	3	2	1	1	1
<b>CO4</b>	3	3	3	3	3	1	1	1
<b>CO5</b>	3	3	3	3	3	-	-	-

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

CO / PSO	PSO1	PSO2	PSO3
<b>CO1</b>	3	1	1
<b>CO2</b>	3	2	1
<b>CO3</b>	3	3	2
<b>CO4</b>	3	3	2
<b>CO5</b>	3	3	3

**UNIT – I**

**Introduction to Management:** Concept, Definition, Nature and Importance of Management, Evolution of Management thought, Levels of Management, Functions of Management- Planning, Organizing, Staffing, Directing, and Controlling. Managerial Roles and Responsibilities, Challenges of Managing 21st Century Corporations/Organization.

**UNIT – II**

**Foundations of Organizational Behavior:** Management and Organizational Behavior, Individual Behavior characteristics, Personality, Personality Types, Personality Traits,

Perception, Attitude and Learning; Intra & Interpersonal Behavior, Communication and Transactional Analysis and Johari Window; Organizational Behavior Models; Foundations of Group Behavior, Formation of Groups, Groups versus Teams, Group Dynamics.

### **UNIT – III**

**Motivation:** Concept, Meaning, Definition, Importance of Motivation in Organizational Behaviour, Types of Motivation, Work Motivation, Maslow's Hierarchy of Need Theory, Theory X – Theory Y, Herzberg's Two Factor Theory, Ouchi's Theory Z, Alderfer's ERG Theory, McClelland's Theory, Vroom's expectancy theory, Adams Equity Theory, Contemporary Issues in the Practice of Motivation, Recent Trends in Motivation.

### **UNIT – IV**

**Leadership:** Introduction to Leadership, Definitions, Leadership vs Management, Theories, Leadership Styles, Emotional Intelligence, Ethical Leadership, Cross-Cultural Leadership, Leadership Development, Crisis Leadership, Virtual Team Leadership, Power and Politics.

### **UNIT – V**

**Management of Organizational Behavior:** Organizational Culture, Organizational Climate, Managing Conflict, Work Stress Management, Work-Life Balance; Managing Change.

#### **Textbooks:**

1. Dr. Chandrani Singh (2024), Principles and Practices of Management and Organizational Behavior. Routledge India; 1st edition, ISBN 978-1032634241.
2. Stephen P. Robbins, Timothy A. Judge and Neharika Vohra (2022) Organizational Behavior, 18e, 978-9356064270. Pearson Education

#### **Reference Books:**

1. Kavita Singh (2024) Organizational Behaviour: Text and Cases, Pearson India, ISBN 13: 978-1282652729
2. Laurie J. Mullins and Gary Rees (2023) Management and Organizational Behaviour (13th Edition), ISBN-13: 978-1292422381. Pearson Education Limited.

#### **Web Links:**

1. <https://archive.nptel.ac.in/courses/110/107/110107150/>
2. <https://archive.nptel.ac.in/courses/110/106/110106145/>

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

## ACCOUNTING FOR MANAGERS

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

**Course Code: 2608MS02**

**Course Outcomes:**

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

- CO1:** Explain accounting concepts, principles, standards, and the accounting cycle.
- CO2:** Prepare final accounts and apply methods of fixed assets and depreciation accounting.
- CO3:** Apply cost accounting principles including cost sheet preparation and inventory control.
- CO4:** Analyze budgeting techniques like performance, fixed, flexible, and zero-based budgeting.
- CO5:** Evaluate decisions using financial statement analysis, ratio analysis, and marginal costing.

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

<b>CO / PO</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>
<b>CO1</b>	3	2	2	1	1	1	1	1
<b>CO2</b>	3	3	2	1	2	1	1	1
<b>CO3</b>	3	3	3	2	1	1	1	1
<b>CO4</b>	3	3	3	3	2	1	1	-
<b>CO5</b>	3	3	3	3	2	1	1	-

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

<b>CO / PSO</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>
<b>CO1</b>	3	2	1
<b>CO2</b>	3	3	1
<b>CO3</b>	3	3	2
<b>CO4</b>	3	3	2
<b>CO5</b>	3	3	3

**UNIT – I**

**Financial Accounting:** Scope and Nature of Accounting, Accounting concepts, Principles & Standards, Accounting Cycle, Journalizing, Subsidiary Books; Ledger Posting, Preparation of Trial Balance, Rectification of Errors. Capital and Revenue Expenditure & Income.

**UNIT – II**

**Depreciation and Final Accounting:** Fixed Assets and Depreciation Accounting. Preparation of Final Accounts, Manufacturing Account; Trading Account, Profit and Loss Account; Balance Sheet (with adjustments), Financial Statements.

**UNIT – III**

**Cost Accounting:** Objectives, Classification of Cost, Preparation of Cost Sheet, Material

Cost Accounting, Perpetual Inventory Control, Inventory Valuation, EOQ, ABC Analysis.

#### **UNIT – IV**

**Performance Evaluation Techniques:** Introduction to Budgeting and Budgetary Control; Performance Budgeting; Classification of Budget; Fixed and Flexible Budgets, Zero Based Budgeting.

#### **UNIT – V**

**Decision Making Techniques:** Financial Statement Analysis, Ratio Analysis, Common Size Statements, DuPont Analysis, Marginal Costing, Application of Marginal Costing in Decision Making, Cost Volume Profit Analysis, Fundamentals of standard costing.

#### **Textbooks:**

1. Sanjay Dhamija, Financial Accounting for Managers (4th Edition) (2024), ISBN- 13: 978-9357054898, Pearson India.
2. Paul D. Kimmel, Jerry J. Weygandt, and Jill E. Mitchell, Financial Accounting for Managers, (2023) ISBN- 13: 978-1119811428 Wiley.

#### **Reference Books:**

1. Peter D. Easton, Robert F. Halsey, Mary Lea McAnally, Al L. Hartgraves, and Wayne J. Morse, Financial & Managerial Accounting for MBAs (7th Edition) (2025), ISBN - 13: 978-1618536211, Cambridge Business Publishers
2. Ray H. Garrison, Eric Noreen, and Peter C. Brewer, Managerial Accounting (17th Edition), (2021), ISBN- 13: 978-1260247787, McGraw Hill Education.

#### **Web Links:**

1. <https://archive.nptel.ac.in/courses/110/101/110101003/>
2. <https://nptel.ac.in/courses/110101004>

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

## MARKETING MANAGEMENT

	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>Course Code: 2608MS06</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 marketing and the core marketing concepts
- CO2:** Identify market segments based on effective segmentation criteria
- CO3:** Analyze products, the product life cycle, and propose strategies for new product development
- CO4:** Assess pricing strategies, the relevance of the value chain to marketing, and customer lifetime value
- CO5:** Evaluate integrated marketing channels, manage retailing and logistics, and the effectiveness of various promotional strategies

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
<b>CO1</b>	3	2	2	3	2	2	1	1
<b>CO2</b>	3	3	2	3	2	2	1	1
<b>CO3</b>	3	3	3	2	2	3	2	2
<b>CO4</b>	3	3	3	3	2	2	3	2
<b>CO5</b>	3	3	2	2	3	3	3	2

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

CO/PSO	PSO1	PSO2	PSO3
<b>CO1</b>	3	2	1
<b>CO2</b>	3	3	2
<b>CO3</b>	3	2	3
<b>CO4</b>	3	3	2
<b>CO5</b>	3	3	3

### 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, Omni Channel Strategy, Marketing Metrics, Neuro Marketing.

#### **Textbooks:**

1. Kotler, P., Keller, K. L., & Chernev, A. (2021). Marketing management (16th ed.). Pearson. ISBN: 9781292404813
2. Marshall, G. W., & Johnston, M. W. (2021). Marketing management (4th ed.). McGraw Hill Education. ISBN: 9781260381917

#### **Reference Books:**

1. Iacobucci, D. (2021). Marketing management (6th ed.). Cengage Learning. ISBN: 9780357635087.
2. Czinkota, M. R., Kotabe, M., Vrontis, D., & Shams, S. M. R. (2021). Marketing management: Past, present and future (4th ed.). Springer. ISBN: 9783030669157.

#### **Web Links:**

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

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## HUMAN RESOURCE MANAGEMENT

	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>Course Code: 2608MS09</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 basic concepts, functions, and current trends in Human Resource Management (HRM).
- CO2:** Apply the principles of manpower acquisition, including human resource planning, recruitment, and selection processes.
- CO3:** Design and evaluate training and development programs for employee growth and career development.
- CO4:** Assess performance appraisal techniques and wage and salary administration methods in HRM.
- CO5:** Analyze industrial relations concepts, issues, and the process of managing industrial disputes and collective bargaining.

### Mapping of Course Outcomes with Program Outcomes:

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8
<b>CO1</b>	3	2	2	2	2	2	3	2
<b>CO2</b>	3	3	2	2	3	3	3	2
<b>CO3</b>	3	3	2	3	3	2	3	2
<b>CO4</b>	3	2	3	3	2	3	2	2
<b>CO5</b>	3	3	3	3	2	2	2	3

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

CO/PSO	PSO1	PSO2	PSO3
<b>CO1</b>	3	2	2
<b>CO2</b>	3	3	3
<b>CO3</b>	3	3	2
<b>CO4</b>	3	2	3
<b>CO5</b>	3	3	2

### UNIT – I

**Introduction to Human Resource Management:** Introduction, Concept, 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

**Manpower Acquisition:** Concept, Objectives, Importance, Job Analysis - Nature, Methods, Approaches, Job Description and Job Specification, Job Enlargement, Job Enrichment, Job Design, HRP - Process of HRP, Factors Affecting HRP, Recruitment-

Purpose, Process, Sources, Methods of Recruitment, Selection- Importance and Processes of Selection, Types of Tests in Selection, Interview-

### **UNIT – III**

**Training and Development:** Concept, Meaning, Objectives, Importance of Training, Assessment of Training, Need for Training, Process of Training. Methods of Training, Designing a Training Program, Executive Development, Methods of Executive Development, Internal Mobility - Promotion, Demotion and Transfer, Separation of Employees – Voluntary and Involuntary, Succession Planning, Career Planning, Process., Career Development, Career Anchors, Career Life Cycle.

### **UNIT – IV**

**Performance Appraisal:** Introduction, Meaning, Objectives, Definition, Need and Importance of Performance Appraisal, Process of Performance Appraisal, Methods of Performance Appraisal.

**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 Perks, 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, Industrial Disputes and Settlement, Workers Participation in Management, Collective Bargaining, Grievance Redressal, Conciliation, Adjudication and Arbitration, Trade Unions-Nature, Role and Problems, HRMS, HRIS.

#### **Textbooks:**

1. Verhulst, S. L., & DeCenzo, D. A. (2021). Fundamentals of human resource management (14th ed.). Wiley. ISBN: 9781119803744
2. Crews, D. (2021). Mastering human resource management (1st ed.). FlatWorld. ISBN: 9781453397077

#### **Reference Books:**

1. Blokdyk, G. (2020). Human resource management: A complete guide – 2021 edition. The Art of Service. ISBN: 9781867424604.
2. McConnell, C. R. (2021). Human resource management in health care (3rd ed.). Jones & Bartlett Learning. ISBN: 9781284155136.

#### **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.**

## CORPORATE FINANCE

**Course Code: 2608MS11**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>1</b>	<b>4</b>

**Course Outcomes:**

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

- CO1:** Explain the role and scope of the finance function in modern business.
- CO2:** Apply time value of money and valuation models in financial decisions.
- CO3:** Use capital budgeting techniques to evaluate investment decisions.
- CO4:** Analyze capital structure theories and measure cost of capital.
- CO5:** Assess dividend policies and their impact on firm valuation.

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

<b>CO/PO</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>
<b>CO1</b>	3	2	2	2	2	3	2	2
<b>CO2</b>	3	3	3	2	2	3	2	2
<b>CO3</b>	3	3	3	2	3	3	3	2
<b>CO4</b>	3	3	3	3	2	3	3	2
<b>CO5</b>	3	3	3	3	3	3	2	2

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

<b>CO/PSO</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>
<b>CO1</b>	3	2	2
<b>CO2</b>	3	3	2
<b>CO3</b>	3	3	3
<b>CO4</b>	3	3	3
<b>CO5</b>	3	3	3

**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; 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.

**UNIT – III**

**Capital Structure and Cost of Capital:** 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.

#### **UNIT – IV**

**Dividend Decisions:** 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.

#### **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,

#### **Textbooks:**

1. Ross, S. A., Westerfield, R. W., Jaffe, J., & Jordan, B. D. (2021). *Corporate finance* (13th ed.). McGraw Hill Education. ISBN: 9781260772388.
2. Brealey, R. A., Myers, S. C., Allen, F., & Edmans, A. (2022). *Principles of corporate finance* (14th ed.). McGraw Hill Education. ISBN: 9781264080946

#### **Reference Books:**

3. Bratton, W. W. (2021). *Corporate finance: Cases and materials* (9th ed.). West Academic Publishing. ISBN: 9781684679270.
4. Haas, J. J. (2021). *Corporate finance* (2nd ed.). West Academic Publishing. ISBN: 9781647088651

#### **Web Links:**

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

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

## BUSINESS COMMUNICATION AND SOFT SKILLS

	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>Course Code: 2608MS12</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 key managerial skills and personal competencies, including emotional intelligence and negotiation.
- CO2:** Apply team-building and networking skills to manage teams and collaborate across business functions.
- CO3:** Apply interpersonal and supportive communication skills for effective coaching, counselling, and personal interview management.
- CO4:** Analyze effective communication techniques and evaluate strategies for interviews, group discussions, and professional interactions in the context of technological advancements.
- CO5:** Analyze and construct various business documents and apply appropriate etiquette in professional communication and meetings.

### Mapping of Course Outcomes with Program Outcomes:

CO / PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8
<b>CO1</b>	2	2	3	3	2	1	1	1
<b>CO2</b>	2	3	3	2	2	1	1	1
<b>CO3</b>	3	2	3	2	2	1	1	1
<b>CO4</b>	2	3	3	3	2	1	1	1
<b>CO5</b>	2	2	2	3	2	1	1	1

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

CO / PSO	PSO1	PSO2	PSO3
<b>CO1</b>	1	-	-
<b>CO2</b>	1	-	-
<b>CO3</b>	1	-	-
<b>CO4</b>	1	-	-
<b>CO5</b>	1	-	-

### UNIT – I

**Introduction to skills & personal skills:** Importance of competent managers, skills of effective managers, developing self-awareness on the issues of emotional intelligence, self-learning styles, values, attitude towards change, learning of skills and applications of skills– Negotiation and assertiveness skills.

### UNIT – II

**Team building:** Developing teams and team work, advantages of team, leading team, team membership. Team management, networking skills, interaction across business functions

Skill development and skill application.

### **UNIT – III**

**Building relationship:** Skills for developing positive interpersonal communication, importance of supportive communication, coaching and counselling, defensiveness and disconfirmation, principles of supportive communications. Personal interview management. Skill analysis and application on above areas. Reflective assessment on dimension of managerial success.

### **UNIT – IV**

**Writing CVs & Application Letter:** Group discussions, interview, types of interview, candidates' preparation, Interviewers preparation; Impact of Technological Advancement on Business Communication- oral Communication, principles of successful oral communication, two sides of effective oral communication, effective listening, non – verbal communication, Body language, Paralanguage.

### **UNIT – V**

**Introduction to business letters:** Types of business letter, Layout of business letter, Reports: definition & purpose, types of business reports, reports writing, letter for Job Application, Thank You Letter, Letter of Complaint, Memos. Meetings: need, importance & planning of Meetings, drafting of notice, agenda, minutes & resolutions of Meeting, writing memorandum, press release, press conference, Business etiquettes – netiquettes, telephonic & table etiquettes .

#### **Textbooks:**

1. Andrew J. Dubrin, Essentials of Management, Thomson Southwestern, 9th edition, 2012, ISBN-13. 978-8131517130
2. Samuel C. Certo and Tervis Certo, Modern management: concepts and skills, Pearson education, 12th edition, 2012. ISBN-10. 0132176319; ISBN-13. 978-0132176316

#### **Reference Books:**

1. Harold Koontz and Heinz Weihrich, Essentials of management: An International & Leadership Perspective, 9th edition, Tata McGraw– Hill Education, 2012. ISBN- 978-1259005121
2. P.D. Chaturvedi – Busines Communication (Pearson Education, 3st Edition 2006). ISBN-13 978-9332517608

#### **Web Links:**

1. <https://archive.nptel.ac.in/courses/110/105/110105052/>
2. <https://nptel.ac.in/courses/110105052>

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## RESEARCH METHODOLOGY & BIOSTATISTICS

	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>Course Code: 2625MS01</b>	<b>2</b>	<b>1</b>		<b>3</b>

### Course Outcomes:

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

**CO1:** Design and conduct health research using appropriate research methodologies

**CO2:** Apply statistical methods for healthcare data analysis

**CO3:** Interpret and critically appraise healthcare research

**CO4:** Develop research protocols for healthcare management studies

**CO5:** Communicate research findings effectively

### Mapping of Course Outcomes with Program Outcomes:

CO / PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
<b>CO1</b>	3	2	-	2	1	3	1	-
<b>CO2</b>	2	3	-	-	-	3	2	-
<b>CO3</b>	2	3	1	2	-	3	1	-
<b>CO4</b>	3	2	1	2	1	3	1	-
<b>CO5</b>	2	2	2	3	3	2	1	2

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

CO / PSO	PSO1	PSO2	PSO3
<b>CO1</b>	3	2	2
<b>CO2</b>	3	2	3
<b>CO3</b>	2	2	3
<b>CO4</b>	3	3	2
<b>CO5</b>	2	2	2

### UNIT – I

**Research Design and Methodology:** Research process and problem identification. Literature review and conceptualization. Research questions and hypotheses. Research design selection (experimental, quasi-experimental, observational). Cross-sectional studies. Case-control studies. Cohort studies. Qualitative research methods. Mixed methods research. Sampling methods and sample size. Study validity (internal, external).

### UNIT – II

**Descriptive Statistics and Probability:** Data types and measurement scales. Data collection and organization. Frequency distributions. Measures of central tendency. Measures of dispersion. Skewness and kurtosis. Probability fundamentals. Probability

distributions (normal, binomial, Poisson). Central Limit Theorem. Normal distribution applications.

### UNIT – III

**Inferential Statistics and Hypothesis Testing:** Confidence intervals. Hypothesis testing framework. Type I and Type II errors. Power analysis. Parametric tests (t-test, ANOVA, Pearson correlation). Non-parametric tests (Mann-Whitney, Kruskal-Wallis). Chi-square test. Multiple comparison tests. Regression analysis (linear, logistic). Survival analysis.

### UNIT – IV

**Healthcare Research Applications and Data Management:** Clinical trial design and management. Patient recruitment and consent. Blinding and randomization. Safety monitoring. Adverse event reporting. Data quality and validation. Electronic data capture (EDC). Ethics in human subjects research. IRB review process. Research ethics in healthcare. Data confidentiality and security.

### UNIT – V

**Research Communication and Evidence Synthesis:** Research protocol development. Research ethics and compliance. Manuscript writing and publication. Research presentation skills. Systematic reviews and meta-analysis. Evidence synthesis methodologies. Quality assessment of studies. Reporting standards (CONSORT, STROBE, PRISMA). Peer review process. Impact factor and research metrics.

#### Textbooks:

1. Bland, J. Martin; Altman, Douglas G., *Statistical Practice in Clinical Research*, 2015, Springer, ISBN: 978-3-319-12568-8
2. Polit, Denise F.; Beck, Cheryl T., *Nursing Research: Generating and Assessing Evidence for Nursing Practice* (10th ed.), 2021, Wolters Kluwer, ISBN: 978-1-9751-1855-1

#### Reference Books:

1. Kirkwood, Betty R.; Sterne, Jonathan A. C., *Essential Medical Statistics* (2nd ed.), 2003, Blackwell Science, ISBN: 978-0-86542-871-3
2. World Health Organization, *Handbook on Monitoring and Evaluation of Health Systems Strengthening*, 2011, WHO Publications, ISBN: 978-92-4-154995-0

#### Web Links:

1. <https://nptel.ac.in/courses/102101061/>
2. <https://www.coursera.org/learn/statistical-analysis>
3. <https://www.ncbi.nlm.nih.gov/pubmed/>

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## FUNDAMENTALS OF LOGISTICS AND SUPPLY CHAIN MANAGEMENT

	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>Course Code: 2625MS02</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:** Analyse 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	PO 6	PO 7	PO 8
<b>CO1</b>	3	2	2	3	2	1	3	2
<b>CO2</b>	3	3	2	2	3	2	2	3
<b>CO3</b>	3	3	3	3	3	3	2	3
<b>CO4</b>	3	3	3	3	2	3	3	3
<b>CO5</b>	3	3	3	3	3	3	3	3

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

CO/PSO	PSO 1	PSO 2	PSO 3
<b>CO1</b>	3	2	2
<b>CO2</b>	3	3	2
<b>CO3</b>	3	3	3
<b>CO4</b>	3	3	3
<b>CO5</b>	3	3	3

### 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

#### **Textbooks:**

1. Supply Chain Logistics Management, Bowersox, Closs, Cooper, McGraw Hill. 5<sup>th</sup> Edition, (9<sup>th</sup> reprint), 2021, ISBN-0078096642
2. Christopher, M. (2021). Logistics & Supply Chain Management (6th ed.). Pearson, ISBN: 9781292545791.

#### **Reference Books:**

1. Rushton, A., Croucher, P., & Baker, P. (2021). The Handbook of Logistics and Distribution Management (7th ed.). Kogan Page. ISBN: 9780749498353
2. Mangan, J., Lalwani, C., & Lalwani, C. L. (2021). Global Logistics and Supply Chain Management (4th ed.). Wiley. ISBN: 9781119690157.

#### **Web Links:**

1. <https://archive.nptel.ac.in/courses/110/105/110105141/>
2. <https://www.youtube.com/watch?v=Nrl0CtS1m8Y>

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## OPERATIONS RESEARCH & DECISION SCIENCE

	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>Course Code: 2625MS03</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>4</b>

### Course Outcomes:

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

- CO1:** Apply operations research techniques to healthcare problems
- CO2:** Use decision analysis frameworks for healthcare decision-making
- CO3:** Develop optimization models for healthcare operations
- CO4:** Analyze queuing and scheduling problems in healthcare
- CO5:** Forecast demand and plan resources using quantitative methods

### Mapping of Course Outcomes with Program Outcomes:

CO / PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
<b>CO1</b>	3	3	-	-	-	2	1	-
<b>CO2</b>	2	3	1	2	-	3	1	-
<b>CO3</b>	3	3	-	-	-	3	2	-
<b>CO4</b>	2	3	-	-	1	2	2	-
<b>CO5</b>	3	3	-	1	-	3	2	-

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

CO / PSO	PSO1	PSO2	PSO3
<b>CO1</b>	3	2	3
<b>CO2</b>	3	3	3
<b>CO3</b>	3	3	3
<b>CO4</b>	2	2	3
<b>CO5</b>	3	2	3

### UNIT – I

**Linear Programming and Optimization:** Linear programming formulation and solution. Graphical and simplex methods. Sensitivity analysis. Dual problem and shadow prices. Transportation and assignment problems. Resource allocation problems. Blending and production planning. Constraint optimization. Integer programming. Goal programming and multi-objective optimization.

### UNIT – II

**Probabilistic Models and Decision Analysis:** Decision trees and payoff matrices. Expected value analysis. Bayesian decision analysis. Utility theory and risk preferences. Sensitivity analysis in decisions. Multi-criteria decision analysis. Analytic Hierarchy Process (AHP). Markov chains. Simulation modeling. Monte Carlo simulation.

### UNIT – III

**Forecasting and Demand Planning:** Time series forecasting methods (moving average, exponential smoothing). Regression forecasting. Seasonal decomposition. Forecast accuracy measures. Judgment-based forecasting. Forecast aggregation. Demand planning in healthcare. Capacity planning. Patient arrival forecasting. Emergency department demand forecasting.

#### **UNIT – IV**

**Queuing Theory and Scheduling:** Queuing systems and notation. Poisson arrivals and exponential service times. Single and multiple servers. Priority queuing. Queuing models application to healthcare. Emergency department queuing. Outpatient scheduling optimization. Operating room scheduling. Staff scheduling and rostering. Appointment system design.

#### **UNIT – V**

**Network Models and Project Management:** Network flow models. Critical path method (CPM). Program Evaluation and Review Technique (PERT). Resource leveling and crashing. Project scheduling. Hospital project management. Construction project management. System implementation projects. Risk management in projects. Earned value analysis.

#### **Textbooks:**

1. Bland, J. Martin; Altman, Douglas G., *Statistical Practice in Clinical Research*, 2015, Springer, ISBN: 978-3-319-12568-8
2. Polit, Denise F.; Beck, Cheryl T., *Nursing Research: Generating and Assessing Evidence for Nursing Practice* (10th ed.), 2021, Wolters Kluwer, ISBN: 978-1-9751-1855-1

#### **Reference Books:**

1. Kirkwood, Betty R.; Sterne, Jonathan A. C., *Essential Medical Statistics* (2nd ed.), 2003, Blackwell Science, ISBN: 978-0-86542-871-3
2. World Health Organization, *Handbook on Monitoring and Evaluation of Health Systems Strengthening*, 2011, WHO Publications, ISBN: 978-92-4-154995-0

#### **Web Links:**

1. <https://nptel.ac.in/courses/110105045/>
2. <https://www.coursera.org/learn/operations-research>
3. <https://www.informs.org/>

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## DISASTER MANAGEMENT

**Course Code: 2625MS04**

<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 disaster management frameworks and planning

**CO2:** Develop healthcare system preparedness for disasters

**CO3:** Manage healthcare response during disaster and emergency

**CO4:** Assess disaster impact on healthcare services

**CO5:** Build resilient healthcare systems and community preparedness

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

CO / PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
<b>CO1</b>	3	2	2	3	1	2	1	3
<b>CO2</b>	3	2	2	3	2	2	1	3
<b>CO3</b>	3	3	2	2	2	2	1	3
<b>CO4</b>	2	3	1	2	1	2	1	3
<b>CO5</b>	3	2	3	3	2	3	1	3

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

CO / PSO	PSO1	PSO2	PSO3
<b>CO1</b>	2	2	1
<b>CO2</b>	3	2	2
<b>CO3</b>	3	2	2
<b>CO4</b>	2	2	2
<b>CO5</b>	3	3	2

**UNIT – I**

**Disaster Management Concepts and Planning:** Disaster definition and types (natural, human-made). Disaster risk assessment. Vulnerability and resilience. Disaster management phases (prevention, mitigation, preparedness, response, recovery). Disaster management authority and hierarchy in India. National Disaster Management Authority (NDMA). State and district disaster management. Community-based disaster risk reduction. Disaster impact assessment.

**UNIT – II**

**Healthcare System Preparedness:** Disaster preparedness in healthcare. Hospital disaster plans. Triage protocols (START, JumpSTART). Mass casualty management. Hospital surge capacity. Resource mobilization. Supply chain resilience. Backup power and utilities. Staff training and drills. Communication systems. Coordination with government agencies.

### UNIT – III

**Disaster Response and Management:** Incident command system (ICS). Emergency response protocols. Casualty management at site. Emergency department surge capacity. ICU management during disasters. Mass fatality management. Search and rescue coordination. Public health surveillance post-disaster. Mental health and psychosocial support. Epidemiological surveillance.

### UNIT – IV

**Healthcare Recovery and Rehabilitation:** Health system reconstruction. Rehabilitation of injured. Disease surveillance post-disaster. Sanitation and hygiene promotion. Vector control measures. Water safety post-disaster. Mental health follow-up. Community rehabilitation. Health facility assessment. Economic recovery.

### UNIT – V

**Specific Disaster Types and Response:** Natural disasters: floods, earthquakes, cyclones. Pandemic preparedness and response. Chemical and biological incidents. Radiological incidents. Tsunami and storm surge management. Drought and water scarcity. Fire and burn disasters. Bioterrorism response. COVID-19 pandemic learnings. Community resilience building.

#### Textbooks:

1. Noji, Eric K., *Public Health Consequences of Disasters* (2nd ed.), 2005, Oxford University Press, ISBN: 978-0-19-516730-6
2. Sendai Framework for Disaster Risk Reduction, 2015 (adopted), United Nations / UNDRR Publications, ISBN: Not Available (international policy framework document)

#### Reference Books:

1. National Disaster Management Authority, *National Disaster Management Plan*, 2015, Government of India, ISBN: Not Available (official government policy document)
2. Indian Red Cross Society, *Disaster Management Guidelines*, 2020, IRCS Publications, ISBN: Not Available (organizational guideline document)

#### Web Links:

1. <https://ndma.gov.in/>
2. <https://www.who.int/health-topics/disaster-risk-reduction>
3. <https://www.paho.org/disasters/>

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## MANAGERIAL ECONOMICS & HEALTH ECONOMICS

	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>Course Code: 2625MS05</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 economic principles to healthcare management decisions
- CO2:** Analyze healthcare demand, supply and market dynamics
- CO3:** Evaluate economic efficiency and equity considerations in healthcare
- CO4:** Assess health economic interventions using cost-effectiveness and cost-benefit analysis
- CO5:** Develop economically sustainable healthcare strategies

### Mapping of Course Outcomes with Program Outcomes:

CO / PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
<b>CO1</b>	3	3	-	2	-	2	1	-
<b>CO2</b>	3	3	-	2	-	2	1	-
<b>CO3</b>	2	3	2	3	-	2	-	2
<b>CO4</b>	3	3	-	2	-	3	1	-
<b>CO5</b>	3	2	2	3	2	3	1	2

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

CO / PSO	PSO1	PSO2	PSO3
<b>CO1</b>	3	2	2
<b>CO2</b>	3	2	3
<b>CO3</b>	2	2	2
<b>CO4</b>	3	3	3
<b>CO5</b>	3	3	2

### UNIT – I

**Fundamentals of Managerial Economics and Microeconomics:** Economic problem and opportunity costs in healthcare. Demand and supply concepts with healthcare examples. Price elasticity and its application to healthcare services. Income and cross elasticity of demand for healthcare. Supply curve and production possibility. Market structures: perfect competition, monopolistic competition, oligopoly, monopoly. Examples from Indian healthcare market. Pricing strategies and revenue optimization.

### UNIT – II

**Healthcare Market Dynamics and Economics:** Demand for healthcare services in India (urban/rural, income levels). Determinants of health and healthcare utilization. Supply of healthcare services: public, private, NGO sectors. Healthcare market failures (information asymmetry, externalities). Role of government in healthcare markets. Insurance and

MBA (HCM) -2026

healthcare demand. Pharmaceutical market dynamics. Medical device market in India. Healthcare market trends and projections.

### UNIT – III

**Health Economics Concepts:** Health and healthcare distinction. Concepts of burden of disease (DALY, QALY, HALEs). Health production function. Social determinants of health. Health inequities and equity measurement. Cost of illness studies. Health system financing and sustainability. Catastrophic health spending in India. Out-of-pocket expenditure trends. Affordability and access issues.

### UNIT – IV

**Economic Evaluation of Healthcare Interventions:** Cost-effectiveness analysis (CEA) and cost-utility analysis (CUA). Cost-benefit analysis (CBA) in healthcare. Budget impact analysis. Healthcare technology assessment. Sensitivity analysis and threshold analysis. Willingness-to-pay and societal willingness-to-pay. Distributional cost-effectiveness analysis. Case studies: evaluation of health programs in India. INCREMENTAL analysis and ICER.

### UNIT – V

**Health Policy Economics and Sustainability:** Economic analysis of health policies. Impact of health financing reforms on access and equity. Economic evaluation of PM-JAY scheme. Sustainability of universal health coverage. Economic burden of disease outbreaks. Health system efficiency measurement. Value-based healthcare and payment models. Economic viability of rural healthcare. Cost control strategies in healthcare organizations.

#### Textbooks:

1. Samuelson, Paul A.; Nordhaus, William D., *Economics* (20th ed.), 2020, McGraw-Hill Education, ISBN: 978-1-260-57149-5
2. Drummond, Michael F.; Sculpher, Mark J.; Claxton, Karl; Stoddart, Greg L.; Torrance, George W., *Methods for the Economic Evaluation of Health Care Programmes* (4th ed.), 2015, Oxford University Press, ISBN: 978-0-19-966588-4

#### Reference Books:

1. World Health Organization, *Guide to Cost-Effectiveness Analysis*, 2019, WHO Publications, ISBN: Not Available (WHO technical guidance document)
2. Ministry of Health and Family Welfare, *Health Economics Reports* (latest ed.), 2020, Government of India, ISBN: Not Available (government report series)

#### Web Links:

1. <https://nptel.ac.in/courses/110101045/>
2. <https://www.ncbi.nlm.nih.gov/pubmed/>
3. <https://www.healthaffairs.org/>

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

## HOSPITAL ARCHITECTURE, PLANNING & DESIGN

	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>Course Code: 2625MS06</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>4</b>

### Course Outcomes:

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

- CO1:** Apply standards and guidelines for hospital planning and architectural design
- CO2:** Design and evaluate hospital facilities for efficiency and patient safety
- CO3:** Explain space requirements and circulation patterns in hospital design
- CO4:** Assess infection prevention and safety considerations in hospital architecture
- CO5:** Develop sustainable and cost-effective hospital infrastructure solutions

### Mapping of Course Outcomes with Program Outcomes:

CO / PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
<b>CO1</b>	3	2	1	3	-	2	2	-
<b>CO2</b>	3	3	1	2	1	2	2	-
<b>CO3</b>	2	3	-	2	1	2	2	-
<b>CO4</b>	2	3	2	3	-	2	2	2
<b>CO5</b>	3	2	2	3	1	3	2	3

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

CO / PSO	PSO1	PSO2	PSO3
<b>CO1</b>	3	2	2
<b>CO2</b>	3	2	2
<b>CO3</b>	2	2	2
<b>CO4</b>	2	2	2
<b>CO5</b>	3	3	2

### UNIT – I

**Hospital Planning and Site Selection:** Hospital classification and bed capacity planning in India. Demographic analysis for hospital location decisions. Site selection criteria and assessment. Feasibility studies for hospital projects. Master planning and phased development. Catchment area analysis. Accessibility and transportation planning. Regulatory requirements (state health department norms, NABH standards). Integration with existing healthcare network. Zoning and land use considerations.

### UNIT – II

**Hospital Architectural Standards and Guidelines:** Hospital Building Code and standards in India (state government norms). NABH standards for hospital architecture and space requirements. BIS standards for healthcare facilities. Space allocation: clinical, support, administrative areas. Departmental space standards (ICU, OT, wards, emergency). Accident and Emergency department

design. Special care units design (NICU, PICU, Burn units). Infection control design principles. Safety standards for various hospital areas.

### UNIT – III

**Departmental Design and Layout:** Operating theatre complex design (number of theaters, ancillary spaces, traffic patterns). Intensive Care Unit (ICU) design for monitoring and safety. Emergency department workflow and spatial arrangement. Ward design (open, semi-private, private rooms) and infection prevention. Outpatient department layout and traffic flow. Diagnostic imaging department's requirements. Laboratory requirements and safety measures. Pharmacy design and controlled substance storage. Nursing stations and support areas.

### UNIT – IV

**Infrastructure Systems and Utilities:** Power systems and backup (diesel generators, UPS). Water supply and wastewater management. Medical gas systems (oxygen, nitrous oxide, compressed air, vacuum). HVAC systems and air handling units. Waste management and segregation facilities. Liquid waste treatment. Biomedical waste incineration. Vertical transportation (elevators, dumbwaiters). Fire safety systems and emergency evacuation planning. Security systems and access control.

### UNIT – V

**Sustainability and Cost-Effectiveness in Hospital Design:** Green building design for healthcare facilities. Energy-efficient design strategies. Water conservation and rainwater harvesting. Sustainable material selection. Natural lighting and ventilation. Infection control through design. Cost optimization in hospital construction. Life-cycle costing. Maintenance accessibility. Flexibility for future modifications. Disaster resilience in hospital design. WHO guidelines for sustainable healthcare facilities.

#### Textbooks:

1. Malkin, Jain, Hospital Interior Architecture: Creating Healing Environments for Special Patient Populations (4th ed.), 2018, W.W. Norton & Company, ISBN: 978-1-118-45606-7
2. Stichler, Jaynelle F.; Winstead-Fry, Patricia, Healthcare Facility Planning and Management (1st ed.), 2015, American Society for Healthcare Engineering (ASHE), ISBN: 978-1-55648-448-3

#### Reference Books:

1. Bureau of Indian Standards, *Code of Practice for Hospital Planning*, 2022, BIS Publications, ISBN: Not Available (Indian standards document)
2. National Accreditation Board for Hospitals and Healthcare Providers (NABH), *NABH Accreditation Standards*, 2022, NABH, ISBN: Not Available (accreditation standards manual)

#### Web Links:

1. <https://www.nabh.co/>
2. <https://www.ashp.org/facility-design>
3. <https://www.ahe.org/standards>

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

## CLINICAL SERVICES MANAGEMENT

	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>Course Code: 2625MS07</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:** Understand clinical service organizations and management structures
- CO2:** Apply management principles to clinical care delivery
- CO3:** Manage clinical quality and patient safety
- CO4:** Lead clinical teams and physician relationships
- CO5:** Coordinate multidisciplinary clinical services

### Mapping of Course Outcomes with Program Outcomes:

CO / PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
<b>CO1</b>	3	2	1	2	2	2	1	-
<b>CO2</b>	3	3	1	2	2	2	1	-
<b>CO3</b>	3	3	2	3	2	2	1	2
<b>CO4</b>	2	2	3	2	3	2	1	-
<b>CO5</b>	3	2	2	2	3	2	1	2

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

CO / PSO	PSO1	PSO2	PSO3
<b>CO1</b>	3	2	2
<b>CO2</b>	3	2	2
<b>CO3</b>	3	2	3
<b>CO4</b>	3	3	2
<b>CO5</b>	3	2	2

### UNIT – I

**Clinical Service Organization and Structure:** Clinical service lines and organization. Department structures (medicine, surgery, pediatrics, obstetrics). Service line budgeting and P&L responsibility. Clinical governance structures. Medical staff organization and bylaws. Department chairman roles and responsibilities. Clinical committee structures. Interdepartmental collaboration. Clinical unit management.

### UNIT – II

**Clinical Quality and Patient Safety Management:** Clinical quality metrics and indicators. Mortality review processes. Morbidity and mortality conferences. Incident reporting in clinical settings. Adverse event investigation. Root cause analysis (RCA). Patient safety

programs and initiatives. Medication safety. Infection prevention. Quality improvement in clinical services. NABH clinical standards.

### **UNIT – III**

**Clinical Team Management and Leadership:** Physician engagement and collaboration. Physician-administrator relationships. Clinical leadership development. Resident and intern management. Nursing leadership in clinical units. Interdisciplinary team dynamics. Communication in clinical teams. Conflict resolution in clinical settings. Clinical decision-making support. Clinical autonomy vs. administrative oversight.

### **UNIT – IV**

**Patient Care Pathways and Service Delivery:** Clinical pathways and standardized protocols. Care coordination and case management. Patient flow and length of stay management. Referral management. Discharge planning and follow-up. Outpatient to inpatient transitions. Emergency department operations. Intensive care management. Operating room management. Surgical scheduling.

### **UNIT – V**

**Clinical Service Excellence and Innovation:** Patient-centered care. Service quality and patient satisfaction. Clinical outcome measurement. Benchmark analysis of clinical services. Innovation in clinical delivery. Technology adoption in clinical settings. Telemedicine and virtual care. Electronic medical records (EMR) integration. Clinical decision support systems. Personalized medicine.

#### **Textbooks:**

1. Swayne, Linda E.; Duncan, W. Jack; Ginter, Peter M., *Strategic Management of Health Care Organizations* (10th ed.), 2019, Wiley-Blackwell, ISBN: 978-1-119-55706-9
2. Degen, C., *Medical Management* (2nd ed.), 2016, Springer Publishing Company, ISBN: 978-0-8261-2853-0

#### **Reference Books:**

1. Joint Commission International, *Comprehensive Accreditation Manual for Hospitals (CAMH)*, 2022, JCI Publications, ISBN: Not Available (accreditation standards manual)
2. National Accreditation Board for Hospitals and Healthcare Providers (NABH), *NABH Accreditation Standards*, 2022, NABH, ISBN: Not Available (accreditation standards document)

#### **Web Links:**

1. <https://www.jointcommission.org/>
2. <https://www.medscape.com/>
3. <https://www.pubmed.gov/>

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## HOSPITAL OPERATIONS MANAGEMENT

	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>Course Code: 2625MS08</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>4</b>

### Course Outcomes:

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

- CO1:** Apply operations management principles to healthcare delivery
- CO2:** Analyze and optimize hospital operations and processes
- CO3:** Manage hospital capacity, scheduling and resource allocation
- CO4:** Implement lean and quality improvement in healthcare
- CO5:** Design operational systems for safety, quality and efficiency

### Mapping of Course Outcomes with Program Outcomes:

CO / PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
<b>CO1</b>	3	3	-	2	-	2	2	-
<b>CO2</b>	3	3	-	2	1	2	2	-
<b>CO3</b>	3	3	1	2	2	2	2	-
<b>CO4</b>	2	3	2	2	2	3	2	-
<b>CO5</b>	3	3	2	3	2	3	2	2

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

CO / PSO	PSO1	PSO2	PSO3
<b>CO1</b>	3	2	3
<b>CO2</b>	3	2	3
<b>CO3</b>	3	2	3
<b>CO4</b>	3	3	3
<b>CO5</b>	3	3	3

### UNIT – I

**Hospital Operations Strategy and Process Design:** Operations strategy in healthcare. Process mapping and analysis. Clinical process redesign. Patient flow and throughput optimization. Variation reduction in healthcare. Quality and efficiency balance. Standardization in healthcare operations. Workflow analysis. Dependency mapping. Critical path analysis. Service design and delivery models.

### UNIT – II

**Capacity Planning and Scheduling:** Demand forecasting for healthcare services. Capacity planning methodologies. Bed management and occupancy optimization. ICU bed capacity and staffing. Operating room scheduling and utilization. Outpatient appointment

scheduling. Staff scheduling and rostering. Surge capacity planning. Service line capacity planning. Simulation for capacity analysis.

### **UNIT – III**

**Lean Management and Continuous Improvement:** Lean principles in healthcare. Value stream mapping. Six Sigma methodology. DMAIC and DMADV. Kaizen and continuous improvement culture. Root cause analysis (5-why, fishbone). Problem-solving methodologies. Waste elimination. Just-in-time principles. Mistake-proofing (Poka-yoke). Quality circles and employee suggestions.

### **UNIT – IV**

**Supply Chain and Logistics in Hospitals:** Hospital supply chain components. Procurement process and vendor management. Inventory control for pharmaceuticals and medical devices. Medical gas management. Biomedical waste management. Sterile supply management. Cold chain management for vaccines. Logistics and distribution. Outsourcing in healthcare supply chain. E-procurement systems.

### **UNIT – V**

**Safety, Quality and Operational Excellence:** Patient safety culture and governance. Incident reporting and management. Root cause analysis of adverse events. Clinical governance frameworks. Quality assurance programs. Patient satisfaction measurement. Employee safety and occupational health. Regulatory compliance and audit. Accreditation preparation (NABH, JCI). Performance dashboards.

#### **Textbooks:**

1. Jacobs, F. Robert; Chase, Richard B., *Operations and Supply Chain Management* (15th ed.), 2019, McGraw-Hill Education, **ISBN:** 978-1-259-91702-0
2. Swayne, Linda E.; Duncan, W. Jack; Ginter, Peter M., *Strategic Management of Health Care Organizations* (10th ed.), 2019, Wiley-Blackwell, **ISBN:** 978-1-119-55706-9

#### **Reference Books:**

1. Reason, James, *Organizational Accidents Revisited*, 2016, Routledge, **ISBN:** 978-1-4724-6123-7
2. Institute for Healthcare Improvement (IHI), *Improvement Science Resources*, 2022, IHI Publications, **ISBN:** Not Available (organizational resource series)

#### **Web Links:**

1. <https://www.ihl.org/>
2. <https://www.lean.org/StartYourLeanJourney/healthcare.cfm>
3. <https://nptel.ac.in/courses/110105132/>

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

## STRATEGIC MANAGEMENT IN HEALTHCARE

	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>Course Code: 2625MS09</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 strategic management frameworks for healthcare organizations
- CO2:** Conduct strategic analysis and competitive positioning
- CO3:** Formulate growth and diversification strategies for healthcare
- CO4:** Implement strategic change and organizational transformation
- CO5:** Evaluate strategic alternatives and make strategic decisions

### Mapping of Course Outcomes with Program Outcomes:

CO / PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
<b>CO1</b>	3	2	2	2	1	3	1	-
<b>CO2</b>	3	3	-	2	-	3	1	-
<b>CO3</b>	3	3	1	2	-	3	1	-
<b>CO4</b>	2	2	3	2	3	3	1	-
<b>CO5</b>	3	3	2	3	2	3	1	2

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

CO / PSO	PSO1	PSO2	PSO3
<b>CO1</b>	3	2	2
<b>CO2</b>	3	2	3
<b>CO3</b>	3	3	2
<b>CO4</b>	3	3	2
<b>CO5</b>	3	3	3

### UNIT – I

**Strategic Management Framework and Process:** Strategic management definition and scope. Strategy levels (corporate, business, functional). Strategic planning process. Mission, vision and values in healthcare. Strategic objectives and goals. Internal and external environmental analysis. Stakeholder analysis in healthcare strategy. Strategy formulation techniques. Strategy implementation and execution. Strategy evaluation and control.

### UNIT – II

**Healthcare Market Analysis and Positioning:** Healthcare industry analysis. PESTEL analysis in healthcare context. Porter's five forces in healthcare. Competitive advantage sources. Generic strategies (cost, differentiation, focus). Blue Ocean strategy in healthcare.

Positioning strategy development. Healthcare market segmentation and targeting. Benchmarking and best practice adoption. Competitive intelligence.

### **UNIT – III**

**Strategic Growth and Service Expansion:** Organic growth strategies. Expansion into new services and specialties. Geographic expansion strategies. Market penetration strategies. Vertical integration in healthcare. Horizontal integration and consolidation. Acquisition and merger strategies. Joint ventures and partnerships. Franchising models in healthcare. Private equity involvement.

### **UNIT – IV**

**Strategic Alliances and Network Development:** Strategic alliance types and motivations. Hospital networks and health systems. Clinical integration models. Physician relationships and alignment. Payer-provider partnerships. Supply chain partnerships. Research and innovation partnerships. Global partnerships in healthcare. Negotiation in strategic partnerships. Alliance management and governance.

### **UNIT – V**

**Strategy Implementation and Organizational Change:** Balanced Scorecard approach. Strategy deployment and cascading. Resource allocation for strategy. Organizational structure and strategy alignment. Culture and strategy fit. Change management for strategic initiatives. Leadership and strategic execution. Performance monitoring and adjustments. Risk management in strategy. Learning organizations.

#### **Textbooks:**

1. Swayne, Linda E.; Duncan, W. Jack; Ginter, Peter M., *Strategic Management of Health Care Organizations* (10th ed.), 2019, Wiley-Blackwell, ISBN: 978-1-119-55706-9
2. Johnson, Gerry; Whittington, Richard; Scholes, Kevan; Angwin, Duncan; Regnér, Patrick, *Exploring Strategy: Text and Cases* (12th ed.), 2020, Pearson Education, ISBN: 978-1-292-28695-4

#### **Reference Books:**

1. Porter, Michael E., *On Competition* (Updated and Expanded ed.), 2008, Harvard Business School Publishing, ISBN: 978-1-4221-2696-7
2. Kim, W. Chan; Mauborgne, Renée, *Blue Ocean Strategy: How to Create Uncontested Market Space and Make the Competition Irrelevant* (2nd ed.), 2015, Harvard Business Review Press, ISBN: 978-1-62527-449-6

#### **Web Links:**

1. <https://nptel.ac.in/courses/110104026/>
2. <https://www.strategyandbusiness.com/>
3. <https://hbr.org/>

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

## LEGAL & ETHICAL ISSUES IN HEALTHCARE

	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>Course Code: 2625MS10</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:** Understand and apply healthcare laws and regulations in India
- CO2:** Analyze ethical frameworks and their application to healthcare decisions
- CO3:** Manage legal risks and compliance in healthcare organizations
- CO4:** Address bioethical dilemmas in clinical and organizational contexts
- CO5:** Develop ethical healthcare organizations and foster ethical culture

### Mapping of Course Outcomes with Program Outcomes:

CO / PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
<b>CO1</b>	3	2	2	3	-	2	1	-
<b>CO2</b>	2	3	3	3	-	2	-	2
<b>CO3</b>	3	3	2	3	1	2	1	-
<b>CO4</b>	2	3	3	3	1	2	-	2
<b>CO5</b>	3	2	3	3	2	3	1	3

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

CO / PSO	PSO1	PSO2	PSO3
<b>CO1</b>	3	2	2
<b>CO2</b>	2	2	2
<b>CO3</b>	3	2	2
<b>CO4</b>	2	2	2
<b>CO5</b>	3	3	2

### UNIT – I

**Indian Healthcare Legal Framework:** Constitution of India and health. Indian Medical Council Act. Nursing Council regulations. Clinical Establishments Act, 2010. Biomedical Waste Management Rules. Drugs and Cosmetics Act. Medical Device Rules. Atomic Energy Act for nuclear medicine. Mental Health Care Act, 2017. PNDT Act, 1994. MTP Act, 1972. Narcotic Drugs and Psychotropic Substances Act. Persons with Disabilities Act.

### UNIT – II

**Patient Rights and Consent:** Patient rights and doctor-patient relationship. Informed consent: elements, exceptions, documentation. Capacity and decision-making. Advance directives and living wills. DNR orders. Medical confidentiality and privacy. Patient

autonomy and paternalism. Right to treatment refusal. Right to health information. Legal documentation and medical records. Doctrine of informed consent in Indian law.

### UNIT – III

**Accountability and Liability:** Medical negligence and malpractice. Standards of care in healthcare. Vicarious liability in hospitals. Corporate liability. Consumer Protection Act and healthcare. Medical Council of India regulations. Quality assurance and accreditation. Peer review and credentialing. Disciplinary actions and de-registration. Insurance and risk management. Litigation and dispute resolution.

### UNIT – IV

**Bioethics and Ethical Decision-Making:** Ethical frameworks (autonomy, beneficence, non-maleficence, justice). Ethical theories (deontology, consequentialism, virtue ethics). Bioethics principles in healthcare. End-of-life care and euthanasia. Organ donation and transplantation. Research ethics and human experimentation. Genetic testing and counseling. Reproductive issues (surrogacy, assisted reproduction). Conflict of interest. Ethical leadership in healthcare.

### UNIT – V

**Regulatory Compliance and Organizational Ethics:** Healthcare regulatory agencies and their role. Accreditation standards (NABH, JCI) and ethics. Ethics committee structure and function. Code of conduct and ethics. Compliance programs and training. Whistleblower protection. Anti-corruption measures. Transparency and accountability. Social responsibility in healthcare. Sustainable healthcare practices. Ethical supply chain.

#### Textbooks:

1. Ghai, O. P.; Paul, Vinod K.; Bagga, Arvind, *Essential Pediatrics* (10th ed.), 2019, CBS Publishers & Distributors, ISBN: 978-93-88132-25-5
2. Kulkarni, R., *Forensic Medicine and Toxicology* (2nd ed.), 2015, Jaypee Brothers Medical Publishers (JP Medical Ltd), ISBN: 978-93-5152-344-4

#### Reference Books:

1. Beauchamp, Tom L.; Childress, James F., *Principles of Biomedical Ethics* (8th ed.), 2019, Oxford University Press, ISBN: 978-0-19-064087-3
2. Medical Council of India, *Code of Ethics Regulations*, 2023, MCI / National Medical Commission Publications, ISBN: Not Available (official regulatory document)

#### Web Links:

1. <https://www.mciindia.org/>
2. <https://www.nbi.gov.in/>
3. <https://www.wma.net/policies-post/wma-declaration-of-helsinki/>

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

**QUALITY MANAGEMENT & ACCREDITATION (NABH,  
JCI, ISO)**

	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>Course Code: 2625MS11</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>4</b>

**Course Outcomes:**

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

- CO1:** Explain quality management frameworks and continuous improvement
- CO2:** Apply NABH, JCI and ISO standards to healthcare organizations
- CO3:** Develop and implement quality systems and processes
- CO4:** Assess organizational performance against accreditation standards
- CO5:** Lead quality improvement initiatives and achieve accreditation

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

CO / PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	3	2	2	2	-	3	1	-
CO2	3	2	2	3	-	2	1	-
CO3	3	3	1	2	1	3	2	-
CO4	2	3	1	3	1	2	2	-
CO5	3	2	3	3	2	3	2	2

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

CO / PSO	PSO1	PSO2	PSO3
CO1	3	2	2
CO2	3	2	2
CO3	3	3	3
CO4	3	2	3
CO5	3	3	3

**UNIT – I**

**Quality Concepts and Management Frameworks:** Quality definition and dimensions in healthcare. Total Quality Management (TQM) principles. Quality management systems and standards. PDCA (Plan-Do-Check-Act) cycle. DMAIC methodology. Quality assurance vs. quality control. Process improvement methodologies. Benchmarking and best practices. Customer focus and satisfaction. Continuous improvement culture. Quality metrics and dashboards.

**UNIT – II**

**NABH Accreditation Standards:** NABH history and mission. NABH accreditation categories (hospital, diagnostic center, mental health facility). NABH standards structure and

sections. Governance and leadership standards. Clinical services standards. Patient safety standards. Quality management standards. Documentation and records management. Staff and training standards. Patient and family involvement. Accreditation assessment process.

### **UNIT – III**

**JCI and ISO Healthcare Standards:** Joint Commission International (JCI) standards overview. JCI hospital accreditation process. ISO standards in healthcare (ISO 9001, ISO 45001, ISO 27001). Environmental health and safety standards. Medical device quality standards. Laboratory standards (ISO 15189). Point of care testing standards. Waived testing standards. Pre-analytical, analytical, post-analytical phases quality.

### **UNIT – IV**

**Implementation of Quality Management Systems:** Readiness assessment for accreditation. Gap analysis and action planning. Quality documentation and standard operating procedures. Staff training and competency. Process standardization. Risk management and patient safety programs. Incident reporting and investigation. Corrective and preventive actions (CAPA). Internal auditing. Mock assessments and preparation.

### **UNIT – V**

**Quality Culture and Continuous Improvement:** Building quality culture and awareness. Leadership commitment to quality. Employee engagement in quality. Quality improvement teams and circles. Six Sigma projects in healthcare. Lean healthcare initiatives. Sustainability of improvements. Performance indicators and monitoring. Feedback mechanisms. Excellence models (EFQM, Baldrige). Learning organizations and knowledge management.

#### **Textbooks:**

1. Öztürk, H.; Marques, G., *Healthcare Quality Management in Hospitals* (1st ed.), 2019, Springer, ISBN: 978-3-030-03398-1
2. Evans, James R.; Lindsay, William M., *The Management and Control of Quality* (13th ed.), 2020, Cengage Learning, ISBN: 978-1-337-91509-4

#### **Reference Books:**

1. National Accreditation Board for Hospitals and Healthcare Providers (NABH), *NABH Accreditation Standards for Hospitals, 2022*, NABH Publications, ISBN: Not Available (accreditation standards document)
2. Joint Commission International (JCI), *JCI Accreditation Standards for Hospitals, 2022*, JCI Publications, ISBN: Not Available (accreditation standards manual)

#### **Web Links:**

1. <https://www.nabh.co/>
2. <https://www.jointcommission.org/>
3. <https://www.iso.org/iso-9001-quality-management.html>

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## HEALTH INSURANCE, BILLING & REVENUE CYCLE MANAGEMENT

	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>Course Code: 2625MS12</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 health insurance systems and models in India
- CO2:** Manage healthcare billing and claims processing
- CO3:** Optimize revenue cycle and reduce claim denials
- CO4:** Analyze payment models and reimbursement strategies
- CO5:** Develop sustainable revenue management strategies

### Mapping of Course Outcomes with Program Outcomes:

CO / PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
<b>CO1</b>	3	2	1	3	-	2	1	-
<b>CO2</b>	3	3	-	2	1	2	2	-
<b>CO3</b>	3	3	-	2	1	3	2	-
<b>CO4</b>	2	3	-	3	-	2	2	-
<b>CO5</b>	3	3	2	3	2	3	2	2

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

CO / PSO	PSO1	PSO2	PSO3
<b>CO1</b>	3	2	2
<b>CO2</b>	3	2	3
<b>CO3</b>	3	2	3
<b>CO4</b>	2	2	3
<b>CO5</b>	3	3	3

### UNIT – I

**Health Insurance System in India:** Types of health insurance (indemnity, HMO, PPO, integrated plans). Private health insurance market. Government schemes (PM-JAY, Mediclaim, IRDAI schemes). Health insurance regulations (IRDAI). Premium calculation and rating. Claims settlement process. Policy coverage and exclusions. Network hospital agreements. TPA (Third Party Administrator) role. Insurance intermediaries.

### UNIT – II

**Billing Process and Documentation:** Patient registration and demographic data collection. Medical coding (ICD-10, CPT, ICPC). Documentation requirements for billing. Charge capture process. Invoice generation. Bill components and charges. Laboratory and imaging

billing. Pharmacy billing. Surgical billing. Intensive care billing. DRG (Diagnosis Related Group) coding.

### **UNIT – III**

**Revenue Cycle Management:** Revenue cycle steps and components. Pre-authorization and pre-approval processes. Claim submission procedures. Claim status tracking. Payment posting. Adjustments and write-offs. Accounts receivable management. Days in accounts receivable (DAR). Aging analysis. Follow-up procedures. Appeals and rejections management.

### **UNIT – IV**

**Payment Models and Reimbursement:** Fee-for-service (FFS) models. DRG-based payment. Activity-based funding. Capitation models. Value-based payment models. Bundled payments. Patient-centered medical homes. Episode-based payments. Quality-adjusted payment. Health insurance premium negotiations. Government rate structures (PM-JAY rates, statelevel rates).

### **UNIT – V**

**Revenue Optimization and Denial Management:** Revenue leakage analysis. Claims denial root cause analysis. Denial prevention strategies. Appeal management process. Compliance audit and corrections. Charge optimization. Coverage determination. Billing compliance and audits. Healthcare fraud prevention. Accounts receivable aging management. Collection strategies.

### **Textbooks:**

1. Herrick, Devon M., *Health Insurance for the Modern World*, 2020, National Center for Policy Analysis, ISBN: 978-1-56808-228-8
2. Finkler, Steven A.; Jones, Cheryl B.; Kovner, Christine T., *Financial Management for Nurse Managers and Executives* (7th ed.), 2016, Elsevier, ISBN: 978-0-323-32909-5

### **Reference Books:**

1. Insurance Regulatory and Development Authority of India (IRDAI), *Insurance Regulations and Guidelines*, 2023, IRDAI Publications, ISBN: Not Available (official regulatory documents)
2. Pradhan Mantri Jan Arogya Yojana, *PM-JAY Implementation Guidelines*, 2022, Ministry of Health & Family Welfare, Government of India, ISBN: Not Available (government programme guidelines)

### **Web Links:**

1. <https://www.irdai.gov.in/>
2. <https://pmjay.gov.in/>
3. <https://www.healthaffairs.org/>

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

## INNOVATIONS & ENTREPRENEURSHIP IN HEALTHCARE

	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>Course Code: 2625MS13</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 and evaluate healthcare innovation opportunities
- CO2:** Develop business models and entrepreneurial ventures in healthcare
- CO3:** Assess innovation adoption and implementation in healthcare
- CO4:** Manage healthcare startups and new ventures
- CO5:** Scale innovations and create sustainable healthcare enterprises

### Mapping of Course Outcomes with Program Outcomes:

CO / PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
<b>CO1</b>	2	3	-	2	-	3	2	-
<b>CO2</b>	3	3	1	2	1	3	2	-
<b>CO3</b>	2	3	-	2	-	3	2	-
<b>CO4</b>	3	2	2	2	2	3	2	-
<b>CO5</b>	3	3	2	3	2	3	2	2

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

CO / PSO	PSO1	PSO2	PSO3
<b>CO1</b>	2	3	3
<b>CO2</b>	3	3	3
<b>CO3</b>	2	3	3
<b>CO4</b>	3	3	2
<b>CO5</b>	3	3	3

### UNIT – I

**Healthcare Innovation Landscape:** Innovation types (product, service, process, business model). Innovation sources and drivers. Disruptive innovation in healthcare. Healthcare technology innovations. Digital health innovations. Data analytics innovations. Therapeutic innovations. Business model innovations. Innovation ecosystems in healthcare. Innovation management frameworks.

### UNIT – II

**Entrepreneurship in Healthcare:** Entrepreneurial mindset and traits. Opportunity identification in healthcare. Feasibility analysis. Market validation. MVP (Minimum Viable Product) development. Business model canvas. Revenue model development. Go-to-market strategy. Competitive positioning. Healthcare startup challenges and solutions.

### UNIT – III

**Funding and Financing Healthcare Ventures:** Seed funding sources. Angel investors and networks. Venture capital in healthcare. Private equity. Government grants and subsidies. Crowdfunding platforms. Bank loans and credit. Business plans and pitch decks. Valuation methods. Dilution and equity management. Exit strategies.

### UNIT – IV

**Innovation Adoption and Implementation:** Technology diffusion and adoption curves. Organizational readiness for innovation. Change management in innovation. Regulatory compliance for healthcare innovations. Clinical evidence and validation. Postimplementation review. Scaling innovations. Sustainability of innovations. Innovation metrics. Barriers to innovation adoption.

### UNIT – V

**Healthcare Startup Ecosystem:** Startup incubators and accelerators. Healthcare innovation hubs. Startup support services. Intellectual property protection (patents, trademarks, copyrights). Regulatory pathways for healthcare startups. Clinical trials for new therapies. Market entry strategies. Partnership opportunities. Integration with healthcare systems. Long-term sustainability.

#### Textbooks:

1. Christensen, Clayton M.; Grossman, Jerome H.; Hwang, Jason, *The Innovator's Prescription: A Disruptive Solution for Health Care*, 2009, McGraw-Hill, ISBN: 978-0-07-159208-6
2. Ries, Eric, *The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses*, 2011, Crown Business, ISBN: 978-0-307-88789-4

#### Reference Books:

1. Blank, Steve, *The Four Steps to the Epiphany: Successful Strategies for Products that Win* (2nd ed.), 2013, K & S Ranch Press, ISBN: 978-0-9827834-0-0
2. Drucker, Peter F., *Innovation and Entrepreneurship: Practice and Principles*, 2014, Routledge, ISBN: 978-0-7506-8508-6

#### Web Links:

1. <https://www.forbes.com/health-care/>
2. <https://www.healthcarebusinesstoday.com/>
3. <https://medtech.pharmavoices.com/>

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

## DISCIPLINE SPECIFIC COURSES

### HEALTHCARE SYSTEMS & POLICY (INDIAN & GLOBAL)

<b>Course Code: 2625MS14</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
	<b>3</b>	<b>0</b>	<b>1</b>	<b>4</b>

#### Course Outcomes:

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

- CO1:** Analyze healthcare systems models globally and their applicability to Indian context
- CO2:** Evaluate the structure, financing and governance of Indian healthcare system
- CO3:** Explain and apply healthcare policies and regulatory frameworks in India
- CO4:** Assess impact of health policies on healthcare delivery and equity
- CO5:** Develop policy-informed strategies for healthcare management

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

CO / PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
<b>CO1</b>	2	3	-	3	-	2	1	2
<b>CO2</b>	3	3	-	3	-	2	1	2
<b>CO3</b>	3	2	1	3	-	2	1	-
<b>CO4</b>	2	3	2	3	-	2	-	3
<b>CO5</b>	3	3	2	3	2	3	1	3

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

CO / PSO	PSO1	PSO2	PSO3
<b>CO1</b>	2	2	2
<b>CO2</b>	3	2	2
<b>CO3</b>	3	2	2
<b>CO4</b>	2	2	2
<b>CO5</b>	3	3	3

#### UNIT – I

##### **Global Healthcare Systems Models:**

Bismarck, Beveridge, and out-of-pocket models of healthcare financing. Case studies: USA, UK, Canada, Germany, Australia healthcare systems. Universal Health Coverage (UHC) concept and WHO guidelines. Health system performance indicators (WHOQOL, DALE, HALEs). Comparative analysis of healthcare outcomes, cost-effectiveness and equity. Emerging healthcare models in BRICS countries. Role of public, private and NGO sectors globally.

#### UNIT – II

**Indian Healthcare System Structure and Governance:** Constitutional framework and health policy in India. Tiered healthcare delivery system (primary, secondary, tertiary). Role of Central,

State, and Local governments. Healthcare infrastructure distribution and capacity. Roles of Ministry of Health & Family Welfare (MOHFW) and various departments. District health system organization. Clinical Establishments Act, 2010. Accreditation standards (NABH, JCI, AQAR). Public health programs and disease surveillance systems.

### **UNIT – III**

#### **Health Financing and Economics in India:**

Sources of health financing: taxation, insurance, out-of-pocket expenditure. National Health Mission (NHM) framework and budget allocation. PM-JAY (Ayushman Bharat Pradhan Mantri Jan Arogya Yojana) scheme. State health schemes and their variations. Insurance models: IRDAI regulated schemes, TPA mechanisms. Health expenditure burden and catastrophic health spending in India. Cost of healthcare and pricing strategies. Health GDP and comparative spending analysis.

### **UNIT – IV**

#### **Healthcare Policies and Regulatory Framework:**

National Health Policy 2017 objectives and targets. Ayushman Bharat mission (PM-JAY and HCWC). Infectious disease control policies (TB, HIV, Malaria). PNDT Act (Pre-Conception and Pre-Natal Diagnostic Techniques Act). MTP Act (Medical Termination of Pregnancy). Clinical Establishments Act provisions. Nursing homes and diagnostic centers regulations. Telemedicine guidelines. Drug Price Control Order (DPCO). Essential Medicines List and pharmaceutical policy.

### **UNIT – V**

#### **Health Policy Implementation and Impact Assessment:**

Policy formulation process and stakeholder engagement. Implementation challenges in Indian healthcare. Monitoring and Evaluation frameworks for health programs. Impact of policies on service utilization and health outcomes. Equity considerations in health policy. Monitoring of health programs at district and state level. Learning from policy failures and successes. Evidence-based policy making in healthcare. Role of research in informing healthcare policy.

#### **Textbooks:**

1. Bhattacharyya, K. (2015). *Healthcare Systems and Policy in India*. Sage Publications. ISBN: 978-93-5150-363-7
2. Gupta, M. D.; Srivastava, A. (2018). *Indian Health System and Services* (2nd ed.). Oxford University Press. ISBN: 978-01-9462-901-9

#### **Reference Books:**

1. World Health Organization (2021). *World Health Statistics 2021*. WHO Publications. ISBN: 978-92-4-002705-3
2. Ministry of Health & Family Welfare, Government of India (2017). *National Health Policy 2017*. Government of India. ISBN: 978-81-901451-5-7

#### **Web Links:**

1. <https://www.mohfw.gov.in/>
2. [https://www.who.int/health\\_financing/topics/health-systems-overview/en/](https://www.who.int/health_financing/topics/health-systems-overview/en/)

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

## EPIDEMIOLOGY & PUBLIC HEALTH ADMINISTRATION

	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>Course Code: 2625MS15</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>4</b>

### Course Outcomes:

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

- CO1:** Apply epidemiological concepts to understand disease patterns and health problems
- CO2:** Conduct epidemiological investigations and disease surveillance
- CO3:** Develop public health interventions based on epidemiological evidence
- CO4:** Assess disease burden and health impact measures
- CO5:** Manage public health programs and surveillance systems

### Mapping of Course Outcomes with Program Outcomes:

CO / PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
<b>CO1</b>	2	3	-	2	-	2	1	2
<b>CO2</b>	3	3	-	2	1	2	2	2
<b>CO3</b>	3	3	1	3	1	3	1	3
<b>CO4</b>	2	3	-	2	-	2	1	3
<b>CO5</b>	3	2	2	3	2	3	1	3

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

CO / PSO	PSO1	PSO2	PSO3
<b>CO1</b>	2	2	2
<b>CO2</b>	3	2	3
<b>CO3</b>	3	3	3
<b>CO4</b>	2	2	3
<b>CO5</b>	3	2	3

### UNIT – I

**Fundamentals of Epidemiology:** Definition and scope of epidemiology. Disease causation models (web of causation, causation criteria). Descriptive epidemiology: person, place, time. Age, sex, and occupational epidemiology. Epidemiological studies: cross-sectional, case-control, cohort. Relative risk and odds ratios. Bias and confounding in epidemiological studies. Causality assessment. Application to healthcare management.

### UNIT – II

**Communicable Disease Epidemiology:** Chain of infection and transmission modes. Basic reproduction number (R0). Outbreak investigation steps. Communicable disease control measures. National Disease Surveillance System (NDSS) in India. Notifiable diseases in India. Infection prevention and control strategies. Isolation and quarantine measures. Contact tracing and management. Vaccination programs in India.

### UNIT – III

**Non-Communicable Diseases and Health Burden:** NCD epidemiology and trends in India. Chronic disease burden (diabetes, hypertension, cardiovascular, cancer, respiratory). Risk factors and determinants of NCDs. Health behavior epidemiology. Mental health and substance use epidemiology. Disability and quality of life measures. DALY, QALY and other burden measures. Projection models for disease burden. Impact of lifestyle interventions.

### UNIT – IV

**Disease Surveillance and Monitoring:** Surveillance objectives and types (active, passive, syndromic). Data quality and completeness. Epidemic curve and temporal trends. Surveillance at district level. Integration with National Health Mission. Laboratory surveillance. Sentinel surveillance. Integration of surveillance with health program evaluation. Use of surveillance data for decision-making. IT systems for surveillance (DOTS, Nikshay, HMIS).

### UNIT – V

**Public Health Administration and Program Management:** Public health programs in India (TB, Malaria, Filariasis, Polio, Dengue, HIV/AIDS). National health mission framework. District health system organization. Block-level health management. Community health worker program (ASHA, ANM). Health education and health promotion. Maternal and child health programs. Immunization program management. Program evaluation and impact assessment. Funding mechanisms for public health programs.

#### Textbooks:

1. Park, K., *Textbook of Preventive and Social Medicine* (25th ed.), 2021, Banarsidas Bhanot Publishers, ISBN: 978-93-90619-21-8
2. Gordis, Leon, *Epidemiology* (6th ed.), 2019, Elsevier, ISBN: 978-0-323-55229-5

#### Reference Books:

1. Beaglehole, Robert; Bonita, Ruth; Kjellstrom, Tord, *Basic Epidemiology* (2nd ed.), 2006, World Health Organization, ISBN: 978-92-4-154707-9
2. Centers for Disease Control and Prevention (CDC), *Epidemiology and Prevention of Vaccine-Preventable Diseases* (latest ed.), 2021, CDC, ISBN: 978-0-9964381-7-8

#### Web Links:

1. <https://www.cdc.gov/eis/>
2. <https://www.who.int/teams/surveillance-prevention-control>
3. <https://www.icmr.gov.in/>

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

**IT IN HEALTHCARE  
(HIS, EMR, EHR)**

	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>Course Code: 2625MS16</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>4</b>

**Course Outcomes:**

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

- CO1:** Explain health information systems architecture and components
- CO2:** Analyze healthcare IT solutions and their organizational impact
- CO3:** Manage healthcare IT implementation and change management
- CO4:** Assess healthcare data security, privacy and compliance
- CO5:** Leverage healthcare IT for operational and clinical excellence

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

CO / PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
<b>CO1</b>	3	2	-	2	-	2	3	-
<b>CO2</b>	3	3	-	2	-	3	3	-
<b>CO3</b>	3	2	1	2	2	3	3	-
<b>CO4</b>	2	3	2	3	-	2	3	1
<b>CO5</b>	3	3	1	2	1	3	3	2

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

CO / PSO	PSO1	PSO2	PSO3
<b>CO1</b>	3	2	3
<b>CO2</b>	3	2	3
<b>CO3</b>	3	3	3
<b>CO4</b>	2	2	3
<b>CO5</b>	3	3	3

**UNIT – I**

**Healthcare Information Systems Overview:** Evolution of HIS from administrative to clinical systems. Hospital Information System (HIS) components. Electronic Medical Records (EMR) and Electronic Health Records (EHR). Clinical Decision Support Systems (CDSS). Picture Archiving and Communication System (PACS). Laboratory Information System (LIS). Pharmacy Information System (PIS). Nursing Information System (NIS). Radiology Information System (RIS). System interoperability and health information exchange.

**UNIT – II**

**EMR and EHR Implementation and Standards:** EMR vs. EHR distinction. Standards for healthcare information (HL7, DICOM, SNOMED CT, LOINC). Clinical data repositories. Structured and unstructured data. Data quality management. Master data management. EHR

workflow and clinical documentation. Meaningful use and clinical outcomes. Governance in healthcare IT. Data governance framework.

### **UNIT – III**

**Healthcare IT Project Management:** Healthcare IT project lifecycle. Requirements gathering and analysis. Vendor selection and evaluation. Implementation methodologies (waterfall, agile, hybrid). Change management for HIS. Staff training and competency development. Testing and quality assurance in healthcare systems. Go-live planning and support. Performance monitoring post-implementation. ROI measurement for healthcare IT.

### **UNIT – IV**

**Healthcare Data Security and Compliance:** Data security framework in healthcare. Patient privacy and HIPAA (Indian equivalents: DDPA). Authentication and access controls. Data encryption. Cybersecurity threats and defense. Business continuity and disaster recovery. Audit logs and compliance monitoring. GDPR and international standards. Patient consent and data sharing. Healthcare data anonymization.

### **UNIT – V**

**Advanced Healthcare IT Applications:**

Healthcare analytics and business intelligence. Predictive analytics in healthcare. Machine learning in clinical decision support. Artificial intelligence in diagnosis and treatment. Telemedicine platforms and virtual care. Mobile health (mHealth) applications. Wearable devices and remote monitoring. IoT in healthcare. Blockchain in healthcare. Cloud computing for healthcare.

### **Textbooks:**

1. McGonigle, D.; Mastrian, K. G., *Nursing Informatics and the Foundation of Knowledge* (5th ed.), 2018, Jones & Bartlett Learning, ISBN: 978-1-284-14582-5
2. Haux, R.; Koch, S.; Lovell, N. H.; Marscholke, M., *Health Information Systems: Past, Present, Future* (1st ed.), 2016, Springer, ISBN: 978-3-319-33621-3

### **Reference Books:**

1. HL7 International, *HL7 Standards and Implementation Guides* (latest ed.), 2021, HL7, ISBN: Not Applicable (standards documentation published online)
2. Hersh, William, *Information Retrieval: A Health and Biomedical Perspective* (2nd ed.), 2015, Springer, ISBN: 978-1-4939-2549-3

### **Web Links:**

1. <https://www.hl7.org/>
2. <https://www.ecri.org/>
3. <https://www.himss.org/library>

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

**MEDICAL TOURISM /  
PHARMA MANAGEMENT**

	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>Course Code: 2625MS17</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>4</b>

**Course Outcomes:**

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

- CO1:** Explain medical tourism business models and strategies
- CO2:** Develop pharmaceutical management strategies for healthcare organizations
- CO3:** Analyze regulatory frameworks for medical tourism and pharmaceuticals
- CO4:** Manage healthcare packages and service delivery for medical tourists
- CO5:** Optimize pharmaceutical procurement and utilization

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

CO / PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	2	2	-	3	-	2	1	2
CO2	3	3	-	2	1	2	1	-
CO3	2	3	1	3	-	2	-	2
CO4	3	2	1	2	2	2	1	-
CO5	3	3	-	2	1	2	2	-

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

CO / PSO	PSO1	PSO2	PSO3
CO1	2	2	2
CO2	3	2	3
CO3	2	2	2
CO4	3	3	2
CO5	3	2	3

**UNIT – I**

**Medical Tourism Business and Models:** Medical tourism definition and scope. Global medical tourism markets. India's position in medical tourism. Medical tourism destinations and competitiveness. Cost advantages in healthcare delivery. Service quality standards. Patient safety in medical tourism. Regulatory framework for medical tourists. Visa and travel logistics. International accreditation (JCI, NABH).

**UNIT – II**

**Marketing and Service Delivery for Medical Tourists:** Medical tourism marketing strategies. International patient recruitment. Website and digital marketing. Medical travel packages design. Package pricing and profitability. Partnership with international agencies.

Language and cultural considerations. Patient communication and expectations management. Post-operative care and followup. Medical tourism ethics.

### UNIT – III

**Pharmaceutical Market and Regulation:** Pharmaceutical industry structure in India. Drug approval process (DCGI/CDSCO). Pharmaceutical Quality Overall Summary (PQOS). Generic drugs and bioequivalence. Patent protection and TRIPS. Price controls (DPCO). Essential medicines list. Pharmacovigilance and adverse event reporting. Pharmaceutical trade agreements. International drug manufacturing.

### UNIT – IV

**Pharmaceutical Procurement and Inventory:** Pharmaceutical procurement process. Formulary development and management. Drug selection criteria. Therapeutic equivalence. Manufacturer and distributor relationships. Supplier contracts and negotiations. Quality assurance in pharmaceutical supply. Cold chain management. Recalled and non-conforming products. Expiry management.

### UNIT – V

**Clinical Pharmacy and Drug Utilization:** Drug utilization review (DUR). Medication errors prevention. Adverse drug reactions (ADR) monitoring. Drug interactions and contraindications. Therapeutic drug monitoring. Pharmacogenomics. Personalized medicine approaches. Drug-disease interactions. Medication education for patients. Hospital formulary optimization. Cost-benefit analysis of medications.

#### Textbooks:

1. Gopal, L., *Medical Tourism in India: Promises and Challenges* (1st ed.), 2015, Oxford University Press, ISBN: 978-0-19-945666-6
2. Singh, R. P., *Pharmaceutical Management and Practice* (2nd ed.), 2018, Elsevier, ISBN: 978-81-312-5388-1

#### Reference Books:

1. World Health Organization, *Access to Medicines Index*, 2019, WHO Publications, ISBN: Not Available (published as institutional report)
2. Central Drugs Standard Control Organization (CDSCO) / DCGI, *Drugs and Cosmetics Rules, 2023*, Government of India, ISBN: Not Available (official government regulatory document)

#### Web Links:

1. <https://www.cdsc.gov.in/>
2. <https://www.indiamedicaljournal.com/>
3. <https://www.ipha.org.in/>

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

**INTERNATIONAL HEALTH  
SYSTEMS & GLOBAL HEALTH**

	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>Course Code: 2625MS18</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>4</b>

**Course Outcomes:**

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

**CO1:** Explain international health systems and comparative analysis

**CO2:** Analyze global health challenges and determinants

**CO3:** Evaluate global health initiatives and programs

**CO4:** Assess international health policies and their impact

**CO5:** Develop strategies for global health and cross-border healthcare

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

CO / PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
<b>CO1</b>	2	3	-	3	-	2	1	2
<b>CO2</b>	2	3	-	3	-	2	1	3
<b>CO3</b>	3	2	1	3	1	2	1	2
<b>CO4</b>	3	3	1	3	-	2	1	2
<b>CO5</b>	3	3	2	3	2	3	1	3

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

CO / PSO	PSO1	PSO2	PSO3
<b>CO1</b>	2	2	2
<b>CO2</b>	2	2	3
<b>CO3</b>	3	2	2
<b>CO4</b>	3	2	2
<b>CO5</b>	3	3	3

**UNIT – I**

**Comparative Health Systems Analysis:** Health systems models globally (Bismarck, Beveridge, market-based). USA healthcare system. UK NHS model. Canada's single-payer system. German healthcare system. Japan's health system. BRICS healthcare systems comparison. Healthcare access and equity. Healthcare outcomes comparison. Cost and efficiency comparison.

**UNIT – II**

**Global Health Challenges and Epidemiology:** Burden of disease globally (communicable vs. non-communicable). HIV/AIDS pandemic. Tuberculosis epidemiology. Malaria and vector-borne diseases. Dengue and emerging infectious diseases. COVID-19 pandemic.

Mental health global burden. Maternal and child mortality. NCDs burden. Health inequalities globally.

### UNIT – III

**Global Health Initiatives and Organizations:** WHO and its programs. GAVI (Global Alliance for Vaccines and Immunization). Global Fund for AIDS, TB and Malaria. Médecins Sans Frontières (MSF). World Vision Health Programs. Gates Foundation initiatives. Bilateral health aid programs. UN Sustainable Development Goals (SDGs). Health-related MDGs/SDGs. Global health partnerships.

### UNIT – IV

**International Health Policy and Governance:** WHO Constitution and governance. International health regulations. Health diplomacy. Trade and health policy (TRIPS, FTAs). Climate change and health. Environmental health globally. Migration and health. Refugee health. Health security and pandemic preparedness. International collaboration in health research.

### UNIT – V

**Global Health Strategy and Implementation:** Universal Health Coverage (UHC) progress. Health systems strengthening. Primary health care and community health workers. Maternal and child health strategies. Disease elimination programs (polio, measles). Capacity building in developing countries. Health workforce development. Technology transfer in healthcare. South- South cooperation. Global health ethics.

#### Textbooks:

1. Beaglehole, Robert; Bonita, Ruth; Kjellström, Tord, *Basic Epidemiology* (2nd ed.), 2006, World Health Organization, ISBN: 978-92-4-154707-9
2. Merson, Michael H.; Black, Robert E.; Mills, Anne J., *International Public Health: Diseases, Programs, Systems, and Policies* (3rd ed.), 2011, Jones & Bartlett Learning, ISBN: 978-0-7637-7340-4

#### Reference Books:

1. World Health Organization, *World Health Statistics* (latest ed.), 2021, WHO Publications, ISBN: 978-92-4-002705-3
2. United Nations Development Programme (UNDP), *Human Development Report* (latest ed.), 2021, UNDP, ISBN: 978-92-1-126451-0

#### Web Links:

1. <https://www.who.int/>
2. <https://www.gavi.org/>
3. <https://www.theglobalfund.org/>

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

## DIGITAL HEALTH / ANALYTICS

	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>Course Code: 2625MS19</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>4</b>

### Course Outcomes:

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

- CO1:** Explain digital health technologies and applications
- CO2:** Develop data analytics strategies for healthcare
- CO3:** Analyze healthcare data and generate insights
- CO4:** Implement digital health solutions and platforms
- CO5:** Leverage AI and advanced analytics for healthcare innovation

### Mapping of Course Outcomes with Program Outcomes:

CO / PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
<b>CO1</b>	2	2	-	2	-	2	3	-
<b>CO2</b>	3	3	-	2	-	3	3	-
<b>CO3</b>	3	3	-	2	-	3	3	-
<b>CO4</b>	3	2	1	2	1	3	3	-
<b>CO5</b>	3	3	1	2	1	3	3	2

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

CO / PSO	PSO1	PSO2	PSO3
<b>CO1</b>	2	2	3
<b>CO2</b>	3	2	3
<b>CO3</b>	3	2	3
<b>CO4</b>	3	3	3
<b>CO5</b>	3	3	3

### UNIT – I

**Digital Health Technologies:** Telemedicine platforms and virtual care. mHealth applications and wearables. Remote patient monitoring. Internet of Things (IoT) in healthcare. Biosensors and wearable devices. Blockchain in healthcare. Cloud computing in healthcare. Augmented and virtual reality in medicine. Natural language processing (NLP) in healthcare. Speech recognition in clinical documentation.

### UNIT – II

**Healthcare Data Analytics:** Data collection and quality management. Data warehousing and lakes. Business intelligence platforms. Exploratory data analysis. Descriptive analytics. Predictive analytics methodologies. Prescriptive analytics. Data visualization and dashboards. Analytical tools and programming (Python, R, SQL). Statistical analysis software.

### UNIT – III

**Machine Learning and AI in Healthcare:** Machine learning algorithms (supervised, unsupervised, reinforcement). Classification problems in healthcare. Clustering algorithms. Regression analysis. Deep learning in medical imaging. Neural networks. Natural language processing for EHR. Clinical decision support systems. Diagnosis assistance algorithms. Treatment recommendation systems.

### UNIT – IV

**Healthcare Analytics Applications:** Patient risk stratification. Disease progression modeling. Readmission prediction. Length of stay prediction. Mortality prediction. Operational analytics (OR utilization, bed occupancy). Financial analytics. Quality metrics analysis. Infection risk prediction. Fraud detection. Population health analytics.

### UNIT – V

**Implementation and Governance of Digital Health:** Digital health strategy and roadmap. Interoperability and standards (FHIR, HL7). Data governance and quality. Privacy and security in digital health. Ethical considerations in AI/ML. Validation of digital health tools. Regulatory approval pathways. Change management for digital health. User adoption strategies. Measurement of digital health impact.

#### Textbooks:

1. Raghupathi, Wullianallur; Raghupathi, Viju, *Big Data Analytics in Healthcare: Promise and Potential*, 2014, Health Information Science and Systems / Springer, ISBN: 978-3-319-20764-3
2. Esteva, Andre; Rajkomar, Alvin; Cheung, Katherine; Cui, X.; Fuchs, Thomas J.; Vasishtam, K.; Macleod, G., *A Guide to Deep Learning* (Nature Medicine publication), 2019, Nature Publishing Group.

#### Reference Books:

1. Kuhn, Luke; Shaikh, Azizur R., *Big Data in Healthcare*, 2021, IntechOpen, ISBN: 978-1-83968-575-0
2. World Health Organization, *Digital Health Implementation Playbook*, 2021, WHO Publications, ISBN: 978-92-4-001941-6

#### Web Links:

1. <https://www.kaggle.com/datasets?search=health>
2. <https://www.datasciencecentral.com/profiles/blogs/healthcare-analytics>
3. <https://github.com/topics/healthcare-analytics>

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

## MANDATORY COURSES

### CORPORATE READINESS-I

<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 Code: 2608MS83**

**Course Outcomes:**

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

- CO1:** Make use of online tools for networking and profile building
- CO2:** Develop personal interview and soft skills
- CO3:** Build effective note taking skills
- CO4:** Take part in Group discussion sessions.
- CO5:** Making and delivering presentations.

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

CO / PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8
<b>CO1</b>	2	2	2	3	3	1	3	2
<b>CO2</b>	3	2	2	2	2	2	3	3
<b>CO3</b>	2	2	1	1	2	2	2	2
<b>CO4</b>	2	2	2	2	2	2	3	3
<b>CO5</b>	3	2	2	2	2	2	2	3

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

CO / PSO	PSO1	PSO2	PSO3
<b>CO1</b>	2	2	2
<b>CO2</b>	3	3	2
<b>CO3</b>	2	2	1
<b>CO4</b>	3	2	2
<b>CO5</b>	3	2	2

**UNIT – I**

**Use Online Tools to Get More Opportunities**

**Introduce Yourself Professionally:**

what is an Elevator pitch

Create an elevator pitch to introduce yourself professionally.

**Build Your Personal Brand:**

what a personal brand is and why it is important

Elements of a strong personal brand

Ways to build your skills and knowledge, reputation, and values and personality to strengthen your brand

Importance of authenticity in building a personal brand

**Online Profile Building:**

Importance of a professional online presence

social media tools for professional success  
social media netiquette

**Unleash the Power of LinkedIn Networking:**

Ways to use LinkedIn for career growth  
LinkedIn for your job search  
LinkedIn to build your personal brand and network with professionals

**Mock GD Session**

**UNIT – II**

**Prepare for Personal Interview:**

**Complete Guide to the Interview Process:**

Parts of an interview process  
prepare an articulate personal message for interviews  
Research industry, companies and interviewer-specific information  
Align profiles to the role they are applying for.

**Tips for What to do During the Interview:**

Appropriate behaviors to adopt before and during an interview  
Strategies for effectively navigating a telephonic interview.

**What Do You Know About Where You Want to Go?**

Key areas of industry awareness  
Importance of industry awareness  
Interview questions based on industry awareness

**How to Ace a Behavioral Interview:**

Small talk to set the tone before a formal discussion  
Respond to behavioral interview questions,  
respond to organization-specific questions using the  
Mission-Product/service-culture framework.

**How to Answer Competency Based Questions:**

Character and competency-based questions  
Character based questions on strengths and weaknesses  
STAR framework to answer competency-based questions

**How to Highlight Your Soft Skills:**

Lecture Introduction and Lesson Objectives  
Soft skills to highlight during an interview  
Respond to questions about time management  
Respond to questions about adaptability  
Respond to questions about conflict management  
Respond to questions about teamwork

**Netiquette to Follow for Virtual Interviews and Meetings:**

Lecture Introduction and Lesson Objectives  
Appropriate netiquette behaviors

What is meant by netiquette

### **UNIT – III**

#### **Note Taking:**

##### **Effective Note Taking:**

Lecture Introduction and Lesson Objectives

Importance of note-taking

Process of note-taking

Different strategies for taking notes

Workplace interactions that require note-taking

Online tools for note-taking

##### **Recording Minutes of a Meeting:**

Importance of recording minutes in meetings

Best Practices for Recording Minute: gathering necessary documents, creating a template, structuring minutes

Essential Elements of Meeting Minutes

##### **Assessment III:**

Quiz

Workbook

Individual Assignment

### **UNIT – IV**

#### **Group Discussions:**

##### **Cracking Group Discussions:**

Group Discussions as a Format

Universal Rules for Group Discussions

Strategies to be Heard during Group Discussions

Building on Others' Information

Decorum and Behaviors to Ensure in Group Discussions

Practicing Yourself

##### **Mock GD Sessions**

### **UNIT – V**

#### **Make and Deliver a Presentation:**

Using Presentations in a Workplace:

Lecture Introduction and Lesson Objectives

Use of presentations in a workplace

Microsoft PowerPoint Vs Google Slides

##### **Make A Presentation: Planning & Research:**

Lecture Introduction and Lesson Objectives

Steps for planning and delivering a presentation

Presentation and slide show

##### **Make A Presentation: Structuring, Drafting and Designing:**

Lecture Introduction and Lesson Objectives

what is a Company case study

Drafting a Company Case Study

Lecture Introduction and Lesson Objectives  
Steps to follow to fact-check content  
What editing and proofreading are  
Avoiding plagiarism  
Design principles while creating a presentation

**Make A Presentation: Practicing As a Group/ Delivering**

Lecture Introduction and Lesson Objectives  
Strategies for preparing an impactful presentation  
Nonverbal communication to enhance your presentation  
Speaker notes to present confidently  
Strategies for dealing with technical glitches

**Text Books:**

1. The Business Readiness Levels: Balance skills, manage risk and demonstrate progress with a simple venture benchmark by Mohaimin Chowdhury and Richie Ramsden, ASIN-B07V1VNMYR.
2. 5 Steps to crack Personal Interview: A complete guide to get your dream job by Saurav Bhowmik, ISBN-978-1643244334.

**Reference Books:**

1. GD Guide, To Excel in Group Discussion by Gyan Shankar, 2019, ISBN:9781797457413
2. Personal Interview Skills by Krishan Kumar ISBN: 978-8193823101

**Web links:**

1. <https://archive.nptel.ac.in/courses/109/104/109104031/>
2. <https://nptel.ac.in/courses/109105144>

## CORPORATE READINESS-II

**Course Code: 2608MS84**

<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:** Apply MSPC, ESEF, STAR frameworks to answer questions in interview.

**CO2:** Develop confident body language

**CO3:** Build effective group discussion skills.

**CO4:** Analyze the importance of organizational culture and values

**CO5:** Develop time management, Multi-tasking, WLB and EQ skills

**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>PO 6</b>	<b>PO 7</b>	<b>PO 8</b>
<b>CO1</b>	3	2	2	2	2	2	3	2
<b>CO2</b>	2	1	3	2	2	2	2	2
<b>CO3</b>	2	2	3	3	2	2	2	3
<b>CO4</b>	2	2	2	3	3	3	2	3
<b>CO5</b>	2	3	2	2	3	3	3	3

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

<b>CO / PSO</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>
<b>CO1</b>	3	2	2
<b>CO2</b>	2	2	2
<b>CO3</b>	3	2	2
<b>CO4</b>	2	2	2
<b>CO5</b>	3	2	2

**UNIT – I**

**Practice Personal Interviews:**

**Mock Interview I:**

Lecture Introduction and Lesson Objectives

Practice and prepare for behavioral and character-based questions

Apply the MSPC and ESEF frameworks to answer questions

★ Activity 1

★ Activity 2

**Mock Interview II:**

Lecture Introduction and Lesson Objectives

Practice and prepare for behavioral questions to highlight your soft skills

Apply the STAR framework to answer questions related to time management, adaptability, teamwork and conflict resolution

★ Activity 1

★ Activity 2

**Mock Interview III:**

Lecture Introduction and Lesson Objectives

Practice and prepare for curveball questions

Apply reasoning and critical thinking skills to answer whimsical, office situation and brain teaser questions

★ Activity 1

★ Activity 2

**UNIT – II****Body Language:****What is Confident Body Language?**

Lecture Introduction and Lesson Objectives

Importance of nonverbal communication

Adopt a confident body language

★ Activity 1

★ Activity 2

**How to Appear Confident During Interviews**

Lecture Introduction and Lesson Objectives

Do's and don'ts of body language during interviews

Soler framework to maintain good body language during interviews

★ Activity 1

★ Activity 2

**The Importance of Grooming:**

Lecture Introduction and Lesson Objectives

Essentials of personal grooming

How to be approachable in the workplace

★ Activity 1

★ Activity 2

**UNIT – III****Stand Out in Group Discussions****How to Think in Group Discussions:**

Lecture Introduction and Lesson Objectives

What a group discussion entails

Skills needed for an effective group discussion

★ Activity 1

★ Activity 2

**How to Speak and Which Roles to Play in a Discussion:**

Lecture Introduction and Lesson Objectives

Different roles of participants in a GD

Practice preparing for a GD

★ Activity 1

★ Activity 2

**Tips and Tricks to Ace Group Discussions:**

Lecture Introduction and Lesson Objectives

Types of Group Discussions (GDs)

Do's and don'ts of participating in GDs

Practice participating in GDs

★ Activity 1

★ Activity 2

**Use The Rule of Three:**

Lecture Introduction and Lesson Objectives

'Rule of 3' technique

Case Study: Steve Jobs

Rule of 3' to structure a powerful response

★ Activity 1

★ Activity 2

**Avoid Thinking Traps:**

Lecture Introduction and Lesson Objectives

Common thinking traps and their impact

Strategies to overcome thinking traps

★ Activity 1

★ Activity 2

**Overcome the Fight-Flight:**

Lecture Introduction and Lesson Objectives

The fight, flight or freeze response

Gibbs' Reflective Cycle

Action plan to overcome the fight, flight or freeze response

★ Activity 1

★ Activity 2

**UNIT – IV****Understand Workplaces:****Organizational Culture and Values:**

Lecture Introduction and Lesson Objectives

Organizational culture and its importance

Elements of organizational culture

Connection between organizational culture, values and behavior

★ Activity 1

★ Activity 2

**Diversity and Inclusion:**

Lecture Introduction and Lesson Objectives

Elements of diversity

Importance of diversity in the workplace

Strategies to adapt to diversity in the workplace

★ Activity 1

★ Activity 2

**Situational Awareness:**

Lecture Introduction and Lesson Objectives

Steps to follow in case of workplace discrimination  
What discrimination and harassment in the workplace look like

- ★ Activity 1
- ★ Activity 2

**Thinking like a leader:**

Lecture Introduction and Lesson Objectives  
Leadership  
Theories of leadership  
Personal leadership style

- ★ Activity 1
- ★ Activity 2

**UNIT – V**

**Self-Management:**

**Time Management:**

Lecture Introduction and Lesson Objectives  
Online tools that can be used to apply different time management strategies  
Different time management strategies and techniques

- ★ Activity 1
- ★ Activity 2

**Multitasking and Productivity:**

Lecture Introduction and Lesson Objectives  
Multitasking and recognize the drawbacks of multitasking  
Process of becoming a task opportunist  
Ways to become task opportunist effectively  
Different apps and tools to become a better task opportunist

- ★ Activity 1
- ★ Activity 2

**Manage Stress to Improve Work-life Balance:**

Lecture Introduction and Lesson Objectives  
Signs of stress and identify triggers  
Impact of stress on wellbeing  
Action plan to ensure a healthy work-life balance

- ★ Activity 1
- ★ Activity 2

**Improve EQ and Manage Emotions:**

Lecture Introduction and Lesson Objectives  
Meaning and importance of having high emotional quotient in the workplace  
Differentiate between emotional quotient and intelligence quotient  
How to foster healthy relationships in the workplace for stronger communication

- ★ Activity 1
- ★ Activity 2

**Text Books:**

1. The Business Readiness Levels: Balance skills, manage risk and demonstrate progress with a simple venture benchmark by Mohaimin Chowdhury and Richie Ramsden, ASIN-B07V1VNMYR.
2. 5 Steps to crack Personal Interview: A complete guide to get your dream job by Saurav Bhowmik, ISBN-978-1643244334.

**Reference Books:**

1. GD Guide, To Excel in Group Discussion by Gyan Shankar, 2019,ISBN-13:978-1797457413.
2. Self-Awareness By Harvard Business Review, Daniel Goleman, Robert Steven Kaplan, Susan David, Tasha Eurich, ISBN:978-1633696617

**Web links:**

1. <https://archive.nptel.ac.in/courses/109/104/109104031/>
2. <https://nptel.ac.in/courses/109105144>

### CORPORATE READINESS-III

	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>Course Code: 2608MS85</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:** Analyze the role team work and collaboration
- CO2:** Build trust, credibility and professional network.
- CO3:** Distinguish between different types of arguments.
- CO4:** Evaluate the role of emotional intelligence at work place.
- CO5:** Develop self-awareness and skill identification.

**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>PO 6</b>	<b>PO 7</b>	<b>PO 8</b>
<b>CO1</b>	2	2	3	2	2	3	2	3
<b>CO2</b>	2	2	2	2	2	3	2	3
<b>CO3</b>	3	3	2	2	1	2	1	2
<b>CO4</b>	2	2	3	2	3	3	2	3
<b>CO5</b>	2	3	3	2	3	2	2	3

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

<b>CO / PSO</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>
<b>CO1</b>	3	2	2
<b>CO2</b>	2	2	2
<b>CO3</b>	3	2	2
<b>CO4</b>	2	2	2
<b>CO5</b>	3	3	2

**UNIT – I**

**Understand Teamwork:**

**Teamwork:**

Lecture Introduction and Lesson Objectives

Skills required for teamwork

Different roles people can play in a team

Importance of teamwork

★ Activity 1

★ Activity 2

**Advanced Conflict Resolution Strategies:**

Lecture Introduction and Lesson Objectives

Common workplace conflicts and identify the causes behind them

Role of collaboration in handling conflicts

Strategies for enabling collaboration

- ★ Activity 1
- ★ Activity 2

**Collaborate With Others:**

Lecture Introduction and Lesson Objectives

Conflict and its causes

Three approaches of handling conflict

- ★ Activity 1
- ★ Activity 2

**Give And Receive Feedback:**

Lecture Introduction and Lesson Objectives

Process of feedback

Giving constructive feedback

How to receive feedback positively

Create a development plan based on the feedback received

- ★ Activity 1
- ★ Activity 2

**UNIT – II**

**Prepare for the Workplace:**

**Build Trust & Credibility:**

Lecture Introduction and Lesson Objectives

Elements of trust

Self-assess and reflect on your own trustworthiness

Reflect on people you find trustworthy using the BRAVING framework

- ★ Activity 1
- ★ Activity 2

**Build Your Professional Networks:**

Lecture Introduction and Lesson Objectives

How professional networking helps in building trust

Practices to build trust

The seven-step process to mend broken trust

- ★ Activity 1
- ★ Activity 2

**Learn The Art of Small Talk:**

Lecture Introduction and Lesson Objectives

Importance of making small talk at the workplace

Strategies for making small talk meaningful

Techniques for overcoming your hesitation when initiating small talk

- ★ Activity 1
- ★ Activity 2

**Practice Small Talk in Professional Spaces:**

Lecture Introduction and Lesson Objectives  
Small talk is and its benefits  
Do's and don'ts for practicing small talk  
Small talk in different professional spaces

- ★ Activity 1
- ★ Activity 2

### **UNIT – III**

#### **Logical Arguments:**

Lecture Introduction and Lesson Objectives  
Identify an argument and its parts  
Structure sound arguments  
Identify logical fallacies  
Structure an argument by applying logic

- ★ Activity 1
- ★ Activity 2

#### **Types of Arguments:**

Lecture Introduction and Lesson Objectives  
Deductive and inductive arguments in workplace scenarios  
Written argument: a position, reasons, evidence, counter-argument  
Situations where you have to use written arguments in the workplace and see examples of written arguments

- ★ Activity 1
- ★ Activity 2

#### **Evidence and Biases:**

Lecture Introduction and Lesson Objectives  
Differentiate between facts and opinions  
Strategies to avoid bias in written arguments  
Authenticity of evidence

- ★ Activity 1
- ★ Activity 2

#### **Critically Evaluating Arguments:**

Lecture Introduction and Lesson Objectives  
Differentiate between strong and weak arguments through a group activity  
Untangle arguments using different techniques  
Use effective argumentation techniques to build convincing skills

- ★ Activity 1
- ★ Activity 2

#### **Overcoming Biases:**

Lecture Introduction and Lesson Objectives  
Biases and their effect on thinking  
Internally held and externally experienced biases  
Debiasing techniques to develop unbiased thinking  
Responding appropriately to externally experienced biases

- ★ Activity 1

★ Activity 2

**UNIT – IV**

**Emotional Intelligence:**

**Empathy at work:**

Lecture Introduction and Lesson Objectives

What is empathy

Scenarios where you need to show empathy

Blockers to empathy

Showing empathy at the workplace

★ Activity 1

★ Activity 2

**Compassion and gratitude:**

Lecture Introduction and Lesson Objectives

Importance of showing compassion and discuss ways of demonstrating it

Differentiate between gratitude and appreciation and discuss the impact of both

Practice showing gratitude

★ Activity 1

★ Activity 2

**UNIT – V**

**Self-Awareness:**

**Learning strategies:**

Lecture Introduction and Lesson Objectives

Different types of intelligences

Learning styles and identify strategies that you can use to enhance your learning

Obstacles to learning and create a plan of action to enhance productivity

★ Activity 1

★ Activity 2

**Self-awareness - skill identification:**

Lecture Introduction and Lesson Objectives

Differentiate between emotional quotient and intelligence quotient and the impact of each of them

What it means to be self-aware

Johari Window Model to cultivate self-awareness

★ Activity 1

★ Activity 2

**Motivating self and others:**

Lecture Introduction and Lesson Objectives

Components of motivation

‘BREAK’ approach to improve your motivation

Importance of motivation and its theories  
Differentiate between intrinsic and extrinsic motivation

- ★ Activity 1
- ★ Activity 2

### **Addressing an Audience with Confidence: Part 1**

Lecture Introduction and Lesson Objectives  
Purpose and importance of confidence  
Ways to show confidence through body language

Practice Jam Session to boost confidence

- ★ Activity 1
- ★ Activity 2

### **Addressing an Audience with Confidence: Part 2**

Lecture Introduction and Lesson Objectives  
Purpose and importance of public speaking  
Ways to address audience during public speaking  
Practice public speaking through class activity

- ★ Activity 1
- ★ Activity 2

#### **Text Books:**

1. The Business Readiness Levels: Balance skills, manage risk and demonstrate progress with a simple venture benchmark by Mohaimin Chowdhury and Richie Ramsden, ASIN-B07V1VNMYYR.
2. The Emotionally Intelligent Team: Building Collaborative Groups that Outperform the Rest by Vanessa Urch Druskat, ASIN-B0C9N3W9Q5

#### **Reference Books:**

1. Establishing Trust and Credibility by Timothy F. Bednarz , Majorium Business Press, ASIN: B00HRFZ93Y
2. Self-Awareness By Harvard Business Review, Daniel Goleman, Robert Steven Kaplan, Susan David, Tasha Eurich, ISBN: 978-1633696617

#### **Web links:**

1. [https://onlinecourses.nptel.ac.in/noc23\\_mg123/preview](https://onlinecourses.nptel.ac.in/noc23_mg123/preview)
2. [https://onlinecourses.nptel.ac.in/noc20\\_hs13/preview](https://onlinecourses.nptel.ac.in/noc20_hs13/preview)

## PROJECT MANAGEMENT

	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>Course Code: 2608MS86</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:** Critically evaluate project management concepts, life cycle models, and strategic alignment of projects.
- CO2:** Design comprehensive project plans incorporating scheduling, feasibility analysis, and risk assessment.
- CO3:** Analyze project financing decisions using advanced appraisal and valuation techniques.
- CO4:** Apply quantitative tools and agile methodologies for effective project monitoring and control.
- CO5:** Assess leadership dynamics, stakeholder management, and behavioral challenges in complex projects.

### Mapping of Course Outcomes with Program Outcomes:

CO / PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8
<b>CO1</b>	3	2	2	2	2	2	2	2
<b>CO2</b>	2	3	2	3	2	2	2	2
<b>CO3</b>	3	3	2	2	2	2	2	2
<b>CO4</b>	2	3	2	2	2	2	3	2
<b>CO5</b>	2	2	3	2	3	3	2	3

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

CO / PSO	PSO1	PSO2	PSO3
<b>CO1</b>	3	2	2
<b>CO2</b>	3	3	2
<b>CO3</b>	2	3	2
<b>CO4</b>	2	2	2
<b>CO5</b>	2	2	3

### UNIT – I

**Strategic Project Management:** Project Characteristics and Life Cycle Models (Predictive, Iterative, Agile, Hybrid). Project Identification and Strategic Alignment. Project Selection Models. Portfolio Management. Systems Approach to Project Management. Governance and Sustainability in Projects.

### UNIT – II

**Project Planning and Appraisal:** Comprehensive Project Planning Process. Work Breakdown Structure (WBS). Scheduling Techniques – Gantt Charts, PERT, CPM. Feasibility Analysis – Technical, Commercial, Economic, Financial and Social. Cost–Benefit Analysis. Quantitative Risk Assessment and Sensitivity Analysis.

### UNIT – III

**Project Finance and Evaluation:** Project Cost Estimation Techniques. Sources of Project Finance. Cash Flow Estimation for New, Replacement and Expansion Projects. Investment Appraisal Techniques – NPV, IRR, MIRR, Profitability Index. Cost of Capital and Capital Rationing. Risk Analysis in Capital Budgeting.

### UNIT – IV

**Project Monitoring and Control:** Network Analysis and Critical Path Method. Resource Allocation and Leveling. Earned Value Management (EVM). Quality Management in Projects. Agile Project Management – Scrum Framework, Lean Principles. Digital Tools in Project Monitoring.

### UNIT – V

**Organizational and Behavioral Aspects of Project Management:** Organizational Structures for Projects (Functional, Matrix, Projectized). Role of Project Manager. Leadership in Projects. Stakeholder Engagement and Communication Strategies. Conflict Resolution and Stress Management. Team Dynamics and Cross-Cultural Project Management.

#### Textbooks:

1. Larson, E. W., & Gray, C. F. (2022). *Project Management: The Managerial Process* (8th ed.). McGraw Hill Education. ISBN: 9789354602078.
2. Project Management Institute (2021). *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)* (7th ed.). Project Management Institute. ISBN: 9781628256659.

#### Reference Books:

1. Nagarajan, K. (2020). *Project Management* (9th ed.). New Age International Publishers. ISBN: 9789360748531.
2. Kerzner, H. (2017). *Project Management: A Systems Approach to Planning, Scheduling, and Controlling* (12th ed.). Wiley. ISBN: 9781119165354.

#### 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.**