

MOHAN BABU UNIVERSITY

Sree Sainath Nagar, Tirupati – 517 102



MBU
MOHAN BABU
UNIVERSITY

DREAM . BELIEVE . ACHIEVE

SCHOOL OF COMMERCE AND MANAGEMENT

B.Com.. - Bachelor of Commerce
(3 Years Degree)

Bachelor of Commerce (Hons.)
(4 Years Degree)

CURRICULUM AND SYLLABUS
(From 2022-23 Admitted Batches)

FULLY FLEXIBLE CHOICE BASED CREDIT SYSTEM
(FFCBCS)



MOHAN BABU UNIVERSITY

Vision

To be a globally respected institution with an innovative and entrepreneurial culture that offers transformative education to advance sustainability and societal good.

Mission

- ❖ Develop industry-focused professionals with a global perspective.
- ❖ Offer academic programs that provide transformative learning experience founded on the spirit of curiosity, innovation, and integrity.
- ❖ Create confluence of research, innovation, and ideation to bring about sustainable and socially relevant enterprises.
- ❖ Uphold high standards of professional ethics leading to harmonious relationship with environment and society.

SCHOOL OF COMMERCE AND MANAGEMENT

Vision

To be the preferred choice for commerce and management education recognised for excellence, innovation, entrepreneurship and societal consciousness

Mission

- ❖ Impart relevant knowledge of commerce and management, a broad set of skills, and an inquisitive attitude to provide appropriate and distinctive solutions to serve industry and community
- ❖ Offer an experience par excellence with our state-of-the-art research, innovation, and incubation ecosystem to realise our learners' fullest entrepreneurial potential
- ❖ Provide continued education and research support to working professionals in the field of commerce and management to augment their domain expertise in the cutting-edge technologies used for business developments
- ❖ Inculcate the true spirit of societal consciousness in managers of tomorrow in solving challenges in commerce and management.

DEPARTMENT OF COMMERCE

Vision

To be a center of excellence in Commerce discipline through teaching and research producing high quality commerce graduates and post graduates with values and ethics to meet domestic and global demands.

Mission

- ❖ Imparting students with quality education in commerce through contemporary curriculum, congenial learning environment, relevant research, industry-institute interaction and mentoring for creating innovative solutions to serve industry and community.
- ❖ Nurturing students with strong leadership, team spirit and communication skills along with ethics and social consciousness through co-curricular and extra-curricular activities, to take on the challenges of the business world.
- ❖ Encourage faculty and staff to excel in their respective fields and demonstrate the best of their abilities by the way of continuing education, research and consultancy.

B.Com. – Bachelor of Commerce

PROGRAM EDUCATIONAL OBJECTIVES

After few years of graduation, the graduates of B.Com. will:

- PEO1.** Pursue higher education and advance research in the field of commerce, business, finance, management and other allied areas of interest.
Address the contemporary issues in business or related field and provide
- PEO2.** appropriate solutions through professional career in industry/teaching/research.
- PEO3.** Plan and develop the start-ups and entrepreneurial ventures independently through skills developed during the tenure of the course.
Demonstrate managerial skills and leadership qualities, participate in
- PEO4.** continuing education programs for life-long learning and to lead the diverse teams and small groups to achieve the common goals of an organization.

PROGRAM OUTCOMES

On successful completion of the Program, the graduates of B.Com. will be able to:

- PO1. Conceptual knowledge:** Expose the knowledge of Accountancy, Finance, Marketing, Human Resource management, E-business, Taxation, Auditing, banking, computer applications, entrepreneurial, Legal environment and allied subjects.
- PO2. Critical Thinking:** Identify, formulate and analyze multifarious business problems by using principles, theories, models, techniques in key areas of business and determine various perspectives and to solve complex business problems.
- PO3. Modern tool usage:** Demonstrate knowledge on usage of financial modeling tools and techniques; apply appropriate statistical techniques and IT tools including e-business models, computer and mobile applications for business.
- PO4. Environment and sustainability:** Analyze the business issues and actions that have an impact on environment and sustainability.
- PO5. Ethics and Responsibilities:** Clear understanding of professional integrity, corporate governance, business ethics, responsibility accounting, professional ethics in adopting business practices.
- PO6. Effective Communication and Managerial decisions:** Interpret composite business implications, prepare reports and design documentation and communicate effectively various business reports, make effective presentations, and to take managerial decisions on complex business activities.

- P07. Project management and finance:** Understanding the ability for Financial Planning, analysis, teamwork, manage projects, financial tools and techniques.
- P08. Employability and Entrepreneurial Skill:** Recognize the business opportunities, exploring the entrepreneurial opportunities and identify the contemporary social problems and opportunities for social entrepreneurship and designing business solutions.
- P09. Self-directed and Life-long learning:** Acquire the ability to employ independent and life-long learning in the changing business scenario.

PROGRAM SPECIFIC OUTCOMES

On successful completion of the Program, the graduates of B.Com. will be able to:

- PS01.** Proficiency in business theories and Laws, methodologies, tools and techniques to model real-world problems, employ modern tools and platforms for efficient design and development of business resources.
- PS02.** Develops necessary professional knowledge and skills in Management, Finance, Human Resources, Marketing, Entrepreneurship, Accountancy, Costing, Banking, electronic business models, and Legal aspects of business and computer applications for business in solving complex business problems from inter-disciplinary domains.
- PS03.** Apply suitable models, tools and techniques to perform business operations and data analytics for effective decision-making, innovations and problem solving in day-to-day business activities.
- PS04.** Develop competency in students to make them employable and successful entrepreneurs in the global market.
- PS05.** Discover ethical perspectives in various aspects of business and its functioning.

B.Com. – Bachelor of Commerce (3 Years Degree Program)

Basket Wise - Credit Distribution

S. No.	Basket	Credits (Min. - Max.)
1	SCHOOL CORE	36-45
2	PROGRAM CORE	36-42
3	PROGRAM ELECTIVE	30-36
4	SPECIALIZATION ELECTIVE	18-24
5	UNIVERSITY ELECTIVE	6-9
TOTAL CREDITS		Min. 120

B.Com. – Bachelor of Commerce (Hons.) (4 Years Degree Program)

Basket Wise – Credit Distribution

S. No.	Basket	Credits (Min. - Max.)
1	SCHOOL CORE	36-45
2	PROGRAM CORE	42-54
3	PROGRAM ELECTIVE	36-45
4	SPECIALIZATION ELECTIVE	24-30
5	UNIVERSITY ELECTIVE	9-12
TOTAL CREDITS		Min. 160

SCHOOL CORE (36 - 45 Credits)

Course Code	Title of the Course	Lecture	Tutorial	Practical	Project Based Learning	Credits	Pre-requisite
		L	T	P	S	C	
22BS101401	Environmental Studies	2	-	-	-	2	-
22CM103001	Fundamentals of Accounting	3	-	-	4	4	-
22CM101001	Business Economics	3	-	-	-	3	-
22CM101002	Business Environment	3	-	-	-	3	-
22CM101003	Business Organization and Management	3	-	-	-	3	-
22CM101004	Corporate Governance and Business Ethics	3	-	-	-	3	-
22CM102001	Information Technology for Business	3	-	2	-	4	-
22CM101005	Principles of Banking and Insurance	3	-	-	-	3	-
22CM101006	Fundamentals of Auditing	3	-	-	-	3	-
22CM102002	Data Analysis Using Spreadsheet	3	-	2	-	4	-
22CM111001	Internship	-	-	-	-	2	-
22CM108001	Capstone Project	-	-	-	-	8	-
Language Basket (Min. 8 credits to be earned)							
22LG102405	General English	2	-	2	-	3	-
22LG101407	Business Communication	3	-	-	-	3	-
22LG101402	Telugu	2	-	-	-	2	-
22LG101403	Hindi	2	-	-	-	2	-
22LG101404	Sanskrit	2	-	-	-	2	-
22LG101405	German Language	2	-	-	-	2	-
22LG101408	French Language	2	-	-	-	2	-

Course Code	Title of the Course	Lecture	Tutorial	Practical	Project Based Learning	Credits	Pre-requisite
		L	T	P	S	C	
Mandatory Courses (Min. 6 Credits to be earned. Earned Credits will not be considered for CGPA)							
22MG107601	Innovation, Incubation and Entrepreneurship	2	-	-	-	2	-
22LG101401	Personality Development	2	-	-	-	2	-
22EE107601	Intellectual Property Rights	2	-	-	-	2	-
22LG107601	Professional Ethics and Human Values	2	-	-	-	2	-
22CE107602	Disaster Mitigation and Management	2	-	-	-	2	-
22AB107601	NCC/NSS Activities	-	-	-	-	2	-

PROGRAM CORE

(36-42 Credits for 3 years Program);

(42-54 Credits for 4 years Program)

Course Code	Title of the Course	Lecture	Tutorial	Practical	Project-based Learning	Credits	Pre-requisite
		L	T	P	S	C	
22CM101007	Business Statistics	3	-	-	-	3	-
22CM101008	Financial Accounting-I	4	-	-	-	4	Fundamentals of Accounting
22CM101009	Legal Aspects of Business	3	-	-	-	3	-
22CM101010	Corporate Accounting	3	-	-	-	3	Fundamentals of Accounting
22CM101011	Management Accounting	3	-	-	-	3	Fundamentals of Accounting
22CM101012	Cost Accounting	3	-	-	-	3	
22CM101013	Goods and Services Tax	3	-	-	-	3	-
22CM101014	Income Tax Law and Practice	3	-	-	-	3	-
22CM101016	Investment Management	3	-	-	-	3	-
22CM101017	Financial Accounting – II	4	-	-	-	4	Financial Accounting - I
22CM101018	Research Methodology for Business	3	-	-	-	3	Business Statistics
22CM102003	Computerized Accounting with Tally	3	-	2	-	4	Financial Accounting - I
22CM101015	Fundamentals of Stock Market	3	-	-	-	3	-
22CM101024	Security Analysis and Portfolio Management	3	-	-	-	3	-
22CM101019	Banking Theory and Practices	3	-	-	-	3	
22CM101021	Mergers and Acquisition	3	-	-	-	3	
22CM101023	Entrepreneurship Development	3	-	-	-	3	

PROGRAM ELECTIVE

(30-36 Credits for 3 years Program);

(36-45 Credits for 4 years Program)

Course Code	Knowledge Area	Title of the Course	Lecture	Tutorial	Practical	Project-based Learning	Credits	Pre-requisite
			L	T	P	S	C	
22CM101020	Accounting	Advance Corporate Accounting	3	-	-	-	3	Corporate Accounting
22CM101022		Applied Cost Accounting	3	-	-	-	3	Cost Accounting
22CM101038	Finance	Management of Financial Services	3	-	-	-	3	-
22CM101027		Financial Derivatives	3	-	-	-	3	-
22CM101043		Fundamentals of Financial Technology	3	-	-	-	3	-
22CM101026		Financial Management	3	-	-	-	3	-
22CM101028	Management	Principles of Management	3	-	-	-	3	-
22CM101029		Project Management	3	-	-	-	3	-
22CM101030		Human Resource Management	3	-	-	-	3	-
22CM101031		Organizational Behavior	3	-	-	-	3	-
22CM101032	Marketing	Principles of Marketing Management	3	-	-	-	3	-
22CM101035		Digital and Service Marketing	3	-	-	-	3	Principles of Marketing Management
22CM101036	Banking	International Banking and Forex Management	3	-	-	-	3	

SPECIALIZATION ELECTIVE

(18-24 Credits for 3 years Program);

(24-30 Credits for 4 years Program)

Computer Applications

Course Code	Course Title	Lecture	Tutorial	Practical	Project Based Learning	Credits	Pre-requisite
		L	T	P	S	C	
22MM101441	Fundamentals of Operating Systems	3	1	-	-	4	-
22MM102002	Programming with C	3	-	2	-	4	
22MM102430	Relational Database Management Systems	3	-	2	-	4	
22MM202005	Python Programming	3	-	2	-	4	
22MM102006	Object Oriented Programming with JAVA	3	-	2	-	4	
22CA102003	Data Warehousing and Mining	3	-	2	-	4	Relational Database Management Systems
22MM102012	Big Data Technologies Using R	3	-	2	-	4	Relational Database Management Systems
22MM201007	Block chain Technologies	3	-	-	-	3	

UNIVERSITY ELECTIVE

(6-9 Credits for 3 years Program);

(9 - 12 Credits for 4 years Program)

Course Code	Title of the Course	Lecture	Tutorial	Practical	Project based Learning	Credits	Pre-requisite
		L	T	P	S	C	
22EC101701	AI in Healthcare	3	-	-	-	3	-
22CM101701	Banking and Insurance	3	-	-	-	3	-
22AI101701	Bioinformatics	3	-	-	-	3	-
22LG101701	Business Communication and Career Skills	3	-	-	-	3	-
22SS101701	Constitution of India	3	-	-	-	3	-
22CM101702	Cost Accounting and Financial Management	3	-	-	-	3	-
22CB101701	Cyber Laws and Security	3	-	-	-	3	-
22MG101701	Entrepreneurship for Micro, Small and Medium Enterprises	3	-	-	-	3	-
22CE101702	Environmental Pollution and Control	3	-	-	-	3	-
22CB101702	Introduction to Ethical Hacking	3	-	-	-	3	-
22CB101703	Forensic Science	3	-	-	-	3	-
22SS101702	Gender and Environment	3	-	-	-	3	-
22ME101701	Global Strategy and Technology	3	-	-	-	3	-
22SS101703	Indian Economy	3	-	-	-	3	-
22SS101704	Indian History	3	-	-	-	3	-
22SS101705	Indian Tradition and Culture	3	-	-	-	3	-
22AI101702	Introduction to Artificial Intelligence	3	-	-	-	3	-
22AI101703	Introduction to Data Science	3	-	-	-	3	-
22AI101704	Introduction to Machine Learning	3	-	-	-	3	-
22ME101704	Managing Innovation and Entrepreneurship	3	-	-	-	3	-
22LG101702	Personality Development	3	-	-	-	3	-
22CE101703	Planning for Sustainable Development	3	-	-	-	3	-
22CS101702	Web Design Fundamentals	3	-	-	-	3	-
22SS101706	Women Empowerment	3	-	-	-	3	-

Note:

1. If any student has chosen a course or equivalent course from the above list in their regular curriculum then, he/she is not eligible to opt the same course/s under University Elective.
2. The student can choose courses from other disciplines offered across the schools of MBU satisfying the pre-requisite other than the above list.

SCHOOL CORE

Course Code	Course Title	L	T	P	S	C
22BS101401	ENVIRONMENTAL STUDIES	2	-	-	-	2
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course provides a detailed discussion on multidisciplinary nature of environmental studies, scope and importance of environmental education, ecosystems, ecology, renewable and non-renewable energy resources. Biodiversity and its conservation. Environmental pollution and its control measures, global environmental issues and Acts. Green Chemistry and its tools.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Understand the natural environment, and to realize the importance of renewable energy sources.
- CO2.** Acquire knowledge of various sources of water pollution and the management of municipal and Industrial wastewater.
- CO3.** Summarize the various environmental pollution and its control measures.
- CO4.** Get familiarized on climate and social issues arising due to environmental disorders.
- CO5.** Gain awareness on Green technology and its tools.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes								
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
CO1	3	-	-	-	3	2	-	-	-
CO2	3	-	-	-	3	2	-	-	-
CO3	3	-	-	-	3	3	-	-	-
CO4	2	-	-	-	3	3	-	-	2
CO5	3	-	-	2	3	-	-	-	2
Course Correlation Mapping	3	-	-	2	3	3	-	-	2

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT

Module 1: ENERGY SOURCES (06 Periods)

Renewable energy Resources: Solar energy - solar cells, wind energy, tidal energy. *Non-renewable energy resources:* Natural gas, coal gas, biogas.

Module 2: WATER POLLUTION (06 Periods)

Potable water, Sources of water, impurities in water and their consequences, Eutrophication, Effect of Hardness of water, Municipal and Industrial wastewater management.

Module 3: ENVIRONMENTAL POLLUTION AND ITS CONTROL MEASURES (06 Periods)

Definition, causes, effects and control measures of: Air, Water (thermal and marine pollution), Land pollution, Radiation pollution and Nuclear hazard, Noise pollution, Overgrazing, effects of modern agriculture – fertilizer and pesticides.

Module 4: ENVIRONMENTAL AND SOCIAL ISSUES (06 Periods)

Climate changes: global warming, acid rain, ozone layer depletion, nuclear accidents. *Social Issues:* Population growth, variation among nations and population explosion. Urban problems related to Water conservation, rain water harvesting and watershed management.

Module 5: GREEN TECHNOLOGY (06 Periods)

Introduction, principles of green chemistry, Tools of green chemistry, Green Computing, Green construction, Green manufacturing Systems.

Total Periods: 30

EXPERIENTIAL LEARNING

1. Submit a document on your plan of action in maintaining the sustainable environment.
2. Visit the Tirupati Municipal corporation water treatment plant and submit a report on your observations
3. List any two major environmental issues in Tirupati and make a report with solutions using your expertise.
4. Submit your ideas on the importance of Environmental Education for technical students.
5. How do unequal urban planning and green space distribution affect temperatures in a city?
6. How are water sources affected by urbanization?

RESOURCES

TEXT BOOKS:

1. Anubha Kaushik and C. P. Kaushik, Perspectives in Environmental Studies, New Age International (P) Ltd. Publications, 6 th Edition, 2018.
2. Erach Barucha, Environmental Studies, Orient Black swan, 2nd Edition, 2013.

REFERENCE BOOKS:

1. Benny Joseph, Environmental Studies, Tata McGraw-Hill, 2nd Edition, 2009.

2. Cunningham W.P. and Cunningham M.A., Principles of Environmental Science, Tata McGraw-Hill Publishing Company, New Delhi, 8th Edition,2016.

VIDEO LECTURES:

1. <https://study.com/academy/lesson/what-is-environmental-science-definition-and-scope-of-the-field.html>
2. <https://www.youtube.com/watch?v=Y5B1nWYle40>
3. <https://www.digimat.in/nptel/courses/video/127105018/L26.html>

Web Resources:

1. <https://www.ugc.ac.in/oldpdf/modelcurriculum/env.pdf>
2. <https://www.hzu.edu.in/bed/E%20V%20S.pdf>
3. <https://cpcb.nic.in/7thEditionPollutionControlLawSeries2021.pdf>
4. <https://www.clearias.com/environmental-laws-india/>

SCHOOL CORE

Course Code	Course Title	L	T	P	S	C
22CM103001	FUNDAMENTALS OF ACCOUNTING	3	-	-	4	4
Pre-Requisite	---					
Anti-Requisite	---					
Co-Requisite	---					

COURSE DESCRIPTION: The objective of the course is to equip the students with the understanding of accounting process and double entry system. The course is designed so that the students can understand the scientific preparation of accounting books with relevant interpretation. The course also provides students with knowledge of preparation of final accounts.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1** Apply the double entry system to record the business transactions.
- CO2** Prepare different types of subsidiary books to record the business transactions.
- CO3** Prepare Bank Reconciliation Statement to reconcile the balances as per Cash Book and Pass Book. And to write Rectification entries for the errors in the books of accounts.
- CO4** Determine the closing balance of assets under different Depreciation methods and measuring the financial performance of the business at the end of the year.

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	-	-	-	-	-	-	1	3	3	-	2	-
CO2	3	3	-	-	-	-	-	-	1	3	3	-	2	-
CO3	3	3	-	-	-	-	-	-	1	3	3	3	2	-
CO4	3	3	-	-	-	-	-	-	1	3	3	3	2	-
Course Correlation Mapping	3	3	-	-	-	-	-	-	1	3	3	3	2	-

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT

Module-1: ACCOUNTING PROCESS

(09 Periods)

Introduction–Evolution and Definition–Accounting Functions–Advantages and Limitations–Users of Accounting Information–Branches of Accounting–Accounting Principles: Concepts and Conventions– Double Entry System - Classification of Accounts – Accounting Cycle- Journal-Ledger and Trial Balance. (Including problems)

Module-2: SUBSIDIARY BOOKS

(08 Periods)

Meaning –Types - Purchases Book - Purchases Returns Book - Sales Book - - Sales Returns Book - Bills Receivable Book - Bills Payable Book – Cash Book - Single Column, Two Column, Three Column and Petty Cash Book - Journal Proper (Including problems)

Module-3: BANK RECONCILIATION STATEMENT

(08 Periods)

Meaning – Need - Reasons for differences between cash book and pass book balances – Favorable and over draft balances – Ascertainment of correct cash book balance (Amended Cash Book) - Preparation of Bank Reconciliation Statement. (Including problems)

Module-4: RECTIFICATION OF ERRORS AND DEPRECIATION

(10 Periods)

Errors and their Rectification: Types of Errors - Suspense Account – Effect of Errors on Profit. Depreciation (AS-6): Meaning – Causes –Depreciation, Amortization and Depletion - Objectives of providing for depreciation – Factors affecting depreciation – Accounting Treatment – Methods of depreciation: Straight Line Method - Diminishing Balance Method – Annuity Method – Depletion Method (Including problems)

Module 5: FINAL ACCOUNTS

(10 Periods)

Final Accounts of Sole Trader: Capital and Revenue Expenditure – Capital and Revenue Receipts - Differed Revenue Expenditure. - Preparation of Final Accounts - Manufacturing, Trading and Profit & Loss Account and Balance Sheet – Adjustments –(Including problems)

Total Periods: 45

PROJECT BASED LEARNING

1. Journalise the following Transactions and prepare relevant ledger accounts and also trial balance in the books of a business.

Date	Particulars	Amount (Rs.)
2019		
Augst	Pradeep commenced business with a cash	50,000
1	Deposited with Bank	10,000
2	Sold goods to kiran	20,000
3	Goods sold for cash	5,000
4	Purchases	2,000
5	Bought goods from Jeevan	4,000
8	Returned goods by Kiran	1,000
12	Paid telephone bill	500
15	Bought furniture and paid by cheque	12,000
16	Goods returned to Jeevan	300
17	Paid for advertisement	1,500
18	Commission received	450
19	Goods sold to Thirumala for cash	5,000
22	Interest received from Nagesh	200
25	Cash received from Lal	2,000
27	Received cash from Kiran	4,000
28	Purchased goods from Rama for Cash	1,200
29	Rs.3650 cash paid to Jeevan in full settlement of Rs.3,700 (discount received Rs.50)	
30	Received cash from Kiran Rs.14,600 in full settlement of Rs.15,000 (discount allowed Rs.400)	

2. Prepare appropriate subsidiary books from the following transactions:

Opening Balances as on 1/Jan/2018:

Cash in hand – 3000, Cash at Bank-12000, Furniture – 5000, Debtors- 10000, Bills Receivable- 8000, Machinery-22000, Creditors-20000, Bills Payables-5000, Banks Loan-10000.

Date	Particulars
2018	
Jan. 1	Goods purchased from Ramesh Rs 60,000.
2	Sold goods to Suresh Rs 40,000.
5	Sold goods by Mahesh to us Rs 25,000.
7	Goods purchased from Harish Rs 12,000.
9	Sold goods to Avinash Rs 27,500.
11	Goods returned to Ramesh Rs 5,000.
15	Goods returned from Suresh Rs 10,000.
17	Sold goods to Kamal Rs 33,000.
20	Bad debts written off on debtors Rs 500.
22	Goods returned from Kamal Rs 3,000.
25	Prepaid insurance Rs 150.
26	Outstanding salaries Rs 1,000.
28	Goods returned to Harish Rs 2,000.
30	Goods purchased from Ramesh Rs 5,000.

2. Prepare a three column cash book from the following transactions:

Date	Particulars
2006	
Apr. 1	Cash in Hand Rs 2,500; Cash at Bank Rs 10,000.
2	Paid in to bank Rs 1,000.
3	Bought furniture and issued cheque Rs 2,000.
4	Purchased goods for cash Rs 500.
10	Received from Mohan Rs 980 and discount allowed Rs 20.
12	Cash sales Rs 4,000.
14	Paid Amarnath by cheque Rs 1,450 and received discount Rs 50.
16	Withdrew from bank for private use Rs 600.
17	Received cheque from Patel Rs 1,430 and allowed to him discount Rs 20. Patel's cheque deposited in to bank.
20	Withdrew from bank for office use Rs 2,000.
22	Paid advertisement by cheque Rs 350.
23	Received cheque from Ali (in full settlement of debt of Rs 1,500) Rs 1,200. the Cheque deposited on the same day in to the bank.
25	Sale of machinery, payment received in cheque Rs 2,500.
26	New machinery purchased and issued cheque Rs 5,000.
28	Withdrew from bank and paid salaries of office staff Rs 1,500.
29	Drew cheque for petty expenses Rs 150.
30	Rent paid by cheque Rs 500.

3. Prepare Trial Balance from the following balances

Particulars	Amount (Rs)	Particulars	Amount (Rs)
Cash at Bank	200	Debtors	30000
Capital	78000	Bills Payable	7210
Lease Property	46000	Opening Stock	5000
Furniture	10500	Bank Loan	40000
Sales	131020	Plant & Machinery	48000
Discount Allowed	540	Purchases	81900
Returns Inward	1500	Carriage Outward	240
Salaries and Wages	17350	Purchase Returns	380
10% Govt. Securities	29960	Sundry Expenses	1370
Bank Charges	1000	Taxes	500
Creditors	22760	Commission Received	1690
Drawings	3000	Copy Rights	4000

4. The difference of Trial Balance of a trader Rs. 559 has been transferred Suspense account. Later the following errors were discovered pass rectification entries and prepare Suspense A/c.

- Total of Sales Returns book was under cast by Rs. 50
- Instead of crediting Rs. 512 to Mohan account Rs. 215 were debited to his account.
- Erection charges paid on Machinery Rs. 2000 wrongly debited to Factory expenses account.
- Sale of Rs. 172 was recorded in sales account as Rs. 217
- Discount of Rs. 41 allowed to Ramesh, but entered in his account as Rs. 14
- Depreciation charged Rs. 100 on Machinery, was not posted in Depreciation account.

5. Prepare Bank Reconciliation Statement as on 31-12-2017

- Bank balance as per Cash Book Rs. 25000
- Cheques deposited into bank, but not collected Rs.3200
- Cheques issued, but not presented for payment Rs.4000
- Interest on deposits credited in Pass book Rs.80
- Bank charges debited in Pass book Rs.20
- Interest on investments shown in pass book only Rs.250
- Insurance premium debited in pass book only Rs. 350
- Bank has credited for rent received Rs. 2000 but no information from bank
- The bank collected a bill for Rs. 4200, intimation received from bank on 15/1/2018

- j) A customer directly deposited into bank Rs. 1500
- k) Telephone charges paid by bank Rs. 500
- l) A bill discounted for Rs.950 (Discount Rs.50) was dishonoured and debited in Pass book inly

6. The given particulars belong to Sowmya on 31.12.2016. Prepare a Bank Reconciliation Statement.

- The overdraft as shown by the Cash book is Rs.18,600.
- Out of the total cheques issued for Rs.1,500 on 31/12/2016, only on cheque for Rs.400 was cashed on the same day.
- Rs.200 cheque has been collected by the bank as against the total cheques deposited for Rs.750 in December 2016.
- Telephone bill paid by the bank Rs.150 was not credited in the cash book.
- Bank charges Rs.30 were posted twice in cash book but other charges of Rs.50 and bank expenses Rs.25 was not recorded.
- Interest received for Rs.30 has been recorded in cash book.
- A bill discounted by us previously, but now dishonoured was debited in the pass book was Rs.800.
- Wrong debit given in the pass book was Rs.300.
- Interest collected on securities for Rs.125 recorded in cash book only.
- Funds of Rs.1,000 were transferred from a customer account, but not recorded in cash book.

7. From the following balances of Mr. Aravind as at 31.12.2016, prepare Trading, Profit and Loss Account for the year ended and Balance Sheet as at that date after making the necessary adjustments.

Debit Balances	Amount (Rs.)	Credit Balances	Amount (Rs.)
Drawing Account	6,000	Capital	80,000
Plant and Machinery	25,000	Sundry Creditors	10,000
Stock (opening)	15,000	Sales	1,20,000
Purchases	82,000	Returns outwards	1,000
Return Inwards	2,000	R.B.D.D.	400
Sundry Debtors	20,600	Discounts	800
Furniture & Fixtures	5,000	Rent of Premises sublet	1,200
Freight and Duty	2,000	Reserve Fund	5,000
Carriage outwards	500		
Rent, Rates & Taxes	4,600		
Printing & Stationery	800		
Trade Expenses	400		
Postage and Telegrams	800		
Insurance charges	700		
Salaries and Wages	21,300		
Cash in Hand	6,200		
Cash at Bank	25,500		
	2,18,400		2,18,400

Adjustments:

- Stock on 31.12.2006 was Rs.14,600.
- Write off Rs.600 as bad debts and provide 5% for R.B.D.D.
- Provide for depreciation on furniture 5% & Plant & Machinery at 20%.
- Insurance prepaid was Rs.100.
- Outstanding salaries Rs. 700
- A fire occurred on 25th December, 2006 and stock worth Rs.5,000 was destroyed and the insurance company admitted a claim for Rs. 4500 only.

RESOURCES

TEXT BOOKS:

1. "Financial Accounting", S.P. Jain & K.L Narang, Kalyani Publishers, New Delhi, 2021.
2. "Introduction to Accountancy", T.S.Grewal, S.Chand and Co, New Delhi, 2021.
3. "Financial Accounting", Jawahar Lal, Himalaya Publishing House, Mumbai, 2021.

REFERENCE BOOKS:

1. "Accountancy", Haneef and Mukherjee, Tata McGraw Hill Company, New Delhi, 2021.
2. "Principles & Practice of Accounting", R.L.Gupta&V.K.Gupta, Sultan Chand, New Delhi, 2021.

VIDEO LECTURES:

1. <https://www.youtube.com/watch?v=SUQMuc3Z3vs&list=PLLhSIFfDZcUUwKluDIB2exPUYc75Va37x>
2. <https://www.youtube.com/watch?v=4N0Dmzhi3Tw>

Web Resources:

1. https://students.icai.org/?page_id=4893
2. https://icmai.in/upload/Students/Syllabus-2012/Study_Material_New/Foundation-Paper2-Revised.pdf
3. <https://khatabook.com/blog/fundamentals-of-accounting/>

SCHOOL CORE

Course Code	Course Title	L T P S C
22CM101001	BUSINESS ECONOMICS	3 - - - 3
Pre-Requisite	-	
Anti-Requisite	-	
Co-Requisite	-	

COURSE DESCRIPTION: The course aim is to acquaint with fundamentals of economic theories and impact on pricing, demand, supply, production, and cost concepts. To gain understanding of economic ideas and techniques in order to apply them to business Practices.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1** Demonstrate the Principles of Business Economics and analysing the risk and uncertainty in business entities. Have knowledge about forces that control markets- Supply and Demand.
- CO2** Interpret the theories of Production and Cost for the managerial decision making of an organization.
- CO3** Understand the Price and Output relation in the different Market structures and understanding of Various Pricing Concepts in Business.
- CO4** Demonstrate the consumer behaviour to identify various markets in the economy and also in selecting appropriate strategies for the success of the entity.

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	-	-	-	-	-	-	1	3	3	-	2	-
CO2	3	3	-	-	-	-	-	-	1	3	3	-	2	-
CO3	3	3	-	-	-	-	-	-	1	3	3	3	2	-
CO4	3	3	-	-	-	-	-	-	1	3	3	3	2	-
Course Correlation Mapping	3	3	-	-	-	-	-	-	1	3	3	3	2	-

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT

Module 1: INTRODUCTION TO BUSINESS ECONOMICS

(09 Periods)

Introduction: Definition, Nature and Scope of Business Economics, Macro and Microeconomics, Principles of Business Economics.

Risk and uncertainty: Externality and trade-off, Constrained and unconstrained optimization, Economics of Information.

Module 2: CONCEPT OF DEMAND AND SUPPLY

(09 Periods)

Demand Analysis: Different concepts of demand, demand curve, Determinants of demand, Law of demand, Demand forecasting methods, Market equilibrium, Concepts of elasticity

Supply: Concept of supply, supply curve, Conditions of supply, Elasticity of supply, Economies of scale and scope.

Module 3: THEORY OF PRODUCTION AND COST ANALYSIS

(09 Periods)

Production and Cost Concepts: Production Function: Input-output relationship, Law of Variable proportion, Isoquants and Iso-costs

Cost Concepts: Total, Average and Marginal Cost, Fixed vs. Variable costs, Opportunity Costs Vs. Outlay Costs, Separable Costs Vs Joint Costs, Urgent Costs Vs Postponable Costs, Avoidable Costs Vs. Unavoidable Costs.

Break Even Analysis: Break Even Analysis (BEA), Assumptions, Merits and demerits, Determination of Break Even Point (Simple problems).

Module 4: MARKETS AND PRICING

(09 Periods)

Market Structure: Types of Markets, Features of perfect competition, Monopoly and monopolistic competition, Price and Output determination in perfect competition, monopoly and monopolistic Markets.

Pricing: Objectives and policies of pricing, Sealed bid pricing, Marginal cost pricing, Cost plus pricing, Going rate pricing, penetration Pricing, skimming Pricing, Block pricing, Peak load pricing, Cross subsidization.

Module 5: THEORY OF CONSUMER BEHAVIOUR

(09 Periods)

The indifference curve approach: Meaning, definition, assumptions and properties of the indifference curve, consumers equilibrium, budget line. Preference; utility; budget constraint; choice; demand; Slutsky equation; buying and selling; choice under risk and inter temporal choice; revealed preference.

Total Periods: 45

EXPERIENTIAL LEARNING

- 1 Prepare a report regarding demand and supply of electric vehicles in the Indian market.
- 2 Submitting the assignment on the topics viz. Production function and cost of the product and BEP.
- 3 Presentation of seminar on the topics viz. types of markets and pricing methods
All the above is detailed in CHO.

RESOURCES

TEXT BOOKS:

1. Hal R. Varian, Intermediate Microeconomics: A Modern Approach, W.W. Norton and Company/Affiliated East-West Press (India), The workbook by Varian and Bergstrom may be used for problems.
2. C. Snyder and W. Nicholson, Fundamentals of Microeconomics, Cengage Learning (India).
3. B. Douglas Bernheim and Michael D. Whinston, Microeconomics, Tata McGraw-Hill (India).

REFERENCE BOOKS:

1. H L Ahuja, Business Economics (Thirteenth edition), s Chand Publishing, Jan 2016.

VIDEO LECTURES:

1. <https://www.youtube.com/watch?v=JNdQVPEVURU>
2. https://www.youtube.com/watch?v=356_pioFiss

Web Resources:

1. <https://www.geektonight.com/business-economics-notes-pdf/>
2. https://www.academia.edu/6416337/Business_Economics_ppt_chap_1
3. <https://aits-tpt.edu.in/wp-content/uploads/2018/08/Market-and-Pricing-Strategies.pdf>
4. <https://www.britannica.com/topic/production-function>

SCHOOL CORE

Course Code	Course Title	L	T	P	S	C
22CM101002	BUSINESS ENVIRONMENT	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course will prepare future entrepreneurs to plan, launch and grow a business venture within the context of their local and national social, political, legal cultural and economic environment. It will ensure that They will be able to assess the impact of these different environments on the potential to succeed in their new business.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1** Understand the concept, significance and changing dimensions of Business Environment.
- CO2** Interpret the role of economic systems and economic environment and its impact on business.
- CO3** Infer the importance and impact of legal and political, Socio- Cultural environment on the business.
- CO4** Understand the importance of Multinational corporations, foreign collaborations and international institutions in business.

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	-	-	-	-	-	-	3	2	2	-	-	-
CO2	3	2	-	-	-	-	-	2	-	2	2	-	-	-
CO3	3	2	-	-	-	-	-	2	-	2	2	-	-	-
CO4	3	2	-	-	-	-	-	-	-	2	2	-	-	-
Course Correlation Mapping	3	2	-	-	-	-	-	2	3	2	2	-	-	-

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT

Module 1: BUSINESS ENVIRONMENT

**(09
Periods)**

Concept, Nature, Scope, Significance, Types of Environments, Internal and External Environment, Factors Influencing Business Environment, Techniques of Environmental Scanning and Monitoring, Emerging Dimensions of Business Environment.

Module 2: ECONOMIC ENVIRONMENT (09 Periods)

Concept, Nature, Scope, Elements of Economic Environment, Economic System and Business Environment, Economic planning, Industrial policy, Fiscal policy, Monetary Policy, New economic policy.

Module 3 POLITICAL AND LEGAL ENVIRONMENT (09 Periods)

Concepts, Political institutions, Rationale and Extent of State Intervention, Reasons for State Intervention, Types of Intervention, Government Business Interface, Legal Environment, Changing Dimensions of Legal Environment.

Module 4 SOCIO- CULTURAL ENVIRONMENT (09 Periods)

Concept, Elements of Socio, Cultural Environment, Impact, Social Responsibility of Business, Business Ethics, Corporate Governance.

Module 5 GLOBAL ENVIRONMENT (09 Periods)

Concept, Nature, Scope, Significance, Foreign Investment in India, Benefits and problems of MNCs, Strategies for Going Global, EXIM Policy, FEMA, Emerging Challenges of Global Business.

Total Periods: 45

EXPERIENTIAL LEARNING

- 1 Prepare a mini project report regarding recent trends and changes in the Indian economic environment.
- 2 Submitting the assignment on emerging challenges of global business.
- 3 Presentation of seminar on the topics selected topics.
All the above is detailed in CHO.

RESOURCES

TEXT BOOKS:

- 1 K. Aswathappa, Essentials of Business environment, Himalaya Publishing House
- 2 Francis Cherunilam, Business environment – Text and cases, Himalaya Publishing House

REFERENCE BOOKS:

- 1 Sundaram& Black. International Business Environment Text and cases, PHI
- 2 Pandey G.N. Environmental Management, Vikas publishing house

VIDEO LECTURES:

- 1 <https://www.youtube.com/watch?v=dUoRQia5e6k>
- 2 https://www.youtube.com/watch?v=AOnG_0C2g6M

Web Resources:

- 1 <https://archive.nptel.ac.in/>

- 2 <https://ncert.nic.in/textbook/pdf/lebs103.pdf>
 3 <https://ncert.nic.in/textbook/pdf/lebs103.pdf>

SCHOOL CORE

Course Code	Course Title	L	T	P	S	C
22CM101003	BUSINESS ORGANISATION AND MANAGEMENT	3	-	-	-	3
Pre-Requisite	---					
Anti-Requisite	---					
Co-Requisite	---					

COURSE DESCRIPTION: This course provides essential knowledge of business and management. This course will familiarize the students with different types business organizations and also various dimensions in management.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1** Examine and understand the concepts and different form of Business organizations
 Demonstrate knowledge about the need and importance of organization process &
CO2 structure
 Examine the stages in company incorporation, and preparation of statutory documents to
CO3 be prepared while company incorporation.
 Demonstrate the knowledge about departmentation and delegation of authority, various
CO4 systems and approaches to management.

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	-	-	-	-	-	-	-	-	3	2	-	-	-
CO2	3	-	-	-	-	-	-	-	-	3	2	-	-	-
CO3	3	-	-	-	-	-	-	-	-	3	2	-	-	-
CO4	3	-	-	-	-	3	-	-	-	3	2	-	-	-
Course Correlation Mapping	3	-	-	-	-	3	-	-	-	3	2	-	-	-

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT

Module 1: Introduction of Business

(09 Periods)

Business – Meaning, Definition, Features and Functions of Business - Trade Classification – Aids to Trade – Industry Classification and Commerce - Factors Influencing the Choice of Suitable form of Organisations.

Module 2: Forms of Business Organisations

(09 Periods)

Features, Merits and Demerits of Sole Proprietor Ship and Partnership Business - Features Merits and Demerits of Joint Stock Companies - Public Sector Enterprises (PSEs) - Multinational Corporations (MNCs)- Differences between Private Limited Public Limited Company

Module 3 Company Incorporation

(09 Periods)

Preparation of Important Documents for Incorporation of Company - Certificate of Incorporation and Certificate of Commencement of Business - Contents of Memorandum and Articles of Association - Contents of Prospectus

Module 4 Nature of Management

(09 Periods)

Definition – Management an Art, Science or Profession – Manager Defined – Manager vs Leader - Levels of Management – Skills of Management -Fayol's 14 Principles of Management - Administration Vs Management.

Module 5 Functions of Management

(09 Periods)

Different Functions of Management - Meaning – Definition – Characteristics Merits and Demerits of Planning - Principles of Organisation – Line and staff of Organisation-Delegation of authority: Meaning – advantages and disadvantages - Decentralization: Meaning – advantages and disadvantages

Total Periods: 45

EXPERIENTIAL LEARNING

1. Analyse the business environment at a select city of your choice and list out 10 business entities falling under each form of business (Sole proprietorship, Partnership, Public & Private Companies)
2. Prepare a report on the procedure to be followed while incorporation of a new company as per Indian Companies Act.
3. Collect and submit Memorandum of association of any 5 companies by using online sources.
4. Submit a report of Organization structure of any 5 business entities
5. Prepare a report on Delegation and Decentralization
6. Prepare a report on factors influencing the form of business Organization

RESOURCES

TEXT BOOKS:

1. R.K.Sharma and Shashi K Gupta , "Business Organization", Kalyani Publications, Mumbai, 2018.
2. C.D.Balaji and G. Prasad, "Business Organization", Margham Publications, Chennai, 2018.
3. C.R. Basu , "Business Organization & Management", Tata McGraw Hil, New Delhi, 2019.

REFERENCE BOOKS:

1. C.B.Guptha, "Industrial Organization and Management", Sultan Chand Publishers ,Mumbai, 20221
2. Sharma, Shashi K. Gupta, "Business Organization & Management", Kalyani Publishers, Mumbai, 2019.

VIDEO LECTURES:

1. <https://www.classcentral.com/course/swayam-principles-of-management-19977>
2. <https://www.classcentral.com/course/swayam-forms-of-business-organisation-45146>

Web Resources:

1. <https://www.entrepreneur.com>
2. <https://www.uagrantham.edu>
3. <https://journals.sagepub.com>

SCHOOL CORE

Course Code	Course Title	L	T	P	S	C
22CM101004	CORPORATE GOVERNANCE AND BUSINESS ETHICS	3	-	-	-	3

Pre-Requisite -

Anti-Requisite -

Co-Requisite -

COURSE DESCRIPTION: The course aim is to acquaint with basic concepts of corporate governance in the corporate sector and to gain the knowledge about the ethical values in business.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1** Acquire the knowledge Corporate Governance.
- CO2** Know about the committee recommendations of Corporate Governance.
- CO3** Know the Formation of board of directors
- CO4** Acquire the knowledge about the business ethics.
- CO5** Acquire the knowledge about the duties and responsibilities of top management.

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	-	-	-	2	-	-	1	-	-	3	-	2	-
CO2	3	-	-	-	2	-	-	1	1	-	3	-	2	-
CO3	3	-	-	-	2	-	-	1	1	-	3	-	2	-
CO4	3	-	-	-	2	-	-	1	1	-	3	-	2	-
CO5	3	-	-	-	2	-	-	-	1	-	3	-	2	-
Course Correlation Mapping	3	-	-	-	2	-	-	1	1	-	3	-	2	-

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT:

Module 1: CORPORATE GOVERNANCE

(09 Periods)

Meaning – Need – Importance – Corporate Governance (CG) mechanism – CG Systems – Indian model of CG – CG and Value maximization – Issues in Corporate Governance.

Module 2: CORPORATE GOVERNANCE IN INDIA (09 Periods)

Need and Importance – Historical perspective – Indian Committees and guidelines on CG – Naresh Chandra Committee – Narayana Murthy Committee – J.J Irani Committee – Kumara Mangalam Birla Committee – The CII initiatives – SEBI initiative – CG practice in India

Module 3 BOARD OF DIRECTORS AND AUDIT COMMITTEE (09 Periods)

Board of Directors and their role in CG – Composition of Board – CG issues relating to Board Audit Committee: Duties and responsibilities of Auditors – Composition of Audit Committee – CG and internal auditors – Indian situation - Principles of good CG and code of best practices

Module 4 BUSINESS ETHICS (09 Periods)

Introduction - ethics and values - the new management philosophy - Ethics in HRM – Ethics in Production function - Ethics in management of quality - Ethics in finance function area.

Module 5 ETHICS IN CEO, MD, PROMOTERS (09 Periods)

Business ethics in CEO, MD, Business promoters, responsibilities - ethics in intellectual property rights – trademarks - property rights – patents and copy rights.

Total Periods: 45

EXPERIENTIAL LEARNING

1. Submit a report on the structure of corporate governance.
2. Prepare a detailed report on committees of corporate governance in India.
3. Conduct a group discussion on CII and SEBI initiatives.
4. Give a presentation of the ethical values of the CEO in the flowchart

RESOURCES

TEXT BOOKS:

- 1 Fernando A.C, Corporate Governance - Principles, Policies, and Practices, Pearson Education, New Delhi -2006.
- 2 Subash Chandra Das, Corporate Governance – Codes, Systems, Standards and Practices, PHI Learning New Delhi-2009

REFERENCE BOOKS

- 1 Singh S - Corporate Governance – Global Concepts and Practices – Excel Books -New Delhi-2005.
- 2 Donald H. Chew Jr. Stuart L. Gillan, Corporate Governance at Crossroads, Tata McGraw – Hill Co. Ltd. New Delhi

VIDEO LECTURES

- 1 <https://www.youtube.com/watch?v=GiYBSHgPEgE>
- 2 https://www.youtube.com/watch?v=mCgV_43oLnc

WEB RESOURCES:

1. <https://blog.ipleaders.in/corporate-governance-and-business-ethics/>
2. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4664146/>

SCHOOL CORE

Course Code	Course Title	L	T	P	S	C
22CM102001	INFORMATION TECHNOLOGY FOR BUSINESS	3	-	2	-	4

Pre-Requisite

Anti-Requisite

Co-Requisite

COURSE DESCRIPTION: The course aim is to acquaint with fundamentals of computers and Information Technology. Also, to gain understanding of Internet technology and office tools.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Understand the basic concepts of information technology and computer networks.
- CO2.** Explain the concepts of the MIS and DBMS
- CO3.** Interpret the concept of Multimedia devices and business application of Multimedia.
- CO4.** Understand the knowledge of Internet security and office management applications.
- CO5.** Apply office automation tools to create and manage Organizational documents.

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	-	-	-	-	-	-	-	-	3	-	3	-	-
CO2	3	-	-	-	-	-	-	-	-	3	-	3	-	-
CO3	3	-	-	-	-	-	-	-	-	3	-	3	-	-
CO4	3	-	-	-	-	-	-	-	-	3	-	3	-	-
CO5	2	-	-	-	-	3	3	-	-	3	-	3	-	-
Course Correlation Mapping	3	-	-	-	-	-	-	-	-	3	-	3	-	-

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT

Module 1: Introduction to Information Technology (09 Periods)

Computer Systems - Hardware - I/O Devices, Memory Devices, Processors - Software - Classification of Software - Systems Software, Application Software - Operating System - Definition - Types of OS - Understanding of GUI - Networks - Definition - Types of Network - LAN, WAN - Network Topologies - Physical Communication Media - TCP/IP, OSI Model.

Module 2: Introduction to Information System (09 Periods)

Definition of Data, Information & Knowledge, IS - MIS, DSS, Expert Systems - Types of IS - Operation, Tactical, Strategic IS - Executives Information Systems (EIS) - Definitions - Data Base, DBMS, Advantages & Disadvantages of DBMS - Ethical and Social Issues in IS.

Module 3: Multimedia Concepts (09 Periods)

Definition of Multimedia - Multimedia Devices - Multimedia Formats - Audio Formats - Video Formats - Compression/Decompression Issues - Business Applications of Multimedia.

Module 4: Internet & Security Issues (09 Periods)

History - Internet Addressing and Architecture - WWW - Architecture - Browser - Servers - Search Engines - Internet Services - Email - Chatting - Messaging - Groups - Social Networking - Internet in Business - Definition of E-commerce, M-commerce - Types of Online Business - Security Issues in Internet.

Module 5: Office management applications (09 Periods)

Intranets, Extranets, VPN - Internet Telephony - Groupware - Audio and Video Conferencing - Wireless Communication - WLANs - Definitions of Bluetooth - WiFi - WiMax - RFID - Use of Document Application (MS-Word), Spreadsheet Applications (MS-Excel) - Database Application (MS-Access) for the business (important menu options only).

Total Periods: 45

EXPERIENTIAL LEARNING

List of Exercises

1. Identify and study various peripheral devices of computer.
2. Perform MS DOS internal and external commands.
3. Study various multimedia Tools.
4. Send a formal Invitation to multiple persons using any E- Mailing Application.
5. Perform a video conference / online meeting using a video conferencing tool.
6. Create an advertisement for an Education institution in MS Word.
7. Perform Mail-Merge in MS Word.
8. Apply mathematical functions to student mark sheet in excel
9. Represent sales forecasting of a firm using Pie chart.
10. Generate Monthly Budget for a startup company in Excel.

RESOURCES

TEXT BOOKS:

1. Dr. Dhiraj Sharma, "Information Technology for Business", Himalaya Publishers, New Delhi, 2017.
2. Reema Thareja, "Information Technology and its Applications in Business", Oxford Publications, New Delhi, 2017.

REFERENCE BOOKS:

1. Antony Thomas, "Information Technology For Business", Prathibha Publication, Bangalore, 2015.
2. Sanjay Saxena, "Introduction to Information Technology", Vikas Publishing, 2018.

VIDEO LECTURES:

1. <https://www.youtube.com/watch?v=Qy064xFEW64>
2. <https://www.youtube.com/watch?v=7BfdMKeLTj0>

Web Resources:

1. <https://mu.ac.in/wp-content/uploads/2021/01/IT-in-Management.pdf>
2. <https://rccmindore.com/wp-content/uploads/2015/06/BBA-1-Information-Technology.pdf>

SCHOOL CORE

Course Code	Course Title	L	T	P	S	C
22CM101005	PRINCIPLES OF BANKING AND INSURANCE	3	-	-	-	3

Pre-Requisite ---

Anti-Requisite ---

Co-Requisite ---

COURSE DESCRIPTION: The objective of this course is to enable students gain knowledge about banking and insurance and its various components. The last two decades there has been a revolutionary development in the fields of banking. This course focuses on banking introduction, loans and advances and management of NPAs, E-Banking, introduction of Insurance and Life Insurance Plans.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1** Examine and understand the features of Indian Banking System, role of commercial banks in India
- CO2** Assess the impact of NPA's on the performance of Banks.
- CO3** Explain the Insurance Concepts and its functioning, regulation.
- CO4** Illustrate the sales promotion activities of Insurance policies and post-sale services to customers.

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	-	-	-	-	-	-	-	-	3	2	-	-	-
CO2	3	-	-	-	-	-	-	-	-	3	2	-	-	-
CO3	3	-	-	-	-	-	-	-	-	3	2	-	-	-
CO4	3	-	-	-	-	-	-	-	-	3	2	-	-	-
Course Correlation Mapping	3	-	-	-	-	-	-	-	-	3	2	-	-	-

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT

Module 1: Introduction to Banking

(09 Periods)

Meaning & Definition of Bank-Evolution of Banking in India-Functions of Commercial Banks-Structure of Commercial Banks in India-Role of Commercial Banks in Economic Development - Central Bank Vs. Commercial Bank

Module 2: Loans and Advances & Management of NPAs

(09 Periods)

Principles of Sound Lending-Secured and Unsecured Advances-Forms of Advances-Concept of Non-Performing Assets (NPAs)-Factors Contributing to NPAs- Management of NPAs -Recent Measures

Module 3 Electronic Banking

(09 Periods)

Meaning of E-Banking-Automated Teller Machine (ATM)-Internet Banking-Electronic Clearing Service (ECS)-Electronic Funds Transfer (EFT)-Tele Banking-Electronic Cheques-Debit Cards-Credit Cards-Smart Cards-Risks in E-Banking.

Module 4 Life Insurance

(09 Periods)

Growth of Insurance Sector in India-Regulatory Mechanism (IRDA) – Functions of IRDA. Life Insurance – Meaning - Features of Life Insurance - Advantages of Life Insurance - Importance of Life Insurance Policies - Types of Life Insurance Policies - Procedure of taking Life Insurance Policies - Nomination and Assignment of Life Insurance Policies -

Module 5 General Insurance

(09 Periods)

General Insurance – Meaning - Importance of General Insurance - Types of General Insurance Policies - Fire Insurance – Marine Insurance - Motor Vehicle Insurance - Health Insurance - Theft & Burglary Insurance - Procedure for taking Fire Insurance Policy - Procedure for taking Health Insurance Policy.

Total Periods: 45

EXPERIENTIAL LEARNING

1. Write a report on Banking structure in India
2. Submit a report on "Role of commercial banks in Economic development"
3. Prepare a report on Non-Performing Assets of Public sector banks.
4. Write a report on electronic banking facilities providing by the Indian banks.
5. Write a report on the Banking sector in India.
6. Write a report on the functions of RBI & IRDA in India
7. Prepare a report on Indian Insurance sector.

RESOURCES

TEXT BOOKS:

1. Jagroop Singh & Seema Ghosh, "*Banking Theory and Practice*", Kalyani Publishers, New Delhi, 2021.
2. Gordon, E & Natarajan.K "*Banking Theory, Law and Practice*", Himalaya Publishing House, Mumbai, 2021.
1. Jyotsna Sethi & Nishwan Bhatia, "*Elements of Banking and Insurance*", PHI Learning Pvt, Ltd, New Delhi, 2012.

REFERENCE BOOKS:

- 1 Murali, S. & Subbakrishna, K.R., "*Bank Credit Management*", Himalaya Publishing House, Mumbai, 2019.
- 2 Guruswamy, S. "*Banking Theory law and practice*", TaTa Mc Graw-Hill Education Pvt. Ltd., New Delhi, 2010.

VIDEO LECTURES:

- 1 <https://www.youtube-Basics of Banking/HitBullsEye-585456>
- 2 <https://www.youtube.com/watch?v=Vvp6z1cvC-k>

WEB RESOURCES:

- 1 www.himpub.com
- 2 www.RBI.com
- 3 www.IBA.com

SCHOOL CORE

Course Code	Course Title	L	T	P	S	C
22CM101006	FUNDAMENTALS OF AUDITING	3	-	-	-	3
Pre-Requisite	---					
Anti-Requisite	---					
Co-Requisite	---					
COURSE DESCRIPTION: This course provides essential knowledge of auditing for any type of business and management. This course will familiarize the students with types of audits, vouching and audit of companies.						
COURSE OUTCOMES: After successful completion of the course, students will be able to:						
CO1	Understand the meaning and necessity of audit in modern era, and have the knowledge about types of audits.					
CO2	Have the knowledge of audit planning, Internal check, and Internal control.					
CO3	Familiarise with the concepts of vouching of cash and trade transactions.					
CO4	Understand the preparation of audit report, and appointment of auditor of a company.					

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	1	-	-	-	-	-	-	-	3	3	-	-	-
CO2	3	1	-	-	-	-	-	-	-	3	3	-	-	-
CO3	3	1	-	-	-	-	-	-	-	3	3	-	-	-
CO4	3	1	-	-	-	1	-	-	-	3	3	-	-	-
Course Correlation Mapping	3	1	-	-	-	1	-	-	-	3	3	-	-	-

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT

Module 1: Introduction of Auditing **(09 Periods)**

Meaning – Objectives – Importance of Auditing – Characteristics -Book Keeping vs Auditing
- Accounting vs Auditing – Role of Auditor in Checking Corporate Frauds.

Module 2: Types of Audits **(09 Periods)**

Based on Ownership, Time and Objective - Independent, Financial, Internal, Cost, Tax, Government, Secretarial Audits

Module 3: Planning of Audit **(09 Periods)**

Steps to be taken at the Commencement of a New Audit –Audit Programme - Audit Note Book– Audit Working Papers - Audit Evidence - Internal Check, Internal Audit and Internal Control.

Module 4: Vouching and Investigation **(09 Periods)**

Definition and Importance of Vouching – Objectives of Vouching -Vouching of Cash and Trade Transactions – Investigation - Auditing vs. Investigation

Module 5: Company Audit and Auditors Report **(09 Periods)**

Auditor's Qualifications – Appointment and Reappointment – Rights, Duties, Liabilities and Disqualifications - Audit Report: Contents –Preparation - Relevant Provisions of Companies Act, 2013

Total Periods: 45

EXPERIENTIAL LEARNING

1. Prepare a report on role of auditor in the prevention of corporate frauds
2. Prepare a report on the corporate frauds that are taken place in the recent times in India.
3. Prepare a report on different types of audits.
4. Prepare and submit a Report on audit guidelines as per ICAI.
5. Present a report on auditors' qualification and disqualification as per ICAI.
6. Prepare and submit a report on provisions of Companies Act relating to Audit report.

RESOURCES

TEXT BOOKS:

1. S.Vengadamani, "Practical Auditing", Margham Publications, Chennai, 2018.
2. Ghatalia, "Principles of Auditing", Allied Publishers Pvt. Ltd., New Delhi, 2021.
3. N.D. Kapoor, "Auditing", S Chand, New Delhi, 2022.

REFERENCE BOOKS:

1. R.G. Saxena, "Principles and Practice of Auditing", Himalaya Publishing House New Delhi, 2022

2. Jagadeesh Prakash, "Principles and Practices of Auditing", Kalyani Publications, 2019.

VIDEO LECTURES:

1. <https://www.classcentral.com/course/auditing-part1-conceptual-foundations-11798>
2. <https://www.classcentral.com/course/auditing-part2-the-practice-12151>

Web Resources:

1. <http://www.dsa.ap.gov.in>
2. <http://audit.delhigovt.nic.in>
3. <https://www.mca.gov.in>

SCHOOL CORE

Course Code	Course Title	L	T	P	S	C
22CM102002	DATA ANALYSIS USING SPREADSHEET	3	-	2		4
Pre-Requisite	22CM102001 - INFORMATION TECHNOLOGY FOR BUSINESS					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION:

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1** Understand and the use of basic operations of MS Excel.
- CO2** Apply the skills working with Pivot tables using MS Excel.
- CO3** Understand and practice the conditional functions and Working with Large Sets of Data.
- CO4** Apply Lookup Functions in problem solving.
- CO5** Apply Financial, Logical, Statistical, Reference and Text Excel functions to solve Business problems.

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	1	-		-	-	-		3	2	2	-	-
CO2	3	2	1	-		-	-	-		3	2	2	-	-
CO3	3	2	1	-		-	-	-		3	2	2	-	-
CO4	3	2	1	-		-	-	-		3	2	2	-	-
Course Correlation Mapping	3	3	1	-		-	-	-		3	2	2	-	-

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT

Module 1: Introduction

(09 Periods)

Basic Excel functions: Structure of an excel function, functions such as SUM (), MIN (), MAX (), AVERAGE (), COUNT (), AUTOSUM, AUTOFILL. **Working with an Excel List:** Understanding Excel List Structure, sorting a List Using Single Level Sort, sorting a List Using Multi-Level Sorts, Using Custom Sorts in an Excel List, Filter an Excel List Using the AutoFilter, Creating Subtotals in a List, format a List as a Table, Using Conditional Formatting to Find Duplicates, Removing Duplicates. **Excel Data Validation:** Understanding the Need for Data Validation, creating a Validation List, adding a Custom Validation Error, Dynamic Formulas by Using Validation Techniques

Module 2: Pivot Table

(09 Periods)

PivotTable: Understanding Excel PivotTables, creating an Excel PivotTable, Modifying Excel PivotTable Calculations, Grouping PivotTable Data, Formatting PivotTable Data, Drilling Down into PivotTable Data, Creating Pivot Charts, Filtering PivotTable Data, Filtering with the Slicer Tool.

Module 3: Functions - I

(09 Periods)

Conditional Functions: Working with Excel Name Ranges, Using Excel's IF () Function, Nesting Functions, Using Excel's COUNTIF () Function, Using Excel's SUMIF () Function, Using Excel's IFERROR () Function. **Working with Large Sets of Excel Data:** Using the Freeze Panes Tool, Grouping Data (Columns and/or Rows), Consolidating Data from Multiple Worksheets.

Module 4: Functions - II

(09 Periods)

Excel's Lookup Functions: Using Excel's VLOOKUP() Function, Using Excel's HLOOKUP() Function, Using Excel's INDEX() and MATCH() Functions.

Excel's Text Based Functions: Using Excel's functions such as LEFT(), RIGHT() and MID(), LEN(), SEARCH(), CONCATENATE().

Module 5: Functions - III

(09 Periods)

Financial Functions: Time value of money - present value of money, Capital budgeting, Net present value, Internal rate of return (Theory), Depreciation, Simple Interest (PMT, NPER, INTRATE) - Present Value, Net Present Value, Future Value (PV, NPV, FV), Annuity, Internal Rate of Return (IRR).

Statistical Functions: AVG(), MIN(), MAX(), COUNT(), COVAR(), FREQUENCY(), MEDIAN(), STDEV() and VAR().

Total Periods:45

EXPERIENTIAL LEARNING

1. Working with basic Excell functions

Investors Name	Investment Type	Amount in USD
SoftBank Vision Fund	Series G	23,10000
Paytm, NPTK and Neoplux	Series C	1,20,00,00
Vertex Growth Fund	Series E	3,00,00,000
Sabre Partners	Debt Funding	59,00,000
Ruizheng Investment	Seed Round	20,00,000
SAIF Partners, Spring Canter Investment Ltd.	Series F	2,00,00,000
Sathguru Catalyzer Advisors	Series A	60,00,000
Manipal Education and Medical Group (MEMG)	Seed Round	5,00,00,000
Ping An Global Voyager Fund	Series D	7,00,00,000
Mumbai Angels, Ravikanth Reddy	Seed	5,00,00,000
Vijay Shekhar Sharma	Funding Round	1,00,00,000
FinTech	Debt Funding	1,74,11,265
Altimeter Capital, Sutter Hill Ventures	Series C	13,50,00,000

2. Sorting a list using Single Level and Multi-Level Sorts

Startup Name	Industry Vertical	Sub Vertical	Location
Lenskart.com	E-Commerce	Online Eyewear Shopping Portal	Faridabad
Healthians	B2B-focused foodtech startup	Food Solutions for Corporate	Bengaluru
Licious	E-Commerce	Online Meat and Seafood Ordering Startup	Bengaluru
InCred	Finance	Non-Banking Financial Company	Mumbai
Trell	Video	Experience Discovery Platform	Bengaluru

3. Creating Pivot table

Sub Vertical	Location	Investors Name	Investment Type
Online Eyewear Shopping Portal	Faridabad	SoftBank Vision Fund	Series G
Food Solutions for Corporate	Bengaluru	Paytm, NPTK, Sabre Partners and Neoplux	Series C
Online Meat and Seafood Ordering Startup	Bengaluru	Vertex Growth Fund	Series E
Non-Banking Financial Company	Mumbai	Sutter Hill Ventures	Debt Funding
Experience Discovery Platform	Bengaluru	Ruizheng Investment	Seed Round
Logistics Services and Solutions	Gurgaon	SAIF Partners, Spring Canter Investment Ltd.	Series F
Agritech	Pune	Sathguru Catalyzer Advisors	Series A
Real moneybased gaming startup	Noida	Manipal Education and Medical Group (MEMG)	Seed Round
Automobile	Gurgaon	Ping An Global Voyager Fund	Series D
Satellite Communication	Bengaluru	Mumbai Angels, Ravikanth Reddy	Seed
Mobile Wallet	Noida	Vijay Shekhar Sharma	Funding Round
Financial Services to MSMEs	Gurgaon	FinTech	Debt Funding
Recovery software	San Jose,	Altimeter Capital	Series C

4. Creating Pivot Charts

Sub Vertical	Location	Investors Name	Investment Type
Online Eyewear Shopping Portal	Faridabad	SoftBank Vision Fund	Series G
Food Solutions for Corporate	Bengaluru	Paytm, NPTK, Sabre Partners and Neoplux	Series C
Online Meat and Seafood Ordering Startup	Bengaluru	Vertex Growth Fund	Series E
Non-Banking Financial Company	Mumbai	NPTK	Debt Funding
Experience Discovery Platform	Bengaluru	Ruizheng Investment	Seed Round

5. Working with VLOOKUP() Function

Date	Average Amount in USD	Total Amount in USD
20-12-2019	5,00,00,000	23,10,00,000
17-12-2019	7,00,00,000	1,20,00,000
16-12-2019	5,00,00,000	3,00,00,000
16-12-2019	1,00,00,00,000	59,00,000
14-12-2019	1,74,11,265	20,00,000
13-12-2019	13,50,00,000	2,00,00,000
12-12-2019	22,00,00,000	60,00,000
11-12-2019	20,00,00,000	5,00,00,000
06-12-2019	1,20,00,000	7,00,00,000

6. Extend the above pass/fail computation problem to include attendance also. A student passes if he has an attendance greater than 8 else he fails even if he has a total greater than 50

Name	Gender	Attendance	Assignment	Mid-term	Final	Total
Virat	M	9	12	14	45	71
Soal	M	13	11	12	34	57
Vibool	M	8	8	12	21	41
Thehary	F	8	14	8	30	51

7. Time Value of Money Formula – Below is the extract from standard chartered bank deposit rate (recurring deposit) available for various periods. Now let's assume that you decide to invest \$100,000 say for period 6 months, then what is the value you would expect to receive?

Tenure	RESI	Senior Citizen	Non- Resident
3 months	3.50%	3.50%	NA
6 months	3.50%	3.50%	NA
12 months	3.50%	3.50%	NA
4 months	4.50%	4.50%	7.25%
6 months	7.30%	7.30%	7.30%
12months	7.25%	7.25%	7.25%

RESOURCES

TEXT BOOKS:

1. Rinkoo Jainn, *A to Z of MS EXCEL: A Book for Learners and Trainers*, Independently Published, 2021
2. Jordan Goldmeier, *Advanced Excel Essentials*. Apress, 2014

REFERENCE BOOKS:

1. Excel Data Analysis - Modeling and Simulation, Hector Guerrero, Springer Nature Switzerland AG 2019.
2. Data Analysis with Microsoft Excel, Kenneth N. Berk, Cengage Learning, 2007.

VIDEO LECTURES:

1. https://www.youtube.com/watch?v=8Ob8Hre_SnI
2. <https://www.qimacros.com/training/excel-videos/>

Web Resources:

1. <https://www.microsoft.com/en-in/education/products/office/default.aspx>
2. <https://excelexposure.com/>
3. <http://www.excel-easy.com/>
4. <https://www.javatpoint.com/excel-tutorial>

Course Code	SCHOOL CORE Course Title	L	T	P	S	C
22CM108001	CAPSTONE PROJECT	-	-	-	-	6
Pre-Requisite						
Anti-Requisite						
Co-Requisite						

COURSE DESCRIPTION: The course gives an idea of the research project, identify the research problem, review of literature, give idea about data collection and understating the knowledge on statistical tools.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- C01.** Gained knowledge about research project
- C02.** Increased knowledge on research problem
- C03.** Improved practice in review of literature
- C04.** Well versed in data collection
- C05.** Implement knowledge on statistical tools and Proficiency in project preparation

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
C01	1	1	2				3	1		3		2	1	
C02	1	1	2				3	1		3		2	1	
C03	1	1	2				3	1		3		2	1	
C04	1	1	2				3	1		3		2	1	
C05	1	1	2				3	1		3		2	1	
Course Correlation Mapping	1	1	2				3	1		3		2	1	

SCHOOLCORE

Course Code	Course Title	L	T	P	S	C
22CM111001	INTERNSHIP	-	-	-	-	2
Pre-Requisite						
Anti-Requisite						
Co-Requisite						

COURSE DESCRIPTION: The course gives an idea of the research project, identify the research problem, review of literature, give idea about data collection and understating the knowledge on statistical tools.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- C01.** Gained knowledge about research project
- C02.** Increased knowledge on research problem
- C03.** Improved practice in review of literature
- C04.** Well versed in data collection
- C05.** Implement knowledge on statistical tools and Proficiency in project preparation

Course Outcomes	Program Outcomes									Program Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
C01	1	1	2				3	1		3		2	1	
C02	1	1	2				3	1		3		2	1	
C03	1	1	2				3	1		3		2	1	
C04	1	1	2				3	1		3		2	1	
C05	1	1	2				3	1		3		2	1	
Course Correlation Mapping	1	1	2				3	1		3		2	1	

SCHOOL CORE

Course Code	Course Title	L	T	P	S	C
22LG102405	GENERAL ENGLISH	2	-	2	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course deals with selected literary works of eminent writers, exercises on speaking, reading comprehensions for skimming and scanning, vocabulary, grammar, pronunciation, and conversation practice.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Demonstrate knowledge of literary works of various pieces of eminent writers.
- CO2.** Adapt general and technical vocabulary in communication.
- CO3.** Apply grammatically correct English in writing.
- CO4.** Analyse texts using reading techniques.
- CO5.** Apply different communication styles in various situations.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes								
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
CO1	3	-	-	-	-	-	-	2	2
CO2	3	2	-	-	-	-	-	2	2
CO3	2	3	-	-	-	-	-	2	2
CO4	2	3	-	2	-	-	-	2	2
CO5	2	2	-	3	-	-	-	2	2
Course Correlation Mapping	2	3	-	3	-	-	-	2	2

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT

Module 1: 'A snake in the Grass' short story by R.K. Narayan. (06 Periods)
A Snake in the Grass – A Short Story, Reading Comprehension, Grammar, Vocabulary, Pronunciation, and Conversation Practice.

Module 2: 'On saying Please 'short essay by A. G. Gardiner (06 Periods)
On Saying Please – A Short Essay, Reading Comprehension, Grammar Vocabulary, Pronunciation, and Conversation Practice.

Module 3: 'If You Forget Me 'poem by Pablo Neruda (06 Periods)
If you Forget Me - A Poem, Reading Comprehension, Grammar, Pronunciation, and Conversation Practice.

Module 4: 'After the Sunset' short story by Bhoopal (06 Periods)
After the Sunset – A Short Story, Reading Comprehension, Grammar, Pronunciation, and Conversation Practice.

Module 5: 'Man's Peril 'essay by Bertrand Russel (06 Periods)
Man's Peril - An Essay, Reading Comprehension, Vocabulary, Grammar, Pronunciation, and Conversation Practice.

Total Periods: 30

EXPERIENTIAL LEARNING

1. In rainy seasons a lot of snakes are found crawling around. Prepare a write-up on the reactions of people when they found snakes.
2. India is now for entrepreneurs and the government announced a lot of startup programmes for that. Prepare a presentation on recent entrepreneurs.
3. Small courtesies play a major role in creating an impression on other people. List out a few examples.
4. Prepare a PowerPoint presentation on the present scenario in higher education and jobs in India.
5. Being a shopkeeper and persuading a customer to buy a product which is introduced newly in the market. Prepare a conversation.
6. The English language has a rich vocabulary. List out the homophones and homonyms and write down the pronunciation and meaning of those words.
7. Describe a situation in your college where teamwork is needed and explain the strategies to manage the team effectively.
8. India is a country of unity in diversity. List out the existence of different racial and religious people and bring out reasons for the harmonious relationship among the people.
9. Forget and forgive are the most important quality of any human being. Prepare a write-up on any two experiences which come across in your life where you forgive or forget to maintain good relationships with friends or relatives.
10. Make a case study on the problems of second language learners of English and suggest solutions to overcome them.
11. How do you feel that the role of science and technology in nation-building?

Above all will be detailed in CHO.

RESOURCES

TEXTBOOKS:

1. G. Damodar "English Language for Undergraduate Students", Cambridge University-2019.

REFERENCE BOOKS:

1. <https://www.researchgate.net/publication/331773456> RK Narayan's A Snake in the Grass and Stephen Leacock's With the Photographer - A Comparative Study
2. <https://smartenglishnotes.com/2020/07/17/on-saying-please-summary-analysis-and-questions-and-answers/>

VIDEO LECTURES:

1. <https://www.youtube.com/watch?v=WnOOKO0CdaM>
2. <https://www.youtube.com/watch?v=H6Nlz8qmcFc>
3. <https://www.youtube.com/watch?v=-ITliZO85YM>
4. <https://www.youtube.com/watch?v=048YjXwgHWE>
5. <https://www.youtube.com/watch?v=XLLQm7Grmcc>

WEB RESOURCES:

1. <https://www.researchgate.net/publication/331773456> RK Narayan's A Snake in the Grass and Stephen Leacock's With the Photographer - A Comparative Study
2. <https://smartenglishnotes.com/2020/07/17/on-saying-please-summary-analysis-and-questions-and-answers/>
3. http://www.emcp.com/product_catalog/school/litLink/Grade09/U09-04forgetme/
4. <https://englishlanguage-lit.blogspot.com/2021/05/after-sunset-short-story-by-bhoopal.html>
5. <https://www.taylorfrancis.com/chapters/mono/10.4324/9781003090359-31/man-peril-bertrand-russell?context=ubx&refId=1d767e2d-ceb1-4537-9de5-6417eab47d1e>

SCHOOL CORE

Course Code	Course Title	L	T	P	S	C
22LG101407	BUSINESS COMMUNICATION	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: In today's personal and professional world, communication is one of the most vital skills to develop. Effectiveness in communicating ideas, feelings, instructions, and thoughts is key to success, especially in business. Business Communication is designed to introduce skills and practices that will help to communicate and develop communication strategies among businesses, clients/stakeholders.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Write error-free while making optimum use of correct Business Vocabulary & Grammar.
- CO2.** Analyse various levels of organizational communication and communication barriers while developing an understanding of communication as a process in an organization
- CO3.** Draft effective business correspondence with brevity and clarity.
- CO4.** Stimulate their Critical thinking by designing and developing clean and lucid writing skills.
- CO5.** Apply modern technology in communication.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes								
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
CO1	2	-	-	-	-	-	2	-	3
CO2	2	3	-	-	-	-	2	-	2
CO3	2	2	-	-	-	-	2	-	3
CO4	2	-	-	-	-	-	2	-	3
CO5	-	2	-	-	2	-	2	-	3
Course Correlation Mapping	2	2	-	-	2	-	2	-	3

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT

Module 1: INTRODUCTION TO BUSINESS ENGLISH (09 Periods)

Introduction to Business communication, Barriers to Communication: Linguistic Barriers, Psychological Barriers, Interpersonal Barriers, Cultural Barriers, Physical Barriers, Organizational Barriers.

Module 2: BUSINESS CORRESPONDENCE (09 Periods)

Letter Writing, presentation, Inviting quotations, Sending quotations, Placing orders, Inviting tenders, Sales letters, claim & adjustment letters and social correspondence, Memorandum, Interoffice Memo, Notices, Agenda, Minutes, Job application letter, preparing the resume.

Module 3 BUSINESS REPORT WRITING (09 Periods)

Identify the types of reports, define the basic format of a report, identify the steps of report writing, write a report meeting the format requirements, and determine the process of writing a report.

Module 4 ENGLISH LANGUAGE AND PRESENTATION (09 Periods)

Importance of Business language, Vocabulary Words often confused, Words often misspelled Common errors in English. PowerPoint presentation, Visual aids.

Module 5 TECHNOLOGY AND BUSINESS COMMUNICATION (09 Periods)

E-mail, text messaging, instant messaging, video conferencing, and social networking. The strategic importance of e-communication.

Total Periods: 45

EXPERIENTIAL LEARNING

1. Prepare a list of confused words of yours and find a way to overcome the difficulties.
2. Make a PowerPoint presentation on the modern communication system of any organization.
3. Analyse the pros and cons of video conferencing.
4. Prepare visual aids to support the presentation
5. Make a detailed study on social networking and its impact on modern business.
6. Case study on the e-commerce websites with reference to their communication strategy.

RESOURCES

TEXTBOOK:

- 1 Vikram Bisen & Priya. Business Communication. New Age International, 2009.

REFERENCE BOOKS:

1. Guffey Mary Ellen, Loewy Dana Almonte & Richard. Essentials of business communication. Nelson College Indigenous, 2018.
2. Anjanee Sethi & Bhavana Adhikari. Business Communication. Tata Mcgraw Hill, 2009.

3. P. D. Chaturvedi, & Mukesh Chaturvedi. Business Communication: for B. Com course of Uttar Pradesh Universities Pearson Education. 2011.
4. Jones, Leo & Richard Alexander. New International Business English. CUP, 2003.
5. Horner, David & Peter Strutt. Words at Work. CUP. 1996.
6. Levi, Daniel. Group Dynamics for Teams. 3 ed. Sage Publications India Pvt. Ltd. New Delhi, 2011.
7. Owen, Roger. BBC Business English. BBC, 1996.
8. R. C. Sharma & Krishna Mohan. Business correspondence and report writing: a practical approach to business & technical communication. Mc Graw Hill India, 2017.
9. Michelle Reid. Report Writing Red. Globe Press, 2018.

VIDEO LECTURES:

1. <https://nptel.ac.in/courses/110105052>
2. https://edurev.in/courses/14522_Business-Communication-The-Ultimate-Guide

WEB RESOURCES:

1. <http://www.rapodar.ac.in/pdf/elearn/Business%20Communication%20Semester%20I%20notes.pdf>
2. <https://www.nextiva.com/blog/what-is-business-communication.html#:~:text=Business%20communication%20is%20the%20process,organizational%20practices%20and%20reduce%20errors.>
3. <https://www.cloudtalk.io/blog/the-importance-of-business-communication-definition-types-and-tips/>

SCHOOL CORE

Course Code	Course Title	L	T	P	S	C
22LG101402	తెలుగు	2	-	-	-	2

Pre-Requisite -

Anti-Requisite -

Co-Requisite -

COURSE DESCRIPTION: తుమ్మల సీతారామమూర్తి-ఎక్కట్లు, తిక్కన-నాడీజంఘాపాఖ్యానం, పోతన-ఘనోపాఖ్యానం, దువ్వూరి రామిరెడ్డి - కృషీ వలుడు, మరియు తెలుగు వ్యాకరణం మీద అవగాహన.

COURSE OUTCOMES: కోర్సు విజయవంతంగా పూర్తి చేసిన తర్వాత, విద్యార్థులు వీటిని చేయగలరు:

- C01.** విద్యార్థులలో మానవీయ విలువలు పెరిగి నైతిక వలువలతో జీవించడం
- C02.** సమాజంలో మనకు చేతనైన సాయం చెయ్యడం ప్రతి మనిషి బాధ్యత అనే సందేశం
- C03.** త్రికరణ శుద్ధితో కృషి చేస్తే ఏదైనా సాధించ వచ్చు అనే సందేశం
- C04.** వ్యవసాయ రంగం గూర్చి విద్యార్థులలో అవగాహన కలగడం
- C05.** తెలుగు వ్యాకరణం

CO-PO Mapping Table:

Course Outcomes	Program Outcomes								
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
C01	3	-	-	-	-	-	-	-	-
C02	3	-	-	-	-	-	-	-	-
C03	3	-	-	-	-	-	-	-	-
C04	3	-	-	-	-	-	-	-	-
C05	3	-	-	-	-	-	-	-	-
Course Correlation Mapping	3	-	-	-	-	-	-	-	-

Correlation Levels: 3: High; 2: Medium; 1: Low

పాఠ్య ప్రణాళిక

Module 1: ఎక్కట్లు – తుమ్మల సీతారామమూర్తి

(06 Periods)

సత్ప్రవర్తన, సచ్చీలత, సన్మార్గం, సమసమానత్వం గూర్చి వివరించడం.

Module 2: నాడీజంఘాపాఖ్యానం – తిక్కన

(06 Periods)

సహాయం చేసినవారిని మరచి పోరాదు. చేసిన మేలు మరచిన వారి జీవితం ఎంత హీనంగా ఉంటుందో తెలియజేయడం.

Module 3: ధ్రువోపాఖ్యానం – పోతన

(06 Periods)

ఎటువంటి కష్టాలకు సమస్యలకు కుంగి పోకుండా దీక్షతో పట్టుదలతో కృషితో అనుకున్నది సాధించాలని తెలియజేయడం.

Module 4: కృషీ వలుడు – దువ్వూరి రామిరెడ్డి

(06 Periods)

సమాజానికి వెన్నెముక అయిన రైతు యొక్క కష్టాలను త్యాగాలను వివరించడం.

Module 5: సంధులు, సమాసాలు, అలంకారాలు.

(06 Periods)

తెలుగు భాష యొక్క మూలాలను తెలుసుకోవడం.

Total Periods: 30

RESOURCES

TEXT BOOKS:

1. ఎక్కట్లు – కవి తుమ్మల సీతారామమూర్తి చౌదరి.
2. నాడీజంఘాపాఖ్యానం – కవి తిక్కన. (మహాభారతం – శాంతి పర్వం – తృతీయా శ్వాసం – 472 నుండి 511 పద్యాల వరకు).
3. ధ్రువోపాఖ్యానం – కవి పోతన (ఆంధ్ర మాహాభాగవతం – చతుర్థ స్కంధం – 216 నుండి 277 పద్యాల వరకు)
4. కృషీ వలుడు – కవి దువ్వూరి రామిరెడ్డి

VIDEO LECTURES:

1. <https://www.youtube.com/watch?v=5jX20h6HWzg>
2. <https://www.youtube.com/watch?v=FFtPSPByBmk>
3. https://www.youtube.com/watch?v=nQHF_pgTfL8
4. <https://www.youtube.com/watch?v=IEERKL3Q2Cs>

Web Resources:

1. http://teluguvignanamvinodam1.blogspot.com/2021/06/maha-bharatam-in-telugu-pdf-free-download_25.html
2. <https://www.freegurukul.org/blog/ramayanam-pdf/>

EXPERIENTIAL LEARNING

The experiential learning components will be detailed in CHO.

SCHOOL CORE

Course Code	Course Title	L	T	P	S	C
22LG101404	SANSKRIT	2	-	-	-	2
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: अस्मिन् पाठ्यक्रमे संस्कृत गद्य, पद्य, व्याकरणेन सह महाभारतम् अपि च रामायणस्य कान्धन खण्डानां मेलनं भवति । अयं पाठ्यक्रमः छात्राणां कृते विभिन्न संस्कृत ग्रन्थानां अपि च साहित्यस्य समालोचनात्मक विश्लेषण करणमपि शिक्षयति । संपूर्ण पाठ्यक्रमे अस्मिन्, छात्राः देवनागरी लिपेः लिखनं अधिगच्छति, संस्कृतस्य शब्दानां उच्चारणं तथा हृदिस्थं करिष्यति, अपि च प्राथमिक व्याकरण पठिष्यति तेन ते संस्कृते सरल वाक्यानां निर्माणं कर्तुं प्रभवन्ति ।

COURSE OUTCOMES: □□□□□□□□□□ □□□□□□□□□□ □□□□□□ □□□□□□

- C01** कर्तव्यपरक शैक्षणिक वृत्तिपरक तथा शोधकर्तृणां निर्माणार्थं छात्राणां संज्ञानात्मक, प्रभावशाली तथा व्यवहारिक क्षमतानां आकार प्रदानार्थं सहायतां करोति।
- C02** सामाजिक परिवर्तने भागग्रहणार्थं सक्षमाः भवितुं छात्रेषु सेवायाः धारणा संचारः करोति।
- C03** समकालीन समस्या-समाधान स्थितिषु प्राचीन भारतीय ज्ञानस्य अनुप्रयोगस्य ज्ञानप्राप्तिः। सामान्य रूपेण तथा विशेष रूपेण अभ्यसने तथा तस्य मूल्यांकनस्य संदर्भं च नैतिक उपयुक्ततायाः एकः दृढतर भावनायाः विकासार्थम्।
- C04** प्राचीन साहित्यतः प्राथमिक जीवनं तथा अवधारणानां ज्ञानप्रदानं यत् कालातीतः जातः तथापि इदानीमपि समाजाय अनुवर्तते।
आवेदनस्य प्रमुख क्षेत्रेषु प्राथमिक कौशलस्य अधिग्रहणे सुगमकरणम् उदा- नेतृत्वे, संचारे, अनुसंधान योग्यतायां, व्यवहार संशोधने इत्यादि।
- C05** सामाजिक विविधतायाः कृते सम्मान-विकसितं करनं तथा सामाजिक अपि च सांस्कृतिक प्रासंगिकतायाः अध्ययने अभिवृद्धि करनम्।

CO-PO Mapping Table:

Course Outcomes	Program Outcomes								
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
C01	3	-	-	-	-	-	-	-	-
C02	3	-	-	-	-	-	-	-	-
C03	3	-	-	-	-	-	-	-	-
C04	3	-	-	-	-	-	-	-	-
C05	3	-	-	-	-	-	-	-	-
Course Correlation Mapping	3	-	-	-	-	-	-	-	-

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT

- Module-2:** चम्पूकाव्यम् & आधुनिक पद्यकाव्यम् **(06 Periods)**
3. गङ्गावतरणम् - भोजराजः - चम्पूरामायणम्
4. मोहापनोदः - श्री पमिडिपाटि पट्टाभिरामारावः – मूलकथा-‘धर्मसौहृदम्’ इति संस्कृत पद्यकाव्यम्
- Module-3:** गद्यसाहित्यम् **(06 Periods)**
5. अत्युत्कटैः पापपुण्यैः इहैव फलमश्नुते - नारायणपण्डितः - हितोपदेशः
6. शूद्रकवीरवरकथा - हितोपदेशः
- Module-4:** शब्दाः **(6 Periods)**
- देव, कवि, भानु, पितृ, धातृ, गो, रमा, मति
- Module 5:** महाकवि, शास्त्रकाराः **(6 Periods)**
1. पाणिनिः 2. कौटिल्यः 3. भरतमुनिः 4. भारविः 5. माघः 6. भवभूतिः
7. शङ्कराचार्यः 8. दण्डी

Total Periods: 30

RESOURCES

TEXT BOOKS:

1. विश्वभारती 2. संस्कृत भारती 3. अमृतवाणी

REFERENCE BOOKS:

1. रामायणम् 2. महाभारतम् 3. अष्टाध्यायी 4. अमरकोशः

VIDEO LECTURES:

1. <https://www.youtube.com/watch?v=bh-14xfMeYk>
2. <https://www.youtube.com/watch?v=6xFkoOpzsvs>

Web Resources:

1. <https://www.forum.universityupdates.in/threads/ou-sanskrit-2nd-semester-study-material.33659/>
2. https://cbpbu.ac.in/study_mat_sanskrit.php

EXPERIENTIAL LEARNING

The experiential learning components will be detailed in CHO.

SCHOOL CORE

Course Code	Course Title	L	T	P	S	C
22LG101401	PERSONALITY DEVELOPMENT	2	-	-	-	2
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course gives awareness to students about the various dynamics of personality developments.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1** Demonstrate knowledge of leadership qualities by examining and applying personality traits through Positive self-esteem, Open Communication and Self-Righteousness.
- CO2** Analyze the limitations of Attitudes by applying and demonstrating communication traits through decision Making, Ethics and Self-Actualization.
- CO3** Apply appropriate Analyzing techniques for comprehending different personalities by examining Positive and Negative Characteristic Traits and demonstrating through Leadership Styles, Mentoring and Behaviour Modification.
- CO4** Apply appropriate techniques in Solving Problems by examining and demonstrating Time Management, Stress Management and Anger Management.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes								
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
CO1	2	1	-	-	3	-	-	1	-
CO2	2	3	-	-	3	-	-	1	-
CO3	2	2	-	-	3	-	-	2	-
CO4	3	1	-	-	2	-	-	3	-
Course Correlation Mapping	2	2	-	-	3	-	-	2	-

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT

Module 1: PERSONALITIES AND LEADERSHIP QUALITIES (06 Periods)

Introduction: Different Personalities - Personality Analysis - Freudian Analysis – Vedantic Concept: Swamy Vivekananda - Personality Begets - Types- Leadership Qualities – Decision Making - Case Studies: Personalities, - Exercises.

Module 2 SELF-ESTEEM AND SELF DEVELOPMENT (06 Periods)

Know Yourself: Self Image - Positive Self Esteem -Turn Failure into Success - Be Sensitive to Feedback - Build Self Confidence – Self Actualization - Set Goals - Action Plans - Accountability – Behavior Modification – Mentoring - Learning- Counselling – Challenge yourself with Aptitude Tests and Internships, - Exercises.

Module 3 ATTITUDE**(06 Periods)**

Importance – Difference between Behavior and Attitude - Changing Negative Attitude- Impact of Attitudes on Others - Unproductive Attitudes –Assess your Behaviour – Exercises.

Module 4 COMMUNICATION RELATIONSHIP**(06 Periods)**

Introduction – Positive and Negative Characteristic Traits - Grapevine Communication – Open Communication; Team Player - Leadership styles – Performance Expectations - Electronic Communication; Text Messaging – Voicemail – e-Mail, - Exercises.

Module 5 CRITICAL WORK SKILLS AND ETHICS**(06 Periods)**

Time Management - Balancing Life and Work - Stress Management - Anger Management - Making Decisions and Solving Problems - Developing Creativity - Ethics and Self-Righteousness – Being Judgmental in the Real World - Striving for Integrity, - Exercises.

Total Periods: 30**EXPERIENTIAL LEARNING**

1. List out the positive traits in you on the charts and explain in detail.
2. Discuss different famous personalities and their leadership styles.
3. What do you know about values and beliefs discuss elaborately.
4. Illustrate the morals that you follow in your that you practice in your life.
5. Interpret the role of different personalities in *Bhagavad Gita*.

RESOURCES**TEXTBOOK:**

- 1 Harold R. Wallace and L. Ann Masters, *Personal Development for Life and Work*, Cengage Learning, Delhi, 10th edition Indian Reprint, 2011. (6th Indian Reprint 2015)
- 2 Barun K. Mitra, *Personality Development and Soft Skills*, Oxford University Press, 2011.

REFERENCE BOOKS:

1. K. Alex, *Soft Skills*, S. Chand & Company Ltd, New Delhi, 2nd Revised Edition, 2011.
2. Stephen P. Robbins and Timothy A. Judge, *Organizational Behaviour*, Prentice Hall, Delhi, 16th edition, 2014

VIDEO LECTURES:

1. <https://www.youtube.com/watch?v=6Y5VWBLi1es>
2. <https://www.youtube.com/watch?v=H9qA3inVMrA>

WEB RESOURCES:

1. <https://www.universalclass.com/.../the-process-of-perso...>
2. <https://www.ncbi.nlm.nih.gov/pubmed/25545842>

SCHOOL CORE

Course Code	Course Title	L	T	P	S	C
22EE107601	INTELLECTUAL PROPERTY RIGHTS	2	-	-	-	2

Pre-Requisite --

Anti-Requisite --

Co-Requisite --

COURSE DESCRIPTION: The course is designed to provide comprehensive knowledge to the students regarding the general principles of intellectual property rights, Concepts and Theories, Criticisms of Intellectual Property Rights, and International Regime Relating to IPR. The course provides awareness on how to protect one's unique creation, claim ownership, knowledge of what falls under the purview of someone's rights and what doesn't, and safeguard their creations and gain a competitive edge over their peers.

COURSE OUTCOMES: *After successful completion of the course, students will be able to:*

- C01** Understand the need and the concepts of intellectual property right and avenues for filling intellectual property rights.
- C02** Understand the legislative practices and protocols for the acquisition of trademarks and the judicial consequences for violating laws of trademark protection.
- C03** Understand the legislative practices and protocols for the acquisition of copyrights and the judicial consequences for violating laws of copyright protection.
- C04** Understand the fundamentals of patent laws, legislative practices, and protocols for acquisition of trade secrets and the judicial consequences for violating laws of trade secrets protection.
- C05** Understand the importance of geographical indications and various laws and protocols for protecting geographical indications.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes											
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C01	3	--	--	--	--	--	--	--	--	--	--	2
C02	3	--	--	--	1	--	--	3	--	--	--	2
C03	3	--	--	--	1	--	--	3	--	--	--	2
C04	3	--	--	--	1	--	--	3	--	--	--	2
C05	3	--	--	--	1	--	--	3	--	--	--	2
Course Correlation Level	3	--	--	--	1	--	--	3	--	--	--	2

Correlation Levels:

3: High;

2: Medium;

1: Low

COURSE CONTENT

Module 1: INTRODUCTION TO INTELLECTUAL PROPERTY RIGHTS (06 Periods)

Introduction and the need for intellectual property rights (IPR); types of intellectual property- Design; International organizations, agencies, and treaties.

Module 2: TRADEMARKS (06 Periods)

Introduction to trademark, Purpose, and function of trademarks, acquisition of trademark rights, protectable matter, selecting and evaluating trademark, trademark registration processes.

Module 3: LAW OF COPYRIGHTS (06 Periods)

Fundamental of copyright law, originality of material, rights of reproduction, rights to perform the work publicly, copyright ownership issues, copyright registration, a notice of copyright, and international copyright law.

Law of patents: Foundation of patent law, patent searching process, ownership rights and transfer.

Module 4: TRADESECRETS (06 Periods)

Trade secret law, determination of trade secret status, liability for misappropriations of trade secrets, protection for submission, trade secrete litigation.

Unfair competition: Misappropriation right of publicity, false advertising.

Module 5: GEOGRAPHICAL INDICATIONS (06 Periods)

The Geographical indications law in India, The objectives and features, the registry of geographical indications powers and functions. Types of goods offered. Protection: Agriculture goods, manufactured goods, and natural goods. Registration of indications and the requirements. Prohibition of misleading use of indications of geographical origins, prohibition of dilution of geographical origins.

Total Periods: 30

EXPERIENTIAL LEARNING

1. Should conduct a survey based on the real scenario, where IPR is misused or unethically used and present an article.
2. Prepare an article on the registration processes of IPR practically (copy right/trade mark/patents).
3. Should study a case of conflict on trademarks/patents and should produce an article mentioning the circumstances and remedial measures.
4. Prepare an article on the latest development in the international intellectual property rights.

(Note: It's an indicative one. Course Instructor may change activities and shall be reflected in course Handout)

RESOURCES

TEXT BOOKS:

1. Deborah, E. Bouchoux, *Intellectual property: The law of Trademarks, Copyright, Patents, and Trade Secrets*, Cengage learning, 4th Edition, 2013.
2. Prabuddha Ganguli, *Intellectual property right - Unleashing the knowledge economy*, Tata McGraw Hill Publishing Company Ltd.

3. Marsha Aechols; *Geographical Indications for Food Products*, , Wolters, 2008

REFERENCE BOOKS:

1. Neeraj P., & Khusdeep D. Intellectual Property Rights. India, IN: PHI learning Private Limited. 1st Edition 2019.
2. Nithyananda, K V. Intellectual Property Rights: Protection and Management. India, IN: Cengage Learning India Private Limited. 2019

VIDEO LECTURES:

- 1 <https://nptel.ac.in/courses/110105139>

Web Resources:

1. Subramanian, N., & Sundararaman, M. (2018). *Intellectual Property Rights – An Overview*. Retrieved from <http://www.bdu.ac.in/cells/ipr/docs/ipr-eng-ebook.pdf>
2. World Intellectual Property Organization. (2004). *WIPO Intellectual property Handbook*. Retrieved from https://www.wipo.int/edocs/pubdocs/en/intproperty/489/wipo_pub_489.pdf
3. Cell for IPR Promotion and Management (<http://cipam.gov.in/>)
4. World Intellectual Property Organization (<https://www.wipo.int/about-ip/en/>)
5. Office of the Controller General of Patents, Designs & Trademarks (<http://www.ipindia.nic.in/>)

SCHOOL CORE

Course Code	Course Title	L	T	P	S	C
22LG107601	PROFESSIONAL ETHICS AND HUMAN VALUES	2	-	-	-	2

Pre-Requisite -

Anti-Requisite -

Co-Requisite -

COURSE DESCRIPTION: This course deals with personal conviction, and ethics and describes the accepted principles and standards of conduct regarding moral duties and virtues as applied to an organization. Codes of professional ethics guide the stakeholders of an organization about the desirable and undesirable acts related to the profession.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Demonstrate the principles of ethics, professional values, and social responsibility.
- CO2.** Analyze the problems in the implementation of moral autonomy and use ethical theories in resolving moral dilemmas.
- CO3.** Develop suitable strategies to resolve problems that arise in practicing professional ethics and Industrial standards.
- CO4.** Function as a member, consultant, manager, advisor and leader in multi-disciplinary teams.
- CO5.** Provide solutions to complex problems associated with professional ethics using analysis and interpretation.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes											
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	-	-	-	-	2	2	2	2	-	-	-
CO2	2	3	2	-	2	2	2	2	2	-	-	-
CO3	2	-	3	-	2	2	2	2	2	-	-	-
CO4	2	-	-	-	-	2	2	2	2	-	3	-
CO5	2	2	3	2	-	3	2	2	2	-	-	-
Course Correlation Mapping	2	3	-	-	2	2	2	2	2	-	3	-

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT

Module 1: PROFESSIONAL ETHICS

(06 Periods)

Scope and aim of ethics, Senses of ethics, Variety of moral issues, Types of inquiry, Moral dilemmas, Moral autonomy-Kohlberg's theory, Gilligan's theory, Consensus, and controversy.

Module 2: PROFESSIONAL IDEALS AND VIRTUES

(06 Periods)

Theories on virtues and ideals, Professions, Professionalism, Characteristics, Expectations, Professional responsibility, Integrity, Self-respect, Sense of responsibility, Self-interest, Customs and religion, Self-interest and ethical egoism, Customs and ethical relativism, Religion and divine command ethics, Use of ethical theories, Resolving moral dilemmas and moral leadership.

Module 3: SOCIAL EXPERIMENTATION

(06 Periods)

Experimentation, Similarities to standard experiments, Learning from the past and knowledge gained, responsible experimenters, Conscientiousness, Moral autonomy and accountability, The challenger case, Codes of ethics and limitations, Industrial standards and Problems with the law of engineering.

Module 4: RESPONSIBILITIES AND RIGHTS

(06 Periods)

Collegiality and loyalty, Respect for authority, Collective bargaining, Confidentiality, Conflict of interests, Occupational crime, Rights of engineers, Professional rights, Whistle-blowing, The BART case, Employee rights, and discrimination.

Module 5: HARMONY WITH PROFESSIONAL ETHICS

(06 Periods)

Acceptance of human values; Ethical Human Conduct; Basis for Humanistic Education, Constitution, and Universal Order; Competence in professional ethics; Case studies: Holistic technologies, Management Models and Production Systems; Transition from the present state to Universal Human Order: socially and ecologically responsible engineers, technologists and managers - enriching institutions and organizations.

Total Periods: 30

EXPERIENTIAL LEARNING

1. Demonstrate orally using your experiences of what is naturally acceptable in a relationship – Feeling of respect or disrespect and what is naturally acceptable is to nurture or exploit others.
2. Identify community partners and discuss with a community partner or organization. Prepare a report by identifying and analysing the issues or opportunities.
3. Field experiences may be directed to include a range of time-intensive endeavours that require varying levels of student interaction. Prepare a report on visiting a Juvenile home.
4. Students read a speech in the classroom by former United Nations Secretary-General Kofi Annan on human values.
5. Students are encouraged to bring a daily newspaper to class or to access any news related to the need for human values and note down the points.
6. Bring out the relevance of engineering ethics theory and practice with relevance to current trends.
7. Professional ideals and virtues are important to everyone. Prepare a case study on the professional ideals and virtue of any one of the famous sports personalities from India.

8. Compare the present to the past in engineering experimentations concerning the change in professionalism.
9. Make a study on occupational crime and the role of modern technology in finding solutions.
10. Prepare a case study on how to maintain harmony with different cultural people using professional ethics.

RESOURCES

TEXTBOOKS:

1. Gaur R R, Sangal R & G P Bagaria, *Human Values and Professional Ethics*, Excel Books, New Delhi, 2010.
2. Govindarajan, M., Nata Govindarajan, M., Natarajan, S. and Senthilkumar, V. S., *Engineering Ethics*, Prentice Hall of India, 2004.
3. Mike W. Martin and Roland Schinzinger, *Ethics in Engineering*, Tata McGraw-Hill, 3rd Edition, 2007.

REFERENCE BOOKS:

1. S. Kannan and K. Srilakshmi, *Human Values and Professional Ethics*, Taxmann Allied Services Pvt Ltd., 2009.
2. Edmund G. Seebauer and Robert L. Barry, *Fundamental of Ethics for Scientists and Engineers*, Oxford University Press, 2001.
3. Charles F. Fledderman, *Engineering Ethics*, Pearson Education, 2nd Edition, 2004.
4. R. Subramanian, *Professional Ethics*, Oxford Higher Education, 2013.

VIDEO LECTURES:

1. https://www.youtube.com/watch?v=jfGIq_EiXzI
2. <https://www.youtube.com/watch?v=QFH0tH54oUc>
3. <https://www.youtube.com/watch?v=JJshY11nX14>
4. <https://www.youtube.com/watch?v=TyP09S0UEzA>
5. https://www.youtube.com/watch?v=0QMwjV_ZVtc

WEB RESOURCES:

1. <https://siiet.ac.in/wp-content/uploads/2020/09/7.1.10-professional-ethics-manual.pdf>
2. <https://soaneemrana.org/onewebmedia/Professional%20Ethics%20and%20Human%20Values%20by%20R.S%20NAAGARAZAN.pdf>
3. <https://india.oup.com/productPage/5591038/7421214/9780199475070>

SCHOOL CORE

Course Code	Course Title	L	T	P	S	C
22CE107602	DISASTER MITIGATION AND MANAGEMENT	2	-	-	-	2
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course provides a detailed discussion on disasters, earthquakes, floods, cyclones, droughts, landslides and disaster management.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Analyze the vulnerability of an area to natural and man-made disasters/hazards as per the guidelines to solve complex problems using appropriate techniques ensuring safety, environment and sustainability.
- CO2.** Propose appropriate mitigation strategies for earthquake and tsunami impacts as per code of practice using suitable techniques ensuring safety, environment and sustainability besides communicating effectively in graphical form.
- CO3.** Analyze the causes and impacts of floods, cyclones and droughts using appropriate tools and techniques and suggest mitigation measures ensuring safety, environment and sustainability besides communicating effectively in graphical form.
- CO4.** Analyze the causes and impacts of landslides using appropriate tools and techniques and suggest mitigation measures ensuring safety, environment and sustainability.
- CO5.** Design disaster management strategies to solve pre, during and post disaster problems using appropriate tools and techniques following the relevant guidelines and latest developments ensuring safety, environment and sustainability besides communicating effectively in graphical form.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes											
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3	-	2	2	2	2	2	-	-	-	-
CO2	3	3	3	3	2	2	1	2	-	2	-	-
CO3	3	3	-	2	2	2	2	-	-	2	-	-
CO4	3	3	-	3	2	2	2	-	-	-	-	-
CO5	3	2	3	2	2	2	1	2	-	1	3	2
Course Correlation Mapping	3	3	3	3	2	2	2	2	-	2	3	2

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT

Module 1: DISASTERS (06 Periods)

Types of disasters - Natural disasters; Impact of disasters on environment, infrastructure and development; Concepts of hazards and vulnerability analysis, Hazard Assessment, Guidelines for hazard assessment and vulnerability analysis, Basic principles and elements of disaster mitigation.

Module 2: EARTHQUAKES (06 Periods)

Introduction to earthquake, Intensity scale (MSK-64), Seismic zones and activity in India, Action plan for earthquake disaster preparedness, Elements at risk, Recovery and rehabilitation after earthquake, Concepts of Earthquake resistant design and construction of buildings; Tsunami – Onset, Types and causes, Warning, Elements at risk, Typical effects, Specific preparedness and mitigation strategies, Case studies.

Module 3: FLOODS, CYCLONES AND DROUGHTS (07 Periods)

Floods and Cyclones: Onset, Types, Causes, Warnings, Elements at risk, Typical effects, Indian floods and cyclones, Hazard zones, Potential for reducing hazards, Mitigation strategies and community based mitigation, Case studies.

Droughts: Onset, Types and warning; Causes, Impact, Early warning and response mechanisms, Mitigation strategies, Droughts in India, Case studies.

Module 4: LANDSLIDES (06 Periods)

Onset, Types and warning; Causes, Elements at risk, Indian landslides, Hazards zones, Typical effects, Mitigation strategies and community based mitigation, Case studies.

Module 5: DISASTER MANAGEMENT (05 Periods)

Disaster management organization and methodology, Disaster management cycle, Disaster management in India – Typical cases and Cost-benefit analysis, Disaster management programs implemented by NGOs and Government of India, Usage of GIS and Remote sensing techniques in disaster management, Leadership and Coordination in Disaster management, Emerging trends in disaster management.

Total Periods: 30

EXPERIENTIAL LEARNING

1. Perform hazard assessment and vulnerability analysis for any nearby town/city and prepare a detailed report of possible impacts of various disasters on environment, infrastructure and development.
2. Prepare a detailed report on the causes and effects of Tsunami that was occurred in the year 2004. Also discuss various advancements in Tsunami warning systems.
3. Identify the major causes of urban floods in cities like Chennai, Hyderabad & Mumbai and submit a report along with various mitigation strategies to reduce the impact of floods.
4. Prepare a detailed report on how various man-made activities are directly/indirectly related to the occurrence of landslides that occurred in recent days in India.
5. Visit AP State Disaster Response and Fire Services Department and record about various methods used by them in mitigating disasters and their management.

RESOURCES

TEXT BOOKS:

1. Sharma V. K., *Disaster Management*, Medtech Publishing, 2nd Edition, 2013.
2. Anand S. Arya, Anup Karanth, and Ankush Agarwal, *Hazards, Disasters and Your Community: A Primer for Parliamentarians*, GOI–UNDP Disaster Risk Management Programme, Government of India, National Disaster Management Division, Ministry of Home Affairs, New Delhi, Version 1.0, 2005

REFERENCE BOOKS:

- Donald Hyndman and David Hyndman, *Natural Hazards and Disasters*, Cengage Learning, USA, 5th Edition, 2015.
2. *Disaster Management in India*, A Status Report, Ministry of Home Affairs, Govt. of India, May 2011.
 3. Rajendra Kumar Bhandari, *Disaster Education and Management: A Joyride for Students, Teachers, and Disaster Managers*, Springer India, 2014.
 4. Singh R. B., *Natural Hazards and Disaster Management*, Rawat Publications, 2009.

VIDEO LECTURES:

1. <https://nptel.ac.in/courses/105104183>
2. <https://www.digimat.in/nptel/courses/video/124107010/L01.html>

WEB RESOURCES:

1. <https://egyankosh.ac.in/handle/123456789/25093>
2. <https://www.egyankosh.ac.in/handle/123456789/25912>
3. <https://www.nios.ac.in/media/documents/333courseE/12.pdf>
4. <https://ndmindia.mha.gov.in/images/public-awareness/Primer%20for%20Parliamentarians.pdf>

PROGRAM CORE

Course Code	Course Title	L	T	P	S	C
22CM101007	BUSINESS STATISTICS	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course will enable the students to Learn and apply the statistical tools in day life. Create quantitative models to solve real world problems in appropriate contexts. Also, students able to understand the importance of Statistics in real life by providing the necessary data analysis for solving business problems.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1** Understand the concepts and significance of Business Statistics. Also, tabulation and graphical representation of data.
- CO2** Applying the different measures of central tendency such as mean, mode, median.
- CO3** Examining the measures of dispersion and skewness.
- CO4** Applying the concept of index numbers and calculation of various types of index numbers

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	-	-	-	-	-	-	-	-	3	3	-	-
CO2	3	3	3	-	-	-	-	-	-	2	3	3	-	-
CO3	3	3	3	-	-	-	-	-	-	2	3	3	-	-
CO4	3	2	3	-	-	-	-	-	-	2	3	3	-	-
Course Correlation Mapping	3	3	3	-	-	-	-	-	-	2	3	3	-	-

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT

Module 1: INTRODUCTION

(09 Periods)

Introduction to Statistics: Definition – Importance, Characteristics and Limitations of Statistics - Classification and Tabulation – Frequency Distribution Table -Diagrams and Graphic Presentation of Data (including problems)

Module 2: MEASURES OF CENTRAL TENDENCY

(09 Periods)

Types of Averages – Qualities of Good Average - Mean, Median, Mode, and Median based Averages- Geometric Mean – Harmonic Mean (including problems)

Module 3 MEASURES OF DISPERSION AND SKEWNESS

(09 Periods)

Meaning and Properties of Dispersion – Absolute and Relative Measures - Types of Dispersion-Range - Quartile Deviation (Semi – Inter Quartile Range) -Mean Deviation - Standard Deviation - Coefficient of Variation Karl Pearson's, Bowley's Co-efficient of Skewness. (Including problems)

Module 4 MEASURES OF RELATION

(09 Periods)

Meaning and use of Correlation – Types of Correlation – Karl pearson's Correlation Coefficient - Probable Error - Spearman's Rank-Correlation (including problems)

Module 5 INDEX NUMBERS

(09 Periods)

Unweighted Index numbers – Simple aggregative method and simple average of relative's method – Weighted Index Numbers – Laspeyre, Pasche, Bowley and Fisher's Ideal index- Time reversal and Factor reversals tests- Cost of Living Index (including problems)

Total Periods: 45

EXPERIENTIAL LEARNING

1. Calculate the arithmetic mean for the wages of workers in a Factory

Wages (Rs).	4	6	8	10	15	16
Workers	5	15	6	7	8	2

2. Calculate arithmetic mean for the following data

Monthly Sales(Rs. In '000)	No.of firms
300-350	5
350-400	14
400-450	23
450-500	50
500-550	52
550-600	25
600-650	22
650-700	7
700-750	2

3. Compute Median from the following data

Age (Years)	No. of workers
Below 25	120
25-30	125
30-35	180
35-40	160
40-45	150
45-50	140
50-55	100
55 and Above	25

4. Calculate the correlation coefficient between X and Y and comment on their relationship

X	1	3	4	5	7	8
Y	2	6	8	10	14	16

5. From the following table. Compute the quartile deviation as well as its co-efficient

Size	4-8	8-12	12-16	16-20	20-24	24-28	28-32	32-36	36-40
Frequency	6	10	18	30	15	12	10	6	2

RESOURCES

TEXT BOOKS:

- 1 Reddy C.R., Business Statistics, Deepthi Publications, New Delhi, 2018.
- 2 Gupta S.P, Statistical Methods, Sultan Chand & Sons, New Delhi, 2015.

REFERENCE BOOKS:

- 1 LS Agarwal, Business Statistics, Kalyani Publications, 2015.
- 2 S.L.Agarwal, S.L.Bhardwaj and K.Raghuveer, Business Statistics: Kalyani Publishers. 2012.

VIDEO LECTURES:

- 1 https://www.youtube.com/watch?v=VDLyk6z8uCg&list=PLLy_2iUCG87DugHjjOGBZDXfufXjfaXNs
- 2 <https://www.youtube.com/watch?v=suobaJODVjI>

Web Resources:

- 1 [https://gurukpo.com/Content/B.Com/Business_Statistics\(B.Com\)P-1.pdf](https://gurukpo.com/Content/B.Com/Business_Statistics(B.Com)P-1.pdf)
- 2 <https://mu.ac.in/wp-content/uploads/2021/08/MMS-Business-Statistics-1.pdf>

PROGRAM CORE

Course Code	Course Title	L	T	P	S	C
22CM101008	FINANCIAL ACCOUNTING - I	4	-	-	-	4

Pre-Requisite 22CM103001 - FUNDAMENTALS OF ACCOUNTING

Anti-Requisite ---

Co-Requisite ---

COURSE DESCRIPTION: The objective of this course is to impart the knowledge about preparation of accounting records for specialized business transactions. Also, students able to know how books of accounts are maintained for partnership firms in case of admission, retirement of a partner and dissolution of partnership firms.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1** Demonstrate the recording of accounting books for Consignment and joint venture transactions.
- CO2** Illustrate the recording of business transactions for Provisions and Reserves
- CO3** Examine the recording of accounts in case of Admission, Retirement and death of a partner.
- CO4** Explain the recording of the business transactions in case of Dissolution of partnership firms.

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	-	-	-	-	-	-	-	3	3	3	-	-
CO2	3	3	-	-	-	-	-	-	-	3	3	3	-	-
CO3	3	3	-	-	-	-	-	-	-	3	3	3	-	-
CO4	3	3	-	-	-	-	-	-	-	3	3	3	-	-
Course Correlation Mapping	3	3	-	-	-	-	-	-	-	3	3	3	-	-

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT

Module 1: Consignment Accounts

(12 Periods)

Consignment - Features - Proforma invoice - Account sales – Del-credre Commission - Accounting treatment in the books of consigner and consignee - Valuation of closing stock - Normal and Abnormal loss – Problems.

Module 2: Joint Venture Accounts

(12 Periods)

Joint venture - Features - Difference between joint venture and consignment – Accounting procedure - Methods of keeping records (When separate set of books are maintained and when separate set of books are not maintained) - Problems.

Module 3 Provisions and Reserves

(12 Periods)

Meaning of Provision and Reserve – Difference between Provision & Reserve – Preparation of Bad debts Account – Provision for Bad and Doubtful Debts Account – Provision for Discount on Debtors Account – Provision for discount on creditors Account – Repairs and Renewals Reserve A/c – Problems

Module 4 Partnership Accounts - I

(12 Periods)

Meaning – Partnership Deed - Fixed and Fluctuating Capital accounts of partners – Accounting Treatment of Goodwill – Admission of a Partner – Retirement & Death of a Partner – Problems

Module 5 Partnership Accounts - II

(12 Periods)

Dissolution of a Partnership – Dissolution of Firm – Realisation Account – Insolvency of one or more Partners – Garner Vs Murray Case Rule – problems.

Total Periods: 60

EXPERIENTIAL LEARNING

1. Ganga Mills of Chennai consigned 5,000 kg. of Oil to Vijaya Dealers of Vizag. Each kg. Ghee costs Rs.80 invoiced at Rs. 100 per Kg. Ganga Mills paid Rs.5000 as carriage, Rs.2500 as freight and Rs. 2000 as insurance in transit. During transit 250 kg. were accidentally destroyed for which the insurance company paid directly to the consignors Rs.18000 in settlement of the claim.
After three months from the date of the consignment of the goods, Vijaya Dealers reported that 3,500 kg. of ghee was sold @ Rs. 125 per kg. and expenses being: on godown rent Rs.5000 and on salesman salary Rs.7500. Vijay Dealers are entitled to a 5% commission on sales. Vijay Dealers also reported a loss of 50 kg. due to leakage. Write the necessary journal entries and ledger accounts in the books of both the parties.
2. Naveen consigned 1,000 bats costing Rs.500 each to Santhosh of Chennai for sales and incurs Rs.4,000 towards freight and Rs.1,000 for insurance. Swaroop was able to take delivery of 900 bats only and 100 bats were destroyed by fire in transit. Insurance Co. admitted a claim of Rs.45000. Swaroop will be entitled to a commission of 5% on sales, 2% Del credere commission on credit sales only. Swaroop has spent Rs. 2,000 towards sales expenses, The account sales is as under: 500 bats at Rs.600 per bat for cash, 200 bats at Rs.700 per bat for credit.
Consignment debtors paid their dues except one customer to whom 4 bats sold for Rs. 2,800 could pay only Rs. 800. Show the necessary journal entries and ledger accounts in the books of both the parties.

3. Ram, Mohan and Rahim were partners in joint venture, each contributing Rs.5,000. Ram purchased goods for Rs.13,000 and also supplied goods worth Rs.1,000 from his stock. Rahim also supplied goods to the value of Rs.1,500 from stock and his expenses in connection with the supplying of goods on account of joint venture amounted to Rs.50. Ram paid Rs.250 for expenses in connection with the joint venture. Ram sold goods on behalf of the joint venture and realized Rs.20,800. Ram was entitled to a commission of 5% on sales. Unsold goods amounting to Rs.500 were taken over by Mohan. Ram settled accounts of Mohan and Rahim by Bank draft.

Record these transactions in Ram's Journal and also prepare Joint Venture Account and Mohan and Rahim Accounts in Ram's Books.

4. A, B and C jointly undertake to construct a bridge, at a price of Rs.50,00,000 to be paid Rs.40,00,000 in cash by instalments and Rs.10,00,000 in Shares of the Company. They agreed to share the profit or losses equally. They contributed as A – Rs.6,00,000; B – Rs.7,50,000 and C – Rs.4,00,000. These amounts are deposited in a joint banking account. A gets the plan prepared and paid Rs.70,000 architects fees. B brings in to the venture a concrete mixer of the value of Rs.2,50,000 and C brings into the venture a motor truck of the value of Rs.2,00,000. They buy a plant for Rs.2,40,000; material worth Rs.24,00,000 and paid wages Rs.19,50,000.

On completion of the venture A takes over the unused materials for Rs.1,40,000, B takes back the concrete mixer at a valuation of Rs.1,20,000 and C takes back the truck at Rs.80,000. The plant was sold for Rs.60,000. When the contract price fully received A took over the shares at a valuation of Rs.8,00,000. Record the above transactions and Show the Joint Venture Account, Joint Bank Account and Individual Account's ventures.

5. On 1st January 2014, a reserve for doubtful debts account shows a credit balance of Rs.16,000. The bad debts during the year amount to Rs.10,500. The debtors at 31st December 2014 are Rs.3,00,000 and at 5% reserve for doubtful debts is required to be maintained. The bad debts in 2015 amount to Rs.16,250. On 31st December 2015 the debtors are Rs.3,00,000 and a 5% reserve for doubtful debts is required to be kept. The bad debts in 2016 amount to Rs.4,500. On 31st December 2016 the debtors are Rs.1,45,000 and 5% reserve for doubtful debts is to be maintained. Pass Journal Entries and open Bad debts Account and Reserve for bad and doubtful debts Account for all the three years.

6. Following are extracts from the Trial Balance of a firm as on 31/3/2015

	Debit (Rs)	Credit (Rs)
Sundry Debtors	205000	-
Provision for Baddebts	-	10000
Provision for Discount on debtors	-	1800
Baddebts	3000	
Discount	1000	

Additional Information:

- Maintain a provision for Baddebts @ 10 % on debtors
 - Create a provision for discount on debtors @ 2 % on debtors
 - Additional discount given to the debtors Rs. 1000
 - Additional baddebts occurred Rs. 4000
- Pass necessary entries and show relevant accounts.

7. A and B are carrying on business in a partnership, sharing profits and losses in the ratio of 2:3. Their Balance Sheet as at 31.3.2019 was as under:

Liabilities	Amount (Rs.)	Assets	Amount (Rs.)
Sundry Creditors	50,000	Cash in hand	30,000
Capital Accounts:		Cash at Bank	20,000
A 2,80,000		Sundry Debtors	1,00,000
B <u>4,20,000</u>	7,00,000	Stock	2,00,000
		Furniture	50,000
		Buildings	3,50,000
	<u>7,50,000</u>		<u>7,50,000</u>

On that date they admit "C" in to partnership and given him 1/4th share in the future profits on the following terms and Conditions:

- "C" is to be bring in Rs.3,00,000 as his Capital and Rs.1,00,000 as Goodwill, which will remain in the business.
- Stock and Furniture are to be reduced in value by 10%.
- Buildings are to be appreciated by Rs.50,000.
- A provision of 5% to be created on Sundry Debtors for doubtful debts.

Write Journal Entries to record the above arrangement and prepare various Ledger Accounts and also show the Balance Sheet of the new firm.

8. Manasa, Madhuri and Madhavi are partners sharing profits and losses equally. Their Balance Sheet as on 31st March, 2004 is given below:

Liabilities	Amount (Rs.)	Assets	Amount (Rs.)
Creditors	1,00,000	Cash at Bank	90,000
Profit and Loss Account	90,000	Debtors	1,50,000
Capital Accounts:		Stock	1,20,000
Manasa	2,50,000	Machinery	2,00,000
Madhuri	2,00,000	Buildings	2,30,000
Madhavi	1,50,000		
	7,90,000		7,90,000

On the above date Madhavi decided to retire from the firm on the following conditions: Goodwill of the firm be valued at Rs.1,20,000.

- Depreciate Stock and Machinery by 10%.
- Buildings to be appreciated up to Rs.2,80,000.
- Provide 5% on Debtors towards reserve for doubtful debts.

Prepare Ledger Accounts and new Balance Sheet of the firm as on 1.4.04.

9. Anil, Sunil and Vineel are in partnership on 31-12-2014, they decided to dissolve and their position was as follows.

Liabilities	Rs.	Assets	Rs.
Sundry Creditors	10000	Plant & Machinery	20000
Reserve Fund	18000	Debtors	20000
P & L A/c	12000	Stock	40000
Capital Accounts:		Investments	20000
Anil	30000	Furniture	16000
Sunil	20000	Cash	4000
Vineel	30000		
	120000		120000

The investments, furniture, debtors and plant & machinery were realised Rs.70000. Stock was taken over by Anil at an agreed value of Rs. 36000. The expenses of Realisation amounted to Rs.750. Creditors were paid in full. Record necessary journal entries and prepare the accounts to show the closure of the firm.

10. X, Y, Z share Profits and Losses in 4:3:2 ratio and their Balance Sheet as on 31.12.2002 was as follows:

Liabilities	Rs.	Assets	Rs.
Creditors	90000	Cash	2250
Capitals:		Debtors	100000
X	200,000	Stock	74000
Y	100000	Plant & Machinery	180000
Z	5000	Goodwill	50000
Profit and Loss A/c	11250		
	406250		406250

Z became insolvent. Cash realized on debtors Rs.70,000; Stock Rs.51,750; Machinery Rs.1,00,000. Rs.1,390 is realized from the estate of Z. Realisation expenses Rs.2,250. Prepare necessary Ledger Accounts as per Garner Vs Murray decision showing final settlement.

RESOURCES

TEXT BOOKS:

1. S.P. Jain & K.L Narang, "Financial Accounting", Kalyani Publishers, New Delhi, 2020.
2. S.N.Maheshwari & V.L.Maheshwari, "Advanced Accountancy", Vikas publishers, New Delhi, 2018.

REFERENCE BOOKS:

1. Haneef and Mukherjee, "Accountancy", Tata McGraw Hill Company, New Delhi, 2021.
2. R.L.Gupta & V.K.Gupta, "Principles & Practice of Accounting", Sultan Chand, New Delhi, 2021.

VIDEO LECTURES:

2. <https://www.youtube.com/watch?v=Ih7AErYuCOg>
3. <https://www.youtube.com/watch?v=Jr4jmVUIOnk>

Web Resources:

1. https://students.icai.org/?page_id=4893
2. https://icmai.in/upload/Students/Syllabus-2012/Study_Material_New/Foundation-Paper2-Revised.pdf

PROGRAM CORE

Course Code	Course Title	L	T	P	S	C
22CM101009	LEGAL ASPECTS OF BUSINESS	3	-	-	-	3
Pre-Requisite	---					
Anti-Requisite	---					
Co-Requisite	---					

COURSE DESCRIPTION: This course provides a basic understanding of various statutory provisions that confronts business managers while taking decisions. Throughout the course, students focus on legal aspects stated in Indian Contract Act 1872, Sale of Goods Act 1930, Companies Act 2013, Consumer Protection Act 1986 and Information Technology Act 2000.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1** Demonstrate the elements of Contract under Indian Contract Act and legal provisions relating to performance of contracts.
- CO2** Examine the provisions relating to creation Agency contracts, Rights & Duties of Principal and Agent.
- CO3** Demonstrate the provisions of Sale of Goods Act and Indian Companies Act.
- CO4** Explain the provisions of Consumer protection Act and Information Technology Act

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	-	-	-	2	-	-	-	1	3	3	-	-	2
CO2	3	-	-	-	2	-	-	-	1	3	3	-	-	2
CO3	3	-	-	-	2	-	-	-	1	3	3	-	-	2
CO4	3	-	-	-	2	-	-	-	1	3	3	-	-	-
Course Correlation Mapping	3	-	-	-	2	-	-	-	1	3	3	-	-	2

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT

Module 1: The Indian Contract Act 1872 (10 Periods)

Introduction – Definition of contract – agreement – offer – acceptance – consideration - capacity to contract – Discharge of Contract – Breach of Contract and Remedies to breach of contract.

Module 2: Contract of Agency (09 Periods)

Essentials of Contract of Agency – Creation of Agency – Kinds of Agents –Relationship of Principal and Agent – Duties of an Agent – Rights of an Agent – Duties and Rights of the Principal – Delegation of authority by an Agent – Sub Agent – Position of Principal and Agent in relation to third Parties – Termination of Agency.

Module 3 Sale of Goods Act 1930 (08 Periods)

Sale and Agreement to sell - Conditions and Warrantees - Transfer of property in Goods -Rights of an unpaid seller.

Module 4 Companies Act 2013 (09 Periods)

Company Formation – Memorandum – Articles – Directors: appointment, Powers and duties - Meetings – Proceedings – Management – oppression & mismanagement – winding up of Company.

Module 5 The Consumer Protection Act & Information Technology Act (09 Periods)

The Consumer Protection Act, 1986: Object – Rights of Consumers – Consumer Protection Councils – Redressal Machinery – District Forum – State Commission - National Commission.
Information Technology Act 2000: Cyber Law -Need for Cyber laws – Cyber law In India – Information Technology Act – 2000 – Defining Cyber Crime – Types of Cyber Crimes – Prevention of Cyber Crime.

Total Periods: 45

EXPERIENTIAL LEARNING

1. Submit a report on different types of Contracts.
2. Prepare a report on Breach of Contract and Remedies to breach of contract.
3. Write a report on Rights and duties of Principal and Agent.
4. Write a report on Conditions and Warranties as per Sale of Goods Act. 1930
5. Collect and submit the report on the procedures to be followed for company formation as per Companies act.
6. Submit the report on Consumer dispute redressal mechanism in India
7. Write a report on recent cyber-crimes have taken place in India in recent times.

RESOURCES

TEXT BOOKS:

1. N. D. Kapoor, "Mercantile Law", Sultan Chand & Sons, New Delhi, 2018.
2. Prof. Akhileshwar Pathak, "Legal Aspects of Business", McGraw Hill, New Delhi, 2019.

REFERENCE BOOKS:

1. Rohini Aggarwal, Mercantile and Commercial Laws, Taxman, Mumbai, 2018.
2. Ravindra Kumar, "Legal Aspects of Business", Cengage Publications, Noida, 2020.

VIDEO LECTURES:

1. <https://www.classcentral.com/course/youtube-business-law-mercantile-law-91410>
2. <https://www.classcentral.com/course/swayam-fundamentals-of-legal-aspects-of-business-22987>

WEB RESOURCES:

1. www.law4india.com
2. www.taxmann.com

PROGRAM CORE

Course Code	Course Title	L	T	P	S	C
22CM101010	CORPORATE ACCOUNTING	3	-	-	-	3

Pre-Requisite 22CM103001 - Fundamentals of Accounting

Anti-Requisite -

Co-Requisite -

COURSE DESCRIPTION: This course provides a detailed discussion of basic financial concepts and practices and includes an analysis of company resources, types and sources of financing, forecasting and planning methods, and the roles of the money and capital markets

COURSE OUTCOMES: After successful completion of the course, students will be able to:

CO1 Understand the Accounting treatment of Share Capital

CO2 Acquire knowledge of profit prior to incorporation.

CO3 Understand the record of Transactions related to Amalgamation and Reconstruction

CO4 To maximize value by improving decisions relating to capital budgeting.

CO5 Acquire skills in Accounting Procedure for winding up of a company.

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2			2	1				3	2	-	-	-
CO2	3	2			2	1				3	2	-	-	-
CO3	3	2			2	1				3	2	-	-	-
CO4	3	2			2	1				3	2	-	-	-
CO5	3	2			2	1				3	2			
Course Correlation Mapping	3	2			2	1				3	2	-	-	-

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT

Module 1: Valuation of Shares

(09 Periods)

Introduction – Need for valuation – Factors affecting the valuation of shares – Methods of valuation - Net Assets Basics Method – Earning Capacity Method – Dual Method – Other Method. (Theory & Problems).

Module 2: Profit Prior to Incorporation

(09 Periods)

Introduction – Nature of Profit or Loss Prior to Incorporation – Ascertainment of Profit or Loss Prior to Incorporation – Calculation of Sales Ratio – Weighted Ratio -Treatment of Loss Prior to Incorporation. (Problems only).

Module 3: Amalgamation and External Reconstruction**(09 Periods)**

Introduction – Definition – Types of Amalgamation – Amalgamation in the nature of Merger- Amalgamation in the nature of purchase – Amalgamation and External Reconstruction. (Problems only).

Module 4: Internal Reconstruction**(09 Periods)**

Introduction – Alteration of Share Capital – Meaning of Internal Reconstruction / Capital Reduction – Procedure for Reducing Share Capital – Accounting Entries on Internal Reconstruction (Problems only).

Module 5: Liquidation**(09 Periods)**

Meaning - Modes of Winding up of a Company- - Liquidator's Final Statement of Account - Calculation of Liquidator's Remuneration - Preparation of Liquidator's Final Statement of Account only

Total Periods: 45**EXPERIENTIAL LEARNING**

- 1 Write a report on the various methods of valuation of shares under the Company's Act 2013.
- 2 Submit a detailed report on the amalgamation process under Indian companies.
- 3 Prepare a note on accounting standard procedure under the company's act 2013.
- 4 Write a report on the procedure for reducing share capital.
- 5 Submit a report on the role and responsibilities of the liquidator.

RESOURCES**TEXT BOOKS:**

- 1 Corporate Accounting: S.N. Maheswari, S.K. Maheswari, Vikas Publishing House, 6th Edition 2018.
- 2 Advanced Accounts: M C Shukla, T S Grewal and S C Gupta, S Chand Publications, 19th Edition 2017.
- 3 Corporate Accounting – T.S Reddy and Murthy, Margham Publications, Chennai, 6th Edition, 1999.

REFERENCE BOOKS:

- 1 Corporate Accounting – RL Gupta & Radha Swami, Sultan Chand & sons
- 2 Corporate Accounting – P.C. Tulsian, S.Chand Publishers

VIDEO LECTURES:

- 1 <https://www.classcentral.com/course/udemy-corporate-accounting-for-beginners-25590>
- 2 <https://www.classcentral.com/course/swayam-corporate-accounting-269674>
- 3 <https://www.udemy.com/course/corporate-accounting-for-beginners>

Web Resources:

- 1 <https://www.mca.gov.in/content/mca/global/en/home.html>
- 2 <http://www.cga.nic.in/>
- 3 https://doe.gov.in/page_cga

PROGRAM CORE

Course Code	Course Title	L	T	P	S	C
22CM101011	MANAGEMENT ACCOUNTING	3	-	-	-	3

Pre-Requisite 22CM103001 - Fundamentals of Accounting

Anti-Requisite

Co-Requisite

COURSE DESCRIPTION: The course introduces students to contemporary management accounting concepts and techniques. Topics include: the role of accountants in internal decision-making, tools used to design and develop costing systems, preparation of budgets and their role as a planning and control tool, other decision-making tools.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1** Understand the basic concepts of management accounting
- CO2** Acquire knowledge of various ratios and draw inferences
- CO3** Analyze the performance of the organization by preparing funds flow statement
- CO4** Analyze the performance of the organization by preparing cash flow statements
- CO5** Understand the concept and application of budgeting.

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	1	-	-	1	-	-	-	3	-	2	-	1
CO2	3	2	1	-	-	1	-	-	-	3	-	2	-	1
CO3	3	2	1	-	-	1	-	-	-	3	-	2	-	1
CO4	3	2	1	-	-	1	-	-	-	3	-	2	-	1
CO5	3	2	1	-	-	-	-	-	-	3	-	2	-	1
Course Correlation Mapping	3	2	1	-	-	1	-	-	-	3	-	2	-	1

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT:

Module 1: Introduction **(09 Periods)**

Definition – meaning- Nature - Scope of Management Accounting – Significance of Management Accounting- Accounting differences between management accounting, Financial Accounting and Cost Accounting – Advantages and Limitations of Management Accounting (Theory only)

Module 2: Ratio Analysis **(09 Periods)**

Meaning - Advantages and Limitations of Ratio Analysis – Types of Ratios –Profitability Ratios – Liquidity Ratios – Activity Ratios – Solvency ratios. (Problems only).

Module 3 Fund Flow Statement Analysis (09 Periods)

Meaning and Concept of Working Capital (Fund) – Fund Flow Statement –Meaning and Uses of Funds Flow Statement – Preparation of Funds Flow Statement. (Problems only)

Module 4 Cash Flow Statement Analysis (09 Periods)

Meaning and Uses of Cash Flow Statement – Preparation of Cash Flow Statement – Difference between Cash Flow Statement and Funds Flow Statement (Problems only).

Module 5 Budgeting and Budgetary Control (09 Periods)

Meaning of Budget – Meaning of Control – Meaning of Budgetary control – objectives of Budgetary control system – Advantages and Limitations of Budgetary control system. Preparation of fixed budget and flexible budgets (Problems only).

Total Periods: 45

EXPERIENTIAL LEARNING:

- 1 Give a presentation on the significance of Management Accounting.
- 2 Submit a report on the importance of ratios in financial organizations.
- 3 visit any local company to collect their financial data and prepare funds and cash flow statements
- 4 Collect financial data from companies or web resources prepare Fixed and flexible budgets and submit a brief report after analyzing such data

RESOURCES

TEXT BOOKS:

- 1 T.S. Reddy and Dr. Y. Hari Prasad Reddy, Cost Accounting and Management Accounting, Margam Publications, 2020.
- 2 Principles of Management Accounting by Manmohan & Goyal, Publisher: PHI Learning

REFERENCE BOOKS:

- 1 Cost and Management Accounting by SP Jain and KL Narang, Kalyani Publishers, 2020.
- 2 Management Accounting: Text, Problems & Cases by Khan & Jain, Tata McGraw Hill.
- 3 Management Accounting and financial control S.N. Maheshwari, Sultan Chand and Sons.

VIDEO LECTURERS:

- 1 <https://www.youtube.com/watch?v=tmrPjAbp5WY&list=PL9Cd7H8NFRQws4pO9waDeqaI7RHcZLgIl>
- 2 <https://www.youtube.com/watch?v=rCmuB4-XGWI>

WEB RESOURCES:

- 1 <https://www.investopedia.com/terms/m/managerialaccounting.asp>
- 2 <https://www.financestrategists.com/accounting/management-accounting/budget-and-budgetary-control/>

PROGRAM CORE

Course Cod	Course Title	L	T	P	S	C
22CM101012	COST ACCOUNTING	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: The course enables the student to Thoroughly understand the theory and practice of cost accounting for decision-making in manufacturing industries.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1** Gain a working knowledge of the principles and process of cost accounting and standards.
- CO2** Express the place and role of the cost sheet in the modern economic environment.
- CO3** Select the material costs according to their impact on business and differentiate methods of calculating stock consumption.
- CO4** Differentiate methods of overhead costs according to the nature of the business.
- CO5** Apply office automation tools to create and manage costing records in organizations.

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	-	-	-	-	-	-	-	-		3		2	-
CO2	3	-	2	-	-	-	-	-	1		-		-	-
CO3	3	-	2	-	-	-	-	-	1		-		3	-
CO4	3	-	-	-	-	-	-	-	-		-		-	-
CO5	3	-	-	-	2	-	-	-	1		-		-	3
Course Correlation Mapping	3	-	2	-	2	-	-	-	1		3		3	3

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT**Module 1 Introduction to Cost Accounting****(09 Periods)**

Meaning of Costing and Cost Accounting – Objectives- Scope- and functions of Cost Accounting – Cost - significance of cost accounting, its relationship with financial accounting and management accounting - Cost Objects, Cost centers, and Cost Units - Elements of Cost - Classification of costs (Theory only).

Module 2 Cost Ascertainment – Elements of Cost**(09 Periods)**

Material Costs: Procurement of Materials - Inventory Management and Control - Inventory Accounting & Valuation - Physical Verification - treatment of losses - Scrap, spoilage, defectives, and wastage.

Labour: Definition – Meaning – wage payment system – Piece Rate – Merrix’s – Taylor’s – Halsey and Rowan (simple problems).

Module 3 Overheads and Cost Sheet (09 Periods)

Meaning and Definition of overheads – direct and indirect overheads – allocation of overheads.

Meaning – need for cost sheet - Elements of cost – Preparation of Cost sheet- Tenders and quotations (simple problems).

Module 4 Job and Batch Costing (09 Periods)

Meaning and Definition – importance of job costing – preparation of job costing.

Batch Costing: Meaning and Definition of Batch costing – preparation of batch costing (simple problems).

Module 5 Cost Accounting Standards (09 Periods)

Introduction – Definition – Purpose and Requirement of cost accounting standards -Estimating costs – presentation and documentation – auditing procedures and reports (Theory only).

Total Periods: 45

EXPERIENTIAL LEARNING:

- 1 Prepare a report on the role of cost accountants in the growth of a company.
- 2 To visit the manufacturing unit to observe how they used various techniques for analyzing the financial health of a company.
- 3 Prepare the cost sheet with practical examples of any two manufacturing companies

RESOURCES:

TEXT BOOKS:

- 1 S.P. Jain and K.L. Narang, Cost Accounting (2021), Kalyani Publishers, 16th Revised Edition, New Delhi.
- 2 Bhattacharyya A K, Principles and Practices of Cost Accounting (2012), 3rd Edition, PHI.

REFERENCE BOOKS:

- 1 B.K. Bhar, Cost Accounting, (2015), Academic Publishers', 19th Edition, Calcutta.
- 2 S.P Iyengar, Cost Accounting, (2015), Sultan Chand and Sons., 11th Edition, New Delhi

VIDEO LECTURS:

- 1 <https://www.youtube.com/watch?v=GIEDhnTuA48>
- 2 <https://www.youtube.com/watch?v=H0q2qAAnubI>

WEB RESOURCE:

- 1 <https://smallbusiness.chron.com/scope-objective-significance-cost-accounting-79250.html>
- 2 <https://www.akounto.com/blog/cost-accounting-standards>

PROGRAM CORE

Course Code	Course Title	L	T	P	S	C
22CM101013	GOODS AND SERVICE TAX	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course enables the students to know the basics concepts of GST, to learn the application of the principles in GST the system and process of Input Tax credit and practical aspects and apply the provisions of GST laws to various situations.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1** Understand the basics of GST.
- CO2** Understand the comprehensive structure of the GST.
- CO3** Describe the principles of GST.
- CO4** Understand the Input Tax Credit System.
- CO5** Demonstrate the GST Returns.

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	-	-	-	2	-	-	1	-	-	3	-	2	-
CO2	3	-	-	-	2	-	-	1	1	-	3	-	2	-
CO3	3	-	-	-	2	-	-	1	1	-	3	-	2	-
CO4	3	-	-	-	2	-	-	1	1	-	3	-	2	-
CO5	3	-	-	-	2	-	-	-	1	-	3	-	2	-
Course Correlation Mapping	3	-	-	-	2	-	-	1	1	-	3	-	2	-

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT

Module 1: INTRODUCTION

(09 Periods)

Overview of GST - Concepts - Taxes Subsumed under GST Components of GST- GST Council- Advantages of GST-GST Registration.

Module 2: GST PRINCIPLES

(09 Periods)

Vijay Kelkar Sha Committee Recommendations - Comprehensive Structure of GST Model in India: Single, Dual GST - GST Rates - Taxes Exempted from GST- Taxes and Duties outside the purview of GST Taxation of Services.

Module 3 TAX INVOICE

(09 Periods)

Bill of Supply - Transactions covered under GST - Composition Scheme - Reverse Charge Mechanism - Composite Supply - Mixed Supply.

Module 4 TIME OF SUPPLY OF GOODS & SERVICES

(09 Periods)

Value of Supply - Input Tax Credit Distribution of Credit -Matching of Input Tax Credit - Availability of Credit in Special Circumstances- Cross utilization of ITC between the Central GST and the State GST.

Module 5 GST RETURNS

(09 Periods)

Regular Monthly Filing Returns-Composition Quarterly Filing Returns-GSTR-1, GSTR-2, GSTR 2A, GSTR-3. GSTR 3B- Annual Returns GSTR-9, GSTR 9A, GSTR 9B& GSTR 9C - Records to be Maintained under GST.

Total Periods: 45

EXPERIENTIAL LEARNING

1. Conduct group discussions on the pros and cons of GST.
2. Submit a report on rates of GST taxes on various commodities.
3. Make a report related to current affairs on GST.

RESOURCES

TEXT BOOKS:

- 1 Dr. H.C. Mehrotra, Prof. V.P. Agarwal Goods and Services Tax (G.S.T) Tenth Revised and updated Edition, Sahitya Bhawan Publications,2022 Agra.
- 2 Jayakumar sithanandam, Textbook on Goods and Services Tax Laws, White Falcon Publishing, First Edition, 2018.

REFERENCE BOOKS

- 1 Sanjeet Sharma (Author), Lovenish Budhiraja (Author), "Goods and Service Tax", VK Global Publications Pvt Ltd; 2020th edition (1 January 2020),New Delhi.
- 2 Dr. Avinash Poddar & Mr. Shailin Doshi, "Master Guide to GST Act", Commercial Law Publishers Pvt Ltd; 2023rd edition.

VIDEO LECTURERS

- 1 <https://youtu.be/BpKn4AG9QIU>
- 2 <https://youtu.be/5htsJsaOxHc>

WEB RESOURCES:

- 1 <https://www.legalbites.in/categories/law-library/taxation/components-of-gst-924950>
- 2 <https://taxguru.in/goods-and-service-tax/input-service-distributor-isd-distribution-credit-gst.html>

PROGRAM CORE

Course Code	Course Title	L	T	P	S	C
22CM101014	INCOME TAX LAW AND PRACTICES	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course is designed to make students initially understand the basic principles and provisions of the income tax law prevailing in India and finally compute the Total Income and Tax payable by an Individual.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- C01.** To enable the students to identify the basic concepts, definitions, and terms related to Income Tax.
- C02.** Students would identify the technical terms related to income from salaries under Income Tax.
- C03.** To enable the students to determine the residential status of an individual and income from house property
- C04.** Students would determine the income from business/profession and the scope of total income.
- C05.** Students would compute income from capital gains and income from other sources.

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
C01	3	2	1							3	1	-	-	-
C02	3	2	1		1					3	1	-	-	-
C03	3	2	1		1					3	1	-	-	-
C04	3	2	1		1					3	1	-	-	-
C05	3	2	1		1					3	1	-	-	-
Course Correlation Mapping	3	2	1		1					3	1	-	-	-

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT

Module 1: Introduction

(09 Periods)

Income Tax Act-1961 - Basic Concepts: Income, Person, Assessee - Assessment Year, Previous Year, Rates of Tax, Agricultural Income, Permanent Account Number (PAN), Residential Status of Individual -Incidence of Tax – Incomes Exempt from Tax, Deductions under Section 80 - Computation of Total Income (including problems).

Module 2: Income from Salaries

(09 Periods)

Basis of Charge, Tax Treatment of Different Types of salary allowances, Perquisites, Profits instead of Salary, Deductions from Salary Income, Computation of Salary Income (including problems).

Module 3: Income from House Property

(09 Periods)

Annual Value, Let-out/Self Occupied/Deemed to be Let-out house -Deductions from Annual Value - Computation of Income from House Property (including problems).

Module 4: Income from Profits and Gains from Business

(09 Periods)

Definition of Business and Profession – Procedure for Computation of Income from Business – Revenue and Capital Nature of Incomes and Expenses – Allowable Expenses – Expenses Expressly Disallowed – Computation (including problems).

Module 5: Income from Capital Gains - Income from Other Sources

(09 Periods)

Meaning of Capital Asset – Types – Procedure for Computation of Long-term and Short-term Capital Gains/Losses Meaning of Other Sources - General Incomes – Specific Incomes – Computation (including problems)

Total Periods: 45

Experiential Learning:

List of Exercises

1. Collect the individual employee salary particulars and make a report on it.
2. Make a presentation on the Non-Resident of India.
3. Make a report income tax filing.
4. Make a Report on the different sources of income.

RESOURCES

TEXT BOOKS:

- 1 Dr. Vinod; K. Singhanian; Direct Taxes – Law and Practice, Taxman Publications
- 2 T. S. Reddy and Dr. Y. Hari Prasad Reddy - Taxation, by Margham Publications

REFERENCE BOOKS:

- 1 Dr. Mehrotra and Dr. Goyal -Direct Taxes, Law and Practice, Sahitya Bhavan Publication
- 2 Balachandran &Thothadri- Taxation Law and Practice, PHI Learning.

VIDEO LECTURER:

- 1 <https://www.youtube.com/watch?v=41kyvIHdZtA&list=PL50U27IGzKQD1sU6dJ1y5ErxL3kKrbeZy>
- 2 https://www.youtube.com/watch?v=ip_YIGww_VE&list=PL50U27IGzKQCCch2nYhLo1qZv7s

[2jrk19](#)

WEB RESOURCES:

- 1 <https://tax2win.in/guide/how-to-calculate-income-tax-on-salary>
- 2 <https://www.bankbazaar.com/tax/how-calculate-income-from-house-property.html>

PROGRAM CORE

Course Code	Course Title	L	T	P	S	C
22CM101016	Investment Management	3	-	-	-	3

Pre-Requisite

Anti-Requisite

Co-Requisite

COURSE DESCRIPTION: The course aim is to acquaint with fundamental concepts of investment methods and to gain knowledge about mutual funds and portfolio analysis.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1** Acquire basic knowledge of Investment.
- CO2** Ascertain knowledge about trading in the stock home.
- CO3** Develop the knowledge about mutual funds.
- CO4** Demonstrate the marketing activities of stock and commodities.

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	2	-	-	-	-	1		2	3	-	1	-
CO2	3	2	2		-	-	-	1		2	3	-	1	-
CO3	3	2	2		-	-	-	1		2	3	-	1	-
CO4	3	2	2		-	-	-	1		2	3	-	1	-
Course Correlation Mapping	3	2	2		-	-	-	1		2	3	-	1	-

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT

Module 1: Investment Management (09 Periods)

Meaning – Definition - Introduction Investment Management- Nature and Scope, Types of Financial Assets – Systematic and Unsystematic Risk – Sources of Risk, Measurement of Risk and Return, Sources of Investment Information, Fixed Income – Securities – Bonds, Preference Shares.

Module 2: Securities Analysis (09 Periods)

Meaning – Definition - Analysis of Variable Income Securities, Fundamental Analysis – Analysis of Economy, Industry Analysis, Company Analysis – Financial and Non-financial Analysis – Equity Valuation Models, Options, Futures, Forwards, Warrants and their Valuations.

Module 3 Portfolio Management

(09 Periods)

Meaning – Definition - Portfolio Management - Portfolio Analysis - Portfolio Objectives -Portfolio Management Process - Selection of Securities - Portfolio Theory, Sharpe’s Single Index Model, Efficient Frontier with Lending and Borrowing.

Module 4 Portfolio Management Strategies

(09 Periods)

Meaning – Definition - Bond Portfolio Management Strategies, Equity Portfolio Management Strategies, Strategies using Derivatives, Portfolio Revision – Rebalancing Plans, Portfolio Evaluation, Sharpe’s Index, Treynor’s Measure and Jensen’s Measure.

Module 5 Mutual Funds

(09 Periods)

Meaning – Definition- Mutual Funds, Investor’s Life Cycle, Personal Investment, Personal Finance, Insurance Companies, Pension Funds, International Investing, International Funds Management.

Total Periods: 45

EXPERIENTIAL LEARNING

List of Exercises

1. Identify and study various Investment strategies.
2. List out the financial assets
3. Prepare a brief note on various sources of investment management.
4. Collect securities bonds and debentures and make a report on it.
5. Perform investment related to some of the business ideas in the classroom.

RESOURCES

TEXT BOOKS:

- 1 Yogesh Maheswari, PHI Learning private limited, New Delhi, ISBN NO: 9788120334267, 2020.
- 2 Bhalla V.K, Investment Management, S Chand & Company publisher (1 June 2008), **978-8121912488**.

VIDEO LECTURES:

- 1 <https://www.youtube.com/watch?v=nOamE8NWyIc>
- 2 <https://www.youtube.com/watch?v=nOamE8NWyIc&list=PLsh2FvSr3n7dyc9mWitsK3S6yIiTJBKPI>

WEB RESOURCES:

- 1 https://en.wikipedia.org/wiki/Investment_management
- 2 <https://www.morganstanley.com/what-we-do/investment-management>

PROGRAM CORE

Course Code	Course Title	L	T	P	S	C
22CM101017	FINANCIAL ACCOUNTING –II	3	1	-	-	4
Pre-Requisite	22CM101008 - Financial Accounting -I					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: The course enables to the students the steps involved in the process of issue of shares and debentures, Learn the theoretical knowledge and apply it in the real practical world.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Understand the basic concepts of bills of exchange.
- CO2.** Demonstrate the hire purchase and installment system.
- CO3.** Understand how to formulate a company.
- CO4.** Understand the methods of pooling capital.
- CO5.** Understand and analyze the concept of debentures.

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	-	-	-	2	-	-	-	1	-	3	-	-	-
CO2	-	3	-	-	-	-	-	-	-	3	-	-	-	-
CO3	-	-	-	-	3	-	-	-	-	3	-	-	-	-
CO4	-	-	-	-	-	-	-	-	3	-	-	-	3	-
CO5	-	3	-	-	-	-	-	-	-	-	-	-	3	-
Course Correlation Mapping	3	3	-	-	3	-	-	-	2	3	3	-	3	-

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT:

Module 1 Bills of Exchange

(09 Periods)

Introduction of Bills of Exchange – Definition - Features – types of bill parties – Record of Bills of Exchange - Entries to be made on Acceptance of Bill - Accommodation Bills – Rewriting bills - Bills for Cancellation (Theory and Problems).

Module 2 Instalment Purchase System and Hire Purchase System **Periods: 09**

Instalment Purchase System – Difference between Hire Purchase and Instalment Purchase systems – Accounting Treatment in the Books of Purchase and Vendor - Hire Purchase System – Features – Accounting Treatment in the Books of Hire Purchaser and Hire Vendor – Default and Repossession (Theory and Problems).

Module 3 Introduction to Company **Periods: 09**

Meaning and Definition of Joint-stock Company – features – advantages, and Disadvantages – types of companies - Incorporation of a company – Memorandum of Association – Articles of Association - Prospectus (Theory only).

Module 4 Issue of Share Capital **Periods: 9**

Meaning - Types of shares -Issue of Preference and Equity shares –Issued at Par, Premium, and at Discount – Forfeiture and Re-issue of Shares (Simple problems).

Module 5 Debentures **Periods: 09**

Definition – Introduction - Meaning- importance of debentures - Types -Issue – Redemption of Debenture (Simple problems).

Total Periods: 45

EXPERIENTIAL LEARNING:

1. Make a report on the accommodation of bills.
2. Give a presentation on the formation of different types of companies.
3. Prepare a report on methods of issue of shares in public limited companies.

RESOURCES

TEXT BOOKS:

1. S.P. Jain and K.L. Narang, Financial Accounting (Advanced Accounting), Kalyani Publishers, ISBN: 978-93-272-2357-6.
2. S.N. Maheshwari, and. S. K. Maheshwari. Financial Accounting. 5th Edition, Vikas Publishing House, New Delhi.

REFERENCE BOOKS:

1. Abhik Kr.Mukherjee& Mukherjee , Financial Accounting 2, Oxford University, Press, 2018.
2. S.N. Maheshwari, and. S. K. Maheshwari. Financial Accounting. Vikas Publishing House, New Delhi.

VIDEO LECTURES:

1. <https://www.youtube.com/watch?v=Eu9slLys4NI>
2. <https://www.youtube.com/watch?v=bZSdkGuu0vE>

WEB RESOURCES:

1. <https://www.vedantu.com/commerce/journal-entry-for-bills-of-exchange>
2. <https://www.financestrategists.com/accounting/shares-and-debentures/issue-of-shares-problems-and-solutions/>

PROGRAM CORE

Course Code	Course Title	L	T	P	S	C
22CM101018	Research Methodology for Business	3	-	-	-	3
Pre-Requisite	22CM101007 – Business Statistics					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course focuses on the principles of the research proposal, literature evaluation, and qualitative and quantitative methods in order to offer the theoretical and practical foundation for a research project. The purpose of this course is to give students the knowledge and abilities needed to plan and carry out a research dissertation

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** understand the importance of research and the various methods that researcher used to investigate problems
- CO2.** Evaluate the different types of research designs to derive strategies
- CO3.** understand the concepts and challenges in collecting the data
- CO4.** Interpret the data to make meaningful decisions through analyzing the data
- CO5.** Know the report writing procedure

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3		2							3	2	1	-	-
CO2	3	1	2			1		1		3	2	1	-	-
CO3	3	1	2		1			1		3	2	1	-	-
CO4	3	1	2		1					3	2	1	-	-
CO5	3	1	2		1									
Course Correlation Mapping	3	1	2		1	1		1		3	2	1	-	-

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT

Module 1: Introduction to Business Research (09 Periods)

Definition-Types of Business Research, Scientific Investigation, Technology and Business Research: Information needs of Business - Role of Business Research in Managerial Decisions. Problem Identification: Broad Problem Area-Preliminary Data Gathering. Literature Survey

Module 2: Research Design (09 Periods)

Types of Research Designs: Exploratory, Descriptive, Experimental Designs and Case Study - Measurement of Variables- Operational Definitions and Scales-Nominal and Ordinal Scales- Rating Scales- Ranking Scales- Reliability and Validity - Sampling and Methods of sampling

Module 3: Data Sources and Survey (10 Periods)

Primary and Secondary Sources of Data - Data Collection Methods Observational Surveys: Questionnaire Construction: Organizing Questions- Structured and Unstructured Questionnaires - Guidelines for Construction of Questionnaires.

Module 4: Data Analysis (09 Periods)

Hypothesis Development - Statement of Hypothesis- Procedure for Testing of Hypothesis, Cross Tabulation, Uni-variate analysis, bivariate analysis: Correlation, Karl Pearson's coefficient of correlation, Spearman's coefficient of correlation, hypothesis testing, t-test, Z test, F-test, Chi-square test, Analysis of variance.

Module 5: Research Report (08 Periods)

Research Reports-Components-The Title Page-Table of Contents-The Executive Summary-The Introductory Section-The Body of the Report -The Final Part of the Report- Acknowledgements - References-Appendix - Guidelines for Preparing a Good Research report - Oral Presentation

Total Periods:45

EXPERIENTIAL LEARNING

1. Prepare a questionnaire on descriptive type research and collect the data.
2. Conduct a focus group discussion about higher education in India and submit a report
3. Give a presentation on primary and secondary sources of data if you are asked to collect data about Amazon India sales in a certain period of time.

RESOURCES

TEXT BOOKS:

1. C.R. Kothari, Research Methodology – Methods & Techniques, , Vishwa Prakashan, 2017.
2. Uma Sekaran, Research Methods for Business–A Skill Building Approach, John Wiley & Sons (Asia) Pte.Ltd, Singapore.
3. Research Methodology (Concepts and cases) Deepak Chawla Neena Sondhi-Vikas publishing
4. Business Research Methods 8th Edition, Zikmund- Babin-Carr- Adhikari-Griffin-Cengage learning

REFERENCE BOOKS:

1. Business Research Methods, Donald R Cooper and Pamela S Schindler,9/e,Tata McGrawHill Publishing Company Limited.
2. Methodology and Techniques of Social Science Research, Wilkinson & Bhandarkar, Himalaya Publishing House.

VIDEO LECTURES:

1. <https://www.youtube.com/watch?v=ZLjmuKwUfWk>
2. <https://www.youtube.com/watch?v=xfWxIkeH7Ic>

Web Resources:

1. <https://www.caluniv.ac.in/academic/Commerce/Study/S-IV-BRM.pdf>
2. <https://mu.ac.in/wp-content/uploads/2022/08/MMS-Business-Research-Methods.pdf>

PROGRAM CORE

Course Code	Course Title	L	T	P	S	C
22CM102003	COMPUTERIZED ACCOUNTING WITH TALLY	3	-	2	-	4

Pre-Requisite 22CM101008 – Financial Accounting - I

Anti-Requisite -

Co-Requisite -

COURSE DESCRIPTION: The course aim is to acquaint with fundamentals of computerized accounting procedure and accounting software's and tally. Also, to gain understanding tally application office tools.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1** Understand the basic concepts of computerized accounting.
- CO2** Explain the concepts of the tally.
- CO3** Interpret the concept of voucher entries in tally.
- CO4** Understand the knowledge of TDS.
- CO5** Understanding the concept of payroll.

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	-	-	-	-	-	-	-	-	3	-	3	-	-
CO2	3	-	-	-	-	-	-	-	-	3	-	3	-	-
CO3	3	-	-	-	-	-	-	-	-	3	-	3	-	-
CO4	3	-	-	-	-	-	-	-	-	3	-	3	-	-
CO5	2	-				-	-			3	-	3		
Course Correlation Mapping	3	-	-	-	-	-	-	-	-	3	-	3	-	-

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT

Module 1: Introduction to computerized Accounting and Accounting software's (09 Periods)

Introduction to computerized Accounting, features of computerized accounting, advantages and of and dis advantages, basic accounting concepts, Leading Accounting Software's - Busy - Marg Books - Quick Books - Zoho Books.

Module 2: Introduction to tally (09 Periods)

Company Creation, creation of ledgers, groups and vouchers - display, and alteration of multiple and single ledgers - Types of vouchers - creation and alteration of vouchers (lab exercises).

Module 3 Tally inventory

(09 Periods)

Tally inventory-configuration-creation and display of inventory masters-recording various inventory vouchers, display and print of inventory reports. (Lab exercises).

Module 4 TDS

(09 Periods)

Introduction to TDS- Advanced and balance payments of TAX - Generation of TDS reports - Enabling service tax – creation of ledger and recording of vouchers in relation to TDS (lab exercises).

Module 5 Payroll

(09 Periods)

Payroll features – Enabling payroll -creation of pay head ledgers- creation of employee masters and pay roll vouchers and attendance vouchers-Display and print of various payroll reports (lab exercises).

Total Periods: 45

EXPERIENTIAL LEARNING

- 1 To visit at least one business organization dealing with Computerized Accounting.
- 2 Collect data relating to the business transactions and prepare the vouchers.
- 3 Study ledger creation in accounting software.
- 4 Submit a report how to generate the reports in Tally.
- 5 Give a presentation on payroll.

RESOURCES

TEXT BOOK:

- 1 Chakra Burthy Tarun, tally prime, Diamond Pocket Books publisher, First Edition, 2019, ISBN: 9788128820748, 9788128820748
- 2 Tally. ERP 9 Made Simple Basic Financial Accounting by BPB Publisher.
- 3 Nadhani, Ashok K, Tally ERP 9 Training Guide, BPB Publications.

REFERENCE BOOKS:

- 1 Dream tech Press, tally, ISBN-10: 9386052431, ISBN-13:978-9386052438.
- 2 DT Editorial services, tally prime, Dream tech publisher,1 FEB 2020, ISBN-10 9389872553:, ISBN-13 : 978-9389872552.
- 3 Tally ERP 9 For Real Time Accounting by Avichi Krishnan.

VIDEO LECTURES:

- 1 <https://www.youtube.com/watch?v=Ipz1VVQGXEc>.
- 2 <https://www.youtube.com/watch?v=eA8oK3wn1p4>.

Web Resources:

- 1 <https://tallyerp9renewal.com/what-is-tally/>
- 2 https://help.tallysolutions.com/docs/te9rel66/Common_Files/#gref
- 3 <https://tallysolutions.com/tally/payroll-management-in-tally-erp-9/#gref>

PROGRAM CORE

Course Code	Course Title	L	T	P	S	C
22CM101015	FUNDAMENTALS OF STOCK MARKET	3	-	-	-	3

Pre-Requisite	-
Anti-Requisite	-
Co-Requisite	-

COURSE DESCRIPTION: The course aim is to acquaint with fundamentals of computerized accounting procedure and accounting software's and tally. Also, to gain understanding tally application office tools.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1** To Understand Basics of stock market analysis and latest trends in today's stock markets
- CO2** To know how to operate Demat account and understand mutual Fund
- CO3** To study and learn the foundations of Marketing Analysis
- CO4** To explain how the trading activities are carried on stock market
- CO5** To understand the settlement Procedure

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	-	2	-	1	-	-	1	-	3	-	3	-	-
CO2	3	-	2	-	1	-	-	1	-	3	-	3	-	-
CO3	3	-	2	-	1	-	-	1	-	3	-	3	-	-
CO4	3	-	2	-	1	-	-	1	-	3	-	3	-	-
CO5	2	-	2		-	-	-	1		3	-	3		
Course Correlation Mapping	3	-	2	-	1	-	-	1	-	3	-	3	-	-

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT

Module 1: Introduction (10 Periods)

Capital Market in India, Investment in Stock Market - The process to invest, Primary Market vs Secondary Market - Practical Learning on instruments of Primary and Secondary Markets - Indices & Initial Public Offering (IPO) - Practices on IPO applications - Learn from scratch about Indian Stock Markets, How the Indian stock market works.

Module 2: Demat and Depository (09 Periods)

Demat - Demat and Depository - Opening of Demat Account and its application - Mutual Funds - Introduction to Mutual Funds, Working of Mutual Fund with practices - Types and Benefits of Mutual Fund, Factors Affecting the Choice of Mutual Fund - Debt & Hybrid Mutual Funds- Investment practices on mutual funds.

Module 3 Commodity Market - Currency Market (08 Periods)

Introduction to Commodity Market, Currency Market - Trading practices with Commodity Market - Future and options - Call and Put Options - Investment Psychology, Investor Types, Delivery, and Intraday Trading - Intraday Trading Strategies.

Module 4 Portfolio Management and Trading Account (09 Periods)

Portfolio Management, Trading Account, and Free Demat Opening, Equity - Cash and Derivative Market, Tools of Trading - Fundamental Analysis – Economic Analysis with Practices - Industry and Company Analysis with Practices - Best Practices in Trading & Trading Psychology - Risk of Investing in the Stock Market.

Module 5 Stock Quotations, Online trading of stock (09 Periods)

Stock Quotations, Online trading of stock - Limit Order & Market Order - Trading Pattern & Settlement - Broker Registration – Procedure - Qualification of Stock Broker - Activities of Brokers & Broker Charges, Settlement Procedure.

Total Periods: 45

EXPERIENTIAL LEARNING

- 1 Using virtual platforms to simulate real market conditions, allows participants to practice trading without financial risk.
- 2 Make a report on Learning how to open a demat account, including the documentation.
- 3 Using simulation or real trading platforms to execute commodity trades, manage positions, and monitor market fluctuations.

RESOURCES

TEXT BOOK:

- 1 Stock Market Investing by warren Anderson Smart finance publishing 2021
- 2 An Introduction to stock market and investment by Rod Davis Mcgraw Publication 2020.

REFERENCE BOOKS:

- 1 Introduction to Stock Market by Zerodha.com 2022
- 2 Stock Market Investing by warren Anderson Smart finance publishing 2021
- 3

VIDEO LECTURES:

- 1 <https://www.youtube.com/watch?v=t9OICNhilAA>
- 2 <https://www.youtube.com/watch?v=RzmLaXULZAw>

Web Resources:

- 1 <https://www.indiainfo.com/knowledge-center/share-market/share-market-investment-guide-for-beginners>
- 2 <https://www.apm.org.uk/resources/what-is-project-management/what-is-portfolio-management/>
- 3 <https://www.5paisa.com/stock-market-guide/demat/what-is-demat-account>

PROGRAM CORE

Course Code	Course Title	L	T	P	S	C
22CM101024	SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course develops an understanding of security, Portfolio Management, and Phases of Portfolio Management. Financial Markets - Investment – Securities Market. Bond Evaluation - Risk and Return Analysis of stocks. Fundamental Analysis and Technical Analysis. Portfolio Risk and return and portfolio selection – Portfolio Evaluation and Revision.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

CO1 understand basic Knowledge of Financial Markets and various investment avenues.
CO2 examine bond evaluation process
CO3 Analyze the stock market by Fundamental Analysis and Technical Analysis
CO4 Evaluate the Portfolio Selection
CO5 Appraise the evaluation of mutual funds and Revision

CO-PO Mapping Table:

Course Outcomes	Program Specific Outcomes														
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5	
CO1	3	2	-	-	-	-	-	-	-	3	1	2	-	-	
CO2	3	2	-	-	-	-	-	-	-	3	1	2	-	-	
CO3	3	2	2	-	-	-	-	-	-	3	1	2	-	-	
CO4	3	2	2	-	-	-	-	-	-	3	1	2	-	-	
CO5	3	2	2	-	-	-	-	-	-	3	1	2	-	-	
Course Correlation Mapping	3	2	2	-	-	-	-	-	-	3	1	2	-	-	

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT

Module 1: INTRODUCTION (05 Periods)

Investment: Meaning – Features - Speculation and Gambling – Financial Markets – Money Market – Capital Market - Investment objectives – Investment Process – Investment avenues – Real Assets – Financial Assets – GDR – ADR- IDR.

Module 2: RISK AND RETURN AND BOND EVALUATION (10 Periods)

Risk – Return Framework: Meaning of Risk and Return – Measurement of Return – Risk Systematic and Unsystematic Risk – Risk Measurement (Theory and Case Studies)
 Bond Characteristics, Prices, Yields, Yield Curve – Determinants of interest Rates, Interest Rate Risk – Duration of the Bond and Immunization (Theory and Case Studies)

Module 3: FUNDAMENTAL AND TECHNICAL ANALYSIS (10 Periods)

Fundamental Analysis: Meaning – Importance – Objectives – Economic Analysis – Industry Analysis – Company Analysis. Technical Analysis – Meaning – Dow Theory – Gaps - Difference between fundamental analysis and technical analysis. (Theory and Case Studies)

Module 4: PORTFOLIO ANALYSIS (05 Periods)

Portfolio – Approaches in construction of portfolio – determination – portfolio risk and return analysis – Reduction of portfolio Risk Through Diversification. Portfolio with more than two Assets. selection – Markowitz Model – simple diversification – The Markowitz Model – Efficient Frontier – Capital Asset Pricing Model – CAPM theory – Capital Market Line – Security Market Line (Theory and Case Studies).

Module 5: PERFORMANCE EVALUATION (10 Periods)

Mutual Funds – Meaning – Structure of mutual funds – Classification of Mutual Funds – Exchange traded funds – Evaluation of portfolios – Sharpe – Treynor and Jensen. Portfolio Revision (Theory and Case Studies).

Total Periods:45

EXPERIENTIAL LEARNING

LIST OF EXPERIMENTS:

1. Present a case summary report on Bond evaluation of a bank.
2. Present a TED talk on trends in security analysis and portfolio management
3. Write an assignment on governing body role in security analysis and portfolio management

RESOURCES

TEXTBOOKS:

1. Bodie, Kane, Marcus, Mohanty. Investments. McGraw Hill, 2019
2. Kannadhasan. Fixed Income Securities, Valuation and Risk Management. 2022. Cengage

REFERENCE BOOKS:

1. Chandra Prasanna, Investment Analysis and Portfolio Management, Tata McGrwahill Publishing company Ltd.,
2. Punithavathy Pandian, Security Analysis and Portfolio Management, Vikas Publishing House Pvt. Ltd.,
3. Kevin, S., Security Analysis and Portfolio Management, PHI Publishers.

VIDEO LECTURES:

1. <https://www.youtube.com/watch?v=ope5Y3Mrsaw&list=PLEC357A2BC142F57E>
2. <https://www.youtube.com/watch?v=tzasFmP1CpA>

WEB RESOURCES:

1. [https://kanchiuniv.ac.in/coursematerials/IM%20UNIT-%20I%20\(2\).pdf](https://kanchiuniv.ac.in/coursematerials/IM%20UNIT-%20I%20(2).pdf)
2. <https://josephscollege.ac.in/lms/Uploads/pdf/material/IAPM.pdf>
3. <https://backup.pondiuni.edu.in/sites/default/files/investment%26portfolio-260214.pdf>

PROGRAM CORE

Course Code	Course Title	L	T	P	S	C
22CM101019	Banking Theory and Practices	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: The course imparts valuable information about the origin and growth of the Indian Banking sector and the relevance of the technological innovations taking place in the banking sector. It also gives vital information about the Procedure for opening & operating of deposit account, International Banking operation

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1** Familiarize with the Indian Banking sector.
- CO2** Understand the importance of Procedure for opening & operating of deposit account
- CO3** Understanding the concept of lending, Negotiable Instruments and the role bank plays in lending loans to customers and corporate.
- CO4** Understanding the various technological innovations taking place in banking sector

CO-PO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	-	-	1	-	-	-	1	3	2	1	-	-
CO2	3	2	-	-	1	-	-	-	1	3	2	1	-	-
CO3	3	2	-	-	1	-	-	-	1	3	2	1	-	-
CO4	3	2	-	-	1	-	-	-	1	3	2	1	-	-
Course Correlation Mapping	3	2	-	-	1	-	-	-	1	3	2	1	-	-

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT

Module 1: Banking Scenario in India Banking Operations (08 Periods)

Basic Concepts; Types of accounts; Scope and Functions of Banking; India's banking Sector, Need for banking Regulation and Supervision; Origin and growth of commercial banks in India. Current Scenario, Role of RBI; Credit rating Agencies in India.

Module 2: Procedure for opening & operating of deposit account (12 Periods)

Procedure for opening of Deposit account: Know your Customer Norms (KYC norms), Application form, Introduction, Proof of residence, Specimen signature & Nomination: Their importance. Procedure for operating Deposit account: Pay - in- slips, Issue of pass book, (Current Savings or Recurring deposits), Issue of Cheque book, Issue of fixed deposit receipt, Premature encashment of fixed deposits & loan against fixed deposit. Recurring deposits: Premature encashment & loan against fixed deposit. Closure of accounts, transfer of accounts to other branches

Module 3: Negotiable Instruments (10 Periods)

Negotiable instruments: Promissory Note, Bills of Exchange, Cheque, Draft, Definitions, Features, Crossing of Cheques, Endorsement, Material Alteration, Paying Banker, Rights and Duties, Statutory Protection, Dishonour of Cheques, Role of collecting banker. Lending: Principles of lending, Types of Borrowings, Precautions to be taken by a banker, Non-Performing Assets

Module 4: Banking Technology (10 Periods)

Technological Channels for the Delivery of Financial Services, ATMs' Internet banking; Mobile banking; payment and receipts gateway; Paytm; BHIM; TEZZ etc.; Card Technologies Debit; Credit; and Smart cards; Electronic Fund Disclosure; IMPS, NEFT and RTGS; Money Laundering; Anti-money Laundering Guidelines.

Module 5: Impact of Technology (05 Periods)

Impact of Technology on its employees, Customer service, Management control. Protecting – Confidentiality and secrecy of data – Cyber laws and its implications

Total Periods:45

EXPERIENTIAL LEARNING

LIST OF EXPERIMENTS:

1. Visit the local banks to learn about the operations of the banking sector.
2. Real-world case studies of successful implementations of technological channels in financial services.
3. Provide access to banking or financial apps where learners can practice tasks such as transferring money, paying bills, or analyzing financial data.

RESOURCES

TEXTBOOKS:

1. Principles and Practices of Banking, author by IIBF, 3rd Edition, 2015 by Macmillan Publication.
2. Legal and Regulatory Aspects of Banking – JAIIB, author by IIBF, 3rd Edition, 2015 by Macmillan Publication.

REFERENCE BOOKS:

1. Justin Paul and Padmalatha Suresh, Management of Banking and Financial Services, 4th Edition, New Delhi: Pearson Education.
2. Principles and Practices of Banking, Indian Institute of Banking and Finance, 3rd Edition, Macmillan.

VIDEO LECTURES:

1. <https://www.youtube.com/watch?v=PbCHpuWJkpo>
2. <https://www.youtube.com/watch?v=Tpc9HvkUHEo>

WEB RESOURCES:

1. <https://www.toppr.com/guides/commercial-knowledge/organizations-facilitating-business/the-reserve-bank-of-india/>
2. <https://corporatefinanceinstitute.com/resources/wealth-management/mobile-banking/>

PROGRAM CORE

Course Code	Course Title	L	T	P	S	C
22CM101021	MERGERS AND ACQUISITIONS	3	-	-	-	3

Pre-Requisite -

Anti-Requisite -

Co-Requisite -

COURSE DESCRIPTION: To provide a concrete understanding of Mergers & Acquisitions To familiarize the concepts to the students with the current issues in M&A To expose the students about the process and methods of M&A, measures to evaluate the performance of M&A.

COURSE OUTCOMES: After completion of the course, the students will be able to:

- CO1** Demonstrate uses of Mergers and Acquisitions for decision-making.
- CO2** Pursue a career in the field of corporate restructuring, Investment analysis.
- CO3** Gain experiential learning through well-structured internships and live-projects.
- CO4** Analyze and learn about M& A Applications and its impact on firm.
- CO5** Understand different theories of valuation of mergers and acquisitions.

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	-	-	-	2	-	-	1	3	2	1	-	-
CO2	3	3	-	-	-	2	-	-	1	3	2	1	-	-
CO3	3	3	-	-	-	2	-	-	1	3	2	1	-	-
CO4	3	3	-	-	-	2	-	-	1	3	2	1	-	-
Course Correlation Mapping	3	3	-	-	-	2	-	-	1	3	2	1	-	-

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT:

Module 1: BUSINESS ALLIANCES **(05 Periods)**

Business Alliances: Introduction - Various Forms of Business Alliances – types of mergers - Strategic Choice of Type of Business Alliance - Who should go for Merger and Acquisition and Take-over - Defining and Selecting Target - Pricing of Mergers

Module 2: MERGERS **(10 Periods)**

Mergers: Characteristics of Merger, Divestitures, sell off, spin off, Equity carveout, Going private, demergers and Leveraged buyouts. Calculating share exchange ratio.

Module 3: ACQUISITIONS **(10 Periods)**

Acquisitions: Negotiation/Approach for Merger, Acquisition and Take-over - Contracting - Implementation of Merger and Acquisition - Managing Post-Merger Issues - Legalities Involved in Merger, Acquisition and Take-over - Ethical Issues of Merger and Take-over – Defensive tactics for mergers.

Module 4: ISSUES **(10 Periods)**

Issues: Reasons for Mergers - Accounting for Mergers - Financing the Mergers and Takeovers - Corporate Restructuring - Divestment and Abandonment.

Module 5: THEORIES **(10 Periods)**

Theories: Theories of Merger – tax aspects in mergers & acquisitions – Different approaches in the valuation of mergers and acquisitions – Cross border mergers – Funding options for mergers.

Total Periods:45

EXPERIENTIAL LEARNING:

LIST OF EXPERIMENTS:

1. Choose a prominent merger or acquisition from recent years (e.g., Disney's acquisition of Fox, Amazon's acquisition of Whole Foods) and analyze the motivations behind the deal
2. Select two companies that have recently merged and conduct a financial analysis comparing their performance before and after the merger.
3. Analyze the impact of mergers and acquisitions on different stakeholders, including shareholders, employees, customers, suppliers, and the broader community.

RESOURCES

TEXT BOOKS:

1. Patrick A. Gaughan, Mergers and Acquisitions Corporate Restructuring, Wiley Publishers, 6th Edition, 2015.
2. Rabi Narayan Kar/Minakshi, Mergers Acquisitions & Corporate Restructuring - Strategies & Practices. Paperback.
3. Donald M. DePamphilis, Mergers, Acquisitions, and Other Restructuring Activities: An Integrated Approach to Process, Tools, Cases, and Solutions. Academic Press, 6th Edition, 2011.

REFERENCE BOOKS:

1. Karn Gupta, Global Corporate Restructuring & Mergers & Acquisitions in India: Corporate Restructuring: Global Analytics & Indian Position. Lap Lambert Academic Publishing, 2013.
2. Donald M. DePamphilis, Mergers, Acquisitions, and Other Restructuring Activities. Academic Press, 5th Edition, 2010.
3. Sheeba Kapil, Kanwal N. Kapil. Mergers and Acquisitions: Valuation, Leveraged Buyouts and Financing (WIND). Paperback WILEY, 2015.

VIDEO LECTURES:

1. <https://youtu.be/NtXV3YGr988>
2. <https://youtu.be/WBHzCDgEtVQ>
3. <https://youtu.be/p0Bx6UtherQ>
4. <https://youtu.be/9zn2IWCwVOg>

WEB RESOURCES:

1. <https://www.investopedia.com/terms/m/mergersandacquisitions.asp>
2. [https://www.nishithdesai.com/fileadmin/user_upload/pdfs/Research%20Papers/Mergers ___Acquisitions_in_India.pdf](https://www.nishithdesai.com/fileadmin/user_upload/pdfs/Research%20Papers/Mergers___Acquisitions_in_India.pdf)
3. <https://corporatefinanceinstitute.com/resources/valuation/mergers-acquisitions-ma/>
4. <https://www.wallstreetmojo.com/top-best-mergers-and-acquisitions-ma-books/>

Course Code	Course Title	L	T	P	S	C
22CM101023	Entrepreneurship Development	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course introduces students to the opportunities and challenges associated with the creation and management of entrepreneurial and small organizations. This course discusses innovative and contemporary approaches in addressing areas such as: starting, acquiring a business, succeeding in business, and franchising a small business venture.

COURSE OUTCOMES: After completion of the course, the students will be able to:

- CO1** Understand the development of entrepreneurship as a field of study and as a profession.
- CO2** Comprehend the SSE in the development of the Indian economy.
- CO3** Understand the business decisions involved in starting a new business venture
- CO4** Determine the financial and non-financial assistance to SSE.

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	-	-	-	2	-	-	1	3	2	1	-	-
CO2	3	3	-	-	-	2	-	-	1	3	2	1	-	-
CO3	3	3	-	-	-	2	-	-	1	3	2	1	-	-
CO4	3	3	-	-	-	2	-	-	1	3	2	1	-	-
Course Correlation Mapping	3	3	-	-	-	2	-	-	1	3	2	1	-	-

Correlation Levels: **3: High; 2: Medium; 1: Low**

COURSE CONTENT:

Module 1: Introduction to Entrepreneurship (05 Periods)

Introduction; Meaning & Definition of Entrepreneurship; Entrepreneur & Enterprise; Functions of Entrepreneur; Factors influencing Entrepreneurship; Pros and Cons of being an Entrepreneur; Qualities of an Entrepreneur; Types of Entrepreneur; Women Entrepreneur.

Module 2: SSI and Social Entrepreneurship (10 Periods)

Meaning; Product Range; Capital Investment; Ownership Patterns; Meaning and importance of Tiny Industries, Ancillary Industries, and Cottage Industries. Role played by SSI in the development of Indian Economy. Problems faced by SSIs and the steps taken to solve the problems.

Social entrepreneurship - Rural entrepreneurship, MSME Policies. Make-In India, Start-Up India, Stand-Up India.

Module 3: Family Business (10 Periods)

Importance of family business, Types, History, Responsibilities and rights of shareholders of a family business, Succession in family business, Pitfalls of the family business, strategies for improving the capability of family business, improving family business performance.

Module 4: Sources of Business Ideas and Tests of Feasibility (10 Periods)

Significance of writing the business plan/ project proposal; Contents of business plan/ project proposal; Designing business processes, location, layout, operation, planning & control;

preparation of project report (various aspects of the project report such as size of investment, nature of product, market potential may be covered.

Module 5: Institutions Supporting Entrepreneurs (10 Periods)

Financial assistance through SFC's, SIDBI, Commercial Banks, IFCI - Non-financial assistance from DIC, SISI, AWAKE, KVIC - Financial incentives for SSI's and Tax Concessions Assistance for obtaining Raw Material, Machinery, Land and Building and Technical Assistance - Industrial Estates: Role and Types.

Total Periods:45

EXPERIENTIAL LEARNING:

LIST OF EXPERIMENTS:

1. Visit small-scale industries and make a report on it.
2. Give a presentation on the operational activities of SSI.

RESOURCES

TEXT BOOKS:

1. Vasanth Desai, Management of Small Scale Industry, HPH, 2016.
2. Mark. J. Dollinger, Entrepreneurship – Strategies and Resources, Pearson Edition.

REFERENCE BOOKS:

1. Dr. Asha R Gupta, Women Entrepreneurship and Economic Empowerment, HPH
2. Dr. Venkataramana ; Entrepreneurial Development, SHB Publications
3. Family Business in India Sudipt Dutta SAGE Publications,

VIDEO LECTURES:

1. <https://www.youtube.com/watch?v=c5coSA6Jt1I>
2. <https://www.youtube.com/watch?v=4ciKzMY8Q2U>

WEB RESOURCES:

1. <https://cleartax.in/s/small-scale-industries-ssi>
2. <https://www.simplilearn.com/business-planning-article>

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C
22CM101020	ADVANCED CORPORATE ACCOUNTING	3	-	-	-	3

Pre-Requisite 22CM101010 – Corporate Accounting

Anti-Requisite ---

Co-Requisite ---

COURSE DESCRIPTION: The objective of this course is to impart knowledge to Make students aware of the latest issues of corporate accounting, Provide the student with knowledge of recent developments in corporate accounting, and Acquire knowledge of AS-14 and preparation of accounts of banking and insurance companies.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1** Understand the Knowledge of amalgamation process.
- CO2** Acquire knowledge of alteration of capital and reconstruction.
- CO3** Understand the record of accounting system in banking companies.
- CO4** Acquire skills in Accounting Procedures in Holding companies.
- CO5** Acquire the knowledge of double account system.

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	-	-	-	2	-	-	1	3	2	1	-	-
CO2	3	3	-	-	-	2	-	-	1	3	2	1	-	-
CO3	3	3	-	-	-	2	-	-	1	3	2	1	-	-
CO4	3	3	-	-	-	2	-	-	1	3	2	1	-	-
Course Correlation Mapping	3	3	-	-	-	2	-	-	1	3	2	1	-	-

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT

Module 1: Amalgamation and Absorption of Companies (9 Periods)

Meaning- purchase consideration- accounting entries in the books of transferor and transferee companies

Module 2: Alteration of Share Capital and Re-construction (9 Periods)

. Meaning-Kinds of alteration –Accounting entries- Internal reconstruction - Reduction of share capital- procedure for reducing share capital- Revised Balance sheet- External reconstruction

Module 3 Accounting for Banking Companies (9 Periods)

Banking companies – Rebate on Bills discounted – Profit and Loss account – Balance Sheet as per new format

Module 4 Holding Company Accounts (9 Periods)

Meaning– Capital Profit – Revenue Profit - Cost of control - Consolidated Balance sheet

Module 5 Double Account Systems (9 Periods)

Accounts of Electricity Companies, Capital Profit – Revenue Profit and Balance sheet

Total Periods: 45

EXPERIENTIAL LEARNING

1. Collect accounting data from electricity companies and prepare revenue account.
2. To visit banking companies and make a note of how they maintain their records.
3. Report on the process of amalgamation.

RESOURCES

TEXT BOOKS:

1. M.C. Shukla, T.S. Grewal and S.C. Gupta, (2012), Corporate Accounting, S. Chand Publishing, New Delhi
2. S.P. Jain & K.L. Narang, "Financial Accounting", Kalyani Publishers, New Delhi, 2020.

REFERENCE BOOKS:

1. T. S. Reddy and A. Murthy, (2012), Corporate Accounting, Margham Publications, Chennai
2. S.P. Jain and K.L. Narang, (2012), Advanced Accountancy Volume II, Kalyani Publishers, New Delhi

VIDEO LECTURES:

1. <https://www.youtube.com/watch?v=Qgl6iumeHFQ>
2. <https://www.youtube.com/watch?v=o-kT4Zoo6JE&list=PLMxHDSgJhntEw4kaXP1BCPLOErGiLs8M2>

Web Resources:

1. <https://www.investopedia.com/terms/d/double-entry.asp>
2. <https://taxguru.in/rbi/final-accounts-banking-companies-npa-norms.html>

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C
22CM101022	APPLIED COST ACCOUNTING	3	-	-	-	3

Pre-Requisite 22CM101012 – Cost Accounting

Anti-Requisite ---

Co-Requisite ---

COURSE DESCRIPTION: The course enables the student to Thoroughly understand the theory and practice of cost accounting for decision-making in manufacturing industries.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1** Gain a working knowledge of the principles and cost accounting techniques.
- CO2** Understand the process of operating costing.
- CO3** Acquire knowledge about the cost volume profit analysis.
- CO4** Gain knowledge on concept of standard costing.
- CO5** Apply office automation tools to create and manage costing records in organizations.

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	-	-	1	-	-	-	-	3	2	1	-	-
CO2	3	2	-	-	1	-	-	-	-	3	2	1	-	-
CO3	3	2	-	-	1	-	-	-	-	3	2	1	-	-
CO4	3	2	-	-	1	-	-	-	-	3	2	1	-	-
CO53	3	2	-	-	1	-	-	-	-	3	2	1	-	-
Course Correlation Mapping	3	2	-	-	1	-	-	-	-	3	2	1	-	-

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT

Module 1: Introduction

(09 Periods)

Introduction: Meaning of Cost Control – Cost Control Techniques – Requisites of effective Cost Control System – Cost Reduction – meaning – essentials for an effective Cost Reduction Program Differences between Cost Profit and Financial Profit – Reconciliation of the cost profit with financial profit (Theory and Problems).

Module 2: Operating Costing

(09 Periods)

Meaning- Different types of operating costing businesses - Transport, Hotel & Hospital, Power generating (Problems in Transport costing).

Module 3 Cost Volume Profit Analysis (CVP Analysis)**(09 Periods)**

Applications of Marginal Costing – Profit planning – Evaluation of Performance - selection of product mix (Sales Mix) - maintaining a desired level of profit - Make or Buy decisions (problems only)

Module 4 Standard Costing and Variance Analysis**(09 Periods)**

Concept of Standard Cost and Standard Costing – Advantages and limitations – analysis of variances- importance of Variance Analysis - computation of variances relating to material (Problems only).

Module 5 Process Costing**(09 Periods)**

Meaning of process - Manufacturing companies with suitability of process costing -Preparation of process accounts with Normal loss and Abnormal loss or Abnormal gain (Problems only).

Total Periods: 45**EXPERIENTIAL LEARNING**

1. Sri Lakshmi Travels, a transport company is running a fleet of six buses between two towns 75 kms. apart. The seating capacity of each bus is 40 passengers. The following particulars are available for the month of April 2017.
Wages of Drivers, Conductors, etc. Rs.14,400
Salaries of office and supervisory staff Rs. 15,000
Diesel oil., etc. Rs.20,320
Repairs and maintenance Rs.1,200
Taxes and insurance Rs.2,400
Depreciation Rs.3,900
Interest and other charges Rs.3,000
The actual passengers carried were 80% of the capacity. All the buses run all the days in the month. Each bus made one round trip per day. Find out the cost per passenger kilometer.
2. Mr. Srinivasulu furnishes you the following data and wants you to compute the cost per running km of vehicle A.
Cost of vehicle ₹ 4,50,000
Road license per year ₹ 1,800
Annual supervision & salaries ₹ 7,200
Driver's wages per hour ₹ 40
Cost of fuel per liter ₹ 52
Repairs & maintenance per km ₹ 22
Tires cost per km ₹ 4
Insurance premium p.a. ₹1,700
Garage rent per year ₹15,300 Kms run per liter ₹ 20
Kms run during the year ₹ 15,000
Estimated life of vehicle in kms ₹ 1,00,000
Average tonnage carried ₹ 6
Charge interest at 5% per annum on the cost of the vehicle. The vehicle runs 20 kms per hour on average.

3. Prepare a statement of reconciliation from the following:
Rs.
Net loss as per cost accounts 34,500
Net loss as per financial accounts 40,950
Works overhead under recovered in costing 6,240
Administrative overhead recovered in excess 3,400
Depreciation recovered in costing 11,200
Depreciation charged in financial accounts 12,500
Interest on investments not included in costing 6,000
Goodwill written off 5,000
Provision for doubtful debts in financial accounts 1,260
Stores adjustment credit in financial accounts 950
Loss of stock charged in financial accounts 3,000

RESOURCES

TEXT BOOKS:

1. T.S. Reddy and Dr. Y. Hari Prasad Reddy, Cost Accounting and Management Accounting, Margam Publications.
2. M.C. Shukla, T. S. Grewal & Dr M. P. Gupta, Cost Accounting, S. Chand and Company Private Limited, New Delhi 2018.

REFERENCE BOOKS:

1. SP Jain and KL Narang, Cost and Management Accounting, Kalyani Publishers, New Delhi 2020.
2. Advanced Cost Accounting: SN Maheswari, S. Chand and Company Private Limited, New Delhi

VIDEO LECTURES:

- 1 https://www.youtube.com/watch?v=BBXGk1U5XLI&list=PLOhI7x0ED7_NwOWLu6GB_r9vGm_wtoMIJ
- 2 <https://www.youtube.com/watch?v=thwBRR-Dje8>

WEB RESOURCES:

1. <https://www.indeed.com/career-advice/career-development/what-is-process-costing>
2. <https://www.taxmann.com/post/blog/comprehensive-guide-on-cost-control-through-standard-costing>

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C
22CM101038	Management of Financial Services	3	-	-	-	3

Pre-Requisite

Anti-Requisite

Co-Requisite

COURSE DESCRIPTION: To provide basic knowledge about the financial markets and various services provided in the markets

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1** Understand the role and function of the financial system in the macro economy.
- CO2** Know financial instruments in the Capital and Money market. To demonstrate an awareness of the current structure and regulation of the Indian financial services sector
- CO3** Describe the instruments, participants, and operation of the money market and the role of intermediaries in the primary market.
- CO4** Explore the integration of international financial markets and analyze the implications for financial managers.
- CO5** Evaluate and create strategies to promote financial products and services

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	1			-				3	-	2	-	1
CO2	3	2	1			-				3	-	2	-	1
CO3	3	2	1			-				3	-	2	-	1
CO4	3	2	1			-				3	-	2	-	1
CO5	3	2	1			-				3		2		1
Course Correlation Mapping	3	2	1			-				3	-	2	-	1

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT:

Module 1: Introduction to Financial System (09 Periods)

Introduction to Financial System: Elements of Financial System and Economic Development- Regulatory and Promotional Institutions- Function and Role of RBI Monetary Policy and Techniques of RBI.

Module 2: Banking and Non-banking Institutions (09 Periods)

Public and the private sectors-structure and comparative performance, Bank capital and Banking Innovations, Commercial and Co-operative banks The Non-banking financial Institutions - Mutual Funds, Growth of Indian Mutual funds and its Regulation. The Role of AMFI, Insurance Companies- Role of IRDA.

Module 3 Financial and Securities Markets (09 Periods)

Primary and Secondary Markets, Structure and functions of Money Market –Call money market- Government Securities Market – T-bills market- Commercial Bills market- Commercial paper and certificate of deposits. Securities markets: - Organization and structure- listing trading and settlement of securities market-The role and functions of SEBI

Module 4 Fund Based Services (09 Periods)

Lease and Hire Purchase, Consumer Credit and Factoring- Venture Capital Financing and Housing Finance

Module 5 Fee-based Services (09 Periods)

Stock broking- Credit Rating- Merchant Banking- Portfolio services. Underwriting- Depository services- Challenges faced by Investment Bankers.

Total Periods: 45

EXPERIENTIAL LEARNING

- 1 Conduct a mock trading
- 2 Submit a report on stock market awareness
- 3 Case study on bank capital
- 4 Group discussion about merchant banking services

RESOURCES

TEXT BOOKS:

- 1 L. M. Bhole, Financial Institutions and Markets, 4/e Tata McGraw Hill, 2004
- 2 Gordon &Natarajan, Financial services, 10/e, Himalaya publishers, 2016.

REFERENCE BOOKS:

- 1 Appannaiah, Sharma, Financial Markets and services, HPH, 2015
- 2 Meir Kohn, Financial Institutions and Markets, Oxford University Press, 2007
- 3 M Y Khan, Financial Services, 10th edition TMH, 2019

VIDEO LECTURERS:

- 1 https://www.youtube.com/watch?v=hmi_KONgeac

2 <https://www.youtube.com/watch?v=HCIO9xw24E8>

WEB RESOURCES

- 1 <https://www.tradebulls.in/learn-stock-market/investment-advisor/financial-markets-securities>
- 2 <https://unacademy.com/content/bank-exam/study-material/general-awareness/a-brief-note-on-components-of-the-indian-financial-system/>

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C
22CM101027	FINANCIAL DERIVATIVES	3	-	-	-	3

Pre-Requisite

Anti-Requisite

Co-Requisite

COURSE DESCRIPTION: This course enables students to study basic knowledge about the concept of financial derivatives and its types, to know about hedging and the development position in derivatives.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1** Acquire basic knowledge of Derivatives.
- CO2** Ascertain knowledge about trading in stock home.
- CO3** Develop the knowledge about SEBI guidelines.
- CO4** Demonstrate the marketing activities of stock and commodities.

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	2					1		2	3	-	1	-
CO2	3	2	2					1		2	3	-	1	-
CO3	3	2	2					1		2	3	-	1	-
CO4	3	2	2					1		2	3	-	1	-
Course Correlation Mapping	3	2	2					1		2	3	-	1	-

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT:

Module 1: FINANCIAL DERIVATIVES

(09 Periods)

Meaning -Definition - Introduction – Advantages and Disadvantages - types (both exchange traded and OTC traded) and features of financial derivatives-Factors causing growth of derivatives-functions of derivatives market-Derivative market players (Hedgers, speculators and arbitragers)-Derivatives market in India. (Theory)

Module 2: FUTURES AND FORWARDS

(09 Periods)

Meaning- Definition - features - types of futures/forwards- Futures vs. Forwards- Mechanics of buying and selling futures/forwards- Hedging through futures/forwards- Marking-to-market process-contract specifications of stock, index and commodity futures-valuation of futures/forwards using cost of carry model. (Theory & problems)

Module 3: OPTION CONTRACTS

(09 Periods)

Meaning – Definition - features and types of option contracts-Options vs. futures/forwards- Mechanics of buying and selling option contracts-contract specifications of stock. index and commodity options-Option pricing-factors affecting option pricing-Valuation of option contracts using Black Scholes model and Binomial model. (Theory & problems)

Module 4: FINANCIAL SWAPS

(09 Periods)

Meaning – Definition - features - advantages of financial swaps-Types of financial swaps (Interest rate swap, currency swap, equity swap and commodity swap)-Mechanics of interest rate swaps- Triangular swap (Numerical problems only on interest rate swap including triangular swap)- valuation of interest rate swaps- (Only theory).

Module 5: COMMODITY DERIVATIVE MARKET

(09 Periods)

Meaning – Definition - Commodity derivative exchanges (with commodities traded) in India- Trading and settlement system of commodity derivatives-SEBI Guidelines for commodity market-commodities traded. (Theory)

Total Periods: 45

EXPERIENTIAL LEARNING

List of Exercises

1. Select students will be given a case on derivatives contract and its relevance to contemporary business practices.
2. Students will be asked to have group discussion on capital market.
3. Students will be asked to have seminar and role play on commodity derivative market and SEBI.

RESOURCES

TEXT BOOKS:

- 1 John C. Hull, "Options, Futures and other derivatives (Latest Edition)", Pearson Education.

- 2 John C. Hull, "Options, Futures and other derivatives (Latest Edition)", Pearson Education.

REFERENCE BOOKS:

- 1 Jurgen Franke, Wolfgang Harlde and Christian Hafner, "Introduction to statistics of financial markets".
- 2 R. Madhumathi, M. Ranganatham, "Derivatives and risk management (first Edition)".

VIDEO LECTURES:

- 1 <https://youtu.be/CUvUI0gqYGk>
- 2 <https://youtu.be/X4F7SF0B4O8>

WEB RESOURCES:

- 1 <http://economyria.com/derivatives-meaning/>
- 2 https://www.csie.ntu.edu.tw/~lyuu/Capitals/lessons_der.pdf

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C
22CM101043	FUNDAMENTALS OF FINANCIAL TECHNOLOGY	3	-	-	-	3
Pre-Requisite	---					
Anti-Requisite	---					
Co-Requisite	---					

COURSE DESCRIPTION: The objective of this course is to impart knowledge to FinTech, including Money and Payment, Digital Finance and Alternative Finance.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1** Understand application of Financial Technology, including Money and Payment, Digital Finance, and Alternative Finance
- CO2** Assimilate Fin-Tech Regulation and Reg-Tech and fundamental role of Data and Security in data-driven finance
- CO3** Comprehend Business and regulatory implications of technology for the financial industry
- CO4** Understanding the lending and payment regulations.
- CO5** Visualize the driving technology innovation in Finance

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	3	-	-	-	-	1	-	3	2	1	-	-
CO2	3	2	3	-	-	-	-	1	-	3	2	1	-	-
CO3	3	2	3	-	-	-	-	1	-	3	2	1	-	-
CO4	3	2	3	-	-	-	-	1	-	3	2	1	-	-
Course Correlation Mapping	3	2	3	-	-	-	-	1	-	3	2	1	-	-

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT

Module 1: Financial Technology Introduction and Overview (08 Periods)

Introduction to Financial Technology: India Vs Global Countries, India Vs Developing Countries, Fintech Transformation, Emerging Sectors in Fintech, Fintech and its various applications.

Module 2: Block Chain Technology and Crypto Currency (12 Periods)

History of Block chain, Decentralization, Paper blocks, Chain of blocks, nodes, and networks.

Introduction of cryptocurrency, cryptography, smart contracts, Ethereum, Zero-knowledge proof. Introduction to bitcoin, bitcoin mining, bitcoin security

Module 3 Central Bank Digital Currencies (9 Periods)

Stable coins, stable currencies, Enterprise block chain, payment gateways, regulatory norms, other countries CBDC.

Module 4 Lending and Payments (8 Periods)

P2P lending in Asia, new payment systems, digital wallets, authenticated tracing, payment challenges, lending frauds, multi, inter, intra and international payment and lending

Module 5 Financial Technology Regulations (8 Periods)

Risk and challenges, new payment services act in India, benefits, opportunities, threats and frauds in Reg tech, Technology Giants in Fintech

Total Periods: 45

EXPERIENTIAL LEARNING

1. Students could undertake a project to design and develop a personal finance app.
2. Analyzing real-world FinTech case studies provides insights into the challenges and opportunities faced by FinTech companies
3. Working on FinTech startup projects allows individuals to gain firsthand experience in building and launching innovative financial products or services.

RESOURCES

TEXT BOOKS:

1. John Hill, (2018) Financial Technology, Elsevier Publication, 1st Edition ISBN: 978- 0128-134-979.
2. Jutla, S. – Sundararajan, N. (2016): India's FinTech Ecosystem. In: The FinTech Book: The Financial Technology Handbook for Investors and Visionaries

REFERENCE BOOKS:

1. Van der Kleij, E. (2016): Tech Giants Becoming Non-Bank Banks. In: The FinTech Book: The Financial Technology Handbook for Investors, Entrepreneurs and Visionaries
2. Bhandari, M. (2016): India and the Pyramid of Opportunity. In: The FinTech Book: The Financial Technology Handbook for Investors, Entrepreneurs and Visionaries

VIDEO LECTURES:

- 1 <https://www.youtube.com/watch?v=ZbHLNinXy9E>
- 2 <https://www.youtube.com/watch?v=SxO4JkPnPr8>

Web Resources:

1. <https://corporatefinanceinstitute.com/course/intro-to-fintech/>
2. <https://consensys.io/knowledge-base/what-is-cryptocurrency>

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C
22CM101026	FINANCIAL MANAGEMENT	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course provides a detailed discussion on basic financial concepts and practices and includes analysis of company resources, types and sources of financing, forecasting and planning methods, and the roles of the money and capital markets

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Understand the overall role and importance of the finance function.
- CO2.** Acquire knowledge of various sources of investment categories.
- CO3.** To understand, how firms meet their financial objectives utilizing financial decision-making.
- CO4.** To maximize value by improving decisions relating to capital budgeting.
- CO5.** Gain awareness on capital structure and working capital management.

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	-	1	-	-	-	2	-	-	3	-	-	-	-
CO2	3	1	1	-	-	-	2	-	-	2	-	-	-	-
CO3	3	1	1	-	-	-	2	-	-	-	-	3	-	-
CO4	3	-	1	-	-	-	2	-	-	-	-	-	-	3
CO5	3	1	1	-	-	-	2	-	-	-	-	2	-	-
Course Correlation Mapping	3	1	1	-	-	-	2	-	-	3	-	3	-	3

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT:

Module 1: INTRODUCTION

(09 Periods)

Nature, scope and objective of Financial Management – importance of financial management - Time value of money - Risk and return. (Theory only).

Module 2: INVESTMENT DECISION

(09 Periods)

Introduction – meaning - Capital Budgeting Process - Cash flow Estimation, Payback Period Method, Accounting Rate of Return, Net Present Value (NPV), Net Terminal Value, Internal Rate of Return (IRR), Profitability Index (simple problems).

Module 3: FINANCING DECISION

(09 Periods)

Cost of Capital -- Estimation of components of cost of capital - Sources of long-term finances - Methods for Calculating cost of equity capital, Cost of Retained Earnings, Cost of Debt (simple problems).

Module 4: DIVIDEND DECISION

(09 Periods)

Definition – meaning and importance - Theories for Relevance and irrelevance of dividend decision for corporate valuation; Cash and stock dividends; Dividend policies in practice.

Module 5: WORKING CAPITAL DECISION

(09 Periods)

Definition – meaning and importance - Concept of working capital, the risk and return of trade off, sources of short-term finance, working capital estimation (simple problems).

Total Periods: 45

EXPERIENTIAL LEARNING:

- 1 Prepare a report on the company formation process in the present scenario
- 2 Prepare a report on the investments that are taken place in recent times in Indian companies.
- 3 Prepare a report on different types of investments
- 4 Prepare and submit a Report on SEBI guidelines for the formation of a company and its structure.
- 5 Present a report on the role of working assets in trading and non-trading companies
- 6 Prepare and submit a report on the payable system in Indian companies

RESOURCES

TEXT BOOKS:

- 1 Pandey, I.M. Financial Management. Vikas Publications
- 2 Khan and Jain. Basic Financial Management, McGraw Hill Education

REFERENCE BOOKS:

- 1 Chandra, P. Fundamentals of Financial Management. McGraw Hill Education
- 2 Singh, J.K. Financial Management- text and Problems. 2nd Ed. Dhanpat Rai and Company, Delhi

VIDEO LECTURES:

- 1 <https://www.classcentral.com/course/edx-financial-management-in-organizations-9109>
- 2 <https://www.classcentral.com/course/swayam-fundamentals-of-financial-management-17618>

Web Resources:

- 1 <https://financialservices.gov.in/>
- 2 <https://www.ajnifm.ac.in/>

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C
22CM101028	PRINCIPLES OF MANAGEMENT	3	-	-	-	3

Pre-Requisite

Anti-Requisite

Co-Requisite

COURSE DESCRIPTION: This course enables students to study functions and principles of management, learn the application of the principles in an organization and study the system and process of effective controlling in the organization.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

CO1 Understand managerial functions of business organization.

CO2 Understand the planning process in the organization.

CO3 Describe the principles of organization.

CO4 Understand the concept and process of staffing.

CO5 Demonstrate the ability to direct, leadership and communicate effectively.

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3				2	1				1	-	2	3	-
CO2	3				2	1			1	1	-	2	3	-
CO3	3				2	1			1	1	-	2	3	-
CO4	3				2	1			1	1	-	2	3	-
CO5	3				2	1			1	1	-	2	3	-
Course Correlation Mapping	3				2	1			1	1	-	2	3	-

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT:

Modul 1: INTRODUCTION TO MANAGEMENT

(09 Periods)

Meaning, Definition - Concept, Scope and Principles of Management; Evolution of Management Thought- Management Theories – Classical, Behavior, System, Contingency and Contemporary Perspectives on Management. Management Art or Science and Management as Profession. Process And Levels of Management. Introduction to Functions [POSDCORB] of Management.

Module 2: PLANNING - IMPORTANCE

(09 Periods)

Meaning and Definition - Planning- Importance, Objectives, Process, Policies, Types of Planning, Decision Making- Process of Decision Making, Types of Decision, Problems involved in Decision Making.

Module 3 ORGANISING

(09 Periods)

Meaning, Importance, Principles of Organizing, Span of Management, Patterns of Organization- Formal and Informal Organizations, Common Organizational Structures; Departmentalization, Authority- Delegation, Centralization Decentralization, Responsibility- Line and Staff Relationship.

Module 4 STAFFING

(09 Periods)

Sources of Recruitment, Selection Process, Training, Directing, Controlling- Meaning and Importance, Function, Span of Control, Process and Types of Control, Motivation, Coordination- Need and Types and Techniques Of Coordination- Distinction between Coordination And Cooperation- Requisites for Excellent Coordination-Systems Approaches and Coordination.

Module 5 EMERGING ISSUES IN MANAGEMENT

(09 Periods)

Total Quality Management, Technology Management, Talent and Knowledge Management, Leadership, Organizational Change and Development, Corporate Social Responsibility.

Total Periods: 45

EXPERIENTIAL LEARNING

List of Exercises

1. Select students will be given a case on management theory and its relevance to contemporary business practices.
2. Case of Amazon India on planning and staffing personnel for its timely delivery in rural area.
3. Students will be asked to discuss technology, organization and management in a group discussion.

RESOURCES

TEXT BOOKS:

- 1 Charles W.L. Hill and Steven L. McShane, Principles Of Management, Tata Mc-Craw-Hill Company, New Delhi
- 2 Griffin, Ricky W., Management. AITBS Publishers and Distributors, New Delhi.

VIDEO LECTURES:

- 1 1. <https://youtu.be/slZ0uRbGquo>
- 2 2. https://youtu.be/RIozYN_rhKA

Web Resources:

- 1 <https://www.vedantu.com/commerce/evolution-of-management-thought>
- 2 <https://asq.org/quality-resources/total-quality-management>

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C
22CM101029	PROJECT MANAGEMENT	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: The purpose of this course is to prepare the students to understand the tools and techniques involved in a project. Moreover, enables them to execute a project to achieve specific goals that will benefit the organizations and society.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1** Students will identify the resources needed for each stage of project importance.
- CO2** Acquire the knowledge of Project Representation and Preliminary Manipulations.
- CO3** To understand Teamwork in Project Management and Attributes of a good project team
- CO4** To analyse the project evaluation.
- CO5** Gain awareness on Case studies in Project management.

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	1				1			3	2	-	-	-
CO2	3	2	1				1			3	2	-	-	-
CO3	3	2	1				1			3	2	-	-	-
CO4	3	2	1				1			3	2	-	-	-
CO5	3	2	1				1			3	2	-	-	-
Course Correlation Mapping	3	2	1				1			3	2	-	-	-

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT

Module 1: Introduction (09 Periods)

Objectives of Project Management- Importance of Project Management- Types of Projects Project Management Life Cycle- Project Selection – Feasibility study: Types of feasibility Steps in feasibility study.

Module 2: PROJECT PLANNING AND IMPLEMENTATION (09 Periods)

Project Scope- Estimation of Project cost – Cost of Capital – Project Representation and Preliminary Manipulations - Basic Scheduling Concepts - Resource Levelling – Resource Allocation.

Module 3: PROJECT MONITORING AND CONTROL (09 Periods)

Setting a base line- Project management Information System – Indices to monitor progress. Importance of Contracts in projects- Teamwork in Project Management - Attributes of a good project team – Formation of effective teams – stages of team formation.

Module 4: PROJECT CLOSURE (09 Periods)

Project evaluation- Project Auditing – Phases of project Audit- Project closure reports Guidelines for closeout reports.

Module 5: SPECIAL TOPICS IN PROJECT MANAGEMENT (09 Periods)

Computers, e-markets and their role in Project management- Risk management Environmental Impact Assessment. Case studies in Project management

Total Periods: 45

Experiential Learning

- 1 Visit nearby industries and make a project report.
- 2 Make a presentation of Risk management process in project life cycle.
- 3 Make a report on formation of effective teams.

Resources

Text Books:

- 1 Berkun, Scott (2008), Making Things Happen: Mastering Project Management, O'Reilly Media: Cambridge
- 2 Crowe, Andy (2006), Alpha Project Managers: What the Top 2% Know that Everyone Else Does Not, Velociteach: Kennesaw, GA

Reference Books:

- 1 Lewis, James (1998), Team-Based Project Management, Beard Books.
- 2 Tate, Karen (2001), Getting Started in Project Management, Wiley: New York

Video Lecturers:

- 1 https://www.youtube.com/watch?v=qoY6VX_nRCs
- 2 https://www.youtube.com/watch?v=7HmFzo_nqz4

Web Resources:

- 1 <https://in.indeed.com/career-advice/finding-a-job/objectives-of-project-management>
- 2 <https://www.projectmanager.com/blog/improving-project-evaluation-process>

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C
22CM101030	HUMAN RESOURCE MANAGEMENT	3	-	-	-	3
Pre-Requisite	---					
Anti-Requisite	---					
Co-Requisite	---					

COURSE DESCRIPTION: The objective of this course is to provide the basic knowledge in Human Resource Management and impart skills required for managing human resources in the organization.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1** Understand HRM practices and apply them effectively in the real time business to increase productivity.
- CO2** Apply job analysis, scientific recruitment and selection processes for higher Productivity
- CO3** Determine organizational growth by designing and implementing appropriate training and development programs.
- CO4** Demonstrate relevant performance appraisal and compensation systems to meet individual and organizational strategic needs
- CO5** Analyze disciplinary and grievance mechanisms to ensure stability and smooth functioning of the organization

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	1	1	1	1	2	-	2	-	3	2	1	-	-
CO2	2	2	3	3	2	2	-	-	-	3	2	1	-	-
CO3	2	2	2	2	2	-	-	-	-	3	2	1	-	-
CO4	2	2	2	2	2	-	-	-	-	3	2	1	-	-
Course Correlation Mapping	2	2	2	3	2	2	-	2	-	3	2	1	-	-

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT

Module 1: Introduction to HRM

(8 Periods)

Definition – Functions – Personnel policies and principles; Human Resource Planning: Definition – Objectives – Process – Assessing Current Human Resources – Importance of HRP – Current Trends in HRM/HRP

Module 2: Job Analysis and Design and Job Analysis and Design

(12 Periods)

Job Analysis and Design: Job Analysis – Process – Uses – Methods; Job Description – Job Specification; Job Design – Factors affecting job design – Different Approaches; Hack man & Oldham's Job Characteristics Model; Job Enlargement and Job Enrichment. **Recruitment and Selection:** Recruitment – Process – Sources, advantages and disadvantages – e-Recruitment; Selection – Process – Barriers to effective selection.

Module 3 Managing Careers and Training and Development

(9 Periods)

Managing Careers: Career Planning – Its Elements; Promotions – Transfers – Separations; Career Development – Initiatives – Employee commitment; **Training and Development:** Nature– Inputs – As a source of competitive advantage; Training process – Training Methods – Evaluation; Employee development – Methods

Module 4 Performance Appraisal and Compensation Management

(8 Periods)

Performance Appraisal: Definition – Objectives – Process – Methods – Purposes; Job Evaluation – Methods; **Compensation Management:** Components of remuneration – Importance of an ideal compensation system – factors influencing employee remuneration; Concepts of Wages – Incentives – Types of incentive plans – Guidelines for Effective Incentive Plans; Employee Benefits – Need – Types.

Module 5 Employee Discipline

(8 Periods)

Definition – Causes of indiscipline – Kinds of punishments/penalties; Misconduct – Forms of misconduct – Procedure for Disciplinary Action– Principles of Maintaining Discipline; **Grievance Handling:** Causes of Grievance – Grievance procedure – Advantages; **Labour Laws:** Importance – sources – objectives; Ethical issues in HRM – HR Audit – Challenges of HRM

Total Periods: 45

EXPERIENTIAL LEARNING

1. Collect the case studied related to recent trends in HRM and other Contemporary HR Practices and Present them as a seminar.
2. Different Case Studies Will be Given to students as per the topic that will be collected and evaluated.
3. The case studies will be collected as Assignments and the same will be evaluated.

RESOURCES

TEXT BOOKS:

1. K. Aswathappa: *"Human Resource and Personnel Management"*, Tata McGraw Hill, New Delhi, 2007.
2. Gary Dessler: *"Human Resources Management"*, PHI, New Delhi, 2007.
3. P. Subba Rao: *"Personnel and Human Resource Management – Text and Cases"*, Himalaya Publishing House, Mumbai, 2010.

REFERENCE BOOKS:

1. Biswajeet Pattanayak: *"Human Resource Management"*, PHI, New Delhi, 2001.
2. P G Aquinas: *"Human Resources Management"*, Vikas Publishing House, New Delhi, 2010.
3. Fundamentals of Human Resource Management by Dr T.Chandrasekhar Yadav 2021 by Asia Pacific Publications

VIDEO LECTURES:

- 1 <https://hbsp.harvard.edu/cases/>
- 2 <https://open.umn.edu/opentextbooks/textbooks/human-resource-management>

Web Resources:

1. <https://www.icmrindia.org/case%20volumes/Case%20Studies%20in%20Human%20Resource%20Management%20Vol%20I.htm>
2. <https://www.citehr.com/> 5 <https://www.hr-guide.com>
- 3 <https://www.icmrindia.org>

Course Code	Course Title	L	T	P	S	C
22CM101031	ORGANISATIONAL BEHAVIOUR	3	-	-	-	3

Pre-Requisite

Anti-Requisite

Co-Requisite -

COURSE DESCRIPTION: This course enables the students to know the principles in an organization, the system and process of effective controlling in the organization.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- C01.** Interpret the scope of organizational behavior and its significance.
- C02.** Understand the managerial strategies in achieving the organizational goals of an organization
- C03.** Demonstrate the impact of motivation and leadership in group dynamics.
- C04.** Solve organizational conflicts through negotiation and team building.
- C05.** Improve the results – performance outcome through human behavior and organizational behaviour can aid them in their pursuit of the goals.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
C01	1	2	-	-	-	2	-	2	-	2	1			
C02	1	-	2	1	-	2	-	-	-	2	2			
C03	2	-	2	-	1	-	-	-	-	2	2			
C04	1	2	-	1	-	-	-	-	-	2	2			
C05	1	2	1	-	-	-	-	-	-	2	2			
Course Correlation Mapping	2	2	2	3	2	2		2		2	2			

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT

Module 1: Introduction (09 Periods)

Nature and scope – Linkages with other social sciences- Individual roles and organizational goals – perspectives of human behavior - Perception– perceptual process

Module 2: Learning (09 Periods)

Learning - Learning Process- Theories- (Pavlov, Skinner and Thorndike) - Personality and Individual Differences - Determinants of Personality - Values, Attitudes and Beliefs

Module 3: Motivation and Leadership (09 Periods)

Definition and nature of motivation, Theories of Motivation (Maslow, Alderfer) - Leadership –Traits-Styles –Leadership skills– Challenges to leaders– Groups – stages formation of groups – Group Dynamics – Collaborative bargaining Processes in Work Groups - Johari -Window theory.

Module 4: Organizational conflicts (09 Periods)

causes and consequences and Negotiation Team Building, Conflict Resolution in Groups and problem solving Techniques Stress, types of stress causative factors of stress in organizations, preventive measures

Module 5: Organizational Communication (09 Periods)

Communication, types and process, importance and barriers – Organizational change - change process - resistance to change – Organizational development and OD interventions.

Total Periods:45

EXPERIENTIAL LEARNING

LIST OF EXPERIMENTS:

1. Collect the case studies related to recent topics in OB and other Contemporary OB Practices and Present them as a seminar.
2. Different Case Studies Will be Given to students as per the topic that will be collected and evaluated.
3. The case studies will be collected as Assignments and the same will be evaluated.

RESOURCES

TEXT BOOKS:

1. Robbins.P. Stephen (2006), Organizational Behaviour, Pearson Education, New Delhi.
2. Luthans Fred (1998), Organizational Behaviour, Tata Mc Graw Hill International Edition, New Delhi
3. K.Aswhathappa "Organisational Behaviour-Text, Cases and Games", HimalayaPublishingHouse, New Delhi, 2008.

REFERENCE BOOKS:

1. Steven L Mc Shane, Mary Ann Von Glinow, Radha R Sharma: "Organisational

Behaviour", TMH Education, New Delhi, 2008

2. Pareek Udai (2007), Understanding Organizational Behaviour, Oxford University Press, New Delhi
3. Jerald Greenberg and Robert A. Baron, (2009), Organizational Behaviour, PHI Learning Private Ltd., New Delhi.

VIDEO LECTURES:

1. https://www.youtube.com/watch?v=Sg64udtQ300&list=PL3Y_p3e-Lne2no2K5cNa8y7ti1uqCjZw8
2. <https://www.youtube.com/watch?v=pHg3ZfGk5j0>

Web Resources:

1. <https://www.icmrindia.org>
2. <https://www.citeob.com/> 5 <https://www.ob-guide.com>

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C
22CM101032	PRINCIPLES OF MARKETING MANAGEMENT	3	-	-	-	3

Pre-Requisite

Anti-Requisite ---

Co-Requisite ---

COURSE DESCRIPTION: This course enhances students' knowledge of the basics of marketing, and develop practical insights into application of marketing concepts.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1** Understand the need and importance of marketing in the current business scenario
- CO2** Analyze the need and importance of marketsegmentation, targeting, and positioning.
- CO3** Understand the steps involved in designing a marketing mix.
- CO4** Evaluate and apply the knowledge of expanded marketing mix.
- CO5** Understand the recent trends in marketing.

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3									3	2	1	-	-
CO2	3	1		1		1		1		3	2	1	-	-
CO3	3	1		1	2			1		3	2	1	-	-
CO4	3	1	2	1	1				1	3	2	1	-	-
CO5	3	1		1	1									
Course Correlation Mapping	3	1	2	1	1	1		1	1	3	2	1	-	-

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT

Module 1: Introduction to Marketing Fundamentals (06 Periods)

Concept, scope, and Value of marketing, core marketing principles, Marketing and Customer Value.

Module 2: Market segmentation, Targeting & Positioning (STP) (09 Periods)

Market Segmentation, meaning, its benefits, Bases for segmenting Consumer market and Industrial market, Market Targeting, Product positioning concept

Module 3 Marketing Research (10 Periods)

Nature & Scope, Marketing Research Process, Questionnaire designing & methods of data collection

Module 4 Marketing Mix (10 Periods)

Product, Price, Place, Promotion, Process, People, and Physical evidence.

Module 5 Recent Trends in Marketing (10 Periods)

Digital Marketing Meaning, Importance, Green Marketing - Meaning, Importance, Use of Information Technology in marketing practices Virtual marketing, E-buying behavior, etc.

Total Periods: 45

EXPERIENTIAL LEARNING

1. Mystery Shopping in Super Markets / Malls
2. Storytelling of Customer experiences in the Purchase Process of Goods & Services
3. Field Trip/ Outdoor Learning through interaction with Marketing Executives
4. Business Plan (4Ps) Presentations
5. Case Discussions and fish bowl exercises on Marketing issues & Challenges Above all will be detailed in CHO.

RESOURCES

TEXT BOOKS:

1. Kotler.P, & Keller.K.L., Koshy & Jha (2020). Marketing Management, 20th edition, Pearson
2. Saxena, Rajan, Marketing Management, Tata-McGraw Hill, New Delhi, 2018.

REFERENCE BOOKS:

1. Kotler & Armstrong, 15th ed., Principles of Marketing Management, Pearson publication.
2. Marshall & Johnston, Marketing Management, McGraw Hill (2020).

VIDEO LECTURES:

- 1 <https://www.digimat.in/nptel/courses/video/110104068/L01.html>

2 <https://www.digimat.in/nptel/courses/video/110104070/L01.html>

Web Resources:

1. Basics of Marketing: <http://www.umsl.edu/~chewl/ba206.htm>.
2. <https://www.pdfdrive.com/principles-of-marketing-e154804.html>
3. <https://ipsedu.in/downloads/MBABooks/principles-of-marketing-philip-kotler.pdf>

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C
22CM101035	DIGITAL AND SERVICE MARKETING	3	-	-	-	3

Pre-Requisite

Anti-Requisite

Co-Requisite

COURSE DESCRIPTION: The course aim is to acquaint with Digital and Service Marketing Also, to gain understanding of what marketing channels contribute to a cohesive online presence, exploring areas such as organic and paid search, social media, and marketing services

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Understand the basic concepts of Digital and service marketing
- CO2.** Analyze the concept of designing and creating a website
- CO3.** Understand the knowledge of search engine marketing
- CO4.** Interpret the concept of social media marketing
- CO5.** understand marketing of different services in Indian context

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	-	-	1	-	-	-	-	3	-	3	-	-
CO2	3	2	-	-	1	-	-	-	-	3	-	3	-	-
CO3	3	2	-	-	1	-	-	-	-	3	-	3	-	-
CO4	3	2	-	-	1	-	-	-	-	3	-	3	-	-
CO5	2	2	-	-	1	3	3	-	-	-	3	-	3	-
Course Correlation Mapping	3	2	-	-	1	-	-	-	-	-	3	-	3	-

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT:

Module: 1 Introduction to Digital and Service Marketing 09 Periods

Introduction to Digital Marketing-Meaning – importance -Advantages and Limitations of Digital Marketing-Service Marketing-Concept, Distinctive characteristics of services, Marketing Triangle, Marketing Challenges of services, Goods Vs. Services marketing.

Module: 2 Website Planning and Creation 09 Periods

Web Site: meaning – objectives – components of website - website creation – incorporation of design and– adding content, installing and activating plugins.

Module: 3 Search Engine Optimization (SEO)

09 Periods

SEO: Meaning – History and growth of SEO –Importance of Search Engine - On page Optimization – off page optimization – Role of Search Engine Operation- Google Ad words – Search Engine Marketing: Campaign Creation – Ad Creation, Approval and Extensions.

Module: 4 Social Media Marketing

09 Periods

Meaning of social media and Social Media Marketing – social Management tools-strategy and planning – social media network – Social Networking – video creation and sharing – use of different social media platforms - Content creation - Blogging – Guest Blogging.

Module: 5 Marketing of Services

09 Periods

International and Global Strategies in Services Marketing: Services in the Global Economy- Moving from Domestic to Transnational Marketing-Elements of Transnational Strategy- Recent Trends in Marketing of services in: Tourism, Hospitality, Health Care, Banking, Insurance, Education, IT and Entertainment Industry.

Total Periods: 45

EXPERIENTIAL LEARNING

List of Exercises

1. Write a report on the Marketing Challenges of services
2. Prepare a report on components of website planning
3. Find out the importance of Search Engine
4. Submit a report on the role of Search Engine Operation (SEO)
5. Prepare a report on recent trends in marketing services in IT and Entertainment Industry.

RESOURCES

TEXT BOOKS:

1. Anita Agrawal, Rahul Vasant Kotian, Tushar Agarwal & Vijayalakshmi Kannan "E-Commerce and Digital Marketing", Himalaya Publication Housing, Mumbai, 2016.
2. Nishikant Jha, Jay Prakash Verma, Rimi Moitra, "Service Marketing", Himalaya Publication Housing, Mumbai, 2016.
3. Digital Marketing for Dummies by Ryan Deiss& Russ Henneberry, publisher John Wiley first edition 2020.
4. Digital Marketing 2020 by Danny Star, Independently Published, 2019.

REFERENCE BOOKS:

1. Youtility by JayBaer, Published by Gilda MediaL C Portfolio 2013
2. Epic Content Marketing by Joe Pulizzi, McGraw-Hill Education, 2013

VIDEO LECTURES:

1. <https://youtu.be/evRg1B9ya94>
2. <https://youtu.be/u4LCHWVq89Y>

WEB RESOURCES:

1. <://www.simplilearn.com/tutorials/digital-marketing-tutorial/what-is-digital-marketing>.
2. https://www.marketingteacher.com/.../lesson_services_marketing

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C
22CM101036	International Banking and Forex Management	3	-	-	-	3
Pre-Requisite						
Anti-Requisite						
Co-Requisite						

COURSE DESCRIPTION: The course gives an introduction about International Banking and International Capital Markets, discusses about the origin and organization structure of Federal Reserve System with an insight into the London and New York money market, and elaborates about the foreign exchange rate system and the foreign exchange markets in India.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Information about international banking and capital markets.
- CO2.** Summarize the working of Federal Reserve System
- CO3.** Understand about the foreign exchange rate system and exchange rate determination.
- CO4.** Analyze about the Forex market in India

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	-	-	1	-	-	-	-	3	-	3	-	-
CO2	3	2	-	-	1	-	-	-	-	3	-	3	-	-
CO3	3	2	-	-	1	-	-	-	-	3	-	3	-	-
CO4	3	2	-	-	1	-	-	-	-	3	-	3	-	-
Course Correlation Mapping	3	2	-	-	1	-	-	-	-	-	3	-	3	-

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT:

Module: 1 Introduction to International Banking 06 Periods

Introduction, Meaning, Functions, Financing of Exports, Financing of Imports, International Payment Systems.

Module: 2 International Capital Markets 10 Periods

Introduction, Meaning and Definition, Types, Financial market flow beyond national boundaries, Debt and non-debt flows, Volatile and stable flows, Interest Rate Differentials, Demand for and supply of funds across borders.

Module: 3 Federal Reserve System 10 Periods

: Origin, Organizational Structure and Working, Commercial Banking in USA, Unit Banking and Branch Banking and Factors for its Growth in USA New York Money Market, Constituents and Working, Comparison between London Money Market and x London Money Market, Market Constituents working and credit Instrument, Euro Dollar.

Module: 4 Foreign Exchange and Markets 10 Periods

Introduction, Meaning, Elements, Importance, Evolution of Exchange Rate System, International Monetary System, Gold Standard, Types of Exchange Rates, Fluctuations in Foreign Exchange rates, Causes and Effects, Need for Stable Foreign Exchange Rates, Determination of Exchange rates, Theories of Determination of Foreign Exchange Rates, EMU.

Module: 5 Forex Market in India 09 Periods

Introduction, Meaning, Types, Operations, Convertibility, Objectives of Foreign Exchange Control, and Problems of Foreign Exchange markets in India, Mechanism to settle the problems, Role of RBI in settlement of foreign exchange problems in India.

Total Periods: 45

EXPERIENTIAL LEARNING

List of Exercises

RESOURCES

TEXT BOOKS:

1. International Banking by Indian Institute of Banking, Finance (IIBF), Macmillan Publishers India; ISBN: 9780230330580, 0230330584; Edition: 2010.
2. International Bank Management, Dileep Mehta, Hung – Gay Fung, Online ISBN: 9780470759240. Wiley

REFERENCE BOOKS:

1. Machenize K. – Banking Systems of Great Britain, French, Germany and U.S.A.
2. Somanatha: International Financial Management I.K. International Publishers

VIDEO LECTURERS:

1. <https://www.youtube.com/watch?v=b2m2G8xMmBM>
2. <https://www.youtube.com/watch?v=W9DCW6s6d98>

WEB RESOURCES:

1. <https://herovired.com/learning-hub/blogs/foreign-exchange-market/>
2. https://saylordotorg.github.io/text_international-business/s11-02-understanding-international-ca.html

SPECIALIZATION ELECTIVE

Course Code	Course Title	L	T	P	S	C
22MM101441	FUNDAMENTALS OF OPERATING SYSTEMS	3	1	-	-	4
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: Operating Systems Operations; Process Scheduling; Process Synchronization, Deadlocks; Paging and Segmentation, Disk Scheduling; File Concepts, I/O Interface; Concepts of Protection and Security.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Analyze the performance of CPU scheduling algorithms.
- CO2.** Design solutions for process synchronization problems by using semaphores and monitors.
- CO3.** Devise solutions for deadlocks using deadlock handling mechanisms.
- CO4.** Solve memory management problems using page replacement and disk scheduling algorithms.
- CO5.** Identify efficient file allocation methods for optimal disk utilization and Analyze services of I/O subsystems and mechanisms of security & protection.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes								
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
CO1	3	3	2	-	-	-	-	-	-
CO2	3	2	-	3	-	-	-	-	-
CO3	3	2	-	2	-	-	-	-	-
CO4	-	-	-	-	-	2	-	-	-
CO5	-	-	-	-	-	-	-	3	-
Course Correlation Mapping	3	2	2	3	-	2	-	3	-

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT

Module 1: INTRODUCTION TO OPERATING SYSTEM AND PROCESS MANAGEMENT (08 Periods)

Introduction: Definition, Operating System Structure, and Services, System Calls.

Process Management: Process Scheduling, Process Control Block, Inter Process Communication, Threads, Multithreading Models, CPU Scheduling Criteria, Scheduling Algorithms, Multiprocessor Scheduling.

Module 2: PROCESS SYNCHRONIZATION AND DEADLOCKS (10 Periods)

Process Synchronization: Critical Section Problem, Peterson's Solution, Synchronization Hardware, Semaphores, Synchronization Problems, Monitors.

Deadlocks: System Model, Deadlock characterization, Methods for handling deadlocks, Prevention, Detection, Avoidance, Recovery from deadlock.

Module 3 MEMORY MANAGEMENT AND SECONDARY STORAGE (07 Periods)

Memory Management: Swapping, Contiguous Allocation, Paging, Segmentation, Segmentation with Paging.

Virtual Memory: Demand Paging, Page Replacement Algorithms, Copy-on-Write, Thrashing. **Secondary Storage Structure:** Overview of Mass Storage Structure, Disk Structure, Disk Scheduling, Disk Management.

Module 4 FILE AND I/O SYSTEMS (10 Periods)

File System: File concept, Access Methods, Directory Structure, File System Structure, i-node, File System Implementation, Directory Implementation, Allocation Methods.

I/O System: I/O Hardware, Application I/O Interface, Kernel I/O subsystem.

Module 5 PROTECTION AND SECURITY (10 Periods)

Protection: Goals, Principles, Domain of Protection, Access Matrix, Implementation of Access Matrix, Access Control, Revocation of Access Rights.

Security: Security Problems, Program Threats, System and Network Threats, User Authentication, Implementing Security Defenses, Firewalling to Protect Systems and Networks, Computer-Security Classifications.

Total Periods: 45

EXPERIENTIAL LEARNING:

1. Design and develop simple shell programs by using conditional, branching, and looping statements.
2. Design and develop a Shell program to find the factorial of a number.
3. Write a programming code for implementing Priority scheduling algorithms.
4. Demonstrate banker's algorithm for deadlock avoidance.

RESOURCES:

TEXT BOOKS:

1. Abraham Silber Schatz, Peter Baer Galvin and Greg Gagne, Operating System Concepts, Wiley India Edition, 9th Edition, 2016.

REFERENCE BOOKS:

1. William Stallings, Operating Systems, Internals and Design Principles, Pearson Education, 7th Edition, 2013.
2. Andrew S. Tanenbaum, Modern Operating Systems, PHI, 3rd Edition, 2009.

VIDEO LECTURES:

1. https://onlinecourses.nptel.ac.in/noc22_cs78/preview
2. <https://www.cse.iitb.ac.in/~mythili/os/>
3. <https://www.youtube.com/watch?v=vBURTt97EkA>

WEB RESOURCES:

1. https://www.tutorialspoint.com/operating_system/os_useful_resources.htm
2. <https://www.techtarget.com/whatis/definition/operating-system-OS>
3. <https://www.studytonight.com/operating-system/introduction-operating-systems>
4. <https://www.geeksforgeeks.org/web-operating-system/>

SPECIALIZATION ELECTIVE

Course Code	Course Title	L	T	P	S	C
22MM102002	PROGRAMMING WITH C	3	-	2	-	4
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: Introduction to algorithms, programming languages, and overview of C Programming; Operators and Expressions; Input and Output Functions; Control Structures; Problem Solving Aspects; Arrays and Strings; Functions; Pointers; Structures and Unions; File Handling.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Demonstrate knowledge of algorithm and C programming constructs to develop Programs.
- CO2.** Design algorithms using problem-solving techniques for given problems.
- CO3.** Apply functions and Arrays to enhance reusability and data manipulation.
- CO4.** Use pointers to manage memory effectively.
- CO5.** Apply Structures, Unions, and File handling concepts to develop societal applications.
- CO6.** Work independently and communicate effectively oral and written forms.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes								
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
CO1	3	3	3	-	2	3	-	3	-
CO2	3	3	3	-	1	3	-	3	-
CO3	2	3	3	-	2	3	-	3	-
CO4	3	3	3	-	3	3	-	3	-
CO5	3	3	3	-	2	3	-	3	-
CO6	-	-	-		-	3	-	3	-
Course Correlation Mapping	3	2	2		2	3	-	3	-

Correlation Levels: 3: High; 2:Medium;1:Low

Module 1: INTRODUCTION TO ALGORITHMS AND PROGRAMMING LANGUAGE AND INTRODUCTION TO C 10 Periods

Introduction to Algorithms and Programming Languages: Algorithm, Key features of Algorithms, Some more Algorithms, Flow Charts, Pseudocode Generations of Programming Languages, Structured Programming Language.

Introduction to C:

History of C, Importance of C, Basic Structure of C Programs, Programming Style, Character Set, C Tokens, Keywords, and Identifiers, Symbolic Constants, Declaring variable as a constant, overflow and underflow of data.

Operators and Expressions:

Arithmetic, relational, logical, assignment operators, increment and decrement operators, conditional operators, bitwise operators, special operators, Arithmetic Expressions, Evaluation of Expressions, Precedence of Arithmetic Operators, Type Conversions in Expressions, Operator Precedence and Associativity, Mathematical functions.

Module 2: MANAGING I/O OPERATIONS AND CONTROL STRUCTURES 7 Periods

Managing I/O Operations: Reading and Writing a Character, Formatted Input, Output.

CONTROL STRUCTURES: if statement, if else statement, Nesting of if else statements, else if ladder, switch statement, the operator, goto statement, the while statement–do statement, the for statement jumps in loops.

Module 3 ARRAYS AND STRINGS 10 Periods

Arrays: Introduction, Declaration of Arrays, Accessing elements of the Array, Storing Values in Array, Calculating the length of the Array, Operations on Array, one dimensional array for inter function communication, Two dimensional Arrays, Operations on Two Dimensional Arrays, Dynamic Arrays, Initialization.

Strings: Declarations, Initialization of string variables, reading and writing strings, string handling functions.

Module 4 FUNCTIONS, STRUCTURES AND UNIONS 10 Periods

Functions: Concept of Function, Using Functions, elements of user-defined functions, definition, return values and their types, function calls, declaration, category, all types of arguments and return values, nesting of functions, Call-by-Value Vs Call-by-reference, passing arrays, strings to functions, Scope of Variables, Storage Classes, and Recursion.

Structures and Unions: Defining a structure, declaring a structure variable, accessing structure members, initialization, copying and comparing, operation on individual members array of structures, arrays within structures, structures within structures, structures, and functions, unions, size of structures, Structures verses Unions, Enumeration Types.

Module 5 POINTERS AND FILES 8 Periods

Pointers: Introduction, Advantages and Disadvantages of Pointers, Address of Operator (&), declaring and initialization of pointer variables, Accessing a variable through its pointer, chain of pointers , pointer increments and scale factors ,Pointers and character Strings ,Pointers to Pointers, Array of Pointers, pointers as function arguments –pointers and structures, Dynamic Memory Allocation.

Files: Introduction, Defining, opening, closing a file, I/O Operations on files, Error handling during I/O operations, command line arguments, Working with Text Files –Working with Binary Files, Random Access to Files of Records.

Total Periods: 45

EXPERIENTIALLEARNING

LIST OF EXERCISES:

1. Write a program to check whether the given number is Armstrong or not.
2. Write a program to find the sum of individual digits of a positive integer.
3. Write a program to generate the first n terms of the Fibonacci sequence.
4. Write a program to find both the largest and smallest number in a list of integer values.
5. Write a program to demonstrate refexion of parameters in swapping of two integer values using Call by Value and Call by Address.
6. Write a program that uses functions to add two matrices.
7. Write a program to calculate factorial of given integer value using recursive functions.
8. Write a program for multiplication of two NXN matrices.
9. Write a program to perform various string operations
10. Write a program to search an element in a given list of values.
11. Write a program to sort a given list of integers in ascending order.
12. Write a program to calculate the salaries of all employees using Employee (ID, Name, Designation, Basic Pay, DA, HRA, Gross Salary, Deduction, Net Salary) structure.
 - a. DA is30 % of Basic Pay
 - b. HRA is 15% of Basic Pay
 - c. Deduction is 10% of (Basic Pay + DA)
 - d. Gross Salary= BasicPay+DA+HRAe. Net Salary=Gross Salary–Deduction.
13. Write a program to illustrate pointer arithmetic.
14. Write a program to read the data character by character from a file.
15. Write a program to create Book (ISBN, Title, Author, Price, Pages, Publisher) structure and store book details in a file and perform the following operations.
 - a. Add book details
 - b. Search a book detail for a given ISBN and display book details, if available.
 - c. Update a book detail using ISBN
 - d. Delete book details for a given ISBN and display list of remaining Books.

RESOURCES

TEXTBOOKS:

1. E Balaguruswamy, - Programming in ANSIC, 7th Edition, Tata MCGraw Hill Publishing Company,2017.

REFERENCEBOOKS:

1. Yashavant Kanetkar–LetUs`C` –BPB Publications.
2. Byron S Gottfried and Jitender Kumar Chhabra, Programming with C, Fourth Edition, McGraw Hill Education,2019.

SOFTWARE/TOOLS:

1. Turbo C compiler, Notepad plus, Editplus.

VIDEOLECTURES:

1. <https://nptel.ac.in/courses/106104128>
2. https://onlinecourses.nptel.ac.in/noc19_cs42/preview
3. https://onlinecourses.nptel.ac.in/noc22_cs40/preview

WEB RESOURCES:

1. Learn C Programming –[https://www. programiz.com/c-programming](https://www.programiz.com/c-programming)
2. LearnCProgramming–<https://www.tutorialspoint.com/cprogramming/index.htm>
3. C Programming Exercises, Practice, Solution –
<https://www.w3resource.com/cprogramming-exercises/>
4. BasicprogrammingexercisessolutionsinC–<https://codeforwin.org/2015/05/basic-programming-practice-problems.html>

SPECIALIZATION ELECTIVE

Course Code	Course Title	L	T	P	S	C
2MM102430	RELATIONAL DATABASE MANAGEMENT SYSTEMS	3	-	2	-	4

Pre-Requisite -

Anti-Requisite -

Co-Requisite -

COURSE DESCRIPTION: Introduction to database systems; Database design; Relational model; Relational algebra; SQL queries; Constraints and triggers; PL/SQL; Schema refinement and normal forms; Transaction management; Concurrency control; Overview of storage and indexing.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Apply the concepts of ER-modeling and normalization to design viable data models for a given problem.
- CO2.** Formulate relational database schemas, apply suitable integrity constraints, for querying databases.
- CO3.** Use SQL to store, query, and manipulate data in relational databases.
- CO4.** Develop PL/SQL blocks to centralize database applications for maintainability and reusability.
- CO5.** Analyze transaction processing, concurrency control and storage methods for database management.

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3
CO1	2	2	3	-	-	-	-	3	-	-	-	3
CO2	1	2	-	-	-	-	-	3	-	2	-	3
CO3	3	2	-	-	-	-	-	3	-	1	-	3
CO4	1	2	3	2	-	-	-	3	-	3	-	2
CO5	3	3	-	-	-	-	-	3	-	2	-	3
Course Correlation Mapping	3	2	3	2	-	-	-	3	-	2	-	3

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT

Module 1: INTRODUCTION TO DATABASE SYSTEMS AND DATABASE DESIGN (08 Periods)

Introduction to Database Systems: Database system applications, Purpose of database systems, View of data, Data abstraction, Instances and schemas, Data models; Database languages - Data Definition Language, Data Manipulation Language; Database architecture, Database users and administrators.

Introduction to Database Design: Database design and ER diagrams, Entities, attributes and entity sets, Relationships and relationship sets, Additional features of ER model, Conceptual Design with ER model.

Module 2: RELATIONAL MODEL AND RELATIONAL ALGEBRA (08 Periods)

Relational Model: Creating and modifying relations, Integrity constraints over relations, enforcing integrity constraints, querying relational data, Logical database design, Introduction to views, Destroying/altering tables and views.

Relational Algebra: Preliminaries, Relational Algebra operators

Module 3 SQL AND PL/SQL (10 Periods)

SQL: Form of basic SQL query, Nested queries, Aggregate operators, Null values, Complex integrity constraints in SQL, Triggers and active databases.

PL/SQL: Generic PL/SQL block, PL/SQL data types, Control structure, Procedures and functions, Cursors, Database triggers.

Module 4 Database Administration and Security (10 Periods)

User management and access control, Backup and recovery strategies, Monitoring and optimizing database performance, Database security principles and best practices.

Module 5 Advanced Topics in RDBMS (09Periods)

Stored procedures, triggers, and functions, Views and materialized views, Transaction management and concurrency control, Emerging trends and technologies in RDBMS (e.g., NoSQL databases, cloud databases).

Total Periods: 45

LIST OF EXERCISES:

1. Design and analyze an ER Model for the following use case. Roadway TravelsII has been in business since 1977 with several buses connecting different places in India. Its main office is located in Hyderabad. The company wants to computerize its operations in the following areas:
 - Reservations.
 - Ticketing.
 - Cancellations

Reservations:

Reservations are directly handled by booking office. Reservations can be made 60 days in advance in either cash or credit. In case the ticket is not available, await listed ticket is issued to the customer. This ticket is confirmed against the cancellation. Cancellation and

Modification:

Cancellations are also directly handed at the booking office. Cancellation charges will be charged. Waitlisted tickets that do not get confirmed are fully refunded.

2. a). Implement Data Definition Language commands -Create, Alter, Drop, Truncate,and Rename.
b). Implement Data Manipulation Language commands - Insert, Select, Update, andDelete.
C). Implement Single Row functions - Character, Numeric and Date functions.
3. Implement various types of integrity constraints - NOT NULL constraint, DEFAULT constraint, UNIQUE constraint, PRIMARY key, FOREIGN key, CHECK constraint.
4. a). Implement group functions with different operators such as aggregate operators,group by, having and order by.
b). Implement nested and correlated nested queries using set operators and set comparison operators.
5. a). Creation of views, synonyms, sequence, indexes and save point.b). Implement various types of joins - outer join and inner join.

Basic SQL:

6. Construct PL/SQL block for the following.
 - a). To determine whether a number is palindrome
 - b). To determine whether a number is an Armstrong numberc).
 - To find greatest of three numbers
 - d). To display Fibonacci series

Control Structures:

7. a). Write a program in PL/SQL to update the salary of a specific employee by 8% ifthe salary exceeds the mid-range of the salary against this job and update up to mid- range if the salary is less than the mid-range of the salary, and display a suitable message.
b). Write a PL/SQL program to display the description against a student's grade using CASE statement.

Exception Handling:

8. a). Develop a PL/SQL program that displays the name and address of a student whose ID is given. If there is no student with the given student ID in the database, the program should raise a run-time exception NO_DATA_FOUND, which should be captured in the EXCEPTION block.
b). Construct the user-defined exceptions to get the salary of an employee and check it with the job's salary range. If the salary is below the range, raise an exception BELOW_SALARY_RANGE. If the salary is above the range, raise the exception ABOVE_SALARY_RANGE.

Functions:

9. a). Write a function that accepts two numbers A and B and performs the following operations.
 - Addition.
 - Subtraction.
 - Multiplication
 - Division.
- b). Write a PL/SQL block that updates salary of an employee in Employee table by using incr function which takes employee number as argument and calculates increment and returns increment based on the following criteria. If salary ≤ 3000 ,
increment = 30% of salary If salary > 3000 and ≤ 6000 , increment = 20% of salaryelse
increment = 10% of salary

Procedures:

- 10.a). Write a procedure that accepts two numbers and displays their sum.
b). Write procedures to demonstrate IN, IN OUT and OUT parameters.

Cursors:

11. a). Write a block in PL/SQL to create a Cursor that displays the employee name and number of jobs he or she has done in the past.
- b). Write a program in PL/SQL to create a cursor to display the name and salary of each employee in the EMPLOYEES table whose salary is less than that specified by a passed-in parameter value.

Triggers:

12. Develop a suitable student database application by considering appropriate attributes. Couple of attributes to be maintained is the attendance of a student in each subject for which he/she has enrolled and internal assessment Using TRIGGERS for the following
 - a). Whenever the attendance is updated, check if the attendance is less than 85%; if so, notify the concerned head of the department.
 - b). Whenever, the marks in an internal assessment test are entered, check if the marks are less than 40%; if so, notify the concerned head of the department.

RESOURCES**TEXT BOOKS:**

1. Raghu Ramakrishnan, Johannes Gehrke, Database Management Systems, McGraw Hill, 3rd Edition, 2014.
2. Abraham Silberschatz, Henry. F. Korth, S. Sudarshan, Database System Concepts, McGraw Hill, 7th edition, 2019.

REFERENCE BOOKS:

1. Ivan Bayross, SQL, PL/SQL: The Programming Language of Oracle, BPB publications, 4 th Edition, 2017.
2. Ramez Elmasri, Shamkant B. Navathe, Fundamentals of Database Systems, 7th Edition, Pearson, 2015.

VIDEO LECTURES:

1. https://swayam.gov.in/nd1_noc19_cs46/preview
2. <https://www.classcentral.com/course/swayam-introduction-to-database-systems17660>

WEB RESOURCES:

1. <https://nptel.ac.in/courses/106105175>
2. https://onlinecourses.nptel.ac.in/noc21_cs04/preview
3. <https://www.coursera.org/learn/database-management>

SPECIALIZATION ELECTIVE

Course Code	Course Title	L	T	P	S	C
22MM202005	PYTHON PROGRAMMING	3	-	2	-	4

Pre-Requisite -

Anti-Requisite -

Co-Requisite -

COURSE DESCRIPTION: Basics of Python programming, Control structures, Lists, Tuples, Strings, Sets, Dictionaries, Regular expressions, Functions, File handling, Object oriented programming, Exception handling.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Demonstrate knowledge on Python constructs, sequences, sets and dictionaries to solve basic computational problems.
- CO2.** Apply the concepts of regular expressions for searching patterns in strings.
- CO3.** Develop and use Python modules to provide solutions to problems.
- CO4.** Apply the knowledge of file operations in Python for file processing.
- CO5.** Design applications using object-oriented programming features – encapsulation, inheritance, polymorphism and exception handling.
- CO6** Work independently and communicate effectively oral and written forms.

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3
CO1	3	2	-	-	3	-	-	3	-	3	-	-
CO2	3	2	-	-	3	-	-	3	-	3	-	-
CO3	3	3	3	3	3	-	-	3	-	3	-	-
CO4	3	3	3	2	3	-	-	3	-	-	-	-
CO5	3	3	3	3	3	-	-	3	-	-	-	-
CO6	-	-	-	-	-	3	-	3	-	-	-	-
Course Correlation Mapping	3	3	3	3	3	-	-	3	-	3	-	-

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT

Module 1: INTRODUCTION TO PYTHON PROGRAMMING: (07 Periods)

Introduction to Python, Tokens, Variables, Literals, Identifiers, Keywords, Special symbols, Operators, Fundamental datatypes, Expressions, Type conversions, Handling Input and output in Python.

Module 2: CONTROL STRUCTURES (08 Periods)

Selection Statements: if statement, if-else statement, if-elif-else statement, nested-if statement.

Iterative Statements: while loop, for loop, break statement, continue statement, pass and else statements used with loops.

Module 3: SEQUENCES, SETS, DICTIONARIES AND REGULAR EXPRESSIONS (11 Periods)

Sequences: Lists and operations, Creating, Inserting elements, Updating elements, Deleting elements, Searching and sorting, List comprehensions, Nested lists; Tuples, Creating, Searching and sorting, Nested tuples;

Strings: Initializing a string and string operations, String handling methods, String formatting.

Sets: Set creation, Set operations.

Dictionaries: Operations on dictionaries, Dictionary methods, Sorting elements using lambdas.

Regular Expressions: Regular expressions, Sequence characters in regular expressions, Quantifiers in regular expressions, Special characters in regular expressions.

Module 4: FUNCTIONS AND FILE HANDLING (09 Periods)

Functions: Need for functions, Function definition, Function call, Variable scope and lifetime, Return statement, Positional arguments, Keyword arguments, Default arguments and variable length arguments, Recursive functions, Lambda functions, Generators.

File Handling: Types of files, Opening and closing files, Reading and writing data

Module 5 OBJECT ORIENTED PROGRAMMING AND EXCEPTION HANDLING (10 Periods)

Object Oriented Programming: Introduction to object-oriented programming, Classes and objects, Inheritance and polymorphism, Abstract Classes and interfaces.

Total Periods: 45

EXPERIENTIAL LEARNING

LIST OF EXERCISES:

1. Write a program to demonstrate different number datatypes in python
2. Write a program to perform different arithmetic operations on numbers in python.
3. Write a python script to convert a given decimal number into octal, hexadecimal and binary.

4. Write a python script to read four integer values separated with commas and display the sum of those four numbers.
5. Write a program to create, concatenate and print a string and accessing substring from a given string.
6. Write a python script to display Fibonacci sequence of numbers using while loop, for loop and do-while loop constructs.
7. Write a python script to perform the following operations on Lists:
 - (i) Matrix Addition.
 - (ii) Matrix Multiplication.
8. Write a program to demonstrate working with dictionaries in python.
9. Write a python program to find largest of three numbers
10. Write a python program to construct the following pattern using nested for loop
11. Write a python script to read details of N students – name, roll number, branch and age. Sort the student details based on their names and display.
12. Design a function that can perform sum of two or three or four numbers.
13. Write a python script to implement Towers of Hanoi problem.
14. Write a python script to copy the content of one file into another file.
15. Write a python script to read all the strings from the text file and display them

RESOURCES

TEXT BOOKS:

1. R. Nageswara Rao, Core Python Programming, 2nd Edition, Dreamtech Press, 2018.

REFERENCE BOOKS:

1. Reema Thareja, Python Programming using Problem Solving Approach, 1st Edition, Oxford University Press, 2017.
2. Charles Dierbach, Introduction to Computer Science using Python: A Computational Problem Solving Focus, Wiley India, 2016.

SOFTWARE/TOOLS:

1. Python 3.10.5

VIDEO LECTURES:

1. <http://nptel.ac.in/courses/106102064>
2. <http://nptel.ac.in/courses/106106127/>
3. https://onlinecourses.nptel.ac.in/noc19_cs41/preview

WEB RESOURCES:

1. https://onlinecourses.nptel.ac.in/noc19_cs41/preview
2. <https://www.coursera.org/specializations/python>
3. <https://www.coursera.org/learn/python-for-applied-data-science-ai>
4. <https://beginnersbook.com/2018/03/python-tutorial-learn-programming/>
5. <https://www.javatpoint.com/python-tutorial>

SPECIALIZATION ELECTIVE

Course Code	Course Title	L	T	P	S	C
22CA102003	DATA WAREHOUSING AND DATA MINING	3	-	2	-	4
Pre-Requisite	- Database Management Systems					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION

Data Mining Fundamentals; Data Preprocessing; Operational Database Systems and Data Warehouses; Mining Frequent Patterns; Classification and Prediction; Clustering; Data warehousing and Mining tools, New Trends and Research Frontiers.

COURSE OUTCOMES

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

- CO1.** Understand the concepts of Data Warehousing architecture, Multidimensional models and OLAP operations.
- CO2.** Analyze data preprocessing techniques to produce refined data.
- CO3.** Apply Association rules and classification techniques for data categorization.
- CO4.** Make use of clustering techniques for grouping similar data items and identify outliers.
- CO5.** Design and develop applications using Data Mining trends.

CO-PO-PSO Mapping Table

Course Outcomes	Program Outcomes												Program Specific Outcomes		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3	3	3	3	-	-	-	-	-	-	-	2	-	3
CO2	3	3	3	3	3	-	-	-	-	-	-	-	2	-	3
CO3	3	2	3	3	3	-	-	-	-	-	-	-	2	-	3
CO4	3	3	3	3	3	-	-	-	-	-	-	-	2	-	3
CO5	-	-	-	-	-	-	-	-	3	3	-	-	2	-	3
Course Correlation Mapping	3	3	3	3	3	-	-	-	3	3	-	-	2	-	3

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT

Module 1–DATA WAREHOUSING AND ONLINE ANALYTICAL PROCESSING (09 Periods)

Data Warehouse, Operational Database Systems versus Data Warehouses, A Multi tiered Architecture, A Multidimensional Data Model, Stars, Snowflakes and Fact Constellations: Schemas, Role of Concept hierarchies, Measures, OLAP Operations, from online Analytical processing to Multidimensional Data Mining, Indexing OLAP Data.

Module 2–DATA MINING AND DATA PREPROCESSING (08 Periods)

Introduction to Data Mining, kinds of data, kinds of patterns, major issues in Data Mining, Data Pre-processing, Data Cleaning, Data Integration , Data Reduction, Data Transformation and Discretization.

Module 3–ASSOCIATIONS AND CLASSIFICATION (10 Periods)

Basic Concepts, Frequent itemset Mining Methods, pattern evaluation methods- From Association Mining to Correlation Analysis, Classification, Decision Tree Introduction, Bayesian Classification Methods, Rule Based Classification, Prediction: Linear Regression.

Module 4- CLUSTER ANALYSIS (09 Periods)

Types of Data in Cluster Analysis, A Categorization of Major Clustering Methods, Partitioning Methods- k-Means and K-Medoids, Hierarchical methods-Agglomerative and divisive method, Density-Based Method-DBSCAN, Grid-Based Method-STING, Outlier Analysis.

Module 5- DATA MINING TRENDS (09 Periods)

Mining Complex Data Types: Mining sequence data, Mining other kinds of data: Spatial, Text, Multimedia and Web data.

Data Mining Trends: Mining Complex Data Types, Methodologies of Data Mining, Data Mining Applications, Data Mining and Society, Data Mining Trends.

Total Periods: 45

EXPERIENTIAL LEARNING

1. Design and implement data acquisition process to perform Source Qualifier Transformation
2. Design and implement data acquisition process to perform Filter Transformation
3. Design and implement data acquisition process to perform Joiner Transformation
4. Design and implement data acquisition process to perform Aggregator Transformation
5. Design and implement data acquisition process to perform Sorter Transformation
6. Design and implement data acquisition process to perform Router Transformation
7. Design and implement data acquisition process to perform Union Transformation
8. Design and implement data acquisition process to perform Transaction control Transformation
9. Design and implement data acquisition process to perform Rank Transformation
10. Design and implement data acquisition process to perform Normalizer Transformation

11. Implement the following Data mining techniques.
 - a. Data cleaning techniques
 - b. smoothing by bin means
 - c. smoothing by bin medians
 - d. smoothing by bin boundaries

RESOURCES

TEXT BOOK:

Jiawei Han, Micheline Kamber and Jian Pei, "Data Mining: Concepts and Techniques," Elsevier, 3rd Edition, 2013.

REFERENCE BOOKS:

1. K.P. Soman, Shyam Diwakar and V. Ajay, Insight into Data mining Theory and Practice, Easter Economy Edition, Prentice Hall of India, 2006.
2. G. K. Gupta, Introduction to Data Mining with Case Studies, Easter Economy Edition, Prentice Hall of India, 2006.
3. Tan P.N, Steinbach M. and Kumar V., Introduction to Data Mining, Addison-Wesley, 2006.

SOFTWARE/TOOLS:

Python

Library : Sci kit Learn;

Computing platform : Jupyter Notebook

VIDEO LECTURES:

1. <http://nptel.ac.in/courses/106106093/35>
2. http://nptel.ac.in/syllabus/syllabus_pdf/106106105.pdf
3. <http://nptel.ac.in/video.php?subjectId=106106093>
4. <http://textofvideo.nptel.iitm.ac.in/video.php?courseId=106106093&p=4>

WEB RESOURCES:

1. <http://myweb.sabanciuniv.edu/rdehkharghani/files/2016/02/>
2. <https://myweb.sabanciuniv.edu/rdehkharghani/files/2016/02/The-Morgan-Kaufmann-Series-in-Data-Management-Systems-Jiawei-Han-Micheline-Kamber-Jian-Pei-Data-Mining.-Concepts-and-Techniques-3rd-Edition-Morgan-Kaufmann-2011.pdf>
3. <https://www.dei.unipd.it/~capri/SI/MATERIALE/DWDM0405.pdf>

SPECIALIZATION ELECTIVE

Course Code	Course Title	L	T	P	S	C
22MM102012	BIG DATA TECHNOLOGIES USING R	3	-	2	-	4

Pre-Requisite

Anti-Requisite -

Co-Requisite -

COURSE DESCRIPTION: This course provides a detailed discussion on Introduction to Big Data, Data analysis using big data tools, data frames and charts and graphs.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

CO1 Understand data and classification of digital data.

CO2 Understand Big Data Analytics.

CO3 Load data into R.

CO4 Organize data in the form of R objects and manipulate them as needed.

CO5 Perform analytics using R programming.

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3
CO1	3	3	-	3	-	-	-	3	-	-	-	3
CO2	3	3	-	3	-	-	-	-	-	-	-	3
CO3	3	3	-	-	-	-	-	-	-	-	-	3
CO4	3	2	-	-	-	-	-	-	-	-	-	3
CO5	3	2	-	-	-	-	-	-	-	-	-	3
Course Correlation Mapping	3	2	-	3	-	-	-	3	-	-	-	3

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT

Module 1: Introduction to Big data (09 Periods)

Data, classification Of Digital Data--structured, unstructured, semi-structured data, characteristics of data, evaluation of big data, definition and challenges of big data, what is big data and why to use big data ?, business intelligence Vs big data.

Module 2: Big data Analytics (08 Periods)

What is and isn't big data analytics? Why hype around big data analytics? Classification of analytics, top challenges facing big data, importance of big data analytics, technologies needed to meet challenges of big data.

Module 3: Introduction to R and getting started with R (09 Periods)

What is R? Why R? , advantages of R over other programming languages, Data types inR- logical, numeric, integer, character, double, complex, raw, ls() command, expressions, variables and functions, control structures, Array, Matrix, Vectors.

Module 4: Exploring data in R (09 Periods)

Data frames-data frame access, ordering data frames, R functions for data frames dim(), nrow(), ncol(), str(), summary(), names(), head(), tail(), edit() .Load data frames—readingfrom .CSV files, reading from tab separated value files, reading from tables.

Module 5: Data Visualization using R (10 Periods)

Reading and getting data into R (External Data): XML files, Web Data, JSON files, Databases, Excel files.

Working with R Charts and Graphs: Histograms, Bar Charts, Line Graphs, Scatter plots, Pie Charts.

Total Periods: 45

LIST OF EXPERIMENTS

List of Exercises

1. Create a vector in R and perform operations on it.
2. Create integer, complex, logical, character data type objects in R and print their values and their class using print and class functions.
3. Write code in R to demonstrate sum(), min(), max() and seq() functions.
4. Write code in R to manipulate text in R using grep(), toupper(),

tolower() and substr() functions.

5. Create data frame in R and perform operations on it.
6. Import data into R from text and excel files using read.table () and read.csv () functions.
7. Write code in R to find out whether number is prime or not.
8. Print numbers from 1 to 100 using while loop and for loop in R.
9. Write a program to import data from csv file and print the data on the console.
10. Write a program to demonstrate histogram in R.

RESOURCES

TEXTBOOKS:

1. Seema Acharya , Subhashini Chellappan, Big Data And Analytics, Wiley, second edition, 2019.
2. Seema Acharya, Data Analytics using R, McGraw Hill education (India) Private Limited, First edition, 2018.

REFERENCE BOOKS:

1. W. N. Venables, D.M. Smith, An Introduction to R, Network theory Limited, second edition, 2009.

VIDEO LECTURES:

1. [Data Analytics Using R | Introduction To Data Analytics | Data Analytics For Beginners | Simplilearn - YouTube](#)
2. [Data Analytics Using R | Introduction To Data Analytics | Data Analytics For Beginners | Simplilearn - YouTube](#)

WEB RESOURCES:

1. columbia.edu/~sjm2186/EPIC_R/EPIC_R_BigData.pdf
2. [Big Data Analytics - Introduction to R \(tutorialspoint.com\)](http://BigDataAnalytics-IntroductiontoR(tutorialspoint.com))

COURSE CONTENT:

Module 1: Overview of Block Chain (09 Periods)

The Internet of Information, In Search of the Trust Protocol, What is Block chain?, Practitioner Perspective: Andreas Wallendahl, Head of Strategic Initiatives at ConsenSys, Practitioner Perspective: Rob Carter, Executive VP and CIO, FedEx40s, Achieving Trust in the Digital Age, How Blockchain Works, The Internet of Information, In Search of the Trust Protocol / What is Blockchain,

Achieving Trust in the Digital Age, How Blockchain Works, The Second Era of the Internet, Steps of a Blockchain Transaction

Module 2: Blockchain Design Principles (07 Periods)

Intro to Blockchain Design Principles, Principle 1: Networked Integrity, Principle 2: Distributed Power, Practitioner Perspective: Rob Carter, Executive VP and CIO, FedEx1m, Principle 3: Value as Incentive, Principle 4: Security. Principle 5: Privacy, Principle 6: Rights Preserved, Principle 7: Inclusion, Practitioner Perspective: Julie Maupin, Director of Social Impact & Regulatory Affairs at IOTA Foundation, Privacy Rights and Inclusion, Blockchain Design Principles

Module 3: Public and Private Ledgers (09 Periods)

The Benefits of Shared Knowledge, How Much is Too Much Transparency, Centralized vs. Distributed Ledgers ,Public vs Private Ledgers, Practitioner Perspective: Rolf Hoefer, Keyless Technologies.

Practitioner Perspective: Andreas Wallendahl, Head of Strategic Initiatives at ConsenSys, Transparency as a Strategic Risk, Transparency as a Strategic Asset , Usage of Multiple IDs, Zero Knowledge Proofs, Implementation in Public vs. Private Block chains.

Module 4: The Blockchain Ecosystem (10 Periods)

Intro to the Blockchain Ecosystem ,Blockchain Stakeholders Part, Practitioner Perspective: Rob Carter, Executive VP and CIO, FedEx, Blockchain Stakeholders Part ,Blockchain Stakeholders Part ,Practitioner Perspective: Oleg Fomenko, Co-founder of Sweatcoin, Stewarding the Blockchain Revolution

Module 5: Blockchain Implementation Challenges (10 Periods)

Overcoming Showstoppers, Challenge 1: The Technology is Not Ready for Prime Time, Challenge 2: The Energy Consumed is Unsustainable, Challenge 3: Governments Will Stifle or Twist It, Practitioner Perspective: Oleg Fomenko, Co-Founder at Sweatcoin, Practitioner Perspective: Will Harborne, Director of Operations at Ethfinex, Challenge 4: Powerful Incumbents of the Old Paradigm Will Usurp It, Challenge 5: The Incentives are Inadequate. Challenge 6: Blockchain is a Job Killer, Challenge 7: Governing the Protocols, Practitioner Perspective: Rob Carter, Executive VP and CIO, FedEx, Challenge 8: Distributed Autonomous Agents, Challenge 9: Privacy, Challenge 10: Criminals Will Use It, Reasons Blockchain Will Fail or Implementation Challenges? Course Wrap-up

EXPERIENTIAL LEARNING:

Part 1 Understanding Block using (<https://tools.superdatascience.com/Blockchain/block>)

Understanding Block chain using

1.1 (<https://tools.superdatascience.com/Blockchain/Blockchain>)

Understanding Distributed Blockchain using

1.2 <https://tools.superdatascience.com/Blockchain/distributed>

1.3 Understanding Tokens using <https://tools.superdatascience.com/Blockchain/tokens>

Understanding coin based transaction using

1.4 (<https://tools.superdatascience.com/Blockchain/tokens>)

Part 2 Using JavaScript Perform following (Source: YouTube Channel: Simply Explain Savjee)

2.1 Creating a Blockchain

2.2 Implementing Proof-of-Work

2.3 Miner rewards & transactions

2.4 Signing transactions

2.5 Angular frontend

Part 3 Introduction to Geth:

3.1 Introduction to geth

3.2 Creation of private Blockchain

3.2 Creation of Account

3.4 Mining using geth

Part 4 Introduction to Remix Ethereum:

4.1 Introduction to Metamask

4.2 Creation of account using Metamask

4.3 Introduction to Remix Ethereum

Introduction to solidity program structure, compilation and deployment

4.4 environment.

4.5 Write a smart contract in solidity to store and get "Hello World".

Write a smart contract in solidity to create a function setter and getter to set and

4.6 get a value.

4.7 Write a smart contract in solidity to print the array of integers and its length.

4.8 Write a solidity code to print array elements and its position.

Part 5 Introduction to Ethereum-Ganache:

5.1 Creation of account using Ganache.

5.2 Introduction to solidity smart contract compilation and deployment environment.

5.3 Write a smart contract in solidity to store and get "Hello World".

RESOURCES:

TEXT BOOKS:

1. Imran Bashir, "Mastering Blockchain: Distributed Ledger Technology, Decentralization and Smart Contracts Explained", Second Edition, Packt Publishing, 2018

REFERENCE BOOKS:

1. Arshdeep Bahga, Vijay Madisetti, "Blockchain Applications: A Hands On Approach", VPT, 2017.
2. Roger Wattenhofer, "The Science of the Blockchain" CreateSpace Independent Publishing, 2016.
3. A. Narayanan, J. Bonneau, E. Felten, A. Miller, S. Goldfeder, "Bitcoin and Cryptocurrency Technologies: A Comprehensive Introduction", Princeton University Press, 2016.

VIDEO LECTURES:

1. <https://in.coursera.org/learn/introduction-blockchain-technologies>

WEB RESOURCES:

1. <https://www.udemy.com/topic/blockchain/>
2. <https://in.coursera.org/courses?query=blockchain>
3. <https://www.simplilearn.com/blockchain-certification-training-course>

SPECIALIZATION ELECTIVE

Course Code	Course Title	L	T	P	S	C
22MM102006	OBJECT ORIENTATED PROGRAMMING WITH JAVA	3	-	2	-	4

Pre-Requisite XXXX-

Anti-Requisite XXXX-

Co-Requisite XXXX-

COURSE DESCRIPTION: Introduction to Object Oriented Programming, Classes and Objects; Inheritance, Packages, Interfaces; Exception handling, Multithreading; Collection Classes; Swings, Event handling.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Apply object-oriented programming constructs to solve programming problems.
- CO2.** Design solutions to the problems by using control statements, interfaces, utility classes and Packages.
- CO3.** Solve real time problems using object oriented programming features – polymorphism, inheritance, exception handling and multithreading.
- CO4.** Apply multithreading mechanism to enhance the performance of a system.
- CO5.** Develop user interfaces using GUI programming techniques.
- CO6** Work independently and communicate effectively oral and written forms.

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes									Program Specific Outcomes		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3
CO1	3	3	3	-	-	-	-	3	-	3	-	-
CO2	3	3	3	-	-	-	-	3	-	3	-	-
CO3	3	3	3	-	-	-	-	3	-	3	-	-
CO4	3	3	-	-	-	-	-	-	-	-	-	-
CO5	3	3	-	-	-	-	-	-	-	-	-	-
CO6	-	-	-	-	-	3	-	-	-	-	-	-
Course Correlation Mapping	3	2	3	-	-	3	-	3	-	3	-	-

Correlation Levels: 3: High; 2: Medium;1: Low

COURSE CONTENT

Module 1: INTRODUCTION TO JAVA

(13 Periods)

Introduction to Java: Features of Java, Basic Concepts of Object Oriented Programming, Benefits of OOP, Applications of OOP.

OVERVIEW OF JAVA LANGUAGE: Introduction, Simple Java program structure- Java Tokens, Java Statements, Implementing a Java Program, Compiling and Executing a Java Program, Java Virtual Machine, Command line arguments.

Constants, Variables & Data Types-Introduction, Constants, Variables, Data Types, Declaration of variables, Scope of variables, Symbolic Constants, Type Casting, Operators Expressions.

DECISION MAKING & BRANCHING: Introduction, Decision making with if statement, Simple if statement, if. Else statement, Nesting of if. else statements, the else if ladder, the switch statement, the conditional operator.

LOOPING: Introduction, The While statement, the do-while statement, the for statement, Jumps in loops, Accepting Input from the Keyboard. Reading Input with Java.util.Scanner Class, Displaying Output with System.out.printf(), Displaying Formatted Output with String. format()

Module 2: CLASSES & INHERITANCE

(08 Periods)

CLASSES, OBJECTS & METHODS: Introduction, Defining a class, Adding variables, Adding methods, Creating objects, Accessing class members, Constructors, Method overloading, Static members, Nesting of methods;

INHERITANCE: Introduction to Inheritance , Advantages, Extending a class, Types of Inheritance, Overloading methods, Final variables and methods, Final classes, Abstract methods and classes;

Module 3 ARRAYS, INTERFACES & MULTITHREADED PROGRAMMING

(08 Periods)

ARRAYS, STRINGS AND VECTORS: Arrays, One-dimensional arrays, Creating an array, Two – dimensional arrays, Strings, Vectors, Wrapper classes;

INTERFACES: MULTIPLE INHERITANCE: Introduction, Defining interfaces, Extending interfaces, Implementing interfaces, Assessing interface variables;

MULTITHREADED PROGRAMMING: Introduction, Creating Threads, Extending the Threads, Stopping and Blocking a Thread, Lifecycle of a Thread, Using Thread Methods, Thread Exceptions, Thread Priority, Synchronization, Implementing the 'Runnable' Interface.

Module 4 EXCEPTIONS, APPLET PROGRAMMING AND PACKAGES (08 Periods)

MANAGING ERRORS AND EXCEPTIONS: Types of errors : Compile-time errors, Run- time errors, Exceptions, Exception handling, Multiple Catch Statements, Using finally statement.

APPLET PROGRAMMING: local and remote applets, Applets and Applications, Building Applet code, Applet Life cycle: Initialization state, Running state, Idle or stopped state, Dead state, Display state.

PACKAGES: Introduction, Java API Packages, Using System Packages, Naming conventions, Creating Packages, Accessing a Package, using a Package.

Module 5 FILES, EVENTS, AWT & SWINGS (08 Periods)

MANAGING INPUT/OUTPUT FILES IN JAVA: Introduction, Concept of Streams, Stream classes, Byte Stream Classes, Input Stream Classes, Output Stream Classes, Character Stream classes: Reader stream classes, Writer Stream classes, Using Streams, Reading and writing files.

Event Handling: Introduction, Types of Events, Example.

AWT: Introduction, Components, Containers, Button, Label, Checkbox, Radio Buttons, Container Class, Layouts.

Swings: Introduction, Differences between Swing and AWT, JFrame, JApplet, JPanel, Components in Swings, Layout Managers, JTable.

Total Periods: 45

LIST OF EXERCISES:

1. Write a program to perform various String Operations
2. Write a program on class and object in java
3. Write a program to illustrate Function Overloading & Function Overriding methods in Java
4. Write a program to illustrate the implementation of abstract class
5. Write a program to implement Exception handling
6. Write a program to create packages in Java
7. Write a program on interface in java
8. Write a program to Create Multiple Threads in Java
9. Write a program to Write Applets to draw the various polygons
10. Write a program which illustrates the implementation of multiple Inheritance using interfaces in Java
11. Write a program to assign priorities to threads in java

RESOURCES

1. Dr. R. Nageswara Rao & Kogan, Core Java: An Integrated Approach, Authored by Learning Solutions 2009.
2. E. Balaguruswamy, Programming with JAVA, A primer, 3e, TATA McGraw- Hill Company, 3rd Edition, 2007.
3. John R. Hubbard, Programming with Java, Second Edition, Schaum's outline Series, TMH 2nd Edition, 2007.
4. Deite and Deitel. Java TM: How to Program, PHI 2007.

REFERENCE BOOKS:

1. Y. Daniel Liang, An Introduction to JAVA Programming, Prentice-Hall of India Pvt.Ltd., 2003.
2. Cay S. Horstmann and Gary Cornell, Core JavaTM2 Volume I-Fundamentals, 7th Edition - Pearson Education, 2005.
3. Ken Arnold, James Gosling and David Holmes, The JavaTM Programming Language, Pearson Education, 3rd Edition, 2003.

SOFTWARE/TOOLS:

1. Software: Java JDK

VIDEO LECTURES:

1. <https://docs.oracle.com/javase/tutorial/index.html>.
2. <https://nptel.ac.in/courses/106105191>
3. https://onlinecourses.nptel.ac.in/noc22_cs47/preview

WEB RESOURCES:

1. <https://www.w3schools.com/java/>
2. <https://www.javatpoint.com/java-tutorial>
3. <https://www.tutorialspoint.com/java/index.htm>
4. <https://docs.oracle.com/javase/tutorial/>
5. <https://www.iitk.ac.in/esc101/share/downloads/javanotes5.pdf>

UNIVERSITY ELECTIVE

Course Code	Course Title	L	T	P	S	C
22SS101706	WOMEN EMPOWERMENT	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: Concept & Framework, Status of Women, Women’s Right to Work, International Women’s Decade, and Women Entrepreneurship.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1** Demonstrate the knowledge of the characteristics and achievements of empowered women and women's empowerment techniques by analyzing women’s legal and political status.
- CO2** Apply the knowledge of women’s rights by analyzing various societal issues and obstacles in different fields, including science and technology.
- CO3** Demonstrate the knowledge of the significance of women’s participation in policy debates, National conferences, and common forums for equality and development by identifying and analyzing issues.
- CO4** Analyze the concept of women’s entrepreneurship, government schemes, and entrepreneurial challenges and opportunities.

CO-PO Mapping Table

Course Outcomes	Program Outcomes								
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
CO1	3	1	-	-	1	3	-	1	-
CO2	3	1	-	-	-	2	-	-	-
CO3	3	1	-	-	-	2	-	-	-
CO4	3	1	-	-	-	-	-	-	-
Course Correlation Mapping	3	1	-	-	1	3	-	1	-

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT

Module 1: CONCEPT & FRAMEWORK

(09 Periods)

Introduction– Empowered Women’s Characteristics – Achievements of Women’s Empowerment **Concept of Empowerment:** Meaning & Concept – Generalizations about Empowerment – Empowerment Propositions – Choices women can make for empowerment – Women’s participation in decision making, development process & in Governance. **Framework for Empowerment** – Five levels of equality – Tenets of Empowerment– Elements – Phases and aspects – Techniques – Categories and Models – Approaches.

Module 2: STATUS OF WOMEN

(09 Periods)

Legal Status: Present Scenario – Call for Social Change – Significant Trends – Legal & Schemes – Personal Law – Joint Family – Criminal Law – Shift towards Dowry – Deterrent Punishment – Criminal Law (II Amendment) – Discrimination in Employment.

Political Status: Present Scenario – Political Participation & its Nature Socio-economic Characteristics – Political Mobilization: Mass Media – Campaign Exposure – Group Orientation – Awareness of issues and participation – Progress & Future Thrust.

Module 3: WOMEN’S RIGHT TO WORK

(09 Periods)

Introduction – Present Scenario – Changes in Policy & Programme – National Plan of Action– Women’s Cells and Bureau – Increase in the work participation rate – Discrimination in the labour market – Women in unorganized sector – Issues and Obstacles– Women in Education – Women in Science & Technology – Case Study: Linking Education to Women’s Access to resources.

Module 4: WOMEN’S PARTICIPATORY DEVELOPMENT

(09 Periods)

Dynamics of social change – conscious participation – Information Explosion – Organized Articulation – National Conference – Common Forums – Participatory Development – New Issues Identified – Role of other Institutions.

Module 5: WOMEN ENTREPRENEURSHIP

(09 Periods)

Introduction – Definition – Concept – Traits of women Entrepreneurs – Role of Women Entrepreneurs in India – Reasons for Women Entrepreneurship – Government schemes & Financial Institutions to develop Women Entrepreneurs – Key policy recommendations – Project Planning – Suggestions and measures to strengthen women entrepreneurship – Growth & Future challenges – Training and Opportunities – Case Study: Training Women as Hand-pump Mechanics– Case Study: Literacy for Empowering Craftswomen

Total Periods: 45

EXPERIENTIAL LEARNING

1. Prepare poster presentation on "impact of women's self-help groups on their empowerment and socio-economic development."
2. Prepare a comparative analysis chart on the status of women in various countries.
3. Prepare a presentation on women and cultural responsibilities in different societies.
4. Prepare a presentation on the women of the past, present and future in terms of responsibilities and duties.
5. Prepare a presentation on the great women entrepreneurs of India.

(Note: It's an indicative one. Course Instructor may change activities and shall be reflected in course Handout)

RESOURCES

TEXT BOOKS:

1. SahaySushama, *Women and Empowerment*, Discovery Publishing House, New Delhi, 2013.
2. NayakSarojini, Jeevan Nair, *Women's Empowerment in India*, Pointer Publishers, Jaipur, 2017.

REFERENCE BOOKS:

1. Baluchamy. S, *Women's Empowerment of Women*, Pointer Publishers, Jaipur, 2010.
2. Khobragade Grishma, *Women's Empowerment: Challenges and Strategies Empowering Indian Women*, Booksclinic Publishing, Chhattisgarh, 2020.

Web Resources:

1. <https://www.economicdiscussion.net/entrepreneurship/women-entrepreneurs-in-india>
2. <https://www.businessmanagementideas.com/entrepreneurship-2/women-entrepreneurs>

UNIVERSITY ELECTIVE

Course Code	Course Title	L	T	P	S	C
22SS101703	INDIAN ECONOMY	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: Introduction; Elementary Economic Analysis; Economic Planning; Time Value of Money; Value Analysis/Value Engineering.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

CO1 Understand the basic concepts of economics, economic analysis, economic planning, and strata.

CO2 Demonstrate knowledge in capital budgeting, evaluation of engineering projects, depreciation policy and familiarize with the concepts of value analysis vs value engineering.

CO3 Analyze and apply financial information for the evaluation of finance.

CO-PO Mapping Table

Course Outcomes	Program Outcomes											
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	-	-	-	-	2	-	-	-	-	-	-
CO2	3	-	-	-	-	2	-	-	-	-	-	2
CO3	3	-	-	-	-	2	-	-	-	-	-	2
Course Correlation Mapping	3	-	-	-	-	2	-	-	-	-	-	2

Correlation Levels: 3: High; 2: Medium; 1: Low

COURSE CONTENT

Module 1: INTRODUCTION (09 Periods)

Economics-Flow in an Economy, Law of Supply and Demand; Micro and Macro Economics; Relationship between Science, Engineering, Technology and Economic Development; Concept of Engineering Economics-Types of Efficiency, Definition and Scope of Engineering Economics.

Module 2: ELEMENTARY ECONOMIC ANALYSIS (09 Periods)

Economic Analysis – Meaning, Significance, Simple Economic Analysis; Material Selection for a Product, Substitution of Raw Material; Design Selection for a Product; Material Selection-Process Planning, Process Modification.

Module 3: ECONOMIC PLANNING (09 Periods)

Introduction - Need For Planning in India, Five-year plans(1951-2012), NITI Aayog (from 2014 onwards); Inclusive Growth-Meaning, Significance, Need for inclusive growth in India, Strategy for more inclusive growth, Challenges and Prospects; Employment and Inclusive Growth in India, Role of engineers in sustaining inclusive growth.

Module 4: TIME VALUE OF MONEY (12 Periods)

Concepts and Application; Capital Budgeting-Traditional and Modern Methods; Simple and Compound Interest, Cash Flow Diagram, Principle of Economic Equivalence; Evaluation of Engineering Projects - Present Worth Method, Future Worth Method, Annual Worth Method, Internal Rate of Return Method, Cost-benefit Analysis in Public Projects; Depreciation Policy-Depreciation of Capital Assets, Causes of Depreciation, Straight Line Method and Declining Balance Method.

Module 5: VALUE ANALYSIS/VALUE ENGINEERING (06 Periods)

Introduction-Value Analysis, Value Engineering, Functions, Aims; Value Analysis vs Value Engineering; Value Engineering Procedure- Advantages, Application Areas.

Total Periods: 45

EXPERIENTIAL LEARNING

1. Prepare a poster presentation on the impact of globalization on family structure and society.
2. Prepare a presentation on family setups of different countries and their peculiar customs if any.
3. Prepare a poster presentation on "Ancient hominin walked like a human but climbed like an ape."
4. Find out the problems of present society and being part of future generations and how you may help to strengthen environmental security.

(Note: It's an indicative one. Course Instructor may change activities and shall be reflected in course Handout)

RESOURCES

TEXT BOOKS:

1. Panneerselvam. R., *Engineering Economics*, PHI Learning Private Limited, New Delhi, 2nd edition, 2013.
2. Jain. T. R., V. K. Ohri, O. P. Khanna., *Economics for Engineers*, VK Publication, 1st edition, 2015.

REFERENCE BOOKS:

1. DuttRudar & Sundhram K. P. M., *Indian Economy*, S. Chand, New Delhi, 62nd revised edition, 2010.
2. Misra, S. K. & V. K. Puri., *Indian Economy: Its Development Experience*, Himalaya Publishing House, Mumbai, 32nd edition, 2010.