



**MANAV RACHNA
UNIVERSITY** 
Declared as State Private University vide Haryana Act 26 of 2014

PROGRAM BOOKLET

BBA

(BATCH: 2022-2025)

**SCHOOL OF
MANAGEMENT AND
COMMERCE
MANAV RACHNA
UNIVERSITY**

MANAV RACHNA UNIVERSITY

Vision

To educate students in frontier areas of knowledge enabling them to take up challenges as ethical and responsible global citizens

Mission

- To impart outcome based holistic education
- To disseminate education in frontier areas
- To produce globally competitive, ethical and socially responsible human resources
- To produce human resources sensitive to issues of Environment and Sustainable Development
- To develop Environment and Sustainable development as a thrust area of research and development.

Quality Policy

To continuously learn from the best practices, study role models and develop transparent procedures for empowerment of stakeholders.

Strategic Objectives

- To facilitate, enhance & promote innovation in curriculum design and delivery and have Outcome-oriented Learning Culture.
- To promote Research Environment and Management Practices.
- To enhance the quality of the student learning experience.
- To provide Resources and Infrastructure for Academic Excellence.

DEPARTMENT OF MANAGEMENT & COMMERCE

Vision

The Department of Management and Commerce aims at becoming a centre of learning in the area of management and inter-disciplinary areas such as law, technology, and education in order to create industry ready human resources.

Mission

To foster creation and development of industry ready workforce with the assistance of dedicated teaching faculty in sync with global standards. This will help future ready human resources to achieve excellence at work.

BBA PROGRAM

Programme Outcomes (POs)

PO1: Domain Knowledge of Business Environment- students shall apply knowledge of management theories, principles, practices & skills in emerging business environment.

PO2: Integrity, Ethic & professional Conduct: Students shall demonstrate ethical behavior and professional integrity in their conduct to strive for truth, fairness, humility and honesty in professional life.

PO3: Critical Thinking & Problem-Solving Ability: Students shall apply critical thinking skills to design problem solving strategies across management areas and implement innovative solutions.

PO4: Analytical & Decision-making ability: students shall access business environment using techniques of data analytics and other decision support tools to analyze and evaluate possible alternatives to complex business situations.

PO5: Research Aptitude & Inquiry: Students shall exhibit research acumen and research aptitude to provide innovative solutions in the different areas of management for the benefit of industry, academia and society at large.

PO6 -Multicultural Competence & Global Outlook: Students shall demonstrate competence in cross cultural environment, work in diverse groups in areas like health care ,supply chain, operations, finance etc and emerge as responsible global citizens.

PO7: Leadership readiness & Behavioral Skills: students shall demonstrate leadership skills and work effectively with diverse teams through collaborative learning to deal with VUCA world.

PO8: Effective business communication & Social networking - Students shall be able to engage effectively, develop interpersonal relationship through their ability to listen, read, write ,interact, influence & negotiate in complex business situations.

PO9: Social Networking Skills & emotional intelligence: Students shall be able to acquire social and emotional skills to work effectively with diverse groups in multicultural environment.

PO10: Creativity, Empathy & community Engagement: Students shall demonstrate ability to identify with other or understand others perspectives, innovate or perform tasks in a better manner for the well-being of the society

PO11: Environment & Sustainability: students shall analyze the implications of managerial decisions in the context of environmental, social and corporate governance(ESG) in creating sustainable businesses

PO12: Information /Digital literacy: Students shall demonstrate ability to access, evaluate and use ICT in a variety of work situations and access relevant information sources for analysis of data.

Programme Specific Outcomes (PSOs)

PSO 1: Employability & Entrepreneurship: Students shall define their career aspirations and work towards achieving the same by engaging in developing appropriate skills, mindset and competencies in their chosen profession/ fields of learning (corporate career, startup, family business, higher education etc)

PSO2: Specialized knowledge & skills: Students will be able to demonstrate the acquisition of comprehensive & procedural knowledge for carrying out professional work/tasks in the specialized field and generate solutions in challenging environment.

| SEMESTER – 1 | | | | | | | | | |
|-----------------------------|--|---------------------|--|---|---|---|---|-------------------------------|----------------|
| SUBJECT CODES | SUBJECT NAME | OFFERING DEPARTMENT | *COURSE NATURE (Hard/Soft/Workshop/NTCC) | COURSE TYPE (Core/Elective/University Compulsory) | L | T | P | NO. OF CONTACT HOURS PER WEEK | NO. OF CREDITS |
| ECW104B | COMPUTER INFORMATION SYSTEM | Ece | HARD | CORE | 0 | 0 | 3 | 3 | 2 |
| MCH106B | BUSINESS STATISTICS | DMC | HARD | CORE | 3 | 0 | 0 | 3 | 3 |
| EDH146 | BUSINESS COMMUNICATION – I | EDU | SOFT | CORE | 3 | 0 | 0 | 3 | 3 |
| MCH105B | MARKETING MANAGEMENT | DMC | HARD | CORE | 3 | 0 | 0 | 3 | 3 |
| MCH121B | MANAGEMENT PRINCIPLES AND ORGANIZATIONAL BEHAVIOUR | DMC | HARD | CORE | 3 | 0 | 0 | 3 | 3 |
| ELECTIVE | | | | | | | | | |
| FINANCE AND ACCOUNTS | | | | | | | | | |
| MCH109B | FINANCIAL ACCOUNTING | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| MCH102B | MICRO ECONOMICS | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |

| Entrepreneurship & Family Business Specialization | | | | | | | | | | |
|--|---------|---|-----|------|----------|---|---|---|---|---|
| | MCH108B | ENTREPRENEURSHIP: THEORY AND PRACTICES | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| | MCH125B | CREATIVITY & INNOVATION IN ENTREPRENEURSHIP | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| | MCH103B | ACCOUNTING FOR MANAGERS | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| | MCH102B | MICRO ECONOMICS | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| Health Care Management Specialization | | | | | | | | | | |
| | MCH110B | INTRODUCTION TO HEALTH CARE MANAGEMENT | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| | MCH103B | ACCOUNTING FOR MANAGERS | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| | MCH102B | MICRO ECONOMICS | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| Operations Management Specialization | | | | | | | | | | |
| | MCH111B | PRINCIPLES OF MANUFACTURING | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| | MCH103B | ACCOUNTING FOR MANAGERS | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| | MCH102B | MICRO ECONOMICS | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |

Business Analytics Specialization

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|---------|------------------------------------|-----|------|----------|---|---|---|---|---|
| MCH129B | INTRODUCTION TO BUSINESS ANALYTICS | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| MCH103B | ACCOUNTING FOR MANAGERS | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| MCH133B | PYTHON PROGRAMMING | DMC | HARD | ELECTIVE | 0 | 0 | 4 | 4 | 2 |
| | L-T-P Total | | | | | | | | |

COURSES ARE OPTED DEPENDING UPON THE SPECIALIZATION CHOSEN BY THE STUDENT

SEMESTER - 2 CORE

| SUBJECT CODES | SUBJECT NAME | OFFERING DEPARTMENT | *COURSE NATURE (Hard/Soft/Workshop/NTCC) | COURSE TYPE (Core/Elective / University Compulsory) | L | T | P | NO. OF CONTACT HOURS PER WEEK | NO. OF CREDITS |
|---------------|---------------------------|---------------------|--|---|---|---|---|-------------------------------|----------------|
| MCH113B | MACRO ECONOMICS | DMC | HARD | CORE | 3 | 0 | 0 | 3 | 3 |
| MCH114B | HUMAN RESOURCE MANAGEMENT | DMC | HARD | CORE | 3 | 0 | 0 | 3 | 3 |

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|---------|----------------------|-----|------|------|---|---|---|---|---|
| MCH115B | FINANCIAL MANAGEMENT | DMC | HARD | CORE | 3 | 0 | 0 | 3 | 3 |
| CSS108B | ADVANCED EXCEL | CST | SOFT | CORE | 1 | 0 | 2 | 3 | 2 |

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| ELECTIVE | | | | | | | | | | |
| FINANCE AND ACCOUNTS | | | | | | | | | | |
| MCH122B | COST ACCOUNTING | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 | |
| EDH147 | BUSINESS COMMUNICATION SKILLS- II | EDU | HARD | CORE | 3 | 0 | 0 | 3 | 3 | |
| MCH137B | INDUSTRY PROJECT | DMC | NTCC | CORE | 0 | 0 | 0 | 0 | 2 | |
| Entrepreneurship & Family Business Specialization | | | | | | | | | | |
| MCH123B | FUNDAMENTALS OF DESIGN THINKING & VENTURE CREATION | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 | |
| MCH124B | INTRODUCTION TO FAMILY BUSINESS MANAGEMENT | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 | |
| EDH147 | BUSINESS COMMUNICATION SKILLS- II | EDU | HARD | CORE | 3 | 0 | 0 | 3 | 3 | |
| MCH137B | INDUSTRY PROJECT | DMC | NTCC | CORE | 0 | 0 | 0 | 0 | 2 | |
| Health Care Management Specialization | | | | | | | | | | |

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| | MCH119B | FINANCING & BUSINESS DEVELOPMENT OF HOSPITALS | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| | MCH126B | HEALTHCARE COMMUNICATION | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| | MCH127B | HEALTHCARE ECONOMICS | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| | MCH137B | INDUSTRY PROJECT | DMC | NTCC | CORE | 0 | 0 | 0 | 0 | 2 |
| Operations Management | | | | | | | | | | |
| | MCH117B | FUNDAMENTALS OF LOGISTICS | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| | MCH137B | INDUSTRY PROJECT | DMC | NTCC | CORE | 0 | 0 | 0 | 0 | 2 |
| Business Analytics Specialization | | | | | | | | | | |
| | EDH147 | BUSINESS COMMUNICATION SKILLS- II | EDU | HARD | CORE | 3 | 0 | 0 | 3 | 3 |
| | MCH136B | MANAGERIAL ECONOMICS | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| | MCH134B | SQL | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| | MCH135B | DATA CLEANING | DMC | HARD | ELECTIVE | 2 | 0 | 2 | 4 | 3 |

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| MCH137B | INDUSTRY PROJECT | | | | | | | | |
| | | DMC | SOFT | CORE | 0 | 0 | 0 | 0 | 2 |

COURSES ARE OPTED DEPENDING UPON THE SPECIALIZATION CHOSEN BY THE STUDENT

| SEMESTER – 3 | | | | | | | | | |
|----------------------|--------------------------------|----------------------------|---|--|----------|----------|----------|--------------------------------------|-----------------------|
| SUBJECT CODES | SUBJECT NAME | OFFERING DEPARTMENT | *COURSE NATURE (Hard/Soft/Workshop/NTCC) | COURSE TYPE (Core/Elective/University Compulsory) | L | T | P | NO. OF CONTACT HOURS PER WEEK | NO. OF CREDITS |
| MCH201B | BUSINESS LAW | DMC | HARD | CORE | 3 | 0 | 0 | 3 | 3 |
| ECH212B | MANAGEMENT INFORMATION SYSTEMS | ECE | HARD | CORE | 2 | 0 | 2 | 4 | 3 |
| MCH217B | RESEARCH METHODOLOGY | DMC | HARD | CORE | 3 | 0 | 0 | 3 | 3 |
| MCH203B | OPERATIONS MANAGEMENT | DMC | HARD | CORE | 3 | 0 | 0 | 3 | 3 |
| FLS101,102,103 | FOREIGN LANGUAGE | MRV FL | SOFT | UC | 2 | 0 | 0 | 2 | 0 |

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| | CHH107B | ENVIRONMENTAL SCIENCES | CHEM DEPT | HARD | UC | 2 | 0 | 0 | 4 | 4 |
| | CDO213 | Skill Enhancement UG-I | CDC | SOFT | CORE | 2 | 0 | 0 | 2 | 2 |
| ELECTIVE | | | | | | | | | | |
| FINANCE AND ACCOUNTS | | | | | | | | | | |
| | MCH234B | FINANCIAL SERVICES | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| | MCH239B | MANAGEMENT ACCOUNTING | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| | MCH205B | INVESTMENT ANALYSIS AND PORTFOLIO MANAGEMENT | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| Entrepreneurship & Family Business Specialization | | | | | | | | | | |
| | MCH241B | FAMILY BUSINESS GOVERNANCE | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| | MCH242B | BUSINESS MODELLING | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| Health Care Management Specialization | | | | | | | | | | |
| | MCH210B | CLINICAL SERVICES | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| | MCH211B | PLANNING AND DESIGN OF HOSPITALS | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |

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| | MCH237B | EPIDEMIOLOGY | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| Operations Management | | | | | | | | | | |

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| | MCH208B | TOTAL QUALITY MANAGEMENT | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| | MCH209B | WAREHOUSING MANAGEMENT | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |

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| Business Analytics Specialization | | | | | | | | | | |
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| | MCH248B | Statistics with R | DMC | HARD | ELECTIVE | 2 | 0 | 2 | 4 | 3 |
| | MCH250B | Research Techniques | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| | MCH249B | Consumer Behaviour | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |

COURSES ARE OPTED DEPENDING UPON THE SPECIALIZATION CHOSEN BY THE STUDENT

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| SEMESTER – 4 | | | | | | | | | | |
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| SUBJECT CODES | SUBJECT NAME | OFFERING DEPARTMENT | FINANCE *COURSE NATURE (Hard/Soft/Workshop/NTCC) | COURSE TYPE (Core/Elective / University Compulsory) | L | T | P | NO. OF CONTACT HOURS PER WEEK | NO. OF CREDITS |
|---------------|--------------|---------------------|--|---|---|---|---|-------------------------------|----------------|
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| | MCH218B | SERVICES MARKETING | DMC | HARD | CORE | 3 | 0 | 0 | 3 | 3 |
| | MCH215B | SUPPLY CHAIN MANAGEMENT | DMC | HARD | CORE | 3 | 0 | 0 | 3 | 3 |

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|--|---------|---------------------------------------|-----|------|------|---|---|---|---|---|
| | MCH236B | CSR AND SUSTAINABLE DEVELOPMENT | DMC | HARD | CORE | 3 | 0 | 0 | 3 | 3 |
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ELECTIVE

FINANCE AND ACCOUNTS

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|--|---------|---|-----|------|----------|---|---|---|---|---|
| | MCH219B | MANAGEMENT OF BANKING AND FINANCIAL INSTITUTIONS | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| | MCH235B | CORPORATE ACCOUNTING | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| | MCH240B | DIGITAL FINANCE | DMC | HARD | ELECTIVE | 2 | 0 | 0 | 2 | 2 |
| | MCH216B | PERFORMANCE AND COMPENSATION MANAGEMENT SYSTEMS | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| | MCH221B | SUMMER INTERNSHIP | DMC | SOFT | ELECTIVE | 0 | 0 | 0 | 0 | 4 |

**Entrepreneurship & Family Business
Specialization**

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|--|---------|---|-----|------|----------|---|---|---|---|---|
| | MCH222B | MANAGING ENTREPRENEURIAL GROWTH AND STRATEGY | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
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| | MCH255B | APPLIED ENTREPRENEURSHIP PROGRAM | DMC | SOFT | Elective | 2 | 0 | 2 | 4 | 3 |
| | MCH225B | APPLIED ENTREPRENEURSHIP PROJECT | DMC | NTCC | Elective | 0 | 0 | 0 | 0 | 6 |
| Health Care Management Specialization | | | | | | | | | | |
| | MCH226B | MATERIAL & INVENTORY MANAGEMENT | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| | MCH227B | HEALTHCARE INFORMATION SYSTEM | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| | MCH228B | MANAGEMENT OF MEDICATION | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| | MCH229B | HEALTHCARE & HRM | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| | MCH243B | HEALTHCARE INDUSTRY PROJECT | DMC | HARD | CORE | 0 | 0 | 0 | 0 | 6 |
| Operations management | | | | | | | | | | |
| | MCH231B | PROJECT MANAGEMENT | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| | MCH232B | FREIGHT TRANSPORT MANAGEMENT | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |

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| MCH233B | APPLIED OPERATIONS MANAGEMENT PROJECT | DMC | NTCC | ELECTIVE | 0 | 0 | 0 | 0 | 6 |
|---------|---------------------------------------|-----|------|----------|---|---|---|---|---|

| Business Analytics Specialization | | | | | | | | | |
|--|---|-----|------|----------|---|---|---|---|---|
| MCH246B | OPERATION RESEARCH | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| MCH247B | SAS & TABLEAU | DMC | HARD | ELECTIVE | 0 | 0 | 4 | 0 | 2 |
| MCH216B | PERFORMANCE AND COMPENSATION MANAGEMENT SYSTEMS | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| MCH254B | APPLIED INDUSTRY PROJECT | DMC | NTCC | ELECTIVE | 0 | 0 | 0 | 0 | 6 |
| | L-T-P Total | | | | | | | | |

COURSES ARE OPTED DEPENDING UPON THE SPECIALIZATION CHOSEN BY THE STUDENT

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**SEMESTER –
5**

| SUBJECT CODES | SUBJECT NAME | OFFERING DEPARTMENT | *COURSE NATURE (Hard/Soft/Workshop/NTCC) | COURSE TYPE (Core/Elective/University Compulsory) | L | T | P | NO. OF CONTACT HOURS PER WEEK | NO. OF CREDITS |
|---------------|------------------------|---------------------|--|---|---|---|---|-------------------------------|----------------|
| CSS101B | WEBSITE DESIGNING | CST | SOFT | CORE | 1 | 0 | 2 | 3 | 2 |
| MCH302B | INTERNATIONAL BUSINESS | DMC | HARD | CORE | 3 | 0 | 0 | 3 | 3 |

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|---------|-------------------------|-----|------|------|---|---|---|---|---|
| MCH303B | STRATEGIC MANAGEMENT | DMC | HARD | CORE | 3 | 0 | 0 | 3 | 3 |
| CD0314B | SKILL ENHANCEMENT UG-II | CDC | SOFT | UC | 4 | 0 | 0 | 4 | 2 |

ELECTIVE

FINANCE AND ACCOUNTS

| | | | | | | | | | |
|---------|--------------------------|-----|------|-----------|---|---|---|---|---|
| MCH337B | COMPANY LAW | DMC | HARD | ELECTIVES | 3 | 0 | 0 | 3 | 3 |
| MCH304B | FINANCIAL DERIVATIVES | DMC | HARD | ELECTIVES | 3 | 0 | 0 | 3 | 3 |
| MCH305B | BUSINESS TAXATION | DMC | HARD | ELECTIVES | 3 | 0 | 0 | 3 | 3 |
| MCH306B | MERGERS AND ACQUISITIONS | DMC | HARD | ELECTIVES | 3 | 0 | 0 | 3 | 3 |

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|--|---|--|-------------|------|----------|---|---|---|---|---|
| | EDS289/EDS290/EDS288/PSE301/LWS325/LWS323 | Applied Psychology/Applied Sociology/Applied Philosophy/Essential of Peace and Sustainability/Law Relating to Intellectual Property Rights/Cyber Law | EDU/LAW/PSE | SOFT | ELECTIVE | 2 | 0 | 2 | 2 | 2 |
| Entrepreneurship & Family Business Specialization | | | | | | | | | | |
| | MCH338B | NEW AGE ENTREPRENEURSHIP | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |

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| MCH339B | INTERNATIONAL FAMILY BUSINESS MODELS | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| EDS289/ED S290/EDS2 88/PSE301/ LWS325/L WS323 | Applied Psychology/Applied Sociology/Applied Philosophy/Essential of Peace and Sustainability/Law Relating to Intellectual Property Rights/Cyber Law | EDU/ LAW/ PSE | SOFT | ELECTIVE | 2 | 0 | 2 | 2 | 2 |
| Health Care Management Specialization | | | | | | | | | |
| MCH310B | HEALTH CARE INSURANCE & MANAGEMENT CARE | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| MCH311B | QUALITY ASSURANCE IN HEALTH CARE | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| MCH312B | LEGAL & ETHICAL ISSUES IN HEALTH CARE | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |

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| EDS289/EDS290/EDS288/PSE301/LWS325/LWS323 | APPLIED PSYCHOLOGY/APPLIED SOCIOLOGY/APPLIED PHILOSOPHY/ESSENTIAL OF PEACE AND SUSTAINABILITY/LAW RELATING TO INTELLECTUAL PROPERTY RIGHTS/CYBER LAW | EDU/LAW/PSE | SOFT | ELECTIVE | 2 | 0 | 2 | 2 | 2 |
|---|--|-------------|------|----------|---|---|---|---|---|

| Operations Management | | | | | | | | | |
|-----------------------|---|-----|------|----------|---|---|---|---|---|
| MCH313B | LOGISTICS AND INTERNATIONAL SUPPLY CHAIN MANAGEMENT | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| MCH314B | PURCHASING AND INVENTORY MANAGEMENT | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| MCH315B | SERVICE OPERATIONS MANAGEMENT | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |

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|---|--|-------------|------|----------|---|---|---|---|---|
| EDS289/EDS290/EDS288/PSE301/LWS325/LWS323 | APPLIED PSYCHOLOGY/APPLIED SOCIOLOGY/APPLIED PHILOSOPHY/ESSENTIAL OF PEACE AND SUSTAINABILITY/LAW RELATING TO INTELLECTUAL PROPERTY RIGHTS/CYBER LAW | EDU/LAW/PSE | SOFT | ELECTIVE | 2 | 0 | 2 | 2 | 2 |
| Business Analytics Specialization | | | | | | | | | |
| MCH340B | HR ANALYTICS | DMC | HARD | ELECTIVE | 2 | 0 | 2 | 4 | 3 |
| MCH341B | SOCIAL MEDIA ANALYTICS | DMC | HARD | ELECTIVE | 2 | 0 | 2 | 4 | 3 |
| MCH345B | FINANCE ANALYTICS | DMC | HARD | ELECTIVE | 2 | 0 | 2 | 4 | 3 |
| EDS289/EDS290/EDS288/PSE301/LWS325/LWS323 | APPLIED PSYCHOLOGY/APPLIED SOCIOLOGY/APPLIED PHILOSOPHY/ESSENTIAL OF PEACE AND SUSTAINABILITY/LAW RELATING TO INTELLECTUAL PROPERTY RIGHTS/CYBER LAW | EDU/LAW/PSE | SOFT | ELECTIVE | 2 | 0 | 2 | 2 | 2 |

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| | L-T-P Total | | | | | | | | |
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COURSES ARE OPTED DEPENDING UPON THE SPECIALIZATION CHOSEN BY THE STUDENT

SEMESTER – 6

| SUBJECT CODES | SUBJECT NAME | OFFERING DEPARTMENT | *COURSE NATURE (Hard/Soft/Workshop/NTCC) | COURSE TYPE (Core/Elective / University Compulsory) | L | T | P | NO. OF CONTACT HOURS PER WEEK | NO. OF CREDITS |
|----------------------|---------------------|----------------------------|---|--|----------|----------|----------|--------------------------------------|-----------------------|
| MCH316B | E-COMMERCE | DMC | HARD | CORE | 3 | 0 | 0 | 3 | 3 |
| MCH317B | DIGITAL MARKETING | DMC | HARD | CORE | 3 | 0 | 0 | 3 | 3 |

FINANCE AND ACCOUNTS

| | | | | | | | | | |
|---------|-----------------------------------|-----|------|-----------|---|---|---|---|---|
| MCH320B | BEHAVIOURAL FINANCE | DMC | HARD | ELECTIVES | 3 | 0 | 0 | 3 | 3 |
| MCH335B | RISK MANAGEMENT IN BANKING SECTOR | DMC | HARD | ELECTIVES | 3 | 0 | 0 | 3 | 3 |
| MCH336B | FINANCIAL MODELING | DMC | HARD | ELECTIVES | 1 | 0 | 4 | 5 | 4 |
| MCH350B | GOODS & SERVICE TAX | DMC | HARD | ELECTIVES | 3 | 0 | 0 | 3 | 3 |

| Entrepreneurship & Family Business Specialization | | | | | | | | | | |
|--|--|-----|------|----------|---|---|----|----|---|--|
| MCH322B | STRATEGIES AND PRACTICES OF FAMILY-OWNED ENTERPRISES | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 | |
| MCH323B | COPYRIGHT, PATENTS AND LAWS OF IPR | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 | |
| MCH324B | ENTREPRENEURIAL FINANCE | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 | |
| MCH318B | BUSINESS ANALYTICS | DMC | HARD | CORE | 3 | 0 | 0 | 3 | 3 | |
| MCH325B | APPLIED ENTREPRENEURSHIP PROJECT | DMC | NTCC | ELECTIVE | 0 | 0 | 0 | 0 | 6 | |
| Health Care Management Specialization | | | | | | | | | | |
| MCH327B | PUBLIC HEALTH | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 | |
| MCH329B | GLOBAL HEALTHCARE SCENARIO | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 | |
| MCH318B | BUSINESS ANALYTICS | DMC | HARD | CORE | 3 | 0 | 0 | 3 | 3 | |
| MCH141B | HOSPITAL HAZARDS & WASTE MANAGEMENT | DMC | HARD | CORE | 3 | 0 | 0 | 3 | 3 | |
| MCH330B | FINAL INTERNSHIP REPORT | DMC | NTCC | ELECTIVE | 0 | 0 | 16 | 16 | 8 | |

Operations Management

| | | | | | | | | | | |
|--|---------|--|-----|------|----------|---|---|---|---|---|
| | MCH331B | INTRODUCTION TO SHIPPING | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| | MCH332B | MULTIMODAL TRANSPORTATION | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| | MCH333B | TRANSPORTATION AND DISTRIBUTION MANAGEMENT | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| | MCH334B | APPLIED OPERATIONS MANAGEMENT PROJECT | DMC | NTCC | ELECTIVE | 0 | 0 | 0 | 0 | 8 |

Business Analytics Specialization

| | | | | | | | | | | |
|--|---------|---|-----|----------|----------|-------|---|-------|----|---|
| | MCH342B | MACHINE LEARNING & AI | DMC | ELECTIVE | CORE | 2 | 0 | 2 | 4 | 3 |
| | MCH343B | SUPPLY CHAIN ANALYTICS | DMC | ELECTIVE | ELECTIVE | 2 | 0 | 2 | 4 | 3 |
| | MCH346B | MARKETING ANALYTICS | DMC | ELECTIVE | ELECTIVE | 2 | 0 | 2 | 4 | 3 |
| | MCH344B | Applied Project (Marketing, HR or Social Media analytics Based/Big Data or Digital Marketing) | DMC | ELECTIVE | ELECTIVE | 0 | 0 | 12 | 12 | 6 |
| | | L-T-P Total | | | | 13-18 | 0 | 15-19 | | |

COURSES ARE OPTED DEPENDING UPON THE SPECIALIZATION CHOSEN BY THE STUDENT

Detailed Syllabus

BBA- First Semester

| Course Title/Code | COMPUTERS AND INFORMATION SYSTEMS/ECW104B | |
|-----------------------|---|-------------------|
| Course Type | Core | |
| L-T-P Structure | 0-0-3 | |
| Credits | 2 | |
| Course Objective | This is a basic paper for Business Administration students to familiarize with the computer and its applications in the relevant fields and expose them to other related papers of IT. | |
| Course Outcomes (COs) | | Mapping |
| CO1 | Understand the basics of Computer and its evolution. | Employability |
| CO2 | Exemplify in a better way the I/O and memory organization. Define different number systems, binary addition and subtraction, 2's complement representation and operations with this representation. | Skill Development |
| CO3 | Analyze the input and Output Devices | Skill Development |
| CO4 | Learn the operating system concept | Skill Development |

Section A

Block diagram of computer, Function of different units of computer, Types of software (System and Application). I/O devices: Keyboard, Mouse, Joystick, Digitizer, Scanner, MICR, OCR, OMR, Light Pen, Touch Screen, Barcode Reader, Voice Input Device, Printer and its type (Impact and Non-Impact with example).

Introduction to operating system; Function of OS, Types of operating systems, Booting Procedure, Start-up sequence, Details of basic system configuration, Important terms like Directory, File, Volume, Label, Drive name, task manager, control panel etc, Creating back up, fragmenting the disks, creating directories etc

Section B

Ms. word: Document Creating, editing, saving and printing text documents Font and paragraph formatting, Simple character formatting, Inserting tables, smart art, Using lists and styles Working with images, Using Spelling and Grammar check, Header & Footers, Understanding document properties, Mail Merge

Section C

Ms. Excel: Spreadsheet basics Creating, editing, saving and printing spreadsheets Working with functions & formulas Modifying worksheets with color & auto formats Graphically representing data : Charts & Graphs Speeding data entry : Using Data Forms Analyzing data : Data Menu, Subtotal, Filtering Data Formatting worksheets Securing & Protecting spreadsheets.

Section D

Ms. Power Point Opening, viewing, creating, and printing slides Applying auto layouts Adding custom animation Using slide transitions Graphically representing data: Charts & Graphs Creating Professional Slide for Presentation.

Text books:

1. Goel, A.(2010), Computer Fundamentals 1st ed, Pearson
2. Balagurusamy, E(2005), Fundamental of Computers, McGraw Hill Education
3. Vikas, B. and Agarwal, J.(2019), Computer Fundamentals, Nirali Prakashan
4. Shrivastav, N.(2013), Fundamentals of Computers and Information system, Dreamtech Press

References:

1. Adabala, N and Rajaraman, V.(2014). Fundamentals of Computers . Prentice Hall of India
2. Sinha, K P, & Sinha, P. (2021). Computer Fundamentals - 8th Edition ([edition unavailable]). BPB Publications
3. Senn, J. A. (1984,). Analysis and Design of Information Systems. Tata McGraw Hill Education

| Course Code | Course | Course Outcome | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PS | PS |
|-------------|-----------------------------|----------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | O1 | O2 |
| ECW10 4B | Computer Information System | CO1 | 3 | 2 | 2 | 3 | | 2 | 3 | 2 | 2 | 3 | 1 | 2 | 1 | 1 |
| | | CO2 | 3 | 3 | 2 | 2 | 1 | 3 | 2 | 1 | 1 | 2 | 1 | 2 | 1 | 1 |
| | | CO3 | 3 | 3 | 3 | 2 | X | 1 | X | X | 2 | 1 | X | X | 1 | 1 |
| | | CO4 | 2 | 3 | 2 | X | X | 1 | X | X | 2 | 1 | X | X | 1 | 1 |

| | | |
|--------------------------|--|--------------------------|
| Course Title/Code | BUSINESS STATISTICS / MCH106B | |
| Course Type | Core | |
| L-T-P Structure | 3-0-0 | |
| Credits | 3 | |
| Course Objective | Learning important statistical techniques required for performing data analysis and its interpretation, as it further assists in managerial decision-making. | |
| | Course Outcomes (COs) | Mapping |
| CO1 | To provide basic knowledge of application of mathematics and statistics to business disciplines | SKILL DEVELOPMENT |
| CO2 | Develop the ability to analyse and interpret data to provide meaningful information to assist in making management decisions | EMPLOYABILITY |
| CO3 | Develop an ability to apply modern quantitative tools to analyse business situations | ENTREPRENEURSHIP |
| CO4 | Conduct basic analysis of data | EMPLOYABILITY |

Section A

Introduction: Meaning and definitions of Statistical Data; Applications of Statistics in Managerial Decision- Making; Frequency Distributions. Measures of Central Tendency: Mean, Geometric mean, Harmonic mean, Median, Mode and the implications. Partition Values: Quartiles, Deciles and Percentiles. Measures of Dispersion: Range, Quartile Deviation, Mean Deviation and Standard Deviation.

Section B

Probability: Concept, Uses of Probability in Business Decision-Making, Addition and Multiplication Theorem of Probability.

Section C

Correlation, Karl Pearson Correlation Coefficient, Scatter Diagram, Regression Analysis, Regression Equation, Skewness and Kurtosis.

Section D

Meaning, Importance and Component of Time Series, Additive Model, Multiplication Model, Measurement of Trend: Semi Average Method, Moving Average Method and Methods of Least Squares.

Text Books:

1. Gupta S C & Gupta I(2022). Business Statistics. Himalaya Publishing House, India
2. Levin, Richard, David S. Rubin, Rastogi, and Siddiqui(2017). Statistics for Management, 10th Ed, Pearson Education,

References:

1. Sharma J K (2019) .Business Statistics. Vikas Publishing House.
2. Gupta, S P (2021).Statistical Methods. Sultan Chand & Sons .
3. Vohra N. D (2017). Business Statistics, McGraw Hill.

| Course Code | Course | Course Outcomes | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PS | PS |
|-------------|------------------------|-----------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | O1 | O2 |
| MCH 106B | BUSINESS STATISTICS | CO1 | 3 | X | 3 | 3 | 2 | X | 1 | 1 | X | X | X | 3 | X | X |
| | | CO2 | 3 | 2 | 3 | 3 | 2 | X | 1 | 1 | X | X | X | 3 | X | X |
| | | CO3 | 3 | X | 3 | 3 | 2 | X | 1 | 1 | X | X | X | 3 | X | X |
| | | CO4 | 3 | 1 | 3 | 3 | 2 | X | 1 | 1 | X | X | X | 3 | X | X |

| | | |
|--------------------------|--|--------------------------|
| Course Title/Code | Business Communication –I/ EDH146 | |
| Course Type | Core | |
| L-T-P Structure | 3-0-0 | |
| Credits | 3 | |
| Course Objective | Demonstrate effective interpersonal skills and the ability to work effectively in teams of diverse composition. | |
| | Course Outcomes (COs) | Mapping |
| CO1 | Develop communication knowledge and skills and will enhance their abilities to be effective in leadership and team roles. | Skill Enhancement |
| CO2 | Demonstrate written communication skills appropriate for business situations. | Skill Enhancement |
| CO3 | Gain confidence through individual and group exercises in physical and emotional awareness, improvisational skills, scene study, character creation and voice. | Skill Enhancement |
| CO4 | Recognize their ethical responsibilities towards their community, society, discipline, and profession based on various perspectives and associated standards of ethical communication. | Employability |

Section A

Grammar

Parts of Speech, Sentence, Identifying & Analyzing Grammatical Errors in sentences related to Pronoun, Article, Verb, Preposition, Jumbled Sentences, Reported Speech, Question Tags, Tenses, Active and Passive Voice, Tense

Section B

Introduction to Business Communication

Basic forms of communication, Process of communication, Impact of Encoding and Decoding in Communication (noise, codes, culture, technology), Principles of effective Business Communication, 7 Cs. Media of Communication: Types of communication: Barriers of communication (Practical exercise in communication), Levels of Communication (interpersonal, intrapersonal, group, public); Communication as a Change Agent (silence, satire, artifice), Determinants in Impacting Communication; Social, Political, Cultural; Semiotics and Communication; Ideology and Communication, Communication models and processes; Theories of Communication.

Section-C

Corporate Communication

Importance of communication skills in Business Management. Formal and Informal communication networks; Grapevine; Miscommunication; Steps for improving communication.

Business manners.

Body language: Revelation of Inner Self, Importance of Body Language; Using Humor and Wit; Gestures, Etiquette of the written word, Structure of an effective Speech; Speaker's Credibility; Tips for Building Credibility

Business meetings: How to conduct and attend a meeting, Business Talk, Characteristics of Good Business Speaker; Importance of gestures, Practicing the Art of Business Communication; Meeting, Playing role of effective team members in a meeting

Principles and steps of Group Discussions; Interviews; Seminars;

Business Presentation: Audience Analysis, Preparing effective Power Point presentation, Delivering of presentation, Handling questions

Feedback: Giving and Receiving,

Section D

Business Writing

Departmental Communication: Newsletters, Circulars, Agenda, Notice, Office memorandums, Office orders, Report Writing, Paraphrasing, bill collection, E-mail etiquettes and writing.

disciplinary action; persuasive messages; negative messages; job applications. CV Writing, Business letter writing: Need, Functions and Kinds. Layout of letter writing. Types of letter writing: Persuasive letters, Request letters, Sales letters, Complaints and Adjustments, Meaning, Need and types: Interview letters, Promotion Letters, Resignation letters.

Text Books:

1. Chaturvedi P D and Chaturvedi M.(2017). Business Communication. Pearson Education
2. James Schofield J and Osborn A(2011). Business Speaking: B1-C2 (Collins Business Skills and Communication). Collins
3. Roche M (2023).Business Email. Macson Bell

References:

1. Chhabra T N(2016).Business Communication: Concepts and Skills, Sun India Publications. New Delhi
2. Convey, R. Stephen(2013). The Seven Habits of Highly Effective People.Paperback – Special Edition
3. E.H.McGrath, S.J.(2001)Basic Managerial Skills for All,4th ed., Prentice Hall of India Pvt. Ltd., New Delhi

| Course s Code | Courses | Course Outcom es | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PS | PS |
|------------------|-----------------------------------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | O1 | O2 | |
| EDH14 6 | BUSINESS COMMUNICA TION – I | CO1 | 1 | 3 | 1 | 2 | 1 | 1 | 3 | 3 | 3 | 3 | 1 | X | 3 | 3 | |
| | | CO2 | 3 | 1 | X | X | 3 | X | 1 | 3 | 1 | X | X | X | 3 | 3 | |
| | | CO3 | 1 | 1 | X | X | 1 | X | 3 | 3 | 3 | 3 | 1 | X | 3 | 2 | |
| | | CO4 | 1 | 3 | 1 | 1 | 1 | X | 3 | 3 | 3 | 1 | 1 | X | 2 | 2 | |
| | | CO5 | 1 | 3 | 1 | 2 | 1 | 1 | 3 | 3 | 3 | 3 | 1 | X | 3 | 3 | |

| | |
|-------------------|---|
| Course Title/Code | MARKETING MANAGEMENT /MCH105B |
| Course Type: | Core |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | The objective of this paper is to identify and develop knowledge and skills in application of the fundamental terms and concepts that are commonly used in marketing. |

| Course Outcomes (COs) | | Mapping |
|------------------------------|--|--------------------------|
| CO1 | To acquaint the students with the fundamental principles of Marketing | Employability |
| CO2 | To enable students to understand marketing planning and strategies and market segmentation | Employability |
| CO3 | To enable students to analyse branding and pricing decisions | Entrepreneurship |
| CO4 | To enable students to take decisions using Marketing principles. | Skill Enhancement |

SECTION A

An Overview: Introduction, Definition of Market, Types of Markets, Meaning and Definition of Marketing, Origin of Marketing, Scope of Marketing, Importance of Marketing, Functions of Marketing, Difference between Marketing and Selling; *Marketing Concepts:* Introduction, Exchange concept, Production concept, Product concept, Sales/selling concept, Modern marketing concept, Societal marketing concept, Impact of marketing concepts and its applicability; *Marketing Environment:* Introduction, Need and Importance of Environmental Analysis, Methods of Analysis – SWOT, PEST, Internal Environment of the Organization, External Environment; *Consumer Behaviour:* Introduction, Important definitions, Evolution of the study of consumer behavior, Determinants of consumer behavior, Types of buying decisions, Stages of the buying process, Importance of consumer behaviour study

SECTION B

Marketing Planning and Strategies: Introduction, Management Processes in Marketing, Types of Marketing Plan, Competitive Marketing Strategies, Interactions between Marketing Mix and Marketing Environment, Control Mechanisms in Marketing; *Market Segmentation:* Introduction, Definition of market segmentation, Need for market segmentation, Criteria for effective segmentation, Bases for market segmentation, Benefits of market segmentation; *Product Related Decisions:* Introduction, Features of a Product and its Classifications, Product Plan and New Product Development, Product Mix and its Elements, Decisions related to Product Mix, Product Life Cycle

SECTION C

Introduction to branding: introduction, definition of a brand, development of a brand, types of brands,

importance of brands and branding, merits and demerits of branding, brand equity – definition and benefits;. Pricing decisions: introduction, price and its determinants, objectives of pricing decisions, factors affecting pricing decisions, pricing policies and strategies, pricing methods; distribution strategy: introduction, meaning, need for and importance of distribution channel, factors influencing channel decisions, types of channels, direct channel, indirect channel, functions of channel members

SECTION D

Promotion Mix: Introduction, Promotion mix and its components, Advertising, Sales Promotion, Personal selling, Direct marketing, Public Relations and publicity, Online marketing, Developing an integrated promotion mix;. Promotion Mix Decisions: Introduction: Advertising decisions, Sales promotion decisions, Personal selling decisions, Public Relations and Publicity decisions; Services Marketing: Introduction, Definition of services, Characteristics of services, Distinction between goods and services, Marketing mix for services, Types of services, Strategies for Services Marketing; Recent Trends in Marketing : Introduction, E-commerce, E-marketing, E-Retailing, Relationship marketing, Mobile marketing, Green marketing.

Text Books:

1. Kumar, R. (2020). Application Exercises in Management. Vikas Publishing House .
2. Ramaswamy. V S & Namakumari S. (2021). Marketing management-planning implementation and control, macmillan business books, New Delhi.

References:

1. Kotler, P., Keller, K. L., Cunningham, P. H., & Sivaramakrishnan, S. (2012, January 24). Marketing Management
2. E. (2007, January 1). Marketing With Cd, 14E (Sie). Tata McGraw-Hill Education
3. Armstrong, G., & Kotler, P. (2005, January 1). Marketing. Prentice Hall
4. Kumar, S. R. (2012, January 1). Case Studies in Marketing Management. Pearson Education India
- 5.

| Courses Code | Courses | Course Outcomes | POs | | | | | | | | | | | | | |
|--------------|----------------------|-----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|
| | | | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | PO13 | PO14 |
| MCH105 B | MARKETING MANAGEMENT | CO1 | 3 | 2 | X | X | 3 | 2 | X | 3 | 1 | 2 | 3 | X | 2 | 2 |
| | | CO2 | 3 | 3 | X | 2 | 2 | X | 3 | 3 | 2 | 2 | X | X | 2 | 3 |
| | | CO3 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | X | 2 | 1 | X | 2 | 2 |
| | | CO4 | 3 | 3 | 3 | 2 | X | 2 | 3 | 1 | 3 | 3 | 3 | 2 | 1 | 1 |

| | | |
|------------------------------|---|--------------------------|
| Course Title/Code | MANAGEMENT PRINCIPLES & ORGANIZATIONAL BEHAVIOUR/ MCH121B | |
| Course Type | Core | |
| L-T-P Structure | 3-0-0 | |
| Credits | 3 | |
| Course Objective | The objective of this course is to expose the students to basic concepts of Management and Organizational Behavior, in order to enable them to gain appreciation for emerging ideas, techniques, procedures and practices in the field of management. | |
| Course Outcomes (COs) | | Mapping |
| CO1 | To acquaint & familiarize the students about the determinants of Management as a discipline, and discuss Interpersonal & Transactional analysis, thereof | Skill Enhancement |
| CO2 | To enable an in-depth understanding of Leadership styles & Motivation theories, alongwith Individual Behaviour Dimensions | Skill Enhancement |
| CO3 | To familiarize the students about group behavior & team development for efficient Management control & social responsibility | Employability |
| CO4 | To impart an understanding of organizational culture & contemporary Industry settings; change & conflict management, to deal with uncertainty & future of work | Employability |

SECTION A

Concept and nature of management; Managerial competencies--**Communication, Planning, Decision making and Organizing**: nature and elements of planning, planning types and models, planning in learning organizations; Strategic planning – An overview; Decision making process, models of decision-making. Basic issues in organizing – work specialization, chain of command, delegation, decentralization, span of management, bases for departmentation. Nature and meaning of Interpersonal Behavior, and Transactional Analysis; Benefits and uses of Transactional Analysis, Johari Window Model

SECTION B

Leading: recognition of human factors, leadership styles. Personal characteristics of effective leaders, leadership development; Leadership for learning organizations. Trait, behavioral, contingency theories, and managerial grid. Foundation of **Individual behavior- Personality**- meaning, self-concept, self-esteem, Major determinants of personality, **Motivation**- types of motivation, theories of work motivation given by Maslow, Herzberg, McGregor, Vroom and Porter – Lawler.

SECTION C

Management control, Managerial ethics and Social responsibility. **Group Behavior & Team development**--Group dynamics, Types of groups, Group norms and roles, Group cohesiveness, Group development and facilitation, Understanding work Teams and types of team, Creating effective team.

SECTION D

Contemporary Industry shifts & Industry 4.0. Gig Economy parameters & Nature of Work towards futuristic Work Models. Organizational Culture-Concept, Functions, Socialization; Creating and sustaining culture; Managing Change & Managing Conflict – Sources, types, process and resolution of conflict.

Text Books:

1. Robins, Stephen P.(2016).Organizational Behaviour, 16th ed, Pearson Education Asia
2. Schen P(2017).Organizational Psychology and Leadership , 5th ed, John Wiley and Sons
3. Koontz, H and Wehrich, H(2012) Essentials of Management: An International and Leadership Perspective.McGraw Hill Education
4. Stoner, J (2003), Management, Pearson Education India

References:

1. Robbins, S.P. and Decenzo, D.A.(15 June 2016), Fundamentals of Management,Pearson Education Asia, New Delhi
2. Gupta P(2010).Organizational Behaviour, 1st ed, Tata McGraw Hill
3. Luthans F (2010). Organization Behaviour, 12th ed, Tata McGraw Hill
4. Newstrom (2017). Organizational Behaviour: Human Behaviour at Work, 12th ed, Tata McGraw Hill

| Course Code | Course | Course Outcomes | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | PSO1 | PSO2 |
|-------------|--|-----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|
| MCH121 B | MANAGEMENT PRINCIPLES & ORGANIZATIONAL BEHAVIOUR | CO1 | 3 | 2 | 2 | X | 1 | 2 | 3 | 3 | 2 | 2 | 2 | 1 | 2 | X |
| | | CO2 | 3 | 2 | 2 | X | 1 | 2 | 3 | 3 | 3 | 2 | 2 | 1 | 2 | X |
| | | CO3 | 3 | 2 | 2 | X | 1 | 2 | 3 | 3 | 3 | 2 | 2 | 1 | 2 | X |
| | | CO4 | 3 | 2 | 2 | X | 1 | 2 | 3 | 3 | 2 | 2 | 2 | 1 | 2 | X |

| | |
|-------------------|---|
| Course Title/Code | FINANCIAL ACCOUNTING/ MCH109B |
| Course Type: | Elective |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | The primary objective of the course is to familiarize the professional under graduate students with the basic accounting principles and techniques of preparing and presenting the accounts for user of accounting information. |

| Course Outcomes (COs) | | Mapping |
|-------------------------------|--|--------------------------|
| CO1 | To acquaint the students with the fundamentals principles of financial accounting, techniques of preparing and presenting the accounts for user of accounting information. | Employability |
| CO2 | To enable the students to prepare, analyze and interpret financial statements | Skill Enhancement |
| CO3 | To enable the students to take to understand the concept and uses of Computerized Accounting. | Skill Enhancement |
| CO4 | To enable the students to learn Accounting Software packages that will help to understand the practical application. | Employability |
| Prerequisites (if any) | | |

SECTION A

Introduction: Financial Accounting-definition and Scope, objectives of Financial Accounting, Accounting v/s Book Keeping Terms used in accounting, users of accounting information and limitations of Financial Accounting. Conceptual Frame work: Accounting Concepts, Principles and Conventions, Accounting Standards-concept, objectives, benefits, brief review of Accounting Standards in India.

SECTION B

Recording of transactions: Voucher system;Accounting Process, Journals, Subsidiary Books, Ledger, Cash Book, Bank Reconciliation Statement, Trial Balance, Depreciation: Meaning, need & importance of depreciation, methods of charging depreciation. (WDV & SLM)

SECTION C

Preparation of final accounts: Preparation of Trading and Profit & Loss Account and Balance Sheet, Introduction to Company Final Accounts: Important provisions of Companies Act, 1956 in respect of preparation of Final Accounts.

SECTION D

Preparation of final accounts of a Company, Computerized Accounting: Computers and Financial application, Accounting Software packages.

Text Books:

1. Gupta A. (2022).Financial Accounting for Managers. Pearson Education
2. FRANK F J (2016).Financial Accounting a Managerial..PHI Delhi
3. Narayanaswami R (2011).Financial Accounting: A Managerial Perspective.Prentice Hall India Learning Private Limited

References:

1. Gupta R L (2018).Advanced Accounting, 13thed, Sultan Chand and Son
2. Shah(2017). Basic Financial Accounting, 4thed, Oxford University Press
3. Maheshwari and Maheshwari(2018). An Introduction to Accountancy 12e – Vikas Publishing House, 2018
4. Bhattacharya (2006). Financial Accounting for business Managers, 3rded,Prentice Hall of India
5. Khan and Jain(2007).Financial Accounting, 5thed, Tata McGraw-Hill Education

| Course s Code | Courses | Course Outcom es | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PS | PS |
|------------------|-------------------------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | O1 | O2 |
| MCH 109B | FINANCIAL ACCOUNTING | CO1 | 3 | X | 3 | 3 | X | 3 | 2 | 2 | X | 3 | 3 | 3 | 3 | 3 |
| | | CO2 | 3 | X | 3 | 3 | X | 3 | 2 | 2 | 1 | 3 | X | 3 | 3 | 3 |
| | | CO3 | 3 | 1 | 3 | 3 | 2 | 3 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 |
| | | CO4 | 3 | 1 | 3 | 3 | 1 | 3 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 |

| | |
|-------------------|--|
| Course Title/Code | MICRO ECONOMICS/ MCH102B |
| Course Type: | Elective |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | The objective of this course is to familiarize the students with concepts and techniques used in Micro-Economic theory and to develop their capability to apply these concepts and techniques in making decisions pertaining to different business situations. |

| Course Outcomes (COs) | | Mapping |
|-------------------------------|--|--------------------------|
| CO1 | To acquaint the students with the fundamental knowledge Micro-Economics and its basic laws and principles. | Employability |
| CO2 | To help students understand the theories of demand and supply and practically identify the different factors that affect demand and supply | Skill Enhancement |
| CO3 | To understand analyze the different types of costs that form part of a production process and relate it with the laws of production. | Skill Enhancement |
| CO4 | To make the students understand and evaluate the different types of markets operating in an industry. | Employability |
| Prerequisites (if any) | | |

SECTION A

Microeconomics: meaning nature and scope. Basic concepts of economics: Static and dynamic approaches, equilibrium, utility, opportunity cost, marginal and incremental principles. Microeconomics and Business, Utility analysis.

SECTION B

Theory of demand: Nature of demand for a product, individual demand, market demand, determinants of demand. Elasticity of demand and its determinants, demand as multivariate function.

SECTION C

Theory of production and costs: The concept of production function, production with one and two variable inputs, optimal input combination, theory of cost in short run and long run, revenue function.

SECTION D

Theory of firm and market organization: Breakeven analysis, pricing under perfect competition, pricing under monopoly, price discrimination, pricing under monopolistic competition, selling cost, pricing under oligopoly: cournot model, kinked demand curve and price leadership.

Text Books:

1. Ahuja, H L.(2021). Principles of Microeconomics, S.chand, 22 Edition

2. Pindyck R and Rubinfeld D.(2017). Microeconomics . Pearson

E-content: NPTEL IIT Kanpur <https://www.youtube.com/playlist?list=PLFW6lRTa1g810WIgFkEKRMku2PA0gtFbC>

References:

1. Dwivdi D N (2018), Micro Economics: Theory and Applications, 1sted, Sultan Chand& Co., New Delhi
2. N Gregory Mankiw(2006), Principles of Micro Economics, 6thed, Cengage India
3. Salvatore, D. (2009), Principles of Microeconomics, 5thed, Oxford University Press
4. Samuelson(2010)), Micro-Economics;19thed, McGraw-Hill International Edition

| Course s Code | Courses | Course Outcom es | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PS | PS |
|------------------|--------------------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | O1 | O2 |
| MCH10 2B | MICRO ECONOMICS | CO1 | 3 | 1 | 2 | 1 | 3 | 3 | 1 | X | 1 | 3 | X | 1 | 2 | 2 |
| | | CO2 | 3 | X | 2 | 1 | 3 | 2 | X | 1 | 1 | 2 | 1 | X | 2 | 2 |
| | | CO3 | 3 | 2 | 3 | X | 2 | 2 | 1 | 1 | X | 2 | 1 | 1 | 2 | 2 |
| | | CO4 | 3 | 2 | 2 | 1 | 3 | 2 | 1 | 1 | 1 | 1 | X | 1 | 2 | 2 |

| | |
|-------------------|---|
| Course Title/Code | ENTREPRENEURIAL THEORY AND PRACTICES / MCH108B |
| Course Type: | ELECTIVE |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | Recognize the entrepreneurial potential within yourself and in your environment; Appreciate the role of entrepreneurship within society, at the level of the organization, and in your own personal life; Understand the process, nature of entrepreneurship, and ways to manage the process; this course will introduce the basic knowledge of various aspects of Entrepreneurship. |

| Course Outcomes (COs) | | Mapping |
|-----------------------|--|-------------------|
| CO1 | To acquaint the students with the fundamentals principles of Entrepreneurship | Entrepreneurship |
| CO2 | To enable students to prepare, analyze & interpret matrices & models associated with Entrepreneurship | Skill Enhancement |
| CO3 | To enable the students to take decisions by extrapolating opportunities/ initiatives into business models/ventures | Entrepreneurship |
| CO4 | To have a thorough understanding of the various Entrepreneurship models and the nuances of their implementation | Entrepreneurship |

SECTION A

Defining Entrepreneurship; what is an Entrepreneurial Mindset? The Entrepreneurial Process; An Integrative Model of Entrepreneurship. “Who” is the Entrepreneur? Sociological and Psychological Characteristics; The Different Types of Entrepreneurs; Nature versus Nurture, Why Entrepreneurs are not Born

SECTION B

Understanding The Nature of Opportunity & Defining Opportunity; An Opportunity is Different from a Business Concept; Sources and Types of Opportunity; Discovery versus Search; Where are the Emerging Opportunities; Evaluating Opportunity; Factors that Undermine an Opportunity; Windows of Opportunity; Understanding the Market and the Customer Needs. Entrepreneurial Skills such as Communication, Design Thinking, Personal Selling, and Risk and Resilience

SECTION C

Developing a Great Business Concept and Business Model From Product to Business Concept (the Value Proposition), From Business Model to Business Plan; The Nature of Successful Business Concepts; Sources of Concepts; What Makes for a Good Concept; Components of a Complete Business Model; A Look at Successful and Failed Business Models

SECTION D

Expectations about Size, Growth, Returns, and Risk, What About the Investment Model (Income, Growth, or Speculative)?; Ways of Extracting Returns from the Venture; Types of Ventures; What it Takes to Actually Start a Venture; Four Ways to Enter a Market; The Concept of Risk; Types of Risk; Assessing in a New Venture; Risk and Return.

Text Books

1. Roy R(2020).Entrepreneurship”, 2nd ed, Oxford Higher Education
2. Hisrich R D , Peters M P, Shepherd D A and Sinha S. (2020).Entrepreneurship | 11th ed , McGraw Hill
3. Holt,(2016).Entrepreneurship: New Venture Creation Pearson Education India
4. Chhabra (2019). Entrepreneurship Development.Sun India Publications

Reference Books

1. ERIC R(2023).THE LEAN STARTUP, Crown Currency
2. Blake Masters(2015). Zero to one, Ebury Publishing

| Course Code | Courses | Course Outcomes | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PS | PS |
|-------------|--|-----------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | O1 | O2 |
| MCH 108B | ENTREPRENEURSHIP: THEORY AND PRACTICES | CO1 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | X | 2 | 1 | 2 | 2 | 3 |
| | | CO2 | 3 | 2 | 2 | 2 | X | 2 | 2 | 2 | 1 | 2 | X | 2 | 2 | 3 |
| | | CO3 | 3 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | X | 2 | 1 | 2 | 2 | 3 |
| | | CO4 | 3 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 2 | 1 | 2 | 2 | 3 |

| | |
|-------------------|--|
| Course Title/Code | CREATIVITY, INNOVATION AND ENTREPRENEURSHIP/MCH125B |
| Course Type: | Core |
| Course Nature: | ELECTIVE |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | To acquaint the students with the concept & application of creativity & innovation in Entrepreneurship |

| Course Outcomes (COs) | | Mapping |
|------------------------------|--|-------------------------|
| CO1 | To acquaint the students with the concept & application of creativity & innovation in Entrepreneurship | Entrepreneurship |
| CO2 | To enable the students to prepare, analyze and interpret matrices & models associated with creativity, leading to innovation | Entrepreneurship |
| CO3 | To enable the students to recognize the aspects related to innovation implementation | Entrepreneurship |
| CO4 | To familiarize the students with trends, government policy & associated industrial matrices of Innovation & Entrepreneurship | Entrepreneurship |

SECTION A

Models of Innovation, The underpinning of Profits: Assets, Competences and Knowledge, Sources and Transfer of Innovation, ***Creating a culture of Innovation

SECTION B

Recognizing the potential of Innovation, Reducing Uncertainty, Strategic Choice or environmental Determinism, Strategies for sustaining Profits

SECTION C

Financing Entrepreneurial activity, Implementation of the decision to adopt

SECTION D

Globalization of Innovations, Innovation for emerging economies, Role of National Govt in Innovation, Strategic Innovation Process

Case : The Internet

Text Books:

1. Fisher S and Duane J (2016) , The Startup Equation, 1sted.,McGraw Hill
2. Conway , S and Steward, F. (2012), Managing & Shaping Innovation ,Oxford University Press

References:

1. Afuah, A. (2002), Innovation Management , 2nd ed, Oxford Publications
2. Hisrich, R D. (2013) ,Entrepreneurship, 8th ed ,McGraw Hill Education

| Course s Code | Courses | Course Outcom es | PO 1 | PO 2 | PO 3 | PO 4 | PO 5 | PO 6 | PO 7 | PO 8 | PO 9 | PO 10 | PO 11 | PO 12 | PS O1 | PS O2 |
|------------------|--|------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|----------|----------|----------|----------|
| MCH12 5B | CREATIVITY, INNOVATION AND ENTREPRENE URSHIP | CO1 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | X | 2 | 1 | 2 | 3 | 3 |
| | | CO2 | 3 | 2 | X | 2 | 1 | 2 | 2 | 2 | 1 | 2 | X | 2 | 3 | 3 |
| | | CO3 | 3 | 2 | 2 | 2 | X | 2 | 2 | 2 | 1 | 2 | 1 | 2 | 3 | 3 |
| | | CO4 | 3 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | X | 2 | X | 2 | 3 | 3 |

| | |
|--------------------------|---|
| Course Title/Code | ACCOUNTING FOR MANAGERS/ MCH103B |
| Course Type | Elective |
| L-T-P Structure | 3-0-0 |
| Credits | 3 |
| Course Objective | Participants who master the course will be able to identify (a), interpret (b an c) and analyze (d) the accounting information. Consequently student will be able to take financial decisions |

| Course Outcomes (COs) | | Mapping |
|------------------------------|--|--------------------------|
| CO1 | To acquaint the students with the fundamentals principles of financial, cost and management accounting | Skill Enhancement |
| CO2 | To enable the students to prepare, analyze and interpret financial statements and | Employability |
| CO3 | To enable the students to take decisions using management accounting tools. | Entrepreneurship |
| CO4 | To enable the students to take decisions using management accounting tools and techniques. | Employability |

SECTION A

Basics of Accounting: Accounting process, Basic terminology, accounting principles and its application. Journal entries, Ledgers, Types of Accounting.

SECTION B

Trial Balance to Balance Sheet: Trial Balance, Adjustment entries, construction of Profit and Loss Accounts and Balance Sheet, Computerized Accounting System.

SECTION C

Cost Accounting - Elements of Cost, Types of Costs, Preparation of Cost Sheet. Standard Costing: Variance Analysis: Material Variances, Labour Variances, Simple Problems Related to Material and Labour Variances only. Break-Even Analysis - Cost Volume Profit Relationship.

SECTION D

Management Accounting:Ratio Analysis :Uses and Limitations, Classification of Ratios – Liquidity, Profitability, Financial and Turnover Ratios, Simple Problems Only. Cash Flow Analysis: Uses and Limitations. Budgets: cash budget, purchase budget, sales budget, fixed and flexible budget

Text Books

1. Ghosh Roy H J G and Singhal A K(2006).Accounting for Managers.Vayu Education of India
2. Dhamija S (2015). Accounting for Managers . Pearson

References:

3. Ramanathan S(2019).Accounting for managers, oxford university press
4. Shah p(2017).Basic accounting for managers, oxford, Delhi
5. Gupta a(2019). Financial accounting for management, pearson, Delhi

| Course s Code | Courses | Course Outcom es | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PS | PS |
|------------------|---------------------------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | O1 | O2 |
| MCH1 03B | Accounting For Manager | CO1 | 3 | X | 3 | 3 | X | 3 | 2 | 2 | X | 3 | 3 | 3 | 3 | 3 |
| | | CO2 | 3 | X | 3 | 3 | X | 3 | 2 | 2 | X | 3 | 3 | 3 | 3 | 3 |
| | | CO3 | 3 | 1 | 3 | 3 | 2 | 3 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 |
| | | CO4 | 3 | 1 | 3 | 3 | 1 | 3 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 |

| | |
|-------------------|---|
| Course Title/Code | INTRODUCTION TO HCM / MCH110B |
| Course Type: | Elective |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | This course will introduce the basic knowledge of various aspects of Healthcare Industry. After the successful completion of the course student will be familiar with the scope and functions of Health Care Management |

| Course Outcomes (COs) | | Mapping |
|------------------------------|---|--------------------------|
| CO1 | Learn concepts and theories in health care management; | Skill Enhancement |
| CO2 | Develop skills in using materials tools and/or technology central to health care mgt; | Skill Enhancement |
| CO3 | Develop the basic understanding of sectoral coordination in hospital management | Employability |
| CO4 | Distinguish between managing in a health care environment versus any other business setting | Employability |

SECTION A

Structuring of Health Care sector

- as per the service provider(Government hospitals, Private hospitals, hospitals run by NGOs).
- as per the services being provided (Primary, Secondary, Tertiary & Preventive).
- as per the size of Hospitals (Sub Centre, Primary health care centre, community health care, district hospitals and teaching institutions)
- Health Care Scenario- statistics of industry
- Present opportunities and Challenges in Health Care Management; worldwide scenario.

SECTION B

Overview of Human Resource Management in HealthCare, Manpower in Health Care Management

SECTION C

Quality and regulations in Health Care: Quality in Health Care Management, Regulation in Health Care Management

SECTION D

Financing in Health Care: Accounts, Stores, Purchases, Fundraising and Analysis

Text Books:

1. Healey, B J and Evans T M (2021). Introduction to Health Care Services: Foundations and Challenges, Wiley Publications.
2. DeLae R (2020), Introduction to Health Care & Careers, Jones & Bartlett Learning books

References:

1. Buchbinde S B. (2022), Healthcare Management –with access, Jones & Bartlett Publishers
2. Buttigieg, S (2021) , International Best Practices in Health Care Management , Emerald Group Publishing Ltd

| Course s Code | Courses | Course Outcom es | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PS | PS |
|---------------------|------------------------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | O1 | O2 |
| MCH 110B | Introduction to HCM | CO1 | 3 | 2 | 2 | 2 | 2 | 2 | X | X | X | X | 2 | X | 2 | 2 |
| | | CO2 | X | 3 | 2 | 2 | 2 | 2 | X | 2 | X | X | X | 2 | 2 | 3 |
| | | CO3 | 3 | X | 2 | 2 | 3 | 2 | 2 | 2 | 2 | X | 2 | 2 | X | 2 |
| | | CO4 | X | 2 | 2 | 3 | 2 | 2 | 2 | X | 2 | X | 2 | 2 | 2 | X |

| | |
|-------------------|--|
| Course Title/Code | PRINCIPLES OF MANUFACTURING/ MCH111B |
| Course Type: | Core (Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | This course will introduce to the basic knowledge of various aspects of manufacturing. After the successful completion of the course student will be familiar with the scope and functions of manufacturing. |

| Course Outcomes (COs) | | Mapping |
|------------------------------|---|--------------------------|
| CO1 | Learn concepts and theories in health care management; | Skill Enhancement |
| CO2 | Develop skills in using materials tools and/or technology central to health care mgt; | Skill Enhancement |
| CO3 | Develop the basic understanding of sectoral coordination in hospital management | Skill Enhancement |
| CO4 | Explain the latest trends of Advanced manufacturing system and other relevant areas | Skill Enhancement |

Section A

Overview of Manufacturing: Define manufacturing and describe how it is used to solve problems. Research the five general steps of manufacturing (preparation, processing, assembly, finishing, and packaging). Research the history of manufacturing. Summarize its evolution from the Industrial Age to the rise of mechanization and automation in the manufacturing industry

Section B

Quality Assurance and Continuous Improvement: research the three basic types of data that are important to controlling the manufacturing of a product: product output data, quality control data,

and labor data. Examine common statistical processes to analyze data. As a class, develop standard procedures for analysis to apply to manufacturing projects throughout the course and program of study.

Section C

Unit Process Variation and Control: Modeling and controlling temporal and spatial variation in unit processes, Factory Level System Variation and Control: Modeling and controlling flows in manufacturing systems with stochastic elements and inputs; Supply Chain – System Variation and Control: How to operate and design optimal manufacturing-centered supply chains

Section D

Latest Trends in Advanced Manufacturing: Explore a range of new and emerging trends in advanced manufacturing. A trend could be the change in the types of skills needed in manufacturing, the use of computers, or the use of advanced materials in recent years. Examples include the following: a. Process control b. Materials design, synthesis, and processing c. Digital manufacturing technologies d. Sustainable manufacturing e. Flexible electronics manufacturing and f. Additive manufacturing. Research one or more of these trends in depth, and compile, review, and revise a presentation or a paper explaining both the technical aspects involved and the effects on businesses, workers, and society.; Business Flows: Understanding the uses and flow of business information to start up, scale up and operate a manufacturing facility.

Text Books :

1. Dittmann J P (2012), Supply Chain Transformation: Building and Executing an Integrated Supply Chain Strategy, McGraw-Hill

Reference Books :

1. Fehrenbach, P (2016), The 12 Principles of Manufacturing Excellence: A Leader’s Guide to Achieving and Sustaining Excellence Larry E. Fast Productivity Press
2. The Toyota Way to Lean Leadership (2017): Achieving and Sustaining Excellence through Leadership Development, Jeffrey Liker, Gary Convis McGraw-Hill

| Course s Code | Courses | Course Outcom es | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PS | PS |
|------------------|-------------------------------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | O1 | O2 |
| MCH11 B | Principal of Manufacturing | CO1 | 3 | 2 | 2 | 2 | X | 3 | 1 | X | 1 | 1 | 2 | X | 3 | 3 |
| | | CO2 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 1 | 1 | X | 3 | 2 | 3 | 2 |
| | | CO3 | 3 | 3 | 2 | 2 | X | 2 | 2 | 2 | X | 1 | 3 | 2 | 3 | 3 |
| | | CO4 | 3 | 3 | 3 | 3 | 1 | 2 | 3 | 2 | 1 | X | 3 | 1 | 3 | 2 |

| | |
|--------------------------|---|
| Course Title/Code | INTRODUCTION TO BUSINESS ANALYTICS/MCH129B |
| Course Type: | ELECTIVE |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Course Objectives | By the end of the course, a student should be able to Understanding the Role of Business Analyst in business. |
| Credit | 3 |

| Course Outcomes (COs) | | Mapping |
|-------------------------------|---|--------------------------|
| CO1 | Understand the basics of business analytics and data management and data handling | Skill Enhancement |
| CO2 | Understand data warehousing & data mining concept and its techniques | Skill Enhancement |
| CO3 | Understand the applications of machine learning & Big data concept | Skill Enhancement |
| CO4 | Understand the application of business analysis in different Domain | Skill Enhancement |
| Prerequisites (if any) | | |

SECTION – A

Foundations of Analytics: Introduction of Business Analytics, its evolution, Scope & Usage in Business. Popular tools used for Analytics. Career in Business Analytics

Data: - Types of data & Data Classification, Data collection, Data management, Sources of data. Data quality, dealing with missing or incomplete data. Data Visualization - Dashboards and reporting.

SECTION B

Data Warehouse: Data warehouse- concept, definitions, purpose and applications, Data marts & Metadata; On-line analytical processing (OLAP) – concept and its applications.

Data Mining: Introduction to data mining, origins of Data mining, Tasks of data mining, Multidimensional data analysis, Concepts of association and cluster analysis.

SECTION C

Data Science, Machine learning – history and evolution, AI Evolution, Statistics vs. data mining Vs data analytics Vs data science. Supervised and unsupervised learning.

Big Data: Big Data and its importance, Industry Examples of Big Data, Big Data Technology; Hadoop.

SECTION D

Application of Analytics: Retail Analytics, Marketing Analytics, Financial Analytics Human Resource Analytics, Healthcare Analytics, and Supply chain Analytics

Text Books:

1. Bhimasankaram, P and Sridhar, S(2019) Essentials of Business Analytics: An Introduction to the methodology and its application, Springer.
2. Müller, A C and Guido, S (2016),Introduction to Machine Learning with Python: A Guide for Data Scientists 1st Edition, O'Reilly
3. Iguar, L and Seguí S.(2017) Introduction to Data Science, Springer
4. Prasad R N and Acharya, S. (2011), Fundamentals of Business Analytics, Wiley

References:

1. Camm, J.D. et al. (2015) . Essentials of Business Analytics. Cengage Learning
2. Ger Koole (2019), An Introduction to Business Analytics, Lulu.com
3. Evans, J.R. (2017). Business Analytics. Pearson Publishing
4. Minelli, M.et al. (2014). Big Data, Big Analytics. John Wiley & Sons.
5. Michael J. A. Berry and Gordon S. Linoff (2004). Data Mining Techniques for marketing, Sales and CRM, John Wiley & Sons.
6. R.N.Prasad and Seema Acharya (2016). Fundamentals of Business Analytics, John Wiley & Sons

| Course s Code | Courses | Course Outcom es | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PS | PS |
|------------------|--|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | O1 | O2 |
| MCH1 29B | Introduction to Business Analytics | CO1 | 1 | X | 3 | 2 | 2 | 3 | 1 | 1 | X | 1 | 1 | 1 | 2 | 2 |
| | | CO2 | X | 1 | 2 | 3 | 3 | 2 | X | 1 | 1 | 1 | 2 | 2 | 2 | 2 |
| | | CO3 | 1 | 1 | 3 | 2 | 3 | 3 | 1 | X | 1 | X | 1 | 3 | 2 | 3 |
| | | CO4 | 2 | X | 3 | 3 | 3 | 3 | 1 | 1 | 1 | 1 | 2 | 3 | 2 | 3 |

| | |
|--------------------------|---|
| Course Title/Code | Python Programming/ MCH133B |
| Course Type: | Elective |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | The purpose of this course is to help students gain much needed knowledge pertaining to Python Programming, to prepare them for the advanced modules such as ML. Python scripting is user friendly and is the most used language in industry when it comes to designing and scripting applications with respect to Emerging Technologies. |

| Course Outcomes (COs) | | Mapping |
|------------------------------|---|--------------------------|
| CO1 | To impart understanding of why python is a useful scripting language. | Skill Enhancement |
| CO2 | To impart understanding of Types, Operators and Expressions of python | Skill Enhancement |
| CO3 | To impart understanding of decision control, Data structures and Control flow for implementing python programs. | Skill Enhancement |
| CO4 | To impart the knowledge of OOP and Exception handling in python. | Employability |

Section -A

Introduction History of Python, Need of Python Programming, Applications Basics of Python Programming Using the REPL(Shell), Running Python Scripts, Variables, Assignment, Keywords, Input Output, Indentation

Types, Operators and Expressions Types – Integers, Strings, Booleans; Operators- Arithmetic Operators, Comparison (Relational) Operators, Assignment Operators, Logical Operators, Bitwise Operators, Membership Operators, Identity Operators, Expressions.

Section -B

Data Structures and Control Flow Lists, Operations, Slicing, Methods, Tuples, Sets, Dictionaries, Sequences, Comprehensions, Conditional blocks using If, Else and El-if, For Loop, for loop using Ranges, String, list and Dictionaries, While Loop, Loop Manipulation using Pass, Continue, Break and Else, Conditional and Loops Block.

Section -C

Functions Modules and Packages Defining Functions, Calling Functions, Passing Arguments, Keyword Arguments, Default Arguments, Variable-length arguments, Anonymous Functions, Function Returning Values, Scope of the Variables in a Function – Global and Local Variables. Creating modules, Name Spacing, Introduction to PIP, Installing Packages via PIP, Using Python Packages

Section -D

Object Oriented Programming & Exception Handling Classes, Self-Variable, Methods, Constructor Method, Inheritance, Overriding Methods, Data Hiding, Difference between an Error and Exception, Handling Exception, Try Except Block, Raising Exceptions, and User Defined Exceptions.

Text Books

1. Muller A(2016).Introduction to Machine Learning with Python: A Guide for Data Scientists.Shroff Publishers & Distributors Pvt. Ltd
2. Motwani B(2020).Data Analytics using Python.Wiley India Pvt Ltd
3. Pradhan M & Dinesh K U(2020) .Machine Learning using Python.Wiley India Pvt Ltd

References:

1. R. N. R. (2008, February 1). Core Java: An Integrated Approach: Covers
2. Hearty J(2016).Advanced Machine Learning with Python, Packt.
3. VanderPlas J(2016).Python Data Science Handbook: Essential Tools for Working with Data, O'Reilly.
4. Lutz M(2010).Programming Python.O'Reilly.
5. Hall T and Stacey J P (2009).Python 3 for Absolute Beginners, Apress

| Course s Code | Courses | Course Outcom es | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PS | PS |
|------------------|-----------------------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | O1 | O2 |
| MCH24 4B | Python Programming | CO1 | 3 | 2 | 3 | 3 | 2 | 2 | 1 | X | X | X | X | 3 | 3 | 3 |
| | | CO2 | 3 | 2 | 3 | 3 | 2 | 1 | 2 | X | X | 1 | 1 | 3 | 2 | 3 |
| | | CO3 | 3 | 2 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 |
| | | CO4 | 3 | 2 | 3 | 3 | 2 | 1 | 2 | 1 | 1 | X | X | 3 | 2 | 3 |

| SEMESTER - 2 | | | | | | | | | |
|----------------------|---------------------------------------|---------------------|--|---|---|---|---|-------------------------------|----------------|
| SUBJECT CODES | SUBJECT NAME | OFFERING DEPARTMENT | *COURSE NATURE (Hard/Soft/Workshop/NTCC) | COURSE TYPE (Core/Elective/University Compulsory) | L | T | P | NO. OF CONTACT HOURS PER WEEK | NO. OF CREDITS |
| MCH113B | MACRO ECONOMICS | DMC | HARD | CORE | 3 | 0 | 0 | 3 | 3 |
| MCH114B | HUMAN RESOURCE MANAGEMENT | DMC | HARD | CORE | 3 | 0 | 0 | 3 | 3 |
| MCH115B | FINANCIAL MANAGEMENT | DMC | HARD | CORE | 3 | 0 | 0 | 3 | 3 |
| CSW105B | ADVANCED EXCEL | CST | WORKSHOP | CORE | 0 | 0 | 3 | 3 | 1.5 |
| CDO101B | PROFESSIONAL DEVELOPMENT PROGRAMME II | CDC | SOFT | UC | 1 | 0 | 1 | 2 | 0 |
| ELECTIVE | | | | | | | | | |
| FINANCE AND ACCOUNTS | | | | | | | | | |
| MCH122B | COST ACCOUNTING | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| EDH147 | BUSINESS COMMUNICATION SKILLS- II | EDU | HARD | CORE | 3 | 0 | 0 | 3 | 3 |

| | | | | | | | | | | |
|--|---|-----|------|----------|---|---|---|---|---|--|
| MCH213 B | INDUSTRY PROJECT (TO BE EVALUATED IN 3 SEM) | DMC | | | | | | | | |
| | | | NTCC | CORE | 0 | 0 | 4 | 4 | 2 | |
| Entrepreneurship & Family Business Specialization | | | | | | | | | | |
| MCH123B | FUNDAMENTALS OF DESIGN THINKING & VENTURE CREATION | DMC | | ELECTIVE | | | | | | |
| | | | HARD | | 3 | 0 | 0 | 3 | 3 | |
| MCH124B | INTRODUCTION TO FAMILY BUSINESS MANAGEMENT | DMC | | ELECTIVE | | | | | | |
| | | | HARD | | 3 | 0 | 0 | 3 | 3 | |
| EDH147 | BUSINESS COMMUNICATION SKILLS- II | EDU | | | | | | | | |
| | | | HARD | CORE | 3 | 0 | 0 | 3 | 3 | |
| MCH213 B | INDUSTRY PROJECT (TO BE EVALUATED IN 3 SEM) | DMC | | | | | | | | |
| | | | NTCC | CORE | 0 | 0 | 4 | 4 | 2 | |
| Health Care Management Specialization | | | | | | | | | | |
| EDH147 | BUSINESS COMMUNICATION SKILLS- II | EDU | | | | | | | | |
| | | | HARD | CORE | 3 | 0 | 0 | 3 | 3 | |
| MCH119B | FINANCING & BUSINESS DEVELOPMENT OF HOSPITALS | DMC | | | | | | 3 | 3 | |
| | | | HARD | ELECTIVE | 3 | 0 | 0 | | | |
| MCH126B | HEALTHCARE COMMUNICATION | DMC | | | | | | 3 | 3 | |
| | | | HARD | ELECTIVE | 3 | 0 | 0 | | | |
| MCH127B | HEALTHCARE ECONOMICS | DMC | | | | | | 3 | 3 | |
| | | | HARD | ELECTIVE | 3 | 0 | 0 | | | |

| | | | | | | | | | | |
|--|---|-----|--|------|----------|---|---|---|---|---|
| MCH213 B | INDUSTRY PROJECT (TO BE EVALUATED IN 3 SEM) | DMC | | NTCC | CORE | 0 | 0 | 4 | 4 | 2 |
| Operations Management | | | | | | | | | | |
| MCH117B | FUNDAMENTALS OF LOGISTICS | ME | | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| MCH213B | INDUSTRY PROJECT (TO BE EVALUATED IN 3 SEM) | DMC | | NTCC | CORE | 0 | 0 | 4 | 4 | 2 |
| Business Analytics Specialization | | | | | | | | | | |
| EDH147 | BUSINESS COMMUNICATION SKILLS- II | EDU | | HARD | CORE | 3 | 0 | 0 | 3 | 3 |
| MCH132B | Descriptive Analytics | DMC | | HARD | ELECTIVE | 2 | 0 | 2 | 4 | 3 |
| MCH121B | SUMMER TRAINING (TO BE EVALUATED IN III SEM) | DMC | | SOFT | CORE | 0 | 0 | 4 | 4 | 2 |
| COURSES ARE OPTED DEPENDING UPON THE SPECIALIZATION CHOSEN BY THE STUDENT | | | | | | | | | | |

BBA- Second Semester

| | |
|-------------------|--|
| Course Title/Code | MACRO ECONOMICS/MCH113B |
| Course Type: | Core |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | The Macroeconomics course is designed to provide students with a unified frame work that can be used to analyze macroeconomic issues such as national income concepts, Money Supply, Inflation, National Income determination, International aspects of Macroeconomics and macroeconomic policies. |

| Course Outcomes (COs) | | Mapping |
|------------------------------|--|--------------------------|
| CO1 | Students will be able to explain the concepts of gross domestic product, inflation and unemployment, and how they are measured. | Skill Enhancement |
| CO2 | Students will be able to explain the circular flow model and use the concepts of aggregate demand and aggregate supply to analyze the response of the economy to disturbances. | Employability |
| CO3 | Students will be able to describe the determinants of the demand for money, the supply of money and interest rates and the role of financial institutions in the economy. | Employability |
| CO4 | Students will be able to define fiscal and monetary policies and how these affect the economy. | Employability |

SECTION A

Macroeconomics: meaning, nature and scope, the circular flow Models of the Economy, National Income: Concepts, measurements, difficulties and importance.

SECTION B

Money – Its functions and Role, Quantity theory of Money, Keynesian view about money and price; Inflation – Meaning, Measures and Effects; Theories of Inflation

SECTION C

Theory of Income and Employment – The classical theory of Output and Employment, Keynesian Theory of Income and Employment, Four sector model of income determination in an open Economy

SECTION D

Balance of Payments: Meaning and Assessment, Disequilibrium and Adjustments, Macroeconomic Policy: Meaning, Objectives and Formulation, Monetary Policy and Fiscal Policy

Text Books:

1. Samuelson, P. A., Nordhaus, W. D., & Chaudhuri, S. (2021). *Macroeconomic*. McGraw-Hill's. HL, Ahuja. Macroeconomics Theory and Policy S Chand 20/e
2. Dwivedi, D N. (2015). *Macro Economics*. McGraw Hill Education.

Econtent: Swayam Prabha IIT Madras by Dr Aparna Samudra

https://www.youtube.com/playlist?list=PLJoALJA_KMOAmMz0AfqOnihbseYRCWnD-

References:

1. D'Souza, E. (2012). *Macro Economic*. Pearson Education.
2. Aggarwal, (2010). *Macroeconomics Theory and Polic*. Pearson Education.
3. Mishra., & Puri. (2017). *Modern Macro-Economic Theory*. Himalaya Publishing House. 17th edition.

| Course s Code | Courses | Course Outcom es | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PS | PS |
|------------------|--------------------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | O1 | O2 |
| MCH1 13B | MACRO ECONOMICS | CO1 | 3 | X | 3 | 2 | 2 | 2 | 1 | 3 | 2 | 2 | 2 | 3 | 3 | 3 |
| | | CO2 | 3 | 1 | 3 | 2 | 2 | 2 | X | 3 | 1 | X | 2 | 2 | 3 | 3 |
| | | CO3 | 3 | X | 2 | 2 | 2 | X | 1 | 3 | 1 | 1 | 2 | 2 | 3 | 3 |
| | | CO4 | 3 | 1 | 2 | 2 | 2 | 3 | 2 | 3 | X | 1 | 2 | 2 | 3 | 3 |

| | |
|-------------------|---|
| Course Title/Code | HUMAN RESOURCE MANAGEMENT /MCH114B |
| Course Type: | Core |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | The objective of the course is to familiarize students with the different aspects of managing Human Resources in the organization through the phases of acquisition, development and retention. |

| Course Outcomes (COs) | | Mapping |
|-------------------------------|--|--------------------------|
| CO1 | To develop the understanding of the concept of human resource management and to understand its relevance in organizations. | Skill Enhancement |
| CO2 | To develop necessary skill set for application of various HR issues. | Skill Enhancement |
| CO3 | To analyse the strategic issues and strategies required to select and develop manpower resources. | Employability |
| CO4 | To analyse the strategic issues and strategies required to select and develop manpower resources. | Skill Enhancement |
| Prerequisites (if any) | | |

SECTION A

Introduction: Concept, nature, scope, objectives and importance of HRM; Evolution of HRM; Environment of HRM; Personnel Management v/s HRM. **Acquisition of Human Resources:** HR Planning; Job analysis – job description and job specification; recruitment – sources and process; selection process – tests and interviews; placement and induction. Job changes – transfers, promotions/demotions, separations

SECTION B

Training and Development: Concept and importance of training; types of training; methods of training; design of training program; evaluation of training effectiveness; executive development – process and techniques; career planning and development

SECTION C

Performance Appraisal: Performance appraisal – concept and objectives; traditional and modern methods, limitations of performance appraisal methods.

SECTION D

Compensation and Maintenance: Compensation: job evaluation – concept, process and significance; components of employee remuneration – base and supplementary; maintenance: overview of employee welfare, health and safety, social security.

Text Books :

1. Aswathappa, K.(2003). Human Resource and Personnel Management (Text and Cases), Tata McGraw Hill Publishing Company, New Delhi.
2. Dessler, G and Varrkey B.(2017). Human Resource Management, 15th ed, Prentice Hall.

Reference Books :

1. Flippo, Edwin B. (1984), Personnel Management, (Mc Graw-Hill International Editions): Management Series.
2. Cenzo, D A. & Robbin, S P (2019), Personnel Human Resource Management, 7thed, Prentice Hall of India.
3. Rao, V, S, P. (2004). Human Resource Management. D, Cenzo, David, A. & Stephen, P.

| Course s Code | Courses | Course Outcom es | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PS | PSO | |
|------------------|-------------------------------------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|---|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | O1 | 2 | |
| MCH1 14B | HUMAN RESOURCE MANAGEME NT | CO1 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | X | 1 | 2 | 2 |
| | | CO2 | 3 | 3 | 2 | 3 | 3 | 1 | 3 | 3 | 3 | 3 | 2 | 1 | X | 2 | 2 |
| | | CO3 | 3 | 3 | 2 | 3 | 3 | X | 3 | 3 | 3 | 3 | 2 | 1 | 1 | 2 | 2 |
| | | CO4 | 3 | 3 | 2 | X | 3 | 3 | 3 | 3 | 3 | 3 | 2 | X | 1 | 2 | 2 |

| | |
|-------------------|--|
| Course Title/Code | FINANCIAL MANAGEMENT/MCH115B |
| Course Type: | Core (Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | Every decision that a firm makes has a finance component to it. Thus, finance includes all of a firm's decision that has financial implications. It broadly includes Investment Decisions, Financing Decisions & Management of Current Assets Decisions. These decisions, of course, have the implications on the firms' market/share value. |

| Course Outcomes (COs) | | Mapping |
|------------------------------|--|--------------------------|
| CO1 | To acquaint the students with the fundamental concepts of Financial Management & Time Value of Money | Skill Enhancement |
| CO2 | To enable students to take decisions using Capital Budgeting techniques | Employability |
| CO3 | To enable students to understand and apply concepts of working capital management | Employability |
| CO4 | To enable students to analyze and apply the concepts of firm's value, capital structure theories, dividend policy decisions. | Skill Enhancement |

SECTION A

Overview, Time Value of Money; Overview of financial management – Introduction to finance, Cost of Capital :Cost of debt, equity, preference shares, determining the proportions, weighted average cost of capital, determining the optimal capital budget, Case Analysis

SECTION B

Capital budgeting process, Project classification, Investment criteria, Net present value, Benefit cost, ratio, Internal rate of return, Payback period, Discounted payback period, Accounting rate of

return, Case Analysis

SECTION C

Working capital Management: Inventory management; Cash management, Credit management

SECTION D

Capital Structure and Dividend Policy, Leverages: Operating, Financial, Combined, Capital structure: Traditional position, Net income approach, Net operating income approach, , Modigliani and Miller position, ROI-ROE Analysis, EBIT-EPS analysis, Dividend Policy: Traditional Position, Walter Model, Gordon Model, MM Position, Determinants of Dividend Policy

Text Books:

1. Jonathan B(2017).Financial Managemen.Pengui
2. Pandey I M(2015).Financial Managemen.Vikas
3. Chandra P(2018).Financial Managemen theory and practices. McGraw Hill Pvt. Ltd

References:

1. Prasanna, C.(2017). Fundamentals of Financial Management. 6e, McGraw Hill Pvt. Ltd.
2. Ross, S A.,Randolph W. and Jordan, B, D(2022). Essentials of Corporate Finance: SIE, 11thed, McGraw Hill Education.

| Course s Code | Courses | Course Outcom es | PO | | | | | | | | | | | | | | PS | |
|------------------|-----------------------------|------------------------|----|---|---|---|---|---|---|---|---|----|----|----|----|----|----|--|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | O1 | O2 | | |
| MCH1 15B | FINANCIAL MANAGEME NT | CO1 | 3 | 1 | 3 | 3 | 1 | 3 | 2 | 1 | 2 | 2 | 3 | 2 | 3 | 3 | | |
| | | CO2 | 3 | 1 | 3 | 3 | 1 | 3 | X | X | 1 | 1 | 2 | 2 | 3 | 3 | | |
| | | CO3 | 3 | X | 3 | 2 | X | 3 | 2 | 1 | 1 | X | 1 | 2 | 3 | 3 | | |
| | | CO4 | 3 | 1 | 3 | 3 | 1 | 3 | 1 | X | 1 | 1 | 1 | 2 | 3 | 3 | | |

| | |
|-------------------|--------------------------------|
| Course Title/Code | ADVANCED EXCEL/ CSW105B |
| Course Type: | Core |
| Course Nature: | Workshop |

| | |
|-------------------|---|
| L-T-PStructure | 0-0-3 |
| Credit | 1.5 |
| Course Objectives | At the end of this course, students will be able to understand the basic and advanced functions in Excel for business activities. |

| Course Outcomes (COs) | | Mapping |
|------------------------------|--|--------------------------|
| CO1 | Acquire knowledge of multiple styles and different data formats in excel. | Skill Enhancement |
| CO2 | Understand Excel IDE and improve productivity and efficiency | Skill Enhancement |
| CO3 | Use various functionalities of Excel to perform the most complex calculations with ease. | Skill Enhancement |
| CO4 | Manipulate large amounts of data with minimal requirements of time. | Employability |

SECTION-A

Introduction to Excel: Excel Introduction, Understanding Workbooks and Worksheets, Introducing the Ribbon, Using Shortcut Menus, Working with Dialog Boxes, Using the Task Pane, Creating Excel Worksheet, Entering and Editing Worksheet Data, Essential Worksheet Operations.

SECTION-B

Advanced Excel

: Working with Cells and Ranges, Introducing Tables, Worksheet Formatting, Using Custom Number Formats, Understanding Excel Files, Using and Creating Templates, Printing Your Work, Working with

Dates and Times, Introducing Formulas and Functions, Creating Formulas That Count and Sum, Creating Formulas That Look Up Values

SECTION-C

Creating Formulas for Financial Applications, Introducing Array Formulas, Visualizing Data Using Conditional Formatting, Using Data Validation, Creating Charts and Graphics 04 Understanding How Excel Handles Charts, Understanding Chart Types, Understanding Chart Elements, Modifying the Chart Area, Modifying the Plot Area, Working with Chart Titles, Working with a Legend

SECTION-D

Working with Gridlines, Working with Data Series, Creating Chart Templates, Analyzing Data with Excel 04 Introducing Pivot Tables, Analyzing Data with Pivot Tables, Understanding Slicers and Slicer properties

Text books:

1. Murray A. (2022). Advanced Excel Formulas: Apress.
2. Lalwani,L.(2019). excel 2019 All-in-one: bpb.

References:

1. Walkenbach, J. (2013). Excel 2013 Bible. Wiley.
2. Michaloudis, J and Hong, B.(2022). 101 Most Popular Excel Formulas (101 Excel). My Excel Online

Excel LAB

SECTION A

Introduction to Excel : Excel Introduction· Basic formulae: Entering and editing data, Creating and copying formulae, Creating· functions easily Formatting: Inserting/deleting rows/columns, Changing fonts, Colors and borders,· Merging and aligning cells Printing: Page break preview, Using page layout view, Headers and footers, Freezing· print titles Charts: Selecting data, Quick ways to create charts, Formatting your chart· Basic tables: Table styles, Using calculated columns, Header rows and total rows· Case Exercises/ Practical Assignments/Activities

SECTION B

Advanced Excel : Sorting and filtering lists/tables of data, custom sort· Number formatting: Creating custom formats, The four parts of a format, Scaling· numbers Dates and times: How dates and times are stored, Useful date/time functions,· Formatting dates and times , Conditional formatting: Creating/using cell rules, Data bars and colour sets, Styles· and themes, How themes work, Using the default styles, Creating custom styles Validation and protection: Setting cell validation, Protecting cells/worksheets,· Grouping and outlining, Cell comments Range names and absolute references: Absolute references (\$ symbol), Fixing only· the row/column, Creating range names, Labelling ranges automatically, Case Exercises/ Practical Assignments/Activities

SECTION C

Advanced Excel: Excel Functions: Introduction to Mathematical Functions, Introduction to Text· Functions, Introduction to Logical & Reference Functions, Introduction to Date & Time Functions, Introduction to Financial Functions, Introduction to Information Functions IF and LOOKUP functions: The conditional (IF) function, Nested Ifs, Lookup· functions Case Exercises/ Practical Assignments/Activities

SECTION D

Tables and Charts : Advanced Tables, Using calculated columns, Removing duplicates, Advanced filter· Pivot tables: Creating pivot tables, Swapping rows, columns and pages, Grouping· fields Slicers, Pivot table slicers, Changing slicer properties· Advanced charts, Creating chart templates, Combination charts, Picture charts,· Custom chart types, Case Exercises/ Practical Assignments/Activities

Text Books:

1. Murray A. (2022). Advanced Excel Formulas: Apress.
2. Arora, R. (2023). Mastering. Advanced Excel: bpb
3. Lalwani, L. (2019). excel 2019 All-in-one. bpb.

References:

1. Walkenbach, J. (2013). Excel 2013 Bible: Wiley.
2. Walkenbach, J.(2013). Excel 2013 Power Programming with VBA: Wiley.
3. Robert, J. (2022).Green Excel 2022. Independently published.

| Course s Code | Courses | Course Outcom es | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PS | PS |
|------------------|-------------------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | O1 | O2 |
| CSW105 B | ADVANCED EXCEL | CO1 | 2 | 1 | 3 | 3 | 3 | 1 | 1 | 2 | 2 | 1 | 1 | 2 | 2 | 2 |
| | | CO2 | 2 | 2 | 3 | 3 | 2 | X | 2 | 1 | 2 | 2 | X | 2 | 3 | 3 |
| | | CO3 | 2 | X | 2 | 3 | 2 | 1 | 2 | X | 1 | 2 | 2 | 3 | 3 | 3 |
| | | CO4 | 3 | 1 | 3 | 3 | 3 | X | 1 | 2 | 2 | 1 | 1 | 3 | 2 | 3 |

| | |
|-------------------|--|
| Course Title/Code | COST ACCOUNTING /MCH122B |
| Course Type: | Core(Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | Understanding of basic concepts, analyses, uses and procedures of various cost and management accounting techniques. |

| Course Outcomes (Cos) | | Mapping |
|-----------------------|--|--------------------------|
| CO1 | To prepare learners to understand the Scope of Cost Accounting in any business activity. | Employability |
| CO2 | To learn the Cost Accounting treatment in relation to Material Cost Accounting, employee cost and overheads. | Skill Enhancement |
| CO3 | To enable the students to take decisions using cost accounting tools and techniques. | Skill Enhancement |
| CO4 | To gain knowledge about the reconciliation process and cost audit. | Employability |

SECTION A

Cost and Variance Measures: Comparison of expected results (budgets) to actual outcomes; Determine variances; Calculation and analysis of variances; Flexible budgets to analyze performance & management by exception; Standard cost systems – Flexible Budget & Variance Analysis, and Sales Volume Variance Analysis

Responsibility Centers & Reporting Segments: Types of responsibility centers; contribution and segment reporting; transfer pricing models; reporting of organizational segments

Performance Measures: Product Profitability Analysis; Business unit Profitability Analysis & Customer Profitability Analysis; Return on Investment (ROI); Residual Income (RI); RI vs. ROI; Balanced Scorecard; Performance Measures and Reporting Mechanisms

SECTION B

Measurement Concepts: Define and classify costs to understand how they can be used to measure performance; Manufacturing Costs, Cost Drivers & Pre-determined Overhead Rate; Cost Flows: COGM → COGS; Types of Costs – Actual, Normal, and Standard Costing, Fixed & Variable Costs, Absorption & Variable Costing, and Joint Product Costing and By-Product Costing

Costing System: Job order vs. Process costing; Activity-based costing; Life-cycle costing; Operation costing, and Backflush costing

Overhead Costs: Fixed and variable overhead expenses; Plant-wide, departmental, and ABC overhead costing; Allocation of service department costs

Supply Chain Management: Material requirements planning; Just-in-time manufacturing; Outsourcing;

Theory of constraints; Capacity concepts; Other production management theories
Business Process Performance: Value chain analysis; Value-added concepts and quality; Process analysis;
Benchmarking; Activity-based management; Continuous improvement (Kaizen) concepts; Best practice
analysis; Cost of quality analysis.

SECTION C

Basic Financial Statement Analysis: Common-size financial statements; Trend analysis and
review the growth rates of the various elements of the financial statement; Statement of cash
flows

Financial Performance Metrics: Financial Ratios; Working capital analysis – Liquidity/solvency ratios
and Capital structure analysis , Profitability Analysis: Earnings per Share; Sustainable Equity Growth;
Return on Capital Investment; Revenue Analysis; Income measurement Analysis and Limitations of Ratio
Analysis

Special Issues: Differences in accounting measurement; Economic complexities – inflation and foreign
currency transactions; Economic profit and accounting profits; Earnings quality; Effects of changing
prices and inflation; Fair value standards; Accounting for foreign currency and Differences in financial
results: IFRS vs. GAAP

SECTION D

Cost/Volume Profit Analysis: Fixed & Variable Costs; CVP Analysis (Break-even Analysis); Income
Taxes and CVP Analysis; Sensitivity Analysis and CVP and Analysis of multiple products

Marginal Analysis: Special Orders and Pricing; Make vs. Buy; Sell or Process further; Add or drop a
segment; Income Taxes and Marginal Analysis

Pricing: Setting Prices; Market-based Pricing; Cost-based Pricing & Target pricing; Laws of demand and
demand curve; Law of supply and supply curve; Market equilibrium and Price elasticity of demand

Text Books:

1. Arora M N. (2022). Methods & Techniques of Cost Accounting. Vikas Publishing House,
2. Jain, S P and arang, K L. (2022). Cost Accounting – Principles and Practices. Kalyani Publisher.
3. Tulsian, P.C, and , Tulsian, B(2022). Tulsian's Management Accounting- A self study Text Book, S. Chand
Publication.

References:

1. Wiley, John, & Sons. (2022). Wiley CMA excel A System Exam Review, Part 1.
2. Wiley, John, & Sons. (2021) Financial Decision Making. Wiley CMA excel Learning System
Exam Review, Part 2.
3. Steven, B M (2022). Cost Accounting Fundamentals. Essential concepts and examples.
AccountingTools.

| Course s Code | Courses | Course Outco m es | P | P | P | P | P | P | P | P | P | P | P | P | P | PS | PS |
|---------------|-----------------|-------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|----|----|----|
| | | | O 1 | O 2 | O 3 | O 4 | O 5 | O 6 | O 7 | O 8 | O 9 | O 10 | O 11 | O 12 | O1 | O2 | |
| MCH122 B | COST ACCOUNTING | CO1 | 3 | 2 | 3 | 3 | 2 | X | 2 | 1 | X | 2 | 3 | 3 | 3 | 3 | 3 |
| | | CO2 | X | 2 | 2 | 3 | 2 | 2 | 2 | X | 1 | 2 | 3 | 3 | 3 | 3 | 3 |
| | | CO3 | 3 | 2 | 3 | 3 | 2 | 1 | 2 | 1 | 2 | X | 3 | 3 | 3 | 3 | 3 |
| | | CO4 | 3 | 2 | 3 | 3 | 2 | X | 2 | 2 | 1 | 1 | 3 | 3 | 3 | 3 | 3 |

| | |
|-------------------|---|
| Course Title/Code | BUSINESS COMMUNICATION SKILLS II/ EDH147 |
| Course Type: | Core |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |

| | |
|-------------------|---|
| Course Objectives | To develop the skills of the professional undergraduate students for proper self-expression, social communication, spoken English, correct pronunciation, voice modulation and business etiquettes. |
|-------------------|---|

| Course Outcomes (COs) | | Mapping |
|-----------------------|--|--------------------------|
| CO1 | Develop communication knowledge and skills and will enhance their abilities to be effective in leadership and team roles. | Skill Enhancement |
| CO2 | Demonstrate written communication skills appropriate for business situations. | Skill Enhancement |
| CO3 | Gain confidence through individual and group exercises in physical and emotional awareness, improvisational skills, scene study, character creation and voice. | Skill Enhancement |
| CO4 | Recognize their ethical responsibilities towards their community, society, discipline, and profession based on various perspectives and associated standards of ethical communication. | Skill Enhancement |

SECTION-A

Meaning; Nature; Key functions of leadership styles; Responsibilities of a Leader; Qualities of a Good Leader; Role of Communication in Delegating Responsibilities; Setting aside personal desires; Importance of Communication in Building Teams ; Leadership in Groups/Teams, Organizations, & the Public Sphere; Cultural Differences in Leadership; Leadership Communication & Ethics; Leadership Development; Creativity and Communication: Importance of Public Speaking and on Special Occasions; Qualities of a Good Speaker; Importance of Body Language; Using Humour and Wit; Structure of a Good Speech; Speaker's Credibility; Tips for Building Credibility; Grammar and Vocabulary: One- Word Substitution, Question Tags

SECTION-B

Theatre and Communication

Public Communication: Orality and performance (speech, visual effects and body language – observation & enactment), Communication as Self-Expression: Writing a Script; Devising a Message; Performing a Scene; Creating Scenes from day to day life such as: Students going to school, Customer visiting a mall/mart or buying a product from the shop, etc., Body Language: Revelation of Inner Self; Communication and Self Confidence; advantages of Self Confidence; Reason of lacking Self Confidence; Negative; Shades of not being Self Confident; Myths about Self Confidence; Tips to develop Self Confidence; Creativity and Communication: Paper Reading (compeering/ anchoring: Voice Modulation, Articulation etc.) ; Grammar and Vocabulary: Idioms and Phrases, Foreign Words

SECTION-C

Personality development: A must for communication and career growth, Personality: Meaning; Definition; Theories; Stages of Personality Development; Big five Personality dimensions; Major Determinants of Personality; Heredity Potentials; Environmental Influences; Relative Influences of Heredity and

Environment, Nervousness: An Indispensable trait; Combating Nervousness; Understanding Self and Others; Self- concept; Perception; Communication and Self disclosure; Effective Disclosure; Openness Communication and giving feedback; Creativity and Communication: Business Talk, Characteristics of Good Business Speaker; Importance of gestures; Practicing the Art of Business Communication; Meeting, Playing role of effective team members in a meeting (task roles, personal roles, problem roles) , Grammar and Vocabulary: Reported Speech, Phrasal Verbs

SECTION-D

Levels of Communication (interpersonal, intrapersonal, group, public); Communication as a Change Agent (silence, satire, artifice)

Determinants in Impacting Communication; Social, Political, Cultural; Semiotics and Communication; Ideology and Communication

Impact of Encoding and Decoding in Communication (noise, codes, culture, technology);Communication and Gratification: Four Models: Publicity Model; Ritual Model; Convergence Model; Reception Model;Creativity and Communication: Situation Writing and Situational Dialogues, Defining an Object (pictorial description), Expansion of Proverbs and Ideas;Grammar and Vocabulary: Synonyms, Antonyms, Reading Comprehension, Jumbled Sentences, Modifiers

Lab Exercises

Exercises related to Grammar

Exercises related to Creativity and Writing

Mock Interviews

Extempore

Group Discussion

Debate

Role Plays (Meeting)

Final production of a one act play/ scene

Introduction to Articulation Skills (Conversation:Telephonic and Face-to-Face)

Listening to Understand (Hearing vs. Listening)

Listening for Inter-personal Effectiveness

Techniques & Levels of Reading Comprehension

Text Books

1. Chaturvedi P D and Chaturvedi M.(2017). Business Communication. Pearson Education
2. James Schofield J and Osborn A(2011). Business Speaking: B1-C2 (Collins Business Skills and Communication). Collins
3. Roche M (2023).Business Email. Macson Bell
4. Mitra B K (2011). Personality Development and Soft Skills, 2 nd ed., Oxford University Press

References:

1. Chhabra, T, ,N. (2016). Business Communication: Concepts and Skills. Sun India Publications.
2. Convey, R, Stephen. (2013). The Seven Habits of Highly Effective People.Paperback. Special Edition.
3. E.H, McGrath., S.J. (2001) Basic Managerial Skills for All. Prentice Hall of India Pvt. Ltd.
4. Beardsley, M. C.(1997).Aspects of Orality: A Short Commentary", New Literary History 8,3
5. Bernet, John R, (1989). Mass Communication. An Introduction, Prentice Hall.

| Course s Code | Courses | Course Outcomes | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PS | PS |
|---------------|----------------------------------|-----------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | O1 | O2 | |
| EDH147B | BUSINESS COMMUNICATION SKILLS-II | CO1 | 1 | 3 | 1 | 2 | 1 | 1 | 3 | 3 | 3 | 3 | 1 | X | 3 | 3 | |
| | | CO2 | 3 | 1 | X | X | 3 | X | 1 | 3 | 1 | X | X | X | 3 | 3 | |
| | | CO3 | 1 | 1 | X | X | 1 | X | 3 | 3 | 3 | 3 | 1 | X | 3 | 2 | |
| | | CO4 | 1 | 3 | 1 | 1 | 1 | X | 3 | 3 | 3 | 1 | 1 | X | 2 | 2 | |

| | |
|-------------------|---|
| Course Title/Code | Fundamentals of Design Thinking & Venture Creation/MCH123B |
| Course Type: | Elective |

| | |
|-------------------|--|
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | This course will introduce to the basic knowledge of design thinking. After the successful completion of the course student will be familiar with the scope and functions of new venture |

| Course Outcomes (COs) | | Mapping |
|-----------------------|--|------------------|
| CO1 | To Understand the Basics of Design Thinking | Entrepreneurship |
| CO2 | To Understand the design thinking processes | Entrepreneurship |
| CO3 | To be able to apply the Design Thinking in practice with tools and methods | Entrepreneurship |
| CO4 | To be able to apply Design thinking in application and product development | Entrepreneurship |

Section A

Background & evolution of Design Thinking: Concept & Definition of Design Thinking; Business uses of Design Thinking; Design Thinking Mindset. Design thinking approach: Empathy, Ethnography, Divergent Thinking, Convergent Thinking & Visual Thinking. Assumption Testing & Prototyping

Section B

Design thinking resources: People, Place, Material & Organizational fit. Design Thinking processes: Double Diamond Process, 5-Stage d.School Process, Designing for Growth Process, Role of Project Management

Section C

Design Thinking in practice; Process & stages. Design thinking Tools & Methods—What is; Visualization, Journey Mapping, Value chain analysis, Mind mapping. What if; Brainstorming & Concept Development. What Wows; Assumption testing, Rapid Prototyping. What works; Customer co-creation, learning launch

Section D

Design thinking application & product development. Case studies. Design thinking & growth strategies. Double diamond approach & its relevance. User centric design thinking theories.

Text Books:

1. Luchs M G, Swan S and Griffin, A.(2016).Design Thinking. Wiley-Blackwell
2. Jain R(2023).Startup to Proficorn. Jaico Publishing House

3. Ganapathi V(2021).Design Thinking And Solving Vision.Notion Press

References

1. Rajput, A. (2015). Business Success Secrets.Venture Creation.
2. David, H H. (2018). Entrepreneurship New Venture.Chaukhamba Auriyantaliya
3. Jain, J. (2018). Design Thinking for Startups. Notion Press.

| Course s Code | Courses | Course Outcomes | PO 1 | PO 2 | PO 3 | PO 4 | PO 5 | PO 6 | PO 7 | PO 8 | PO 9 | PO 10 | PO 11 | PO 12 | PS O1 | PS O2 | |
|---------------|--|-----------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|---|
| MCH1 23B | FUNDAMENTALS OF DESIGN THINKING AND VENTURE CREATION | CO1 | 1 | 2 | X | 2 | 3 | 2 | 2 | X | 2 | 1 | 2 | X | 1 | 2 | |
| | | CO2 | X | 2 | 1 | X | X | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | | CO3 | 2 | 2 | X | 1 | 1 | 3 | 1 | 2 | X | 3 | 2 | 2 | 2 | 2 | 3 |
| | | CO4 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 3 | 3 | X |

| | |
|-------------------|--|
| Course Title/Code | Introduction to Family Business Management/ MCH124B |
| Course Type: | Core (Departmental) |

| | |
|-------------------|--|
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | This course will introduce to the basic knowledge of various aspects of Family Business. After the successful completion of the course student will be familiar with the scope and functions of Family Business. |

| Course Outcomes (COs) | | Mapping |
|------------------------------|---|-------------------------|
| CO1 | Understand the concept, characteristics and importance of family business and its differences to non-family businesses. | Entrepreneurship |
| CO2 | Understand and apply the Concept of 3 Circle Model of Family business and the how each of the circle corresponds to different life cycle of stages of growth. | Entrepreneurship |
| CO3 | Describe the governance structure of family controlled businesses and identify the various family governance institutions through which effective governance is ensured | Entrepreneurship |
| CO4 | Understand the need of Succession and continuity planning and how can it be a planned. | Entrepreneurship |

Section A

Family Business: Concept of Family Business- Importance and Characteristics of Family Business, Uniqueness of Family Business- what makes the family enterprise so successful? History of Family Business, Family Business v/s Non family Business, Systems theory perspective, 3 Circle Model of Family Business, Life cycle of Family Business- Ownership, business and family dimension, Advantages of FB, key challenges facing the family businesses in India.

Section B

Understanding Family Business dynamics: The Family Systems theory, Role of Genograms in family system- Family and ownership of business dichotomy- Responsibilities and rights of a shareholder of a family business, effective governance, Family Constitution, Planning for Succession in law, Conflicts in the family, Resolving the conflicts, Stages of Conflict.

Section C

Family Business and Governance: meaning and challenges to family governance, Advisory board and board of directors- Responsibilities, Family meetings and Family Councils– Role and benefits, Family offices, Board and Family Council- how they work together, professional management, effective outside boards.

Section D

Leadership and the imperatives for family business- Succession and Continuity, Succession- importance, Family leaders- roles and responsibilities. Succession- importance, succession planning and continuity planning mindset, CEO exit styles, next generation leader characteristics, steps in succession planning and transfer of power.

Text Books:

- 1.Poza E J and Duagherty M S(2015) Family Business, Cengagae Learning, New Delhi.
- 2.Gersick, K.E., Davis, J.A., Hampton, M.M., & Lansberg, I. (1997). Generation to Generation: Life Cycles of the Family Business. Harvard Business School Press.
3. Lansberg, I. (1999). Succeeding generations: Realizing the dream of families in business.Harvard Business School Press.

References:

1. Bork et al. (1996). Working with family businesses: A guide for professionals. Jossey Bass Publishers.
- 2.Dyer., W.G. (1986). Cultural change in family firms: Anticipating and managing business and family transitions. ossey-Bass Publishers.
- 3.Miller, D and Breton, M L. (2005). Managing for the long run: Lessons in Competitive Advantage from Great Family Businesses. Harvard Business School Press.

| Course s Code | Courses | Course Outcom es | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PS | PS |
|------------------|---|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | O1 | O2 |
| MCH12 4B | INTRODUCTI ON TO FAMILY BUSINESS MANAGEMEN T | CO1 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | X | 2 | 1 | 2 | 3 | 3 |
| | | CO2 | 3 | 2 | 2 | 2 | X | 2 | 2 | 2 | 1 | 2 | X | 2 | 3 | 3 |
| | | CO3 | 3 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | X | 2 | 1 | 2 | 3 | 3 |
| | | CO4 | 3 | 2 | 2 | 2 | X | 2 | 2 | 2 | 1 | 2 | X | 2 | 3 | 3 |

| | |
|--------------------------|---|
| Course Title/Code | FINANCING AND BUSINESS DEVELOPMENT OF HOSPITALS/ MCH119B |
| Course Type: | Core(Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | After the successful completion of the course student will be having knowledge and skills to handle accounting and finance of hospital. Students are trained and aware with marketing tools and methods for Hospitals |

| Course Outcomes (COs) | | Mapping |
|------------------------------|--|----------------------|
| CO1 | To acquaint the students with the marketing strategies of healthcare industry | Employability |
| CO2 | To enable the students to apply inbound, outbound, social and referral marketing strategies in healthcare industry | Employability |
| CO3 | To enable students to understand different media mix strategies adopted in healthcare industry | Employability |
| CO4 | To analyze and formulate the marketing and financing strategies of healthcare industry. | Employability |

SECTION A

Marketing of Hospitals :Introduction of Marketing, Understanding Marketing Management, Marketing Team & Organogram, Developing marketing strategies & Plans, Developing Brand strategies, Developing pricing strategies, Developing, Managing and Measuring of marketing channels, Managing and Measuring marketing competition, Managing and Measuring marketing communication

SECTION B

Marketing tools for Hospitals:

Media - our ALLY or ENEMY, Introduction to Social, Corporate and Referral Marketing, Referral Marketing, Social Marketing, Corporate Marketing, Legal Implications of Marketing, Entering in New Market, Launching New Product/Department, Socially Responsible Marketing, The Future of Marketing, Marketing to the Millennial Generation, Managing Relationship & Building loyalty , Leadership Roles in Marketing, The search for Leadership

SECTION C

Billing and Revenue of Hospitals :

OPD - Billing, Collection & Settlement (With Journal Entries), IPD - Billing, Collection & Settlement (With Journal Entries), Revenue from other than operating activity-Interest income, Pharmacy income

SECTION D

Direct & Indirect Expenses and Taxes

Direct Expenses- Consultancy & Consumable, Direct Expenses- Drug & Disposable & Outsource share, Indirect Expenses- HR Expense & Admin expense, Indirect Expenses- Sales & marketing, Utility, Maintenance expense & Revenue Sharing/rent Expense, Collection Process, Fixed Assets, Ratio Analysis, Direct Tax-Income Tax (TDS), Indirect Tax-Service Tax and Vat

Text Books:

1. Clark C and Johnson T(2020). Doctorpreneur: The best business and marketing book . Thrive Edutainment
2. Gapenski, L C (2016).Healthcare Finance: An Introduction to Accounting & Financial Management. Health Administration Press.

References:

1. Cooper , A M and Bamford M(1997) Excellence in Health Care Management. Wiley-Blackwell
2. Berkowitz, E N (2003). Essentials Of Health Care Marketing-J&B. Jones And Bartlett Publishers.

| Courses Code | Courses | Course Outcomes | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PS | PS |
|--------------|---|-----------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | O1 | O2 |
| MCH119B | FINANCING AND BUSINESS DEVELOPMENT OF HOSPITALS | CO1 | 3 | 2 | 2 | 2 | 1 | 3 | 2 | 2 | X | 3 | 2 | X | 3 | 3 |
| | | CO2 | X | 2 | X | 2 | X | 2 | X | 2 | 3 | X | X | 2 | 3 | 3 |
| | | CO3 | 3 | 3 | 3 | 2 | X | 2 | X | 3 | X | X | 1 | X | X | X |
| | | CO4 | X | X | X | X | 1 | 2 | 3 | X | X | 2 | 2 | 2 | X | X |

| | |
|-------------------|--|
| Course Title/Code | Healthcare Communication/ MCH126B |
|-------------------|--|

| | |
|-------------------|--|
| Course Type: | Elective (Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0-0 |
| Credit | 3 |
| Course Objectives | Introducing students to the field of communication and healthcare communication in particular along-with using strategic communication to meet both personal and professional objectives in the digital age. |

| Course Outcomes (COs) | | Mapping |
|------------------------------|--|--------------------------|
| CO1 | Analyze and describe how sociohistorical, social, political, and cultural factors affect health communication and healthcare. | Skill Enhancement |
| CO2 | Understand the correlation of theory and practice in health communication settings and campaigns. | Employability |
| CO3 | Identify the strategies to target various audiences and health communities for health communication campaigns by developing written, oral, and graphical communication skills necessary in medical and public health contexts. | Employability |
| CO4 | Develop effective health messages for individuals and publics by understanding how the media, literacy and policy affect the perceptions of health | Employability |

Section - A

Personal and Professional Foundations

- Communication: A Management Tool
- The Strategic Communication Process
- Interpersonal Skills
- Put It in Writing
- Presentations That Deliver

Section - B

- In-House Communications Working with PR & Corporate Communications

Section – C

- Barriers to Improving Communication.
- Creating Community Relationships
- Importance of Effective Measurement

Section – D

- Fundamentals of Social Media& its use in Healthcare
- Technology Implications in Healthcare Communication

Text Book:

1. Parvanta, C and Bass, S. (2018). Health Communication: Strategies and Skills for a New Era: Strategies and Skills for a New Era. Jones & Bartlett Learning.
2. Harrington, T and Nancy, G. (2019). The Routledge Handbook of Health Communication .Routledge Communication Series by Teresa

References:

3. The Oxford Handbook of Health Communication, Behavior Change, and Treatment Adherence
4. Park's Textbook of Preventive and Social Medicine - Textbook by K. Park
5. BEYOND PERSUASION: Communication Strategies for Healthcare Managers in the Digital Age – Patricia J Parsons.

| Course s Code | Courses | Course Outcom es | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PS | PS |
|------------------|-----------------------------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | O1 | O2 |
| MCH1 26B | Healthcare Communication | CO1 | 2 | 1 | 2 | 3 | 1 | X | 2 | 2 | X | X | 2 | X | 1 | 2 |
| | | CO2 | 2 | 2 | 3 | 2 | 2 | 1 | 2 | 2 | X | 2 | 2 | 2 | X | 2 |
| | | CO3 | 2 | X | 2 | 3 | X | 2 | 2 | 3 | 2 | 2 | X | X | 2 | 2 |
| | | CO4 | 3 | 1 | 2 | 2 | 2 | 1 | 2 | 3 | 2 | 2 | 1 | 2 | 1 | 2 |

| | |
|-------------------|---|
| Course Title/Code | Healthcare Economics/ MCH127B |
| Course Type: | Core (Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | This course will introduce to the basic knowledge of various aspects of healthcare. After the successful completion of the course student will be familiar with the scope and functions of economics in healthcare. |

| Course Outcomes (COs) | | Mapping |
|------------------------------|--|--------------------------|
| CO1 | To introduce students to the field of Health Economics & Policy | Employability |
| CO2 | To understand the healthcare market and its demand and supply in relation with healthcare economics. | Employability |
| CO3 | To understand the various issues of healthcare Economics. | Skill Enhancement |
| CO4 | To gain knowledge about the Healthcare Economic Evaluations & Public Policy | Skill Enhancement |

SECTION - A

- Introduction to Health Economics
- Economics and Policy
- Relevance of Health Economics
- Key Concepts
- Indian Health Care Economics
- Healthcare workforce Market

SECTION - B

- Demand for Healthcare
- Market for Health Care Insurance

- Healthcare Production, Supply and Cost

- Role of Government & Market Failure

SECTION – C

- Issues in Health Economics
 - o Socio-economic Factors

- Issues in Hospital Industry
 - o Issues in Pharmaceutical Industry

SECTION – D

- o Economic Evaluations

- o Comparing Healthcare Systems

- o Public Policy & Health Economics

Text Books:

1. Iswanto A H.(2018).Hospital Economics. Routledge Publication
2. Understanding Healthcare Economics.Wendel J et al.(2017) CRC Press

Econtent: NPTEL IIT Kanpur by Prof Angan Sengupta

https://www.youtube.com/playlist?list=PLFW6lRTa1g81XcfSpSurxq_IkWVTsqqR

References:

1. Mogli, G D (2023). Healthcare Economics Management GBS Publication Pvt Ltd
2. Jackson, D(2012).Healthcare Economics made Easy. Scion publication

| Course s Code | Courses | Course Outcom es | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PS | PS |
|------------------|-----------------------------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | O1 | O2 |
| MCH1 27B | HEALTHCAR E ECONOMICS | CO1 | 2 | 2 | 1 | X | 2 | 3 | 2 | 2 | X | 1 | 2 | 1 | 2 | 2 |
| | | CO2 | 2 | X | 2 | 1 | 2 | 3 | 2 | 3 | 1 | 2 | 2 | X | 3 | 3 |
| | | CO3 | 2 | 2 | 1 | X | 2 | 2 | X | 3 | X | 2 | 2 | 1 | 2 | 2 |
| | | CO4 | 2 | 3 | 2 | 1 | 2 | 3 | 2 | 2 | 1 | 1 | 2 | X | 2 | 2 |

| | |
|-------------------|--|
| Course Title/Code | FUNDAMENTALS OF LOGISTICS/MCH117B |
| Course Type: | Core(Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | The Objective of this course is to gain the knowledge of possibilities of efficient optimization and management of operation in Logistics Management and also the ability to apply them in the enterprise reality. |

| Course Outcomes (COs) | | Mapping |
|------------------------------|---|--------------------------|
| CO1 | To gain knowledge of basics of logistics management | Skill Enhancement |
| CO2 | to gain the knowledge of possibilities of efficient optimization of operation in Logistics Management | Skill Enhancement |
| CO3 | To apply the concepts of effective logistics management | Employability |
| CO4 | To understand and apply the concepts of Material Storage System & Warehousing | Employability |

SECTION A

Introduction, Objectives, Concepts of Logistics & Integrated Logistics; Evolution of Logistics; Role of Logistics india, Information Technology.

SECTION B

Material Handling: Introduction, Objectives, Concepts of material handling; Principles of material handling; Equipment used for material handling; Points to be considered; Role of material handling in Logistics; Material handling and packaging.

SECTION C

Material Storage System & Warehousing: Introduction, Objectives, Concepts of material storage system; Storage principles; Storage methods; Concepts of Warehousing; Need for warehousing management; Evolution of warehousing; Significance and Functions of warehousing; Warehousing cost.

SECTION D

Logistical Packaging & Transportation: Introduction, Objectives, Concepts of Logistical packaging; Design considerations in packaging; Types of packaging materials; Packaging costs; Introduction of Transportation systems; Transportation infrastructure; Different modes of transportation; Freight management; Transportation network; Containerisation

Text Books:

1. McDonough A(2020).Operations and Supply Chain Management Essentials You Always Wanted To Know.Vibrant Publishers
2. Sople V V (2012).Logistics Management. Pearson Education India
3. Lambert D, Stock J and Ellram L(1998).Fundamentals of Logistics.McGraw-Hill Education

References:

1. Bowersox (2018).Supply Chain Logistics Management. McGraw Hill Education
2. Burt, Dobbler, Starling, World Class Supply Management. McGraw Hill Education
3. Bowersox D and Closs D J(2017). Logistical Management. McGraw Hill Education

| Course s Code | Courses | Course Outcomes | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PS | PS |
|---------------|---------------------------|-----------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | O1 | O2 | |
| MCH117B | FUNDAMENTALS OF LOGISTICS | CO1 | 3 | 2 | 2 | 2 | 1 | 3 | X | 1 | 1 | 1 | 2 | X | 3 | 2 | |
| | | CO2 | 3 | 3 | 3 | 3 | X | 3 | 3 | 2 | 1 | X | 3 | 2 | 3 | 2 | |
| | | CO3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | X | 1 | 3 | X | 3 | 2 | |
| | | CO4 | 3 | 3 | 3 | 3 | 1 | 2 | 3 | 2 | 1 | 1 | 3 | 1 | 3 | 2 | |

| | |
|-------------------|---|
| Course Title/Code | Structured Query Language (SQL) / MCH245B |
| Course Type: | Elective |
| Course Nature: | Hard |
| L-T-P Structure | 2-0-2 |
| Credit | 3 |
| Course Objectives | The purpose of this course is to familiarize students with various concept of Database Management System and hands on practice using Structured Query Language. |

| Course Outcomes (COs) | | Mapping |
|------------------------------|--|--------------------------|
| CO1 | Conceptualize and understand the basics of DBMS and SQL Programming. | Skill Enhancement |
| CO2 | Articulate and employ the use of Normalization to remove redundancy in data. | Skill Enhancement |
| CO3 | Classify the different types of Locking Protocols and perform Transaction Management. | Skill Enhancement |
| CO4 | Understand No-SQL Data Modeling and employ the use of MongoDB for No- SQL Data Administration. | Skill Enhancement |

Section A

Introduction

Introduction-Database System Applications, Purpose of Database Systems, Views of Data, Data Abstraction, Instances and Schemas, Data Models, Database Languages, DDL, DML, Database Architecture, Database Users and Administrators, Database Design, ER Diagrams, Forms of Basic SQL Query, Nested Queries, SQL Operators, NULL values, Outer Joins, Triggers, Views.

Section B

Normalization

Problems Caused by Redundancy, Decompositions, Functional Dependencies, Normal Forms, First, Second, Third Normal forms, BCNF, Properties of Decompositions, Loss less Join Decomposition, Dependency Preserving Decomposition, Multi Valued Dependencies, Fourth Normal Form, Join Dependencies, Fifth Normal Form.

Section C

Transactions

Transaction Management, Transaction Concept, Transaction State, Implementation of Atomicity and Durability, Concurrent, Executions, Serializability, Recoverability, Implementation of Isolation, testing for serializability, Concurrency Control, Lock, Timestamp Based Protocols, Validation Based Protocols, Recovery, Failure Classification, Storage Structure, Atomicity, Log Based Recovery, Remote Backup Systems.

Section D

No SQL

Overview of No SQL, Types of No SQL Databases, No SQL Storage Architecture, CRUD Operations in MongoDB, Querying, Modifying and Managing No SQL Databases, Indexing and Ordering, Migrating from RDBMS to No SQL, No SQL in Cloud, Database Administration.

Text Books:

1. Harrison, G (2015) , Next Generation Databases: No SQL and Big Data, Apress.
2. Elmasri, R and Navathe, S B(2013), Database Systems, Pearson.

References

1. Sadalage, P J and Fowler, M (2012) No SQL Distilled, Addison Wesley.
2. Silberschatz, A Korth, H F and Sudarshan, S(2006). Database System Concepts, McGraw Hill.
3. Krishnan, R and Gehrke, J(2003). Database Management Systems, McGraw Hill.

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|--------------|---------|-----------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | O1 | O2 | O3 | O4 | O5 | O6 | O7 | O8 | O9 | O0 | O1 | O2 | O1 | O2 |
| MCH245B | SQL | CO1 | 3 | 2 | 2 | X | 2 | 2 | 2 | 3 | 1 | X | 2 | 1 | 1 | 2 |
| | | CO2 | X | 2 | 1 | 2 | X | 2 | X | 1 | 2 | 2 | 1 | 1 | 2 | 2 |
| | | CO3 | 2 | 3 | X | 1 | 1 | 3 | 2 | X | 1 | 3 | 2 | 2 | X | 2 |
| | | CO4 | 1 | 1 | 1 | 3 | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 3 | 2 | 3 |

| | |
|-------------------|--------------------------------------|
| Course Title/Code | MANAGERIAL ECONOMICS/ MCH136B |
| Course Type: | Elective |

| | |
|-----------------------|---|
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | This course will introduce to the basic knowledge of Managerial Economics with demand supply cost and production. |
| Course Outcomes (COs) | To understand the scope, nature and significance of Managerial Economics and the fundamental concepts associated with it. |

| Course Outcomes (COs) | | Mapping |
|-----------------------|--|-------------------------|
| CO1 | To understand the scope, nature and significance of Managerial Economics and the fundamental concepts associated with it. | Entrepreneurship |
| CO2 | To analyse the role of demand and supply in Economics and understand various techniques used in Demand forecasting in the business environment. | Entrepreneurship |
| CO3 | To study cost concepts, the role of production, the main forms of markets, various kinds of competition associated with them and the implications they have on managerial decision-making. | Entrepreneurship |
| CO4 | To acquaint the students with key macroeconomic concepts, with a focus on the Indian economy and opportunities and challenges for managers in the global arena. | Entrepreneurship |

SECTION A

Fundamentals of Managerial Economics: Meaning, Nature, Scope and Significance, The Economic Problem-Scarcity and Choice; Positive and Normative Economics, Micro and Macro Economics; Central Problems of an Economy; Opportunity Cost; Working of Economic Systems; Economic cycles, The Basic process of decision making, Managerial Economics and Statistics, Responsibilities of a Managerial economist.

SECTION B

Demand- Meaning, Demand Schedule, Individual and Market Demand Curve, Determinants of Demand, Law of Demand, Exceptions to Law of Demand; Supply- Meaning, Individual and Market Supply Curve, Determinants of Supply, Law of Supply; Equilibrium Price and Quantity, Elasticity of Demand and Supply, Methods of Demand Forecasting and applications in business settings.

SECTION C

Factors of Production, Types of Production Functions, Concepts of Costs, Economies and Diseconomies of Scales, Short term and long-term profits, Breakeven analysis- meaning and assumptions, Use of Breakeven analysis in Managerial decision-making, Concept of Market, main forms of market, market structure and pricing practices, Objectives of the firm, Perfect Competition, Monopoly, Monopolistic competition, Product differentiation; Features of Oligopoly, Kinked demand curve, Price Leadership, Concept of Externalities.

SECTION D

Introduction to key macroeconomic concepts, Functioning of Macro Economic Systems, Overview of the Indian economy, Fiscal and Monetary policy, National Income, Circular Flow of Income, Money and Banking, International Trade: Opportunities and Challenges, Globalisation and the Indian economy, Recent advances in Managerial Economics

Text Books:

1. Varshney, R L (2014). Managerial Economics: Sultan Chand and Sons.

2. Gupta, G S. (2017) Managerial Economics: Tata McGraw Hill.

Econtent: NPTEL IIT Kharagpur by Dr Brinali Nag

<https://www.youtube.com/watch?v=ycyMktNFZ88&list=PLPjSqITyvDeV84Qiruw4xVWGQPTctrlhg>

Reference books:

1. Salvatore, D. (2007). Managerial Economics in a global economy, Oxford Publications

2. Keat, P , Young P and Erfle S (2013). Economic Tools for today's decision makers: Pearson Publications.

| Course s Code | Courses | Course Outcom es | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PS | PS |
|------------------|-----------------------------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | O1 | O2 |
| MCH1 36B | MANAGERIA L ECONOMICS | CO1 | 2 | 1 | 2 | 2 | 1 | X | 2 | 2 | 1 | 2 | 2 | 2 | 2 | X |
| | | CO2 | 1 | 2 | X | 2 | 1 | 2 | 1 | 1 | 2 | 1 | 2 | 2 | X | 2 |
| | | CO3 | 3 | 2 | 2 | X | 2 | 1 | 2 | X | 1 | 2 | X | 1 | 2 | 1 |
| | | CO4 | 2 | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 1 | 2 |

Data Cleaning

| | |
|-------------------|--|
| Course Title/Code | DATA CLEANING / MCH135B |
| Course Type: | Elective |
| Course Nature: | Hard |
| L-T-P Structure | 2-0-2 |
| Credit | 3 |
| Course Objectives | This course will provide students and exposure towards Data Cleaning. The course comprises of an introduction to Data Cleaning, Pre-processing Character Strings, Factor Types and Dates, and Data Manipulations based on tidyR package under R. |

| Course Outcomes (COs) | | Mapping |
|-----------------------|---|-------------------|
| CO1 | Understand the fundamentals of business analytics and articulate a business problem and convert it into a viable Analytics question | Employability |
| CO2 | Use Descriptive analytics in Decision making and techniques of data mining | Skill Enhancement |
| CO3 | Understand the fundamentals and applications of Data Science, Machine Learning , Artificial Intelligence & Big data | Employability |
| CO4 | Apply knowledge to develop solutions across a range of Functional areas like Marketing Finance, HR and Operations | Skill Enhancement |

Section A

Introduction

Data Cleaning and Wrangling Overview, R Packages, Installing, Loading, Getting Help on Packages, Useful Packages for Wrangling, Cleaning and Manipulation, Overview of R Data Types and usability,

Section B

Working with Character Strings

Character String Basics, Converting to Strings, Printing Strings, String Manipulation with Base R Package, Case Conversion, Character Replacement, String Abbreviations, Extract & Replace Strings, String Manipulation with stringr, Basic Operations, Duplicate Characters within a String, Removing Leading and Trailing Whitespaces, Pad a String with Whitespace, Character Manipulation and Pattern Matching Functions.

Section C

Factors and Date Transformations

Creating, Converting and Inspecting Factors, Ordering Levels, Revalue Levels, Dropping Levels, Converting Strings to Dates, Extract & Manipulate Parts of Dates, Creating Date Sequences, Dealing with Time Zones & Daylight Savings.

Section D

Data Structure Manipulations

Creating Vectors, Lists, Matrices, Data Frames, Managing Vectors, Sub-setting Vectors, Lists, Managing Matrices and Data Frames, Adding Attributes to Matrices & Data Frames, Sub-setting Data Frames and Matrices, User Defined Functions, Pipe (%>%) Operator, Nested Option, Multiple Object Option, %>% Option.

Reshaping Data using tidyr

Making Wide Data Long, Making Long Data Wide, splitting a Single Column into Multiple Columns, Combining Multiple Columns into a Single Column, Additional tidyr Functions, Sequencing tidyr Operations, Selecting Variables of Interest select (), Filtering Rows using filter (), Grouping Data by Categorical Levels using group_by (), Arranging Variables by Value using arrange (), Joining Data Sets using join (), Creating New Variables using mutate ().

Text Books:

1. Metzler, N. (2019). An Introduction to R Programming with Tutorials and Hands-On Examples. Independently Published.
2. Lander, J P. (2018). R for Everyone. Pearson.
3. Mertz D(2021). Cleaning Data for Effective Data Science.Packt Publishing

References

4. Jose, J. (2018). Beginners Guide for Data Analysis using R Programming.
5. Loo, M V D(2018). Statistical Data Cleaning with Applications in R. Wiley.
6. Buttrey, S E. (2017). A Data Scientist’s Guide to Acquiring, Cleaning and Managing Data in R. Wiley.

| Course s Code | Courses | Course Outcom es | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PS | PS |
|---------------|------------------|------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | O1 | O2 |
| MCH135B | DATA CLEANING | CO1 | 3 | x | 2 | 1 | 2 | 1 | X | X | X | X | X | 3 | 3 | 3 |
| | | CO2 | 3 | x | 3 | 3 | 3 | 2 | X | X | X | X | X | 3 | 3 | 3 |
| | | CO3 | 3 | x | 2 | 3 | 3 | 2 | X | X | X | X | X | 3 | 3 | 3 |
| | | CO4 | 3 | x | 3 | 3 | 3 | 3 | X | X | X | X | X | 3 | 3 | 3 |

SEMESTER - 3

| SUBJECT CODES | SUBJECT NAME | OFFERING DEPARTMENT | *COURSE NATURE (Hard/Soft/Workshop/NTCC) | COURSE TYPE (Core/Elective / University Compulsory) | L | T | P | NO. OF CONTACT HOURS PER WEEK | NO. OF CREDITS |
|-----------------------------|--------------------------------|----------------------------|---|--|----------|----------|----------|--------------------------------------|-----------------------|
| MCH201B | BUSINESS LAW | DMC | HARD | CORE | 3 | 0 | 0 | 3 | 3 |
| ECH212B | MANAGEMENT INFORMATION SYSTEMS | ECE | HARD | CORE | 2 | 0 | 2 | 4 | 3 |
| MCH217B | RESEARCH METHODOLOGY | DMC | HARD | CORE | 3 | 0 | 0 | 3 | 3 |
| MCH203B | OPERATIONS MANAGEMENT | DMC | HARD | CORE | 3 | 0 | 0 | 3 | 3 |
| FLS101,102,103 | FOREIGN LANGUAGE | MRV FL | SOFT | UC | 2 | 0 | 0 | 2 | 0 |
| CHH137 | ENVIRONMENTAL SCIENCES | CHEM DEPT | HARD | UC | 4 | 0 | 0 | 4 | 4 |
| ELECTIVE | | | | | | | | | |
| FINANCE AND ACCOUNTS | | | | | | | | | |
| MCH234B | FINANCIAL SERVICES (FAA) | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| MCH239B | MANAGEMENT ACCOUNTING | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |

| | | | | | | | | | |
|--|---|-----|------|----------|---|---|---|---|---|
| MCH205B | INVESTMENT ANALYSIS AND PORTFOLIO MANAGEMENT | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| Entrepreneurship & Family Business Specialization | | | | | | | | | |
| MCH241B | FAMILY BUSINESS GOVERNANCE | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| MCH242B | BUSINESS MODELLING | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| Health Care Management Specialization | | | | | | | | | |
| MCH210B | CLINICAL SERVICES | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| MCH211B | PLANNING AND DESIGN OF HOSPITALS | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| MCH237B | EPIDEMIOLOGY (HCM) | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| Operations Management | | | | | | | | | |
| MCH208B | TOTAL QUALITY MANAGEMENT | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| MCH209B | WAREHOUSING MANAGEMENT | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| Business Analytics Specialization | | | | | | | | | |
| MCH 244B | PYTHON PROGRAMMING | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |

BBA- Third Semester

| | |
|-------------------|---|
| Course Title/Code | BUSINESS LAW/MCH201B |
| Course Type: | Core (Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | To acquaint the student with a basic and elementary knowledge of the subject. |

| Course Outcomes (COs) | | Mapping |
|------------------------------|---|----------------------|
| CO1 | To acquaint the students with the fundamental knowledge of Business Law and Indian Contract Act. | Employability |
| CO2 | To identify and interpret the different contracts like Indemnity, Bailment, Pledge, Guarantee etc in context of day to day life | Employability |
| CO3 | To analyze and understand the concepts and implications of Sales of Goods Act, 1930, Negotiable Instrument Act, 1881 | Employability |
| CO4 | To acquaint the students with the basic knowledge of Indian Companies Act, 2013 | Employability |

SECTION A

Indian Contract Act, 1872 (Fundamental Knowledge) Essentials of valid contract, discharge of contract, remedies for breach of contract.

SECTION B

Contracts of Indemnity, Guarantee, Bailment, Pledge and Agency

SECTION C

Sale of Goods Act 1930 Meaning of Sale and Goods, Conditions and Warranties, Transfer of Property, Rights of an unpaid seller.

The Negotiable Instruments Act 1881 – Essentials of Negotiable instruments, Kinds of N.I. Holder and Holder in Due Course, Negotiation by endorsements, crossing of a cheque and Dishonor of a cheque.

SECTION D

The Companies Act 1956 (Basic elementary knowledge) essential characteristics of a company, types of companies, memorandum and articles of association prospectus, shares – kinds, allotment and transfer, debentures, essential conditions for a valid meeting, kinds of meetings and resolutions.

Directors, Managing Directors, their appointment, qualifications, powers and limits on their remuneration, prevention of oppression and mismanagement

Text Books;

1. Sushma A.(2017).Business Law.Taxmann
2. Kuchhal, M C.(2015).Business Laws.Vikas Publisher
3. Soni A(2018).Business Law. Regal Publications

References:

4. Kuchhal M C and Kuchhal V. (2013), Business Law, 6thed, Vikas Publishing House, New Delhi
5. Bagrial, A (2012).Company Law, 12thed, Vikas Publishing House
6. Kapoor, N. D (2003.Elements of Mercantile Law.Sultan Chand & Sons, New Delhi

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|--------------|--------------|-----------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|
| | | | O1 | O2 | O3 | O4 | O5 | O6 | O7 | O8 | O9 | O0 | O1 | O2 | O1 | O2 | |
| MCH201B | BUSINESS LAW | CO1 | 3 | 3 | 3 | 2 | 1 | 2 | 1 | 2 | 1 | 1 | 2 | X | 3 | 3 | |
| | | CO2 | 3 | 2 | 3 | 2 | 1 | 1 | 1 | 1 | X | 1 | 1 | X | 3 | 3 | |
| | | CO3 | 3 | 3 | 3 | 2 | 2 | 2 | 1 | 1 | X | 1 | 1 | X | 3 | 3 | |
| | | CO4 | 3 | 3 | 3 | 2 | 2 | 2 | 1 | 2 | X | 1 | 2 | 1 | 3 | 3 | |

| | |
|-------------------|---|
| Course Title/Code | MANAGEMENT INFORMATION SYSTEMS/ ECH212B |
| Course Type: | Core (Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 2-0-2 |
| Credit | 3 |
| Course Objectives | Understand and apply core knowledge in Management Information Systems (MIS) Identify and analyze requirements for information systems Understand and apply design principles in Information Systems Understand and apply system development & project management principles Effectively evaluate technology alternatives to solve problems in an MIS context Effectively communicate to both business and IT professionals |

| Course Outcomes (COs) | | Mapping |
|------------------------------|--|--------------------------|
| CO1 | Describe the role of information technology and information systems in business and Reproduce a working knowledge of concepts and terminology related to information technology. | Skill Enhancement |
| CO2 | Interpret how to use information technology to solve business problems and the impact of information systems in society. | Employability |
| CO3 | Analyse and synthesize business information and systems to facilitate evaluation of strategic alternatives. | Employability |
| CO4 | To provide the theoretical models used in database management systems to answer business questions. | Skill Enhancement |

SECTION A

Data, Information, Knowledge, MIS: Need, Purpose and Objectives, MIS and Decision Making Concepts, Herbert Model of Decision Making, Concept of Information, Classification of Information, Value of Information, MIS and Information Concepts

SECTION B

Concept of SAD, Need of SAD, Process of SAD, MIS and System Analysis, Implementation of MIS

SECTION C

Planning, Designing of MIS, Decision Support Systems - Overview, Components and Classification, Steps in constructing a DSS, Philosophy of DSS

SECTION D

Introduction to ERP, Structure of ERP, Concepts of DBMS, Concepts of RDBM, ER Modeling

Text Books:

1. Prasad, L M and Prasad, U(2012). Management Information System. Sultan Chand & Sons
2. Laudon K Cand Laydon J p(2014). Management Information Systems,13thed, ,Pearson Education Limited

Reference:

1. Kroenke, D. M., Gemino, A., & Tingling, P(2016).Experiencing MIS (*4th Canadian Edition*). Toronto: Pearson.
2. Poatsy, M. A., Cameron, E., Williams, J., and Grauer, R(2017) Exploring Microsoft Office Access 2016”, Comprehensive.Boston: Pearson Education Inc.

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|--------------|--------------------------------|-----------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | O1 | O2 | O3 | O4 | O5 | O6 | O7 | O8 | O9 | O0 | O1 | O2 | O1 | O2 | O1 |
| ECH212B | MANAGEMENT INFORMATION SYSTEMS | CO1 | 3 | 2 | 3 | 2 | 3 | 2 | 2 | 2 | X | 2 | 2 | 2 | 2 | 2 | 1 |
| | | CO2 | 3 | 3 | 3 | 3 | 2 | 2 | 1 | 2 | X | 2 | 1 | 2 | 3 | | 2 |
| | | CO3 | 3 | 2 | 3 | 3 | 1 | 2 | 3 | X | 1 | 2 | 1 | 2 | 3 | | 3 |
| | | CO4 | 3 | 2 | 3 | 2 | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | | 3 |

| | |
|-------------------|--------------------------------------|
| Course Title/Code | RESEARCH METHODOLOGY /MCH217B |
| Course Type: | Core (Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |

| Course Outcomes (COs) | | Mapping |
|-----------------------|--|--------------------------|
| CO1 | Identify and explain concepts which influence basic research, research process & research Proposal | Skill Enhancement |
| CO2 | To develop an understanding of various research designs and techniques | Skill Enhancement |
| CO3 | Demonstrate data collection methods and statistical methods, terminology used in research | Employability |
| CO4 | Explain/Classify various data analytic skills and meaningful interpretation to data sets to solve business and research problems & report preparations | Employability |

SECTION-A

Basic Concepts of Research: Business research; its concept, nature, scope, need and managerial value of business research; Research: Its objectives and types. Definitions: concepts, constructs, variables, Formulation of Research Problem; Steps of research & Research ethics. Research Design: Types of Research Design; Factors Affecting Research Design. Literature Review.

SECTION-B

Sampling Methods and Techniques: Basic Concepts, Characteristics of a good sample. Sampling Frame, Sampling errors, Non Sampling errors, Types of sampling: Probability Sample, Non Probability sampling. Measurement of Data: Concept of Measurement: what is measured, Problems in measurement in management research - Validity and Reliability. Levels of measurement - Nominal, Ordinal, Interval, Ratio scales. Attitude Scaling Techniques: Rating Scales and Ranking Scales – Paired Comparison & Forced Ranking - Concept and Application. Types of Data - Primary Data, secondary data; data Collection - Questionnaire Method: Questionnaire Construction - Personal Interviews, Telephonic survey interviewing, and observational methods; editing, coding, content analysis

SECTION-C

Hypothesis Formulation:An overview of non-parametric tests (Wilcoxon Matched – pairs signed – rank test, Mann – Whitney test, Kruskal – Wallis H-test),Introduction to Multivariate Analysis: Factor Analysis; Discriminant Analysis; Cluster Analysis; Dimensional Analysis; Conjoint Analysis.

SECTION-D

Presentation of Results: Report writing: Purpose of a Report; Essentials of a Good Report; Format of a Report; Types of Report Presentation, procedure of preparation of reference and bibliography (APA model)

Text Books

1. Sarangi P(2010).Research Methodology.Taxmann Publications Private Limited
2. Sidhu K S(2018).Methodology of Research in Education.Sterling
3. Panneerselvam R(2013).Research Methodology. Prentice Hall India Learning Private Limited

References:

1. Zikmund, W J, Babin, B J, Carr J C and Griffin M(2013)., Business Research Methods, 8th ed, Thomson Learning, Bombay House.
2. Srivastava,T N and Rego, S (2008). Business Research Methods,2nded, Tata McGraw-Hill Companies
3. Chawla, D and Sondhi, N (2011). Research Methodology, Vikas Publications.
4. Mishra, P(2015). Business Research Methods: 1st ed, Oxford India

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|--------------|----------------------|-----------------|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|
| | | | O1 | O2 | O3 | O4 | O5 | O6 | O7 | O8 | O9 | O10 | O11 | O12 | O13 | O14 |
| MCH217B | RESEARCH METHODOLOGY | CO1 | 2 | 2 | 3 | 2 | 3 | X | 1 | 1 | 1 | 3 | 2 | 2 | X | 2 |
| | | CO2 | 2 | X | 3 | 3 | 3 | 2 | 1 | X | 2 | 2 | 2 | 2 | 2 | 3 |
| | | CO3 | 3 | 2 | 3 | 2 | 3 | X | 1 | 1 | 1 | 3 | 1 | 3 | 2 | 2 |
| | | CO4 | 3 | 3 | 3 | 3 | 3 | 2 | 1 | X | 2 | 2 | 2 | 3 | 2 | 3 |

| | |
|-------------------|--|
| Course Title/Code | OPERATIONS MANAGEMENT / MCH203B |
| Course Type: | Core (Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | Apply decision-support tools to business decision making. Construct and present effective oral and written forms of professional communication. Apply knowledge of business concepts and functions in an integrated manner. Use specialized knowledge in Operations Management to solve business processes. Apply knowledge of fundamental concepts of operations management |

| Course Outcomes (Cos) | | Mapping |
|-----------------------|---|--------------------------|
| CO1 | Understand the fundamental concepts and techniques of Operations management | Skill Enhancement |
| CO2 | Examine various ways of managing the operations | Employability |
| CO3 | To analyze the operational management issues and problems | Employability |
| CO4 | Develop the ability to optimize the operations for business benefit | Employability |

SECTION A

What is operations management? Operations management is important in all types of organization, The input–transformation–output process, The process hierarchy, Operations processes have different characteristics, The activities of operations management, The quality objective, The speed objective, The dependability objective, The flexibility objective, The cost objective, Trade-offs between performance objectives, What is strategy and what is operations strategy?

SECTION B

What is layout? The basic layout types, what type of layout should an operation choose? Detailed design of the layout, what is process technology? Understanding process technologies, evaluating process technologies, implementing process technologies, what is capacity management, Measuring demand and capacity, the alternative capacity plans, choosing a capacity planning and control approach, Capacity planning as a queuing problem

SECTION C

What is inventory? Why is inventory necessary? Some disadvantages of holding inventory, the volume decision – how much to order, the timing decision – when to place an order, Inventory analysis and control systems, what is supply chain management? The activities of supply chain management, Types of relationships in supply chains

SECTION D

What is ERP? How did ERP develop? Implementation of ERP systems, Master production schedule, The bill of materials (BOM), Inventory records, What is lean synchronization? Eliminate waste, Lean synchronization and other approaches, what is quality and why is it so important? Diagnosing quality problems, Conformance to specification, Total quality management (TQM)

Text Books:

1. Jay, H(2017) Operations Management. 12th Ed. Pearson Education
2. Russell, R S(2023). Operations and Supply Chain Management: An Indian Adaptation, 10th Ed. Wiley
3. Chary S.N(2019). Production and Operations Management. 6th Ed. McGraw Hill

References:

1. Schmenner, R(1992). Production/Operations Management. 5th ed. Macmillan Publishing Company
2. Nahmias, S(1993). Production and Operations Analysis. 2nd ed. Irwin
3. Cachon G and Terwiesch, C(2016). Matching Supply with Demand. 4thed, McGraw-Hill in

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|--------------|-----------------------|-----------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | O1 | O2 | O3 | O4 | O5 | O6 | O7 | O8 | O9 | O0 | O1 | O2 | O1 | O2 |
| MCH203B | OPERATIONS MANAGEMENT | CO1 | 3 | 2 | 2 | 2 | 1 | 3 | X | 1 | 1 | X | 2 | X | 3 | 3 |
| | | CO2 | 3 | 3 | 3 | 3 | X | 3 | 2 | 1 | X | 1 | 3 | 1 | 3 | 3 |
| | | CO3 | 3 | 3 | 3 | 2 | 3 | X | 1 | 1 | x | 3 | 3 | 2 | 3 | 3 |
| | | CO4 | 3 | 3 | 3 | 3 | X | 3 | 2 | X | 1 | 1 | 3 | X | 3 | 3 |

| | | |
|------------------------------|--|-------------------|
| Course Title/Code | German-I FLS102 | |
| Course Type | Elective | |
| L-T-P Structure | 2-0-0 | |
| Credits | 0/0 | |
| Course Objective | Students will use listening and speaking skills in a variety of small and large group activities. Write basic descriptive paragraphs with clear topic sentences and supporting detail. Analyze reading segments on a diverse number of cultural topics. Learn the usage of appropriate grammatical structures which include beginning-level vocabulary, and verb conjugations. | |
| Prerequisites | Basic knowledge of grammatical structure, syntax, and vocabulary of English and/or Hindi | |
| Course Outcomes (COs) | | Mapping |
| CO1 | Students will be able to exchange greetings and introduce themselves using formal or informal expressions | Skill Development |
| CO2 | Students will be able to form simple sentences using new verbs and familiar vocabulary. | Skill Development |
| CO3 | Students will be able to identify key details in short, highly-contextualized audio text dealing with a familiar topic and relying on repetition and extra linguistic support when needed. | Skill Development |

| | | |
|----------------------|--|-------------------|
| CO4 | Students will be able to discuss likes and dislikes, demonstrate simple conversations about familiar topics (e.g., greetings, weather, Family, Friends) with repetition when needed. | Skill Development |
| CO5 | Capable to differentiate certain patterns of behavior in the cultures of the German-speaking world and the student's native culture. | Skill Development |
| CO6 | Students will be able to describe various places, locations, themselves using simple sentences and vocabulary. | Skill Development |
| Prerequisites | Basic knowledge of grammatical structure, syntax, and vocabulary of English, and/or Hindi | |

PART-A

Section A: Begrüßungen

1.1 Salutations/Greetings

1.2 Introduction

Section-B: sichvorstellen und Zahlen

2.1 Introduction

2.2 Alphabets

2.3 Numbers 1-20

Section-C: Berufe/ Pronomen

1.1 Personal pronouns

1.2 Hobbies and professions

PART-B

Section -D: Café

4.1 Café related vocabulary and dialogues

4.2 Revision personal pronouns

SectionE: Café dialog

5.1 Café related vocabulary and dialogues

5.2 Common verbs and their conjugations

Section F: Zeit und Monate

6.1 Time

6.2 Days

6.3 Months

Text Books

1. Kulkarni, G V.(2021).Let’s Learn German A1.Notion Press
- 2.Collins Dictionaries(2016).Easy Learning German Grammar and Practice. Collins

References :

1. Richards, O and Rawlings A (2019).Short stories in German.John Murray Learning
2. Funk H(2011).Studio D A1.Cornelson Publication
- 3.Kursbuch & Arbeitsbuch(2011).TangaramAktuell A1.Hueber

CO-PO Mapping

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|-------------------|--------------|-----------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | O1 | O2 | O3 | O4 | O5 | O6 | O7 | O8 | O9 | O0 | O1 | O2 | O1 | O2 |
| GERM AN FLS102 | GERMAN -I | CO1 | X | X | 1 | X | X | X | X | 3 | X | 2 | X | X | 1 | 2 |
| | | CO2 | X | X | 2 | X | X | X | X | 3 | X | 1 | X | X | X | 2 |
| | | CO3 | X | X | 2 | X | X | X | X | 3 | X | 1 | X | X | 2 | 1 |
| | | CO4 | X | X | 1 | X | X | X | X | X | 3 | 2 | X | X | 1 | 2 |

| | | |
|------------------------------|--|--------------------------|
| | Spanish-I FLS101 | |
| Course Type | Elective | |
| L-T-P Structure | 2-0-0 | |
| Credits | 0 | |
| Course Objective | Students will use listening and speaking skills in a variety of small and large group activities. Write basic descriptive paragraphs with clear topic sentences and supporting detail. Analyze reading segments on a diverse number of cultural topics. Learn the usage of appropriate grammatical structures which include beginning-level vocabulary, and verb conjugations. | |
| Prerequisites | Basic knowledge of grammatical structure, syntax, and vocabulary of English and/or Hindi | |
| Course Outcomes (COs) | | Mapping |
| CO1 | Students will exchange greetings, introductions and frame simple questions- answers using formal and informal expressions. | Skill Development |
| CO2 | Students will make simple sentences using familiar vocabulary and verbs. | Skill Development |
| CO3 | Students will learn cardinal-ordinal numbers and use the same in daily conversation. | Skill Development |

| | | |
|----------------------|--|--------------------------|
| CO4 | Students will identify key details in a short, highly-contextualized audio text dealing with a familiar topic, relying on repetition and extra linguistic support when needed. Students will describe themselves, other people, places and objects in short discourse using simple sentences and basic vocabulary. | Skill Development |
| CO5 | Demonstrate the ability to read critically, interpret analytically, speak persuasively, and write coherently about both visual and verbal texts produced in the Spanish-speaking world. | Skill Development |
| CO6 | Students will be able to describe various places, location, themselves using simple sentences and vocabulary. | Skill Development |
| Prerequisites | Basic knowledge of grammatical structure, syntax, and vocabulary of English, and/or Hindi | |

Section A: Introduction to Spanish and SER

- 1.1 Presentation on Spanish language
- 1.2 Greetings and goodbyes
- 1.3 Spanish letters
- 1.4 Introduction of verboSER

Section B: Verb Ser, Nationality, Profession and Counting

- 2.1 Uses of verbo SER
- 2.2 Adjectives related to verbo SER.
- 2.3 Introduction of Nationality
- 2.4 Professions and vocabulary related to professions.
- 2.5 Counting till number 20.

Section C: Articles, Interrogative and Estar

- 3.1 Introduction of Articles and Indefinite articles
- 3.2 Interrogatives
- 3.3 Introduction of VerboEstar

Section D: Estar, Preposition, Tener and Self Introduction

- 4.1 Uses of Verbo ESTAR and adjectives related to it
- 4.2 Introduction of 'my house' vocabulary
- 4.3 Prepositions related to the positioning of an object
- 4.4 Self – introduction

Section E: Day, Month and Regular AR verb

- 5.1 Days
- 5.2 Months
- 5.3 Introduction to regular –AR verbs

Text Books

- 1. Linney W E and Orta A L(2009). Getting Started with Spanish. Armfield Academic Press
- 2. Language Learning University(2020). Spanish: An Essential Guide to Spanish Language Learning. Bravex Publications

Reference Books:

- 1. ¡Ole!-Langers
- 2. ¡Uno, dos, tres.....
- 3. Kattan-Ibarra J(2012). TEACH YOURSELF COMPLETE SPANISH . John Murray Learning

CO-PO Mapping

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|----------------|------------|-----------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | O1 | O2 | O3 | O4 | O5 | O6 | O7 | O8 | O9 | O0 | O1 | O2 | O1 | O2 | O1 |
| Spanish FLS101 | SPANIS H-I | CO1 | X | X | 1 | X | X | X | X | 3 | X | 2 | X | X | 1 | 2 | |
| | | CO2 | X | X | 2 | X | X | X | X | 3 | X | 1 | X | X | X | 2 | |
| | | CO3 | X | X | 2 | X | X | X | X | 3 | X | 1 | X | X | 2 | 1 | |
| | | CO4 | X | X | 1 | X | X | X | X | X | 3 | 2 | X | X | 1 | 2 | |

| | | |
|------------------------------|---|--------------------------|
| Course Title/Code | French-I FLS103 | |
| Course Type | Elective | |
| L-T-P Structure | 2-0-0 | |
| Credits | 0 | |
| Course Objective | Student will use listening and speaking skills in a variety of small and large group activities. Write basic descriptive paragraphs with clear topic sentences and supporting details. Learn the usage of appropriate grammatical structures which include beginning level vocabulary and verb conjugation. | |
| Prerequisites | Basic knowledge of grammatical structure, syntax, and vocabulary of English and/or Hindi | |
| Course Outcomes (COs) | | Mapping |
| CO1 | Students will be able to exchange greetings and introduce themselves using formal and informal expressions. They will be able to ask and answer simple questions. | Skill Development |
| CO2 | Usage of basic vocabulary that can be used to discuss everyday life and using simple sentences and familiar vocabulary. | Skill Development |
| CO3 | Describe themselves, other people, familiar places and objects in short discourse using simple sentences and basic vocabulary. | Skill Development |

| | | |
|----------------------|---|--------------------------|
| CO4 | Present basic information about familiar situations and topics of interests. | Skill Development |
| CO5 | Justify opinions using equivalents of different verbs. | Skill Development |
| CO6 | Describe various places, location, themselves using simple sentences and vocabulary. | Skill Development |
| Prerequisites | Basic knowledge of grammatical structure, syntax, and vocabulary of English and/or Hindi. | |

Section A - Saluer et épeler l'alphabet

1.1 Les Salutations & forms of politeness

1.2 Alphabets

2.1 Taking leave expressions

2.2 Les pronomssujets

2.3 Basic Questions

3.1 Les verbes ER

3.2 Self introduction

3.3 Décrivezvotreami(e)

4.1 Les noms

4.2 VerbesAvoir, Etre, Aller & Faire

4.3 Les nombres

Section B- Usage de Vous et de Tu

Section C- Présentez-vous

Section D- Identifier un nombre, compter

Section E- Demander/ donner l'explications

5.1 Les articles define et indefini

5.2 Les mois de l'annee

5.3 Les jours de la semaine

Section F- Parler des saisons et demander l'heure

6.1 Time

6.2 Weather

6.3 Unseen Passage

Text Books

- Berthet A et al.(2012).Alter Ego Level One Textbook.Hachette Publications
- Ranjit M (2017).Apprenons Le Francais II & III.Publications

References:

- Gajwani S (2011).Excell French: Self-Practice Book for French Grammar.Excell French
- Verma, R(2023).French Made Easy.Goodwill Publishing House

Weblinks:

www.bonjourfrance.com

www.allabout.com

CO-PO Mapping

| Course Code | Course | Course Outcomes | PO 1 | PO 2 | PO 3 | PO 4 | PO 5 | PO 6 | PO 7 | PO 8 | PO 9 | PO 10 | PO 11 | PO 12 | PSO 1 | PSO 2 | |
|-------------|----------|-----------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|---|
| FLS103 | FRENCH-I | CO 1 | X | X | 1 | X | X | 2 | X | 3 | X | X | X | X | 1 | X | |
| | | CO 2 | X | X | 1 | X | X | 2 | X | 3 | X | X | X | X | 2 | | 1 |
| | | CO 3 | X | X | 2 | X | X | X | X | 3 | X | 1 | X | X | 2 | | 1 |
| | | CO 4 | X | X | 1 | X | X | X | X | 3 | X | 2 | X | X | 1 | | X |
| | | CO 5 | X | X | 1 | X | X | 2 | X | 3 | X | | X | X | 2 | | 1 |
| | | CO 6 | X | X | 2 | X | X | X | X | 3 | X | 1 | X | X | 2 | | 1 |

| | |
|-------------------|--|
| Course Title/Code | ENVIRONMENTAL SCIENCES /CHH137 |
| Course Type: | Core(Allied) |
| Course Nature: | Hard |
| L-T-P Structure | 4-0-0 |
| Credit | 4 |
| Course Objectives | Students shall be able to identify the areas of environmental degradation and control measures |

| Course Outcomes (COs) | | Mapping |
|------------------------------|--|--------------------------|
| CO1 | Understand and explain the multidisciplinary dimensions of environmental issues | Skill Enhancement |
| CO2 | Understand the primary environmental problems and suggest potential solutions | Employability |
| CO3 | Understand and explain about the various groups of plants and animals and their interactions in different ecosystems | Employability |
| CO4 | Appreciate the principles governing the interactions between social and environmental factors | Employability |

SECTION A

Multidisciplinary nature of environmental studies, Definition, scope and importance; Need for public awareness., Renewable and non-renewable resources :

Natural resources and associated problems.

- a) Forest resources : Use and over-exploitation, deforestation, case studies. Timber extraction, mining, dams and their effects on forest and tribal people.
- b) Water resources : Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams-benefits and problems.
- c) Mineral resources : Use and exploitation, environmental effects of extracting and using mineral resources, case studies.
- d) Food resources : World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity, case studies.
- e) Energy resources : Growing energy needs, renewable and non renewable energy sources, use of alternate energy sources. Case studies.
- f) Land resources : Land as a resource, land degradation, man induced landslides, soil erosion and desertification.
- g) Role of an individual in conservation of natural resources.
- h) Equitable use of resources for sustainable lifestyles.

Section B

Ecosystems: Concept of an ecosystem, Structure and function of an ecosystem, Producers, consumers and decomposers, Energy flow in the ecosystem., Ecological succession., Food chains, food webs and ecological pyramids, Introduction, types, characteristic features, structure and function of the following ecosystem :-

- a. Forest ecosystem
- b. Grassland ecosystem
- c. Desert ecosystem
- d. Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries)

Biodiversity and its conservation: Introduction – Definition : genetic, species and ecosystem diversity., Bio geographical classification of India, Value of biodiversity : consumptive use, productive use, social, ethical, aesthetic and option values, Biodiversity at global, National and local levels, India as a mega-diversity nation, Hot-spots of biodiversity., Threats to biodiversity : habitat loss, poaching of wildlife, man-wildlife conflicts, Endangered and endemic species of India, Conservation of biodiversity : In-situ and Ex-situ conservation of biodiversity.

SECTION C

Environmental Pollution, Definition, Cause, effects and control measures of :-

- a. Air pollution
- b. Water pollution
- c. Soil pollution
- d. Marine pollution
- e. Noise pollution
- f. Thermal pollution
- g. Nuclear hazards

- Solid waste Management : Causes, effects and control measures of urban and industrial wastes., Role of an individual in prevention of pollution, Pollution case studies, Disaster management : floods, earthquake, cyclone and landslides.

Social Issues and the Environments

From Unsustainable to Sustainable development, Urban problems related to energy, Water conservation, rain water harvesting, watershed management, Resettlement and rehabilitation of people; its problems and concerns. Case Studies, Environmental ethics : Issues and possible solutions., Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust. Case Studies, Wasteland reclamation, Consumerism and waste products., Environment Protection Act, Air (Prevention and Control of Pollution) Act, Water (Prevention and control of Pollution) Act

SECTION D

Human Population and the Environment: Population growth, variation among nations, Population explosion – Family Welfare Programme, Environment and human health, Human Rights, Value Education, HIV/AIDS, Women and Child Welfare., Role of Information Technology in Environment and human health, Case Studies.

Text Books

1. Miller G T and Spoolman S(2010).Environmental Science.Brooks/Cole
2. Batra S K , Kanchan Batra K and Kaur H (2023).Environmental Science.Taxmann

References:

1. Saha, B(2015). Environmental Sciences and Sustainable Development, International Conference on

Environmental Science and Sustainable Development- 2015, World Scientific Publishing Co. Pvt. Ltd

2. Thakur, V. A (2016). Text Book of Environmental Sciences, Scientific Publishers, 2012 Granjou, C. Environmental Changes: The Futures of nature, ISTE Press Elsevier
3. Granjou C(2016). Environmental Changes: The Futures of nature, ISTE Press Elsevier

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | |
|--------------|------------------------|-----------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|--|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | |
| CHH137 | ENVIRONMENTAL SCIENCES | CO1 | 1 | 1 | 1 | X | 3 | 3 | 2 | 2 | 1 | 1 | 3 | 1 | X | X | | |
| | | CO2 | 1 | 2 | 2 | X | 3 | 3 | 2 | 2 | 1 | 1 | 3 | 1 | 2 | 3 | | |
| | | CO3 | X | 1 | X | X | 3 | 3 | 2 | 2 | 1 | 1 | 3 | 1 | X | X | | |
| | | CO4 | X | 1 | X | X | 3 | 3 | 2 | 2 | 1 | 1 | 3 | 1 | X | X | | |

| | |
|-------------------|---|
| Course Title/Code | FINANCIAL SERVICES/MCH234B |
| Course Type: | Elective(Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course objectives | To familiarize students to nature and scope of various financial services |

| Course Outcomes (COs) | | Mapping |
|------------------------------|---|--------------------------|
| CO1 | To understand the nature and scope of financial system | Employability |
| CO2 | To discuss the functions and method of floatation of new issues | Employability |
| CO3 | To demonstrate the role of SEBI and Depository participants in Financial Services | Employability |
| CO4 | To be able to appraise financial planning with understanding of different financial services. | Skill Enhancement |

SECTION – A

Functions of Financial System, Financial Assets, Financial Intermediaries, Financial Markets Money Market, Hire -Purchase and Leasing, Venture Capital & its Features, Difference between Discounting

SECTION – B

New Issue Market (I.P.O), Functions of new issue market, Method of floating issues, Secondary market, B.S.E, N.S.E. Listing, Dematerialization of Shares, Listing of Securities, Share pricing

SECTION - C

Securities & Exchange Board of India (SEBI), Depositing system, Objectives of Depositors, Listing of Securities

SECTION - D

Factoring, Forfeiting, Credit rating in India, Functions of credit rating Agencies, Mutual Funds, Management and Products, Micro Finance,

Text Books:

1. Khan, M.Y(2019), Financial Services, Tata McGraw Hill, New Delhi.
2. Pathak (2018), Indian Financial System, Pearson Education.

References:

1. Machiraju H.R.. (2010). Indian Financial System, 5th Edition. Vikas Publishing House. .
2. Machiraju, H. R. (2009, January 1). The Working of Stock Exchanges in India. New Age International.
3. Shrivastava, R.M and Divya, N (2010). Management of Indian Financial Institutions,

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|--------------|--------------------|-----------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | O1 | O2 | O3 | O4 | O5 | O6 | O7 | O8 | O9 | O0 | O1 | O2 | O1 | O2 | O1 |
| MCH234B | FINANCIAL SERVICES | CO1 | 3 | - | 3 | 3 | 3 | - | 3 | - | 3 | - | - | 3 | 3 | 3 | |
| | | CO2 | 3 | 3 | - | 3 | - | 3 | 3 | 3 | - | 3 | - | 3 | 3 | - | |
| | | CO3 | 3 | - | 3 | - | 3 | - | 3 | - | - | 3 | - | - | - | 3 | |
| | | CO4 | 3 | 3 | - | 3 | - | 3 | 3 | - | 3 | 3 | - | 3 | 3 | 3 | |

| | |
|-------------------|---|
| Course Title/Code | Management Accounting/ MCH239B |
| Course Type: | Core(Allied) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0-0 |
| Credit | 3 |
| Course Objectives | Students shall be able to understand the concept of Management Accounting |

| Course Outcomes (COs) | | Mapping |
|------------------------------|--|--------------------------|
| CO1 | To enable students to perform ratio analysis | Skill Enhancement |
| CO2 | To understand the concept of budget and budget control | Employability |
| CO3 | To perform Costing and cost structure | Employability |
| CO4 | To calculate the break even analysis | Employability |

Section-A

Introduction: Nature, Scope and Importance of Management Accounting; Difference between Financial Accounting and Management Accounting; Difference between Cost Accounting and Management Accounting; Cost Control, Cost Reduction, and Cost Management. Financial statement Analysis: Common-size financial statements, trend percentage analysis, Ratio Analysis: Financial analysis of Companies.

Section- B

Budgeting and Budgetary Control, Concept of Budget and Budgetary Control; Objectives, Merits and Limitations of Budget Administration; Types of Budget: Fixed and Flexible Budgets, Zero-Base Budget, Program and Performance Budget.

Section –C

Standard Costing, Concept of Standard Cost and Standard Costing; Advantages, Limitations, and Application; Variance Analysis: Calculation of Material Variances, Labour Variances, and overhead Variances, Disposition of Variances.

Section-D

Marginal Costing and Decision-Making- Concept of Marginal Costing, Differential Costing and Absorption Costing, Break-Even Analysis, Use of above Costs in Decision-Making; Make or Buy, Change of Product-Mix, Pricing and Determination of Shut-Down Point. Responsibility Accounting- Concept and Approaches to Responsibility Accounting.

Text Books:

1. Maheshwari S N, Maheshwari S and Maheshwari S K(2018).A Textbook Of Accounting For Management.S Chand Publishing
2. Gupta A (2018).Financial Accounting for Management: An Analytical Perspective. Pearson Education

References:

1. Horngren, C T , Sundem, G L and Stratton, W O (2008), Introduction to Management Accounting, 14th edition, Prentice-Pearson Education, Delhi
2. Khan, M.Y., and Jain P K(2009), Management Accounting, 6 edition, Tata McGraw-Hill, New Delhi,
3. Lynch R M and Williams, R W (2005), Accounting and Management: Planning and Control, 3rd edition Tata McGraw-Hill, New Delhi,

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|--------------|-----------------------|-----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | | | O 1 | O 2 | O 3 | O 4 | O 5 | O 6 | O 7 | O 8 | O 9 | O 0 | O 1 | O 2 | O 1 | O 2 |
| MCH239B | Management Accounting | CO1 | 3 | 2 | 3 | 3 | 2 | X | 2 | X | X | 2 | 3 | 3 | 3 | 3 |
| | | CO2 | X | 2 | 2 | 3 | 2 | 2 | 2 | X | 1 | 2 | 3 | 3 | 3 | 3 |
| | | CO3 | 3 | 2 | 3 | 3 | 2 | X | 2 | 1 | 2 | X | 3 | 3 | 3 | 3 |
| | | CO4 | 3 | 2 | 3 | 3 | 2 | 1 | 2 | 2 | X | 1 | 3 | 3 | 3 | 3 |

| | |
|-------------------|---|
| Course Title/Code | INVESTMENT ANALYSIS & PORTFOLIO MANAGEMENT/MCH205B |
| Course Type: | ELECTIVE |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | This course aims at providing a clear understanding of the changing domestic and global investment scenario in general and Indian capital market in particular. |

| Course Outcomes (COs) | | Mapping |
|-------------------------------|---|--------------------------|
| CO1 | To develop a practical understanding of the financial markets and investment avenues. | Skill Enhancement |
| CO2 | To classify different tools and techniques of Securities Analysis i.e. fundamental analysis and technical analysis. | Employability |
| CO3 | To identify theories of portfolio construction. | Employability |
| Prerequisites (if any) | To explain the portfolio management process and will be able to learn the techniques of portfolio revision. | Employability |

SECTION A

A quick review of basic concepts; Overview of Investments: Investment objectives; Investment Environment; Investment Process; Common Errors in Investment Management; Introduction of Primary Markets and interrelationship with secondary markets; Investment Alternatives, Risk and Return in the Context of Portfolio, Capital Asset Pricing Model

SECTION B

Valuation of Securities: Valuation of Fixed Income Securities, Valuation of Common Stock

SECTION C

Markowitz's Risk-Return Optimization; Optimal Portfolio; Efficient Market Hypothesis; Overview of Fundamental & Technical Analysis

SECTION D

Managed Portfolios and Performance Evaluation: Sharpe's, Treynor's, Jensen's and Fama's Performance Measures; Portfolio Revision: Portfolio Re-balancing and Upgrading

Text Books

1. Reilly F, and Brown K(2011).Investment Analysis and Portfolio Management.Cengage
2. Kevin S(2022).Security Analysis and Portfolio Management. PHI Learning

References:

1. Prasanna C(2012).Investment Analysis & Portfolio Management”, 3e. Tata McGraw- Hill Education Pvt. Ltd
2. Fischer D E and Jordan R J(2008).Security Analysis and Portfolio Management”, 6e, Prentice Hall
3. Fuller R J and Farrel J(1987).Modern Investments and Security Analysis.McGraw Hill

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|--------------|--|-----------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | O1 | O2 | O3 | O4 | O5 | O6 | O7 | O8 | O9 | O0 | O1 | O2 | O1 | O2 |
| MCH205B | INVESTMENT ANALYSIS AND PORTFOLIO MANAGEMENT | CO1 | 3 | 3 | 2 | 2 | 1 | 1 | 2 | 1 | X | X | X | 1 | 1 | 2 |
| | | CO2 | X | 3 | 2 | X | 1 | 1 | 2 | 1 | X | X | X | 3 | 3 | 3 |
| | | CO3 | 3 | 3 | X | 2 | 1 | X | X | X | X | X | X | 3 | 3 | 3 |
| | | CO4 | X | 3 | 2 | 2 | X | 1 | 2 | X | 1 | 1 | 1 | 3 | 3 | 3 |

| | |
|-------------------|---|
| Course Title/Code | FAMILY BUSINESS GOVERNANCE/MCH241B |
| Course Type: | Elective (Departmental) |
| Course Nature: | Hard |
| Credit | 3 |
| L-T-P Structure | 3-0-0 |
| Course Objectives | Describe principles and processes of family business governance |

| Course Outcomes (COs) | | Mapping |
|------------------------------|--|--------------------------|
| CO1 | Describe principles and processes of family business governance | Employability |
| CO2 | Understand and explain the governance structure and processes that organize the family system | Skill Enhancement |
| CO3 | Understand and explain the contribution of Professional board of Directors in the family business governance | Skill Enhancement |
| CO4 | Identify the techniques that smoothen the communication between family and board that ensure overlapping of family and business governance | Employability |

SECTION A

Introduction to family business governance- Definition, Meaning, and importance, challenges and risks to family business governance, Purpose and goals of good governance, family member roles in governance, key governance issues in ownership development stages, Corporate governance v/v family governance Structure / Model of Family business governance , Principles of family business governance, theories of corporate governance in family business– agency theory, and stewardship theory .

SECTION B

Organizing the family & Family governance

Meaning & Need for family governance, key concerns of family governance, role of active owners, , Family governance institutions- Family Constitution- Meaning, contents of family constitution, setting a family policy , family office, Family meetings, Family assembly, family council & its purpose, family agreements, understanding family conflicts, family governance for conflict resolution

SECTION C

Organizing the board & Corporate governance

Phases of family ownership and governance activities, types of ownership, Role and responsibilities of the board of directors, benefits of an active board, family decisions on creating boards, the board and family values, the board and commitment of family ownership, board and business strategy

SECTION D

Overlapping of Family and Corporate Governance- Board v/s family council participation and responsibilities, board and family Expectations, chief family officer, managing communication & boundaries between family and board, evolution of family business governance systems, family philanthropy, family foundation

Text Books

1. Aronoff C E and Ward J L(2011).Family Business Governance.Palgrave Macmillan
2. Baron J and Lachenauer R(2021).Harvard Business Review Family Business Handbook.Harvard Business Review

References: •

1. Poza, E. J. and M. S. Daugherty (2014). Family Business, 4th edition (International Edition), South- Western Cengage Learning
2. Ibrahim, B. and W. Ellis. (2004). Family Business Management: Concepts and Practice, Kendall Hunt, Second Edition.
3. Nordqvist, M. and Zellweger, T. (2010). Transgenerational Entrepreneurship: Exploring Growth and Performance in Family Firms across Generations. Cheltenham, Gloucestershire, UK, Edward Elgar Publishing.

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | |
|--------------|----------------------------|-----------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | O1 | O2 | O3 | O4 | O5 | O6 | O7 | O8 | O9 | O0 | O1 | O2 | O1 | O2 | O1 | O2 |
| MCH241B | FAMILY BUSINESS GOVERNANCE | CO1 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | X | 2 | 1 | 2 | 3 | 3 | | |
| | | CO2 | 3 | 2 | 2 | 2 | X | 2 | 2 | 2 | 1 | 2 | X | 2 | 3 | 3 | | |
| | | CO3 | 3 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | X | 2 | 1 | 2 | 3 | 3 | | |
| | | CO4 | 3 | 2 | 2 | 2 | X | 2 | 2 | 2 | 1 | 2 | X | 2 | 3 | 3 | | |

| | |
|--------------------------|--|
| Course Title/Code | BUSINESS MODELLING/MCH242B |
| Course Type: | Core (Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | The main objective of the course is to familiarize you with knowledge, concepts and tools that are needed to diagnose and evaluate existing business models as well as to analyse, design and implement novel business models. The concepts that form the basis for the course are deeply anchored in state-of-the-art research and practice on the subject of business model innovation strategy. The integrative framework that we will learn addresses both the content (e.g., the key components of a business model) as well as the process of business model design. |

SECTION A

Introduction to Business Model Innovation Strategy: Why Do Business Models Matter? , What is a Business Model? Approaches Towards Defining Business Models, The Business Model as an Activity System, The “What, How, Who & Why” Framework - The What Dimension - The How Dimension - The Who Dimension - The Why Dimension , Implications of the Framework , Value Creation vs. Value Appropriation in Business Models.

SECTION B

Business Model Innovation: Adopting a Business Model Mindset and why is it needed, Leadership actions to foster a Business Model Mindset, What is business model innovation, A framework for business model innovation Measuring business model innovation, The Pros and Cons of business model innovation.

SECTION C

Strategic Design Process of Business Model Innovation: Why is a design perspective relevant to business model development, What is Design in the context of Business models, Business Model Strategic Design Drivers, Robust Business Model Design, The Business Model Design Process, Building a business model innovation capability.

SECTION D

Managing the Organizational Challenges of Business Model Implementation in Startups and in Established Firms: The roles of governance and leadership in business model implementation Revenue models the strategic implications of business model innovation in the digital age and how to develop a business model innovation strategy and Revenue models for business model implementataion.

Text Books

1. Tennent J and Friend G(2010).Guide to Business Modelling. Profile Books
2. Amit R and Zott C(2020) .Business Model Innovation Strategy. Wiley

References:

1. Bock A J(2017).Business Model Book, The: Design, Build And Adapt Business Ideas That Drive Business Growth.Pearson Business
2. Osterwalder A and Pigneur Y(2010).Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers.Wiley
3. Soni P(2020).Design Your Thinking: The Mindsets, Toolsets and Skill Sets for Creative Problem.Portfolio

- Case: HBS Case Studies #618051 and #619079 (2019) JD: Envisioning the Future of Retail (A and B) by Feng Zhu and Shirley Sun
- Case: HBS Case Study #W19506 (Ivey, 2019) NIO: Developing a Business Model in China
- Case: HBS Case Study #812077 (2011, rev. 2012) Rent the Runway

| Course Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|-------------|-------------------|-----------------|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|
| | | | O1 | O2 | O3 | O4 | O5 | O6 | O7 | O8 | O9 | O10 | O11 | O12 | O13 | O14 |
| MCH242B | Business Modeling | CO1 | 3 | 2 | 3 | 2 | 2 | 1 | 2 | 2 | X | 2 | 2 | 2 | 3 | 3 |
| | | CO2 | 3 | 2 | 3 | 2 | 2 | X | 2 | 2 | 1 | 2 | 2 | 2 | 3 | 3 |
| | | CO3 | 3 | 2 | 3 | 2 | 2 | 1 | 2 | 2 | X | 2 | 2 | 2 | 3 | 3 |
| | | CO4 | 3 | 2 | 3 | 2 | 2 | X | 2 | 2 | 1 | 2 | 2 | 2 | 3 | 3 |

| | |
|-------------------|--|
| Course Title/Code | CLINICAL SERVICES/MCH210B |
| Course Type: | Core (Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | Develop a working knowledge of clinical practices of Hospitals related to OPD, Operation Theatre, and other services . |

| Course Outcomes (COs) | | Mapping |
|-----------------------|--|--------------------------|
| CO1 | To acquaint the students with the fundamentals of Clinical Services | Skill Enhancement |
| CO2 | To understand the working of different Clinical Departments | Employability |
| CO3 | To understand the interrelationships between all the Clinical Services in Hospitals. | Employability |
| CO4 | To explain the staff planning in Clinical Services in a hospital | Employability |

SECTION-A

Brief introduction of Hospital operation management, roles and decisions and brief description of hospital services.

SECTION-B

Overview of the department, day care, accident and emergency services, physical medicine and rehabilitation, , physiotherapy department.

SECTION-C

Ward design (general & specialized), critical care services – ICU, CCU, NICU, , medical services, surgical services – operation theater, burn unit, nursing services and administration.

SECTION-D

Specialty: OBG & GYN, Orthopedic, , Ophthalmology

super specialty :- Dialysis Unit, Transplantation Services, Cardiology,

Support Services :- Blood Bank & Transfusion Services, Ambulance Services, Pharmacy, CSSD Dietary Service, Hospital Laundry and Linen. and Housekeeping..

Text Books

1. Mishra R (2021).Management of Hospital. Notion Press
2. Torrens P and Williams S (2007).Introduction to Health Services. Delmar Cengage Learning

References:

1. Ramachandra D L(2018).Essentials of Hospital Management and Administration.Educreation Publishing
2. Goel S, Gupta A K and Singh A(2009).Hospital Administration. Elsevier India
3. Sakharkar B M (2009).Principles & Planning of Hospital administration. Jaypee

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | | |
|--------------|-------------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 1 | 2 | | | |
| MCH210B | CLINICAL SERVICES | CO1 | 3 | 1 | 2 | 3 | X | X | 3 | 2 | X | 2 | 2 | 2 | 2 | 2 | 2 | 1 | |
| | | CO2 | 2 | 2 | 2 | 3 | X | X | 2 | 3 | X | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 |
| | | CO3 | 1 | 1 | 2 | 2 | 2 | 3 | 2 | 2 | X | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 2 |
| | | CO4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | X | 2 | 1 | 2 | 2 | 2 | 2 | 2 |

| | |
|-------------------|---|
| Course Title/Code | PLANNING AND DESIGN OF HOSPITALS/MCH211B |
| Course Type: | Core |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | To develop working knowledge of Hospital planning and design from multiple stakeholders and disciplinary perspectives |

| | | |
|------------|--|--------------------------|
| | | |
| CO1 | To understand the basic concepts in planning & designing of a hospital | Skill Enhancement |
| CO2 | Have clarity on the difference between planning & designing of different types of hospitals (teaching, Specialty, disabled friendly) | Skill Enhancement |
| CO3 | To get a basic understanding of different standards and their importance & the tools for Project Management. | Employability |
| CO4 | To analyse the pros and cons in a healthcare facility design | Skill Enhancement |

SECTION A

Conception of idea, formation of hospital planning team, market survey , feasibility study, selection of location, Financial planning of hospitals,

Macro level planning Conception to commissioning-site development, architects brief working drawings and specifications, engineering drawing drawing, equipment planning, bed distribution, space allocation , interior designing and construction of building-commissioning, shake down period

Conception to commissioning-site development, architects brief working drawings and specifications,

SECTION B

A accident and emergency services, and day care services.

Planning for patient care units –Inpatient services and intensive care units.

Planning for surgical suites. (OT) Planning for labour and delivery suites-LDRP (Labour, delivery, Recovery, Postpartum room)

SECTION C

Planning for laboratory service and blood banking .

Planning for imagological -services-x-rays, ultra sonography, CT-scan PET scan and other advances in imagological services.

Cardiac catheterization laboratory, radiotherapy unit, IVF unit, Dialysis unit.

SECTION D

Medical gases, HVAC (Heat, Ventilation, Air condition) ,house keeping ,CSSD,Food and beverages.

Text Books

1. Roberts S (2013).Specialised Hospitals Design and Planning.DesignMedia Publishing Limited
2. Levin D (2013).General Hospitals Planning and Design.DesignMedia Publishing Limited

References:

1. Goel S, Gupta A K and Singh A (2013).Hospital Administration,” Elsevier India
2. Sakharkar B M(2009).Principles & Planning of Hospital administration.Jaypee

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|--------------|----------------------------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 1 | 2 |
| MCH211B | PLANNING AND DESIGN OF HOSPITALS | CO1 | 2 | 1 | 3 | 2 | 1 | 1 | 3 | 2 | X | X | 2 | X | 2 | 1 |
| | | CO2 | 2 | 2 | 2 | 2 | 2 | 1 | 3 | 2 | X | X | 3 | X | 2 | 2 |
| | | CO3 | 1 | 3 | 3 | 2 | 1 | 2 | 3 | 2 | X | X | 2 | X | 1 | 2 |
| | | CO4 | X | 2 | 2 | 2 | 2 | 1 | 3 | 2 | X | X | 2 | X | 2 | 2 |
| | | CO5 | 2 | 1 | 3 | 2 | 1 | 1 | 3 | 2 | X | X | 2 | X | 2 | 1 |

| | |
|-------------------|--|
| Course Title/Code | EPIDEMIOLOGY MCH237B |
| Course Type: | Core (Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | Student will be able to distinguish the roles and relationships between epidemiology and biostatistics in the prevention of disease and the improvement of health. |

| <u>Course Outcomes (COs)</u> | | <u>Mapping</u> |
|------------------------------|--|--------------------------|
| CO1 | To introduce the basic principles and methods of epidemiology | Skill Enhancement |
| CO2 | Demonstrate a basic understanding of epidemiologic methods and study design. | Employability y |
| CO3 | To provide a structured method for organizing and analyzing raw data | Employability y |
| CO4 | Combine appropriate epidemiological concepts and statistical methods. | Skill Enhancement |

SECTION A

Types of Epidemiology a. Prospective and Retrospective b. Descriptive (person, place, time) c. Analytic (cause and risk and protective factors); Uses of Epidemiology a. Determinants of Health (Healthy People 2010) b. Historical study of health status in populations c. Community assessment to identify assets and needs d. Environmental health hazards and exposures e. Factors influencing health beliefs and practices f. Individual risks and primary, secondary, and tertiary preventive strategies g. Disease and health presentations and precursors (e.g. tobacco and COPD) h. Study of causation and causal inference

SECTION B

Epidemiological Models and Strategies: a. Epidemiological triad, web of causation, and health promotion models b. Epidemiological study designs c. Case series, single or multiple d. Case control studies e. Cohort studies f. Random and systematic error g. Subject selection

SECTION C

Natural History of Disease: a. Case definition b. Chain of causation c. Surveillance and investigation d. Prevention and Control (NNT)

Genomics: Gene precursors to health and illness b. Association with conditions

SECTION D

Epidemics/Pandemics a. Emerging infectious diseases b. Globalization of disease

Text Books

1. Elmore et al.(2020).Epidemiology, Biostatistics, Preventive Medicine, and Public Health. Elsevier
2. Breilh J and Krieger N (2021).Critical Epidemiology and the People's Health.OUP USA

References

1. Gordis, L. (2004). Epidemiology. Third edition. Philadelphia: Elsevier Saunders. (The second edition is also acceptable.)
2. Pagano, M. and Gauvreau, K. (2000). Principles of Biostatistics. Belmont, CA: Wadsworth.

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|--------------|--------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 1 | 2 | 1 |
| MCH237B | EPIDEMIOLOGY | CO1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | X | 2 | 2 | 1 | 2 |
| | | CO2 | 3 | 1 | X | 2 | X | 2 | 3 | 2 | 2 | X | 2 | 3 | 2 | 1 | |
| | | CO3 | 1 | 2 | 3 | 2 | 2 | 2 | 3 | 2 | 1 | X | 2 | 2 | 1 | 2 | |
| | | CO4 | 1 | 2 | 2 | 3 | 2 | 1 | 2 | 1 | 2 | X | 2 | 1 | 2 | 1 | |

| | |
|-------------------|---|
| Course Title/Code | TOTAL QUALITY MANAGEMENT/MCH208B |
| Course Type: | Elective (Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0-0 |
| Credit | 3 |
| Course Objectives | To understand Quality of design, control and identify non-conforming product design, control and identify non-conforming products |

| Course Outcomes (COs) | | Mapping |
|-------------------------------|---|--------------------------|
| CO1 | To understand Quality of design, control and identify non-conforming product design, control and identify non-conforming products | Skill Enhancement |
| CO2 | To understand Quality Function Deployment (QFD),(Total Productive Maintenance) TPM | Employability |
| CO3 | To analyze the Failure Mode and Effects Analysis (FMEA)/FTA | Employability |
| CO4 | Analyze Quality Costs and Audit Marketing aspects of total quality, Total Quality of Services, Total Quality and Environment and Safety | Employability |
| Prerequisites (if any) | | |

SECTION A

Total Quality management, Historical background of TQM. Concept of Total Quality and its evolution, Components of a Total Quality Loop. Quality of Design; Quality of Purchasing; Supplier qualification, Critical-to-Quality Characteristics: Attributes and Variables, Planning for quality -Flowcharting, Detailed flow process charts and flow diagrams, Planning for just-in-time (JIT) management, System design and contents, System documentation, implementation and assessment

SECTION B

Measurement of quality- Costs of quality, Tools and techniques for quality improvement, Statistical process control, Quality improvement techniques in service industries. Theory of Acceptance Sampling, Statistical Process Control, Process Capability Studies, Concept of Six Sigma and its application. Training for Total Quality Management-Scope of requirements and identification of training needs, Design of training programmes, Evaluation of training programmes, Performance improvement worksheets, Follow-up of training programmes

SECTION C

Quality of design - Quality of conformance to design, Control of non-conforming products, identifying and classifying non-conformance, re-inspection of repaired and reworked products, Corrective and preventive action. Organization of Quality improvement efforts, Quality improvement tools, Quality Function Deployment (QFD), Introduction to the concept of (Total Productive Maintenance) TPM.

SECTION D

Failure Mode and Effects Analysis (FMEA)/FTA, Quality Costs and Audit, Lead Assessment, Marketing aspects of total quality, Total Quality of Services, Total Quality and Environment and Safety: Introduction to relevant standards. Internal quality audits- Scope of requirements and audit procedures. The audit program and planning of quality audits, verifying compliance with planned arrangements. Stages in the evolution of a company's improvement capability: Traditional approach, structured continuous improvement, goal-oriented continuous improvement, proactive/empowered continuous improvement, full continuous improvement capability (the learning organization)

Text Books:

1. Besterfield, D. H., Besterfield-Michna, C., Besterfield, G. H., & Besterfield-Sacre, M. (2006). Total quality management (3rd ed.). New Delhi: Pearson Education.
2. Dale, B. G. (2003). Managing quality. UK: Blackwell Publishing. Faculty of Management Studies, University of Delhi

References:

1. De Feo, J. A., & Barnard, W. W. (2005). Juran's institute: six sigma breakthrough and beyond: Quality performance breakthrough methods. New Delhi: Tata McGraw Hill.
2. IS/ISO 9001:2000. (2000). New Delhi: Bureau of Indian Standards.
3. Narayan, V., Wardhaugh, J. W., & Das, M. C. (2008). 100 years in maintenance and reliability. New York: Industrial Press.

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|--------------|--------------------------|-----------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | O1 | O2 | O3 | O4 | O5 | O6 | O7 | O8 | O9 | O0 | O1 | O2 | O1 | O2 |
| MCH208B | TOTAL QUALITY MANAGEMENT | CO1 | 3 | 2 | 2 | 2 | 1 | 3 | 1 | 2 | 1 | 1 | 2 | X | 3 | 1 |
| | | CO2 | 3 | 3 | 3 | 3 | X | 3 | 2 | 1 | X | 2 | 3 | 1 | 3 | X |
| | | CO3 | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 2 | 1 | X | 2 | 2 | 1 | 2 |
| | | CO4 | 3 | 3 | 3 | 3 | 1 | 3 | 2 | 1 | 1 | 2 | 3 | 1 | 3 | X |

| | |
|-------------------|--|
| Course Title/Code | WAREHOUSE MANAGEMENT/ MCH209B |
| Course Type: | Core (Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | Understand the concept and application of warehouse management in logistics industry |

| | Course Outcomes (COs) | Mapping |
|------------|--|-------------------|
| CO1 | Define and explain all the important features of warehouse management | Skill Enhancement |
| CO2 | Explain the Warehousing process with relevant examples from industry | Employability |
| CO3 | Analyze the trends in Warehousing, and apply them to explain the future of warehousing | Employability |
| CO4 | Explain the use of various storage and handling equipment in warehousing | Employability |

SECTION A

Warehousing Management: Definitions, Warehousing & Its characteristics, Role of Warehousing, Types of Warehouses, Role of Warehouse manager, Storage Policies Terminologies in warehousing, Introduction to warehousing processes -, Warehouse Receiving & Put- Away.

SECTION B

Warehouse Processes: Pick Preparation, Picking Strategies and equipments, order picking methods, Warehouse processes from replenishment to dispatch.

SECTION C

Warehouse Management System (WMS): Introduction need and process, Introduction to Warehouse Layout & Design, examples of layout of the large players in e-commerce industry in Indian context. Storage and handling equipment used in warehousing

SECTION D

Resourcing a warehouse, Warehouse cost, Use of Information Communication Technology in warehousing, Outsourcing, Development and trends in warehousing - The Warehouse of the future.

Text Books

1. Mcdonough A(2020).Operations and Supply Chain Management Essentials You Always Wanted To Know. Vibrant Publishers
2. Richards G(2017). Warehouse Management: A Complete Guide to Improving Efficiency and Minimizing Costs in the Modern Warehouse.Kogan Page

References:

3. Frazelle E (2001).World-Class Warehousing and Material Handling. McGraw-Hill Education
4. Emmett S(2005).Excellence in Warehouse Management.Wiley
3. Chase , R, Jacobs F R and Aquilano N(2005). Operations Management for Competitive Advantage. McGraw-Hill Education

| Courses Code | Courses | Course Outcomes | Course Outcomes | | | | | | | | | | Course Outcomes | | | | |
|--------------|----------------------|-----------------|-----------------|---|---|---|---|---|---|---|---|----|-----------------|----|----|----|----|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| MCH209B | WAREHOUSE MANAGEMENT | CO1 | 3 | 2 | 2 | 2 | 1 | 3 | 1 | 1 | 1 | 1 | 2 | X | 3 | 3 | |
| | | CO2 | 3 | 3 | 3 | 3 | 1 | 3 | 3 | 1 | 1 | 1 | 3 | 2 | 3 | 2 | |
| | | CO3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | X | 1 | 3 | 2 | 3 | 3 | |
| | | CO4 | 3 | 3 | 3 | 3 | 1 | 2 | 3 | 2 | 1 | 1 | 3 | 1 | 3 | 2 | |

Statistics with R

| | |
|-------------------|--|
| Course Title/Code | Statistics with R / MCH248B |
| Course Type: | Elective |
| Course Nature: | Hard |
| L-T-P Structure | 2-0-2 |
| Credit | 3 |
| Course Objectives | The objective of this module to make students exercise the fundamentals of statistical analysis in R environment. They would be able to analysis data for the purpose of exploration using Descriptive and Inferential Statistics. Students will understand Probability and Sampling Distributions and learn the creative application of Linear Regression in multivariate context for predictive purpose. |

| Course Outcomes (COs) | | Mapping |
|-----------------------|--|-------------------|
| CO1 | Explain the data entry and formatting of data using R. | Skill Enhancement |
| CO2 | Apply exploratory data analysis and regression analysis method to get insights from the data and to predict unknown variables. | Employability |
| CO3 | Analyze role of probabilistic approach in data analysis. | Employability |
| CO4 | Apply hypothesis testing methods to test the hypothesis. | Employability |

Section A

Introduction to R Programming

R and R Studio, Logical Arguments, Missing Values, Characters, Factors and Numeric, Help in R, Vector to Matrix, Matrix Access, Data Frames, Data Frame Access, Basic Data Manipulation Techniques, Usage of various apply functions – apply, lapply, sapply and tapply, Outliers treatment.

Section B

Descriptive Statistics

Types of Data, Nominal, Ordinal, Scale and Ratio, Measures of Central Tendency, Mean, Mode and Median, Bar Chart, Pie Chart and Box Plot, Measures of Variability, Range, Inter- Quartile-Range, Standard Deviation, Skewness and Kurtosis, Histogram, Stem and Leaf Diagram, Standard Error of Mean and Confidence Intervals.

Correlation and Regression

Analysis of Relationship, Positive and Negative Correlation, Perfect Correlation, Correlation Matrix, Scatter Plots, Simple Linear Regression, R Square, Adjusted R Square, Testing of Slope, Standard Error of Estimate, Overall Model Fitness, Assumptions of Linear Regression, Multiple Regression, Coefficients of Partial Determination, Durbin Watson Statistics, Variance Inflation Factor.

Section C

Probability, Probability & Sampling Distribution

Experiment, Sample Space and Events, Classical Probability, General Rules Of Addition, Conditional Probability, General Rules For Multiplication, Independent Events, Bayes' Theorem, Discrete Probability Distributions: Binomial, Poisson, Continuous Probability Distribution, Normal Distribution & t-distribution, Sampling Distribution and Central Limit Theorem.

Section D

Statistical Inference and Hypothesis Testing

Population and Sample, Null and Alternate Hypothesis, Level of Significance, Type I and Type II Errors, One Sample t Test, Confidence Intervals, One Sample Proportion Test, Paired Sample t Test, Independent Samples t Test, Two Sample Proportion Tests, One Way Analysis of Variance and Chi Square Test.

Text Books:

1. Metzler, N. (2019). An Introduction to R Programming with Tutorials and Hands-On Examples. Independently Published.
2. Lander, J P. (2018). R for Everyone. Pearson.
3. Black, K (2013), Business Statistics, New Delhi, Wiley.
4. Cheng. et al., (2013), Statistics for Business and Financial Economics, New York: Heidelberg Dordrecht.

References

1. Jose, J. (2018). Beginners Guide for Data Analysis using R Programming. Khanna.
2. Acharya S(2018). Data Analytics Using R. McGraw Hill Education
3. Motwani B (2021). HR Analytics : Practical Approach Using Python. Wiley

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P | |
|--------------|-------------------|-----------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|---|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | |
| MCH248B | Statistics with R | CO1 | 3 | x | 3 | 3 | 2 | x | x | x | x | x | x | x | 3 | 2 | 3 |
| | | CO2 | 3 | x | 3 | 3 | 3 | x | x | x | x | x | x | x | 3 | 3 | 3 |
| | | CO3 | 3 | x | 3 | 3 | 3 | x | x | x | x | x | x | x | 3 | 3 | 3 |
| | | CO4 | 3 | x | 3 | 3 | 3 | x | x | x | x | x | x | x | 3 | 3 | 3 |

| | |
|--------------------------|---|
| Course Title/Code | Research Techniques/ MCH131B |
| Course Type: | Elective(Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Outcomes | The course enables the students to understand the research process, tools, and techniques. The students will analyze hypothesis testing using research techniques in SPSS |

| Course Outcomes (COs) | | Mapping |
|------------------------------|---|--------------------------|
| CO1 | To familiarize students with nature and scope of the marketing research process | Skill Enhancement |
| CO2 | To understand research design, data purification, and handling | Skill Enhancement |
| CO3 | To understand and apply hypotheses testing | Employability |
| CO4 | To be able to analyze factor analysis on SPSS | Employability |

SECTION A

Introduction to marketing research, Marketing research process: Problem Identification, Research Design Formulation, Scaling Techniques

SECTION B

Research design: Exploratory, Descriptive, Causal, Data purification and handling: Missing data, Outliers, Normality, Hypothesis testing, Sampling: Non-Probability and Probability Sampling, Hypotheses development

SECTION C

Importance of power of test, Factor affecting power of test, Significance of p-values, Type I and Type II errors, Hypotheses Testing

SECTION D

Exploratory and Confirmatory factor analysis, Application of factor analysis, Scree Plot, Rotation, Correlation Matrix, Application in SPSS

Text Books:

1. Hair, J F , BlackW C and Babin B J (2010), Multivariate Data Analysis , Pearson Education,
2. Malhotra, N K (2019), Marketing Research: An Applied Orientation

References:

1. Sheth, J. N. (1977, January 1). Multivariate Methods for Market and Survey Research
2. Lehmann, D. R. (1985, January 1). Market Research and Analysis. McGraw-Hill/Irwin

NPTEL LINK

- [Research Methodology - Course \(nptel.ac.in\)](https://nptel.ac.in)

| Course s Code | Courses | Course Outcom es | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PS | PS |
|------------------|------------------------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | O1 | O2 |
| MCH1 31B | RESEARCH TECHNIQUES | CO1 | 3 | 2 | X | X | 3 | 3 | X | X | X | 3 | 2 | 3 | 3 | X |
| | | CO2 | 3 | X | X | 2 | 3 | 3 | 1 | X | X | 3 | X | 3 | X | 3 |
| | | CO3 | X | X | X | X | 3 | 3 | 2 | 3 | 2 | X | 1 | X | 3 | 3 |
| | | CO4 | 3 | X | 2 | 2 | 3 | 3 | X | X | 2 | X | X | 3 | 3 | 3 |

| | |
|-------------------|---|
| Course Title/Code | CONSUMER BEHAVIOUR/MCH-249 B |
| Course Type: | Core (Departmental) |
| Course Nature: | Hard |
| L-T-P-O Structure | 4-0-0-0 |
| Course Objectives | Participants who master the course material will acquire knowledge about the various disciplines contribution in understanding buyer behavior in a holistic manner. He/she will acquaint with the advances in consumer research in deciphering buyer motivation, behavior (pre-purchase, purchase and post purchase) and impact of social and cultural variables on consumption decisions. The participants will get equipped with frameworks to analyze consumer's behavior and use them in designing marketing strategies and in enhancing the effectiveness of marketing programmes. |

| Course Outcomes (COs) | | Mapping |
|-----------------------|---|-------------------|
| CO1 | To understand the major influences in consumer behavior. | Skill Enhancement |
| CO2 | To analyse major consumer influences and their relationships. | Skill Enhancement |
| CO3 | To establish the relevance of consumer behavior theories and concepts to marketing decisions. | Employability |
| CO4 | To implement appropriate combinations of theories and concepts | Skill Enhancement |

SECTION A

Consumer Behavior: Concept, diversity of consumer behavior, Characteristics of Indian Consumers, Consumer behavior and marketing strategies. Consumerism: Evolution of consumer society. Definition of consumerism, buyers & sellers' rights, effects of consumerism. Consumer Research.

SECTION B

Individual Determinants of Behavior-Personality, perception, attitude (attitudinal models), learning, Motivation, Group influence on consumer behavior-

SECTION C

Opinion leaders. Culture, Sub-culture, Cultural relevance to marketing decisions, Characteristics of culture, Cultural Values, Cultural Changes, Cross cultural understandings. **Family:** Role & Structure, Family Life Cycle, Purchasing decisions, Changing role of families. Diffusion of innovations: the diffusion process – the adoption process - consumer innovativeness and personality traits.

SECTION D

Consumer decision making: Consumer Decision Making Process, Models of consumer decision making- Engle38 Kollatt-Blackwell model, Howard-Sheth Model, Bettman's Model, HCB Model. Concept of involvement & extensive problem solving - limited problem solving – routinized responsive behavior. .Organizational Buying: Concept & comparison with Consumer buying.

Post purchase behavior: Consumer satisfaction concept & Models – Expectancy Disconfirmation, Desires Congruency Model, Equity Theory, Attribution Theory, Cognitive dissonance, Consumer delight, consumer complaint behavior.

Text Books:

1. Roger, B, Paul M and James E (2009).Consumer Behaviour;10th ed, Thomson Learning; New Delhi
2. Loudon, D J. and Albert, D (2014). Consumer Behaviour; 11th ed, Tata McGraw Hill Publishing Company Ltd., New Delhi
3. Schiffman, L G. and Lazar, K L (2010). Consumer Beaviour; 10th revised ed, Pearson Education; New Delhi,

References:

1. Schiffman, L G. and Wisenblit, J (2018).Consumer Beaviour; Pearson
2. Soloman, M R.(2004). Consumer Behaviour – Buying, Having and Being, 5thed,Pearson Education; New Delhi,
3. Henry, A (2005).Consumer Behaviour, Biztantra, New Delhi,
4. Seth, J. N. & Mittal, B.(2004). Customer Behaviour-A Managerial Perspective, 2nded,Thomson South-Western,

| Course s Code | Courses | Course Outcomes | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PS | PS |
|---------------|--------------------|-----------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | O1 | O2 |
| MCH-249 B | CONSUMER BEHAVIOUR | CO1 | 3 | 2 | 3 | x | 2 | 2 | x | 3 | 2 | x | x | x | x | 3 |
| | | CO2 | 3 | | 3 | 3 | 3 | 3 | x | 2 | 3 | x | x | x | 3 | 3 |
| | | CO3 | 3 | x | 3 | 3 | 3 | 3 | x | x | 3 | x | x | x | 3 | 3 |
| | | CO4 | 3 | 3 | 3 | 3 | x | 3 | 3 | x | x | x | x | x | 3 | 3 |

SEMESTER - 4

| SUBJECT CODES | SUBJECT NAME | OFFERING DEPARTMENT | *COURSE NATURE (Hard/Soft/Workshop/NTCC) | COURSE TYPE (Core/Elective / University Compulsory) | L | T | P | NO. OF CONTACT HOURS PER WEEK | NO. OF CREDITS |
|-----------------------------|--|----------------------------|---|--|----------|----------|----------|--------------------------------------|-----------------------|
| MCH218B | SERVICES MARKETING | DMC | HARD | CORE | 3 | 0 | 0 | 3 | 3 |
| MCH215B | SUPPLY CHAIN MANAGEMENT | DMC | HARD | CORE | 3 | 0 | 0 | 3 | 3 |
| MCH236B | CSR And Sustainable Development | DMC | HARD | CORE | 3 | 0 | 0 | 3 | 3 |
| ELECTIVE | | | | | | | | | |
| FINANCE AND ACCOUNTS | | | | | | | | | |
| MCH219B | MANAGEMENT OF BANKING AND FINANCIAL INSTITUTIONS | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| MCH235B | CORPORATE ACCOUNTING | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| MCH240B | DIGITAL FINANCE | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| MCH216B | PERFORMANCE AND COMPENSATION MANAGEMENT SYSTEMS | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |

| | | | | | | | | | |
|--|---|-----|------|----------|---|---|----|----|---|
| CSH216B | RELATIONAL DATABASE MANAGEMENT SYSTEMS | ECE | HARD | ELECTIVE | 2 | 0 | 2 | 4 | 3 |
| MCH221B | SUMMER INTERNSHIP | DMC | SOFT | CORE | 0 | 0 | 8 | 8 | 4 |
| Entrepreneurship & Family Business Specialization | | | | | | | | | |
| MCH222B | MANAGING ENTREPRENEURIAL GROWTH AND STRATEGY | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| MCH238B | APPLIED ENTREPRENEURSHI P PROGRAM | DMC | SOFT | Elective | 1 | 0 | 2 | 3 | 3 |
| MCH 225B | APPLIED ENTREPRENEURSHI P PROJECT | DMC | NTCC | Elective | 0 | 0 | 12 | 12 | 6 |
| Health Care Management Specialization | | | | | | | | | |
| MCH226B | MATERIAL & INVENTORY MANAGEMENT | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| MCH227B | HEALTHCARE INFORMATION SYSTEM | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| MCH228B | MANAGEMENT OF MEDICATION | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| MCH229B | HEALTHCARE & HRM | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |

| | | | | | | | | | |
|---------|--------------------------------|-----|------|------|---|---|----|----|---|
| MCH243B | Healthcare Industry Project | DMC | HARD | CORE | 0 | 0 | 12 | 12 | 6 |
|---------|--------------------------------|-----|------|------|---|---|----|----|---|

| | | | | | | | | | |
|---------|--|-----|------|----------|---|---|----|----|---|
| MCH231B | PROJECT MANAGEMENT | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| MCH232B | FREIGHT TRANSPORT MANAGEMENT | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| MCH233B | APPLIED OPERATIONS MANAGEMENT PROJECT | DMC | NTCC | ELECTIVE | 0 | 0 | 12 | 12 | 6 |

Business Analytics Specialization

| | | | | | | | | | |
|---------|--|-----|------|----------|---|---|---|---|---|
| MCH246B | Operation Research | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| MCH247B | SAS & Tableau | DMC | HARD | ELECTIVE | 0 | 0 | 4 | 4 | 2 |
| MCH216B | PERFORMANCE AND COMPENSATION MANAGEMENT SYSTEMS | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |

COURSES ARE OPTED DEPENDING UPON THE SPECIALIZATION CHOSEN BY THE STUDENT

BBA- Fourth Semester

| | |
|-------------------|---|
| Course Title/Code | SERVICES MARKETING /MCH218B |
| Course Type: | Core (Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | Participants who master the course material will acquire knowledge about the various disciplines contribution in understanding buyer behavior in a holistic manner. He/she will acquaint with the advances in consumer research in deciphering buyer motivation, behavior (pre-purchase, purchase and post purchase) and impact of social and cultural variables on consumption decisions. The participants will get equipped with frameworks to analyze consumer's behavior and use them in designing marketing strategies and in enhancing the effectiveness of marketing programs. |

| Course Outcomes (COs) | | Mapping |
|------------------------------|---|-------------------|
| CO1 | To understands the basics of Services, designing of services, service blueprinting and other related topics. | Skill Enhancement |
| CO2 | To give the students an insight into the 7 Ps of Services Marketing with its practical applicability | Employability |
| CO3 | To understand the dynamics of Services Marketing, its demand and supply through capacity planning and Internal & External Marketing | Employability |
| CO4 | To study the quality gaps, the factors contributing to such gaps and its remedies, buyer's behaviour and impact of social and cultural variables on consumption decisions | Employability |

SECTION A

Introduction Growth of the service sector, the concept of service, Characteristics of Service – Classification of service – Designing of the service, blueprinting, using technology developing, human resources, building service aspirations

SECTION B

Marketing Mix In Service Marketing: The Seven Ps: Product decision, Pricing, Strategies and tactics, Promotion of service and placing of distribution methods for services. Additional dimension in services marketing – People, physical evidence and process

SECTION C

Effective Management Of Service Marketing: Marketing Demand and Supply through capacity planning and segmentation – Internal marketing of Services – External versus Internal orientation of service strategy

SECTION D

Delivering Quality Service: Causes of Service – Quality gaps, the customer expectations versus perceived service gap. Factors and Techniques to resolve this gap Customer Relationship Management. Gaps in Services – Quality standards, factors and solutions – The service performance gap – Key factors and strategies for closing the gap, External communication to the customers – The promise versus delivery gap – Developing appropriate and effective communication about service quality.

Marketing Of Service With Special Reference To: 1. Financial Services 2. Health Service 3. Hospitality Services including travel, hotels and tourism 4. Professional Service 5. Public Utility Services 6. Educational Services

Text Books:

1. Jha S.M. (2020), Services Marketing, New Delhi Himalaya Publishing House.
2. Delwiche L D and Slaughter S J (2019), The Little SAS Book: A Primer
3. Daniel, M (2016), Tableau Your Data!: Fast and Easy Visual Analysis with Tableau Software

References:

- 1 Wirtz, J., Chew, P., & Lovelock, C. H. (2018, September 26). Essentials of Services Marketing.
- 2 Payne, A. (1993, January 1). The Essence of Services Marketing. Pearson P T R
- 3 Wirtz, J., & Lovelock, C. (2021, October 15). Services Marketing: People, Technology, Strategy (Ninth Edition). World Scientific.

| Course s Code | Courses | Course Outcomes | PO 1 | PO 2 | PO 3 | PO 4 | PO 5 | PO 6 | PO 7 | PO 8 | PO 9 | PO 10 | PO 11 | PO 12 | PS O1 | PS O2 |
|----------------------|-----------------------|------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|
| MCH218B | SERVICES MARKETING | CO1 | 3 | 1 | 3 | 2 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | X | 2 | 3 |
| | | CO2 | 3 | 2 | 3 | 1 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | X | 3 | 3 |
| | | CO3 | 3 | 1 | 3 | 2 | 3 | 2 | 2 | 3 | 3 | 2 | 2 | 1 | 3 | 3 |
| | | CO4 | 3 | 2 | 3 | 2 | 3 | 2 | 2 | 3 | 3 | 2 | 1 | 1 | 3 | 3 |

| | |
|-------------------|--|
| Course Title/Code | SUPPLY CHAIN MANAGEMENT / MCH215B |
| Course Type: | Core (Departmental) |
| Course Nature: | Hard |

| | |
|-------------------|---|
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | At the completion of this course, the student should be able to examine the design and performance of supply networks and processes in different business contexts. Students develop capabilities in logistics, digital coordination for supply chain integration, inventory management, risk pooling, procurement, product and process design, and international supply chain management |

| Course Outcomes (COs) | | Mapping |
|-----------------------|--|---------------|
| CO1 | To understand the basic concepts of SCM | Employability |
| CO2 | To understand concepts and application how to develop efficient supply chain | Employability |
| CO3 | To analyze and apply the decision making in SCM | Employability |
| CO4 | To understand and apply Procurement and Outsourcing in SCM | Employability |

SECTION A

Introduction to SCM What is SCM; Key Issues in SCM; Inventory Management , Economic lot size model ;Periodic review policy ;Continuous review policy; Managing inventory in the supply chain

SECTION B

Network Planning Network design Inventory positioning and; make-to-stock supply chain Contracts for make-to-order supply chain Contracts; The bullwhip effect Supply; supply chain trade-offs; Centralized and decentralized decision making and performance impacts

SECTION C

Supply Chain Integration Functional Products Innovative products efficient supply chains Responsive supply chains agile supply chains; Strategic Alliances Framework for strategic alliances Third-party logistics Retailer-Supplier Partnerships; Distribution Strategies

SECTION D

Procurement and Outsourcing Strategies Outsourcing benefits and risks, A Framework for Buy/Make Decisions Procurement , strategies E-Procurement; Global Logistics and Risk Management ;development Mass customization; Information Technology Business Processes Supply Chain IT Innovations Technology standards

Text Books:

1. Lambert D M (2006). Supply Chain Management: Processes, Partnerships, Performance, 2nd Ed, The Supply Chain Management Institute, FL.
2. Schmenner R (1992). Production/Operations Management. 5th ed. Macmillan Publishing Company

References:

1. Nahmias, S(1993). Production and Operations Analysis. 2nd ed. Irwin
2. Jacobs C and Aquilano(2010). Operations Management for Competitive advantages, Tata McGraw-Hill Education Pvt. Ltd
3. Cachon G and Terwiesch C (2016).. Matching Supply with Demand. 4th ed, McGraw-Hill in

| Course s Code | Courses | Course Outcomes | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PS | PS |
|---------------|------------------------|-----------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | O1 | O2 |
| MCH215B | SUPPLY CHAIN MANAGMENT | CO1 | 3 | 2 | 2 | 2 | 1 | 3 | 2 | 1 | 1 | X | 2 | X | 3 | 3 |
| | | CO2 | 3 | 3 | 3 | 3 | 1 | 3 | 1 | 1 | 1 | 1 | 3 | 1 | 2 | 3 |
| | | CO3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | x | 3 | 2 | 2 | 1 | 3 | 3 |
| | | CO4 | 3 | 3 | 3 | 3 | 1 | 3 | 1 | 1 | 1 | 1 | 3 | 1 | 2 | 3 |

| | |
|-------------------|--|
| Course Title/Code | CORPORATE SOCIAL RESPONSIBILITY & SUSTAINABLE DEVELOPMENT MCH236B |
| Course Type: | Core (Departmental) |
| Course Nature: | Hard |

| | |
|----------------------------------|--|
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| <u>COURSE OBJECTIVES:</u> | The objective of this course is to expose the students to basic concepts of Sustainability & Corporate Social responsibility, in order to initiate ideas, techniques, procedures and practices in the mentioned field. |

| Course Outcomes (COs) | | Mapping |
|-----------------------|---|-------------------|
| CO1 | To familiarize the students with context & concept of sustainable development, and its dimensions on ground | Employability |
| CO2 | To inculcate an in-depth understanding of corporate social responsibility, and its role in ushering in sustainable development | Skill Enhancement |
| CO3 | To correlate the alignment of CSR & development in organizational context, and understand the strategy, leadership & motivation therein | Employability |
| CO4 | To familiarize students with coding & quality standards of CSR, and evaluating & reporting performance of CSR initiatives | Skill Enhancement |

Section A

Sustainable Development: Basic Concepts- Perspectives & challenges of sustainability. **Stakeholders of sustainable development-** SDGs, Issues in sustainable development policies. Sustainable Development and social exclusion and impact among socially excluded and marginalized sections: Dalits, Adivasis, Religious Minorities, Women, Transgender, Differently Abled, HIV-Aids victims, Migrants and other marginalized groups.

Section B

Corporate Social Responsibility- Definition, concept, linkages to sustainable development Growth of CSR- historical & contemporary perspectives, National & International scenario. Factors influencing growth of CSR in India- ideological, socio-economic, legal & environmental perspectives Government initiatives for promoting CSR Impact of globalization & liberalization on CSR initiatives

Section C

CSR & Development: -CSR activities–nature, types, impact on development programmes- CSR& development organisations–relationships, functioning & impact on organisational functioning Stakeholders’ participation & perspectives about CSR. CSR Strategy and Leadership. Corporate motivations & Behaviour for CSR – Programmes& initiatives, factors influencing national & international perspectives

Section D

Standards and Codes (ISO – 14001, OHSAS – 18001- SA – 8000, OECD Guidelines for Multinational Companies, Global Compact, AA – 1000, BS / ISO Guideline on CSR Management ISO-26000) Evaluating & reporting performance of CSR initiatives - Social accounting, environment audits and performance measurement

Text Books

1. Das J K, Taneja S and Arora H(2021).Corporate Social Responsibility and Sustainable Development.Routledge
2. Bhinekawati R(2019).Corporate Social Responsibility and Sustainable Development.Gower

Reference Books:

1. Vajpeyi (2015), Corporate Social Responsibility and Sustainable Development in Emerging Economies.Lexington Books
2. Idowu S O(2022).Current Global Practices of Corporate Social Responsibility.Springer Nature Switzerland AG
3. Zhang D, Morse S and Kambhampati U(2017)..Sustainable Development and Corporate Social.Routledge

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|--------------|---|-----------------|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|
| | | | O1 | O2 | O3 | O4 | O5 | O6 | O7 | O8 | O9 | O10 | O11 | O12 | O13 | O14 |
| MCH236B | CORPORATE SOCIAL RESPONSIBILITY & SUSTAINABLE DEVELOPMENT | CO1 | 2 | 2 | 1 | 1 | X | 2 | 1 | 1 | 1 | 1 | 3 | 1 | 1 | 2 |
| | | CO2 | 2 | 2 | X | 1 | 1 | 2 | X | 1 | 1 | X | 3 | 1 | 1 | 2 |
| | | CO3 | 2 | 2 | 1 | X | 1 | 2 | 2 | 1 | X | 1 | 3 | 1 | 1 | 2 |
| | | CO4 | 2 | 2 | X | 1 | X | 2 | 1 | 1 | 1 | 1 | 3 | X | 1 | 2 |

| | |
|-------------------|--|
| Course Title/Code | MANAGEMENT OF BANKING AND FINANCIAL INSTITUTIONS /MCH219B |
| Course Type: | Elective (Departmental) |

| | |
|-------------------|---|
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | To study financial intermediary institutions, including banks, investment banks and institutional investors and their functions |

| Course Outcomes (COs) | | Mapping |
|------------------------------|---|-------------------|
| CO1 | To study about the structure and evolution of various financial institutions, including banks and investment banks and understand their role in economic development. | Employability |
| CO2 | To gain an understanding of the socio-economic and legal environment of the financial business and the process of bank management. | Skill Enhancement |
| CO3 | To study the structure, institution and operating mechanism of financial markets and their role during financial crises | Employability |
| CO4 | To analyse the importance of capital markets in the country and gain an insight into their working in the country. | Skill Enhancement |

SECTION A

Banking and financial institutions in India: Commercial Banks, Cooperative Banks, Regional Rural Banks, Agriculture and Rural Development Banks (SLDBs), Development Banks and NBFCs; their constitution, Functions, Working and Evolution. Reserve Bank of India: Traditional and Developmental Functions and Working, Objectives, Instruments of Monetary Policy.

SECTION B

Nature of Banking Business: Socio, Economic and legal environment of banking business in India – official regulation and control over banks in India: Banking Regulation Act, 1949, Reserve Bank of India Act, 1934, Banking companies Act, 1970 etc –an overview, Diversification of Banking in India, Forms of Banking: Branch Banking, Unit Banking, Group Banking Chain Banking, Banking, correspondent Banking, Process of Bank Management; Branch location policies and decisions. Organizational Structure of Commercial Banks in India Department set up of head office, Zonal Office, Regional office and Branch offices.

SECTION C

Financial markets:: Structure, institution and operating mechanism and its role in Economic Development. Developed and Underdeveloped Markets, Money Market in India: Importance, features instruments. Measures to strengthen money market in India, Recommendations of the working group on money market, Report of the task force on money market and mutual funds

SECTION D

Capital Markets in India: New issue market and stock exchange, importance of stock exchanges: National stock exchange, methods of floating new issues, types of shares and debentures, The Securities and Exchange Board of India (SEBI), need for establishment of SEBI. Objectives and role of SEBI in Capital Markets

Text Books

1. Padmalatha S and Justin P(2017).Management of Banking and Financial Services. Pearson Education
2. ANMOL PUBLICATION (2016).Management of Banking and Financial Institutions.Centrum

References:

1. Casu, Girardone and Molyneux (2015), Introduction to Banking, 2nd ed., Pearson
2. Mishkin and Eakins (2015), Financial Markets and Institutions, 8th ed., Pearson
3. Simpson (2014), Financial Markets , Banking, and Monetary Policy, Wiley

| Courses Code | Courses | Course Outcomes | P | | | | | | | | | | P | | | | |
|--------------|--|-----------------|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|
| | | | O1 | O2 | O3 | O4 | O5 | O6 | O7 | O8 | O9 | O10 | O11 | O12 | O13 | O14 | O15 |
| MCH219B | MANAGEMENT OF BANKING AND FINANCIAL INSTITUTIONS | CO1 | 2 | 2 | 2 | 2 | X | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 3 | 2 | |
| | | CO2 | 3 | 3 | 3 | 2 | 1 | 1 | 2 | 2 | X | 2 | 2 | X | 3 | 2 | |
| | | CO3 | 3 | 3 | 3 | 2 | 2 | X | 2 | 2 | 1 | 2 | 2 | 2 | 3 | 2 | |
| | | CO4 | 3 | 3 | 3 | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 2 | X | 3 | 2 | |

| | |
|--------------------------|---|
| Course Title/Code | CORPORATE ACCOUNTING /MCH235B |
| Course Type: | Elective (Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | The objective of this subject is to enable the students to have a comprehensive awareness about the provisions of the Company's Act and Corporate Accounts. |

| Course Outcomes (COs) | | Mapping |
|------------------------------|---|-------------------|
| CO1 | To understand meaning, functions and applications of underwriting of shares. | Employability |
| CO2 | To understand concept of goodwill, methods of valuation of goodwill and factors influencing valuation of Goodwill. | Skill Enhancement |
| CO3 | To understand concept, methods of valuation of shares and factors influencing share valuation. | Employability |
| CO4 | To understand and prepare company final accounts and understand provision of tax, depreciation, dividends and interest. | Skill Enhancement |

SECTION A-

UNDERWRITING OF SHARES: Meaning – Underwriting Commission – Underwriter – functions - Advantages of Underwriting, Types of Underwriting – Marked and Unmarked Applications – Problems (Excluding Journal entries).

SECTION B-

VALUATION OF GOODWILL: Meaning – Circumstances of Valuation of Goodwill – Factors influencing the value of Goodwill – Methods of Valuation of Goodwill: Average Profit Method, Super Profit Method, Capitalization of average Profit Method, Capitalization of Super Profit Method, and Annuity Method - Problems.

SECTION C-

VALUATION OF SHARES: Meaning – Need for Valuation – Factors Affecting Valuation – Methods of Valuation: Intrinsic Value Method, Yield Method, Earning Capacity Method, Fair Value of shares. Rights Issue and Valuation of Rights Issue - Problem

SECTION D

COMPANY FINAL ACCOUNTS: Statutory Provisions regarding preparation of Company Final Accounts –Treatment of Special Items – Tax deducted at source – Advance payment of Tax – Provision for Tax – Depreciation – Interest on debentures – Dividends – Rules regarding payment of dividends – Transfer to Reserves – Preparation of Profit and Loss Account and Balance Sheet in vertical form.

Text Books:

1. Maheshwari S. N., Maheshwari S K, Maheshwari S K (2019), Fundamentals of Corporate Accounting, Vikas Publishing House
2. Soundarajan. A & Venkataramana, K(2018), Corporate Accounting, Vikas Publishing House
3. Jain S. P. and Narang K. L (2018). – Corporate Accounting, Kalyani Publications.

References:

1. Arulanandam & Raman (2019), Advanced Accounting (Corporate Accounting – II),India, B. O
2. Mariyappa, B, Kumar S A and Kumar V R (2018), Financial Accounting – I , Himalaya Publishing House

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|--------------|----------------------|-----------------|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|
| | | | O1 | O2 | O3 | O4 | O5 | O6 | O7 | O8 | O9 | O10 | O11 | O12 | O13 | O14 |
| MCH235B | CORPORATE ACCOUNTING | CO1 | 3 | X | 3 | 3 | X | 3 | 2 | 2 | X | 3 | 3 | 3 | 3 | 3 |
| | | CO2 | 3 | X | 3 | 3 | X | 3 | 2 | 2 | X | 3 | 3 | 3 | 3 | 3 |
| | | CO3 | 3 | 1 | 3 | 3 | 2 | 3 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 |
| | | CO4 | 3 | 1 | 3 | 3 | 1 | 3 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 |

| | |
|--------------------------|--|
| Course Title/Code | DIGITAL FINANCE / MCH240B |
| Course Type: | Elective (Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | The objective of this course is to understand the nature of digital revolution in finance, key digital technologies and products, customer behavior in digital environment, state of digital revolution, FinTech and cryptocurrency and to gain knowledge of unfair digital practices in the financial sector. |

| Course Outcomes (COs) | | Mapping |
|------------------------------|---|-------------------|
| CO1 | CO1: To acquaint the students with the fundamentals of digital finance | Employability |
| CO2 | CO2: To enable students to understand the concepts of big data, artificial intelligence, blockchain | Skill Enhancement |
| CO3 | CO3: To enable students to analyse and understand the concepts cryptocurrencies | Employability |
| CO4 | CO4: To formulate and review fintech transformation strategies | Skill Enhancement |

SECTION A

Digital transformation of finance: Concept of digital transformation of finance, Relationship of digital transformation of finance and FinTech, Reasons of digital transformation in finance, Stages of digital transformation.

SECTION B

Introduction to Key digital technologies: Authentication, Big data, Artificial intelligence, Blockchain. Prospects of digital finance in different countries, customer behavior in digital environment.

SECTION C

Cryptocurrencies: Nature of cryptocurrencies. Main features of cryptocurrencies. Acceptance of cryptocurrencies. Classification of cryptocurrencies, legal and Regulatory Implications of Cryptocurrencies (King & Wood Mallesons); Central bank digital currencies (CBDCs).

SECTION D

FinTech Transformation, FinTech Typology, Regulation of Mobile Money, Digitization of Financial Services; Crowdfunding – Regards, Charity and Equity; Unfair digital practices in the financial sector.

Text Books

1. Phadke S (2020).Fintech Future : The Digital DNA Of Finance, Sage Publications India Pvt. Ltd.,

References:

2. Lee, D. K. C., Ding, D., & Guan, C. (2021, December 2). Financial Management In The Digital Economy. World Scientific.
3. Soldatos J and Kyriazis D(2022) .Big Data and Artificial Intelligence in Digital Finance: Increasing Personalization and Trust in Digital Finance using Big Data and AI.Springer

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|--------------|-----------------|-----------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 |
| MCH240B | Digital Finance | CO1 | 3 | 3 | 2 | 2 | 1 | 3 | X | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 |
| | | CO2 | 3 | 3 | 2 | 2 | 1 | 3 | 1 | 2 | 2 | X | 3 | X | 3 | 3 | 3 |
| | | CO3 | 2 | 3 | 2 | 2 | X | 3 | X | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 |
| | | CO4 | 3 | X | 3 | 3 | 2 | 3 | 2 | 3 | 3 | 2 | 2 | 2 | 3 | 3 | 3 |

| | |
|-------------------|---|
| Course Title/Code | PERFORMANCE AND COMPENSATION MANAGEMENT SYSTEMS / MCH216B |
| Course Type: | Core (Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | This course aims to impart the understanding about the performance and compensation management system and strategies adopted by the organizations to manage employees' performance. This course also intends to give insights on how to identify, integrate, and retain talent in an organization to deliver high performance |

| Course Outcomes (COs) | | Mapping |
|-----------------------|---|-------------------|
| CO1 | Understand the significance of appraisal for an organization and individuals. | Employability |
| CO2 | Develop an understanding of Performance Appraisal tools, and their applications | Skill Enhancement |
| CO3 | develop and Apply about performance management systems and strategies adopted by the organisation to manage the employee performance | Employability |
| CO4 | demonstrate and Analyse the recent developments in performance managements and establish their readiness to cope with issues relating to performance management | Skill Enhancement |

SECTION A

Conceptual Framework of Performance Management: Performance management process; Objectives of performance management system; Historical development in India; Performance management and performance appraisal; Linkage of performance management system with other HR practices. Components of Performance Management System: Performance planning; Ongoing support and coaching; Performance measurement and evaluation; Performance management and appraisal; Methods of performance appraisal; Appraisal Communication; Counseling, Identifying potential for development; Linking pay with performance.

SECTION B

Implementation and Issues in Performance Management: Implementing performance management system-Strategies and challenges; Characteristics of effective performance metrics; Role of HR professionals in performance management; Performance management as an aid to learning and employee empowerment; Performance management documentation; Performance management audit; Ethical and legal issues in performance management; Use of technology and e-PMS, Performance management practices in Indian organizations. Talent Management: Concept and approaches; Framework of talent management; Talent identification, integration, and retention. Unit V- Talent Management Practices and Process: Building the talent pipeline; Managing employee engagement; Key factors and different aspects of talent management; Using talent management processes to drive culture of excellence; Talent management in India; Future directions in talent management practice and research problem

SECTION C

Compensation management – An Introduction: Compensation Management, Compensation and Non-compensation Dimensions, 3-P Concept in Compensation Management, Compensation as Retention Strategy, Compensation for Special Groups, Significant Compensation Issues Compensation Strategy: New Thinking for the New Millennium: Pay the Person, Reward Excellence, Individualizing the Pay System, Organizational and External Factors Affecting Compensation Strategies, Compensation Strategies as an Integral Part of HRM, Compensation Policies

SECTION D

Managerial Remuneration: Managerial Remuneration – Concept and Elements, Executive Compensation: Methodology, CEO-to-worker pay ratio, Rewarding – A New Approach, Remuneration Ceilings, Remuneration Ceilings under Section XIII, Benchmark Compensation Package as per the Industry Standards Performance Linked Compensation: Performance management, Performance Appraisal and Measurement, Pay for Performance Plans, Balancing of Internal and External Equity ;Pay Structures: Performance Based and Pay Based Structures, Designing Pay Structures, Comparison in Evaluation of Different Types of Pay Structures, Designing Pay Ranges and Bands, Significance of Factors Affecting pay levels; Rewards & Recognition: Concept of Reward Management, Developing Reward Policies, Reward Strategy, Developing Total Reward Approach, Reward Management in Service Sector, Total Reward Framework of Service Industries in India, Factors affecting Reward Management Policies in Service Sector, Process of Designing a Successful Reward Strategy; International Compensation: Expatriate Compensation and its Objectives, Elements of Expatriate's Compensation Package, Problems in Compensation Management

Text Books

1. Armstrong, M. & Baron, A.(2006), Performance management and development, Jaico Publishing House, Mumbai
2. Armstrong, M (2000)., Performance management: Key strategies and practical guidelines, 2nd ed, Kogan Page, London,
3. Rao T V (2015), Performance Management: Toward Organizational Excellence, 2nd ed, Sage Publications,

References:

1. Bhattacharyya, D. K (2011). . Performance Management Systems and Strategies, Pearson
2. Bacal, R. (1998, November 30). Performance Management. McGraw-Hill.

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|--------------|---|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 1 | 2 | |
| MCH216B | PERFORMANCE AND COMPENSATION MANAGEMENT SYSTEMS | CO1 | 3 | 3 | 1 | X | 3 | 3 | 1 | 2 | 2 | 1 | X | X | X | X | 1 |
| | | CO2 | 3 | 2 | 2 | 1 | 2 | 2 | 1 | 3 | 2 | 2 | X | X | 1 | 1 | |
| | | CO3 | 3 | 3 | 1 | X | 3 | 3 | 1 | 2 | 2 | 1 | 2 | X | X | 2 | |
| | | CO4 | 3 | 2 | 2 | 1 | 2 | 2 | 1 | 3 | 2 | 2 | 2 | 1 | 1 | 2 | |

| | |
|-------------------|---|
| Course Title/Code | MANAGING ENTREPRENEURIAL GROWTH AND STRATEGY /MCH222B |
| Course Type: | Elective (Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | The course aims to make students understand the advantages of having a scalable business model, challenges of managing and growing an entrepreneurial firm and identifying the various growth strategies. |

| Course Outcomes (COs) | | Mapping |
|------------------------------|--|-------------------|
| CO1 | To understand the importance of developing sustainable competitive advantages through strategic planning and execution | Employability |
| CO2 | To understand the internal and external environment and identify the resources and capabilities of a firm as a source of competitive advantage | Skill Enhancement |
| CO3 | To understand the initial entrepreneurial strategies that firms adopt and develop competitive position in the industry | Employability |
| CO4 | to understand how industry helps in determining strategy and how different types of innovation fit into business strategy | Skill Enhancement |

SECTION A

Entrepreneurial process, introduction to entrepreneurial strategy - strategy and growth , amalgam of entrepreneurship and strategic management, Why grow? Reasons to Grow, Sustainable competitive advantage, Sustained Growth, Input-process- Output Model, Valuable competitive position, strategist challenge- define values, opportunities and capabilities ,stages of strategy analysis-steps , formulation- methods and process, and 4A Model of strategy implementation.

SECTION B

Industry and Firm analysis- competitive markets; Rent seeking strategies- monopoly rents, Ricardian rents, entrepreneurial rent; Monopoly rents, Industry analysis- five force analysis, Ricardian rent- analyzing the firm's capabilities, resource based view; resource types- tangible & intangible ,building firm capabilities, Identifying attributes of strategic resources- VRIN Framework; Creating barriers to Imitate.

SECTION C

Entrepreneurial Competitive Positioning- Defining Isolating Mechanisms, First mover advantages- definition, sources, advantages and disadvantages. Developing competitive position- differentiation, cost leadership, focused, niche and integrated market strategies, Understanding competitive positioning: Strategic mapping- definition and concept.

SECTION D

Strategy and Industry Environment- Dynamics of Competition- Market dynamics: understanding entrepreneurial/ Schumpeterian rents; Innovation and types of innovation; Understanding the Industry life cycle: S- Curve and introduction to Competitive life cycle (CLC)analysis, Stages of CLC- emergent, maturity and growth phase, Disruption- Meaning, types, new technology disruptions – why Incumbent firms fail?

Text Books:

1. Gundry L K and Kickul J R (2007).Entrepreneurship Strategy, Changing
2. Harris J D and Lenox M J (2013).The Strategist Toolkit, Darden Business Publishing

References:

1. Liedtka J ,King A and Bennett K (2013).Solving Problems with Design Thinking – Ten Stories of What Works , Columbia Business School Publishing
2. Dobbs, M E (2014) "Guidelines for applying Porter's five forces framework: a set of industry analysis templates", Competitiveness Review, Vol. 24 Issue: 1, 32-45.
3. Porter, M. E(1985). The Competitive Advantage: Creating and Sustaining Superior Performance. NY: Free Press

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|--------------|--|-----------------|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|
| | | | O1 | O2 | O3 | O4 | O5 | O6 | O7 | O8 | O9 | O10 | O11 | O12 | O13 | O14 | O15 |
| MCH222B | MANAGING ENTREPRENEURIAL GROWTH AND STRATEGY | CO1 | 3 | X | 3 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 3 | 3 |
| | | CO2 | 3 | 1 | 3 | 2 | 2 | x | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 3 | 3 |
| | | CO3 | 3 | X | 3 | 2 | 2 | X | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 3 | 3 |
| | | CO4 | 3 | X | 3 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 3 | 3 |

| | |
|-------------------|--|
| Course Title/Code | APPLIED ENTREPRENEURSHIP PROGRAM/MCH238B |
| Course Type: | Elective (Departmental) |
| Course Nature: | Soft |
| L-T-P Structure | 1-0-2 |
| Credit | 3 |
| Course Objectives | At the end of this course, students will be able to synthesize knowledge and skills previously gained and applied to an in-depth study and execution of an entrepreneurial venture . |

| | Course Statement | Mapping |
|-----|---|------------------|
| CO1 | Students will be able to identify a problem worth solving using Jobs-to-be-Done (JTBD) methodology and empathize with the customer to further define the problem using Design Thinking. | Entrepreneurship |
| CO2 | Explore to craft their solutions using the Value Proposition Canvas by defining the gain creators and pain relievers | Entrepreneurship |
| CO3 | Create their own business model using the Lean Canvas template | Entrepreneurship |
| CO4 | Able to build solution demo, validate solution demo, build and validate MVP or pivot through MVP interviews | Entrepreneurship |

Section A

Decision to become an entrepreneur

Introduction to entrepreneurship- Defining entrepreneurship, characteristics of successful entrepreneurs, importance of entrepreneurship, Myths about entrepreneurs, Corporate entrepreneurship, Self-Discovery & SWOT analysis, Effectuation –Meaning , Five principles of effectuation, , Defining a Start-up, 4 Ps of a Startup, Reasons of Start-up failure, Basic Model of entrepreneurial process.

Section B

Opportunity discovery

Recognizing opportunities and generating Ideas, Validating the market need, Identify problem worth solving using Jobs to be done(JTBD) methodology, design Thinking- Meaning, Design Thinking Values, Design Thinking Process, Double diamond approach in design thinking

Section C

Customer and Solution-

Customer Vs. Consumer, different market types and their specific requirements, estimate the market size, identify your customer Segment (through STP), Switching costs and psychological biases, understanding Market research for start ups, Customer profile , Value proposition Canvas- understanding the jobs, pains and gains.

Section D

Business Model & Validation and Business Plan

Business Model- Concept, Elements of Business Model and Lean Approach, Lean canvas template, , Blue Ocean Strategy, difference between Solution Demo and MVP, Business plan- definition and importance, components of Business plan- market, technical and financial, legal and ethical aspects in a Start-Up. Cost Structure, Estimate Your Costs, Revenue Streams, Types of Revenue, Identify Your Secondary Revenue Streams, Pricing, Estimate Your Revenue and Price, Check the Profitability of Your Business Idea, Bootstrapping; Sources and Uses of Funds, Identify Sources and Uses of Funds, Create Your Positioning Statement, What Is Branding?, Create Your Brand Strategy, Introduction to Channels, Selecting Your Channels, Create Your Company Profile.

Text Books:

1. Miller, D. and Miller, I. (2005). *Managing for the long run: Lessons in Competitive Advantage from Great Family Businesses*. Harvard Business School Press.
2. Ward, J.L. (1991). *Creating effective boards for private enterprises: Meeting the challenges of continuity and competition* . San Francisco: Jossey-Bass.

Reference Books:

1. Higgins, M., &Nohria, N. (1999). The sidekick effect: Mentoring relationships and the development of social capital. In *Corporate social capital and liability* (pp. 161-179). Springer US.
2. Sullivan, R. (2000). Entrepreneurial learning and mentoring. *International Journal of Entrepreneurial Behavior & Research*, 6(3), 160-175

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P | | |
|--------------|----------------------------------|-----------------|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|---|---|
| | | | O1 | O2 | O3 | O4 | O5 | O6 | O7 | O8 | O9 | O10 | O11 | O12 | O13 | O14 | | |
| MCH238B | APPLIED ENTREPRENEURSHIP PROGRAM | CO1 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | X | 2 | 1 | 2 | 3 | 3 | |
| | | CO2 | 3 | 2 | 2 | 2 | X | 2 | 2 | 2 | 2 | 1 | 2 | X | 2 | 3 | 3 | 3 |
| | | CO3 | 3 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | X | 2 | 1 | 2 | 3 | 3 | 3 |
| | | CO4 | 3 | 2 | 2 | 2 | X | 2 | 2 | 2 | 2 | 1 | 2 | X | 2 | 3 | 3 | 3 |

| | |
|-------------------|--|
| Course Title/Code | APPLIED ENTREPRENEURSHIP PROJECT/MCH225B |
| Course Type: | Elective (Departmental) |
| Course Nature: | Soft |
| L-T-P Structure | 0-0-12 |
| Credit | 6 |
| Course Objectives | At the end of this course, students will be able to synthesize knowledge and skills previously gained and applied to an in-depth study and execution of an entrepreneurial venture . |

| | Course Statement | Mapping |
|-----|--|------------------|
| CO1 | To understand the challenges of entrepreneurship | entrepreneurship |
| CO2 | To Understand the functioning of startup | entrepreneurship |
| CO3 | To understand the functioning of an entrepreneur | entrepreneurship |
| CO4 | To be able to apply the knowledge to set up a new business | entrepreneurship |

General Guidelines for the project:

- a) Applied Entrepreneurship Project is a compulsory course during semester IV
- b) It is an in-depth report of an entrepreneurial venture that incorporates a critical and analytical approach to the subject with a rigorous research focus. Alternatively, it is researching an issue or problem academically to find a solution.
- c) It is a faculty- supervised course component .
- d) Each student will be attached to a Faculty Supervisor.
- e) The evaluation of Applied Entrepreneurship Project is done in two stages viz. continuous evaluation and Final Industry

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|--------------|----------------------------------|-----------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | O1 | O2 | O3 | O4 | O5 | O6 | O7 | O8 | O9 | O0 | O1 | O2 | O1 | O2 | O1 |
| MCH225B | Applied Entrepreneurship Project | CO1 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | X | 2 | 1 | 2 | 3 | 3 |
| | | CO2 | 3 | 2 | 2 | 2 | X | 2 | 2 | 2 | 1 | 2 | X | 2 | 3 | 3 | 3 |
| | | CO3 | 3 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | X | 2 | 1 | 2 | 3 | 3 | 3 |
| | | CO4 | 3 | 2 | 2 | 2 | X | 2 | 2 | 2 | 1 | 2 | X | 2 | 3 | 3 | 3 |

| | |
|-------------------|---|
| Course Title/Code | MATERIAL & INVENTORY MANAGEMENT /MCH226B |
| Course Type: | Elective(Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | a)To provide functional knowledge of Materials Management, Materials Procurement, Inventory Control as well as Warehousing for both service as well as manufacturing sector;To provide theoretical and practical exposure for application of such concepts. |

| Course Outcomes (COs) | | Mapping |
|-----------------------|---|-------------------|
| CO1 | Explain the Meaning of Materials Management | Employability |
| CO2 | Discuss the Scope of Materials Management | Skill Enhancement |
| CO3 | Discuss the Objectives and Significance of Materials Management | Employability |
| CO4 | Discuss the Role of Materials Management in Other Areas of Management Functions | Skill Enhancement |

SECTION A

Basics Principles and Practices

Concept of Integrated Materials Management System, Importance and scope of Materials Management , Supply Chain Management , Make or buy decisions e, Vendor Rating Business Correspondence.

SECTION B

Purchase Management

Procurement Cycle , Ethical concepts in Purchase , CIL Purchase Manual 2020 and its amendments , Procurement on GeM e) Tendering- Scrutiny of indents, preparation of tender documents, Evaluation of tenders, Award of orders etc. f) Lead time Analysis g) Post Contract Management – Amendments to Contracts etc. h) Legal aspects of purchasing: Indian Contract Act, Sale of Goods Act, Indian Companies Act, GST Act, Arbitration & Conciliation Act. i) Integrity Pact- Standard Operating

Centralized vs Decentralized, Concepts of Inventory Control

- i. Types of inventory control
- ii. Techniques of Inventory Control

Section C

Stores and Inventory Control Management S

Need for inventory, inventory cost, inventory cont

Section D

Materials Handling Systems,

Text Books:

- 1. Goel, S, Gupta, A K and Singh, A (2013) “Hospital Administration,” Elsevier India,

References:

- 1. Guide Book to Accreditation Standards for Hospitals 4thed., NABH, 2016.
- 2. Sakharkar, B M (2009). Principles & Planning of Hospital administration,” 2nd ed, Jaypee

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|--------------|---------------------------------|-----------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| MCH226B | MATERIAL & INVENTORY MANAGEMENT | CO1 | 2 | 2 | 3 | 3 | 2 | 2 | 3 | 3 | 2 | X | X | 2 | 2 | 2 | |
| | | CO2 | 1 | 3 | 2 | 2 | 3 | 2 | 3 | 3 | 3 | X | X | 2 | 2 | 2 | |
| | | CO3 | 3 | 2 | 3 | 2 | 2 | 3 | 2 | 2 | 2 | X | X | 2 | 2 | 1 | |
| | | CO4 | 2 | 2 | 2 | 3 | 2 | 2 | 3 | 2 | 2 | X | X | 2 | 2 | 2 | |

| | |
|-------------------|---|
| Course Title/Code | HEALTHCARE INFORMATION SYSTEMS / MCH227B |
| Course Type: | Elective (Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | The purpose of this course is to introduce the student to the principles of computer technology related to health care with emphasis on computerized medical billing, health care data collection, storage, retrieval, security arrangement, presentation, and verification. This course will also introduce the components and requirements of the electronic health record. |

| Course Outcomes (COs) | | Mapping |
|------------------------------|--|-------------------|
| CO1 | Conceptualize and promote the need for and uses of quality data and information requirements across the patient care providers | Employability |
| CO2 | Organise, analyses and manage health care data in order to improve health care outcomes, implement standards and control costs | Skill Enhancement |
| CO3 | Manage the content, integrity, accessibility, use, and protection of information resources | Employability |
| CO4 | Analyse and respond to the information needs of internal and external agencies throughout the health care continuum | Skill Enhancement |

SECTION A

Introduction to HMIS & Its need in a Hospital, Features of HMIS, Categorization of HMIS Modules

SECTION B

Operations Management of HMIS Modules, Advantages of HMIS

SECTION C

Challenges of HMIS, Procurement of HMIS Software

SECTION D

Implementation of HMIS

Text Books

1. Kabene S M.(2010).Healthcare and the Effect of Technology. Medical Information Science Reference
2. Iyamu T, and Tatnall A(2015).Maximizing Healthcare Delivery and Management through Technology Integration.Idea Group,U.S

References:

1. Guide Book to Accreditation Standards for Hospitals 4thed, (2016), NABH
2. Goel, S Gupta A K and Singh A (2013).Hospital Administration,” Elsevier India
3. Sakharkar B M (2009).Principles & Planning of Hospital administration. Jaypee

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|--------------|-------------------------------|-----------------|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|
| | | | O1 | O2 | O3 | O4 | O5 | O6 | O7 | O8 | O9 | O10 | O11 | O12 | O13 | O14 |
| MCH227B | HEALTHCARE INFORMATION SYSTEM | CO1 | 2 | X | 3 | 2 | X | 2 | 2 | 2 | 1 | 2 | 1 | 1 | 2 | 1 |
| | | CO2 | 2 | 2 | 2 | 3 | 2 | X | 3 | 2 | 1 | 2 | X | 1 | 1 | 2 |
| | | CO3 | 2 | 3 | 3 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | X | 2 | 2 |
| | | CO4 | X | 2 | 3 | 2 | 2 | 2 | 3 | 2 | 1 | 2 | 2 | 2 | 2 | 2 |

| | |
|-------------------|---|
| Course Title/Code | MANAGEMENT OF MEDICATION /MCH228B |
| Course Type: | Elective (Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | Students will gain a broader understanding of health-system pharmacy practice, with a focus on acute and ambulatory care, standards and regulations |

| Course Outcomes (COs) | | Mapping |
|------------------------------|---|-------------------|
| CO1 | To introduce students to the Pharmacy Services in Hospital (Medication & its Management) | Employability |
| CO2 | To gain the knowledge of drug administration & monitoring of drug therapy | Skill Enhancement |
| CO3 | To understand the Inventory Control in Pharmacy & Adverse drug event | Employability |
| CO4 | To gain knowledge about the management of medication at the national level in Public Sector | Skill Enhancement |

SECTION A

Pharmacy Services And Usage Of Medication , Policy And Procedures To Guide Storage Of Medication

SECTION B

Policy And Procedures To Guide Prescription Of Medication , Policy And Procedures To Guide Safe Dispensing Of Medication

SECTION C

Policy And Procedures For Medication Administration , Adverse Drug Events Monitoring

SECTION D

Policy And Procedures For Use Of Narcotic Drugs And Psychotropic Substances

Text Books

1. Ramachandra D L (2018).Essentials of Hospital Management and Administration.Educreation Publishing
2. Sakharkar B M (2009).Principles & Planning of Hospital administration. Jaypee.

References:

1. Guide Book to Accreditation Standards for Hospitals 4thed (2016), NABH
2. Goel, S Gupta A K and Singh A (2013).Hospital Administration,” Elsevier India

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|--------------|--------------------------|-----------------|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|
| | | | O1 | O2 | O3 | O4 | O5 | O6 | O7 | O8 | O9 | O10 | O11 | O12 | O11 | O12 | O11 | O12 |
| MCH228B | MANAGEMENT OF MEDICATION | CO1 | X | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | X | X | 2 | 2 | 1 | | |
| | | CO2 | 3 | 2 | 3 | 3 | 2 | 2 | 3 | 2 | 2 | X | X | 2 | 2 | 2 | | |
| | | CO3 | 2 | 2 | 2 | 3 | 2 | 2 | 3 | 2 | 3 | X | X | 2 | 2 | 1 | | |
| | | CO4 | 3 | 2 | 2 | 3 | 2 | 2 | 3 | 2 | X | X | X | 2 | 2 | 2 | | |

| | |
|-------------------|---|
| Course Title/Code | HEALTHCARE AND HUMAN RESOURCE MANAGEMENT /MCH229B |
| Course Type: | Elective(Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | Create executive decision-making strategies, as applied to human resources management |

| Course Outcomes (COs) | | Mapping |
|------------------------------|--|-------------------|
| CO1 | Create executive decision-making strategies, as applied to human resource management | Employability |
| CO2 | Establish Organizational workforce plans, in alignment with organizational goals and objectives | Skill Enhancement |
| CO3 | Evaluate workforce productivity. Understand and value the strategic role of human resource management in a healthcare organization | Employability |
| CO4 | Understand and value the impact of workforce diversity and globalization on healthcare organizations | Skill Enhancement |

SECTION A

Introduction and Functioning of HR, HR Planning

SECTION B

Recruitment, Staff Skill Development & Training

SECTION C

Performance Appraisal

SECTION D

Documentations in HR Department, Challenges in HR

Text books:

1. Chhabra, T. N (2003); Human Resource Management, 4thed, Dhanpati Rai and Co. Pvt. Ltd New Delhi.
2. Dr. Gupta, C. B (2008).; Human Resource Management, 11th revised ed, Sultan Chand and Sons, New Delhi,
3. Khanka S S (2013), Human Resource Management Text and Cases, S. Chand & Company Ltd
4. Rao, V S P (2004), Human Resource Management, Text and Cases, Excel Books

References:

1. Flippo, E. B. (1986, January 1). Personnel Management.
2. D. W., Dessler, G., Lloyd-Walker, B., & Griffiths, J. (2007, January 1). Human Resource Management
3. DeCenzo, D. A., & Robbins, S. P. (1998, December 18). Human Resource Management

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|--------------|---|-----------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| MCH229B | HEALTH CARE & HUMAN RESOURCE MANAGEMENT | CO1 | 2 | 2 | 3 | 3 | 2 | 2 | 3 | 2 | 2 | X | X | 2 | 2 | 2 |
| | | CO2 | 2 | X | 2 | 3 | 2 | 2 | 3 | 2 | 2 | X | X | 2 | 1 | 2 |
| | | CO3 | X | 3 | 3 | 2 | 3 | 3 | 3 | 2 | 3 | X | X | 2 | 2 | 1 |
| | | CO4 | 2 | 3 | 3 | 2 | 3 | 2 | 3 | 2 | 2 | X | X | 2 | 2 | 2 |

| | |
|-------------------|---|
| Course Title/Code | PROJECT MANAGEMENT /MCH231B |
| Course Type: | Elective (Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | Understand the concept and application project management |

| Course Outcomes (COs) | | Mapping |
|------------------------------|---|-------------------|
| CO1 | To acquaint students with the concepts of project management | Skill Enhancement |
| CO2 | Make students capable to analyze, apply and appreciate contemporary project management tools | Employability |
| CO3 | To enable students to comprehend the fundamentals of Contract Administration, Costing and Budgeting. | Employability |
| CO4 | To make them understand the feasibility analysis in Project Management and network analysis tools for cost and time estimation. | Skill Enhancement |

SECTION A

Introduction to project management. Objectives of Project Planning, monitoring and control of investment projects. Social cost benefit analysis, identification of investment opportunities. Project rating index. Market and Demand analysis. Collection of primary and secondary information. Demand forecasting and market planning.

SECTION B

Technical Analysis, Manufacturing process / technology, Material inputs & utilities, Product Mix, Plant Capacity, Location & site, Machinery & Equipment, Structures & Civil work, Environmental aspects, Project Charts & Layouts, Project Time Lines. Issues in Project Planning and Management.

SECTION C

Cost of projects, Means of financing, Estimates of Sales & Production, Cost of Production, Working Capital Requirement & Financing, Projected, income statement, Balance sheet and cash flow with multi year projections, Consideration of alternative sources of finance. Cost and Time Management issues in Project planning and management.

SECTION D

Project Implementation: Forms of project organization, Project control & control charts, Human aspects of project management, Prerequisites for a successful project implementation, Introduction to project network & determination of critical path, Preparation of comprehensive project report.

Text Books

1. Kerzner H (2017).Project Management.Wiley;
2. Nagarajan K(2015).Project Management.New Age International Pvt Ltd Publishers

References:

1. Chandra P(2017).Projects: Planning, Analysis, Selection, Financing, Implementation, and Review.McGraw Hill Education
2. Desai V(2016).Project Management.Himalaya Publishing House
3. Larson E and Gray C(2017).Project Management: The Managerial Process. McGraw Hill Education;

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|--------------|--------------------|-----------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 00 | 01 | 02 | 01 | 00 | 01 |
| MCH231B | PROJECT MANAGEMENT | CO1 | 3 | 2 | 2 | 2 | 1 | 3 | 1 | 1 | 1 | 1 | 1 | 2 | X | 3 | 3 |
| | | CO2 | 3 | 3 | 3 | 2 | X | 3 | 2 | 1 | 1 | 1 | 3 | 1 | 3 | 3 | 3 |
| | | CO3 | 3 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | X | 1 | 2 | 2 | 3 | 2 | 2 |
| | | CO4 | 3 | 3 | 3 | 3 | 1 | 2 | 3 | 2 | 1 | X | 3 | 1 | 3 | 3 | 3 |

| | |
|-------------------|---|
| Course Title/Code | FREIGHT TRANSPORT MANAGEMENT MCH232B |
| Course Type: | Elective (Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | The course acquaints the student to the concept and importance of material logistics and distribution task like transportation and warehousing. |

| Course Outcomes (COs) | | Mapping |
|------------------------------|--|--------------------------|
| CO1 | To acquaint students with the concepts of FTM | Skill Enhancement |
| CO2 | To acquaint students to the concept and importance of material logistics | Employability |
| CO3 | To acquaint students with concepts of transportation and warehousing. | Skill Enhancement |
| CO4 | To acquaint students with the application of FTM | Employability |

SECTION A

Introduction to freight management. Freight on Board. Material Logistics : Concept and Importance of Material Logistics. Logistic Tasks: Follow-up of Order, Transportation, Warehousing, Inventory Control, Information Monitoring. Freight Planning: Major Aspects and Factors

SECTION B

Transportation: A Brief Study of different modes of transport used for movement of materials, their relative advantages, disadvantages and suitability. Road Transport: Road System, Role of Road Transport in Movement of Materials, Role of National Highway Authority of India, Limitations of Road Transport System, Consignment Rail transport: India Railway Network and Role in Transportation of Materials and Cargo, Consignment Note.

SECTION C

Air transport: Role of Air Transport in Domestic and International Transportation of Goods. Role of Ministry of Civil Aviation, Airport Authority of India and Directorate General of Civil Aviation, Air

Waybill, Contract of affreightment

Water transport: Inland Water Transport : Role of Inland Water Transport Inland Waterways: Inland Waterways Authority of India. Ocean transport: Role of Ocean Transport in International Trade, Structure of Shipping . Services – Liner Shipping and Tramp/Charter Shipping, Conference System and Determination of Rates, Bill of Lading and Charter Party. Rail Transport and role of rail transport in Indian and global context

SECTION D

Multi-Model Transport System: Concept and advantages of Multi-Model Transport System. Containerization: Need and Advantages of Containerization, Inland Container Depots (ICDs) and Container Freight Stations (CFSs).Basics of Warehousing. Elements and Functions of Warehousing. Role of Warehousing in Economic Development, Types of Warehousing, Advantages of a Public Warehouse, Costs Associated with Warehousing.

Text Books:

1. Dutta A.K.(2006), Materials Management: Procedures, Text and cases, Prentice Hall of India Pvt. Ltd., New Delhi
2. Gopalakrishnan, P. and Sundareson (2004), M., Materials Management: An Integrated Approach, Prentice Hall of India Pvt. Ltd., New Delhi.
3. Varma, M.M., Essentials of Storekeeping and Purchasing (2001), Sultan Chand and Sons, New Delhi.
4. Shah N.M (1988). An Integrated concept of Materials Management, Indian Institute of Materials Management, Baroda Branch, Baroda.

References:

1. Sharma, S. C. (2000, January 1). Materials Management And Materials Handling.
2. Arnold, J. R. T., & Chapman, S. N. (2001, January 1). Introduction to Materials Management.
3. Leenders, M., Johnson, P. F., & Flynn, A. (2010, July 13). Purchasing and Supply Management.

| Courses Code | Courses | Course Outcomes | P | | | | | | | | | | P | | | | |
|--------------|------------------------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 1 | 1 | 0 | 0 |
| MCH232B | FREIGHT TRANSPORT MANAGEMENT | CO1 | 3 | 2 | 2 | 2 | X | 3 | 1 | 1 | 1 | 1 | 2 | X | 3 | 3 | |
| | | CO2 | 3 | 3 | 3 | 2 | 1 | 3 | 2 | 1 | X | 1 | 3 | 1 | 3 | 3 | |
| | | CO3 | 3 | 3 | 3 | 3 | X | 2 | 3 | 2 | 1 | 1 | 3 | X | 3 | 3 | |
| | | CO4 | 3 | 3 | 2 | 3 | 2 | 2 | 2 | 2 | X | 1 | 3 | 2 | 3 | 3 | |

| | |
|-------------------|---|
| Course Title/Code | Operation Research/ MCH246B |
| Course Type: | Core (Departmental) |
| Course Nature: | Hard |
| L-T-P-O Structure | 3-0-0-0 |
| Course Objectives | The course aims at equipping students with the understanding of the research process, tools and techniques in order to facilitate managerial decision making. |

| Course Outcomes (COs) | | Mapping |
|------------------------------|---|----------------|
| CO1 | Define and formulate linear programming problems and appreciate their limitations. | Employability |
| CO2 | Solve linear programming problems using appropriate techniques and optimization solvers, interpret the results obtained and translate solutions into directives for action. . | Employability |
| CO3 | Conduct and interpret post-optimal and sensitivity analysis and explain the primal-dual relationship. | Employability |
| CO4 | Develop mathematical skills to analyse and solve integer programming and network models arising from a wide range of applications. | Employability |

Section A

Operations Research: Evolution, methodology and role in managerial decision making. Linear programming: Terminology; Properties and assumptions; Formulation of LP problems; Graphical method; Simplex method (Upto three variables), special cases in LPP, concept of duality.

Section B

Transportation problems: Concept, Methods of Initial Solution (NW Corner, Least Cost, and VAM) Optimal solution by MODI method, Stepping Stone method. Special cases in transportation problems: unbalanced problems, degeneracy, maximization objective and multiple optimal solutions.
Assignment problems: Concept, Hungarian method, Special cases in assignment problems: unbalanced problems, maximization objective and multiple optimal solutions.

Section C

Queuing theory: concept, assumptions and applications; Poisson distributed arrivals- Exponentially distributed service time models (MM1 and MMK).

Section D

Game theory: Pure and mixed strategy games, principle of dominance, 2-person zero sum game and their solution. Replacement Theory: Individual and Group replacement.

Text Books:

1. Shree Ram, Operations Research, S Chand, New Delhi
2. Nagarajan K, Textbook of Operations Research: A Self-Learning Approach, 1st Ed, New Age International Ltd.
3. Veerachamy R., Operations Research, Dreamtech Press, 2020

References:

1. Panneerselvam, R. (2002, January 1). Operations Research. PHI Learning Pvt. Ltd. .
2. Taha, H. A. (2017, January 1). Operations Research an Introduction.
3. Vohra, N. D. (1990, January 1). Quantitative Techniques in Management.

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | S |
|--------------|--------------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 1 | 0 | 1 | 2 |
| MCH246B | Operation Research | CO1 | 3 | 2 | 2 | 2 | 1 | 3 | 1 | 1 | 1 | 1 | 1 | 2 | X | 3 | 3 | |
| | | CO2 | 3 | 3 | 3 | 2 | 1 | 3 | 2 | 1 | 1 | 1 | 3 | 1 | 3 | 3 | | |
| | | CO3 | 3 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | X | 1 | 2 | 2 | 3 | 2 | | |
| | | CO4 | 3 | 3 | 3 | 3 | 1 | 2 | 3 | 2 | 1 | X | 3 | 1 | 3 | 3 | | |

| | |
|-------------------|---|
| Course Title/Code | SAS AND TABLEAU/ MCH247B |
| Course Type: | Elective (Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 0-0-4 |
| Credit | 2 |
| Course Objectives | The course acquaints the student to the concept and importance of material logistics and distribution task like transportation and warehousing. |

| Course Outcomes (COs) | | Mapping |
|------------------------------|---|-------------------|
| CO1 | Deploy SaS in a virtual environment and import data for analysis. | Employability |
| CO2 | Prepare and manipulate datasets for analysis in SaS. | Skill Enhancement |
| CO3 | Understand Tableau Interface, Panes and Implement Visualization Techniques. | Employability |
| CO4 | To Get to know and implement the tips and tricks to help fulfill business requirements using Tableau. | Skill Enhancement |

Section A

Introduction to SaS: Overview of SaS university edition, Deploying SaS Studio on virtual platform, File Management, SaS libraries, importing data, Structure of Data and Data Types, Program Syntax, saving data, PROC IMPORT and PROC CONTENTS, Displaying Data and Generating Logs, List Input.

Section B

SaS Programming: Variables and Syntax Rules, Data Set Options, Operators, In-File Statement, Input Styles, Select Statements, Leave and Continue, Decision Making via SaS, Where Statement, Looping Constructs, SaS Functions, Arrays and Array Processing, Modifying and Combining Data Sets.

Section C

SaS Procedures: Proc Data, Proc Sort, Proc Means Sort, Proc Means, Proc Univariate, Proc Freq, Proc Plot, Proc Sgplot, Proc Summary, Proc Contents, Proc Append, Proc Copy, Proc SQL, Proc Delete, Proc Format, Proc Import, Proc Export, Proc Transpose, Proc GChart, Proc GPlot, Proc Report.

Section D

Visualization with Tableau -I: Tableau Software Ecosystem, Toolbar Icons, Data Window and Aggregation, Tableau Data Source, Data Extract, Connect to Data, Measure Names, Number of Records & Measures, Heat Maps, Tree maps, Bar Chart, Line Chart, Area Fill Charts, Pie Chart, Scatter Plot, Circle View, Bullet Graph, Packed Bubble, Histogram, Boxplot and Gantt Chart, Sorting Data, Enhancing Views with Filters, Sets, Groups & Hierarchies.

Visualization with Tableau - II: Cross-tabulation, Dashboard Designing, Dashboard Actions, Joining Database, Functions in Tableau, Aggregate Functions, Numeric Functions, Date Functions, Stories, Advanced Mapping, Advanced Parameters, Tableau Best Practices, Combining Multiple Dashboards into Stories, Publishing Stories and Dashboards.

Text Books:

1. Khattree (2000).Applied Multivariate Statistics with SAS Software.John Wiley & Sons Inc
2. Collum R(2019).Visual Analytics with SAS Viya.SAS Institute
3. Sinha C(2017).Tableau 10 for Beginners.Createspace Independent Pub

References:

1. Peck, G(2020). TABLEAU 9 : THE OFFICIAL GUIDE. McGraw Hill Education (India) Private Limited
2. Ryan L(2018). Visual Data Storytelling with Tableau. Pearson Education
3. Elliott A C (2015).SAS Essentials: Mastering SAS for Data Analytics.Wiley

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|--------------|---------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | O | O | O | O | O | O | O | O | O | O | O | O | O | O |
| MCH247B | SAS & TABLEAU | CO1 | 3 | 2 | 3 | 3 | 2 | 1 | 3 | 2 | 2 | 2 | 1 | 1 | 2 | 2 |
| | | CO2 | 3 | 2 | X | 1 | 2 | 1 | 1 | 1 | 2 | 2 | X | 2 | 1 | 3 |
| | | CO3 | 2 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 3 | 2 |
| | | CO4 | 3 | X | 1 | 2 | 2 | 2 | 3 | 2 | 3 | 2 | 1 | 1 | 1 | 2 |

| SEMESTER - 5 | | | | | | | | | |
|---|--|---------------------|--|---|---|---|---|-------------------------------|----------------|
| SUBJECT CODES | SUBJECT NAME | OFFERING DEPARTMENT | *COURSE NATURE (Hard/Soft/Workshop/NTCC) | COURSE TYPE (Core/Elective/University Compulsory) | L | T | P | NO. OF CONTACT HOURS PER WEEK | NO. OF CREDITS |
| CSW351B | WEBSITE DESIGNING | CST | Workshop | CORE | 0 | 0 | 3 | 3 | 1.5 |
| MCH302B | INTERNATIONAL BUSINESS | DMC | HARD | CORE | 3 | 0 | 0 | 3 | 3 |
| MCH303B | STRATEGIC MANAGEMENT | DMC | HARD | CORE | 3 | 0 | 0 | 3 | 3 |
| CDS305B | PROFESSIONAL DEVELOPMENT PROGRAMME V | CDC | SOFT | UC | 1 | 0 | 1 | 2 | 0 |
| ELECTIVE | | | | | | | | | |
| FINANCE AND ACCOUNTS | | | | | | | | | |
| MCH337B | COMPANY LAW | DMC | HARD | ELECTIVES | 3 | 0 | 0 | 3 | 3 |
| MCH304B | FINANCIAL DERIVATIVES | DMC | HARD | ELECTIVES | 3 | 0 | 0 | 3 | 3 |
| MCH305B | BUSINESS TAXATION | DMC | HARD | ELECTIVES | 3 | 0 | 0 | 3 | 3 |
| MCH306B | MERGERS AND ACQUISITIONS | DMC | HARD | ELECTIVES | 3 | 0 | 0 | 3 | 3 |
| EDS289/EDS290/EDS288/PSE301/LWS325/LWS323 | Applied Psychology/Applied Sociology/Applied Philosophy/Essential of Peace and Sustainability/Law Relating to Intellectual Property Rights/Cyber Law | EDU/LAW/PSE | SOFT | ELECTIVE | 1 | 0 | 2 | 3 | 2 |

| Entrepreneurship & Family Business Specialization | | | | | | | | | |
|---|---|---------------------|------|----------|---|---|---|---|---|
| MCH33 8B | NEW AGE ENTREPRENEURSHIP | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| MCH33 9B | INTERNATIONAL FAMILY BUSINESS MODELS | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| EDS289/ EDS290/ EDS288/ PSE301/ LWS325 /LWS32 3 | Applied Psychology/Applied Sociology/Applied Philosophy/Essential of Peace and Sustainability/Law Relating to Intellectual Property Rights/Cyber Law | EDU/ LAW/ PSE | SOFT | ELECTIVE | 1 | 0 | 2 | 3 | 2 |
| Health Care Management Specialization | | | | | | | | | |
| JMCH3 1 0B | HEALTH CARE INSURANCE & MANAGEMENT CARE | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| MCH31 1B | QUALITY ASSURANCE IN HEALTH CARE | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| MCH31 2B | LEGAL & ETHICAL ISSUES IN HEALTH CARE | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| EDS289/ EDS290/ EDS288/ PSE301/ LWS325 /LWS32 3 | Applied Psychology/Applied Sociology/Applied Philosophy/Essential of Peace and Sustainability/Law Relating to Intellectual Property Rights/Cyber Law | EDU/ LAW/ PSE | SOFT | ELECTIVE | 1 | 0 | 2 | 3 | 2 |
| Operations Management | | | | | | | | | |
| MCH31 3B | LOGISTICS AND INTERNATIONAL SUPPLY CHAIN MANAGEMENT | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |

| | | | | | | | | | |
|-------------|---|----|------|----------|---|---|---|---|---|
| MCH31 4B | PURCHASING AND INVENTORY MANAGEMENT | ME | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
|-------------|---|----|------|----------|---|---|---|---|---|

| | | | | | | | | | |
|---|---|---------------------|------|----------|---|---|---|---|---|
| MCH31 5B | SERVICE OPERATIONS MANAGEMENT | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| EDS289/ EDS290/ EDS288/ PSE301/ LWS325 /LWS32 3 | Applied Psychology/Applied Sociology/Applied Philosophy/Essential of Peace and Sustainability/Law Relating to Intellectual Property Rights/Cyber Law | EDU/ LAW/ PSE | SOFT | ELECTIVE | 1 | 0 | 2 | 3 | 2 |

Business Analytics Specialization

| | | | | | | | | | |
|---|---|---------------------|------|----------|---|---|---|---|---|
| MCH34 0B | HR ANALYTICS | DMC | HARD | ELECTIVE | 2 | 0 | 2 | 4 | 3 |
| MCH34 1B | Social Media Analytics | DMC | HARD | ELECTIVE | 2 | 0 | 2 | 4 | 3 |
| EDS289/ EDS290/ EDS288/ PSE301/ LWS325 /LWS32 3 | Applied Psychology/Applied Sociology/Applied Philosophy/Essential of Peace and Sustainability/Law Relating to Intellectual Property Rights/Cyber Law | EDU/ LAW/ PSE | SOFT | ELECTIVE | 1 | 0 | 2 | 3 | 2 |

COURSES ARE OPTED DEPENDING UPON THE SPECIALIZATION CHOSEN BY THE STUDENT

BBA- Fifth Semester

| | |
|-------------------------------|---|
| Course Title/ Code | Website Designing /CSW351B |
| Course Type: | Core(Departmental) |
| Course Nature: | Workshop |
| L-T-P Structure | 0-0-3 |
| Credit | 1.5 |
| Objectives | Student will be able to design a website. |

| Course Outcomes (COs) | | Mapping |
|------------------------------|--|-------------------|
| CO1 | Demonstrate the basic knowledge of Internet its basic features, basics of HTML 5.0 to be able to create static web pages | Employability |
| CO2 | Build complete static web site for a new start-up, business or entrepreneurship | Skill Enhancement |
| CO3 | Exhibit dynamic nature to a website for expanding business | Employability |
| CO4 | Ability to demonstrate indepth knowledge of styling and making user friendly dynamic websites. | Skill Enhancement |

Section-A

INTRODUCTORY CONCEPTS: Internet, Intranet, Extranet, Web Browser and WWW, W3C, HTTP, Cookies, Session, IP Address, Domain Name, Web Server, website and webpage structure. Markup Language, HTML editor: Dreamweaver, Introduction to HTML tags: html, head, body, div, br, hr, p, text formatting, text styles, layouts, marquee, lists: ordered, unordered and definition lists, hyperlinks: http/https/ftp, images, images as hyperlinks, adding graphics, audio and video, table, Frames, iframes, color names, values & shades, HTML entities, symbols, charset, Forms.

Section-B

Intro HTML 5.0: What Is HTML5, History: A Little Retrospective, The WHATWG, Vision and Philosophy behind HTML5, HTML vs HTML5, Getting Started with HTML5: The State Of Browser Support, Structure of a Web Page: HTML5 DOCTYPE, Page Encoding, HTML5 Markup, New And Updated Elements, Structural Elements, New Attributes, Deprecated Elements And Attributes.

Section-C

HTML 5.0 Form, Graphics & Media: HTML5 DOM, Form: new input types & attributes, form validation, HTML canvas and SVG: Drawing shapes, Text & images, working with pixels, Embedding media: Audio and Video based On Plug-in, New Audio/Video Markup, Attributes and Methods, Audio/Video Events & Controls, Plug-ins in HTML inserting YouTube videos.

Section-D

CSS & CSS3: Introduction to CSS, Syntax, Selectors, Pseudo classes, Applying CSS to backgrounds, Text, Fonts, Links, Lists, Tables, Box Model: Border, Margin, Padding, Dimension, Display, Positioning, Align, CSS to Images and image Opacity, CSS Media Types, CSS Attr Selectors.

CSS3: Introduction, Rounded Corners, Border Images, Backgrounds, Colors, Gradients, Shadows, Fonts and text effects, 2D transforms, 3D Transforms, Transitions & Animations.

LIST OF EXPERIMENTS:

- HTML: Basic Tags
- HTML: Graphics & Tables
- HTML: Frames & Forms
- HTML5.0: Basic Tags
- HTML5.0: DOM & Forms
- HTML: Canvas & SVG
- HTML: Media
- HTML: API's
- CSS
- Minor Project

Text Books:

1. Synodinos D, Bowers M and Sumner V(2012).Pro HTML5 and CSS3 Design Patterns Paperback .APress
2. Ruvalcaba Z and Boehm A(2012).Murach's HTML5 and CSS3 Paperback.Mike Murach & Associates Inc
3. Pilgrim Mark (2011),Dive into HTML5, O'Reilly

References:

1. Crowther. R(2012).Hello! HTML5 & CSS3: A user-friendly reference guide Paperback.Manning
2. Förster K and Oggil B(2011).HTML5 Guidelines for Web Developers.Addison-Wesley Professional

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|--------------|-------------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 1 | 2 | 1 |
| CSW351B | Website Designing | CO1 | 3 | 2 | 3 | 3 | 2 | 3 | 2 | 3 | X | 3 | 2 | 3 | 3 | 3 | 3 |
| | | CO2 | 3 | 1 | 3 | 3 | 3 | 2 | X | 2 | 1 | 3 | 2 | 3 | 3 | 3 | 3 |
| | | CO3 | 3 | X | 3 | 3 | 2 | 2 | 1 | 3 | X | 3 | 2 | 3 | 3 | 3 | 3 |
| | | CO4 | 3 | 2 | 3 | 3 | 3 | 3 | 2 | 2 | 1 | 3 | 2 | 3 | 2 | 2 | 3 |

| | |
|-------------------|---|
| Course Title/Code | INTERNATIONAL BUSINESS/MCH302B |
| Course Type: | Core (Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | Identify and explain theories and factors that determine the business environment of emerging markets, the relevant changes over time, and the Implications for corporate strategies devised for those markets . |

SECTION A

Introduction- Theories of International trade, Globalization forces-meaning, dimensions and stages in it, Tariff and non-tariff barriers, Trading blocs.

SECTION B

Analysis of Global Environment – Political, Social, Legal, Economic & Technological, Country risk analysis, Threats and Opportunities to International Business, Rise of new economies- BRICS & ASIAN countries.

Section C

Global Monetary System - International Monetary Systems & Role played by IMF and World Bank, Balance of payments, International Finance and Foreign Exchange , Introduction to export and import and modes of payment in it.

Section D

Global Operations - Global Production, Outsourcing and Logistics Management, Global HRM, Global Marketing. South East Asian currency crisis, Foreign Direct Investment.

Text Books:

1. Gupta C.B(2014), International Business, 4th Ed, S Chand, New Delhi
2. Verma S(2024).Fundamentals of International Business, 5th Ed. Pearson Education
3. Aswathapa K(2020). International Business, 7th Ed., McGraw Hill

References:

1. Hill C W L and Jain A K(2008).International Business.Tata McGraw-Hill
2. Cherunilam, F(2007).International Business: Text and Cases.Prentice-Hall of India Pvt.Ltd
3. Justin P(2011).International Business.Prentice Hall

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|--------------|------------------------|-----------------|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|
| | | | O1 | O2 | O3 | O4 | O5 | O6 | O7 | O8 | O9 | O10 | O11 | O12 | O13 | O14 |
| MCH302B | INTERNATIONAL BUSINESS | CO1 | 3 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | X | 1 | 1 | X | 2 | 1 |
| | | CO2 | 2 | X | 3 | 2 | 2 | 3 | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 2 |
| | | CO3 | 3 | 1 | 3 | 1 | 2 | 2 | X | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| | | CO4 | 3 | 1 | 3 | 2 | 3 | 3 | 1 | 2 | 1 | 3 | 2 | 3 | 2 | 2 |

| | |
|-------------------|---|
| Course Title/Code | STRATEGIC MANAGEMENT/MCH303B |
| Course Type: | Core (Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | Describe & identify the dynamic environment of Business Management. |

| Course Outcomes (COs) | | Mapping |
|------------------------------|---|-------------------|
| CO1 | Describe & identify the dynamic environment of Business Management. | Employability |
| CO2 | Examine & understand the need & importance of Strategic Management | Skill Enhancement |
| CO3 | Analyse and interpret Porter s Five force model & demonstrate Value chain analysis | Employability |
| CO4 | evaluate & summarize the various corporate strategies adopted by the companies for sustenance of business | Skill Enhancement |

SECTION A

Nature of Strategic Management: Definition of strategic Management, Need for strategic management, Levels of strategy, Strategic management process, Defining Vision and Mission of a company.

SECTION B

External Assessment & Internal Assessment: Environmental Scanning with respect to economic, social, cultural, demographic, environmental, political, governmental and legal aspects, technological forces, Industry's Porter's five force model. Internal analysis of a company profile with respect to seven basic functions of marketing & important financial – ratios, Value chain analysis (VCA) concept

SECTION C

Strategies in Action: Various types of strategies viz. integration strategies, Intensive strategy, Diversification, Turnaround strategies, Divestiture, Outsourcing, Generic Strategies viz Cost leadership, differentiation and focus.

SECTION D

Matrix Analysis & Strategy Evaluation: SWOT analysis, BCG matrix, GE matrix strategic evaluation, Evaluation techniques for strategy and operational control.

Text Books:

1. Haberberg A and Rieple A(2007) strategic Management: Theory and Application.OUP Oxford
2. Kishore R M (2017).Strategic Cost Management.Taxmann

References:

- 1 Arthur, A, Thomson and Strickland, A, J. (2002), Strategic Management – Concept and cases, Tata McGraw Hill, New Delhi
- 2 Glueck, W.T. and Lawrence, R. Jauch (2003), Business Policy and Strategic Management, Frank Bros & Co
- 3 Azhar K(2004). Business Policy and Strategic Management, Tata McGraw Hill, New Delhi,

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P | S | |
|--------------|----------------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 1 | 0 | 2 | |
| MCH303B | STRATEGIC MANAGEMENT | CO1 | 3 | X | 3 | 2 | 2 | 2 | 2 | 3 | 2 | 1 | 2 | 1 | 2 | 1 | | |
| | | CO2 | 3 | X | 3 | 2 | 2 | 2 | 2 | 3 | 2 | X | 2 | 1 | 2 | X | | |
| | | CO3 | 3 | X | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 1 | |
| | | CO4 | 3 | X | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | X | |

SKILL ENHANCEMENT PROGRAM

| | |
|-------------------|-----------------------------------|
| Course Title/Code | BUSINESS ANALYTICS/ CDO501 |
| Course Type: | University Compulsory |
| Course Nature: | Hard |
| L-T-P Structure | 0-0-4 |
| Credit | 2 |

| | |
|-------------------|--|
| Course Objectives | To understand the fundamentals of employability skills |
|-------------------|--|

| Course Outcomes (COs) | | Mapping |
|------------------------------|---|-------------------|
| CO1 | Students will be able to recognize problems based on arithmetic & number system. | Skill Enhancement |
| CO2 | Students will be able to solve problems based on verbal reasoning & simplification. | Skill Enhancement |
| CO3 | Students will be able to calculate the correct answers to the problems within given time. | Skill Enhancement |
| CO4 | Students will be able to develop a holistic approach by mastering essential corporate nuances | Skill Enhancement |
| CO5 | Students will be able to deliver impactful presentations | Skill Enhancement |
| CO6 | Students will be able to prepare effectively for their interviews | Skill Enhancement |

Section A

Numbers, Percentage, Profit Loss, Simple Interest & Compound Interest

Section B

Direction Sense, Coding Decoding, Blood Relation, Number & Letter Series

Section C

Attitude, Mindset and its impact, Building the Brand me, Etiquette, Respect, Accountability & Integrity, Diversity & Inclusion, Email, cover letter, Power of words and Tone, Pronunciations and rate of Speech

Section D

Presentation Skills in detail, Resume writing, Interview Essentials, Power Dressing, Group Discussion.

| | |
|-------------------|--|
| Course Title/Code | BUSINESS ANALYTICS/ CDO502 |
| Course Type: | University Compulsory |
| Course Nature: | Hard |
| L-T-P Structure | 0-0-4 |
| Credit | 2 |
| Course Objectives | To understand the fundamentals of employability skills |

| Course Outcomes (COs) | | Mapping |
|------------------------------|---|-------------------|
| CO1 | Students will be able to recognize problems based on arithmetic & Data Analysis. | Skill Enhancement |
| CO2 | Students will be able to solve problems based on Logical reasoning & simplification. | Skill Enhancement |
| CO3 | Students will be able to calculate the correct answers to the problems within given time. | Skill Enhancement |
| CO4 | Students will be able to hone their verbal ability skills. | Skill Enhancement |
| CO5 | Students will be able to communicate effectively and impactful way | Skill Enhancement |
| CO6 | Students will be able to ace their interview skills | Skill Enhancement |

Section A

Ratio & Proportion, Partnership, Average, Mixture & Alligation, Data Interpretation

Section B

Ranking, Syllogism, Logical Deduction, Time & Work

Section C

Building vocabulary, Synonym & Antonym, One word substitution, Voice change, Active & passive Voice, Spotting Errors, Ordering of Sentences, Completing statements/sentences, Strategic reading, Techniques for solving Reading Comprehension, Solving RC Passages, Para Jumbles

Section D

Handling different types of interviews, Preparing Interview Questions, Understanding the company through the website, LinkedIn profiles & Job portals

| | |
|-------------------|-----------------------------------|
| Course Title/Code | BUSINESS ANALYTICS/ CDO601 |
| Course Type: | University Compulsory |
| Course Nature: | Hard |
| L-T-P Structure | 0-0-4 |
| Credit | 2 |

| | |
|-------------------|--|
| Course Objectives | To understand the fundamentals of employability skills |
|-------------------|--|

| Course Outcomes (COs) | | Mapping |
|-----------------------|---|-------------------|
| CO1 | Students will be able to recognize problems based on Calculations & Possibilities. | Skill Enhancement |
| CO2 | Students will be able to solve problems based on verbal reasoning. | Skill Enhancement |
| CO3 | Students will be able to calculate the correct answers to the problems within given time. | Skill Enhancement |
| CO4 | Students will be able to Hone personal strengths and acquire skills required for self-branding | Skill Enhancement |
| CO5 | Students will be able to build on attributes, values and credibility to confidently display leadership and team skills. | Skill Enhancement |
| CO6 | Students will be able to identify career path and communicate effectively in a multicultural global environment | Skill Enhancement |

Section A

Time Speed & Distance, Permutation & Combination, Probability

Section B

Inequalities, Data Sufficiency, Seating Arrangement

Section C

Managing stress, Handling time, Emotional Intelligence, Decision Making, Defining the goals, Critical Thinking, Interpersonal skills, Problem Solving

Section D

Active and Reflective communication, Adaptability, Creativity, Team Dynamics, Conflict Management, Collaboration, leadership skills, The art of networking.

| | |
|--------------------------|---|
| Course Title/Code | COMPANY LAW/ MCH337B |
| Course Type: | Core (Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | To acquaint the students with the fundamental knowledge of Company Law. |

| Course Outcomes (COs) | | Mapping |
|------------------------------|---|-------------------|
| CO1 | To acquaint the students with the fundamental knowledge of Company Law. | Employability |
| CO2 | To understand and be able to develop the MOA & AOA and its alteration. | Skill Enhancement |
| CO3 | To familiarize the students with the regulatory framework of issuing share capital and related legal provisions | Employability |
| CO4 | To understand the legality around management of a company as per the Indian Companies Act. | Skill Enhancement |

SECTION A

Introduction: The Companies Act 2013 (Basic elementary knowledge), definition & nature of company, essential characteristics of a company, types of companies, incorporation of company & commencement of business. Promoters- role & their legal position, lifting of corporate veil.

SECTION B

Memorandum of Association & Articles of Association, its contents, Alteration of Memorandum of Association & Articles of Association, Doctrine of Ultra-vires, Doctrine of Indoor Management, its exceptions.

SECTION C

Prospectus, statement-in-lieu of prospectus, Misrepresentation in prospectus, share capital, Allotment of shares –definition of share, share warrant, share certificate, Difference between share & stock, Calls on shares, Types of shares, Voting rights, Right issues, Debentures.

SECTION D

Management of Company, Appointment of directors, Legal Position, Duties & liabilities & Powers, Company Meetings- statutory, Annual general meeting, extraordinary meeting, meeting of BOD, Guidelines for managerial remuneration, Quorum for different meetings, Kinds of resolutions, Provisions regarding borrowing, & issue of debentures, dividend and bonus shares, Winding up of company, Oppression & mismanagement

Text Books

1. Davies P and Worthington S(2012).Principles of Modern Company Law.Sweet & Maxwell
2. Girvin et al.(2010).Charlesworth's Company Law.Sweet & Maxwell

References:

1. Avtar Singh's Company Law. (2023, March 10). Onlinelawstore
2. Company Law (Treatise on the Companies Act, 2013 with Legislative History, Committee Reports, Notes on the Companies Act, 1956 & SEBI Regulations)
3. Kapoor, N. D. (1972, January 1). Elements Of Company Law.

| Courses Code | Courses | Course Outcomes | P | | | | | | | | | | P | | | | |
|--------------|-------------|-----------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| MCH 337B | COMPANY LAW | CO1 | 3 | 1 | 2 | 1 | 1 | 2 | 1 | 2 | X | 1 | 1 | X | 2 | 2 | |
| | | CO2 | 2 | 1 | 2 | X | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | |
| | | CO3 | 2 | X | 2 | 1 | 1 | 2 | X | 2 | 1 | 1 | 1 | X | 3 | 3 | |
| | | CO4 | 2 | 1 | 2 | 1 | 1 | 2 | 1 | 2 | X | 1 | 1 | X | 3 | 2 | |

| | |
|-------------------|---|
| Course Title/Code | FINANCIAL DERIVATIVES/MCH304B |
| Course Type: | Elective (Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | This course presents and analyzes derivatives, such as forwards, futures, and options. These instruments have become extremely popular investment tools over the past several decades, as they allow one to tailor the amount and kind of risk one takes, be it risk associated with changes in interest rates, exchange rates, stock prices, commodity prices, inflation, weather, etc. They are used by institutions as well as investors, sometimes to hedge (reduce) unwanted risks, sometimes to take on additional risk motivated by views regarding future market movements. |

| Course Outcomes (COs) | | Mapping |
|------------------------------|---|-------------------|
| CO1 | To acquaint the students with the fundamentals of financial derivatives. | Employability |
| CO2 | To enable the students to understand various categories of financial derivatives. | Skill Enhancement |
| CO3 | To enable the students to take investment decisions by implementing derivatives strategies and risk management. | Employability |
| CO4 | To enable the students to apply understanding of Forex Derivatives for risk management | Skill Enhancement |

SECTION-A

Overview of Derivatives, Functions, Participants and Products, Types and Significance

SECTION-B

Futures and Forwards, Options, Payoffs

SECTION-C

Index Futures, Stock Futures, Strategies, Markowitz’s Risk-Return Optimization; Optimal Portfolio; Efficient Market Hypothesis; Overview of Fundamental & Technical Analysis

SECTION-D

Managed Portfolios and Performance Evaluation: Sharpe’s, Treynor’s, Jensen’s and Fama’s Performance Measures; Portfolio Revision: Portfolio Rebalancing and Upgrading.

Text Books:

1. Derivatives and Financial Innovations, Bansal, M., Bansal, N. (Tata McGraw- Hill Publishing Company)
2. Financial Derivatives in Theory and Practice, Hunt, P J; Kennedy, J E (John Wiley & Sons)

Text Books:

1. John C H (2018).Fundamental of Options & Futures.Pearson Education
2. .David A D and ; Miller W T(2006).Derivatives Valuation and Risk Management.Oxford University Press
3. Kumar S S(2007)Financial Derivatives.Prentice Hall of India

References:

1. Gupta, S L(2017).Financial Derivatives: Theory, Concepts and Problems.Prentice Hall of India
2. Varma, J R(2008).Derivatives & Risk Management.Tata McGraw- Hill Publishing Company
3. Stulz R M (2012).Risk Management & Derivatives.Cengage Learning Pvt. Limited

NPTEL LINK: https://onlinecourses.nptel.ac.in/noc23_mg34/unit?unit=113&lesson=114

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|--------------|-----------------------|-----------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 00 | 01 | 02 | 01 | 02 |
| MCH304B | FINANCIAL DERIVATIVES | CO1 | 3 | 3 | 3 | 1 | 3 | X | 1 | 1 | 1 | 1 | X | 3 | 1 | 2 |
| | | CO2 | 2 | 3 | X | 1 | 1 | 3 | 1 | X | 1 | X | 1 | 3 | 3 | 3 |
| | | CO3 | 3 | 3 | 3 | 3 | 1 | X | X | 1 | 1 | 1 | 1 | X | 3 | X |
| | | CO4 | 3 | X | X | X | 3 | 3 | 1 | 1 | X | 1 | 1 | 3 | 2 | 3 |

| | |
|-------------------|--|
| Course Title/Code | BUSINESS TAXATION/MCH305B |
| Course Type: | Core (Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | To understand the basic concepts and definitions under the Income Tax Act, 1961. |

| Course Outcomes (COs) | | Mapping |
|------------------------------|---|-------------------|
| CO1 | To understand the basic concepts and definitions under the Income Tax Act, 1961. | Employability |
| CO2 | To compute the Income under different heads of Income of Income Tax Act, 1961. | Skill Enhancement |
| CO3 | To understand and apply the knowledge about submission of IT Return, Advance Tax, Tax deducted at Source, Tax Collection Authorities. | Employability |
| CO4 | To compute tax liability of a person defined as per IT Act 1961. | Skill Enhancement |

SECTION A

Income Tax Act-1961. (Meaning, Concepts and Definitions) Income, Person, Assesse, Assessment year, Pervious year, Agricultural Income, Exempted Income, Residential Status of an Assesse, Fringe benefit Tax, Tax deducted at Source, Capital and Revenue Income and expenditure. Computation of Taxable Income under the different heads of Income. A) Income from Salary Salient features, meaning of salary, Allowances and tax Liability-Perquisites and their Valuation- Deductions from salary.(Theory and Problems)

SECTION B

Computation of Taxable Income under the different heads of Income. (continued) B) Income from House Property- Basis of Chargeability-Annual Value-Self occupied and let out property- Deductions allowed (Theory and Problems) C) Profits and Gains of Business and profession Definitions, Deductions expressly allowed and Business and professions disallowed (Theory and Problems) D) Capital Gains Chargeability-definitions- Cost of Improvement Short term and long term capital gains-deductions (Theory only)

SECTION C

Computation of Total Taxable Income of an Individual. E) Income from other sources Chargeability- deductions-Amounts not deductible. (Theory only) Gross total Income- deductions u/s-80(80ccc to 80 u) Income Tax calculation- (Rates applicable for respective Assessment year) Education cesses

SECTION D

Miscellaneous :Tax deducted at source-Return of Income-Advance payment of Tax- methods of payment of tax-Forms of Returns-Refund of Tax. (Theory),Income Tax Authorities :Organization structure of Income Tax Authorities /Administrative and Judicial Originations)Central Board of Direct Tax (Functions and powers of various Income Tax Authorities)

Text Books:

1. Kulkarni M, Mahajan S and Joshi S(2022).BUSINESS TAXATION. Nirali Prakashan
2. Gupta R and Ahuja G(2021).Commercial's Systematics Approach to Income Tax.Commercial Law Publishers
3. Jones C, and Wiles J(2006).Introduction to Business Taxation.CIMA Publishing

References:

1. Reddy T S and Reddy Y H(2012).Business Taxation. Margham Publications
2. Thomson Varghese and Jagtap S V.(2021)Business Taxation. Thakur Publication Pvt. Ltd
3. Singhania V(2022).Indian Income Tax Act

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|--------------|-------------------|-----------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | O1 | O2 | O3 | O4 | O5 | O6 | O7 | O8 | O9 | O0 | O1 | O2 | O1 | O2 |
| MCH305B | BUSINESS TAXATION | CO1 | 2 | 2 | 3 | 3 | 2 | X | 2 | 2 | X | 2 | 3 | 3 | 3 | 3 |
| | | CO2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | X | 2 | 2 | 3 | 3 | 2 | 3 |
| | | CO3 | 2 | 2 | 3 | 3 | 2 | X | 2 | 1 | 2 | X | 3 | 3 | 3 | 2 |
| | | CO4 | 3 | 2 | 3 | 3 | 2 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 3 |

| | |
|-------------------|---|
| Course Title/Code | MERGERS AND ACQUISITIONS/MCH306B |
| Course Type: | Core (Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | To understand the basic concepts, theories of Mergers and Acquisitions. |

| Course Outcomes (COs) | | Mapping |
|------------------------------|---|-------------------|
| CO1 | To understand the basic concepts, theories of Mergers and Acquisitions. | Employability |
| CO2 | To be able to understand the practical handling of cross border/ Cross-culture M&A and its taxation issues. | Skill Enhancement |
| CO3 | To identify and interpret the different types of Mergers & Acquisitions, its legal implications and Anti-takeover strategy | Employability |
| CO4 | To understand the practical aspect of Post-Merger Evaluation, Methods of Financing options and criterias for cracking a deal in a practical scenario. | Skill Enhancement |
| CO5 | To apply theoretical knowledge in Deal Valuations and Evaluation of Merger and Acquisition through various methods. | Skill Enhancement |

SECTION A

Mergers and Acquisitions: Introduction to mergers, types of mergers, theories of mergers & acquisitions; Cross-border mergers and acquisitions, issues and challenges in cross border M&A. Handling cross-culture and taxations issues in cross-border M&A. Analysis of Post-Merger Performance.

SECTION B

Demerger, types of demerger, reverse merger, buyback of shares, leverage buy-out strategy, merger strategy - growth, synergy, operating synergy, financial synergy, diversification. Takeover and its types, takeover strategy, takeover bids, legal framework for mergers and acquisitions, leverages and buyouts; Hostile tender offers and various anti-takeover strategies

SECTION C

Deal Valuation and Evaluation: Factors affecting valuation basics, methods of valuation, cash flow approaches, economic value added (EVA), sensitivity analysis, and valuation under takeover regulation, valuation for slump sale, cost-benefit analysis and swap ratio determination

SECTION D

Post-Merger Evaluation: Financial Evaluation of Mergers & Acquisitions, Impact on shareholders' Wealth; Methods of payment and financing options in mergers & acquisitions, financing decision, Merger, Acquisition and Competition law 2002, SEBI (Securities & Exchange Board of India) Takeover Code 2011 and criteria for negotiating friendly takeover.

Text Books:

1. Kummer C, Molzer W and Eiffe F(2013).Mergers & Acquisitions.Lexis Nexis
2. Ernst & Young (2018).Master Guide to Mergers and Acquisitions in India: Tax & Regulatory.Wolters Kluwer India Private Limited

References

- 1.Weston, Fred; Chung, Kwang S. & Siu, Jon A (1997), Takeovers, Restructuring and Corporate Governance, (2nd ed.). Pearson Education
- 2.Gupta, Manju (2010): Contemporary Issues in Mergers and Acquisitions. Himalaya Publishing
- 3.Sundarsanam (2006); Creating Value from Mergers and Acquisitions, (1st ed.) Pearson Education
4. Ramanujan. S. (1999); Mergers: The New Dimensions for Corporate Restructuring, McGraw Hill
5. Narayankar, R, (2013): Merger and Acquisitions Corporate Restructuring, Strategy and Practices, (2nd ed.). International Book House Pvt. Ltd.

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|--------------|--------------------------|-----------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| MCH306B | MERGERS AND ACQUISITIONS | CO1 | 2 | X | 1 | 1 | X | 1 | 1 | X | 1 | 1 | 1 | X | 1 | 1 | |
| | | CO2 | 2 | 2 | X | 3 | 1 | 3 | 2 | X | 3 | 2 | 1 | 1 | 2 | 3 | |
| | | CO3 | 3 | 3 | 2 | 3 | X | 2 | 1 | 3 | 2 | 2 | X | 1 | 1 | 2 | |
| | | CO4 | 3 | 2 | 2 | 3 | 1 | 1 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 3 | |

| | |
|-------------------|---|
| Course Title/Code | New Age Entrepreneurship/MCH338B |
| Course Type: | Core (Departmental) |

| | |
|-------------------|---|
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | To Understand the concept of New Age Entrepreneurship and its applicability in this business environment. |

| Course Outcomes (COs) | | Mapping |
|------------------------------|--|-------------------|
| CO1 | To understand the relevance of the origination of concept of New Age Entrepreneurship. | Entrepreneurship. |
| CO2 | To identify the opportunities in market and design business plan to create a viable business. | Entrepreneurship. |
| CO3 | To analyse the creation of sectoral opportunities for viable enterprises | Entrepreneurship. |
| CO4 | To apply and align the Academics & Enterprise towards incubating ideas & actionable work for future. | Entrepreneurship. |

Section-A

Definition, meaning & concept of New Age Entrepreneurship. Indian Society, Economy, Polity, and the Socio-Economic Context that impacts the basic model of Entrepreneurship. Advocacy and Networking for incorporating the dynamic changes to advantage of an Entrepreneur. Profile of a New Age Entrepreneur, and the approach to opportunities around. Strategic Innovation & New Age Entrepreneurship. New Age

Entrepreneurship towards correcting market failures.

Section-B

Understanding the New Age Entrepreneurial Terrain: Sector Studies. Venture Conceptualization and Business Planning. Developing the Venture: Strategy & implementation. Venture Entry: Positioning the Firm for Financial and Strategic Advantage. Funding of Ventures/Enterprises in the New Age Economy & Industry 4.0. Marketing & risk management of enterprises.

Section-C

New Age Entrepreneurship & Successful Models: Learning from real life Enterprises. Leadership & change. Understanding & creating sectoral opportunities for viable enterprises. In Social sector, Science and Technology: Design thinking and New Age Innovation. Analysis of New Age Entrepreneurial Models of Flipkart, PayTM, Ola Cabs, Zomato, Swiggyetc

Section-D

Business Ethics, Corporate Governance and Corporate Social Responsibility. Disruptive Innovations and Strategies for Scaling Business Impact. Understanding Start up ecosystem & return on Investment. Estimating Value Creation and Business Model Innovation using value proposition equation in new age dynamics. Understanding the alignment of Academics & Enterprise towards incubating ideas & actionable work for future.

Text Books:

1. Hisrich, Robert D., Michael, P. and Dean, S (2020), Entrepreneurship : Tata McGraw Hill, New Delhi
2. Kuratko, D., and Hodgetts, R (2007), Entrepreneurship, Cengage Learning India Pvt. Ltd., New Delhi

References:

1. Barringer, B. R. and Ireland, R. D (2018) Entrepreneurship. New Jersey (USA): Pearson Prentice Hall.
2. Lall, M. and Sahai, S.(2008) Entrepreneurship Excel Books, New Delhi
3. Charantimath, P (2005). Entrepreneurship Development and Small Business Enterprises, Pearson Education, New Delhi

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P | | |
|--------------|--------------------------|-----------------|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|---|---|
| | | | O1 | O2 | O3 | O4 | O5 | O6 | O7 | O8 | O9 | O10 | O11 | O12 | O13 | O14 | | |
| MCH306B | New Age Entrepreneurship | CO1 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | X | 2 | 1 | 2 | 3 | 3 | |
| | | CO2 | 3 | 2 | 2 | 2 | X | 2 | 2 | 2 | 2 | 1 | 2 | X | 2 | 3 | 3 | 3 |
| | | CO3 | 3 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | X | 2 | 1 | 2 | 3 | 3 | 3 |
| | | CO4 | 3 | 2 | 2 | 2 | X | 2 | 2 | 2 | 2 | 1 | 2 | X | 2 | 3 | 3 | 3 |

| Course Outcomes (COs) | | Mapping |
|-----------------------|--|-------------------|
| CO1 | Understand the Importance and Characteristics of Family Business. | Entrepreneurship. |
| CO2 | Understand and apply the Concept of 3 Circle Model of Family business and the how each of the circle corresponds to different life cycle of stages of growth | Entrepreneurship. |
| CO3 | Understand the concept of Design thinking and Innovation | Entrepreneurship. |
| CO4 | Understanding the challenges entrepreneurial family businesses encounters | Entrepreneurship. |

| | |
|-------------------|--|
| Course Title/Code | INTERNATIONAL FAMILY BUSINESS MODELS /MCH339B |
| Course Type: | Core (Departmental) |
| Course Nature: | Hard |

| | |
|-------------------|---|
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | Understand the concept of Family Business Models, its design and innovation and the related challenges. |

Section A

Family Business: Importance and Characteristics of Family Business, Importance of crafting and selecting business models; 3 Circle Model of Family Business, strategies of family business in the process of internationalization, strategies of family business in the process of internationalization.

Section B

Three phases of Family Business: operating in a domestic market and get prepared for a foreign market, selecting the right model of internationalization and selecting the right strategy of internationalization

Section C

Conceptual Model, Network Theory, International Entrepreneurship Theory, Models of Internationalization. Design thinking and Innovation, five models of ownership: owner/operator, partnership, distributed, nested, and public.

Section D

Challenges entrepreneurial family businesses encounters after the discovery of opportunities outside its domestic market. Understanding foreign markets; the different entry modes for international expansion; the strategies to adopt and the involvement of the family to support the expansion.

Text Books:

1. Poza E J and Duagherty M S(2015) Family Business, Cengagae Learning, New Delhi.
2. Gersick, K.E., Davis, J.A., Hampton, M.M., &Lansberg, I. (1997). Generation to Generation: Life Cycles of the Family Business. Harvard Business School Press.

References:

1. Bork, Jaffe, Lane, Dashew, Heisler (1996). Working with family businesses: A guide for professionals. Jossey Bass Publishers.
2. Collier, C.W. (2002). Wealth in families.Harvard University.

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | S |
|--------------|--------------------------------------|-----------------|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|----------|
| | | | O1 | O2 | O3 | O4 | O5 | O6 | O7 | O8 | O9 | O10 | O11 | O12 | O13 | O14 | O15 | O16 |
| MCH339B | Internatona l family business models | CO1 | 3 | 2 | 2 | 2 | 2 | 1 | 2 | 3 | 1 | x | 2 | 1 | 2 | | | 3 |
| | | CO2 | 2 | 2 | X | 2 | 1 | 3 | 2 | 1 | 3 | 1 | 3 | 3 | 3 | | | 2 |
| | | CO3 | 2 | 2 | 1 | X | 2 | 2 | X | 3 | 2 | 2 | 2 | 2 | 3 | 2 | | 2 |
| | | CO4 | 2 | 3 | 3 | 2 | 3 | 2 | 3 | 1 | 2 | 3 | X | 2 | 1 | | | X |

| | |
|-------------------|---|
| Course Title/Code | HEALTH CARE INSURANCE & MANAGEMENT CARE/ MCH310B |
| Course Type: | Core (Departmental) |
| Course Nature: | Hard |

| | |
|-------------------|--|
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | To understand the healthcare insurance and related legal provisions in India |

| Course Outcomes (COs) | | Mapping |
|------------------------------|---|-------------------|
| CO1 | Develop a practical understanding of Health Insurance and Health insurance Schemes in India. | Employability |
| CO2 | Demonstrate the Need, importance and use of Health Insurance Underwriting. | Skill Enhancement |
| CO3 | Identify the Role of Third Party Administrators in Health Insurance Claims | Employability |
| CO4 | Explain the concept of Claims Management and Health Insurance Frauds and Customer Service in Health Insurance | Skill Enhancement |

SECTION A

Introduction of Health Insurance Meaning, Concept, history, current scenario and future of Health Insurance India, Health Insurance regulation in the Indian Context- Health Insurance regulations (2013 & 2016), Definition of common terminologies. New developments in Health Insurance in India, digital distribution channel in health insurance. Health Insurance Products India Various policies issued in Health Insurance- Concept and features of Mediclaim – Individual and Family floater, Overseas Mediclaim policy, Disease Specific products, Government Sponsored Health Insurance Scheme in India- RSBY & Ayushman Bharat., Critical illness policy. Health Insurance proposal form, policy clauses, Preventive care and wellness program

SECTION B

Health Insurance Underwriting Need for underwriting, Risk identification, Risk classification, evaluation and risk management in health insurance, Underwriting medical risk factors, Methods of underwriting- judgement and numerical rating methods, underwriting manuals, Financial underwriting and medical underwriting, tele underwriting, Genetic Underwriting, Role of IT in health insurance underwriting, Portability benefit.

SECTION C

Role of Third Party Administrator and Group health Insurance Regulations of IRDA (TPA – Health Services Regulations), 2001. Scope of relationship between insurer and TPA. TPA's relationship with customers and hospitals for effective claim settlement. TPA role in claim settlement and reducing frauds, Current scenario and future of TPA in India. Group Health Insurance Guidelines.

SECTION D

Claims Management Intimation, admissibility, payment procedure and documents required for claims settlement in health insurance. Role of different stakeholders in claim settlement process in health insurance. Reasons and solution for high claim ratio, Role of IT in health insurance claims management. Health Insurance Frauds and Customer Service in Health Insurance Fraud and abuse in health insurance, Classification of frauds, Stages of frauds in health insurance, parties involved in frauds, triggers, causes, effects and remedial measures to control fraud. Customer protection, Expectations and drawbacks in customer service, Grievance redressal.

Text Books:

1. IC-27 Health Insurance, Insurance Institute of India Mumbai (2020)
2. IC- 35 Basics of Health Insurance, Insurance Institute of India Mumbai (2019).

References Books:

1. IC- 36 Health Insurance Claims Management, Insurance Institute of India Mumbai (2020).
2. IC- 37 Health Insurance Operations, Insurance Institute of India Mumbai (2020).

Other Resources

1. Web-site of IRDAI (<https://irdai.gov.in>)
2. Annual Reports published by IRDAI
3. IRDAI Journal

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|--------------|-----------------------------------|-----------------|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|
| | | | O1 | O2 | O3 | O4 | O5 | O6 | O7 | O8 | O9 | O10 | O11 | O12 | O11 | O12 |
| MCH310B | HEALTH CARE | CO1 | 1 | 2 | 2 | 3 | 2 | 3 | 2 | 2 | X | 2 | X | 2 | 2 | 2 |
| | INSURANCE & MANAGEMENT CARE (HCM) | CO2 | X | 3 | 2 | 3 | 1 | 2 | 3 | 2 | X | 2 | X | 3 | 2 | X |
| | | CO3 | 1 | 2 | 2 | 3 | 2 | 3 | 2 | 2 | X | 2 | X | 2 | 2 | 2 |
| | | CO4 | 2 | 3 | 2 | 2 | 3 | 2 | 3 | 2 | X | 3 | X | 2 | 2 | 2 |

| | |
|-------------------|--|
| Course Title/Code | QUALITY ASSURANCE IN HEALTHCARE/MCH311B |
| Course Type: | Elective (Departmental) |

| | |
|-------------------|---|
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | To understand the concept of Quality & have clarity on the difference between Quality Control and Quality Assurance |

| Course Outcomes (COs) | | Mapping |
|------------------------------|---|-------------------|
| CO1 | To understand the concept of Quality & have clarity on the difference between Quality Control and Quality Assurance | Employability |
| CO2 | To understand Standards and their importance & tools for Monitoring Quality &TQM | Skill Enhancement |
| CO3 | To understand the role of healthcare managers in QA implementation and managing change. | Employability |
| CO4 | To gain knowledge about the Accreditations in Quality in Healthcare & Quality with Public Health Perspective | Skill Enhancement |

SECTION A

Concepts of Quality, Quality Control and Quality Assurance

SECTION B

Organisational Levels for setting up a Quality Assurance System

SECTION C

Standards and their importance/ tools for Quality monitoring and TQM

SECTION D

Role of healthcare managers in Quality Assurance implementation and Managing Change

Text Books:

1. Lazakidou A, Daskalaki A(2011).Quality Assurance in Healthcare Service Delivery, Nursing and Personalized Medicine: Technologies and Processes. Business Science Reference
2. Collins D and Mannon M(2015).Quality Management in a Lean Health Care Environment .Business Expert Press

References

1. Jones & Bartlett(2012).Michael Merson, Robert Black, Anne Mills. Global Health: Diseases, Programs, Systems and Policies
2. Schmele J A F (1993).The Textbook of Total Quality in Healthcare.CRC Press Inc
3. Gbenga O. (2021), QUALITY ASSURANCE IN HEALTHCARE, Independently published (June 17, 2021)

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | |
|--------------|----------------------------------|-----------------|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|
| | | | O1 | O2 | O3 | O4 | O5 | O6 | O7 | O8 | O9 | O10 | O11 | O12 | O13 | O14 | O15 | O16 |
| MCH311B | QUALITY ASSURANCE IN HEALTH CARE | CO1 | 2 | 2 | 3 | 3 | 3 | X | 3 | 2 | 1 | 2 | X | 2 | 1 | 2 | | |
| | | CO2 | 2 | 3 | 3 | 2 | 3 | 2 | 3 | 2 | 2 | 1 | X | 2 | 2 | | 1 | |
| | | CO3 | 1 | 3 | 2 | 3 | 2 | 3 | 3 | 2 | 1 | X | X | 2 | 1 | | 2 | |
| | | CO4 | 3 | 2 | 2 | 3 | 2 | 3 | 3 | 2 | 2 | 1 | X | 2 | 2 | | 1 | |

| | |
|-------------------|---|
| Course Title/Code | LEGAL AND ETHICAL ASPECTS OF HEALTHCARE/ MCH312B |
| Course Type: | Core (Departmental) |

| | |
|-------------------|---|
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | To provide an overview of major issues related to the design, function, management, regulation, and evaluation of health insurance programs and managed care organizations, including HMOs. |

| Course Outcomes (Cos) | | Mapping |
|------------------------------|--|-------------------|
| CO1 | To understand the basics of Health Care laws and role of health policy and Health Care Centres | Employability |
| CO2 | To acquaint the students with Human Rights. Rights & Duties of Health Care Provider and the Health Care legislations & Regulations | Skill Enhancement |
| CO3 | To analyze and understand the general and specific laws of Health care and the contemporary challenges in health sector | Employability |
| CO4 | To understand Medical Ethics, Contract Act and Consumer Protection Act and to understand the Importance of Medical Insurance, Medical Insurance Regulations and Mediclaim Policies of Health Care Organizations. | Skill Enhancement |

SECTION A

Basic of Health and its provider. Origin & Evaluation. All Council Acts. Need for Health Law – Fraudulance, Negligence and Abuse. Role of Health Policy & Health Care Delivery. Hospital and Health Care Management.

SECTION B

Human Rights. Rights & Duties of Health Care Provider (Public & Private Activities). Functions and Interaction between court Legislation and Regulations

SECTION C

General Laws on Health Law (Medical Allied Agencies). Specific Laws on Health Law (NDT, PWD/etc).Contemporary challenges in Health Laws. Euthanasia and MTP (Medical Termination of Pregnancy).

SECTION D

Medical Ethics. Contract Act and Consumer Protection Act in Health Care Sector.
Medical Insurance- Introduction – Various types , Significance and Kind of Medical Insurance/Policies. Medical Insurance Regulations. Mediclaim Policies and TPA.

Text Books:

1. McLean S A M and Mason J K(2003).Legal and Ethical Aspects of Healthcare.Greenwich Medical Media
2. Edge R S and Krieger J (1997).Legal And Ethical Perspectives In Healthcare.Delmar Cengage Learning

References:

1. Jonathan H (2012) - Medical Law and Ethics, OUP, UK
2. Mason and Smith M C (2023)- Law and Medical Ethics. OUP Oxford
3. Rao S V J (1999). Current Issues in Criminal Justice and Medical laws. Eastern Law House

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P | |
|--------------|---------------------------------------|-----------------|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|--|
| | | | O1 | O2 | O3 | O4 | O5 | O6 | O7 | O8 | O9 | O10 | O11 | O12 | O13 | O14 | |
| MCH312B | LEGAL & ETHICAL ISSUES IN HEALTH CARE | CO1 | 3 | 3 | 2 | X | X | 2 | X | 2 | 1 | 2 | 1 | X | 2 | 2 | |
| | | CO2 | 3 | 3 | 2 | 1 | 3 | 1 | 2 | 2 | 3 | 1 | 1 | 2 | 3 | | |
| | | CO3 | 3 | 3 | 2 | 1 | 2 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 3 | 3 | |
| | | CO4 | 3 | 3 | 2 | 1 | 1 | 2 | 1 | 2 | 1 | 2 | X | 1 | 3 | 3 | |

| | |
|-------------------|--|
| Course Title/Code | LOGISTICS AND INTERNATIONAL SUPPLY CHAIN MANAGEMENT/MCH313B |
| Course Type: | Elective (Departmental) |
| Course Nature: | Hard |

| | |
|-------------------|---|
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | To familiarize the students with the essential elements of the Logistics and Supply Chain Management. Strategic issues in the International Supply Chain Management and logistics network. Configuration along with performance measurement and evaluation shall be studied thoroughly. |

| Course Outcomes (COs) | | Mapping |
|------------------------------|---|-------------------|
| CO1 | To understand the Logistics Network Design for Global Operations | Employability |
| CO2 | To understand Performance Measurement and Evaluation in Global Logistics. | Skill Enhancement |
| CO3 | To study and analyze Key Activities Performance Information, Measuring Performance in Functional Integration, Measuring Performance in Sectoral Integration, Supply chain operations reference model (SCOR) Model | Employability |
| CO4 | To analyze the Global Supply Chains and their societal, business, and cultural contexts and impacts Global Supply Chains and their societal, business, and cultural contexts and impacts | Skill Enhancement |

SECTION A

Introduction to Logistics and Supply Chain Management - Concepts, Objectives and functions of Supply Chain Management, Issues in Supply Chain Management; Managing networks and relationships; Sourcing Internationally, International Distribution Management: Types of Intermediaries, Channel Selection and Management.

SECTION B

Strategic issues in Supply Chain – Strategic Partnership, Logistics Management: Concept, Objective and Scope, Transportation, Warehousing, Inventory Management, Packing and Unitization, Control and Communication, Role of Information Technology in Logistics, Logistics Service Firms, Third Party Logistics, 4PL (Fourth Party Logistics), Reverse Logistics.

SECTION C

Logistics Network Design for Global Operations Global Logistics Network Configuration, Orienting International Facilities: Considerations and Framework, Trade-offs Associated with each Approach, Mapping the different Approaches, Capacity Expansion Issues; Information, Management for Global Logistics: Characteristics of Logistics Information and Telecommunication Systems, Capabilities and Limitations.

SECTION D

Performance Measurement and Evaluation in Global Logistics: Operations and Logistics Control: Key Activities Performance Information, Measuring Performance in Functional Integration, Measuring Performance in Sectoral Integration, Supply chain operations reference model- (SCOR) Model. Global Supply Chains and their societal, business, and cultural contexts and impacts. Perspectives for business, social science, engineering, and legal environment, Drivers for economic globalization (labour costs, resources, regulation etc.), Influence on world and national economies

Text Books:

1. Chira, R(2016). International Logistics Management. Authorhouse
2. Watanabe D and Kawasaki T (2021) . Global and International Logistics. Mdpi AG
3. Singh R(2015). International Trade Logistics. Oxford University Press

References:

1. Mcdonough A(2020).Operations and Supply Chain Management Essentials You Always Wanted To Know. Vibrant Publishers
2. Branch A.E(2008).Global Supply Chain Management and International Logistics. Routledge
3. Chase R, Jacobs F R and Aquilano N (2005). Operations Management for Competitive Advantage. McGraw-Hill Education
4. Sathe R. A Professional Guide to International Trade Operations, Bills of Lading and Payment Methods
5. Sahay, B S(2012). Supply chain management for global competitiveness. Delhi: Macmillan Publishers India Limited.

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|--------------|---|-----------------|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|
| | | | O1 | O2 | O3 | O4 | O5 | O6 | O7 | O8 | O9 | O10 | O11 | O12 | O13 | O14 |
| MCH313B | LOGISTICS AND INTERNATIONAL SUPPLY CHAIN MANAGEMENT | CO1 | 3 | 2 | 2 | 2 | 1 | 3 | 1 | X | 1 | 1 | 2 | X | 3 | 3 |
| | | CO2 | 3 | 3 | 3 | 3 | X | 3 | 2 | 1 | 1 | 1 | 3 | 1 | 3 | 3 |
| | | CO3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | X | 3 | 2 | 3 | 3 |
| | | CO4 | 3 | 3 | 3 | 3 | X | 2 | 3 | 2 | 1 | 1 | 3 | X | 3 | 3 |

| | |
|-------------------|--|
| Course Title/Code | PURCHASING AND INVENTORY MANAGEMENT/MCH314B |
| Course Type: | Elective (Departmental) |

| | |
|-------------------|---|
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | To get the students acquainted with concepts and application of the purchasing and inventory management. To acquaint students with the need and management of inventory in the supply chain management. |

| Course Outcomes (COs) | | Mapping |
|------------------------------|---|-------------------|
| CO1 | To get the students acquainted with concepts and application of the purchasing and inventory management | Employability |
| CO2 | To acquaint students with the need and management of inventory in the supply chain management. | Skill Enhancement |
| CO3 | To acquaint students with the management of inventory in the supply chain management. | Employability |
| CO4 | To acquaint students with the decision making in purchasing, vendor management | Skill Enhancement |

SECTION A

Introduction to Purchasing Management: Objectives and Functions of Purchasing Department, Purchase Policy and Procedure, Negotiations, Purchase of High Capital Equipment and their Feasibilities. Supply Chain Management, Implementation of Supply Chain Principles within a Company.

SECTION B

Suppliers Selection, Vendor Rating and Vendor Rating Techniques, Vendors Development and Vendors' Relationship management. Inventory Management: Different Costs of Inventory, Optimal Order Quantity, EOQ, Inventory Models with Purchase Discounts, Buffer Stocks, Fixed Order Period Model, Safety Stocks, Optimum Level of Safety Stock.

SECTION C

Inventory Control, Elements of Effective Inventory Control, Advantages, Procedure for Setting up an Efficient Inventory Control System, V.E.D. Analysis, S.D.E. Classification, F.S.N. Analysis, X.Y.Z. Analysis, Logistics Management and Its Link with Inventory Control and other Areas.

Value Analysis: Purchasing Research, Price Forecasting, Forward Buying, Make or Buy Decision

SECTION D

Stores Management: Purpose of Store Management, Location and Layout, Cost Aspects and Productivity, Problems and Developments, New Developments in Storing. Evaluation of Materials Management: Organization, Difficulties, Process and Criteria, Reporting and Purchasing. Computers in Material Management Electronic Computer, Integrated Computer System for Materials Management, Material Planning.

Text Books:

1. Kornafel P (2004). Inventory Management and Purchasing. AuthorHouse
2. Menon K S and Kulkarni S (2011). Purchasing And Inventory Management. Shroff Publishers
3. Sharma S D (2014). Operations Research. Kedar Nath Ram Nath

References:

1. Ansari A and Murderess B (1990). JIT Purchasing. Free Press.
2. Baily P J H (1986). Purchasing Principles and Management. Pitman.
3. Lee et al (1989). Purchasing and Materials Management. McGraw Hill.
4. Dutta, A K., Integrated Materials Management, PHI Learning.

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | |
|--------------|-------------------------------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | O | O | O | O | O | O | O | O | O | O | O | O | O | O | O | O |
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 1 | 1 | 2 | |
| MCH314B | PURCHASING AND INVENTORY MANAGEMENT | CO1 | 3 | 2 | 2 | 2 | X | 3 | 1 | 1 | 1 | 1 | 2 | X | 3 | 3 | | |
| | | CO2 | 2 | 3 | 3 | 2 | 1 | 3 | 2 | X | 1 | 1 | 3 | 1 | 3 | 3 | | |
| | | CO3 | 3 | 2 | 3 | | 3 | 2 | 2 | 2 | 2 | 1 | X | 3 | 2 | 3 | | 3 |
| | | CO4 | 3 | 3 | 3 | | 3 | X | 2 | 3 | 2 | 1 | 1 | 3 | 1 | 3 | | 3 |

| | |
|-------------------|--|
| Course Title/Code | SERVICE OPERATIONS MANAGEMENT/MCH315B |
| Course Type: | Elective(Departmental) |
| Course Nature: | Hard |

| | |
|-------------------|--|
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | The objective of this course is to acquaint the participants with decision making in planning, design, delivery, quality, and maintenance and scheduling of service operations on a global basis. The participants are also expected to appreciate the role of service quality and supply chain in emerging service economy of India in relation to international business. Environment and global benchmarks. |

| Course Outcomes (COs) | | Mapping |
|------------------------------|---|-------------------|
| CO1 | Understand the fundamental concepts and techniques of service Operations management | Employability |
| CO2 | Examine various ways of managing the service operations | Skill Enhancement |
| CO3 | To analyze the operational management issues and problems and solve them | Employability |
| CO4 | Develop the ability to optimize the service operations for business | Skill Enhancement |

SECTION A

Matrix of Service Characteristics; Taxonomy of services, Challenges in Operations Management of Services, Aggregate Capacity Planning for Services; Facility Location; subjective and objective factors.

SECTION B

Service design and delivery systems; layouts in services, Job and Work Design in Services- Safety and Physical Environment; Effect of Managing queues, Automation; Operations standards and Work measurement.

SECTION C

Determinants of Quality in Services; Concept of a Total Quality Service, Dynamics of Service Delivery System Measurement, control and improvement of Quality of Services

SECTION D

Scheduling for Service operations, personnel and vehicles, Supply Chain and Distribution of Services, Maintainability and Reliability in Services; Total Productive Maintenance (TPM) in Services

Text Books

1. Robert J, Graham C and Michael S(2017).Service Operations Management.Pearson Education
2. Haksever B R C(2020).SERVICE AND OPERATIONS MANAGEMENT. World Scientific
3. Itzsimmons, J. A., & Fitzsimmons, M. J. (2004). Service management (4th ed.).
New Delhi: McGraw Hill.

References:

1. Jauhari and Dutta (2009).Services: Marketing, Operations and Management.Oxford University Press
2. Bowen, D. E., Chase, R. B., & Cummings, T. G. (Eds.). (1990). Services management effectiveness (2nded.). San Francisco: Jossey Bass.
3. Heizer et al.(2017).Operations Management.Pearson Education
4. Heskett, J. L., Sasser, W. E.,& Hart, C.W.L. (1990). Servicebreakthroughs: changing the rules of the game. New York: FreePress.
5. Martin, C. (1998). Logistics and SCM: Strategies for reducing cost and improving service. New Delhi: Pearson Education.

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | |
|--------------|--------------------------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | O | O | O | O | O | O | O | O | O | O | O | O | O | O | O | O |
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 1 | 1 | 2 | |
| MCH315B | SERVICES OPERATIONS MANAGEMENT | CO1 | 3 | 2 | 3 | X | 1 | 3 | 1 | 3 | X | 1 | 2 | 1 | 1 | 1 | | |
| | | CO2 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 2 | 1 | 2 | 2 | 2 | 2 | X | |
| | | CO3 | 2 | 3 | 3 | 2 | 2 | X | 2 | 2 | 2 | 2 | X | 3 | 2 | 3 | 1 | |
| | | CO4 | 3 | 3 | 3 | 3 | 1 | 2 | 3 | 3 | 2 | 1 | 2 | 2 | 3 | 1 | | |

| | |
|-------------------|------------------------------|
| Course Title/Code | HR Analytics/ MCH340B |
| Course Type: | Elective (Departmental) |
| Course Nature: | Hard |

| | |
|-------------------|--|
| L-T-P Structure | 2-0-2 |
| Credit | 3 |
| Course Objectives | To understand application of human resource data, analysis and making interpretations and decision making based on it. |

| Course Outcomes (COs) | | Mapping |
|------------------------------|---|----------------|
| CO1 | To demonstrate theory, concepts, and business application of human resources research, data, metrics, systems, analyses, and reporting. | Employability |
| CO2 | To Build an understanding of the role and importance of HR analytics, and the ability to track, store, retrieve, analyse and interpret HR data to support decision making | Employability |
| CO3 | Ability to use appropriate software to record, maintain, retrieve and analyse human resources information (e.g., staffing, skills, performance ratings and compensation information). | Employability |
| CO4 | Apply quantitative and qualitative analysis to understand trends and indicators in human resource data & Demonstrate how to connect HR results to business results | Employability |

SECTION – A

Introduction to HR Analytics: Evolution of HR Analytics, HR information systems and data sources, HR Metric and HR Analytics, Evolution of HR Analytics; HR Metrics and HR Analytics; Intuition versus analytical thinking; HRMS/HRIS and data sources; Analytics frameworks like LAMP, HCM:21(r) Model.

SECTION B

Diversity Analysis: Equality, diversity and inclusion, measuring diversity and inclusion, Testing the impact of diversity, Workforce segmentation and search for critical job roles

SECTION C

Recruitment and Selection Analytics: Evaluating Reliability and validity of selection models, Finding out selection bias, Predicting the performance and turnover. Performance Analysis: Predicting employee performance

SECTION D

Training requirements, evaluating training and development, Optimizing selection and promotion decisions Monitoring impact of Interventions: Tracking impact interventions, Evaluating stress levels and value-change. Formulating evidence-based practices and responsible investment. Evaluation of mediation process, moderation, and interaction analysis

Text Books

1. Walsh M(2021).HR Analytics Essentials You Always Wanted To Know.Vibrant Publishers
2. Yadav R S & Maheshwari S(2020).HR Analytics : Connecting Data and Theory.Wiley

References:

1. Motwani B (2021).HR Analytics : Practical Approach Using Python. Wiley
2. Sundmark L. Doing HR Analytics.
3. Deiz F, Bussin M and Lee V (2019). Fundamentals of HR Analytics. Emerald Publishing Limited

| Course s Code | Courses | Course Outcom es | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PO | PS | PS |
|------------------|--------------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | O1 | O2 |
| MCH34 0B | HR Analytics | CO1 | 2 | 3 | 2 | 3 | 2 | 1 | 2 | 3 | 2 | 2 | 1 | 2 | 1 | 2 |
| | | CO2 | 2 | 3 | 2 | 2 | 2 | X | 3 | 2 | 2 | 2 | X | 1 | 2 | 2 |
| | | CO3 | 3 | 3 | 3 | 3 | 2 | X | 3 | 2 | 3 | 2 | 1 | 2 | 1 | 2 |
| | | CO4 | 3 | 3 | 3 | 3 | 3 | 1 | 3 | 3 | 3 | 3 | 1 | 2 | 1 | 2 |

| | |
|-------------------|--|
| Course Title/Code | SOCIAL MEDIA ANALYTICS/ MCH341B |
| Course Type: | Elective(Departmental) |
| Course Nature: | Hard |

| | |
|-------------------|--|
| L-T-P Structure | 2-0-2 |
| Credit | 3 |
| Course Objectives | The objective of this course is to acquaint the participants with decision making in planning, design, delivery, quality, and maintenance and scheduling of service operations on a global basis. The participants are also expected to appreciate the role of service quality and supply chain in emerging service economy of India in relation to international business. Environment and global benchmarks. |

| Course Outcomes (COs) | | Mapping |
|-------------------------------|--|----------------|
| CO1 | To give an overview & Conceptual understanding about Social Media Dimensions | Employability |
| CO2 | To Demonstrate the Understanding of Mobile analytics ,Natural Language processing with Mobile Analytics . | Employability |
| CO3 | To understand the various Parameters of Text Analytics,their sources ,Patterns and trends in order to be Industry ready | Employability |
| CO4 | To Demonstrate the understanding of Big Data, Predictive Analytics, Machine Learning ,IOT& Artificial Intelligence as per Industry 4,0 | Employability |
| Prerequisites (if any) | | |

Section A

Overview- Social Media, On-Line Social Network, Off-Line Social Network, Metrics and Measurement, Dashboard, Target Audience, Desired Action, Content, Market Research Online Communities, Cluster Analysis, Conjoint Analysis, Multidimensional Scaling, Social Media Listening, Social Media Scoring, Social Media Modelling.

Section B

Mobile Analytics Understanding Mobile Analytics Concepts, difference between Mobile Analytics and Site Analytics, Natural language Processing with Mobile Analytics, Text Mining for Mobile Analytics, Mobile Analytics Tools, Churn Analytics.

Section C

Text Analytics- Text Data, Sources of Text Data, Information Clusters, Patterns, Trends, Tagging, Natural Learning Process, Lexical Analysis, Social Network Nodes, Linkage Structure, Node Labelling, Content-Based Classification, Word Stemming, Stemming Algorithms, Polarity of the Attitude, Psychological Profiling, Sentiment Analysis.

Section D

Web Scraping- Web Scraping of unstructured data, Gathering data from HTTP and HTTPS format, Web Scraping from XML and JSON file, Regular expressions, Extraction Strategies, Term Document Matrix, Data Cleansing, Data Manipulation and Data Transformation after Scrapping.

Future of Analytics- Introduction to Big Data, Predictive Analysis for Business, Social Information Processing and Distributed Computing, Advances in Machine Learning, Traditional Data Models Evolve, Analytics to Solve Social Problems, Location Based Data Explosion, Data Privacy Backlash, Internet of Things, Artificial Intelligence

Text Books:

1. Ganis M and Kohirkar A(2016).SOCIAL MEDIA ANALYTICS.Pearson Education India
2. Hong et al.(2021).Deep Learning for Social Media Data Analytics.Springer

References:

1. Chatterjee S, and Krystyanczuk M(2017).Python Social Media Analytics.Packt Publishing
2. Russell M A and Klassen M(2019).Mining The Social Web.Shroff/O'Reilly
3. Bali R(2017).Learning Social Media Analytics with R. Packt Publishing
4. Szabo et al (2018).Social Media Data Mining and Analytics.Wiley

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P | |
|--------------|------------------------|-----------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|
| | | | O1 | O2 | O3 | O4 | O5 | O6 | O7 | O8 | O9 | O0 | O1 | O2 | O1 | O2 | |
| MCH 341B | Social Media Analytics | CO1 | 3 | 2 | 2 | 2 | 2 | X | 3 | 2 | 2 | 2 | 2 | X | 2 | 1 | 2 |
| | | CO2 | 3 | 3 | 3 | 2 | 2 | 1 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 |
| | | CO3 | 3 | 3 | 3 | 3 | 2 | 1 | 3 | 2 | 3 | 2 | X | 2 | 1 | 2 | |
| | | CO4 | 3 | 3 | 3 | 3 | 3 | X | 3 | 3 | 3 | 3 | 3 | 1 | 2 | X | 2 |

| | |
|-------------------|--|
| Course Title/Code | Finance Analytics MCH345B |
| Course Type: | Core (Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | <ul style="list-style-type: none"> • To enable the students to understand Investment and Capital Market. • To provide a foundation in financial analytics in order to handle financial data. • To build the financial models for analyzing the Time Value of Money. • To build analytical models to gauge the risk and return in capital market. |

| Course Outcomes (COs) | | Mapping |
|------------------------------|--|-------------------------------------|
| CO1 | To understand the fundamentals principles of financial accounting, techniques of preparing and presenting the accounts for user of accounting information. | Skill Enhancement |
| CO2 | To develop and interpret financial statements . | Skill Enhancement/ Employability |
| CO3 | To understand and apply the concept and uses of Computerized Accounting in day to day business. | Employability |
| CO4 | To summarize the Accounting Software packages and its practical application. | Skill Enhancement |

Section A

Introduction: Concepts of investment, Financial and Non-financial forms of investment, Objectives of financial investment, Investment methods, Security and non-security forms of investment, Sources of investment information, Investment instruments.

Primary and Secondary Markets: Capital Market, Introduction to Primary Market, Forms of marketability of securities, Functioning of stock exchanges, Trading and settlement procedures at NSE and BSE, SEBI: Its role, importance.

Section B

Risk: Concept and Components of total risk-security returns: Types of Risk, Risk measurement.

Fundamental and Technical Analysis of equity stock, Concept of intrinsic value, Objectives and beliefs of fundamental analysts, Economy-Industry-Company framework, Economic analysis and forecasting, Theory of technical analysis, Points and figures chart, Bar chart etc.

Section C

Time Value of Money: Concepts of Time Value of Money, compounding and discounting, Present Value and Future Value, Multi period compounding, Capital Budgeting Decisions, NPV-Merits/demerits, IRR-Merits/demerits, PI, Payback and Discounted Payback

Practical: Time Value of Money: Future Value, Present Value, NPV, IRR, Loan Schedule (PMT function)

Section D

Financial Statement Analysis: Financial Statements Role of Auditor, Ratio Analysis, Horizontal and Vertical Analysis

Practical: Trend Analysis, Comparative Analysis, Case Study: P&G Financial Statement Analysis, Ratio Analysis

Text Books:

1. Pandian P (2012).Security Analysis And Portfolio Management. Vikas Publishing House
2. Sengupta C(2011).Financial Analytics. Wiley

Reference Books:

1. Financial Analytics. Mohanty P(2022). Wiley
2. Raj V.Business Analytics and Financial Planning.

| Courses Code | Courses | Course Outcomes | P O P P P P P P P P P P O O P P P P | | | | | | | | | | | | | |
|--------------|-------------------|-----------------|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 1 | 2 |
| MCH345B | Finance Analytics | CO1 | 3 | x | 3 | 3 | 2 | 3 | x | x | x | 3 | 3 | 3 | 3 | 3 |
| | | CO2 | 3 | x | 3 | 3 | x | 3 | x | 2 | x | 3 | 3 | 3 | 3 | 3 |
| | | CO3 | 3 | x | 3 | 3 | x | 3 | x | x | x | 3 | 3 | 3 | 3 | 3 |
| | | CO4 | 3 | x | 3 | 3 | 2 | 3 | x | x | x | 3 | 3 | 3 | 3 | 3 |

| | |
|---------------------------|---------------------------|
| Course Title/ Code | Cyber Law (LWS323) |
| Course Type: | Elective |
| Course Nature: | Soft |

| | |
|--------------------------|--|
| L-T-P-O Structure | (2-0-0-0) |
| Objectives | The Objective is this paper is to focus on basic concepts of Cyber Law relevant for understanding evolution of Cyber law and its conformity in any changing society. |

| CO | CO STATEMENT | Mapping |
|------------|---|---------------------|
| CO1 | Describe the concept of Cyber crimes and cyber Law | Employability/Skill |
| CO2 | Critically analyse the problems arising out of online transactions and find solutions | Employability/Skill |
| CO3 | Identify Intellectual Property issues in the cyber space and apply relevant laws to protect or fight infringement | Employability/Skill |
| CO4 | Critically analyse various sections of the Information Technology Act 2000 to apply such laws appropriately | Employability/Skill |

Section A

Computer and its impact in society:- (Contact Hours - 4)

- A. Need for Cyber Law in 21st Century.
- B. Development of Cyber Law in India.

Section B

Privacy Issues & Access Rights :- (Contact Hours -6)

- A. Freedom of speech and expression in Cyberspace.
- B. Right to Privacy and Right to Data Protection.

Section C

Cybercrimes and Legal framework:- (Contact Hours -3)

- A. Kinds of Cyber Crimes: Hacking, Digital Forgery, Phishing, Spam, Malware etc.
- B. Cyber Stalking, Cyber Pornography, Cyber Vandalizing etc.
- C. Concept of Property in Cyberspace.

Section D

Information and Technology Act & Intellectual Property Rights :- (Contact Hours - 3)

- A. Historical Background & Objectives etc.
- B. Legal Recognition of Electronic Record & Procedures.
- C. Offences and Penalties etc.

Text Books:

1. Rastogi A(2014).Cyber Law – Law of Information Technology and Internet.Lexis Nexis.
2. Rattan J(2022). Cyber laws and Information Technology.Bharat law House Pvt Ltd.
3. Sharma V(2016). Information Technology – Law and Practice.Universal Law Publishing Co.

Reference Books:

1. Nandan K K(2016). Law Relating to Computers Internet & E-Commerce.Universal Law Publishing Co.
- 2.Pavan D (2021). Taxmann's Cyber Crimes & Laws, 4th Edition. Taxmann Publications Private Limited
3. Talat (2017).Cyber Law in India, Netherlands.Wolters Kluwer

| | |
|---------------------------|--|
| Course Title/ Code | Law Relating to Intellectual Property Rights (LWS325) |
| Course Type: | Elective |
| Course Nature: | Soft |

| | |
|--------------------------|--|
| L-T-P-O Structure | (2-0-0-0) |
| Objectives | The objective of this paper is to orient students to legal studies. The paper focuses on generally about law and legal system. |

| CO | CO STATEMENT | Mapping |
|------------|---|-------------------------|
| CO1 | Understand the basics of Intellectual Property Rights | Employability/Skil 1 |
| CO2 | Categorize different types of intellectual properties | Employability/Skil 1 |
| CO3 | Recognize the crucial role of intellectual property in different industries. | Employability/Skil 1 |
| CO4 | Understand the procedural aspect pertaining to application and grant of patent, trademark, geographical indication etc. | Employability/Skil 1 |

Section A

Introduction to IPRs and Trademark and Trade Secrets (Contact Hours 4)

1. Introduction to various types of IPR Laws
2. Protection of Trademarks under Trademarks Act – Basic legal Framework
3. Trade Secrets and protection thereof

Section B

Protection of Copyright, Traditional Knowledge, Design and Integrated Circuits (Contact hours 4)

1. Legal Framework relating to Copyright protection in India
2. Protection of Industrial Designs under Designs Act
3. Protection of integrated circuits

| | |
|---------------------------|---|
| Course Title/ Code | Essentials of Peace and Sustainability |
| Course Type: | Elective (Allied) |
| Course Nature: | Soft |

Course Objective

To make participants understand the philosophical underpinnings of “Peace” at Self, Society, Nation and Global level. The course aims at sensitizing participants on aspects of building and maintaining Peace in World through Sustainable Development and creating a mindset to acknowledge the importance of Peace through Collaborative and sustained efforts in personal, social, economic and governance. The course develops sound concepts which participants are made to apply through a series of Projects, Assignments, Group Work and Seminars and helps participants’ growth into “Ambassadors of World Peace as Digital Professionals and sensitive Global Social beings”.

Course Structure (Overall Outline)

Blended mode:

- Online mode: 30%
- Classroom work: 30%
- Field work:40%

Course 1: Essentials of Peace and

Sustainability Learning outcomes

After completing this course, the students will be able to

1. Comprehend concept of “Peace and sustainability” and inter linkages
2. Discuss relevance of sustainable development goals to attain Peace
3. Recognize how peace addresses sustainable development goals
4. Construct thoughts and philosophies of Peace Advocacies
5. Compare various Perspectives on Peace
6. Be able to Choose appropriate strategy to face challenges to peace
7. Appreciate different kinds of thoughts in different contexts with reference to peace

8. Summarize understanding of peace based on various perspectives Make decisions in personal, social and professional life aligning to inner peace
9. Envision impact of individual action on society and nation and globe as a whole
10. Develop culture of following netiquettes of a peace loving citizen in digital era
11. Understand the political, economic, socio-cultural conflict & ecological conflict

Section A: Basic understanding of Peace and Sustainability

- i. Concept of Peace and Approaches to Peace
- ii. Understanding peace from different perspective: Self, Local Community, National and Global.
- iii. Concept of Sustainability and Sustainable Development Goals (2030) as drivers of sustainable, health and social initiatives
- iv. Why Sustainability

Assignment:

- Document analysis of Sustainable development goals agenda
- Creative expression based on sustainable development goals

Section B:

i. Understanding thoughts on Peace

- a) Study of relevant extracts from the writings of Indian thinkers: Gandhi, Tagore, Sri

Aurobindo, Vivekananda

- b) Western thinkers: Russell, Iqbal, Dalai Lama, Nelson Mandela
(Please follow Annexure A-reading references)

Assignment:

- Panel discussion by students
- Discussion forums on different aspects of Peace

Section C: Understanding challenges to peace

- i. Challenges to peace-stress, conflicts, crimes, terrorism, violence and wars
- ii. Ongoing conflicts in the political, economic, socio-cultural and ecological sphere at national and international level

iii. Impact of media- The use of perspective, symbols, stereotypes, and rhetoric in analyzing communication and representation of contentious issues in television and other modern media

Assignment:

- Case study analysis

Section D: Peaceful and Sustainability conscious

individual Being “Peace Ambassador”

i. Role of self in reducing prejudices, biases and stereotypes, nurturing positivity, making choices in response to crises in personal, social and professional life

(These topics should be covered through games and activities)

1. Developing Core competencies and life skills: Negotiation Rational thinking, System thinking, conflict resolution

(These topics should be covered through workshops)

2. Cultivating the skills necessary for peace: Introspection and reflective thinking, Mediation, Dialogue

(These topics should be covered through experiential learning through training and practices)

Assignment

- *Reflective journaling*

Being Sustainability conscious individual

- 3As of Sustainable development goals oriented initiatives: Awareness, Appreciation, Action
- Power of One
- Role of Organizations, NGO and Government
- Role of technology –Digital literacy and media literacy

Assignment

- Project -Students will choose one of the sustainable development goals. Decide the initiative to achieve the goal, execute the initiative. Write a summary report on it and present in symposium.

Some of the suggested areas (But not limited to)

- *Gender stereotyping*

- *Gender equality*
- *Quality education*
- *Carbon footprints*
- *Ecological footprints*
- *Water crisis*
- *Waste water management*
- *Climate change*
- *Biodiversity*

Text Books:

1. Cheshmehzangi A(2022).Urban Health, Sustainability, and Peace in the Day the World Stopped.Springer Verlag
2. Swain A and Ojendal J(2018).Routledge Handbook of Environmental Conflict and Peacebuilding.Routledge

Reference Books:

1. Holz P and Herrmann-Pillath C(2018).Towards A New Social Order. Vernon Press
2. Cheshmehzangi A(2022).ICT, Cities, and Reaching Positive Peace.Springer Verlag
3. Brauch et al(2016).Handbook on Sustainability Transition and Sustainable Peace.Springer

| | |
|--------------------------|------------------------------------|
| Course Title/Code | APPLIED PHILOSOPHY (EDS288) |
| Course Type | Elective (Allied) |
| Course Nature | Soft |
| L-T-P-O Structure | (1-0-2) |

| | |
|-------------------|--|
| Objectives | <p>To enable students to</p> <ul style="list-style-type: none"> - confront the philosophical problems implicit in the experience of self, others and the society. - read critically the philosophy of influential philosophers with respect to society, Science and success in life - understand and apply concepts and theories of moral philosophy. - reflect philosophically and ethically on their own personal, professional and civic lives. - formulate for himself or herself a philosophy of life or world-view consistent with the objectives of liberal society. |
|-------------------|--|

| | Course Outcome | Mapping |
|-------------|---|---------------------|
| CO 1 | Analyze the philosophical problems implicit in the experience of self, others and the society | Employability/skill |
| CO 2 | Explain the philosophy of influential philosophers with respect to society, Science and success in life | Employability/skill |
| CO 3 | Demonstrate the understanding of the concepts and theories of moral philosophy. | Employability/skill |
| Co4 | Reflect philosophically and ethically on one's own personal, professional and civic lives. | Employability/skill |
| CO 5 | Formulate a philosophy of life or world-view consistent with the objectives of liberal society. | Employability/skill |

SECTION A

INTRODUCTION TO PHILOSOPHY: Philosophy: Meaning, Nature and Scope, Practical uses of Philosophy, Branches of Philosophy.

SECTION B

THOUGHTS OF PHILOSOPHERS AND THEIR IMPLICATIONS: General Philosophy of John Dewey, Swami Vivekananda and Rabindra Nath Tagore, Philosophy of life and success: Steve Jobs, N.R. Narayana Murthi, Dr. A.P.J. Abdul Kalam and Muhammad Yunus, Philosophy of Science and technology- Francis Bacon and Martin Heidegger.

SECTION C

PHILOSOPHICAL PERSPECTIVES OF SOCIO-POLITICAL SCENARIO IN INDIA: Nature of Democracy and its implications, Meaning and requirements of National Integration, Universal Human Rights

SECTION D

PHILOSOPHICAL PERSPECTIVES OF RELIGIOUS SCENARIO IN INDIA: Secularism—its nature and implications, Moral Philosophy of religion with special reference to Hinduism, Jainism, Buddhism, Islam, Christianity, Sikhism. Religious pluralism and Religious tolerance.

Text Books:

1. Bhatia, K. & Bhatia, B. (1974) The Philosophical and Sociological Foundations of Education. Delhi: Doaba House.
2. Brubacher, John. S. (1969). Modern Philosophies of Education, New Delhi: Tata McGraw-Hill
3. Dewey, J. (1966). Democracy in Education, New York: Macmillan.

Reference Books:

1. Ferre, F.(1995). Philosophy of Technology. University of Georgia Press.
2. Gandhi, M. K. (1956). Basic Education. Ahmedabad, Navajivan.
3. Goel, A. & Goel S. L. (2005). Human values and Education. New Delhi: Deep and Deep Publications Pvt. Ltd
4. Palmer, Joy A. *et.al.* (2001). Fifty major thinkers on education from confucious to Dewey. New Delhi: Rutledge.
5. Rajput, J.S. (2006). Human Values and Education. New Delhi: Paragon Publications.
6. Walia, J.S. (2011). Philosophical, Sociological and Economic Bases of Education

LAB: (EDS288)

1. Prepare and present a report on 'philosophy of life' from the perspective of a young adult.
2. Quiz and interactive sessions on various philosophical perspectives of contemporary philosophers.
3. Organization of and participation in street plays /dramas/ declamation/ debates/ any other suitable activity on any theme of Philosophical perspectives of Socio-Political scenario in India.
4. Group discussions on any suitable topics concerning contemporary society like aggression among youth, Over-ambitiousness in young generation, misuse of democracy, implications of secularism etc. and to reflect upon different viewpoints.

- 5.Preparation of quotation boards to display quotes of great philosophers in the college premises.
- 6.Picture interpretation and philosophical reflection on social themes like juvenile crime, begging in India, Social networking etc.
- 7.Readings from the autobiographies and other publications of great philosophers e.g. ‘Wings of Fire’ followed by discussion session.
- 8.Showing Videos on Unique personalities: life and philosophies followed by reflection exercises.
- 9.Any other suitable activity.

| Course Outcomes | Program Outcomes | | | | | | | | | | | | Program Specific Outcomes | |
|-----------------|------------------|------|------|------|------|------|------|------|------|-------|-------|-------|---------------------------|------|
| | PO1 | PO 2 | PO 3 | PO 4 | PO 5 | PO 6 | PO 7 | PO 8 | PO 9 | PO 10 | PO 11 | PO 12 | PSO 1 | PSO2 |
| CO1 | 1 | 1 | X | 1 | X | 1 | 1 | 2 | 1 | 1 | 1 | X | X | X |
| CO2 | 1 | 1 | X | 2 | X | 1 | 1 | 2 | 1 | 1 | 1 | X | X | X |
| CO3 | 1 | X | 1 | 1 | X | 1 | X | 1 | 1 | 1 | 1 | X | X | X |
| CO4 | 1 | 1 | 1 | 1 | X | 1 | 1 | 2 | 1 | 1 | 1 | X | X | X |
| CO5 | 1 | 1 | 1 | 1 | X | 1 | 1 | 2 | 1 | 1 | 1 | X | X | X |

| | |
|--------------------------|------------------------------------|
| Course Title/Code | Applied Psychology (EDS289) |
| Course Type | Elective |
| Course Nature | Soft |
| L-T-P-O Structure | (1-0-2-0) |

| | |
|-------------------|--|
| Objectives | <ul style="list-style-type: none"> -To define psychology and its application across various fields. -To identify major attributes of Personality. -To conceptualize psychology in social and organizational settings. -To understand group dynamics. -To solve conflicts among the group. |
|-------------------|--|

| | Course Outcome | Mapping |
|-----|---|---------------------|
| CO1 | develop critical thinking to understand the application of psychology CO2 identify the impact of Stereotyping, prejudice and discrimination in formation of attitude | Employability/skill |
| CO2 | identify the impact of Stereotyping, prejudice and discrimination in formation of attitude | Employability/skill |
| CO3 | Identify major attributes of Personality | Employability/skill |
| CO4 | Explain Social Psychology and able to solve conflicts among the group | Employability/skill |
| CO5 | Demonstrate group dynamics | Employability/skill |
| CO6 | Analyze organization Psychology and able to blend in work environment | Employability/skill |

Section A

PSYCHOLOGY: ATTITUDE FORMATION

Psychology: Meaning, nature, Role of psychology across multi-disciplinary aspects, Introduction: Stereotypes, Prejudice, and Discrimination, Introduction: Attitude, Formation of attitude, Aptitude

Section B

PERSONALITY AND PERSONALITY DEVELOPMENT

Definition of personality and its characteristics, Trait approach to personality (Big five theory of personality), Jung's Theory of personality

Section C

SOCIAL PSYCHOLOGY

Introduction to social identity, social cognition, and social influence, social conflicts and its resolutions, Group dynamics: Introduction, formation, types of groups, cooperation, competition, and conflict in groups.

Text Books:

1. Swain S(2019).Applied Psychology.OakBridge Publishing
2. Gurjar S K and Dubey N(2021).Applied Psychology.Thakur Publication Pvt. Ltd

References:

1. Gruman et al(2024).Applied Social Psychology.SAGE Publications India Pvt Ltd
2. Harty S and McEntee H(2019).Pearson REVISE BTEC National Applied Psychology Revision Guide. Pearson Education
3. Gladding S T and Batra P(2018).Counseling.Pearson Education

| | |
|--------------------------|-----------------------------------|
| Course Title/Code | APPLIED SOCIOLOGY (EDS235) |
| Course Type | Elective (Allied) |

| | |
|--------------------------|--|
| Course Nature | Soft |
| L-T-P-O Structure | (1-0-2) |
| Objectives | <ol style="list-style-type: none"> 1. To know and understand about the fundamental concepts of sociology and its applications. 2. To develop the analytical skills of students about ways in which social processes affect our everyday lives. 3. To understand the impact of various processes of social change and assess their impact on society. 4. To understand and analyze the social cultural dynamics that contribute to transformation of Indian reality 5. To study the various contemporary issues of society. 6. To develop basic research skills in area of sociology. |

| | Course Outcome | Mapping |
|------------|--|---------------------|
| CO1 | analyze the social cultural dynamics that contribute to transformation of Indian Society | Employability/skill |
| CO2 | develop the necessary skills of social processes which affect our everyday lives. | Employability/skill |
| CO3 | Analyse various contemporary issues of society and able to provide solutions of social barrier and benefiting the masses. | Employability/skill |
| Co4 | develop basic research skills in the area of sociology and help to find possible solution of specific social barriers of the society | Employability/skill |

Section A:

Introduction and Applications of Sociology:

- Society, Community, Social Institutions, Social Groups, Introduction to Applied Sociology
- Sociology and Social Processes
- Sociology and Social Change
- Sociology and Social Problems
- Clinical Sociology

Section B:

Sociological Processes:

- Social Stratification, Social Mobility and their impact on society
- Socialization, Agents of Socialization, Assessing the effects of Socialization
- Social Movements: Concept, Impact of Environmental Movements in India: Chipko Movement, Narmada BachaoAndolan

Section C:

Processes and Issues of Social Change:

- Social Change: Westernization, Urbanization, Privatization, Globalization, Sustainable development
- Issues in urban development-Population, poverty, unplanned growth and ecological issues
- Conflict management:
 - Intergroup: Causes, Resolutions
 - Organizational Conflict, Conflict Management and Grievance Handling

Section D:
Field Survey & Report Writing:

- Need, Meaning of Survey
- Types of Survey
- Steps in Conducting Survey
- Data Collection Methods
- Salient Features of Report Writing

LAB:

1. Showing Videos on the life and philosophies of Famous sociologists and to acquaint the students about their different theories
2. Preparation of quotation board with the help of displaying the pictures and quotes of famous sociologists
3. Choose a theme of your interest- for e.g., crime, technology environmental concerns or any other and look through the Sunday editorials of any national daily of the last 3 months to locate related articles.
4. Role Play: Gender issues in everyday life, students will form small groups and present skits to address this issue creatively; this will be followed by discussions.
5. Students may be given the assignment of taking pro-active role in initiating social change in a local field
6. Visit a shopping mall and observe the interaction between employees and customers/visitors. Identify themes based on your observation and prepare a questionnaire based on this experience.
7. Look at a set of published letters of Gandhi, Nehru, C.F. Andrews and Tagore etc. and identify key social issues that are discussed in the contents of the letters and prepare a report on it.
8. Students will be asked to write a short essay on the pressures they feel of the experience in performing masculinity or femininity, Presentations and discussions based around the essays.
9. Debate or discussion on “Is the family the site of love and care” or “Is the family democratic?”
10. Discuss the impact of modernization, industrialization and globalization on the day-today life.
11. Students may be asked to apply any applied research technique
12. Design a survey on factors effecting marriage choices of young people.
13. Any other suitable activity

Text Books:

1. Andrew, W. (1997) Introduction to the Sociology of Development. New Jersey, Palgrave Macmillan.
2. Berg, L.B. (2001). Qualitative Research Methods for the Social Sciences (4th edition). Boston: Allyn and Bacon
3. Bhatia, H.(1970). Elements of Social Psychology. Bombay: Somaiyya Publications Pvt Ltd.
4. Bhattacharyya D.K (2009). *Organizational Behavior*, Oxford University Press, UK.

Reference Books:

1. Desai, B Sonalde et al. (2010). Human Development in India: Challenges for a Society in Transition. OUP
2. Deshpande, S.(2003). Contemporary India: A Sociological View. New Delhi: Viking.
3. Hall R.H (2009). *Organizational Structures, Processes & outcomes, Asia*: Pearson Education Publications.
4. Mc Michael.P. (1996). Development and Social change: A global perspective. California Thousand Oaks.
5. Metha, S. (2009). Women and Social Change, Jaipur: Sage.
6. Sirclaus Moser & G. Kalton: Survey Methods in Social Investigation, Heinemann Educational Books, London.

| Course Outcomes | Program Outcomes | | | | | | | | | | | | Program Specific Outcomes | |
|-----------------|------------------|------|------|------|------|------|------|------|------|-------|-------|-------|---------------------------|------|
| | PO1 | PO 2 | PO 3 | PO 4 | PO 5 | PO 6 | PO 7 | PO 8 | PO 9 | PO 10 | PO 11 | PO 12 | PSO 1 | PSO2 |
| CO1 | X | | | | | | 1 | 2 | 2 | 2 | X | 2 | | |
| CO2 | X | | | | | | 1 | 2 | 2 | 2 | X | 2 | | |
| CO3 | X | | | 1 | | | 1 | 2 | 2 | 2 | X | 2 | | |
| CO4 | X | | | 1 | | | 1 | 2 | 2 | 2 | X | 2 | | |

| SEMESTER - 6 | | | | | | | | | |
|---------------|--------------|---------------------|--|--|---|---|---|---------------------|----------------|
| SUBJECT CODES | SUBJECT NAME | OFFERING DEPARTMENT | *COURSE NATURE (Hard/Soft/Workshop/NTCC) | COURSE TYPE (Core/Elective / University) | L | T | P | NO. OF CONTACT HOUR | NO. OF CREDITS |

| | | | ft/ Workshop/ NTCC) | Compulsory) | | | | S PER WEEK | |
|---------|--------------------|-----|---------------------|-------------|---|---|---|------------|-----|
| MCH316B | E-COMMERCE | DMC | HARD | CORE | 3 | 0 | 0 | 3 | 3 |
| MCH317B | DIGITAL MARKETING | DMC | HARD | CORE | 3 | 0 | 0 | 3 | 3 |
| MCH318B | BUSINESS ANALYTICS | DMC | HARD | CORE | 3 | 0 | 0 | 3 | 3 |
| CSW331B | GOOGLE SUITES | CST | Workshop | CORE | 0 | 0 | 3 | 3 | 1.5 |

FINANCE AND ACCOUNTS

| | | | | | | | | | |
|---------|-----------------------------------|-----|------|-----------|---|---|---|---|---|
| MCH320B | BEHAVIOURAL FINANCE | DMC | HARD | ELECTIVES | 3 | 0 | 0 | 3 | 3 |
| MCH335B | RISK MANAGEMENT IN BANKING SECTOR | DMC | HARD | ELECTIVES | 3 | 0 | 0 | 3 | 3 |
| MCH336B | FINANCIAL MODELING | DMC | HARD | ELECTIVES | 3 | 0 | 0 | 3 | 3 |

Entrepreneurship & Family Business Specialization

| | | | | | | | | | |
|---------|--|-----|------|----------|---|---|---|---|---|
| MCH322B | STRATEGIES AND PRACTICES OF FAMILY-OWNED ENTERPRISES | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| MCH323B | COPYRIGHT, PATENTS AND LAWS OF IPR | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| MCH324B | ENTREPRENEURIAL FINANCE | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |

| | | | | | | | | | |
|--|--|-----|------|----------|---|---|----|----|---|
| MCH32 5B | APPLIED ENTREPRENUERSHIP PROJECT | DMC | NTCC | ELECTIVE | 0 | 0 | 16 | 16 | 8 |
| Health Care Management Specialization | | | | | | | | | |
| MCH 327B | PUBLIC HEALTH | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |
| MCH 329B | GLOBAL HEALTHCARE SCENARIO, | DMC | HARD | ELECTIVE | 3 | 0 | 0 | 3 | 3 |

BBA- Sixth Semester

| | |
|-------------------|---------------------------|
| Course Title/Code | E-COMMERCE/MCH316B |
|-------------------|---------------------------|

| | |
|-------------------|--|
| Course Type: | Core (Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | This course presents to enable the student to become competent to understand the mechanism for excelling in e commerce based employments and self-employment opportunities |

| Course Outcomes (COs) | | Mapping |
|-----------------------|---|-------------------|
| CO1 | To develop a practical understanding of the fundamentals of ecommerce. | Employability |
| CO2 | To create an understanding of varied broad categories of doing business through e-commerce. | Skill Enhancement |
| CO3 | To assess and evaluate the students to take decisions on e-commerce business options. | Employability |
| CO4 | To elaborate the students about the security aspects of ecommerce. | Skill Enhancement |

SECTION A

Network Infrastructure, Client/Server Computing, N-tier Solution, Internet hierarchy, Basic Blocks of E-Commerce, Network layers and TCP/IP protocols, HTTPS, Types of Services and Servers, Virtual Private Network (VPN), Remote Connectivity. Introduction to E-commerce, Concept of EDI & FDI,

SECTION B

Introduction to E-commerce, E-Commerce & E-Business, Features of Ecommerce, E-Commerce payment mechanism, E-Commerce revenue streams, Advertising and Promotion, Building an E-commerce website, Customer Service and service quality evaluation (SERVQUAL)

SECTION C

E-Business Models, Business to Consumer (B2C), Business to business (B2B), Consumer to consumer (C2C), Peer to peer (P2P), M commerce Business Models, E-Governance.

SECTION D

Security and Legal Issues [8L] Cyber Fraud and solutions, Online Contracts, Digital Signatures, Digital Certificates, Concept of Encryption and Cryptography, Public and Secret key encryption, IT Act to legalize E-commerce, Taxation in relation to E-Commerce, Consumer Protection in Cyberspace.

Practical: Web site development & programming

Text Books:

1. Laudon K C and Traver C G (2008). E-Commerce, 4th Edition, Business, Technology, Society. Pearson
2. Deitel H M, Deitel P J and Steinbuhler K (2000).e-Business & e-Commerce for Managers.Pearson
3. Hanson(1995).E-Commerce and Web Marketing.CENGAGE LEARNING

References:

1. Joseph J S (2015).E-Commerce: An Indian Perspective.PHI Learning
2. The Information Technology Act, Bare Act with Short Notes, Universal Law Publishing Co. Pvt. Ltd
3. Bajaj K K and Nag D (2017).E-Commerce.Tata Mcgraw Hill, India

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | |
|--------------|-----------|-----------------|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|---|
| | | | O1 | O2 | O3 | O4 | O5 | O6 | O7 | O8 | O9 | O10 | O11 | O12 | O13 | O14 | O15 | |
| MCH316B | ECOMMERCE | CO1 | 3 | 2 | 2 | 2 | 2 | 1 | 2 | 3 | 1 | x | 2 | 1 | 2 | 3 | | |
| | | CO2 | 2 | 2 | X | 2 | X | 3 | 2 | 1 | 3 | X | | 3 | 3 | 3 | | 2 |
| | | CO3 | 2 | 2 | X | 1 | 2 | 2 | X | 3 | 2 | 2 | | 2 | 3 | 2 | | 2 |
| | | CO4 | 2 | 3 | 3 | 2 | 3 | 2 | 3 | 1 | 2 | 3 | | 1 | 2 | 1 | | 1 |

| | |
|-------------------|----------------------------------|
| Course Title/Code | DIGITAL MARKETING/MCH317B |
| Course Type: | Core (Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |

| | |
|-------------------|--|
| Credit | 3 |
| Course Objectives | To understand the scope of digital marketing and how it integrates with overall business and marketing strategy globally |

| Course Outcomes (COs) | | Mapping |
|------------------------------|---|-------------------|
| CO1 | To understand the scope of digital marketing and how it integrates with overall business and marketing strategy globally | Employability |
| CO2 | To Assess various digital channels and understand which are most suitable to an idea or solution | Skill Enhancement |
| CO3 | To Understand the fundamentals of a digital marketing campaign, and be able to apply it to achieve your business objectives | Employability |
| CO4 | To understand to apply the categories of ecommerce businesses | Skill Enhancement |

SECTION A

Introduction, Digital Marketing meaning, scope and Importance, Web marketing strategy , Web marketing environment, Web Content, Web marketing tools

SECTION B

Online Buyer Behavior, Website Design, Online user experience, online site design, Integrated Internet Marketing Communications, Interactive Marketing Communication, Search Engine Optimization, Creating and Managing Campaigns

SECTION C

Digital Promotion Techniques: EMail marketing, Permission Marketing, Viral Marketing, Social Media Marketing, Content Marketing, Facebook Advertising, Visual Advertising, Display Advertising, Mobile Advertising, Image Advertising, Video Advertising; YouTube Advertising, Concept of SNS Industry (Social Networking Site Industry)

SECTION D

Google Analytics, Tracking Performance, Tracking Mobile marketing Performance, Web Analytics, Traffic Reports, Behavior reports, KPIs in analytics, Tracking SMM performance

Text Books:

1. Ryan D and Jones C(2008). Understanding Digital Marketing, Kogan Page.

2. Parkin G(2009). Digital Marketing: Strategies for Online Success, New Holland Publishers.
3. Hanson, W(2006). Internet Marketing and e-Commerce.South-Western

References:

1. Gupta S(2022).Digital Marketing.McGraw Hill
2. Charlesworth A (2014).Digital Marketing: A Practical Approach. Routledge
3. Vibrant Publishers(2020).Digital Marketing.Vibrant Publishers

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | |
|--------------|-------------------|-----------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|--|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | |
| MCH317B | DIGITAL MARKETING | CO1 | 3 | 2 | 2 | 2 | 2 | 1 | 2 | 3 | 1 | 2 | 3 | 2 | 2 | 2 | | |
| | | CO2 | 2 | X | 1 | 2 | X | 2 | 2 | 1 | 3 | X | 2 | 3 | 3 | 3 | | |
| | | CO3 | 2 | 2 | X | 1 | 2 | 2 | 1 | 3 | X | 2 | 1 | X | 1 | 2 | | |
| | | CO4 | 2 | 3 | 3 | 2 | 3 | 2 | 3 | 1 | 2 | 3 | 2 | 3 | 3 | X | | |

| | |
|---------------------------|-------------------------------|
| Course Title/ Code | Google Suite (CSW331B) |
| Course Type | Core |
| L-T-P Structure | 0-0-3 |
| Credit | 1.5 |
| Objectives | The student will be able to |

| | |
|--|--|
| | <ul style="list-style-type: none"> ● Create and log into google account. ● Upload files and folders. ● Create and manage files and folders. ● Create Docs, Sheets, Slides (Presentation), and Forms (Survey) from Drive. ● Create and rename a document, spreadsheet, presentation, and survey. ● Format and edit a document, spreadsheet, presentation, and survey. ● Use symbols, images, and drawings in a document, spreadsheet, presentation, and survey. ● Share and review changes in a document, spreadsheet, presentation, and survey. ● Manage your Google Calendar, Add Events, Share Calendars, and such. ● Use Gmail to Attach Files from Drive, Save Attachments to Drive, much more |
|--|--|

| Course Outcomes (COs) | | Mapping |
|------------------------|---|-------------------|
| CO1 | Understand various components of Google suite | Skill Enhancement |
| CO2 | Create, format and share documents, presentations, forms and spreadsheets. | Skill Enhancement |
| CO3 | Organize online events and send invites | Skill Enhancement |
| CO4 | Collaborate content within the components of google suite. | Skill Enhancement |
| Prerequisites (if any) | Computer Requirement: One computer per student and Internet accessibility REQUIRED SOFTWARE: Google Applications | |

Section-A

GOOGLE SUITE BASICS: GMAIL: Sign up for a Google account, Change Google account settings, Read and send e-mail messages, Send an email message with an attachment, Manage Gmail contacts, **GOOGLE DRIVE:** Introduction to Google drive, Uploading files, Managing files to google drive; **GOOGLE CALENDAR:** Create online calendar, Create an event, Create repeating events, Set up event reminders, Invite others to events, Share calendar with others, Change calendar views.

Section-B

GOOGLE CHROME: Navigate the Web with Google Chrome, Add and manage bookmarks and history, Use Google Chrome with Google Apps, **GOOGLE SEARCH:** Conduct a basic Google search, Analyze search results page, Filter search results using Google search tools. Refine search using Boolean operators. Search for reliable information on the Web. Evaluate search results by domain. **GOOGLE DOCS:** Create a word processing document (business letter, report, and table). Apply formatting features (fonts, paragraph styles, alignment, bullets/numbering, and line spacing). Insert and move text and objects, e.g., images, links, footnotes, page numbers. Print a document. **GOOGLE SPREADSHEET:** Create a spreadsheet. Enter text, dates, and numbers into rows and columns. Merge cells vertically and

horizontally. Enter and edit formulas in a cell and/or use the formula bar. Format cells. Sort and manage data. Use basic functions (AVERAGE, SUM, COUNT, MIN, and MAX). Print a spreadsheet.

Section-C

GOOGLE SLIDES: Create a presentation. Insert and delete slides. Insert text, images, drawings, videos, tables, and shapes. Format presentation settings. Download a presentation. Collaborate on documents. Share or e-mail documents as attachments. **GOOGLE FORMS:** Create a form, share to get responses, download responses and evaluate them. **GOOGLE KEEP:** Create new notes, collaborate with other google suite elements.

Section-D

GOOGLE SITES: Create and manage a Google site. Insert images, links, gadgets, and Google-specific items. Embed items on Google site (e.g., maps, forms). Collaborate with others to manage sites. **GOOGLE MAPS:** Map a location, write reviews of a location on google maps. **HANGOUT:** start a group chat, **MEET:** make a conference video call, collaborate with google calendar, **GOOGLE PHOTOS:** Upload, download, delete.

Text Books:

1. McFedries P (2020). G Suite. For Dummies
2. Counte S L (2019). The Ridiculously Simple Guide to Google Apps (G Suite). SL Editions

References

1. Cromwell M (2021). Google Apps and G-suite. Masha Cromwell
2. Lentzner R .Google Slides Online. Remylent
3. Bernstein J(2021). Google Docs Made Easy. Independently Published
4. <https://learning.google/>

| Courses Code | Courses | Course Outcomes | P O P P P P P P P P P O P P P P P | | | | | | | | | | | | | | | |
|--------------|-----------------------|-----------------|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 1 | 2 | 1 | 2 |
| CSW331B | SAP BA (Google suite) | CO1 | 3 | 2 | 3 | 3 | 3 | 1 | 2 | 2 | 1 | 1 | 2 | 3 | 2 | 3 | | |
| | | CO2 | 3 | 1 | 3 | 2 | 2 | X | 1 | 2 | 2 | X | 2 | 3 | 3 | 3 | | |
| | | CO3 | 3 | X | 3 | 2 | 2 | 1 | 1 | 2 | 2 | 1 | 2 | 3 | 3 | 3 | | |
| | | CO4 | 3 | 2 | 3 | 3 | 3 | 1 | 2 | 3 | 1 | X | 2 | 3 | 3 | 3 | | |

| | |
|--------------|-------------------------------------|
| Course Title | BEHAVIOURAL FINANCE/ MCH320B |
| Course Type | Elective |

| | |
|-------------------|--|
| Course Nature | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | To gain an understanding of financial market anomalies, biases and heuristic |

| Course Outcomes (COs) | | Mapping |
|------------------------------|--|-------------------|
| CO1 | To acquaint the students with the fundamental concepts of behavioural finance | Employability |
| CO2 | To enable students to understand the concepts of market efficiency, market anomalies and role of behavioural finance | Skill Enhancement |
| CO3 | To enable students to analyse and understand the concepts of heuristic & biases. | Employability |
| CO4 | To formulate and review asset allocation based on investor's personality, behaviour and risk profile | Skill Enhancement |

SECTION A

Introduction to Behavioural Finance, Effect of psychological level, Practical application of behavioral finance, Risk Tolerance Questionnaires and their limitations, Efficient Markets Hypothesis, Fundamental and Technical Analysis, Fundamental Anomalies, Technical Anomalies, Calendar Anomalies,

SECTION B

Asset Allocation and Risk Aversion, Value Investing and Growth Investing, Behavioural obstacles in pursuing value investing, Heuristics, Principle of asset allocation; Investor’s Behaviour and Asset Allocation Process, Prospect Theory, Framing, and Mental Accounting; Noise Trading, & Limits to Arbitrage; Behavioral Explanations for Anomalies.

SECTION C

Investors’ Biases: An overview; Cognitive Biases; Emotional Biases; Implication of overconfidence bias, Representativeness Bias, Anchoring & Adjustment Bias, Cognitive Dissonance Bias, Endowment Bias, Self Control Bias, Loss Aversion Bias.

SECTION D

Rational Managers and Irrational Investors; Behavioral Investing and Neurofinance, Myers Briggs Type Indicator, BarnewallTwo way model, Investors Personality Type Dimensions.

Text Books

- 1.Moniter J(2002).Behavioural Finance: Insights into irrational minds and markets. John Wiley & Sons
2. Shleifer A (2000).Inefficient Markets: An Introduction to Behavioural Finance.Oxford University Press

References

- 1.Pompian, M M (2012). Behavioural Finance & Wealth Management: How to build optimal portfolio. John Wiley & Sons
2. Shefrin H(2001).Behavioural Finance. Edward Elgar Publication

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|--------------|---------------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 1 | 2 | 1 |
| MCH320B | BEHAVIOURAL FINANCE | CO1 | 2 | 3 | 3 | 2 | X | X | 3 | 3 | X | 3 | 2 | 3 | 2 | X | |
| | | CO2 | 2 | 3 | 3 | X | 3 | 3 | 3 | 3 | 3 | 3 | X | 3 | X | | 3 |
| | | CO3 | X | 2 | 3 | X | 3 | 3 | 3 | X | X | 3 | 2 | X | X | X | |
| | | CO4 | 1 | 3 | 1 | X | 3 | X | X | X | 3 | 3 | X | 3 | 2 | 2 | |

| | |
|--------------------------|---|
| Course Title/Code | Risk Management in Banking Sector/MCH335B |
| Course Type: | Core (Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | To enlighten the students with the concept of risk management in banks in general and techniques in measurement and control of credit risk, operational risk and market risk in particular. |

| Course Outcomes (COs) | | Mapping |
|------------------------------|--|-------------------|
| CO1 | To make students understand the banking risk and risk exposed to the banking sector. | Employability |
| CO2 | To explain to students the different approaches of credit risk management. | Skill Enhancement |
| CO3 | To examine the role of operational risk in the banks & as to how to manage it. | Employability |
| CO4 | To analyze the relevance of market risk and measurement & control of bank risks. | Skill Enhancement |

Section-A

Risk definition; Types of Risks- Credit risk, operational risk, and market risk; Asset Liability Management(ALM)- Concept, organization and techniques.

Section-B

Credit Risk Management: Introduction-Capital adequacy norms under Basel I & II, RBI guidelines on Risk management-Standardized and Advanced approaches for Credit Risk; Credit rating/credit scoring and rating system design, Credit Bureaus, Stress test and sensitivity analysis, Internal Capital Adequacy Assessment process.

Section-C

Operational Risk: Introduction, Likely forms of operational risk and causes for significant increase in operational risk, Basel Norms, RBI guidelines, Sound Principles of Operational Risk Management (SPOR)- SPOR identification, measurement, control of operational risk-Capital allocation for operational risk, methodology, qualifying criteria for banks for the adoption of the methods.

Section-D

Market risk: Introduction- Types of Market risks-Liquidity risk, interest rate risk, foreign exchange risk, price risk (equity), commodity risk-Prescriptions and treatment of market risk under Basel norms.

Risk measurement & control in Banks-Calculation of risk, risk exposure analysis; Risk management- Capital adequacy norms, prudential norms, exposure norms, concept of Mid office.

Text Books:

1. Uppal R K and Kaur R(2006). Banking Sector Reforms in India. New Century Publications, New Delhi
2. Agarwal OP(2019).Banking and Insurance.Himalaya Publishing House, Mumbai.

References:

1. Iyengar V(2007).Introduction to Banking. Excel Books, New Delhi
2. The Indian Institute of Bankers, Modern Banking, Mumbai
3. Indian Institute of Banking and Finance, Risk Management, Mumbai

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|--------------|--------------------------|-----------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| MCH335B | Risk management in banks | CO1 | 3 | x | 3 | 3 | 3 | x | 3 | x | x | 3 | 3 | - | 3 | 3 | | |
| | | CO2 | 3 | 3 | 3 | x | 3 | 3 | x | x | x | 3 | 3 | - | 3 | x | | |
| | | CO3 | 3 | x | 3 | 3 | 3 | x | 3 | x | 3 | x | 3 | 3 | 3 | 3 | | |
| | | CO4 | 3 | x | 3 | 3 | 3 | x | 3 | 3 | x | x | 3 | 3 | 3 | x | | |

| | |
|-------------------|------------------------------------|
| Course Title/Code | FINANCIAL MODELING/ MCH336B |
| Course Type: | Core (Departmental) |

| | |
|-------------------|---|
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credits | 3 |
| Course Objectives | <p>The primary focus of the course is to:</p> <p>Relate the theory of finance to practical</p> <p>Prepare usable spreadsheet models that will assist a financial manager with a firm's investment and financing decisions.</p> <p>Introduced both simulation and optimization models.</p> |

| Course Outcomes (COs) | | Mapping |
|------------------------------|---|-------------------|
| CO1 | TO develop a practical understanding of the financial theory underlying financial models. | Employability |
| CO2 | TO classify different tools and techniques of financial modeling. | Skill Enhancement |
| CO3 | TO identify uses of financial modeling. | Employability |
| CO4 | TO explain the financial modeling process and will be able to develop a variety of financial models in Excel. | Skill Enhancement |

Section – A

Introduction to Financial Modeling: Meaning and Types of Financial Models, Tools and Techniques of Financial Modeling, Uses of Financial Modeling, Process of Financial Model

Development, Financial Modeling Skills.

Section – B

Creating Financial Model: Identify the problem, Gathering Data, Layout of Model, Defining inputs, calculations, and output blocks, determine audience, Basics of Excel, conditional formatting, Excel Formulas and macros.

Section – C

Valuation, Scenario Analysis & Sensitivity: Valuation Methods: DCF Analysis, Comparable Analysis (“Comps”), Precedent Transactions, Pivot Table, Pivot Chart, what if analysis, Applying Sensitivity Analysis, Applying Scenario Manager.

Section – D

Financial Modeling Techniques: Forecasting of financial statement, Time Value of Money, Capital Budgeting Model, Forecasting Methods- Moving Average, exponential smoothing, Trend Analysis.

Text Books:

1. Fairhurst D S (2017).Financial Modeling in Excel for Dummies by Danielle Stein. Wiley
2. John T (2009), Building Financial Models, McGraw-Hill Professional.
3. Gilliland M, Tashman L and Sglavo U(2021).Business Forecasting: The Emerging Role of Artificial Intelligence and Machine Learning. Wiley & SAS Institute Inc

References:

1. Eric S (2013), Mastring Financial Modeling: A Professional’s Guide to Building Financial Models in Excel, McGraw-Hill Professional.
2. Rujbeh B J (2010), Understanding and Analyzing Balance Sheet using Excel Worksheets, Prentice Hall International.

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|--------------|--------------------|-----------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | O1 | O2 | O3 | O4 | O5 | O6 | O7 | O8 | O9 | O0 | O1 | O2 | O3 | O4 | O5 | O6 |
| MCH336B | Financial Modeling | CO1 | 3 | 1 | 3 | 3 | 1 | 3 | 2 | X | 2 | 2 | 3 | 2 | 3 | 3 | | |
| | | CO2 | 3 | 1 | 3 | 3 | 1 | 3 | X | 1 | 1 | 1 | 2 | 2 | 3 | 3 | | |
| | | CO3 | 3 | X | 3 | 2 | X | 3 | 2 | 1 | 1 | 1 | 1 | 2 | 3 | 3 | | |
| | | CO4 | 3 | 1 | 3 | 3 | 1 | 3 | 1 | X | 1 | 1 | 1 | 2 | 3 | 3 | | |

| | |
|-------------------|---|
| Course Title/Code | STRATEGIES AND PRACTICES OF FAMILY-OWNED ENTERPRISES/MCH322B |
| Course Type: | Elective (Departmental) |

| | |
|-------------------|---|
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credits | 3 |
| Course Objectives | By the end of the course, a student should be able to develop capability in their family owned enterprises. |

| Course Outcomes (COs) | | Mapping |
|-----------------------|--|-------------------------|
| CO1 | to understand importance and steps involved in the parallel planning process that helps to transform the family enterprises. | Entrepreneurship |
| CO2 | understand essentials of family participation and develop effective ownership. | Entrepreneurship |
| CO3 | To assess the firm's strategic potential and identify market strategies to finalize the strategy and investment decisions | Entrepreneurship |
| CO4 | Understand how effective board are a critical link between the management and family | Entrepreneurship |

SECTION A

The Importance of Planning for Business Families :the challenges facing family businesses, balancing family and business demands, the need and benefits of family business planning, the obstacles to family business planning Parallel planning process: meaning, goals/ decision areas of PPP, understanding strategic planning and family business, creating a shared future vision of the family and business.

SECTION B

Planning for the family- Family commitment- definition, importance, factors contributing towards family commitment - core family values, family business philosophy and family vision, Components of Family enterprise continuity planning- encouraging family participation, Preparing the next generation of family managers and leaders, the influence of life cycle on family business careers.

| | |
|-------------------|--|
| Course Title/Code | COPYRIGHT, PATENTS AND LAWS OF IP/MCH323B |
| Course Type: | Elective (Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credits | 3 |
| Course Objectives | To get the basic understanding of the emergence of Intellectual property Rights, its meaning, types, need and scope. |

| Course Outcomes (COs) | | Mapping |
|------------------------------|--|-------------------------|
| CO1 | To get the basic understanding of the emergence of Intellectual property Rights, its meaning, types, need and scope | Entrepreneurship |
| CO2 | To study “Copyrights Laws” and related matters like DRM, CC and analyze the landmark cases. | Entrepreneurship |
| CO3 | To study and analyze the Patent laws, its scope, rights and obligations, its procedure, infringement and defence mechanism | Entrepreneurship |
| CO4 | To study laws related to trademark, industrial designs and Geographical indications and to examine its applications and practical implications | Entrepreneurship |

SECTION A

General Aspects of Intellectual property Rights: Nature meaning and scope. Evolution and development of IPR’s at International and National level, Emergence of WIPO and WTO-TRIPs, Emerging issues in IPR

SECTION B

Introduction to Copyright and Their Applications

This covers the subject matter of copyright, how and when they are used, its impact, controversies in copyright – Digital Rights Management (DRM) and introduction to ‘Creative Commons’ (CC). Landmark cases relating to copyright will be discussed Meaning, Nature and Scope of Copyright, Infringement of Copyright and Enforcement of Copyrights

SECTION C

Introduction to Patents & Their Applications : This covers what is a patent, how it is identified, how to apply, what benefits the owner gets, what is patentable and where. These basics are reiterated through landmark cases in the field of biotechnology, electronics, mechanical and chemical. Introduction to Patent Searching, Drafting & Procedures

This session will cover ‘why IP’ question, types of IP, what analytic opportunities does the rich IP database provide for – technology trend, technology strategy, business strategy can be derived from the various IPs generated and protected.

SECTION D

Introduction to Trademarks and Their Applications

Introduction to Design Rights and Their

Applications –

This session covers designs – ornamental and others and how they can be protected. Cases are used to understand when patent applies and when design rights apply.

Geographical Indication- Introduction to GI, Infringements and legal remedies

Text Books:

1. Kankanala K C (2012). Indian Patent Law & Practice. Oxford India Paperbacks.
2. Rao M B and Guru M (2005). Patent Law in India. Wolters Kluwer.
3. Narayanan P (2018). Intellectual Property Law. Eastern Law House.

References:

1. Ahuja V K (2009). Intellectual Property Rights in India, 2nd ed., Lexis Nexis.
2. Ahuja V K (2017). Law related to Intellectual Property Rights. Lexis Nexis
3. Bhandari M K (2021). Law related to Intellectual Property Rights.

| Courses Code | Courses | Course Outcomes | P P P P P P P P P P P P P P P P P P | | | | | | | | | | | | | | | |
|--------------|------------------------------------|-----------------|-------------------------------------|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|
| | | | O1 | O2 | O3 | O4 | O5 | O6 | O7 | O8 | O9 | O10 | O11 | O12 | O13 | O14 | O15 | O16 |
| MCH323B | COPYRIGHT, PATENTS AND LAWS OF IPR | CO1 | 3 | 3 | 1 | 1 | X | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | X | 2 | 2 |
| | | CO2 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | X | 1 | 2 | 1 | 1 | 2 | 2 | | |
| | | CO3 | 3 | 2 | 2 | 2 | 1 | X | 1 | 1 | 1 | 2 | X | 1 | 2 | 2 | | |
| | | CO4 | 3 | 2 | 2 | 2 | X | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | | |

| | |
|-------------------|---|
| Course Title/Code | ENTREPRENEURIAL FINANCE/MCH324B |
| Course Type: | Elective (Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credits | 3 |
| Course Objectives | Cover the major financial, managerial and planning fundamentals of entrepreneurial finance. Provide in-depth discussion of venture capital, lease finance and SCBA.. |

| Course Outcomes (COs) | | Mapping |
|------------------------------|---|--------------------------|
| CO1 | To understand the concepts of entrepreneurial finance and capital structure. | Skill Enhancement |
| CO2 | To discuss the various sources of finance. | Entrepreneurship |
| CO3 | To interpret venture capital and lease finance as the source of financial service. | Entrepreneurship |
| CO4 | To examine the concept of social cost benefit analysis and its environmental appraisal. | Entrepreneurship |

SECTION A

Financial Management of a New Venture, Nature and significance of Business Finance ;
Financial management ; Entrepreneur and financial management functions ; Capital structure ;
Venture capital financing ; Debt financing ; Working capital ; Types of resources to be mobilised.

SECTION B

Sources of Finance, Types of Business finance ; Sources of finance based on time period ; Equity Shares ; Preference shares ; Debentures / Bonds ; Retained profits ; Public deposits ; Term Loans ; Specialized financial institutions.

SECTION C

Venture Capital and Lease Finance, Venture capital as a source of finance ; Aims of venture capital ; Features of venture capital ; Criteria adopted by venture capitalists to provide venture capital finance

; Merits of venture capital ; Leasing as a source of finance.

SECTION D

Social Cost Benefit Analysis (SCBA);Concept and Rationale of Social Cost Benefit Analysis;
 Concept of Shadow Pricing, Some cases of SCBA carried out on real Projects; SCBA by
 Financial Institutions; Environmental Appraisal of Projects.

Text Books:

1. Melicher R and Leach J(2020).Entrepreneurial Finance.South-Western College Publishing
2. Smith J K, Smith R L and Bliss R T(2011).Entrepreneurial Finance: Strategy, Valuation, and Deal Structure.Stanford Business Books.

References:

1. Alemany L and Andreoli J J(2018).Entrepreneurial Finance. Cambridge University Press
2. Sahlman W A.Finance for Entrepreneurs: Managing Cash Flow for Startup Success. Harvard Business Review Press.
3. Hisrich D R.Entrepreneurship: Starting, Developing, and Managing a New Enterprise. McGraw-Hill Education

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|--------------|-------------------------|-----------------|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|
| | | | O1 | O2 | O3 | O4 | O5 | O6 | O7 | O8 | O9 | O10 | O11 | O12 | O13 | O14 |
| MCH324B | ENTREPRENEURIAL FINANCE | CO1 | 3 | - | 3 | 3 | 3 | - | 3 | - | 3 | - | - | 3 | 3 | 3 |
| | | CO2 | 3 | 3 | - | 3 | - | 3 | 3 | 3 | - | 3 | - | 3 | 3 | - |
| | | CO3 | 3 | - | 3 | - | 3 | - | 3 | - | - | 3 | - | - | - | 3 |
| | | CO4 | 3 | 3 | - | 3 | - | 3 | 3 | - | 3 | 3 | - | 3 | 3 | 3 |

| | |
|-------------------|--|
| Course Title/Code | BUSINESS ANALYTICS/ MCH318B |
| Course Type: | Core (Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |

| | |
|-------------------|--|
| Course Objectives | To understand the fundamentals of business analytics and articulate a business problem and convert it into a viable Analytics question |
|-------------------|--|

| Course Outcomes (COs) | | Mapping |
|-----------------------|---|-------------------|
| CO1 | Understand the fundamentals of business analytics and articulate a business problem and convert it into a viable Analytics question | Employability |
| CO2 | Use Descriptive analytics in Decision making and techniques of data mining | Skill Enhancement |
| CO3 | Understand the fundamentals and applications of Data Science, Machine Learning , Artificial Intelligence & Big data | Employability |
| CO4 | Apply knowledge to develop solutions across a range of Functional areas like Marketing Finance, HR and Operations | Skill Enhancement |

SECTION A

Foundations of Analytics: Introduction of Business Analytics, its evolution, Scope & Usage in Business. Popular tools used for Analytics. Data & Information - Types of data, Data Dashboards and reporting, Data Visualization, Big data & its importance, Big Data Technology - Hadoop, Industry examples of Big Data.

SECTION B

Data preparation (Treatment of missing values, Identification of outliers and Erroneous data), Data selection, classification & reduction. Measures of Location, Measures of Dispersion, Measures of Shape, Measures of Association, Confidence Intervals, Statistical Inferences, Data Warehouse, Business Intelligence, Data Mining

SECTION C

Analysis of variance (ANOVA), chi square test, regression – simple vs. multiple linear regressions, concept of multicollinearity, difference between correlation and regression, data science, machine learning and artificial intelligence.

SECTION D

Time series analytics and forecasting, Application of Analytics: Retail, Marketing, Finance, HR & Web analytics

Tools: Python, R, Excel, PSS

Text Books:

1. Camm, J.D. (2015) . Essentials of Business Analytics. Cengage Learning
2. Evans, J.R. (2017). Business Analytics. Pearson Publishing
3. Larose C D and Larose D T (2019). Data Science Using Python and R . Wiley
4. Seare C(2019). Simple Predictive Analytics: Using Excel to Solve Business Problems.

References

1. Albright, S. C and Winston, W. L (2015). Business Analytics: Data Analysis and Decision Making”. Atlantic Publisher and Distributors.
2. Krispin R (2019). Hands-On Time Series Analysis with R. Packt Publishing
3. Motwani B . Data Analytics with R

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|--------------|--------------------|-----------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | O1 | O2 | O3 | O4 | O5 | O6 | O7 | O8 | O9 | O0 | O1 | O2 | O1 | O2 |
| MCH318B | Business Analytics | CO1 | 2 | 1 | 2 | 1 | 2 | 1 | 1 | 2 | X | 1 | 1 | 1 | 1 | 1 |
| | | CO2 | 2 | X | 3 | 3 | 3 | 2 | 1 | 2 | 1 | 1 | X | 1 | 2 | 1 |
| | | CO3 | 2 | 2 | 2 | 3 | 3 | 2 | 1 | 2 | X | 1 | 1 | X | 1 | 1 |
| | | CO4 | 2 | 2 | 3 | 3 | 3 | 3 | 1 | 3 | 1 | 1 | 1 | 2 | 1 | 1 |

| | |
|-------------------|---|
| Course Title/Code | PUBLIC HEALTH/ MCH327B |
| Course Type: | Elective (Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credits | 3 |
| Course Objectives | To provide an overview of major issues related to the design, function, management, regulation, and evaluation of health insurance programs and managed care organizations, including HMOs. |

| Course Outcomes (COs) | | Mapping |
|------------------------------|--|--------------------------|
| CO1 | To introduce students to the field of public health and its various activities | Employability |
| CO2 | To understand socio-economic and demographic characteristics of the community and the distribution and types of disease in the community | Skill Enhancement |
| CO3 | To understand the Sources of Data & Data Evaluation | Employability |
| CO4 | To gain knowledge about the Contemporary Issues in Public Health | Employability |

SECTION A

Public Health in Context; Public Health Challenges

SECTION B

Working in organization – skills and approaches; Developing as a reflective practitioner; Ethical issues in Public Health; Educating for Health

SECTION C

Working at Local Level; Settings for promoting Health; Building Partnership and alliances

SECTION D

Building Healthy future – barriers and enablers; Evaluating Public health interventions

| | |
|-------------------|---|
| Course Title/Code | GLOBAL HEALTH SCENARIO/ MCH329B |
| Course Type: | Elective (Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credits | 3 |
| Course Objectives | To develop an understanding of basic concepts and determinants of Global Health |

| Course Outcomes (COs) | | Mapping |
|------------------------------|---|--------------------------|
| CO1 | Develop an understanding of basic concepts and determinants of Global Health | Skill Enhancement |
| CO2 | To gain insight on strategies and programs of promoting human health & global health governance | Employability |
| CO3 | Identify the major issues of global health | Employability |
| CO4 | Discuss the role of sustainability on global economic health & development | Employability |

SECTION A

Introduction to Global Public Health: Concepts, Overview Data Used To Monitor Global Health (Morbidity/Mortality) ;
Measures of Health and Disease in Populations

SECTION B

Culture, Behavior and Health ; Infectious Diseases; Social Determinants of Health

SECTION C

Unit III: Design of Health Systems ; Management and Planning for Global Health; Globalization and Health

SECTION D

Global Mental Health ; Unintentional Injuries and Violence; Health and the Economy Substance Abuse;
Complex Emergencies; Nutrition; Reproductive Health; Co operation in Global health; Evaluation of Large
Scale Health Program Malaria, Dengue

Text Books:

1. Mukherjee J S and Farmer P(2018).An Introduction to Global Health Delivery.OUP USA
2. Gostin L O(2021).Global Health Security: A Blueprint for the Future.Harvard University Press
3. Morgan J and Placa V L(2022)..Social Science Perspectives on Global Public Health.Routledge

References :

- 1.Roberts K (2019).Global Health.Greenhaven Publishing
- 2.Subrahmanian K (2018).Global Child Health: A Toolkit to Address Health Disparities.Springer
- 3.Braithwaite et al.(2018).Healthcare Systems: Future Predictions for Global Care.CRC Press

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|--------------|------------------------------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | O | O | O | O | O | O | O | O | O | O | O | O | O | O |
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 1 | 2 |
| MCH 329B | GLOBAL HEALTHCARE SCENARIOS, (HCM) | CO1 | 3 | 2 | 3 | 2 | 2 | 2 | 3 | 3 | 2 | 1 | X | 2 | 1 | 2 |
| | | CO2 | 2 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 2 | 2 | X | 2 | 2 | 1 |
| | | CO3 | 2 | 3 | 2 | 2 | 3 | 2 | 3 | 2 | 3 | 2 | X | 3 | 2 | 1 |
| | | CO4 | X | 3 | 3 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | X | 2 | 2 | 2 |

Hospital Hazards and Waste Management

| | |
|-------------------|--|
| Course Title/Code | Hospital Hazards and Waste Management(MCH141B) |
| Course Type: | Elective |
| Course Nature: | Hard |
| L-T-P Structure | |
| Credit | 3 |
| Course Objectives | The course would cover-general introduction including definition of solid wastes–municipal waste, biomedical waste, hazardous waste, e-waste; Method of segregation , legal issues and requirements for solid waste management; sampling and characterization of solid waste; analysis of hazardous waste constituents including QA/QC issues; health and environmental issues related to solid waste management. Role of central sterile and Stores department In Controlling HAI . |

| | Course Outcomes (COs) | Mapping |
|-----|--|-------------------|
| CO1 | Outline various types of hospital hazards and preventive measures. | Skill Enhancement |
| CO2 | Explore the guidelines of hospital hazard management. | Skill Enhancement |
| CO3 | Illustrate the role of CSSD/Housekeeping in prevention of hospital acquired infection (HAI). | Employability |
| CO4 | Appraise the methods of bio-waste Management | Skill Enhancement |

Section A

Basics of Hospital Hazards.

Physical Hazards Include Noise, Radiation, Vibration, heat , cold and fire. Biological Hazards include ;- Blood Born Pathogens , Hazardous Chemicals , latex allergies, Mechanical Hazards in clinical equipment. Plant and machinery.

Section B

Hospital Hazards Management

Meaning, Hazards Management- infrastructural, physical, psychological; Hazards to staff and patients. Guidelines for management of various hazards and control. Exposure control plan and hazard communication programme. OSHA (Occupational Safety and Health Administration) guide lines. Joint commission environment of care standard.

Section C

Hospital Acquired Infection.

Microbiological Scientific Era. Epidemiological interaction , Definition HAI (Nosocomial infection) sources of Nosocomial Infection .Common Nosocomial Infection and their causative Agents – Anibiotic Resistance – MRSA and VISA, Chain of infection. Prevention of Hospital Acquired Infection – Role of Central Sterile Supply Department (CSSD), housekeeping; dietary Services; linen and laundry; Central supply Department, Nursing Care, Hygiene and sanitation ,hospital Infection Control committee, Infection control team, ; training and education, universal precautions

for health care workers.

Section D

Biomedical Waste Management and Accreditation

Meaning; categories of bio wastes, disposal of biomedical waste products, Incineration and its importance, standards for waste; Autoclaving, Micro Waving and Deep Burial, Segregation; Packaging, Transportation; Storage, COVID-19 Waste Management Diseases carried from excreta, Sanitation barrier, Methods of Excreta disposal - Sewage wastes: Meaning, Composition , Aims of sewage, Disposal, Decomposition of organic matter, Modern Sewage Treatment , drawbacks of improper disposal of wastes - Solid and liquid.

NABH Compliance ,Accreditation and certification status, legal and statutory requirements, equipment calibrations, MOU renewal, internal Audit schedules, Revision In standards, notification from NABH relevant hospitals , and their departments. News and updates.

.Text Books

1. Khan M F (2004). Hospital Waste Management: Principles and Guidelines. Kanishka Publishers

References:

1. Dawson G Wand Mercer B W (1986).Hazardous Waste Management. Wiley Inter-science publications
2. Basarkar S (2021).Hospital Waste Management: A Guide for Self Assessment .Jaypee Brothers,Medical Publishers Pvt. Limited

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | | |
|--------------|---------------------------------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 1 | 2 | 1 | 2 | |
| (MCH141 B) | Hospital Hazards and Waste Management | CO1 | 3 | 3 | x | 3 | x | 3 | x | x | 3 | x | x | x | x | x | x | x | |
| | | CO2 | 3 | 3 | x | 3 | 3 | 3 | 3 | x | x | x | 3 | x | x | x | x | x | |
| | | CO3 | 3 | x | 3 | 3 | x | 3 | | 3 | 3 | 3 | x | x | x | x | 3 | | |
| | | CO4 | 3 | x | 3 | x | 3 | 3 | 3 | x | 3 | x | 3 | x | 3 | 3 | x | | |

| | |
|-------------------|---|
| Course Title/Code | INTRODUCTION TO SHIPPING/ MCH331B |
| Course Type: | Elective (Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | Understand the concept and application of shipping as transportation method |

| Course Outcomes (COs) | | Mapping |
|------------------------------|---|--------------------------|
| CO1 | To acquaint students with shipping industry | Employability |
| CO2 | To acquaint students with types of ships and trading | Skill Enhancement |
| CO3 | To acquaint students with types of rules related to shipping,laws ,and shipping indices | Employability |
| CO4 | To acquaint students with Environmental issues connected with Ports | Skill Enhancement |

SECTION A

Introduction to shipping. Shipping company structure. Organization of a shipping company – Roles of Commercial, Technical & Crewing departments – In house vs outsourcing of Ship Management functions – Ship Registries, National vs Open Registries – Ship Classification societies. The Indian Bills of Lading Act 1856 – The Indian Carriage of Goods by Sea Act 1925 – The Indian Lighthouses Act 1927 – The Inland Steam Vessels Act – The Indian Port Health Rules. Maritime and Possessory liens – claim’s; order of priorities; subjects maritime liens ; arrest and jurisdiction.

SECTION B

Introduction- Types Of Ships For The Trade; Major Cargoes; Producing Areas And Trades, Their Movement; Methods Of Cargo Handling For Dry Cargo And Tankers. Chartering Market- Different Players, Sale Agreements, FOB,CIF; Factors Influencing Supply And Demand; Role Of Brokers; Baltic Exchange, Various Freight Indices And BIFFEX. Sales and purchase of secondhand ships – Financing of secondhand ships – Analysis of standard Ship Sale and Purchase contracts – Role of ship sale brokers – Demolition market dynamics

SECTION C

History of IMO, Membership in IMO, Legal instruments – SOLAS, COLREG,PSC, Governing bodies in IMO, Technical Committee, Marine safety Committee, standards and recommendations for safetyInvestigation in Marine casualty.Maritime issues: Piracy and Maritime security, continental shelf, Boundaries, Fisheries, Coastal states vs Maritime states, Marine protected areas, Regional approach, Marine Pollution.

SECTION D

Environmental issues connected with Ports & Terminals – Health & safety issues – Port Security issues – International Ships & Port facility security (ISPS) code.Role of Agents.

Ship Agents and E-commerce – Information flow through Ship Agents – Electronic Data Interchange – Use of Internet, Access to Principals Systems for conducting Day to Day Work – Use of electronic systems namely Bolero, Liner Portals. International Freight Forwarding – Logistics Service Providers – Project Cargo Forwarding – Multimodal operations – Warehousing Operations

Text Books:

1. Dykstra D L (2005).Commercial Management in Shipping.The Nautical Institute
2. Williams H (2007).Chartering Documents.LLP Limited
3. Willingale M(2005).Ship Management (Business of Shipping). LLP Professional Publications.

References:

1. Panayides P (2001).Professional Ship Management.Ashgate Publications
2. Guidelines on ISM Code – International Shipping Federation (ISF 3rd Edition, New Guidelines 2010)
3. Commercial Management in Shipping – R.Tallack (Nautical Institute)
4. Ozcayir Z(2004).Port State Control. Informa Professional
5. Lynn J and magazine E(2014).Start Your Own Freight Brokerage Business. Entrepreneur Press
6. Glass D (2004).Freight Forwarding & Multimodal Transport Contract. Informa Legal Publishing UK

| Courses Code | Courses | Course Outcomes | P | | | | | | | | | | | P | P | P | P | P |
|--------------|--------------------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 1 | 2 | 1 | 2 |
| MCH331B | INTRODUCTION TO SHIPPING | CO1 | 3 | 2 | 2 | 2 | 1 | 3 | 1 | 1 | 1 | 1 | 2 | X | 3 | 3 | | |
| | | CO2 | 3 | 3 | 3 | 3 | X | 3 | 2 | 1 | 1 | 1 | 3 | 1 | 3 | 3 | | |
| | | CO3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | X | 1 | 3 | 2 | 3 | 3 | | |
| | | CO4 | 3 | 3 | 3 | 3 | 1 | 2 | 3 | 2 | 1 | 1 | 3 | X | 3 | 3 | | |

| | |
|-------------------|---|
| Course Title/Code | MULTIMODAL TRANSPORTATION/MCH332B |
| Course Type: | Elective (Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credit | 3 |
| Course Objectives | Understand the concept and application of multimodal transportation |

| Course Outcomes (COs) | | Mapping |
|------------------------------|--|----------------------|
| CO1 | To acquaint students with the types of multimodal transportation | Employability |
| CO2 | To acquaint students with the strategies of implementing multimodal transportation | Employability |
| CO3 | To acquaint students with the planning the multimodal transportation models | Employability |
| CO4 | To acquaint students with the intelligent transportation systems | Employability |

SECTION A

Introduction to Multimodal Transport . Carriage By Air . Carriage By Sea . Carriage By Road . Carriage By Rail . Types of Vessels . Operators (Vessel and other) . Freight Forwarders and NVOCC . Outsourcing of Logistics Services . Overview of MMTG Act (1993) 11. Shipping Intermediaries and Formalities. Container – types. Different types of cargo . Packaging and Material Handling. Introduction to Travel Demand Management, TDM Strategies.Multimodal transport operator.

SECTION B

Case Studies on TDM strategies, Introduction to Public Transport System(PTS).
Introduction to Public Transport System(PTS), Public Transport Operations.International transport conventions: UN Transport Conventions • Driving license • Registration • Insurance • Food safety • Exempt of Taxes – import duties . Multilateral transport agreements. Convention on Road Traffic . TIR procedures. CMR Convention. Importance of international conventions. International conventions and globalization

SECTION C

PTS Planning consideration, PTS Case Studies.Introduction to NMT (non motorized transport) systems, Assessment of NMTs .Week 8: Planning considerations for Pedestrians, Planning Considerations for Bicyclists.Planning Considerations for Bicyclists, NMT Strategies

SECTION D

Introduction to Intelligent Transportation Systems, Introduction to ITS,Telecommunications in ITS .

Components of ITS Architecture, ITS Architecture, ITS functional areas, ITS Operations, ITS Applications.
Case studies.Smart cities and their transport systems. Transport and mobility technologies

Text Books :

1. Hariharan K V(2002).A Textbook on Container & Multimodal Transport Management.Shroff Publishers
2. Khare R G(2019).Management & Operation Of Container Terminals & Multi-Modal Transport Logistics.Sterling Book House

Referencess:

- 1.Mason et al(2015).Logistics and Multi-Modal Transport. Institute of Chartered Shipbrokers
2. Hammadi S and Ksouri(2013)Multimodal Transport Systems.Wiley-ISTE

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|--------------|---------------------------|-----------------|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|
| | | | O1 | O2 | O3 | O4 | O5 | O6 | O7 | O8 | O9 | O10 | O11 | O12 | O13 | O14 | O15 |
| MCH332B | MULTIMODAL TRANSPORTATION | CO1 | 3 | 2 | 2 | 2 | X | 3 | 1 | 1 | 1 | 1 | 2 | 1 | 3 | 3 | |
| | | CO2 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | X | 1 | 3 | 1 | 2 | 3 | |
| | | CO3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 2 | 3 | 2 | 3 | 3 | |
| | | CO4 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | X | 1 | 3 | X | 2 | 3 | |

| | |
|-------------------|--|
| Course Title/Code | TRANSPORTATION AND DISTRIBUTION MANAGEMENT/ MCH333B |
| Course Type: | Elective (Departmental) |
| Course Nature: | Hard |
| L-T-P Structure | 3-0-0 |
| Credits | 3 |
| Course Objectives | Understand the concept and application of transportation and distribution management. To understand role of distributors – designing various distribution channels .networking the role of transportation. Will effectively be able to manage transportations. |

| Course Outcomes (COs) | | Mapping |
|------------------------------|--|--------------------------|
| CO1 | To acquaint students with role of distribution in supply chain | Skill Enhancement |
| CO2 | To acquaint students with Distribution network planning | Employability |
| CO3 | To acquaint students with Transportation management strategy | Skill Enhancement |
| CO4 | To acquaint students with Intelligent transport management systems | Employability |

SECTION A

Introduction - role of distribution in supply chain – transportation management – warehousing concepts – designing distribution channels – understanding distribution costs Advantages of distribution models – disadvantages of distribution models – prerequisites Of distribution – comparing distribution networks. Transportation management. Meaning and Definition -Role of transportation and distribution in Supply chain and logistics management – Importance of an effective transportation system - Characteristics of transportation modes and selection – General criteria for carrier selection – Basics modes of transportation – Transport documentation - Transport economics and pricing –Costing of transportation services.

SECTION B

Distribution network planning – various factors in distribution - delivery lead time and local facilities – optimization .approach and techniques – material management process – role of transportation – transportation principles and participants – contribution of various agencies in transportation. International Air transportation – Types of aircrafts – Air cargo Regulations – Truck and Rail Transportation – Inter

model – pipe lines – Packaging objectives – TCL,LCC – Refrigerator – goods – customs duty – Non Traffic barriers – customs cleaning process – International logistics Infrastructure-Transportation Selection – Tradeoff – modes of transportation – models for transportation and distribution.

SECTION C

Transportation modes – performance characteristics and selection – various modes of transportation (multimodal) – merits of each all modes of transportation – transportation performance costs and value measures – understanding – comparing – cost components of multimodal transportation. - Transportation routing decisions – transportation administration – transportation operations management – consolidation of freight – cost negotiations – Transportation management strategy – TMS transportation management system – Transportation services

SECTION D

Transportation cost consideration – transportation rate profiles - various trends in transportation – application of IT in transportation – E commerce Intelligent transport management systems. Transit operation software – geographic information systems – advanced fleet management systems – intermodal freight technology – transportation security initiatives And role of technology – various inspection systems.

Text Books:

1. Dewan K K and Mustafa M(2004).Management of Modern City Transportation System. Deep & Deep
2. Chopra S and Meindl P (2015).Supply chain management strategy Planning, and Operation.Pearson

References:

1. Krishna S J(2007)Transportation Management – Imperatives and Best Practices.ICFAI University Press
2. Marcus H S(1986).Marine Transportation Management.Auburn House Pub. Co.

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|--------------|--|-----------------|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|
| | | | O1 | O2 | O3 | O4 | O5 | O6 | O7 | O8 | O9 | O10 | O11 | O12 | O13 | O14 | O15 |
| MCH333B | TRANSPORTATION AND DISTRIBUTION MANAGEMENT | CO1 | 3 | 2 | 2 | 2 | 1 | 3 | 1 | 1 | 1 | 1 | 2 | X | 3 | 3 | |
| | | CO2 | 3 | 3 | 3 | 3 | X | 3 | 2 | 1 | 1 | 1 | 3 | 1 | 2 | 3 | |
| | | CO3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | X | 1 | 3 | 2 | 3 | 3 | |
| | | CO4 | 3 | 3 | 3 | 3 | 1 | 2 | 3 | 2 | 1 | 1 | 3 | 2 | 2 | 3 | |

| | |
|--------------------------|--|
| Course Title/Code | Machine Learning & AI / MCH342B |
| Course Type | Core |

| | | |
|-------------------------|--|----------------------|
| L-T-P Structure | 2-0-2 | |
| Credits | 3 | |
| Course Objective | Understand the supervised and unsupervised learning methods and MLAI Techniques and its applicability in the industry | |
| | Course Outcomes (Cos) | Mapping |
| CO1 | Demonstrate the understanding of Supervised Learning Methods particularly Decision Trees | Employability |
| CO2 | Demonstrate the Understanding of Unsupervised Learning methods | Employability |
| CO3 | Apply Support Vector Machines for supervised Learning | Employability |
| CO4 | Demonstrate the Understanding of Market Basket Analysis | Employability |

Section A

Classification and Regression Tree

Classification & Regression, working of a Decision Tree, Attribute Selection Measures, Information Gain, Gain Ratio, Gini Index, Building Decision Trees, CART, C5.0, and CHAID Trees, Prediction by Decision Tree, Advantages and Disadvantages of Decision Trees, Model Overfitting, Building Decision Trees in R.

Section B

Clustering

Cluster Analysis versus Factor Analysis, Overview of Basic Clustering Methods, Agglomerative Hierarchical Clustering, Within-Group Linkage, Nearest Neighbour or Single Linkage, Furthest Neighbour or Complete Linkage, Centroid Clustering, Ward's Method, K-Means Algorithm, Dendrogram, Profiling of Cluster, Cluster Evaluation.

Section C

Support Vector Machine

Decision Boundaries for Support Vector Machine, Maximum Margin Hyperplanes, Structural Risk Minimization, Linear SVM-Separable Case, Linear SVM-Non-Separable Case, Kernel Function, Kernel Trick, Kernel Hilbert Space, Model Evaluation.

Section D

Market Basket Analysis- Market Basket Analysis and Association Analysis, Market Basket Data, Stores, Customers, Orders, Items, Order Characteristics, Product Popularity, Tracking Marketing Interventions, Association Rules, Support, Confidence, Lift, Chi-Square Value, Sequential Pattern Analysis Introduction

to Artificial Intelligence-Current Trends in AI, Intelligent Agents, Environments, Problem Solving Agents, Searching Techniques, Knowledge and Reasoning in AI, Forms of Learning, Structure of a Neural Network, Analogy with Biological Neural Network, Activation Functions, Gradient Descent, Model Accuracy.

Text Books:

1. Moroney L(2020).AI and Machine Learning for Coders.Shroff/O'Reilly
2. Leekha G (2021).Learn AI with Python.BPB Publications
3. Muller A(2016).Introduction to Machine Learning with Python.Shroff/O'Reilly

References:

1. Theobald O(2021).Machine Learning for Absolute Beginners.Scatterplot Press
2. Pradhan M and Kumar U D (2019).Machine Learning using Python.Wiley
3. Richards K.Machine Learning: For Beginners.
4. Mueller J P and Massaron L(2016).Machine Learning (in Python and R). Wiley

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|--------------|-------------------------|-----------------|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|
| | | | O1 | O2 | O3 | O4 | O5 | O6 | O7 | O8 | O9 | O10 | O11 | O12 | O13 | O14 |
| MCH342B | Machine Learning and AI | CO1 | 3 | 2 | 3 | 3 | 2 | X | 2 | 2 | 2 | 2 | 1 | 2 | 1 | 2 |
| | | CO2 | 3 | 3 | 2 | 2 | 2 | 1 | 3 | 2 | 2 | 2 | X | 2 | 2 | 2 |
| | | CO3 | 3 | 3 | 3 | 3 | 2 | X | 2 | 2 | 2 | 2 | 1 | 2 | X | 2 |
| | | CO4 | 3 | 2 | 3 | 3 | 3 | 1 | 3 | 3 | 3 | 3 | 1 | 2 | 1 | 2 |

| | |
|--------------------------|--|
| Course Title/Code | Supply Chain Analytics/ MCH343B |
| Course Type | Core |
| L-T-P Structure | 2-0-2 |

| | | |
|-------------------------|--|----------------------|
| Credits | 3 | |
| Course Objective | | |
| | Course Outcomes (COs) | Mapping |
| CO1 | To give them conceptual understanding and importance of Supply Chain Management. | Employability |
| CO2 | To Demonstrate and Elaborate various strategies of Network Planning and ATP Production Planning & Scheduling | Employability |
| CO3 | To elaborate on the Processes of Supply chain Implementation systems along with Architecture of APS. | Employability |
| CO4 | To Demonstrate the Understanding of SCM Models in various Industries. | Employability |

Section A

Basics of Supply Chain Management Supply Chain Management – An Overview, Supply Chain Analysis Types of Supply Chains Advanced Planning.

Section B

Concepts of Advanced Planning Systems Structure of Advanced Planning Systems.

Strategic Network Planning Demand Planning Master Planning, Demand Fulfilment and ATP Production Planning and Scheduling.

Section C

Purchasing and Material Requirements Planning Distribution and Transport Planning Coordination and Integration Collaborative Planning. Implementing Advanced Planning Systems The Definition of a Supply Chain Project The Implementation Process. Architecture of Selected APS. Demand Planning of Styrene Plastics Scheduling of Synthetic Granulate.

Section D

SCM in a Pharmaceutical Company Food and Beverages ,Computer Assembly ,Semiconductor, Manufacturing.

Text Books:

1. Vijayraghavan T.A.S(2021). Supply Chain Analytics, 1st, Ed., Wiley
2. Horst T (2020) Inventory Analytics: Prescriptive Analytics in Supply Chains, Sage,
3. Bhattacharya R (2022) Supply chain Analytics: Strategies Models and Solutions, Sage

References:

1. Rahimi, I., Gandomi, A.H., Fong, S.J., & Ülkü, M.A. (2020). Big Data Analytics in Supply Chain Management:

- Theory and Applications (1st ed.)
2. Feigin G. (2012). Supply chain planning and analytics : the right product in the right place at the right time (1st ed.)
 3. Chopra, S., Meindl, P. (2007). Supply Chain Management. Strategy, Planning & Operation.

| Courses Code | Courses | Course Outcomes | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
|--------------|------------------------|-----------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| MCH343B | Supply Chain Analytics | CO1 | 2 | 2 | 3 | 3 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | X | 1 | 2 | 1 |
| | | CO2 | 2 | 2 | 3 | 2 | 2 | 1 | 3 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 |
| | | CO3 | 3 | 2 | 2 | 3 | X | 1 | 2 | 2 | 2 | 2 | 2 | 1 | X | 1 | 1 |
| | | CO4 | 3 | 3 | 2 | 3 | 2 | 1 | 3 | 3 | 2 | 3 | 3 | X | 1 | 2 | 2 |

| | | |
|------------------------------|---|-------------------------------------|
| Course Title/Code | Marketing Analytics(MCH346B) | |
| Course Type: | ELECTIVE | |
| Course Nature: | Hard | |
| L-T-P | 2-0-2 | |
| Structure | | |
| Credits | 3 | |
| Objectives | The goal of this course is to give students the expertise to initiate, participate in, manage, and evaluate marketing analytics efforts with substantial business impact. This requires knowledge of fundamental ideas at the intersection of statistics, machine learning, and human behavior, but also benefits from knowing specific techniques. This course attempts to develop relationship between marketing and other management functions | |
| Course Outcomes (COs) | | Mapping |
| CO1 | Explain the importance of data analysis by interpreting data to promote the product in the market | Employability |
| CO2 | Apply machine learning models to know the customer's needs to capture more market share by analyzing the data for effective decisions. | Skill Enhancement/ Employability |
| CO3 | Apply data analysis tools to access the loyalty and satisfaction of the customers to retain and attract new customers. | Employability |
| CO4 | Develop mathematical models to know the market demand of the product to utilize the resources for the promotion of the product. | Employability |

SECTION A

Data: Types of data, Data collection techniques, Questionnaire design, Use of Google docs, Exploratory data analysis
Marketing Analytics – concept, Components, The State of Marketing Analytics, The Impact of Analytics, The Marketing Analytics Process

SECTION B

Measuring customer satisfaction and loyalty, Knowing consumers: Marketing Mix Modeling, Correlation and Regression analysis for marketing

SECTION C

What do customers want? Customers segmentation: Cluster Analysis, Analysis of positioning, Market Basket Analysis

SECTION D

Demand forecasting models: Time series analysis, Method of least square, Moving average method, Exponential smoothing method, Forecast models using R software: Trend and seasonal analysis

Text Books:

1. Maity M and Gurazada P(2021). Marketing Analytics. Oxford University Press

2. Gupta S and Jathar A (2021). Marketing Analytics. WILEY
3. Gilliland M, Tashman L and Sglavo U(2021).Business Forecasting: The Emerging Role of Artificial Intelligence and Machine Learning. Wiley & SAS Institute Inc
4. Yildirim G and Kubler R V(2023). Applied Marketing Analytics Using R. SAGE Publications Ltd

References:

1. Chapman C and Feit E M(2015). R for Marketing Research and Analytics. Springer
2. Winston W L (2014).Marketing Analytics - Data Driven Techniques With Microsoft Excel, Wiley
3. Kotler P and Keller K L (2015). Marketing Management.Global Edition ,
4. ARUNANGSHU G & PRADIP P(2021).Applied marketing analytics using SPSS : Modeler, Statistics and AMOS graphics . PHI Learning
5. Gupta S.C (2023). Fundamentals of Statistics. Himalaya Publishing House

| Courses Code | Courses | Course Outcomes | | | | | | | | | | | | | | | |
|--------------|------------------------|-----------------|-----|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|---|
| | | | PO1 | PO 2 | PO 3 | PO 4 | PO 5 | PO 6 | PO 7 | PO 8 | PO 9 | PO1 0 | P01 1 | PO1 2 | PSO 1 | PSO 2 | |
| MCH346 B | MARKETING ANALYTICS | CO1 | 3 | X | 2 | 2 | 3 | 2 | X | X | X | X | X | | 3 | 3 | 3 |
| | | CO2 | 3 | X | 3 | 3 | 3 | 3 | X | X | X | X | X | | 3 | 3 | 3 |
| | | CO3 | 3 | X | 3 | 3 | 3 | 3 | X | X | X | X | X | | 3 | 3 | 3 |
| | | CO4 | 3 | X | 3 | 3 | 3 | 3 | X | X | X | X | X | | 3 | 3 | 3 |