

Marudhar Kesari Jain College for Women (Autonomous)

Vaniyambadi–635751



PG Department of Commerce CA

For

Postgraduate Programme

Master of Commerce (Computer Applications)

From the Academic Year 2024-25

CC	Core Course	14
EC	Elective Paper	6
SEC	Skill Enhancement Course	2
AEC	Ability Enhancement Compulsory Courses	1
VE	Value Educations	1
	Internship	1
PEC	Professional Enhancement Course	1
SLC	Self-Learning Course	1

SECOND YEAR – SEMESTER – III

Course Code	Course Name	Category	L	T	P	S	Credits	Hours	Marks		
									CIA	External	Total
24PCCC31	TAXATION	Core	6	0	0	0	5	6	25	75	100
Learning Objectives											
LO1	To identify deductions from gross total income of persons other than individual										
LO2	To compute taxable income for different classes of persons other than individual										
LO3	To understand the procedure for filing of returns and tax planning										
LO4	To assess Goods and Services Tax and Assessment of GST										
LO5	To compute customs duty as per Customs Act										
Unit	Content										Hours
1	Deductions (other than Individual) Deductions to be made in computing total income of persons other than individual - (80G, 80GGB & 80GGC, 80IA, 80IAB, 80IAC, 80IB, 80IBA, 80ID, 80IE, 80JJA, 80JAA, 80LA, 80M, 80P, 80PA) – Theory and Problems										18
2	Assessment of persons (other than Individual) Assessment of Firms, AOP, BOI, Company and Co-operative society - Problems										18
3	Tax Returns and Tax planning Return of income: Statutory obligation, Return Forms, Time for filing of return, Revised return, Modified return–Assessment -Tax Deducted at Source - Advance payment of Tax - Tax planning, Tax avoidance and Tax evasion – Theory only										18
4	Goods and Services Tax Goods and Services Tax: GST Act, 2017 – Important Definitions - Registration – Procedure for registration under Schedule III – Amendment of registration – Rates of Tax of IGST, CGST, SGST/UGTST- Assessment of GST- Self assessment – Provisional assessment – Scrutiny of returns – Assessment of non-filers of returns – Assessment of unregistered persons – Assessment in certain special cases – Tax Invoice – Credit and Debit Notes – Input Tax Credit- Anti profiteering- Theory only										18
5	Customs Act, 1962 Customs Act, 1962: Important Definitions – Basics – Importance of Customs Duty – Constitutional authority for levy of Customs Duty – Types of Customs 61 Duty – Prohibition of Importation and Exportation of goods – Valuation of goods for Customs Duty – Transaction Value – Assessable Value – Computation of Assessable Value and Customs Duty – Simple Problems and Theory										18

CO	Course Outcomes Students will be able to:
CO1	Apply the provisions of income tax to determine taxable income of person other than individual.
CO2	Evaluate the various types of taxes assessment.
CO3	Illustrate the methods of tax returns and tax planning
CO4	Apply the provisions of GST
CO5	Summarize the provisions of Customs Act

TEXT BOOK

1.	D.P Guar & Narang, Income tax Law and practice,
2.	Dr.T.Srinivasan, Income Tax Law and Practice
3.	Balachandran V, (2021) Textbook of GST and Customs Law, Sultan Chand and Sons, New Delhi (Unit (4& 5)

REFERENCE BOOKS

1.	Sha R.G. and Usha DeviN.,(2022) “Income Tax” (Direct and Indirect Tax), Himalaya Publishing House, Mumbai.
2.	Anurag Pandey, “Law & Practices of GST and Service Tax”- Sumedha Publication House, New Delhi..
3.	Swetha Jain, GST Law & Practice, Taxmann Publishers Pvt. Ltd, Chennai.
4.	Girish Ahuja and Ravi Gupta, “Practical Approach to Direct and Indirect Taxes: Containing Income Tax and GST”, Wolters Kluwer India Private Limited

WEB RESOURCES

1.	https://www.icsi.edu/media/webmodules/Final_Direct_Tax_Law_17_12_2020.pdf
2.	https://www.icsi.edu/media/webmodules/16112021_Advance_Tax_Laws.pdf
3.	https://www.icsi.edu/media/webmodules/TL_Final_pdf_25102021.pdf

Mapping with Programme Outcomes and Programme Specific Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	3	3	3	3	3	3	3	3	2	3
CO2	3	3	3	3	3	3	3	3	2	2	3
CO3	3	3	3	3	2	2	3	3	3	2	3
CO4	3	3	2	2	3	3	3	3	3	2	3
CO5	3	3	3	3	3	3	3	3	3	3	3
TOTAL											
AVERAGE											

3 – Strong, 2- Medium, 1- Lo

SECOND YEAR – SEMESTER – III

Course Code	Course Name	Category	L	T	P	S	Credits	Hours	Marks		
									CIA	Ext	Total
24PCCC32	RESEARCH METHODOLOGY	Core	3	1	2	-	5	6	25	75	100
Learning Objectives											
LO1	To enhance the understanding the basics of Research Methodology										
LO2	To extend the knowledge of Data Collection and Sampling.										
LO3	To facilitate the students to have the deep understanding of Processing of Data										
LO4	To inculcate knowledge of data Analysis through Statistical Tools.										
LO5	To make the student to write the Research Report and know the basic knowledge of SPSS										

Unit	Content	Hours
I	INTRODUCTION Research - definition, characteristics, nature and scope. Various types of research - Formulation of research problem - Major steps in Research – Hypothesis – Research Design - Uses of social research.	15
II	SAMPLING AND DATA COLLECTION Sampling: Meaning, definition, need and types - Merits and demerits of sampling. Data collection: Sources of data; Primary and Secondary data. Procedure for data collection, Tool of data collection – Methods of Data Collection-Questionnaire – Interview-Schedule.	15
III	DATA PROCESSING AND ANALYSIS Processing of data: Editing, Coding and Tabulation - Problems - use of computer in social research. Analysis of data: Statistical analysis; Diagrammatic and Graphic Representation. Interpretation of results.	20
IV	STATISTICAL APPLICATIONS Statistical Tools used in Research – F test – t- Test, Analysis of Variance (ANOVA) – Chi-Square Analysis.(Problems)	20
V	RESEARCH REPORTS Structure and components - Types of Research Report, Good Research Report. Pictures and Graphs. Introduction to SPSS Package	20

Theory 80% Problem 20%

Course Outcome	
Student can able to “:	
CO1	Understand the basics of Research Methodology.
CO2	Know the Data Collection Methods and Sampling Types
CO3	Process Data collected through various representation
CO4	Do the data Analysis through opt Statistical Tools
CO5	Write the Research Report and Basic knowledge on SPSS Package
Textbooks	
1	Kothari.C.R. Research Methodology - Methods & Technology, New Age International Publisher, New Delhi.
2	Panneerselvam. R. Research Methodology, Prentice Hall of India, New Delhi, 2004.New Delhi, 1994.
3	Gupta, C.B., An introduction to Statistics Methods, Vikas Publishing House, 1998, New Delhi
Reference Book	
1	Wilkinson. T.S. & Bhandarkar. P.L. Methodology and Techniques of Social Research, Himalaya Publishing House, 2000, Mumbai.
2	Young, P.V., Scientific Social Survey and Research, Prentice Hall, 1949. New York.
3	Gupta, S.P. Statistical Methods, Sultan Chand and sons, 1999, New Delhi

Mapping of Course outcomes with POs and PSOs

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	3	3	3	1	1	2	3	3	3	2
CO2	3	3	3	3	1	1	2	1	1	3	2
CO3	3	3	3	3	1	1	2	1	1	3	1
CO4	3	3	3	3	1	1	2	1	1	3	2
CO5	3	3	3	3	1	1	2	3	1	3	2
Total	15	15	15	15	5	5	10	9	7	15	9
Average	3	3	3	3	1	1	2	1.8	1.4	3	1.8

3 – Strong, 2- Medium, 1- Low

SECOND YEAR – SEMESTER – III

Course Code	Course Name	Category	L	T	P	S	Credits	Hours	Marks		
									CIA	External	Total
24PCCC33	HUMAN RESOURCE MANAGEMENT	Core	5	0	0	0	4	5	25	75	100
Learning Objectives											
LO1	To understand HRM, HR manager, roles and responsibilities, trends.										
LO2	To understand planning, selection process and strategies, talent management.										
LO3	To analyse training, development and Appraisal Methods.										
LO4	To familiarize with compensation and benefits management.										
LO5	To understand grievance handling and AI in HRM										
Unit	Content									Hours	
1	Introduction to Human Resource Management Concept and Scope of HRM- Objectives and Functions of HRM- Role and Responsibilities of HR Managers- Emerging Trends and Challenges in HRM									18	
2	Talent Acquisition and Management Human Resource Planning- Recruitment and Selection Strategies– on boarding and Induction Process- Employee Retention and Talent Management									18	
3	Training and Development Training and Development Strategies- Career Planning and Management - Performance Appraisal Methods and Techniques- 360-Degree Feedback									18	
4	Compensation and Benefits Management Wage and Salary Administration- Incentive and Reward Systems- Employee Benefits and Services- Payroll Management									18	
5	Employee Redressal and Technology in HRM Grievance Handling and Disciplinary Procedures– Compliance Handling- Strategies for Promoting Positive Employee Relations – Technology and use of AI in HRM.									18	

CO	Course Outcomes students will be able to :
CO1	Appreciate of the role of Human Resource Management and explore recent trends in HRM
CO2	Possess the skill set required by today's HR professionals, enabling them to make appropriate staffing decisions, including recruitment and selection
CO3	Analyse training, development techniques, career development methods and appraisal methods.
CO4	Provide innovative solutions to problems related to wages and employee benefit services.
CO5	Solve employee grievances and use of AI in HRM

TEXT BOOK	
1.	Human resource management, K.Aswathappa, Sadhna dash
2.	Shashi K. Gupta & Rosy Joshi, Human Resource Management, Kalayani Publisher 1st Edition, 2018
REFERENCE BOOKS	
1.	Steve Brown, HR on Purpose: Developing Deliberate People Passion, Society for Human Resource Management, 1st Edition, 2017
2.	Bernard Marr, Data-Driven HR: How to Use Analytics and Metrics to Drive Performance, Kogan Page, 1st Edition, 2018
3.	Kirs Wayne Cascio and John Boudreau, Investing in People: Financial Impact of Human Resource Initiatives, Prentice Hall, 2nd Edition, 2015
WEB RESOURCES	
1	https://www.opentextbooks.org.hk/system/files/export/32/32088/pdf/Human_Resource_Management_32088.pdf
2	https://www.sscasc.in/wp-content/uploads/downloads/BBM/Human-Resource-Management.pdf
3	https://ddceutkal.ac.in/Downloads/UG_SLM/Commerce/Elective_1.pdf

Mapping with Programme Outcomes and Programme Specific Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	3	1	1	0	1	1	1	3	3	3
CO2	3	3	3	2	1	1	1	1	2	3	2
CO3	3	2	3	3	2	2	2	3	3	2	3
CO4	3	2	3	2	2	2	3	3	2	3	3
CO5	3	3	2	2	2	2	2	2	3	2	3
TOTAL	15	13	12	10	7	8	9	10	13	13	14
AVERAGE	3	2.6	2.4	2	1.4	1.6	1.8	2	2.6	2.6	2.8

3 – Strong, 2- Medium, 1- Low

SECOND YEAR - SEMESTER - III

Course Code	Course Name	Category	L	T	P	S	Credits	Hours	Marks		
									CIA	External	Total
24PCCC34	PYTHON AND R PROGRAMMING	SEC	4	0	0	0	3	4	25	75	100
Learning Objectives											
LO1	To understand the basics of Python										
LO2	To learn the concepts of Numpy and Scipy										
LO3	To understand the features of R										
LO4	To understand using visualisation using R										
LO5	To learn data handling										
Unit	Content									Hours	
1	Introduction to Python Introduction to Python - Variables - Types - Strings - Jupiter notebooks - Objects - Functions - Control structures - Operators - User-Defined Functions - Data Structures - List, Tuple - Dictionary.									12	
2	Numpy and Scipy Numpy library – Ndarray - Basic Operations - Conditions and Boolean Arrays - Shape Manipulation - Array Manipulation - General Concepts - Structured Arrays - Reading and Writing Array on Files - SciPy Library for Statistics.									12	
3	R Programming Introduction to R - Installing R - Features of R - Reserved words - Operators, -Strings - Data types and operations - Basic Data types – Vectors - List, Matrices – Arrays - Factors - Data frames - Flow control - Decision making - Loop Control Statements.									12	
4	Visualisation using R R as a Deluxe Calculator - Creating Objects and Assigning Values - Graphics: Simple Plotting - Advanced Plotting - Using Color in Plots - Using Subscripts and Superscripts in Graph Labels - Interactive Graphics - Saving Graphical Output - Loops.									12	
5	Data Handling Feature selection models - Data Preprocessing - Normalization - Methods - Data reduction - Data sampling - Heat maps - Classification: Based on analogy - rules - probabilities - statistics and prediction with R.									12	

CO	Course Outcomes
CO1	Describe the basics of Python
CO2	Explain the necessity for programming in biology
CO3	Apply R programming
CO4	Describe the concepts of visualization using R
CO5	Discuss Data handling

TEXT BOOK	
1.	Fabio Nelli (2018), "Python Data Analytics with Pandas, Numpy and Matplotlib", 2nd Edition, Apress, New York.
2.	Wes McKinney, "Python for Data Analysis", 2nd Edition, O'Reilly publication, USA.
3.	Jeeva Jose (2018), "Beginner's Guide for Data Analysis using R Programming", Khanna Book Publishing Co. Ltd., New Delhi.
4.	Norman Matloff (2011), "The Art of R programming - A tour of statistical software design", 1st Edition, No Starch Press, USA.
REFERENCE BOOKS	
1.	Mark Lutz (2009), "Learning Python", O'Reilly Media Publication, USA.
2.	Martin C Brown (2001), "Python: The Complete Reference". McGraw-Hill Media, USA.
3.	Gentleman R, Carey V.J, Huber W, Irizarry, RA, and Dudoit, S, "Bioinformatics and Computational Biology Solutions Using R and Bioconductor", Springer, New York.
WEB RESOURCES:	
1.	www.sthurlow.com/python/
2.	www.learnpython.org
3.	www.codecademy.com/en/tracks/pytho

Mapping of course outcomes with POs and PSOs

	POs						PSOs		
	1	2	3	4	5	6	1	2	3
CO1	1	1	2	2	1	2	1	2	2
CO2	2	2	2	2	12	2	1	2	2
CO3	3	3	3	3	1	2	1	2	2
CO4	3	3	3	3	2	3	2	3	3
CO5	3	3	3	3	2	3	2	3	3
					Strong-3	Medium-2	low-1		

SECOND YEAR - SEMESTER - III

Course Code	Course Name	Category	L	T	P	S	Credits	Hours	Marks		
									CIA	External	Total
24PCCE31	ENTERPRISE RESOURCE PLANNING	EC	4	0	0	0	3	4	25	75	100
Learning Objectives											
LO1	To learn the history and growth of ERP										
LO2	To Explore the risks while using ERP										
LO3	To gain knowledge on the various ERP technologies										
LO4	To learn the dynamics of ERP marketplace										
LO5	To choose appropriate ERP solutions or packages										
Unit	Content									Hours	
1	Enterprise an Overview Business Functions and Business Processes - Integrated Management Information - Business Modelling - Integrated Data Model. Business Processes: Major Business Processes. Introduction to ERP: Common ERP Myths - A Brief History of ERP - Reasons for the Growth of ERP Market - Advantages of ERP.									12	
2	Risk of ERP People Issues - Process Risks - Technological Risks - Implementation Issues-Operation and Maintenance Issues - Unique Risks of ERP Projects - Managing Risks on ERP Projects - Benefits of ERP.									12	
3	ERP and Related Technologies Business Process Reengineering (BPR) - Business Intelligence (BI) - Business Analytics (BA) - Data Warehousing- Data Mining - On - Line Analytical Processing (OLAP) - Product Life Cycle Management (PLM) - Supply Chain Management (SCM) - Customer Relationship Management (CRM) - Geographic Information Systems (GIS) - Intranets and Extranets.									12	
4	ERP Market Place and Market Place Dynamics Market Overview - ERP Market Tiers. Market Place Dynamics - Industry - Wise ERP Market Share - ERP: The Indian Scenario. Business Modules of an ERP Package: Functional Modules of ERP Software: Integration of ERP, Supply Chain, and Customer Relationship Applications.									12	
5	ERP Implementation Benefits of Implementing ERP - Implementation Challenges. ERP Implementation Life Cycle: Objectives of ERP Implementation - Different Phases of ERP Implementation Reasons for ERP Implementation Failure. ERP Package Selection: ERP Package Evaluation and Selection - The Selection Process - ERP Packages: Make or Buy.									12	

CO	Course Outcomes
CO1	Recall the history and growth of ERP
CO2	Appraise the risks involved while using ERP
CO3	Asses various ERP technologies
CO4	Analyse the dynamics of ERP marketplace
CO5	Distinguish and choose appropriate ERP solutions or packages

TEXT BOOK	
1.	Alexis Leon (2008), “Enterprise Resource Planning”, 2nd edition, Tata McGraw-Hill, Noida.
2.	Jagan Nathan Vaman (2008), “ERP in Practice”, Tata Mc Graw-Hill, Noida.
3.	Mahadeo Jaiswal and Ganesh Vanapalli (2009), “ERP”, Macmillan India, Noida
REFERENCE BOOKS	
1.	Sinha P. Magal and Jeffery Word (2012), “Essentials of Business Process and 27 Information System”, Wiley India, USA.
2.	Summer (2008), “ERP”, Pearson Education, Noida.
3.	Vinod Kumar Grag and N.K. Venkitakrishnan (2006), “ERP- Concepts and Practice”, Prentice Hall of India, New Delhi.

Mapping of course outcomes with POs and PSOs

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	2	1	2	2	3	3	2	1	3	3	3
CO2	3	3	2	3	3	3	2	2	3	3	3
CO3	3	3	2	3	3	3	2	2	3	3	3
CO4	3	3	2	3	3	3	2	1	3	3	3
CO5	3	3	2	3	3	3	2	1	3	3	3
TOTAL	14	13	10	14	15	15	10	12	15	15	15
AVERAGE	2.8	2.6	1.5	2.8	3	3	1.5	2.4	3	3	3

3 – Strong, 2- Medium, 1- Low

SECOND YEAR - SEMESTER - III

Course Code	Course Name	Category	L	T	P	S	Credits	Hours	Marks		
									CIA	External	Total
24PCCE32	INTERNATIONAL BUSINESS	EC	4	0	0	0	3	4	25	75	100
Learning Objectives											
LO1	To understand the concepts of International Business and International Business Environment.										
LO2	To analyse the different theories of International Business.										
LO3	To understand the legal procedures involved in International Business.										
LO4	To evaluate the different types of economic integrations.										
LO5	To analyse the operations of MNCs through real case assessment										
Unit	Content									Hours	
1	Introduction International business: Meaning – nature- concepts – international trade – analyzing the business environment – types – Micro and Macro environment: Role of Political environment- role of social – cultural environment- role of economic environment in international business									12	
2	Theoretical Foundations of International business Theoretical Foundations of International Business: Theory of Mercantilism- Theory of Absolute and Comparative Cost Advantage- Haberler’s Theory of Opportunity Cost- Heckscher- Ohlin Theory Market Imperfections Approach-Product Life Cycle Approach - Transaction Cost Approach-Dunning’s Eclectic Theory of International Production.									12	
3	Legal framework of International Business Legal framework of International Business: Nature and complexities: Code and common laws and their implications to Business- International Business contract- Legal provisions, Payment terms.									12	
4	Multi-Lateral Agreements and Institutions Multi-Lateral Agreements and Institutions: Economic Integration: Developed and Developing Countries-NAFTA- EU-SAARC, ASEAN BRICS- OPEC-Promotional role played by IMF-World Bank and its affiliates- IFC, MIGA and ICSID – ADB Regulatory role played by WTO and UNCTAD.									12	
5	Multinational Companies (MNCs) and Host Countries Multinational Companies (MNCs) and Host Countries: MNCs – Nature and characteristics- Management Practices - Host Country Government Policies-International Business and Developing countries: Motives of MNC operations in Developing- Countries – Challenges posed by MNCs									12	

CO	Course Outcomes
	On the successful completion of the course, student will be able to:
CO1	Recall the concepts of International Business and International Business Environment
CO2	Analyze different theories of International Business
CO3	Evaluate the legal procedures involved in International Business.
CO4	Explain the different types of economic integrations.
CO5	Identify the operations of MNCs through real case assessment

TEXT BOOK

1.	Charles W.L. Hill, International Business: Competing in the Global Market Place, McGraw Hill, New York
2.	Charles W. L. Hill, Chow How Wee & Krishna Udayasankar, International Business: An Asian Perspective- McGraw Hill, New York

REFERENCE BOOKS

1.	Donald Ball, Michael Geringer, Michael Minor & Jeanne McNett, International Business: The Challenge of Global Competition, McGraw Hill Education, New York
2.	Alan M Rugman & Simon Collinson, International Business: Pearson Education, Singapore

WEB RESOURCES

1	https://www.icsi.edu/media/webmodules/publications/9.5%20International%20Business.pdf
2	https://ebooks.lpude.in/commerce/mcom/term_3/DCOM501_INTERNATIONAL_BUSINESS.pdf
3	3. https://www.shobhituniversity.ac.in/pdf/econtent/International-Business-Unit-1-DrNeha-Yajurvedi.pdf

Mapping with Programme Outcomes and Programme Specific Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	1	3	1	2	2	2	2	3	3	1	2
CO2	3	2	3	1	3	3	3	3	2	2	1
CO3	2	1	2	3	2	2	3	2	3	3	3
CO4	1	3	1	2	1	1	2	2	2	2	2
CO5	3	2	2	2	2	2	2	2	1	1	1
TOTAL	10	11	9	10	10	10	12	12	11	9	9
AVERAGE	2	2.2	1.8	2	2	2	2	2.4	2.2	1.8	1.8

3 – Strong, 2- Medium, 1- Low

SECOND YEAR - SEMESTER - III

Course Code	Course Name	Category	L	T	P	S	Credits	Hours	Marks		
									CIA	External	Total
24PCCS31	INTRODUCTION TO INDUSTRY 4.0	SEC	2	0	0	0	2	2	25	75	100
Learning Objectives											
LO1	To comprehend the change from industry 1.0 to 4.0 .										
LO2	To gain knowledge on the challenges and future prospects of applying artificial intelligence										
LO3	To learn the applications of big data for industrial growth and development										
LO4	To understand the applications of IoT in various sectors										
LO5	To understand why education has to be aligned with industry 4.0										
Unit	Content									Hours	
1	Introduction Industry: Meaning, Types - Industrial Revolution: Industrial Revolution 1.0 to 4.0: Meaning, Goals and Design Principles - Technologies of Industry 4.0 - Big Data – Artificial Intelligence (AI) – Industrial Internet of Things - Cyber Security – Cloud – Augmented Reality.									6	
2	Artificial Intelligence Artificial Intelligence (AI): Need, History and Foundations -The AI - environment - Societal Influences of AI – Application Domains and Tools - Associated Technologies of AI - Future prospects of AI – Challenges of AI.									6	
3	Big Data Evolution - Data Evolution - Data: Terminologies - Essential of Big Data in Industry 4.0 - Big Data Merits and Limitations - Big Data Components- Internet of Things (IoT): Introduction to IoT – Architecture of IoT Technologies for IoT - Developing IoT Applications - Applications of IoT - Security in IoT.									6	
4	Applications of IoT IoT in Manufacturing – Healthcare – Education – Aerospace and Defence – Agriculture – Transportation and Logistics – Impact of Industry 4.0 on Society: Impact on Business, Government, People - Tools for Artificial Intelligence - Big Data and Data Analytics - Virtual Reality - Augmented Reality –IoT - Robotics.									6	
5	Industry 4.0 Education 4.0 – Curriculum 4.0 – Faculty 4.0 – Skills required for Future - Tools for Education – Artificial Intelligence Jobs in 2030 – Jobs 2030 - Framework for aligning Education with Industry 4.0.									6	

CO	Course Outcomes
	Students will be able
CO1	Changes from industry 1.0 to 4.0.
CO2	Discover the challenges and future prospects of applying artificial intelligence.
CO3	Apply big data for industrial growth and development.
CO4	Apply IoT in various sectors like Manufacturing, Healthcare, Education, Aerospace and Défense.
CO5	Appraise why education has to be aligned with industry 4.0.

TEXT BOOK

1.	Seema Acharya J, Subhashini Chellappan, (2019) “Big Data and Analytics”, 2nd Edition, Wiley Publication, New Delhi. (Unit 3)
2.	Russel S, Norvig P (2010), “Artificial Intelligence: A Modern approach”, 3 rd Edition, Prentice Hall, New York (Unit II)
3.	Pethuru Raj and Anupama C. Raman, (2017), "The Internet of Things: Enabling Technologies, Platforms, and Use Cases" ,Auerbach Publications (Unit 4 & 5)

REFERENCE BOOKS

1.	Judith Hurwitz, Alan Nugent, Fern Halper, Marcia Kaufman, “Big Data for Dummies”, John Wiley & Sons, Inc.
2.	2. Nilsson (2000), Artificial Intelligence: A new synthesis, Nils J Harcourt Asia PTE Ltd.

WEB RESOURCES:

	https://sist.sathyabama.ac.in/sist_coursematerial/uploads/SEEA1403.pdf
	https://library.oopen.org/bitstream/handle/20.500.12657/43836/external_content.pdf
	https://www.vssut.ac.in/lecture_notes/lecture1428643004.pdf

Mapping of course outcomes with POs and PSOs

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	2	1	2	2	3	3	2	1	3	3	3
CO2	3	3	2	3	3	3	2	2	3	3	3
CO3	3	3	2	3	3	3	2	2	3	3	3
CO4	3	3	2	3	3	3	2	1	3	3	3
CO5	3	3	2	3	3	3	2	1	3	3	3
TOTAL	14	13	10	14	15	15	10	12	15	15	15
AVERAGE	2.8	2.6	1.5	2.8	3	3	1.5	2.4	3	3	3

3 – Strong, 2- Medium, 1- Low

SECOND YEAR - SEMESTER IV

Course Code	Course Name	Category	L	T	P	S	Credits	Hours	Marks		
									CIA	External	Total
24PCCC41	ACCOUNTING FOR MANAGERIAL DECISIONS	CC	3	1	2	0	5	6	25	75	100
Learning Objectives											
LO1	To enhance the understanding of the Accounting for Decision making.										
LO2	To extend the knowledge of Ratio Analysis										
LO3	To facilitate the students to have the deep understanding Cash flow and Fund Flow statements										
LO4	To bring about the awareness of Absorption and Marginal Costing. To bring knowledge towards Budgeting and Budgetary Control										
LO5	To know about financial decisions.										
Unit	Content										Hours
1	Accounting for Decision making Introduction- Characteristics - Scope and Importance –Functions – Advantages and Disadvantages of Decision Accounting – Decision Accounting vs. Financial Accounting and Cost Accounting										15
2	Ratio Analysis Financial and Investment analysis - Analysis and Interpretation - Ratio Analysis.-										23
3	Cash Flow and Fund Flow Analysis Introduction- Construction and analysis of Fund flow and Cash flow statements										22
4	Absorption and Marginal Costing& Budgeting and Budgeting Control Absorption and Marginal Costing - Cost - volume-profit analysis - Applications and techniques: Key factor, Make/Buy decision, Export decision and Plant merger decision and Other Decisions. Budgeting and budgetary control - Functional Budgets- Master Budget –Fixed Budget - Flexible budgeting - Zero Base Budgeting										20
5	Financial decisions Introduction to Financial Decisions, Meaning and Types -Capital Structure - Theories Net Income Approach Net Operating Income Approach Traditional Approach Modigliani & Miller (MM) Theories, Financial Leverage, Operating Leverage and Combined Leverage.										20

Theory20%Problem80%

CO	Course Outcomes
	The students can able to
CO1	Understand the concept of Accounting for Decision making
CO2	Understand the Ratio Analysis.
CO3	Know the analysis of Fund flow and cash flow statements
CO4	Elucidate the Marginal Costing, Applications and its techniques. Knowledge about Budgeting and Budgetary Control
CO5	Analyze Various the financial decisions Making.
Textbooks:	
1	Management Accounting and Financial Control - S.N.Maheswari, Sultan Chand & sons, New Delhi
2	Accounting for Managerial Decisions by Dr.K.L.Gupta, Sathiya Bhawan Publications
3	Management Accounting, Pandey, I.M., Vani Publication, Delhi.
Reference Books:	
1	Management Accounting - Man Mohan and Goyal.
2	Management Accounting - Hingorani and Ramanathan.
3	Management Accounting - Charles Horngren.
Web resources:	
1	https://study.com/learn/lesson/cost-accounting-principles-examples-what-is-cost-accounting.html
2	https://efinancemanagement.com/financial-management/types-of-financial-decisions
3	https://www.accountingnotes.net/companies/fund-flow-analysis/fund-flow-analysis-accounting/13300
4	https://www.investopedia.com/terms/m/marginal-cost-of-production.asp
5	https://www.taxmann.com/post/blog/financial-management-financial-capital-structure

Mapping with Programme Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	3	3	3	3	2	3	3	3	2	3
CO2	3	3	3	3	2	3	3	3	2	3	3
CO3	2	3	2	3	3	3	2	3	3	3	3
CO4	3	3	3	3	2	3	2	3	2	3	3
CO5	2	3	3	3	3	2	3	3	3	3	3
Total	13	15	14	15	13	14	13	15	13	14	15
Average	2.6	3	2.8	3	2.6	2.8	2.6	3	2.6	2.8	3

3– Strong,2-Medium, 1-Low

SECOND YEAR - SEMESTER IV

Course Code	Course Name	Category	L	T	P	S	Credits	Hours	Marks		
									CIA	External	Total
24PCCC42	CORPORATE AND ECONOMICS LAWS	CC	6	0	0	0	5	6	25	75	100
Learning Objectives											
LO1	To analyse current and capital account transactions and deal with foreign currency under FEMA Act										
LO2	To understand unethical competitive practices and forums for redressal of consumer disputes under Competition Act and Consumer Protection Act										
LO3	To understand the procedure for obtaining patents and copyright under The Copyright and Patents Act										
LO4	To evaluate offences and punishment for money laundering under Prevention of Money Laundering Act										
LO5	To explain the registration and related procedures under Real Estate Act										
Unit	Content									Hours	
1	Introduction to Foreign Exchange Management Act, 1999 Foreign Exchange Management Act, 1999: Introduction – Definitions – Current Account transactions – Capital Account transactions – Remittance of assets – Possession and retention of foreign currency or foreign coins – Authorised person – Adjudication and Appeal.									18	
2	Competition Act, 2002 and Consumer Protection Act, 2019 Competition Act, 2002: Objective – Prohibition of Agreements, Prohibition of Abuse of Dominant Position - Regulation of combinations - Competition Commission of India: Duties, Powers and Functions of Commission. The Consumer Protection Act, 2019: Objects; Rights of consumers – Consumer Dispute Redressal Commissions - Consumer protection councils – Appeal against orders.									18	
3	Law relating to intellectual property rights Law relating to intellectual property rights: Introduction - The Copyright Act, 1957: Works in which copyright subsist - Ownership of copyright and the rights of the owner Assignment of copyright - Disputes with respect to assignment of copyright - Term of copyright - Registration of copyright - Infringement of copyright. The Patents Act, 1970: Inventions not patentable - Applications for patents – Publication and examination of applications - Grant of patents and rights conferred - Register of patents. Trademarks Act, 1999: Conditions for registration - Procedure for and duration of registration - Effect of									18	

	registration - Collective marks.	
4	Prevention of Money Laundering Act, 2002 Prevention of Money Laundering Act, 2002: Offence of money laundering –Punishment for money laundering – Attachment, adjudication and confiscation - Obligations of Banking Companies, Financial Institutions and Intermediaries – Summons, Search and Seizure –Appellate Tribunal..	18
5	Real Estate (Regulation and Development) Act, 2016 Real Estate (Regulation and Development) Act, 2016: Introduction - Salient features of the Act - Registration of Real Estate Project – Registration of Real Estate agents – Functions and duties of promoter – Rights and duties of Allottees – Offences, penalties and adjudication – Specimen agreement for sale to be executed between the promoter and the allottee.	18

CO	Course Outcomes
	After Completing the course, students will be able to:
CO1	Recall important provisions of FEMA
CO2	Evaluate the provisions of the Competition Act, 2002 and Consumer Protection Act to govern commercial competition and protect a consumer
CO3	Recall the process relating to obtaining copyrights and patents.
CO4	Examine the provisions of Money Laundering Act
CO5	Analyse the provisions relating to regulation of real estate.

Textbooks:	
1	1. MunishBandari (2022), A Textbook on Corporate and Economic Laws, 33rd Edition, Bestword Publications, New Delhi
2	AmitVohra and RachitDhingra (2022), Economic, Business and Commercial Laws, 18th Edition, Bharat Book House, Siliguri
3	AnkajGarg (2021), Taxmann’s Corporate and Economic Laws, 7th Edition, Taxmann Publications., New Delhi
Reference Books:	
1	Sekar G and SaravanaPrasath B (2022), Students’ Handbook on Corporate and Economic Law, Commercial Law Publishers (India) Pvt.Ltd., New Delhi
2	Taxmann (2021), FEMA & FDI Ready Reckoner, 15th Edition, Taxmann Publications, New Delhi
3	AhujaV.K. and ArchaVashishtha (2020), Intellectual Property Rights (contemporary Developments), Thomson Reuters, Toronto, (CAN)
Web resources	
1	https://resource.cdn.icai.org/68524bos54855-cp2.pdf
2	https://resource.cdn.icai.org/67335bos54154-m3cp3.pdf
3	https://resource.cdn.icai.org/68523bos54855-cp1.pdf

Mapping with Programme Outcomes and Programme Specific Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	3	2	2	3	3	3	2	3	2	1
CO2	3	3	3	2	2	3	2	2	3	1	2
CO3	3	3	2	2	2	3	2	2	3	2	1
CO4	3	3	3	3	3	3	3	2	3	1	1
CO5	3	3	2	2	3	3	3	2	3	2	2
TOTAL	15	15	12	11	13	15	13	10	15	8	7
AVERAGE	3	3	2.4	2.2	2.6	3	2.6	2	3	1.6	1.4

3 – Strong, 2- Medium, 1- Low

SECOND YEAR - SEMESTER IV

Course Code	Course Name	Category	L	T	P	S	Credits	Hours	Marks		
									CIA	External	Total
24PCCE41P	PROGRAMMING WITH JAVA LAB	EC	-	-	6	-	4	6	25	75	100
Learning Objectives											
LO1	To gain the knowledge of Datatypes, Operators and Control statements.										
LO2	To understand the concepts of Classes and objects and Constructor.										
LO3	Describe the concept of inheritance, Arrays and String Handling methods										
LO4	To understand the concepts of Exception Handling, Multithreading and AWT Controls										
LO5	To gain the knowledge of Crud Operation, TCP and UDP Sockets and GUI Concepts										
List of Programs									Hours		
1.Handling Primitive Data types, Operators and Control statements									90		
2.Creating Application using Classes and objects, Copy Constructor											
3.Developing Package, inheritances and interfaces											
4.Implementing Arrays and String Handling methods											
5.Exception Handling and I/O File handling											
6.Implementing Multithreading											
7.Applet and AWT Controls											
8.CRUD operation Using JDBC											
9.Client Server using TCP and UDP Socket											
10.GUI application with JDBC											

CO	Course Outcomes
	After Completing the course, students will be able to
CO1	Recognize and understand the concepts of Control statements
CO2	Learn the methods of Constructor.
CO3	To implement the concept of Arrays and String Handling methods.
CO4	Able to write programs in Exception Handling and methods,AWT Controls.
CO5	To understand the concepts of Crud Operation, TCP and UDP Sockets and GUI Concepts.

Textbooks:	
1	S. Sagayaraj, R. Denis, P. Karthik & D. Gajalakshmi, “Java Programming“, Universities Press, 2017
2	Java The complete reference, 9th edition, Herbert Schildt, McGraw Hill Education (India) Pvt. Ltd.
3	Understanding Object-Oriented Programming with Java, updated edition, T. Budd, Pearson Education.
4	The Complete Reference" by Herbert Schildt.
Reference Books:	
1.	Patrick Naughton & Herbert Schildt, “The Complete Reference: Java 2”, Tata McGraw Hill, 1999.
2.	K. Arnold and J. Gosling, “The JAVA programming language”, Third edition, Pearson Education, 2000.
3.	Timothy Budd, “Understanding Object-oriented programming with Java”, Updated Edition, Pearson Education,2000.
Web resources	
1	https://javabeginnerstutorial.com/core-java-tutorial
2	http://docs.oracle.com/javase/tutorial/
3	https://www.coursera.org/

Mapping with Programme Outcomes and Programme Specific Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	2	3	3	3	2	3	3	3	2	2
CO2	3	2	2	2	2	2	2	2	3	2	3
CO3	3	2	3	3	3	2	3	3	3	2	2
CO4	3	2	2	2	2	2	2	2	3	2	2
CO5	3	2	3	3	2	2	3	3	3	2	3
TOTAL	14	10	13	13	13	10	13	13	15	10	12
AVERAGE	2.8	2	2.6	2.6	2.6	2	2.6	2.6	3	2	2.4

3 – Strong, 2- Medium, 1- Low

SECOND YEAR - SEMESTER IV

Course Code	Course Name	Category	L	T	P	S	Credits	Hours	Marks		
									CIA	External	Total
24PCCE42P	PYTHON PROGRAMMING LAB	EC	-	-	6	-	4	6	25	75	100
Learning Objectives											
LO1	To Understand the basics of Python Working with Number and String Operations.										
LO2	To study about the Tuples, Sets and Dictionaries in Python.										
LO3	To Understand and apply the concepts List Operation.										
LO4	To identify and understand the concepts of Flow Control and Function in Python and Modules and Packages.										
LO5	To understand using Object Oriented and File Handling and Exception in Python.										
List of the Programs									Hours		
1. Write a Python Program Working with Numbers.									90		
2. Write a Program using String Operations.											
3. Write a Program using Tuples and Set.											
4. Write a Program using Implementation of Dictionaries.											
5. Write a Program using List Operation.											
6. Write a Program using Flow Control and Function.											
7. Write a Program using Modules and Package.											
8. Write a Program using File Handling											
9. Write a Program using Object Oriented Programming											
10. Write a Program using Exception Handling and Regular Expression											

CO	Course Outcomes
	After Completing the course, students will be able to
CO1	Describe the basics of Python Numbers and String Operations
CO2	Describe the concept of Tuples, Sets and Dictionaries
CO3	To make the students aware of Analyze the List Operations in Python
CO4	Able to write programs in Python using Flow Control and Function
CO5	To understand the concepts of Object Oriented and File Handling and Exception in Python.

Textbooks:	
1	1 Fabio Nelli (2018), "Python Data Analytics with Pandas, Numpy and Matplotlib", 2nd Edition, Apress, New York.
2	Wes McKinney, "Python for Data Analysis", 2nd Edition, O'Reilly publication, USA.
3	Jeeva Jose (2018), "Beginner's Guide for Data Analysis using R Programming", Khanna Book Publishing Co. Ltd., New Delhi.
4	Norman Matloff (2011), "The Art of R programming - A tour of statistical software design", 1st Edition, No Starch Press, USA.
Reference Books:	
1	Mark Lutz (2009), "Learning Python", O'Reilly Media Publication, USA.
2	Martin C Brown (2001), "Python: The Complete Reference". McGraw-Hill Media, USA.
3	Gentleman R, Carey V.J, Huber W, Irizarry, RA, and Dudoit, S, "Bioinformatics and Computational Biology Solutions Using R and Bioconductor", Springer, New York.
Web resources	
1	www.sthurlow.com/python/
2	www.learnpython.org
3	www.codecademy.com/en/tracks/pytho

Mapping with Programme Outcomes and Programme Specific Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	2	3	3	3	2	3	3	3	2	2
CO2	3	2	2	2	2	2	2	2	3	2	3
CO3	3	2	3	3	3	2	3	3	3	2	2
CO4	3	2	2	2	2	2	2	2	3	2	2
CO5	3	2	3	3	2	2	3	3	3	2	3
TOTAL	14	10	13	13	13	10	13	13	15	10	12
AVERAGE	2.8	2	2.6	2.6	2.6	2	2.6	2.6	3	2	2.4

3 – Strong, 2- Medium, 1- Low

SECOND YEAR - SEMESTER IV

Course Code	Course Name	Category	L	T	P	S	Credits	Hours	Marks		
									CIA	External	Total
24PCCP41	STOCK MARKET OPERATIONS	PEC	2	-	1	-	2	3	25	75	100
Learning Objectives											
LO1	To get students acquainted with the nature of stock market										
LO2	To learn the pattern of trading and settlement in stock market										
LO3	To understand the process of online trading and meaning of basic concepts										
LO4	To know and categorize the option contracts and its strategies										
LO5	To observe the psychology of trader in the stock market										
Unit	Content									Hours	
1	INTRODUCTION TO STOCK MARKET Capital and Stock Market – Stock Exchanges – NSE & BSE– Index–Types of Index- Demat Account & Trading Accounting– Brokerage and Taxation –Intraday Trading.									9	
2	TRADING & SETTLEMENT IN STOCK MARKET Patterns of Trading & Settlement – Speculations and its types – Brokerage – Settlement Procedures –National Securities Depository Ltd. (NSDL), Central Securities DepositoryLtd.(CDSL)									9	
3	ONLINE TRADING PROCESS Trading – Types of trading – Risk, Reward, Target, Stop Loss – Walk through of online trading–Lot Sizes – Minimum Losses and Maximum Profits Stop loss method to increase profits – Ledger Statement–Transaction History–Contract Notes									9	
4	OPTIONS TRADING Concepts of Options – Call Option – Put Option – In-the-money, At-the-money,Out-of-the-money – Option Valuation Basic Option trading strategies.									9	
5	TRADING PSYCHOLOGY News and Social Media –Attitude of a Trader–Wealth Creation through Trading –Successful trading in various market movements – Trading Routine									9	
Theory 80% Practical Exposure 20%											

***The Practical exposure should be handled through various activities involved in concerned industries day to day operations**

CO	Course Outcomes
	After Completing the course, students will be able to
CO1	Explain students acquainted with the nature of stock market
CO2	Analyse the pattern of trading and settlement in stock market
CO3	Analyse the process of online trading and meaning of basic concepts
CO4	Examine the option contracts and its strategies
CO5	Analyse the psychology of trader in the stock market

Textbooks:	
1	Prasanna Chandra, "Investment Analysis and Portfolio management", Tata Mc Graw Hill ,3 rd Edn.,2008.
2	PunithavathyPandian, "Security Analysis and Portfolio Management" , Vikas Publishing House Pvt. Ltd., Chennai,2021.
3	SecuritiesOperationsandRiskManagementbyNationalInstituteofSecuritiesMarker,2023.
Reference Books:	
1	V.A.Avadhani,InvestmentandSecuritiesMarketinIndia,HimalayaPublishingHouse,10 th edition, 2017
2	RaviPulianiandMaheshPuliani,ManualofSEBI,BharatLawHouse,Delhi,2017.
3	NCFM- Options Trading Strategies Module book, National Stock Exchange of India Ltd, 2009

Mapping with Programme Outcomes and Programme Specific Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	3	3	2	2	3	1	2	3	2	1
CO2	3	2	3	2	1	1	1	2	2	2	2
CO3	3	3	2	3	2	3	2	3	3	3	3
CO4	3	2	2	2	2	3	2	3	2	2	1
CO5	2	2	2	2	2	2	2	2	3	3	2
TOTAL	14	12	12	11	9	12	8	12	13	12	9
AVERAGE	2.8	2.4	2.4	2.2	1.8	2.4	1.6	2.4	2.6	2.4	1.8

3 – Strong, 2- Medium, 1- Low

SECOD YEAR – SEMESTER IV

Course Code	Course Name	Category	L	T	P	S	Credits	Hours	Marks		
									CIA	External	Total
24PCCL41	WOMEN ENTREPRENEURSHIP	SLC	2	0	1	0	2	3	25	75	100
Learning Objectives											
LO1	To acquaint students to understand the basic concepts of Women Entrepreneurship.										
LO2	To Identify the process of entrepreneurship										
LO3	To understand the concepts of women entrepreneurship										
LO4	To understand attempts to provide exposure of the Micro Finance, SHGs and Governmental support to Women Entrepreneurs										
LO5	To acquire knowledge on SHG and Micro finance available to Women Entrepreneurs.										
Unit	Content									Hours	
1	Entrepreneurship Concept of Entrepreneurship - Nature and Development of Entrepreneurship - Entrepreneurial decision process - Entrepreneurial traits – types - Culture and structure - competing theories of Entrepreneurship - Entrepreneurial motivation - Establishing Entrepreneurial Systems.									9	
2	Entrepreneurial Process Identifying and evaluation the opportunity - developing a business plan – resources required and the managing the enterprise. Strategic orientation - commitment to opportunity – resources - control of resource and management structure. Entrepreneurial Careers – education – training - Entrepreneurial Ethics.									9	
3	Women entrepreneurship Concept of Women Entrepreneurs, Importance of Women Entrepreneurship, Functions of Women Entrepreneurs, Typologies of Women Entrepreneurs, factors contributing to women entrepreneurship progress, Entrepreneurial skills and competency requirements for women entrepreneur, Problems of Women Entrepreneurs, Role Models of Woman Entrepreneurs, Women Entrepreneurship, Role of Women Entrepreneurs In India									9	
4	Role of financial institution in support of women entrepreneurial activities: SIDO, DIC, EDI, NAYE, NISIET, SIDBI, SEF, WCFC and									9	

	commercial banks, Long term and Short term finance. Web resources: NLSBUD, SEWA, ALEAP - Institutional infrastructure. Obstacles in Getting Financial Assistance by Institutions	
5	Self Help Group and Micro Finance: SHGs and different schemes, SHG and Poverty Alleviation Programs, SHG and Special Programs/ Schemes, Benefit of SHGs to women, Microfinance – An Introduction, Demand and Supply of Microfinance, Microfinance – A Development Strategy and an Industry, Role of Grameen Banks in Microfinance, Microfinance Approaches and Financial Inclusion, Impact of Microfinance on Empowerment of Women	9

CO	Course Outcomes After Completing the course, students will be able to
CO1	Acquire the students to understand the basic concepts of Women Entrepreneurship.
CO2	Insight into the pragmatism of business plan execution, product development and sources of funding.
CO3	Understand the concepts of women entrepreneurship
CO4	Attempts to provide exposure of the Micro Finance, SHGs and Governmental support to Women Entrepreneurs
CO5	Analyse the practices of SHG and Micro finance available to Women Entrepreneurs.

Textbooks:	
1	C. B. Gupta and S. S. Khanka; Entrepreneurship and Small Business Management; Sultan Chand & Sons, New Delhi.
2	C. B. Gupta and N. P. Srinivasan; Entrepreneurial Development in India; Sultan Chand & Sons, New Delhi
Reference Books:	
1	S. S. Kanka; Entrepreneurship Development; Sultan Chand & Sons, New Delhi.
2	C. S. V. Murty; Small Scale Industries and Entrepreneurial Development; Himalaya Publishing House, Mumbai.
3	Aruna Kaulgud; Entrepreneurship Management; Vikas Publications, New Delhi. 11. Chetan Kal(ed) Women and Development Discovery Publishing Home, New Delhi, 12. Journal of Women's Entrepreneurship and Education
4	Chetan Kal(ed) Women and Development Discovery Publishing Home, New Delhi,

1.	https://gacbe.ac.in/pdf/ematerial/18BCO62C-U5.pdf
2.	https://vidyaprasar.dei.ac.in/wp-content/uploads/2022/03/Lesson-14.pdf
3.	https://www.sdcollegeambala.ac.in/wp-content/uploads/2023/02/EDJUNE2022-P-27.pdf

Mapping with Programme Outcomes and Programme Specific Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	2	3	3	3	2	3	3	3	2	2
CO2	3	2	2	2	2	2	2	2	3	2	3
CO3	3	2	3	3	3	2	3	3	3	2	2
CO4	3	2	2	2	2	2	2	2	3	2	2
CO5	3	2	3	3	2	2	3	3	3	2	3
TOTAL	14	10	13	13	13	10	13	13	15	10	12
AVERAGE	2.8	2	2.6	2.6	2.6	2	2.6	2.6	3	2	2.4

3 – Strong, 2- Medium, 1- Low