



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

PROGRAM BOOKLET

BBA

(Batch: 2021-2024)

School of Management & 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 interdisciplinary 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 behaviour 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	CSE	HARD	CORE	0	0	3	3	1.5
MCH 106B	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

MCH129B	INTRODUCTION TO BUSINESS ANALYTICS	DMC	HARD	ELECTIVE	3	0	0	3	3
MCH130B	BASICS OF DATA MANAGEMENT WITH R & PYTHON	DMC	HARD	ELECTIVE	2	0	2	4	3
MCH103B	ACCOUNTING FOR MANAGERS	DMC	HARD	ELECTIVE	3	0	0	3	3
	L-T-P Total				18-24	0	3-5		

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
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
MCH213B	INDUSTRY PROJECT	DMC	NTCC	CORE	0	0	4	4	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
MCH213 B	INDUSTRY PROJECT	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	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
MCH213B	INDUSTRY PROJECT	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	DMC	NTCC	CORE	0	0	4	4	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
MCH131B	RESEARCH TECHNIQUES	DMC	HARD	ELECTIVE	3	0	0	3	3
MCH132B	DESCRIPTIVE ANALYTICS	DMC	HARD	ELECTIVE	2	0	2	4	3
MCH121B	SUMMER TRAINING	DMC	SOFT	CORE	0	0	0	0	2

COURSES ARE OPTED DEPENDING UPON THE SPECIALIZATION CHOSEN BY THE STUDENT

	L-T-P Total				13-22	0	4-10		
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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	CHE M DEPT	HARD	UC	4	0	0	4	4

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
MCH237B	EPIDEMIOLOGY	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
MCH245B	STRUCTURED QUERY LANGUAGE (SQL)	CSE	HARD	ELECTIVE	2	0	2	4	3
	L-T-P Total				22-26	0	2-4		

COURSES ARE OPTED DEPENDING UPON THE SPECIALIZATION CHOSEN BY THE STUDENT

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	0	0	4

Entrepreneurship & Family Business Specialization

MCH222B	MANAGING ENTREPRENEURIAL GROWTH AND STRATEGY	DMC	HARD	ELECTIVE	3	0	0	3	3
MCH253B	APPLIED ENTREPRENEURSHIP PROGRAM	DMC	SOFT	Elective	1	0	2	3	2
MCH225B	APPLIED ENTREPRENEURSHIP PROJECT	DMC	NTCC	Elective	0	0	0	0	8

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
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	4	2
MCH216B	PERFORMANCE AND COMPENSATION MANAGEMENT SYSTEMS	DMC	HARD	ELECTIVE	3	0	0	3	3
MCH254B	APPLIED INDUSTRY PROJECT- BA	DMC	NTCC	ELECTIVE	0	0	0	0	4
	L-T-P Total								

COURSES ARE OPTED DEPENDING UPON THE SPECIALIZATION CHOSEN BY THE STUDENT

	L-T-P Total				13-23	0	4-14		
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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
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
CDO314	SKILL ENHANCEMENT UG-II	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	EDU/LAW/PSE	SOFT	ELECTIVE	1	0	2	3	2

	Relating to Intellectual Property Rights/Cyber Law								
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Entrepreneurship & Family Business Specialization

MCH338B	NEW AGE ENTREPRENEURSHIP	DMC	HARD	ELECTIVE	3	0	0	3	3
MCH339B	INTERNATIONAL FAMILY BUSINESS MODELS	DMC	HARD	ELECTIVE	3	0	0	3	3
MCH337B	COMPANY LAW	DMC	HARD	ELECTIVE	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

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
EDS289/EDS290/EDS288/PSE301/LWS325/LWS323	APPLIED PSYCHOLOGY/APPLIED SOCIOLOGY/APPLIED PHILOSOPHY/ESSEN	EDU/LAW/PSE	SOFT	ELECTIVE	1	0	2	3	2

		TIAL OF PEACE AND SUSTAINABILITY/LAW RELATING TO INTELLECTUAL PROPERTY RIGHTS/CYBER LAW								
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Operations Management

MCH313B	LOGISTICS AND INTERNATIONAL SUPPLY CHAIN MANAGEMENT	DMC	HARD	ELECTIVE	3	0	0	3	3
MCH314B	PURCHASING AND INVENTORY MANAGEMENT	ME	HARD	ELECTIVE	3	0	0	3	3
MCH315B	SERVICE OPERATIONS MANAGEMENT	DMC	HARD	ELECTIVE	3	0	0	3	3
MCH337B	COMPANY LAW	DMC	HARD	ELECTIVE	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

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	1	0	2	3	2
	L-T-P Total				12-20	0	4-10		

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	3	0	0	3	3
CSW331B	GOOGLE SUITES	CST	Workshop	CORE	0	0	3	3	1.5
MCH318B	BUSINESS ANALYTICS	DMC	HARD	CORE	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
MCH351B	INDUSTRY INTERNSHIP	DMC	NTCC	ELECTIVE	0	0	0	0	8
MCH318B	BUSINESS ANALYTICS	DMC	HARD	CORE	3	0	0	3	3

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
MCH351B	INDUSTRY INTERNSHIP	DMC	NTCC	ELECTIVE	0	0	0	0	8

Operations Management

MCH331B	INTRODUCTION TO	DMC	HARD	ELECTIVE	3	0	0	3	3
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		SHIPPING								
MCH332B		MULTIMODAL TRANSPORTATION	DMC	HARD	ELECTIVE	3	0	0	3	3
MCH333B		TRANSPORTATION AND DISTRIBUTION MANAGEMENT	DMC	HARD	ELECTIVE	3	0	0	3	3
MCH351B		INDUSTRY INTERNSHIP	DMC	NTCC	ELECTIVE	0	0	0	0	8

Business Analytics Specialization

MCH342B		MACHINE LEARNING & AI	DMC	ELECTI VE	CORE	2	0	2	4	3
MCH343B		SUPPLY CHAIN ANALYTICS	DMC	ELECTI VE	ELECTIVE	2	0	2	4	3
MCH346B		MARKETING ANALYTICS	DMC	ELECTI VE	ELECTIVE	2	0	2	4	3
MCH344B		Applied Project (Marketing, HR or Social Media analytics Based/Big Data or Digital Marketing	DMC	ELECTI VE	ELECTIVE	0	0	0	0	6

COURSES ARE OPTED DEPENDING UPON THE SPECIALIZATION CHOSEN BY THE STUDENT

Total Credits Scheme

S. No.	Semester	Contact Hours	Credits
1	I (FAA/EFB/HCM/OM/BA)	21-27	19.5-20.5
2	II (FAA/EFB/HCM/OM/BA)	17-27	13.5-22.5

	Summer Internship (Post II Sem)	0	2
3	III (FAA/EFB/HCM/OM/BA)	25-28	22-25
4	IV (FAA/EFB/HCM/OM/BA)	16-25	14-24
	Summer Training (Post IV Sem)	0	4-8
5	V (FAA/EFB/HCM/OM/BA)	23-26	18.5-21.5
6	VI (FAA/EFB/HCM/OM/BA)	18-24	15-21
9	Summer Training (Post 6 th Sem) EFB/OM/HCM		8
Range		114-154	104-141 (excluding summer training)

BBA Semester-I

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
CSW104B	COMPUTER INFORMATION SYSTEM	CSE	HARD	CORE	0	0	3	3	1.5
MCH106B	BUSINESS STATISTICS	DMC	HARD	CORE	3	0	0	3	3
EDH 146	BUSINESS COMMUNICATION – I	EDU	SOFT	CORE	3	0	0	3	3
MCH 105B	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										
	MCH129B	INTRODUCTION TO BUSINESS ANALYTICS	DMC	HARD	ELECTIVE	3	0	0	3	3
	MCH130B	BASICS OF DATA MANAGEMENT WITH R & PYTHON	DMC	HARD	ELECTIVE	2	0	2	4	3
	MCH218B	MANAGERIAL ECONOMICS	DMC	HARD	ELECTIVE	3	0	0	3	3
	MCH103B	ACCOUNTING FOR MANAGERS	DMC	HARD	ELECTIVE	3	0	0	3	3
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	1.5	
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.

Textbooks:

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. K.Sinha, 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 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
CSW10 4B	Computer Information System	CO1	3	2	2	3	X	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	<u>3-0-0</u>	
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	ENTREPRENEURS HIP
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 their 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.

Textbooks:

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 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 106B	BUSINESS STATISTICS	CO1	2	2	3	2	3	X	1	2	X	1	X	X	2	2
		CO2	3	2	3	2	3	X	2	2	X	1	X	X	2	2
		CO3	3	1	3	2	3	X	1	2	X	1	X	X	2	2
		CO4	2	1	3	2	2	X	1	2	X	1	X	X	2	2

Course Title/Code	Business Communication –I/ EDH146	
Course Type	Core	
L-T-P Structure	<u>3-0-0</u>	
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 Humour 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, Practising 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. 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.

Reference Books:

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

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
EDH14 6	BUSINESS COMMUNICA TION – I	CO1	1		X	1	2	2	X	3	3	X	X	2	2	2
		CO2	1	1	X	X	2	2	X	3	3	X	X	X	2	2
		CO3	1	1	X	X	1	1	3	3	3	3	X	X	2	2
		CO4	X	X	X	X	1	2	1	1	X	3	X	X	2	2
		CO5	X	X	3	X	X	X	X	3	X	X	X	X	2	2

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

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 teams, 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.

Textbooks:

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 Wechrich, 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	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 111	PO 112	PS O1	PS O2
MCH121 B	MANAGEMENT PRINCIPLES & ORGANIZATIONAL BEHAVIOUR	CO1	3	2	3	X	3	X	3	X	2	2	X	X	2	2
		CO2	3	3	3	2	X	X	3	2	2	2	X	X	2	2
		CO3	3	3	3	3	X	2	3	2	2	2	X	X	2	2
		CO4	3	3	3	3	X	2	3	3	3	3	X	X	2	2

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.

Textbooks:

1. Gupta A. (2022). Financial Accounting for Managers. Pearson Education
2. FRANK F J (2016). Financial Accounting Managerial. PHI Delhi

3. Narayanaswami R (2011). Financial Accounting: A Managerial Perspective. Prentice Hall India Learning Private Limited

References:

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

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	2	2	1	1	3	X	2	1	X	2	1	2	2	2
		CO2	2	2	1	1	2	X	3	1	X	2	1	2	2	2
		CO3	3	2	1	1	2	X	2	1	X	2	1	2	2	2
		CO4	2	3	1	1	3	X	2	1	X	2	1	2	2	2

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

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	X	1	X	3	1	1	2	2
		CO2	3	1	2	1	3	2	X	1	X	2	1	1	2	2
		CO3	3	2	3	1	2	2	X	1	X	2	1	X	2	2
		CO4	3	2	2	1	3	2	1	1	X	1	1	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 fundamental's 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. Rajeev Roy , “Entrepreneurship”, 2nd ed, Oxford Higher Education, 2011
2. Bruce R. Barringer and R. Duane Ireland, Entrepreneurship: Successfully Launching New Ventures, 3rd Edition, Pearson Prentice Hall (2009).
3. Nandini Vaidyanathan. Entrepedia, A Step-by –step Guide to Becoming An Entrepreneur In India, 2nd ed, Publisher: Embassy Books Publishers & Distributors, 2011

Reference Books

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

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 108B	ENTREPRENE URSHIP: THEORY AND PRACTICES	CO1	2	3	2	3	X	2	3	2	2	2	3	X	1	1
		CO2	2	3	2	3	2	3	X	3	2	2	2	2	1	1
		CO3	3	2	3	2	3	2	2	3	2	3	X	2	1	1
		CO4	2	3	2	2	3	2	3	2	3	3	2	2	1	1

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	X	2	2	3	2	3	2	3	2	1	1
		CO2	2	3	2	3	2	3	X	3	2	2	2	2	X	1
		CO3	3	2	3	2	3	2	2	3	2	3	X	2	1	1
		CO4	2	3	2	2	3	2	3	2	3	3	2	2	1	X

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

Textbooks:

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:

1. ACCOUNTING FOR MANAGERS, S. Ramanathan, Oxford University Press,2019.
2. Paresh Shah, BASIC ACCOUNTING FOR MANAGERS, Oxford, Delhi, 2017.
3. Ambrish Gupta, FINANCIAL ACCOUNTING FOR MANAGEMENT, Pearson, Delhi, 2019.

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

Course Title/Code	INTRODUCTION TO HEALTH CARE MANAGEMENT / MCH110B
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 various aspects of Health Care 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 HR in Health Care, 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, Fund raising and Analysis

Textbooks:

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:

Sharon B. Buchbinde, Healthcare Management –with access, 3rs ed, Jones & Bartlett Publishers, 2017.

Sandra Buttigieg , International Best Practices in Health Care Management , Emerald Group Publishing Ltd, 2015.

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	X	X	X	X	X	X	X	2	2	X	X	1	1
		CO2	3	3	3	2	X	X	3	2	2	2	X	X	1	1	
		CO3	3	3	3	3	X	2	3	2	2	2	X	X	1	1	
		CO4	3	3	3	3	X	2	3	3	3	3	X	X	1	1	

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) Supply Chain Transformation: Building and Executing an Integrated Supply Chain Strategy, J. Paul Dittmann, McGraw-Hill, 256 pages

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 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
MCH11 B	Principal of Manufacturing	CO1	1	1	X	X	1	1	X	X	X	X	2	X	1	1
		CO2	1	1	2	1	X	X	X	3	X	X	1	X	1	1
		CO3	2	1	X	2	X	X	2	1	X	X	1	1	1	1
		CO4	X	2	X	X	2	X	X	X	1	1	X	2	1	1

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. Essentials of Business Analytics: An Introduction to the methodology and its application, Bhimasankaram Pochiraju, Sridhar Seshadri, Springer.
2. Introduction to Machine Learning with Python: A Guide for Data Scientists 1st Edition, by Andreas C. Müller, Sarah Guido, O'Reilly
3. Introduction to Data Science, Laura Igual Santi Seguí, Springer
4. Fundamentals of Business Analytics” by R N Prasad and Seema Acharya

Reference Books

1. Camm, J.D. et al. (2015) . Essentials of Business Analytics. Cengage Learning
2. An Introduction to Business Analytics, Ger Koole, Lulu.com, 2019
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	X	1	3	2	2	1	1	2	2	1	2	2	1	1
		CO2	2	2	2	3	3	X	2	1	2	1	2	X	1	1
		CO3	X	3	3	2	3	1	1	2	2	X	2	1	1	1
		CO4	2	2	2	2	2	2	1	3	2	1	2	2	1	1

Course Title/Code	Basics of Data Management with R & Python /MCH130B)
Course Type:	Elective
Course Nature:	Hard
L-T-P Structure	2-0-2
Credit	3
Course Objectives	To provide basic knowledge of R & Python Syntax

Course Outcomes (COs)		Mapping
CO1	To gain knowledge of R ecosystem at a basic level	Skill Enhancement
CO2	To Conduct simple descriptive analyses and graphic analyses of data in R	Employability
CO3	To Familiarize students' with Python ecosystem at a basic level	Skill Enhancement
CO4	To gain practical experience of Data analysis using python	Employability

Section -A

- 1) Learn the basics of R Syntax
- 2) Learn how to organize and modify data in R using data frames and dplyr
- 3) Learn how to prepare data for analysis in R using dplyr and tidyr.
- 4) Learn the basics of how to create visualizations using the popular R package ggplot2
- 5) Learn the basics of aggregate functions in R with dplyr, which let us calculate quantities that describe groups of data

Section -B

- 1) Learn the basics of joining tables together in R with dplyr
- 2) Learn to use R or manually calculate the mean, median, and mode of real-world datasets
- 3) Learn how to quantify the spread of the dataset by calculating the variance and standard deviation in R
- 4) Learn how to calculate three important descriptive statistics- Quartiles, Quantiles, and Interquartile range that describe the spread of the data
- 5) Learn about the statistics used to run hypothesis tests and use R to run different t-tests that compare distributions.

Section -C

Introduction of Python, Jupyter Notebook, Python Functions, Python Types and Sequences, Python More on Strings, Reading and Writing CSV files

Section -D

Advanced Python Objects, map(), Numpy, Pandas, Visualization DataMatplotlib, Bar Charts, LineCharts, Scatter-plots. The Data Frame & Data Structure

Text Books:

1. Learning Python, 5th Edition by Mark Lutz, O'reilly

2. Mastering Apache Spark 2.x - Second Edition, by Romeo Kienzler, Packt Publishing Ltd.

Reference Books:

1. Python Programming for the Absolute Beginner By Michael Dawson, 2nd Edition, Premier Press, 2003
2. Image Processing and Pattern Recognition, Volume 5, 1st Edition, By Cornelius Leondes, Academic 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
MCH1 30B	Basics of Data Management with “R & Python”	CO1	X	2	2	2	2	X	1	2	1	X	1	1	1	1
		CO2	X	2	2	2	2	X	1	2	1	X	1	1	2	1
		CO3	X	2	2	2	2	X	1	2	1	X	1	1	1	1
		CO4	X	2	2	2	2	1	1	3	2	1	1	1	2	1

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	DMC	NTCC	CORE	0	0	0	0	2	
Entrepreneurship & Family Business Specialization										
MCH123B	FUNDAMENTALS OF DESIGN THINKING	DMC	HARD	ELECTIVE	3	0	0	3	3	

		& VENTURE CREATION								
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	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			
MCH213B	INDUSTRY PROJECT	DMC	NTCC	CORE	0	0	0	0	2	

Operations Management

MCH117B	FUNDAMENTALS OF LOGISTICS	ME								
			HARD	ELECTIVE	3	0	0	3	3	
MCH213B	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
MCH131B	Research Techniques	DMC	HARD	ELECTIVE	3	0	0	3	3
MCH132B	Descriptive Analytics	DMC	HARD	ELECTIVE	2	0	2	4	3
MCH121B	SUMMER TRAINING	DMC	SOFT	CORE	0	0	0	0	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. Errol D'Souza, Macro Economics, 2/e, Pearson Education, 2012.
2. Aggarwal, Macroeconomics Theory and Policy, Pearson Education.1,e, paperback, 2010
3. Mishra and Puri, Modern Macro-Economic Theory, Himalaya Publishing House. 17th ed, 2017

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	2	1	3	3	X	1	X	3	1	1	2	2
		CO2	3	1	2	1	3	2	X	1	X	2	1	X	2	2
		CO3	3	2	3	1	2	2	X	1	X	2	1	1	2	2
		CO4	3	2	2	1	3	2	1	1	X	1	1	1	2	2

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.

References:

- 1) Chhabra, T. N; Human Resource Management, 4thed, Dhanpati Rai and Co. Pvt. Ltd New Delhi 2003.
- 2) Dr. Gupta, C. B.; Human Resource Management, 11th revised ed, Sultan Chand and Sons, New Delhi, 2008.
- 3) Khanka S S, Human Resource Management (Text and Cases), S. Chand & Company Ltd, 2013
- 4) Flippo, Edwin B. ,Personnel Management, (McGraw-Hill International Editions: Management Series, 1984.
- 5) Rao, V S P, Human Resource Management, Text and Cases, Excel Books, 2004.
- 6) D'Enzo,David A & Stephen P.Robbin, Personnel Human Resource Management, 7thed, Prentice Hall of India.

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	2	1	X	2	2
		CO2	3	3	2	3	3	X	3	3	3	2	1	X	2	2
		CO3	3	3	2	3	3	X	3	3	3	2	1	X	2	2
		CO4	3	3	2	1	3	3	3	3	3	2	1	X	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

- Jonathan B (2017). Financial Management. Penguin
- Pandey I M (2015). Financial Management. Vikas
- Chandra P (2018). Financial Management theory and practices. McGraw Hill Pvt. Ltd

References:

- Chandra, Prasanna, "Fundamentals of Financial Management", 6e, McGraw Hill Pvt. Ltd, 2017
- Ross, Stephen A; Westerfield, Randolph W.; Jordan, Bradford D, "Essentials of Corporate Finance", SIE, 11thed, McGraw Hill Education, 2016
- Pandey, I M, "Essentials of Financial Management," 4e, Vikas Publishing House, 2015

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 15B	FINANCIAL MANAGEME NT	CO1	3	2	X	1	3	3	2	1	2	2	1	2	2	2
		CO2	2	2	3	1	2	2	3	X	3	2	3	3	2	2
		CO3	3	2	1	1	2	X	2	X	2	2	X	2	2	2
		CO4	2	3	X	1	3	1	2	1	2	2	1	2	2	2

Course Title/Code	ADVANCED EXCEL/ CSW105B
Course Type:	Core
Course Nature:	Workshop
L-T-Structure	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. John Walkenbach, Excel 2013 Bible, Wiley, PAP/CDR edition, 2013
2. John Walkenbach, Excel 2013 Power Programming with VBA (Mr. Spreadsheet's Bookshelf) Wiley; PAP/CDR edition, 2013

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. Lalwani,L.(2019). excel 2019 All-in-one: bpb.

References:

1. John Walkenbach, Excel 2013 Bible, Wiley, PAP/CDR edition, 2013
2. John Walkenbach, Excel 2013 Power Programming with VBA (Mr. Spreadsheet's Bookshelf) Wiley; PAP/CDR edition, 2013

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	
CSW1 05B	ADVANCED EXCEL	CO1	1	X	X	X	3	X	X	X	1	X	X	X	2	2	
		CO2	2	X	X	X	X	X	X	X	X	X	X	X	2	2	
		CO3	2	3	2	2	X	X	X	X	2	X	X	3	2	2	
		CO4	X	X	X	X	X	X	X	X	X	2	X	1	2	2	

Course Title/Code	Professional Development Programme II/ CDO101B
Course Type:	University Compulsory
Course Nature:	Soft
Credit	0
L-T-Structure	1-0-1
Course Objectives	The employability of students will improve as they will be able to communicate effectively and become aware about the importance of the four pillars of Communication – listening, speaking, reading and writing.

Course Outcomes (COs)		Mapping
CO1	The employability of students will improve as they will be able to communicate effectively and become aware about the importance of the four pillars of Communication – listening, speaking, reading and writing.	Skill enhancement
CO2	The verbal and non- verbal communication skills of the students will improve.	Skill enhancement
CO3	They will be able to give presentations confidently and also speak fluently in various public speaking platforms like debate, declamation, and extempore. They will learn the effective use of body language.	Skill enhancement
CO4	They will be skilled in fluent reading	Skill enhancement

Section 1: Listening Skills

- 1.1 The art of listening
- 1.2 Practicing listening skills
- 1.3 Intensive listening Vs extensive listening
- 1.4 Listening and note taking
- 1.5 Exercises of active listening.

Section 2: Speaking Skills

- 2.1 Speaking practice in various social situations
- 2.2 Constructing small talks
- 2.3 Communication through Roleplays
- 2.4 Extempore

Section 3: Advanced Speaking Skills

- 3.1 Delivering Presentations
- 3.2 Body Language

Section 4: Reading Skills

- 3.1 The art of effective reading
- 3.2 Overcoming common obstacles
- 3.3 Types of reading – skimming, scanning, extensive reading, intensive reading
- 3.4 Tips for effective reading.

Section 5: Writing Skills

- 4.1 Avoiding common errors in construction of sentences and language
- 4.2 Practicing letter writing
- 4.3 Email Etiquette

Section 6: Professional Grooming and Etiquette

- 5.1 Professional grooming
- 5.2 Personal Grooming
- 5.3 Professional Etiquette
- 5.4 Courtesy and communication discipline

Text Books:

1. Basic Business Communication by C. B. Gupta, Sultan Chand and Sons
2. Soft Skills: Enhancing Employability by M.S. Rao, I .K. International Publishing House Pvt. Ltd

Reference Books:

1. Basic Business Communication by Raymond V Lesikar, Mc Graw – Hill publication
2. Communication Skills by Sanjay Kumar and Pushp Lata, Oxford University Press
3. Communication Skills by Prof. Monapally, Tata McGraw Hill publication
4. Living English Structure by W. S Allen, Pearson Education

Course s Code	Courses	Course Outcom es	PO												PS	
			1	2	3	4	5	6	7	8	9	10	11	12	O1	O2
CDO10 1B	Professional Development Programme II	CO1	1	X	X	X	3	X	X	X	1	X	X	X	2	2
		CO2	2	X	X	X	X	X	X	X	X	X	X	X	2	2
		CO3	2	3	2	2	X	X	X	X	2	X	X	3	2	2
		CO4	X	X	X	X	X	X	X	X	X	2	X	1	2	2

Course Title/Code	COST ACCOUNTING /MCH122B
Course Type:	Core (Departmental)
Course Nature:	Hard
L-T-P Structure	3-0-0
Credit	3
Course Objectives	1. 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 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:

- Varun Jain, CPA, CMA and Dwijavanti Varatharajan, CPA , Financial Reporting, Planning, Performance and Control (Class Notes to Wiley CMA excel Learning System) – 2017 Edition;
- Financial Reporting, Planning, Performance and Control – 2017 Edition; Wiley CMA excel A System Exam Review, Part 1, John Wiley & Sons, Inc.
- Financial Decision Making – 2017 Edition; Wiley CMA excel Learning System Exam Review, Part 2, John Wiley & Sons, Inc.

References:

- Steven M.Bragg , Cost Accounting Fundamentals: Essential concepts and examples, fifth edition; 2016
- M.N. Arora, Methods & Techniques of Cost Accounting , 3rd Ed, Himalaya Publishing House, 2011
- S.P. Jain and K L Narang, Cost Accounting – Principles and Practices, 21st Revised Edition; Kalyani Publishers, 2014

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
MCH122B	COST ACCOUNTING	CO1	2	2	1	1	3	X	2	1	X	2	1	X	1	1
		CO2	2	2	1	1	2	X	3	1	X	2	1	X	1	1
		CO3	3	2	1	1	2	X	2	1	X	2	1	X	1	1
		CO4	2	3	1	1	3	X	2	1	X	2	1	X	1	1

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 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 7	BUSINESS COMMUNICA TION SKILLS- II	CO1	X	1	X	X	3	2	2	3	3	X	X	3	2	2	
		CO2	2	X	X	X	3	2	X	3	3	X	X	3	2	2	
		CO3	X	X	X	X	2	2	3	3	2	X	X	3	2	2	
		CO4	X	X	X	X	X	2	X	1	X	3	X	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 vantage

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.

Textbooks:

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

Reference Books

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 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 23B	FUNDAMENT ALS OF DESIGN THINKING AND VENTURE CREATION	CO1	1	2	1	x	3	2	2	1	2	x	2	1	1	1
		CO2	1	2	1	1	1	2	2	1	1	x	2	2	1	1
		CO3	2	2	1	1	1	3	1	2	1	x	2	2	1	1
		CO4	2	1	1	2	2	2	x	2	1	x	2	3	1	1

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:

- Poza E J and Duagherty M S (2015) Family Business, Cengagae Learning, New Delhi.
- 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.
- Lansberg, I. (1999). Succeeding generations: Realizing the dream of families in business.Harvard Business School Press.

References:

- Bork et al. (1996). Working with family businesses: A guide for professionals. Jossey Bass Publishers.
- Dyer., W.G. (1986). Cultural change in family firms: Anticipating and managing business and family transitions. ossey-Bass Publishers.
- Miller, D and Breton, M L. (2005). Managing for the long run: Lessons in Competitive Advantages 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	1	1	2	2	2	2	2	2	X	X	1	1
		CO2	3	2	2	1	3	2	3	3	2	2	X	X	1	1
		CO3	2	3	1	1	3	2	2	3	2	2	X	X	1	1
		CO4	2	2	1	1	3	2	2	2	2	2	3	2	1	1

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:

- Louis C. Gapenski, Healthcare Finance, 6TH, Assoc. of Univ. Programs in Health Administration, 2016

References:

- Bamford Morton-Cooper Bamford Cooper Cavanagh Morton-Cooper, Excellence in Health Care Management , 1st ed, Blackwell Science Inc, 1997.
- Eric. N Berkowitz, Essentials Of Health Care Marketing-J&B, Jones And Bartlett Publishers, Inc, 2003

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
MCH19B	FINANCING AND BUSINESS DEVELOPMENT OF HOSPITALS	CO1	2	2	3	2	X	1	X	3	3	3	3	2	1	1
		CO2	3	3	3	2	X	2	2	3	2	2	3	2	1	1
		CO3	3	3	3	2	X	1	X	3	2	3	2	2	1	1
		CO4	3	2	2	3	X	1	2	3	3	3	2	2	1	1

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

Textbook:

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:

1. The Oxford Handbook of Health Communication, Behavior Change, and Treatment Adherence
2. Park's Textbook of Preventive and Social Medicine - Textbook by K. Park
3. 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	1	X	2	1	2	2	X	3	3	X	X	3	1	1
		CO2	1	X	2	1	2	2	X	3	3	X	X	3	1	1
		CO3	1	X	2	1	2	2	3	3	3	3	X	3	1	1
		CO4	1	2	2	X	1	2	1	1	2	3	X	1	1	1

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=PLFW6IRTa1g81XcfSpSurxg_IkWVTsqgR

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	3	1	2	1	3	3	X	1	X	3	1	1	1	1
		CO2	3	1	2	1	3	2	X	1	X	2	1	1	1	1
		CO3	3	2	3	1	2	2	X	1	X	2	1	1	1	1
		CO4	3	2	2	1	3	2	1	1	X	1	1	1	1	1

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, Closs, Cooper, Supply Chain Logistics Management, McGraw Hill.
2. Burt, Dobbler, Starling, World Class Supply Management, TMH.
3. Donald J Bowersox, David J Closs, Logistical Management, TMH

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 17B	FUNDAMENT ALS OF LOGISTICS	CO1	3	3	2	2	2	1	X	2	1	X	3	1	1	1
		CO2	3	3	2	2	X	1	1	2	1	1	3	X	1	1
		CO3	3	2	3	2	1	1	1	X	1	1	3	1	1	1
		CO4	3	2	3	2	1	X	1	1	1	X	3	1	1	1

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

- Marketing Research: An Applied Orientation (Paperback) by Naresh K. Malhotra
- Multivariate Methods for Marketing and Survey Research (Hardcover) by Jagdish N. Sheth

References

- Multivariate Data Analysis Joseph F. Hair, William C. Black, Barry J. Babin Pearson Education, 2010
- Market Research and Analysis (Hardcover) by Donald R. Lehman

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	1	2	3	X	1	2	3	X	1	2	3	X	1	1
		CO2	X	1	2	3	X	1	2	3	X	1	2	3	1	1
		CO3	2	X	X	2	X	X	3	X	X	3	X	X	1	1
		CO4	1	1	2	2	X	X	1	1	2	2	X	3	1	1

Course Title/Code	Descriptive Analytics /MCH132B
Course Type:	Elective
Course Nature:	Hard
L-T-P Structure	2-0-2
Credit	3
Course Objectives	The objective of this course is to make students exercise the fundamental of Statistical Analysis in Excel and R environment. They would be able to analysis data for the purpose of exploration using Descriptive and Inferential Statistics.

Course Outcomes (COs)		Mapping
CO1	To use R Studio and Excel to perform data visualization tasks	Employability
CO2	Describe key terminologies, concepts and terminologies employed in Statistical Analysis/Descriptive Analytics	Employability
CO3	Define, Calculate and Implement probability and probability distribution to solve wide variety of problems	Employability
CO4	Conduct and Interpret a variety of hypothesis tests to aid Decision making	Skill Enhancement

Section A

Introduction to Descriptive Analytics: Data visualization- Dashboards, Tools and Software’s for creating charts in Microsoft Excel & R Studio, Data Queries – Tables, Sorting and Filtering, Statistical Methods for Summarizing Data. Introduction to R Programming – R and R Studio, Basic data manipulation techniques, Data Frames and Use of various apply functions, missing values and outliers treatment.

Section B

Descriptive Statistical Methods: Population and Samples, Measures of Location – using measures of Location in Business Decisions, Measures of Dispersion, Measures of Shape, Measures of Association.

Section -C

Probability, Probability & Sampling Distributions: Experiment, Sample Space and Events, Classical Probability, General Rules of Addition, Conditional Probability, Probability Distributions. Statistical Inference and Hypothesis Testing: Hypothesis testing

Section - D

Once Sample Hypothesis Test, Two-Tailed hypothesis for the Mean, Two-Sample Hypothesis Test, Analysis of Variance (ANOVA), and Chi-Square Test. Correlation and Regression.

Text Books:

- James R. Evans, 2017, Business Analytics – Methods, Models and Decisions
- Ken Black , 2013, Business Statistics , New Delhi, Wiley

Reference Books:

- Umesh R. Hodeghatta&UmeshaNayak , Business Analytics using R – A practical Approach.

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 32B	Descriptive Analytics	CO1	2	1	3	3	X	1	1	2	X	2	2	2	1	2
		CO2	2	X	2	3	3	1	2	2	1	X	2	1	2	2
		CO3	1	2	2	2	2	X	1	2	2	X	2	1	X	1
		CO4	2	2	2	2	2	2	1	3	2	1	2	2	2	1

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	DMC	HARD	ELECTIVE	3	0	0	3	3
MCH239B	MANAGEMENT ACCOUNTING	DMC	HARD	ELECTIVE	3	0	0	3	3
MCH205B	INVESTMENT ANALYSIS AND PORTFOLIO	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. Soni A(2018).Business Law. Regal Publications

References:

1. Kuchhal M C and Kuchhal V. (2013), Business Law, 6thed, Vikas Publishing House, New Delhi
2. Bagrial, A (2012).Company Law, 12thed, Vikas Publishing House
3. 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	
			1	2	3	4	5	6	7	8	9	0	1	2	1	2	
MCH201B	BUSINESS LAW	CO1	2	2	X	X	3	2	1	2	1	X	X	1	X	X	
		CO2	2	2	X	X	3	2	X	2	X	X	X	X	X	X	X
		CO3	2	2	X	X	3	2	X	2	1	X	X	X	X	X	1
		CO4	2	2	X	X	3	2	X	2	X	X	X	X	X	X	X

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
			1	2	3	4	5	6	7	8	9	0	1	2	1	2	
ECH212B	MANAGEMENT INFORMATION SYSTEMS	CO1	2	3	2	X	X	1	X	X	2	1	1	1	X	X	
		CO2	3	3	3	2	X	1	X	X	2	1	1	1	X	X	
		CO3	2	3	2	X	X	1	X	X	2	1	1	1	X	X	
		CO4	3	3	3	2	X	1	X	X	2	X	1	1	X	X	

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	P
			O1	O2	O3	O4	O5	O6	O7	O8	O9	O10	O11	O12	O13	O14	O15
MCH217B	RESEARCH METHOD OLOGY	CO1	2	2	3	2	3	2	X	3	2	2	2	X	1	2	
		CO2	2	2	3	X	3	2	2	3	2	2	2	1	1	X	
		CO3	2	2	3	3	3	2	2	3	X	2	2	1	X	2	
		CO4	3	3	3	3	3	X	2	3	2	2	2	1	2	1	

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. 4th ed, McGraw-Hill in

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	
MCH203B	OPERATIONS MANAGEMENT	CO1	2	3	3	2	2	X	3	3	1	2	x	1	1	1	
		CO2	2	2	X	2	2	3	2	1	3	X	x	x	x	x	
		CO3	3	3	2	2	3	2	X	3	2	3	1	x	x	1	
		CO4	2	3	3	2	3	2	3	1	2	3	2	1	1	x	

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

3.1 Personal pronouns

3.2 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

Reference Books:

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

CO-PO Mapping

Course Code	Course	Course Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
GERMAN FLS102	GERMAN -I	CO1	X	X	X	X	3	X	2	1	X	X	X
		CO2	X	X	X	X	3	X	1	2	X	X	X
		CO3	X	X	X	X	2	X	1	3	X	X	X
		CO4	X	X	X	X	2	X	3	1	X	X	X
		CO5	X	X	X	X	2	X	1	3	X	X	X
		CO6	X	X	X	X	2	X	1	3	X	X	X

	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	

PART-A

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.

PART-B

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/Reference Books:

1. ¡Ole!-Langers
2. ¡Uno, dos, tres.....

CO-PO Mapping

Course Code	Course	Course Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
Spanish FLS101	SPANIS H-I	CO1	X	X	X	X	2	X	3	2	X	X	X
		CO2	X	X	X	X	2	X	1	2	X	X	X
		CO3	X	X	X	X	2	X	3	2	X	X	X
		CO4	X	X	X	X	3	X	2	3	X	X	X
		CO5	X	X	X	X	3	X	2	3	X	X	X
		CO6	X	X	X	X	3	X	2	3	X	X	X

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.	

PART-A

Section A - Saluer et épeler l'alphabet

- 1.1 Les Salutations & forms of politeness
- 1.2 Alphabets

Section B- Usage de Vous et de Tu

- 2.1 Taking leave expressions
- 2.2 Les pronomssujets
- 2.3 Basic Questions

Section C- Présentez-vous

- 3.1 Les verbes ER
- 3.2 Self introduction
- 3.3 Décrivezvotreami(e)

PART-B

Section D- Identifier un nombre, compter

- 4.1 Les noms
- 4.2 VerbesAvoir, Etre, Aller & Faire
- 4.3 Les nombres

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/Reference Books/ Suggested Readings:

- 1.Alter Ego Level One Textbook, Annie Berthet, Catherine Hugot, Hachette Publications
- 2.Apprenons Le Francais II & III,Mahitha Ranjit, 2017, Saraswati Publications

Weblinks:

www.bonjourfrance.com

www.allabout.com

CO-PO Mapping

Course Code	Course	Course Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
FLS103	FRENCH-I	CO1	X	X	X	X	3	X	2	1	X	X	X
		CO2	X	X	X	X	3	X	2	X	X	X	X
		CO3	X	X	X	X	2	X	1	3	X	X	X
		CO4	X	X	X	X	2	X	X	3	X	X	X
		CO5	X	X	X	X	3	X	2	X	X	X	X
		CO6	X	X	X	X	3	X	1	2	X	X	X

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 Environment

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

Miller G T and Spoolman S(2010).Environmental Science.Brooks/Cole

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

ENVIRONMENTAL SCIENCES PRACTICAL –FIELD WORK

- 1 Visit to a local area to document environmental assets- river/forest/grassland/hill/mountain
- 2 Visit to a local polluted site-Urban/Rural/Industrial/Agricultural
- 3 Study of common plants, insects, birds.

4 Study of simple ecosystems-pond, river, hill slopes, etc. (Field work Equal to 5 lecture hours)

References:

- Saha, B. Environmental Sciences and Sustainable Development, International Conference on Environmental Science and Sustainable Development- 2015, World Scientific Publishing Co. Pvt. Ltd, 2015.
- Thakur, V. A Text Book of Environmental Sciences, Scientific Publishers, 2012
- Granjou, C. Environmental Changes: The Futures of nature, ISTE Press Elsevier, 2016.

Courses Code	Courses	Course Outcomes	P	P	P	P	P	P	P	P	P	P	P	P	P	PS	PS
			O1	O2	O3	O4	O5	O6	O7	O8	O9	O10	O11	O12	O1	O2	
CHH137	ENVIRONMENTAL SCIENCES	CO1	1	2	1	x	3	2	2	1	2	x	2	1	x	x	
		CO2	1	2	1	1	1	2	2	1	1	x	2	2	x	x	
		CO3	2	2	1	1	1	3	1	2	1	x	2	2	x	x	
		CO4	2	1	1	2	2	2	x	2	1	x	2	3	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 familiarise students to nature and scope of various financial services

Course Outcomes (COs)		Mapping
CO1	To familiarise students to nature and scope of various financial services	Employability
CO2	To understand the functions and method of floatation of new issues	Employability
CO3	To understand the role of SEBI and Depository participants in Financial Services	Employability
CO4	To be able to formulate 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,

Textbooks

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	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
		MCH234B	FINANCIAL SERVICES	CO1	3	3	2	2	3	2	X	3	2	3	3	2
		CO2	3	3	2	2	3	2	1	3	2	3	3	2	X	1
		CO3	2	2	2	2	3	3	X	3	2	3	3	2	1	X
		CO4	2	3	3	3	2	1	1	3	2	2	3	2	1	1

Course Title/Code	Management Accounting/ MCH239B
Course Type:	Core (Allied)
Course Nature:	Hard
L-T-P Structure	3-0-0
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	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
MCH239B	Management Accounting	CO1	3	3	2	2	3	2	X	3	2	3	3	2	1	1
		CO2	3	3	2	2	3	2	1	3	2	3	3	2	X	1
		CO3	2	2	2	2	3	3	X	3	2	3	3	2	1	X
		CO4	2	3	3	3	2	1	1	3	2	2	3	2	X	1

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	O10	O11	O12	O13	O14
MCH205B	INVESTMENT ANALYSIS AND PORTFOLIO MANAGEMENT	CO1	2	3	1	2	2	X	2	3	X	1	2	3	1	1
		CO2	2	1	3	2	2	X	2	3	X	1	2	3	1	1
		CO3	3	2	1	2	2	X	1	2	X	1	2	3	1	1
	CO4	2	3	1	2	3	X	2	2	X	1	2	3	1	1	

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 O1	P O2	P O3	P O4	P O5	P O6	P O7	P O8	P O9	P O10	P O11	P O12	PS O1	PS O2
MCH241B	FAMILY BUSINESS GOVERNANCE	CO1	3	3	X	1	3	3	2	2	2	2	3	2	1	2
		CO2	3	3	1	X	3	3	3	2	2	X	3	2	1	2
		CO3	3	3	X	1	3	3	3	2	2	2	3	2	1	2
		CO4	3	2	1	X	2	3	2	2	2	2	3	2	X	2

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
4. Case: HBS Case Studies #618051 and #619079 (2019) JD: Envisioning the Future of Retail (A and B) by Feng Zhu and Shirley Sun

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 2B	Business Modeling	CO1	1		X	1	2	2	X	3	3	X	X	2	1	1
		CO2	1	1	X	X	2	2	X	3	3	X	X	X	1	1
		CO3	1	1	X	X	1	1	3	3	3	3	X	X	1	1
		CO4	X	X	X	X	1	2	1	1	X	3	X	X	1	1

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 theatre , burn unit, nursing services and administration.

SECTION-D

Specialty and super specialty Services and Utility services .

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	PS	PS
			O1	O2	O3	O4	O5	O6	O7	O8	O9	0	11	O1	O2		
MCH210B	CLINICAL SERVICES	CO1	3	2	2	x	1	2	2	1	2	x	3	2	2	x	
		CO2	3	2	2	x	1	1	1	1	2	x	3	2	2	x	
		CO3	2	3	2	x	1	1	1	1	2	x	2	3	1	x	
		CO4	3	2	2	x	1	2	2	1	2	x	3	2	1	x	

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. Design Media Publishing Limited
2. Levin D (2013). General Hospitals Planning and Design. Design Media Publishing Limited

References:

1. Sonu Goel, Anil Kumar Gupta, Amarjeet Singh, "Hospital Administration," Elsevier India, 2013
2. BM Sakharkar, "Principles & Planning of Hospital administration," 2nd ed, Jaypee, 2009.

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
MCH211B	PLANNING AND DESIGN OF HOSPITALS	CO1	2	2	1	x	1	2	1	1	2	1	3	2	2	x
		CO2	2	2	1	x	1	2	1	1	2	1	3	2	2	x
		CO3	2	2	1	x	1	2	1	1	2	1	3	2	2	x
		CO4	2	2	1	x	1	2	1	1	2	1	3	2	2	x
		CO5	2	2	1	x	1	2	1	1	2	1	3	2	2	x

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>
<u>CO1</u>	To introduce the basic principles and methods of epidemiology	Skill Enhancement
<u>CO2</u>	Demonstrate a basic understanding of epidemiologic methods and study design.	Employability
<u>CO3</u>	To provide a structured method for organizing and analyzing raw data	Employability
<u>CO4</u>	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 Outcome s	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
MCH237B	EPIDEMIOLOG Y	CO1	3	2	2	2	1	2	2	1	2	X	1	1	1	1
		CO2	3	2	2	2	1	2	2	1	2	X	1	1	1	1
		CO3	3	2	2	2	1	2	2	1	2	X	1	1	1	1
		CO4	2	2	1	1	1	2	2	1	2	X	1	1	1	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., & BesterfieldSacre, 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										
			1	2	3	4	5	6	7	8	9	0	1	2	1	0	1	0	1	0	1	0	
MCH208B	TOTAL QUALITY MANAGEMENT	CO1	3	3	3	2	2	1	1	2	1	1	3	1	x	x							
		CO2	3	3	2	2	X	1	1	2	X	1	3	1	x	x							
		CO3	3	2	3	2	1	X	1	1	1	1	3	1	x	x							
		CO4	3	2	3	2	X	1	1	1	1	1	3	1	x	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:

1. Frazelle E (2001). World-Class Warehousing and Material Handling. McGraw-Hill Education
2. 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	P	P	P	P	P	P	P	P	P	P	P	P	P	PS	PS
			O1	O2	O3	O4	O5	O6	O7	O8	O9	O10	O11	O12	O1	O2	
MCH209B	WAREHOUSE MANAGEMENT	CO1	1	2	2	X	3	2	X	X	X	X	1	1	1	1	
		CO2	3	X	3	X	2	2	X	X	2	X	2	2	3	2	
		CO3	X	X	X	2	2	1	3	X	2	X	2	2	1	X	
		CO4	X	X	X	3	2	3	2	2	X	3	2	2	3	X	

Course Title/Code	Python Programming/ MCH 244B
Course Type:	ELECTIVE
Course Nature:	Hard
Credit	3
L-T-P Structure	3-0-0
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.	Skill Enhancement

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 Book:

1. R.Nageswara Rao, 2018, Core Python Programming, Dreamtech.
2. John Hearty, 2016, Advanced Machine Learning with Python, Packt.

References:

1. Jake VanderPlas, 2016, Python Data Science Handbook: Essential Tools for Working with Data, O'Reilly.
2. Mark Lutz, 2010, Programming Python, O'Reilly.
3. Tim Hall and J-P Stacey, 2009, Python 3 for Absolute Beginners, Apress.

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
MCH244B	Python Programming	CO1	2	2	X	X	3	2	1	2	1	X	1	2	1	2
		CO2	2	2	X	X	3	2	X	2	X	X	2	1	2	2
		CO3	2	2	X	X	3	2	X	2	1	X	2	1	1	X
		CO4	2	2	X	X	3	2	X	2	X	X	2	2	1	1
		CO5	2	2	X	X	3	2	1	2	1	X	1	2	1	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. Pramod J. Sadalage, Martin Fowler, 2012, *No SQL Distilled*, Addison Wesley.
2. A.Silberschatz, H.F. Korth, S.Sudarshan, 2006, *Database System Concepts*, McGraw Hill.
3. Raghurama Krishnan, Johannes Gehrke, 2003, *Database Management Systems*, McGraw Hill.

References

1. Guy Harrison, 2015, *Next Generation Databases: No SQL and Big Data*, Apress.
2. RamezElmasri, ShamkatB.Navathe, 2013, *Database Systems*, Pearson.

Courses Code	Courses	Course Outcomes	P	P	P	P	P	P	P	P	P	P	P	P	PS	PS
			O1	O2	O3	O4	O5	O6	O7	O8	O9	O10	O11	O12	O1	O2
MCH245B	SQL	CO1	2	2	X	X	3	2	1	2	1	X	1	2	1	2
		CO2	2	2	X	X	3	2	X	2	X	X	2	1	2	2
		CO3	2	2	X	X	3	2	X	2	1	X	2	1	1	X
		CO4	2	2	X	X	3	2	X	2	X	X	2	2	1	1

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	ECE	HARD	ELECTIVE	2	0	2	4	3

	SYSTEMS								
MCH221B	SUMMER INTERNSHIP	DMC	SOFT	CORE	0	0	0	0	4
Entrepreneurship & Family Business Specialization									
MCH222B	MANAGING ENTREPRENEURIAL GROWTH AND STRATEGY	DMC	HARD	ELECTIVE	3	0	0	3	3
MCH253B	APPLIED ENTREPRENEURSHI P PROGRAM	DMC	SOFT	Elective	1	0	2	3	3
MCH 225B	APPLIED ENTREPRENEURSHI P PROJECT	DMC	NTCC	Elective	0	0	0	0	8
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
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	4	2
MCH216B	PERFORMANCE AND COMPENSATION MANAGEMENT SYSTEMS	DMC	HARD	ELECTIVE	3	0	0	3	3
MCH254B	APPLIED INDUSTRY PROJECT-BA	DMC	NTCC	ELECTIVE	0	0	0	0	4
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. 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 Joachen Wirtz, Patricia Chew and Christopher Lovelock, Essentials of Services Marketing, 2nd ed, Pearson Education, South Asia Ltd, 2013.
- 2 Adrian Payne, The Essence of Marketing New Delhi, Prentice Hall of India Pvt. Ltd., 2001.
- 3 Christopher Lovelock, Services Marketing, 4th edn, Pearson Education Asia, 2001.
- 4 Christopher Lovelock and Joachen Wirtz, Services Marketing: People, Technology, Strategy, Prentice Hall, 7th edition, 2011
- 5 K. Douglas Hoffman, John. E.G. Bateson, Essentials of Service Marketing, 2nd edn, Thomson – South Western, 2002.
- 6 Helen Woodroffe – Services Marketing, Mcmillan India Ltd., 1997.
- 7 S.M. Jha, Services Marketing, New Delhi Himalaya Publishing House, 2000.

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

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	P	
			1	2	3	4	5	6	7	8	9	0	1	2	1	2	1	2
MCH236B	CORPORATE SOCIAL RESPONSIBILITY & SUSTAINABLE DEVELOPMENT	CO1	X	2	3	3	3	3	2	2	X	2	3	1	2	2		
		CO2	2	2	3	X	2	2	2	2	3	2	3	X	2	2		
		CO3	2	2	2	3	3	3	2	2	2	2	3	1	2	2		
		CO4	2	2	3	3	2	2	3	3	3	2	3	1	2	2		

MENT																				
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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, Introduction to Banking, 2nd ed., Pearson 2015.
2. Mishkin and Eakins, Financial Markets and Institutions, 8th ed., Pearson, 2015.
3. Simpson, Financial Markets, Banking, and Monetary Policy, Wiley, 2014.

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	O1	O2	
MCH219B	MANAGEMENT OF BANKING AND FINANCIAL INSTITUTIONS	CO1	1	2	3	X	1	2	3	X	1	2	X	X	1	1	
		CO2	1	2	3	X	1	2	3	X	1	2	1	X	1	1	
		CO3	X	1	2	3	X	1	2	3	X	1	X	1	1	1	
		CO4	X	1	X	2	X	X	1	X	2	X	X	X	1	1	

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	PS	PS
			O1	O2	O3	O4	O5	O6	O7	O8	O9	O10	P0	O12	O1	O2	
MCH235B	CORPORATE ACCOUNTING	CO1	3	2	X	1	3	3	2	1	2	2	X	2	1	1	
		CO2	2	2	3	1	2	2	3	X	3	2	3	3	1	1	
		CO3	3	2	1	X	2	1	2	1	2	2	1	2	1	1	
		CO4	2	3	1	1	3	1	2	1	2	2	X	2	1	1	

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.

Textbooks:

- Sanjay Phadke, 1st ed, Fintech Future: The Digital Dna Of Finance, Sage Publications India Pvt. Ltd., 2020.

References:

- David LEE KuoChuen, DING Ding, GUAN Chong, Financial Management in the Digital economy, 1st ed, World Scientific Publishing Co Pte Ltd., United States of America, 2022. ISBN: 9789811231452
- 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	PS	PS
			O1	O2	O3	O4	O5	O6	O7	O8	O9	O10	O11	O12	O1	O2
MCH240B	Digital Finance	CO1	1	2	3	X	1	2	3	X	1	2	3	X	1	1
		CO2	X	1	2	3	X	1	2	3	X	1	2	X	1	1
		CO3	1	2	1	X	2	X	1	X	2	X	1	X	1	1
		CO4	1		3	3	X	2	2	X	3	X	3	X	1	1

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

SYSTEMS																			
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Course Title/Code	RELATIONAL DATABASE MANAGEMENT SYSTEMS/CSH216B
Course Type:	Core (Departmental)
Course Nature:	Hard
L-T-P Structure	2-0-2
Credits	3
Course Objectives	Understand and apply core knowledge in Management Information Systems (MIS)

Course Outcomes (COs)		Mapping
CO1	Understand the basic concepts of Database and various data model used in database design concepts and architecture	Employability
CO2	Understands the importance of computer in various fields of management and administration	Skill Enhancement
CO3	Apply the knowledge of SQL and construct queries using SQL on databases	Employability
CO4	Understanding the basics of report writing tool in dbms and pl/sql	Skill Enhancement

SECTION A

Basic Concepts – Traditional file oriented approach, Disadvantages of simple file system, Database approach, Advantages of Database approach, Database Management Systems (DBMS), Components of DBMS Environment, Advantages and Disadvantages of DBMS, DBMS Architecture, Data Independence, Data Models, Keys.

SECTION B

Computers: An introduction, use of computer in business, advantages and disadvantages, computerized system for inventory control, payroll order, banking and accounting. SQL using ORACLE

SECTION C

Introduction to SQL, Components of SQL: DDL, DML & DCL, Data types in SQL, DDL Commands: Create, Alter, Drop, Truncate, Creating queries with DDL commands and implementing constraints. DML Commands: Insert, Delete, Update, Select, Select with Group

SECTION D

Order by. Creating queries with DML commands, Operators: Set and Logical, SQL functions: Numeric functions, Scalar functions and Group functions Report-Writing: Commands, advantages of Report writing.

Computer Lab: SQL and PL/SQL using Oracle: Introduction to SQL PLUS environment, Executing and Editing SQL Commands, Creating and executing simple PL/SQL programs. OR Any RDBMS Package like MS-Access

Textbooks:

1. George Koch, Kevin Loney, ORACLE 9I computer References, 1sted, Tata Mc-Graw Hill, 2002
2. Raghu Ramakrishnan, Johannes Gehrke, Database Management, McGraw-Hill, 2003

References:

1. RamezElmasri, Shamkant B. Navathe, Fundamentals of Database Systems , 5th ed, Pearson Education, 2008
2. C. J. Date , An Introduction to Database Systems , Addison Wesley (Singapore) Pvt. Ltd., New Delhi,

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	
CSH216B	RELATIONAL DATABASES	CO1	2	2	2	X	2	2	2	2	2	2	2	2	2	1	1
		CO2	2	2	2	2	2	2	2	X	2	2	2	2	2	1	1
	MANAGEMENT SYSTEMS	CO3	3	X	3	3	3	3	3	3	3	3	3	3	3	1	1
		CO4	2	2	2	2	2	2	2	2	X	2	2	2	2	1	1

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. Lisa K. Gundry , Jill R. Kickul , Entrepreneurship Strategy, Changing Patterns in New Venture Creation, Growth, and Reinvention, Sage Publications , 2007.
2. Jared D. Harris, Michael J. Lenox. The Strategist Toolkit, Darden Business Publishing, 2013
3. Jeanne Liedtka, Andrew King, Kevin Bennett, Solving Problems with Design Thinking – Ten Stories of What Works , Columbia Business School Publishing, 2013
4. Michael E. Dobbs, (2014) "Guidelines for applying Porter's five forces framework: a set of industry analysis templates", Competitiveness Review, Vol. 24 Issue: 1, pp.32-45.
5. Porter, M. E. The Competitive Advantage: Creating and Sustaining Superior Performance. NY: Free Press, 1985

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

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	O15
MCH238 B	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
		CO3	3	2	2	2	1	2	2	2	2	X	2	1	2	3	3
		CO4	3	2	2	2	X	2	2	2	2	1	2	X	2	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	PS	PS
			O1	O2	O3	O4	O5	O6	O7	O8	O9	O10	O11	O12	O1	O2
MCH225B	Applied Entrepreneurship Project	CO1	2	3	X	1	3	1	X	1	2	1	2	2	1	1
		CO2	2	3	1	X	3	1	1	1	2	X	2	1	1	1
		CO3	2	3	X	2	3	1	1	1	2	2	3	1	1	1
		CO4	2	3	1	2	3	1	X	1	2	1	3	1	1	1

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

Definition and Importance of Material Management, Principles of Material Management, Material Management Cycle: Process & Documentation

SECTION B

Procurements: Centralized vs Decentralized, Concepts of Inventory Control

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

SECTION C

Inventory Replenishment

SECTION D

Challenges of Material Management

Text Books:

- Goel, S, Gupta, A K and Singh, A (2013) "Hospital Administration," Elsevier India,

References:

- Guide Book to Accreditation Standards for Hospitals 4thed., NABH, 2016.
- BM Sakharkar, "Principles & Planning of Hospital administration," 2nd ed, Jaypee, 2009.

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
MCH226B	MATERIAL & INVENTORY MANAGEMENT	CO1	3	1	2	2	1	1	2	1	2	X	X	X	1	1	
		CO2	2	1	2	2	1	1	2	1	2	X	X	X	1	1	
		CO3	2	2	2	1	1	1	2	2	2	X	X	X	1	1	
		CO4	3	1	2	2	1	1	2	1	2	X	X	X	1	1	

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,, NABH, 2016.
- 2.Sonu Goel, Anil Kumar Gupta, Amarjeet Singh, “Hospital Administration,” Elsevier India,2013
- 3.BM Sakharkar, “Principles & Planning of Hospital administration,” 2nd ed, Jaypee, 2009.

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	1	2	1	2
MCH227B	HEALTHCARE INFORMATION SYSTEM	CO1	3	2	2	2	1	2	2	1	2	1	X	X	1	1		
		CO2	3	2	2	2	X	1	2	1	2	1	X	X	1	1		
		CO3	3	2	2	2	1	1	2	1	2	1	X	X	1	1		
		CO4	3	2	2	2	X	1	2	1	2	1	X	X	1	1		

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., NABH, 2016.
2. Sonu Goel, Anil Kumar Gupta, Amarjeet Singh, “Hospital Administration,” Elsevier India,2013
3. BM Sakharkar, “Principles & Planning of Hospital administration,” 2nd ed, Jaypee, 2009.

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

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, 4th ed, 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	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
MCH229B	HEALTHCARE & HUMAN RESOURCE MANAGEMENT	CO1	1	2	1	1	2	X	2	1	2	X	X	X	1	1
		CO2	X	3	2	1	3	1	2	2	1	1	2	2	1	1
		CO3	2	1	3	2	3	X	2	2	1	X	X	1	1	1
		CO4	X	3	X	3	2	2	2	X	2	3	2	X	1	1

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
			O1	O2	O3	O4	O5	O6	O7	O8	O9	O10	O11	O12	O13	O14
MCH231B	PROJECT MANAGEMENT	CO1	1	2	2	X	3	2	X	X	X	X	1	1	1	1
		CO2	3	X	3	X	2	2	X	3	2	X	2	2	1	1
		CO3	X	2	2	2	2	1	3	X	2	X	2	2	1	1
		CO4	2	X	X	3	2	3	2	2	3	3	2	2	1	1

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., Materials Management: Procedures, Text and cases, Prentice Hall of India Pvt. Ltd., New Delhi.
2. Gopalakrishnan, P. and Sundareson, M., Materials Management: An Integrated Approach, Prentice Hall of India Pvt. Ltd., New Delhi.
3. Varma, M.M., Essentials of Storekeeping and Purchasing, Sultan Chand and Sons, New Delhi.

References:

1. Shah N.M. An Integrated concept of Materials Management, Indian Institute of Materials Management, Baroda Branch, Baroda.
2. Sharma S.C., Material Management and Materials Handling, Khanna Publishers, New Delhi.
3. Arnold, Chapman and Ramakrishnan, Introduction to Materials Management 5th ed., 2007 Pearson Education, Inc.
4. Pooler Victor H. Purchasing and Supply Management, Creating the Vision, New York, Chapman & Hall, 19997.

Courses Code	Courses	Course Outcomes	P	P	P	P	P	P	P	P	P	P	P	P	PS	PS
			O1	O2	O3	O4	O5	O6	O7	O8	O9	O10	O11	O12	O1	O2
MCH232B	FREIGHT TRANSPORT MANAGEMEN T	CO1	3	2	3	2	1	1	2	X	1	3	1	2	1	1
		CO2	3	2	2	X	2	1	2	1	1	3	X	2	1	1
		CO3	2	3	2	2	1	2	X	1	1	2	1	2	1	1
		CO4	2	3	2	X	1	1	1	1	X	3	1	2	X	1

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	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	O 1	O 2
MCH246B	Operation Research	CO1	3	2	3	3	2	X	3	2	2	2	X	1	1	1
		CO2	3	3	3	2	2	X	3	2	2	2	X	2	1	1
		CO3	3	3	3	3	2	X	3	2	2	2	X	1	1	1
		CO4	3	3	3	3	3	X	3	3	3	3	X	1	1	1

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	
			O1	O2	O3	O4	O5	O6	O7	O8	O9	O10	O11	O12	PS O1	PS O2
MCH247B	SAS & TABLEAU	CO1	3	2	3	3	2	X	3	2	2	2	X	1	1	1
		CO2	3	3	3	2	2	X	3	2	2	2	X	2	1	1
		CO3	3	3	3	3	2	X	3	2	2	2	X	1	1	1
		CO4	3	3	3	3	3	X	3	3	3	3	X	1	1	1

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	SKILL ENHANCEMENT UG-II	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

MCH338B	NEW AGE ENTREPRENEURSHIP	DMC	HARD	ELECTIVE	3	0	0	3	3
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MCH33 9B	INTERNATIONAL FAMILY BUSINESS MODELS	DMC	HARD	ELECTIVE	3	0	0	3	3
MCH33 7B	COMPANY LAW	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									
MCH31 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
MCH33 7	COMPANY LAW	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
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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
MCH34 5B	FINANCE 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:

- Pro HTML5 and CSS3 Design Patterns Paperback – 2012 by Dionysios Synodinos, Michael Bowers, Victor Sumner
- Murach's HTML5 and CSS3 Paperback – 2012 by Zak Ruvalcaba
- Dive into HTML5 by Mark Pilgrim.

Reference Book:

- Hello! HTML5 & CSS3: A user-friendly reference guide Paperback by Rob Crowther.
- HTML5 Guidelines for Web Developers by Klaus Förster.

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
CSW351B	Website Designing	CO1	X	X	X	1	2	X	X	2	2	1	X	X	2	2
		CO2	X	X	X	2	3	X	1	2	2	1	X	1	2	2
		CO3	X	X	X	2	3	X	2	3	3	2	X	2	2	2
		CO4	X	X	X	2	3	X	2	3	3	3	X	2	2	2

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. International Business, Charles W L Hill & Arun K.Jain (Tata McGraw-Hill, 6th edition)
2. International Business, Cherunilam, Francis, Text and Cases (PHI, Fourth edition (Revised))
3. International Business, Justin Paul (Prentice Hall)
4. International Business, Dr. P. Subba Rao (Himalaya Publications, 2nd Revised Enlarged edition)

Courses Code	Courses	Course Outcome s	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
MCH302B	INTERNATIONAL BUSINESS	CO1	2	3	x	x	3	2	x	x	1	X	x	x	2	2
		CO2	3	x	x	2	3	3	x	2	2	2	x	x	2	2
		CO3	x	x	3	2	3	3	2	3	3	3	x	x	2	2
		CO4	x	x	3	x	2	X	3	2	2	2	x	x	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
- Kazmi Azhar, Business Policy and Strategic Management, Tata McGraw Hill, New Delhi, 2004

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
MCH303B	STRATEGIC MANAGEMENT	CO1	X	3	2	1	2	3	2	2	1	1	X	X	2	2
		CO2	2	2	X	2	1	2	2	3	2	2	1	X	2	2
		CO3	3	2	3	2	X	2	3	2	2	2	X	X	2	2
		CO4	2	X	2	3	2	2	2	3	3	3	X	X	2	2

Course Title/Code	PROFESSIONAL DEVELOPMENT PROGRAMME V /CDS305B
Course Type:	CORE (CDC)
Course Nature:	SOFT
L-T-P Structure	1-0-1
Credit	0
Course Objectives	To give overview about professional development to the students

Course Outcomes (COs)		Mapping
CO1	To give students the exposure to 21 st century skills	Skill Enhancement
CO2	To understand the interview process	Skill Enhancement
CO3	To create and deliver presentations confidently with effective use of body language	Skill Enhancement
CO4	To understand how to be professional	Skill Enhancement
CO5	To improve writing as well as speaking skills of students	Skill Enhancement

SECTION A

Introduction to Social Responsibility: CSR Initiatives of various companies, Why CSR.

SECTION B

21st Century Skills: Creativity, Change Management, Stress Management, Cross Cultural Communication, Team Building

SECTION C

Written and Speaking Skills: Email Writing, Cover Letter, Creating and delivering Presentations, Group Discussions

SECTION D

Interviews: Resume Writing, Researching the employer, Power Dressing, Managing Interviews

References:

1. Presenting to Win: The Art of Telling Your Story
Book by Jerry Weissman
2. 21st Century Skills: Learning for Life in Our Times
Book by Bernie Trilling and Charles Fadel
3. Everybody Writes: Your Go-To Guide to Creating Ridiculously Good Content
By Ann Handley

Courses Code	Courses	Course Outcome s	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
CDS305B	PROFESSIONAL DEVELOPMENT PROGRAMME V	CO1	X	X	X	X	1	1	2	1	1	1	X	X	1	1
		CO2	X	X	X	1	X	X	1	X	2	X	X	X	1	1
		CO3	X	1	X	X	X	X	2	X	3	X	X	X	1	1
		CO4	X	X	X	X	X	X	2	X	3	X	X	X	1	1
		CO5	X	X	X	1	X	X	X	X	3	X	X	X	1	1

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	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 337B	COMPANY LAW	CO1	2	1	1	X	3	3	X	3	1	X	X	X	2	2
		CO2	2	1	1	X	3	3	X	3	X	X	X	X	2	2
		CO3	2	2	1	1	3	3	X	3	X	X	2	1	2	2
		CO4	2	2	1	1	3	3	X	3	1	X	X	X	2	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. 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	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
MCH304B	FINANCIAL DERIVATIVES	CO1	2	3	2	1	2	X	2	3	X	2	2	2	1	1
		CO2	2	3	1	2	2	X	2	3	X	2	2	1	1	1
		CO3	3	2	2	1	3	X	1	2	X	2	2	2	1	1
		CO4	2	3	2	1	2	X	2	3	X	2	2	1	1	1

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 oftax-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)

Textbooks:

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	PS	PS
			O1	O2	O3	O4	O5	O6	O7	O8	O9	O0	O1	O1	O1	O2
MCH305B	BUSINESS TAXATION	CO1	2	3	2	2	3	2	2	1	2	1	2	2	1	1
		CO2	2	2	2	X	X	3	2	X	2	2	2	1	1	1
		CO3	2	2	2	X	2	2	3	X	2	3	2	2	1	1
		CO4	3	3	2	X	2	2	X	X	2	2	2	1	1	1

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

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.

Textbooks:

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.: Takeovers, Restructuring and Corporate Governance, (2nd ed.). Pearson Education
 2. Gupta, Manju (2010): Contemporary Issues in Mergers and Acquisitions. Himalaya Publishing
- Readings:
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, Ravi, (2013): Merger and Acquisitions Corporate Restructuring, Strategy and Practices, (2nd ed.). International Book House Pvt. Ltd.

Courses Code	Courses	Course Outcome s	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
MCH306B	MERGERS AND ACQUISITIONS	CO1	2	2	1	2	3	3	2	3	1	1	2	1	1	1
		CO2	1	2	1	3	3	2	X	2	X	1	3	X	1	1
		CO3	1	2	2	3	3	2	X	3	X	X	3	X	1	1
		CO4	1	2	2	3	3	1	X	3	X	X	3	X	1	1

Course Title/Code	New Age Entrepreneurship/MCH306B
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	Understand the characteristics and importance of meaning & concept of New Age Entrepreneurship.	Entrepreneurship.
CO2	Understand and apply Venture Conceptualization and Business Planning to create a viable business.	Entrepreneurship.
CO3	Understanding & creating sectoral opportunities for viable enterprises	Entrepreneurship.
CO4	Understanding the alignment of 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

Reference Books:

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	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
MCH306B	New Age Entrepreneurship	CO1	2	3	X	1	3	1	1	1	2	1	2	2	2	2
		CO2	2	3	1	1	3	X	1	1	2	1	2	X	2	2
		CO3	2	3	X	2	3	1	1	1	2	2	3	1	2	2
		CO4	2	3	1	2	3	1	1	X	2	1	3	1	2	2

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.

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.

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 Book

Ernesto J. Poza and Mary S. Duagherty(2015) Family Business, Cengagae Learning, New Delhi.

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:

Bork, Jaffe, Lane, Dashew, Heisler (1996). Working with family businesses: A guide for professionals. Jossey Bass Publishers.

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
			O1	O2	O3	O4	O5	O6	O7	O8	O9	O0	O1	O2	O1	O2
MCH339B	Internatona l family business models	CO1	2	3	1	X	3	1	1	1	2	1	2	2	1	1
		CO2	2	3	1	1	3	X	1	1	2	X	2	1	1	1
		CO3	2	3	1	2	3	1	1	1	2	2	3	1	1	1
		CO4	2	3	1	2	3	1	1	X	2	1	3	X	1	1

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 Mediciam – Individual and Family floater, Overseas Mediciam 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				
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
MCH310B	HEALTH CARE INSURANCE & MANAGEMENT CARE (HCM)	CO1	2	2	3	X	2	2	2	2	2	2	1	X	X	1	1
		CO2	3	2	X	X	3	2	2	2	2	2	2	X	X	1	1
		CO3	3	2	X	X	2	2	2	2	2	2	2	X	X	1	1
		CO4	2	2	X	X	2	3	2	2	2	2	2		X	X	1

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	3	2	2	2	1	x	1	1	2	1	2	x	1	1		
		CO2	2	2	1	2	1	x	1	2	2	1	2	x	1	1		
		CO3	2	2	2	1	1	x	1	2	2	1	2	x	1	1		
		CO4	3	2	2	3	1	x	1	2	2	1	2	x	1	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 Medclaim 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	P	P	
			O1	O2	O3	O4	O5	O6	O7	O8	O9	O10	O11	O12	O13	O14	O15	O16	
MCH312B	LEGAL & ETHICAL ISSUES IN HEALTH CARE	CO1	2	2	1	1	3	2	1	3	1	X	3	1	1	1			
		CO2	2	2	X	1	3	2	1	3	1	1	3	1	1	1			
		CO3	2	2	2	1	3	2	1	3	X	1	3	1	1	1			
		CO4	2	2	2	2	3	2	X	3	1	2	3	2	1	1			

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	O	P	P	P	P
			O1	O2	O3	O4	O5	O6	O7	O8	O9	O0	O1	O2	O1	O2	O1
MCH313B	LOGISTICS AND INTERNATIONAL SUPPLY CHAIN MANAGEMENT	CO1	3	3	3	2	X	1	1	2	1	1	2	X	1	1	
		CO2	3	3	2	2	1	1	1	2	X	1	2	1	1	1	
		CO3	3	3	3	2	1	X	1	2	1	1	2	1	1	1	
	CO4	3	3	2	X	1	1	1	2	1	X	2	1	1	1		

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.

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. Bowen, D. E., Chase, R. B., & Cummings, T. G. (Eds.). (1990). Services management effectiveness (2nded.). San Francisco: Jossey Bass.
2. Fitzsimmons, J. A., & Fitzsimmons, M. J. (2004). Service management (4th ed.). New Delhi: McGraw Hill.
3. Haksever, C., Render, B., Russell, R. S., & Murdick, R. G. (2003). Service management and operations, (2nded.). New Jersey: Prentice Hall.
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	
			O1	O2	O3	O4	O5	O6	O7	O8	O9	O0	O1	O2	O1	O2	O1	O2
MCH315B	SERVICES OPERATIONS MANAGEMENT	CO1	3	2	3	1	x	3	x	3	1	X	2	1	1	1		
		CO2	3	3	3	3	2	2	2	3	2	1	2	2	X	1		
		CO3	2	3	3	2	2	X	2	2	2	X	3	2	1	1		
		CO4	3	3	3	3	x	2	3	3	2	1	2	2	1	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

Textbooks

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

Reference Books

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	X	2	3	2	2	X	X	1	1
		CO2	2	3	2	2	2	X	3	2	2	2	X	X	1	1
		CO3	3	3	3	3	2	X	3	2	3	2	X	X	1	1
		CO4	3	3	3	3	3	X	3	3	3	3	X	X	1	1

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

Textbooks:

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				
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
MCH 341B	Social Media Analytics	CO1	3	2	2	2	2	X	3	2	2	2	X	X	1	1	
		CO2	3	3	3	2	2	X	3	2	2	2	X	X	1	1	
		CO3	3	3	3	3	2	X	3	2	3	2	X	X	1	1	
		CO4	3	3	3	3	3	X	3	3	3	3	X	X	1	1	

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
LWS323.1	Describe the concept of Cyber crimes and cyber Law	Employability/Skill
LWS323.2	Critically analyse the problems arising out of online transactions and find solutions	Employability/Skill
LWS323.3	Identify Intellectual Property issues in the cyber space and apply relevant laws to protect or fight infringement	Employability/Skill
LWS323.4	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.

Tutorial activities 1 Hr/Week

- Quiz on Cyber Law and Cyberspace
- Discussion on Different types of Cyber Crimes and its negative effects on the Society
- Study about the various implementations of Information technology act,2000
- Any other suitable activity

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
4. Pavan D (2019). Cyber Security Law, (N.P.) Independently Published
5. <https://www.indiacode.nic.in/>
6. <https://www.sconline.com/blog/>
7. www.livelaw.in/

Course Outcome:-

1. The student will be able to understand the concepts and development of Cyber law in India.
2. The student will be able to examine the practical aspect of the existence of Cyber Crimes from Historic to Present Phase.
3. The Student will try to understand and deduce the various factors attributing to the rise of Cyber Crime and its impact on society.
4. The Student will understand the development of Legal Reforms in Present day society and what factors impact such legal reforms.

Course Outcomes	Program Outcomes												Program Specific Outcomes	
	PO 1	P O2	P O3	P O4	P O5	P O6	P O7	P O8	P O9	PO 10	PO 11	PO 12	PS O1	PSO2
LWS323.1	2	1	X	X	X	X	2	X	X	1	X	3	X	X
LWS323.2	3	2	X	X	X	X	X	X	2	X	X	1	X	X
LWS323.3	3	1	2	X	X	X	X	1	X	X	X	2	X	X
LWS323.4	3	1	X	X	X	X	X	X	X	X	X	3	X	X

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
LWS325.1	Understand the basics of Intellectual Property Rights	Employability/Skill 1
LWS325.2	Categorize different types of intellectual properties	Employability/Skill 1
LWS325.3	Recognize the crucial role of intellectual property in different industries.	Employability/Skill 1
LWS325.4	Understand the procedural aspect pertaining to application and grant of patent, trademark, geographical indication etc.	Employability/Skill 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
L-T-P-O Structure	(1-0-2-0)

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
9. Make decisions in personal, social and professional life aligning to inner peace
10. Envision impact of individual action on society and nation and globe as a whole
11. Develop culture of following netiquettes of a peace loving citizen in digital era
12. 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*

Textbooks:

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
CO1	Analyze the philosophical problems implicit in the experience of self, others and the society	Employability/skill
CO2	Explain the philosophy of influential philosophers with respect to society, Science and success in life	Employability/skill
CO3	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
CO5	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.

Textbooks:

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	X	X	X	X	X	X	X	2	2	X	X	2	X	X
CO2	X	X	X	X	X	X	X	3	2	X	X	2	X	X
CO3	X	X	X	X	X	X	X	3	2	X	X	2	X	X
CO4	X	X	X	X	X	X	X	3	2	2	X	2	X	X
CO5	X	X	X	X	X	X	X	3	2	2	X	2	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

Reference Books:

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 Bachao Andolan

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	X	X	X	X	X	1	2	2	2	X	2	X	X
CO2	X	X	X	X	X	X	1	2	2	2	X	2	X	X
CO3	X	X	X	1	X	X	1	2	2	2	X	2	X	X
CO4	X	X	X	1	X	X	1	2	2	2	X	2	X	X

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	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
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
MCH351B	INDUSTRY INTERNSHIP	DMC	NTCC	ELECTIVE	0	0	0	0	8

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 acquaint the students with the fundamentals of ecommerce	Employability
CO2	To enable the students to understand various categories of ecommerce businesses	Skill Enhancement
CO3	To enable the students to take decisions on e-commerce business options	Employability
CO4	To enable the students about the security aspects of ecommerce	Skill Enhancement

SECTION A

Network Infrastructure [6L] 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 [8L] 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 [8L] 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: [20L] 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

Reference Books:

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				
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
MCH316B	ECOMMERCE	CO1	3	2	3	2	2	1	2	3	1	x	x	1	2	2	
		CO2	2	2	1	2	2	3	2	1	3	1	x	x	2	2	
		CO3	3	3	2	2	2	2	1	3	2	2	1	x	2	2	
		CO4	2	3	3	2	3	2	3	1	2	3	2	1	2	2	

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
			O1	O2	O3	O4	O5	O6	O7	O8	O9	O0	O1	O2	O1	O2	O1
MCH317B	DIGITAL MARKETING	CO1	3	2	2	2	2	1	2	3	1	x	1	1	2	2	
		CO2	2	1	X	2	1	2	2	1	3	1	2	1	2	2	
		CO3	2	2	1	1	2	2	X	3	1	2	x	x	2	2	
		CO4	2	3	3	2	3	2	3	1	2	3	1	1	2	2	

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, SPSS

Text Books:

1. Camm, J.D. et al. (2015) . Essentials of Business Analytics. Cengage Learning
2. Evans, J.R. (2017). Business Analytics. Pearson Publishing
3. Minelli, M.et al. (2014). Big Data, Big Analytics. John Wiley & Sons.
4. Turban E, Armson, JE, Liang, TP & Sharda (2007). Decision support and Business Intelligence Systems, 8th Edition, 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. Business Analytics: The Science of Data - Driven Decision by U Dinesh Kumar
7. Fundamentals of Business Analytics” by R N Prasad and Seema Acharya

Reference Books

1. Albright, S. C and Winston, W. L (2015). “ Business Analytics: Data Analysis and Decision Making”. Atlantic Publisher and Distributors.
2. Business Analytics: Applications To Consumer Marketing” by Sandhya Kuruganti and HindolBasu
3. Data science for Business” by Foster Provost
4. Business Analytics: Concepts and Theories” by Chopra B

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	
MCH318B	Business Analytics	CO1	2	1	3	1	2	X	X	2	2	X	X	X	2	2		
		CO2	2	2	3	2	3	2	1	2	3	X	X	X	2	2		
		CO3	3	2	3	3	3	X	2	2	2	X	x	X	2	2		
		CO4	2	1	3	3	2	X	2	3	3	X	x	X	2	2		

Course Title/ Code	Google Suite (CSW331B)
Course Type	Core
L-T-P Structure	0-0-3
Credit	1.5
Objectives	<p>The student will be able to</p> <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)	<p>Computer Requirement: One computer per student and Internet accessibility</p> <p>REQUIRED SOFTWARE: Google Applications</p>	

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 aEnd 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.Formatcells.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

Reference Books:

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	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	
CSW331B	SAP BA (Google suite)	CO1	X	X	X	X	3	X	X	X	X	X	X	X	X	2	2
		CO2	X	X	X	X	2	X	X	X	3	X	X	2	2	2	
		CO3	X	X	X	X	2	X	1	X	X	X	X	2	2	2	
		CO4	X	X	X	X	2	X	X	X	X	X	X	X	2	2	

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.

Texts

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

Journals / Magazines

1. The Journal of Behavioural Finance
(Published by The Institute of Behavioural Finance and Lawrence Erlbaum Associates, Inc.)
- 2.International Journal of Behavioural Accounting & Finance
(Published by Inderscience Publishers)
3. The Journal of Finance
4. The Journal of Financial Economics
5. American Economic Review

Courses Code	Courses	Course Outcomes	P										P				
			1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
MCH320B	BEHAVIOURAL FINANCE	CO1	2	2	X	X	X	X	X	3	2	2	3	2	1	1	
		CO2	3	3	2	2	X	X	1	3	2	3	2	2	1	1	
		CO3	2	1	3	2	X	X	X	3	2	3	2	2	1	1	
		CO4	3	3	3	3	X	X	X	3	3	2	3	2	1	1	

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 provide an insight on credit risk aspects relevant in banking sector norms and its relevance in present day banking function.	Employability
CO2	To enable students to understand the various dimensions of credit risk	Skill Enhancement
CO3	To bring in the importance of basel	Employability
CO4	To analyse the financial statements and company's background using parameters	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.

Reference Books:

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	
			1	2	3	4	5	6	7	8	9	10	11	12	1	2	1	2
MCH335B	RISK MANAGEMENT IN BANKING SECTOR	CO1	2	2	X	X	X	X	X	3	2	2	X	X	1	1		
		CO2	3	3	2	2	X	X	1	3	2	3	3	1	1	1		
		CO3	2	1	3	2	X	X	X	3	2	3	X	1	1	1		
		CO4	3	3	3	3	X	X	X	3	3	2	X	2	1	1		

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

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.

SECTION C

Planning for the Business- Assessing the firm's strategic potential, defining the firm's strategic potential, the swot analysis, the internal analysis, assessing the firm's financial strength, assessing the firm's marketing success, assessing the firm's organizational resources, the external analysis, analyzing the general environment, analyzing the market and industry, determining the firm's strategic potential , Exploring possible business strategies, discussing the firm's strategic priority, selecting the strategic direction, seven possible strategic directions and the basic business strategies, evaluating the basic business strategies, unique advantages of family businesses, potential disadvantages of family firms, recommending possible strategies

SECTION D

The Final Strategy and Reinvestment Decision- identifying the business' strategy, assessing the family investment decision, analyzing the business' market value, family investment considerations, other factors affecting the reinvestment decision, reinvestment issues , the role of the board in family business planning affirming family and strategic commitment, supporting the family enterprise continuity plan, contributing to the business strategy plan

Text Books:

1. Carlock R S and Ward J L (2001).Strategic Planning for the Family Business.Palgrave Macmillan
2. Leischnig et al.(2022).Commodity Marketing: Strategies, Concepts, and Cases.Springer Nature

References:

1. Baron J and Lachenauer R (2021).Harvard Business Review Family Business Handbook.Harvard Business Review
2. Harvard Business Review(2018).Harvard Business Review Entrepreneur's Handbook. Harvard Business Review Press
3. Ghosh A (2016).IIMA-Strategies for Growth : Help Your Business Move Up The Ladder.Penguin Random House India Private Limited

Courses Code	Courses	Course Outcomes	P										P				
			O1	O2	O3	O4	O5	O6	O7	O8	O9	O10	O11	O12	O13	O14	O15
MCH322B	STRATEGIES AND PRACTICES OF FAMILY OWNED ENTERPRISES	CO1	3	3	2	X	2	2	2	2	2	2	2	3	2	1	1
		CO2	3	3	2	X	2	2	2	2	2	2	2	3	2	1	1
		CO3	3	3	2	2	2	2	2	2	2	2	2	3	2	X	1
		CO4	3	3	2	X	2	2	2	2	2	2	2	2	3	2	1

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 re-iterated 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. Narayanana 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
			O1	O2	O3	O4	O5	O6	O7	O8	O9	O0	O1	O2	O1	O2
MCH323B	COPYRIGHT, PATENTS AND LAWS OF IPR	CO1	1	2	X	X	3	3	X	X	X	X	2	1	2	2
		CO2	1	1	X	X	3	3	X	1	X	X	2	1	2	2
		CO3	1	1	X	X	3	3	X	1	X	1	2	1	2	2
		CO4	1	1	X	1	3	3	X	1	X	1	2	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	Describe the concepts of entrepreneurial finance and capital structure.	Skill Enhancement
CO2	Examine the sources of finance.	Entrepreneurship
CO3	Classify venture capital and lease finance.	Entrepreneurship
CO4	Demonstrate social cost benefit analysis and 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.

Reference Books:

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
			1	2	3	4	5	6	7	8	9	10	11	12	13	14
MCH324B	ENTREPRENEURIAL FINANCE	CO1	2	2	1	2	X	2	1	1	1	2	2	X	1	1
		CO2	2	X	2	2	1	1	2	X	1	2	1	1	1	1
		CO3	2	2	2	1	1	X	1	2	2	2	2	X	1	1
		CO4	2	2	X	2	2	2	1	1	1	2	2	1	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

Text Books:

1. Plake K S, Schafermeyer K W and McCarthy R L (2016).McCarthy's Introduction to Health Care Delivery.Jones & Bartlett Learning
2. Novick L F, Morrow C B and Mays G P (2007).Public Health Administration.Jones and Bartlett Publishers
3. Hanlon J J and Pickett G E (1989)Public Health: Administration and Practice.Mosby

Reference Books:

1. Goel S L(2005).Public Health Policy And Administration. Deep & Deep
2. Friedman L h and Burke R E (2010). Essentials Of Management And Leadership In Public Health. Jones and Bartlett Publishers
3. Gupta J (2005). Contemporary Public Health: Policy Planning Management. CBS

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
MCH 327B	Public Health	CO1	3	3	2	1	1	2	1	2	2	2	X	X	1	1	
		CO2	3	3	3	2	1	2	2	2	2	2	X	X	1	1	
		CO3	2	3	3	2	1	2	2	2	2	2	X	X	1	1	
		CO4	2	3	2	2	1	3	2	2	2	2	X	X	1	1	

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				
			1	2	3	4	5	6	7	8	9	0	1	2	1	2	1
MCH 329B	GLOBAL HEALTHCARE SCENARIO, (HCM)	CO1	3	2	1	1	2	2	2	2	2	1	X	X	1	1	
		CO2	3	2	X	X	2	2	2	2	2	1	X	X	1	1	
		CO3	3	2	X	1	2	3	X	2	2	1	X	X	1	1	
		CO4	3	2	1	1	2	2	2	2	2	1	X	X	1	1	

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 safety Investigation 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

Textbooks:

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.

Reference Books:

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	Course Objectives														
			P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15
MCH331B	INTRODUCTION TO SHIPPING	CO1	1	2	2	X	3	2	X	1	X	2	1	1	1	1	
		CO2	2	1	2	2	2	2	X	3	2	X	2	2	1	1	
		CO3	X	2	2	2	x	1	2	X	2	X	2	2	1	1	
		CO4	2	X	2	3	2	3	2	2	3	3	2	2	1	1	

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

Reference Books:

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	O0	O1	O2	O1	O2	O1	O2
MCH332B	MULTIMODAL TRANSPORTATION	CO1	1	2	2	X	3	2	X	1	X	2	1	1	1	1	1	
		CO2	2	X	2	2	2	3	X	3	2	X	2	2	1	1	1	1
		CO3	X	2	2	2	x	1	2	X	2	X	2	2	1	1	1	1
		CO4	2	X	X	3	2	3	2	2	3	3	2	2	1	1	1	1

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

Reference Books:

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
			O1	O2	O3	O4	O5	O6	O7	O8	O9	O0	O1	O2	O1	O2
MCH333B	TRANSPO	CO1	1	2	3	X	3	2	X	1	X	2	1	1	1	1

RTATION AND DISTRIBU TION MANAGE MENT	CO2	2	1	2	2	2	2	X	3	2	X	2	2	1	1
	CO3	X	2	2	2	x	2	2	X	2	X	1	2	1	1
	CO4	1	X	2	3	2	3	2	2	3	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

Reference Books:

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	P
			O1	O2	O3	O4	O5	O6	O7	O8	O9	O10	O11	O12	O13	O14	O15
MCH342B	Machine Learning and AI	CO1	3	2	3	3	2	X	2	2	2	2	X	1	2	2	
		CO2	3	3	2	2	2	X	3	2	2	2	X	2	2	2	
		CO3	3	3	3	3	2	X	2	2	2	2	X	1	2	2	
		CO4	3	2	3	3	3	X	3	3	3	3	X	1	2	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
			O1	O2	O3	O4	O5	O6	O7	O8	O9	O0	O1	O2	O1	O2	
MCH343B	Supply Chain Analytics	CO1	2	2	3	3	2	X	2	2	2	2	2	X	2	2	2
		CO2	2	2	3	2	2	X	3	2	2	2	2	X	2	2	2
		CO3	3	2	2	3	1	X	2	2	2	2	2	X	1	2	2
		CO4	3	3	2	3	2	X	3	3	2	3	3	X	2	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 assess 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	PO1 1	PO1 2	PSO 1	PSO 2
MCH346 B	MARKETING ANALYTICS	CO1	3	-	2	2	3	2	-	-	-	-	-	3	3	3
		CO2	3	-	3	3	3	3	-	-	-	-	-	3	3	3
		CO3	3	-	3	3	3	3	-	-	-	-	-	3	3	3

		C04	3	-	3	3	3	3	-	-	-	-	-	3	3	3
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