

Marudhar Kesari Jain College for Women (Autonomous)
Vaniyambadi

Regulations 2026 - 2027

Master of Commerce with Computer Applications
(M.Com CA)



Course Code	Course Category	Title of the Course	Ins. Hrs/ Week	Credit	Marks		Total
					CIA	ESE	
Semester – I							
26PCCC11	Core – 1	Advanced Accounts- I	6	5	25	75	100
26PCCC12P	Core – 2	Web Applications Development and Hosting Lab	6	5	25	75	100
26PCCC13	Core – 3	Modern Banking and Insurance	5	3	25	75	100
26PCCE11/ 26PCCE12	DCE – 1	DBMS/ Business Statistics and Operations Research - I	5	3	25	75	100
26PCCE13/ 26PCCE14	DCE – 2	Big Data Analytics/ Mobile Computing	4	3	25	75	100
26PCCA11	AECC-1	Digital Marketing	2	2	25	75	100
26PCHR11	HR	Human Rights	2	2	25	75	100
			30	23	175	525	700
Semester – II							
26PCCC21	Core – 4	Advanced Accounts – II	6	5	25	75	100
26PCCC22	Core – 5	Advanced Cost Accounting	6	5	25	75	100
26PCCC23P	Core – 6	Financial Accounting Package Tally Prime - Lab	5	3	25	75	100
26PCCE21/ 26PCCE22	DCE – 3	Setting up of Business Entities/ Introduction to Industry 4.0	5	3	25	75	100
26PCCE23/ 26PCCE24	DCE – 4	Logistics and Supply Chains Management/ Business Statistics and Operation Research – II	5	3	25	75	100
26PCCS21	SEC-1	Advertising and Media Management	3	2	25	75	100
			30	21	150	450	600
Semester – III							
26PCCC31	Core – 7	Direct Taxes	6	5	25	75	100
26PCCC32	Core – 8	Research Methodology	6	5	25	75	100
26PCCC33	Core – 9	Python Programming Theory	3	2	25	75	100
26PCCC34P	Core Practical	Python Programming Lab	3	2	25	75	100
26PCCE31/ 26PCCE32	DCE – 5	Enterprise Resource Planning/ Software Engineering	6	3	25	75	100
26PCCS31	SEC – 2	Technology in Banking	3	2	25	75	100
26PCCIK31	IKS*	Traditional Indian Businesses and Ethics	3		25	75	100
26PCCIN31	Internship			2	25	75	100
			30	21	200	600	800
Semester – IV							
26PCCC41	Core –10	Accounting for Managerial Decision	6	5	25	75	100
26PCCC42	Core – 11	Organisational Behaviour	6	5	25	75	100
26PCCC43P	Core – 12	Data Mining using R Lab	4	3	25	75	100
26PCCC44P	Core – 13	Project	6	6	25	75	100
26PCCE41/ 26PCCE42	DCE – 6	Artificial Intelligence and Machine Learning/ International Business	4	3	25	75	100
26PCCP41	PEC	Stock Market operations	2	2	25	75	100
26PCCL41	SLC	Women Entrepreneurship	2	2	25	75	100
	MOOC	NPTEL (Online)			25	75	100
			30	26	200	600	800
			120	91	700	2100	2800

Students must complete at least one online course (MOOC) from platforms like SWAYAM, NPTEL, within the third semester. Additionally, engaging in a specified Self-learning Course is mandatory to qualify for the degree, and successful participation will be acknowledged with an extra credit of 2*.

CC: Core Course

SEC: Skill Enhancement Course

SLC: Self Learning Course

Course)

AECC: Ability Enhancement Compulsory Course.

DCE: Discipline Centric Elective

PEC: Professional Enhancement Course

IKS: Indian Knowledge System (Non- Credit

Department of Commerce CA		L	T	P	Credits	Hours	Marks		
Regulation 2026-27							CIA	ESE	Total
Course Code	Title of the Course								
26PCCC11	Advanced Accounts- I	3	1	2	5	6	25	75	100
Category	Core Course	Theory 20% & Problem 80%							
Learning Objectives									
LO1	To understand the accounting treatment for issue of shares								
LO2	To learn the form and contents of financial statements as per Schedule III of Companies Act 2013								
LO3	To determine profits for fire and marine insurance								
LO4	To prepare consolidated financial statements								
LO5	To learn account for price level changes								
Unit	Content								Hours
1	Issue of Shares Issue of Shares: ESOPs - ESPS - Sweat Equity Shares - Book Building- Buy-back of Shares - Conversion of debentures into shares.								19
2	Final Accounts of Companies Final accounts of Companies as per Schedule III of the Companies Act, 2013 – Managerial remuneration.								18
3	Insurance Company Accounts Insurance Company Accounts: Types of Insurance - Final accounts of life assurance Companies- Ascertainment of profit- Valuation Balance Sheet-Final accounts of Fire, Marine and miscellaneous Insurance Companies.								19
4	Consolidated financial statements Consolidated financial statements as per AS 21: Consolidated Profit and Loss Account– Minority interest – Cost of control – Capital reserve – Inter-company holdings – Preparation of consolidated Balance Sheet.								18
5	Contemporary Accounting Methods Accounting for price level changes – Social responsibility accounting – Human resource accounting. reporting financial reporting: Meaning, Objectives, Characteristics – Indian Accounting Standards (AS 5, AS 10, AS 19, AS 20)								16
CO	Course Outcomes After studying this course, student will be able to								Knowledge Level
1	Prepare account for various entries to be passed in case of issue of shares								K1, K2,K3,K4

2	Prepare Financial statements of companies as per schedule III of Companies Act,2013	K1,K2, K3
3	Prepare final accounts of Life Insurance and General Insurance Companies.	K1,K2,K3, K4,K5
4	Determine the overall profitability and financial position by Preparing consolidated financial statements of holding companies in accordance with AS21.	K1,K2,K3, K4
5	Analyse contemporary accounting methods based on appropriate Accounting Standards and provisions of Companies Act 2013	K1,K2,K3 K4,K5

Textbooks:	
1	Gupta R. L. &Radhaswamy M. (2021), “Corporate Accounting – Volume I & II”, 14thEdition, Sultan Chand & Sons, New Delhi.
2	Maheshwari S. N., Sharad K. Maheshwari&Suneel K. Maheshwari,(2022),“Advanced Accountancy - Volume I &II”, 11thEdition, Vikas PublishingHouse Pvt. Ltd., New Delhi.
3	Jain S. P., Narang K. L., Simmi Agrawal and Monika Sehgal (2019), “Advanced Accountancy - Corporate Accounting – Volume - II”, 22ndEdition, Kalyani Publishers, New Delhi.
4	Reddy T. S. &Murthy A., (2022), “Corporate Accounting – Volume I &II”, 17th Edition, Margham Publications, Chennai.
Reference Books:	
1	Arulanandam M .A&Raman K.S., (2021), “Advanced Accounting (Corporate Accounting – II)”, 8thEdition, Himalaya Publishing House Pvt Ltd, Mumbai.
2	Shukla M C, Grewal T S and Gupta S C, (2022), “Advanced Accounts Volume II”, 19thEdition, Sultan Chand &Sons, New Delhi.
3	Gupta R. L., (2022), “Problems and Solutions in Company Accounts”, 2 nd Edition, Sultan Chand &Sons, New Delhi.
Web resources:	
1	https://resource.cdn.icai.org/66550bos53754-p1-cp9.pdf
2	https://resource.cdn.icai.org/66545bos53754-p1-cp4.pdf
3	https://resource.cdn.icai.org/66638bos53803-cp1.pdf

Mapping with Programme Outcomes and Programme Specific Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	2	2	1	3	3	3	3	3	3	3	2
CO2	3	3	3	3	3	3	3	3	3	2	3
CO3	2	2	1	2	2	2	2	3	2	3	2
CO4	3	2	2	1	2	2	2	3	2	2	2
CO5	3	3	1	3	3	1	3	3	3	1	3
Total	13	12	8	12	13	12	13	15	13	12	12
Average	2.6	2.4	1.6	2.4	2.6	2.4	2.6	3	2.6	2.4	2.4

3 – Strong, 2- Medium, 1- Low

Department of Commerce CA		L	T	P	Credits	Hours	Marks		
Regulation 2026-27							CIA	ESE	Total
Course Code	Title of the Course								
26PCCC12P	Web Application Development and Hosting Lab	-	-	6	5	6	25	75	100
Category	CC- Practical	Practical only							
Learning Objectives									
LO1	Able to design a web page using HTML tags.								
LO2	To enable the students to use Frame sets, hyperlinks, and different formatting features of HTML tags.								
LO3	Enable the students to use Forms & other controls on a webpage.								
LO4	To create interactive applications using PHP.								
Unit	Content								Hours
	<ol style="list-style-type: none"> 1. Develop a website for your college using advanced tags of HTML. 2. Write names of several countries in a paragraph and store it as an HTML document, world.html. Each country's name must be a hot text. When you click India (for example), it must open india.html and it should provide a brief introduction about India. 3. Develop a HTML document to i) display Text with Bullets / Numbers - Using Lists ii) to display the Table Format Data 4. Develop a Complete Web Page using Frames and Framesets which gives the Information about a Hospital using HTML. 5. Write an HTML document to print your Biodata in a neat form using several components. 6. Develop an HTML document to display a Registration Form for an inter-collegiate function. 7. Using HTML form accept Customer details like Name, City, Pin code, Phone number and Email address and validate the data and display appropriate messages for violations using PHP. (Eg. Name is Mandatory field; Pin code must be 6 digits, etc.). 8. Write a program to accept two numbers n1 and n2 using HTML form and display the Prime Numbers between n and n2 using PHP. 								90
CO	Course Outcomes								Knowledge Level
1	Understand & implement the basic HTML tags to create static web pages								K1
2	Capable of using hyperlinks, frames, images, tables,...in a web page								K1,K2,K3

3	Write dynamic web applications using HTML forms	K1,K2,K3, K4,K5 K6
4	Write dynamic web applications in PHP & HTML tags using XAMPP.	K1,K2,K3, K4,K5 K6

Textbooks:	
1	Ivan Bayross, “Web Enabled Commercial Applications Development Using HTML, JavaScript, DHTML and PHP”, BPB Publications, 4th Revised Edition, 2010.
Reference Books:	
1	A.K. Saini and Sumint Tuli, “Mastering XML”, First Edition, New Delhi, 2002.
Web Resources:	
1	https://www.tutorialspoint.com/xml/index.htm
2	https://www.tutorialspoint.com/internet_technologies/websites_development.htm
3	https://www.youtube.com/watch?v=PlxWf493en4

Mapping with Programme Outcomes and Programme Specific Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	2	2	1	3	3	3	3	3	3	3	2
CO2	3	3	3	3	3	3	3	3	3	2	3
CO3	2	2	1	2	2	2	2	3	2	3	2
CO4	3	2	2	1	2	2	2	3	2	2	2
CO5	3	3	1	3	3	1	3	3	3	1	3
Total	13	12	8	12	13	12	13	15	13	12	12
Average	2.6	2.4	1.6	2.4	2.6	2.4	2.6	3	2.6	2.4	2.4

3 – Strong, 2- Medium, 1-Low

Department of Commerce CA		L	T	P	Credits	Hours	Marks		
Regulation 2026-27							CIA	ESE	Total
Course Code	Title of the Course								
26PCCC13	Modern Banking and Insurance	5	-	-	3	5	25	75	100
Category	Core Course	Theory only							
Learning Objectives									
LO1	To understand the evolution of new era banking								
LO2	To explore the digital banking techniques								
LO3	To analyse the role of insurance sector								
LO4	To evaluate the mechanism of customer service in insurance and the relevant regulations								
LO5	To analyse risk and its impact in banking and insurance industry								
Unit	Content								Hours
1	Introduction to Banking Banking: Brief History of Banking - Rapid Transformation in Banking: Customer Shift –Fintech Overview- Fintech Outlook- Digital Financial Revolution. Digital Banking–Electronic Payment Systems – Electronic Fund Transfer System–Electronic Credit and Debit Clearing–NEFT– RTGS–VSAT–SFMS–SWIFT.								15
2	Contemporary Developments in Banking Distributed Ledger Technology – Block chain: Meaning - Structure of Block Chain - Types of Block Chain - Differences between DLT and Block chain - Benefits of Block chain and DLT - Unlocking the potential of Block chain – Crypto currencies, Central Bank Digital Currency (CBDC) - Role of DLT in financial services - AI in Banking: Future of AI in Banking - Applications of AI in Banking - Importance of AI in banking - Banking reimaged with AI. Cloud banking - Meaning - Benefits in switching to Cloud Banking.								15
3	Indian Insurance Market History of Insurance in India – Definition and Functions of Insurance – Insurance Contract – Indian Insurance Market – Reforms in Insurance Sector – Insurance Organisation – Insurance organisation structure. Insurance Intermediaries: Insurance Broker – Insurance Agent - Surveyors and Loss Assessors - Third Party Administrators (Health Services) – Procedures - Code of Conduct								15

4	Customer Services in Insurance Customer Service in Insurance – Quality of Service - Role of Insurance Agents in Customer Service-Agent’s Communication and Customer Service – Ethical Behaviour in Insurance – Grievance Redressal System in Insurance Sector –Integrated Grievance Management System- Insurance Ombudsman - Insurance Regulatory and Development Authority of India Act (IRDA) – Regulations and Guidelines	15
5	Risk Management Risk Management and Control in banking and insurance industries – Methods of Risk Management – Risk Management by Individuals and Corporations – Tools for Controlling Risk.	15
CO	Course Outcomes After studying this course, student will be able to	Knowledge Level
1	Relate the transformation in banking from traditional to new age	K1, K2,K3
2	Apply modern techniques of digital banking	K1,K2,K3, K4
3	Evaluate the role of insurance sector	K1,K2,K3,
4	Examine the regulatory mechanism in customer services in insurance	K1,K2,K3, K4
5	Assess risk mitigation strategies	K1,K2,K3, K4,K5

Textbooks:	
1	Indian Institute of Banking and Finance (2021),“Principles & Practices of Banking”, 5 th Edition, Macmillan Education India Pvt. Ltd, Noida, UttarPradesh.
2	Mishra MN & Mishra SB,(2016),“Insurance Principles and Practice”,22 nd Edition, S.Chand and Company Ltd, Noida, Uttar Pradesh.
3	Emmett,Vaughan,ThereseVaughan M.,(2013), “ Fundamentals of Risk Insurance”,11 th Edition, Wiley & Sons, New Jersey,USA.
4	Theo Lynn , John G. Mooney, Pierangelo Rosati, Mark Cummins (2018), Disrupting Finance: Fin Tech and Strategy in the 21 st Century (Palgrave Studies in Digital Business & Enabling Technologies),Macmillan Publishers, New York(US)
Reference Books:	
1	Sundaram KPM &Varshney P. N., (2020), “Banking Theory, Law and Practice”, 20 th Edition,Sultan Chand &Sons, NewDelhi.
2	Gordon&Natarajan,(2022),“BankingTheory,LawandPractice”,9 th Edition,Himalaya PublishingHousePvtLtd, Mumbai.

3	Gupta P.K. (2021), "Insurance and Risk Management" 6 th Edition, Himalaya Publishing House Pvt Ltd, Mumbai.
4	Susanne Chishti., & Janos Barberis (2016), The Fintech book: The financial technology hand book for investors, entrepreneurs and visionaries. John Wiley & Sons.
Web Resources:	
1	https://sde.uoc.ac.in/sites/default/files/sde_videos/SLM-BCM4A14_BBA4A14-Banking%20and%20Insurance.pdf
2	https://kahedu.edu.in/naac/C-3/Additional%20documents/E-content/1915.pdf
3	https://www.scribd.com/document/653186053/Banking-and-Insurance-B-com-BBA-Juraz

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	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	2	2	1	3	3	3	3	3	3	3	2
CO2	3	3	3	3	3	3	3	3	3	2	3
CO3	2	2	1	2	2	2	2	3	2	3	2
CO4	3	2	2	1	2	2	2	3	2	2	2
CO5	3	3	1	3	3	1	3	3	3	1	3
Total	13	12	8	12	13	12	13	15	13	12	12
Average	2.6	2.4	1.6	2.4	2.6	2.4	2.6	3	2.6	2.4	2.4

3 – Strong, 2- Medium, 1- Low

Department of Commerce CA		L	T	P	Credits	Hours	Marks		
Regulation 2026-27							CIA	ESE	Total
Course Code	Title of the Course								
26PCCE11	Database Management System	5	0	0	3	5	25	75	100
Category	Discipline Centric Elective	Theory only							
Learning Objectives									
LO1	To introduce the basic concepts of Relational Database Management System and the working knowledge of Linux environment								
LO2	To understand designing databases and queries in SQL								
LO3	To apply file organization, indexing, and RDBMS concepts to efficiently store and retrieve data.								
LO4	To upskill the functions and operators								
LO5	To understand the constraints, locks and MySQL								
Unit	Content							Hours	
1	Introduction to Database Systems and Linux Introduction to File and Database systems Database System Structure - Data Models Introduction to Network Models: ER Model, Relational Model - Introduction to Linux Operating System - Properties of Linux - Desktop Environment - Linux basics commands - Working with Files - Text Editors - I/O Redirections - Pipes, Filters, and Wildcards.							15	
2	SQL Definition and Normalization SQL – Data Definition - Queries in SQL - Updates - Views - Integrity and Security. Relational Database design – Functional dependences and Normalization for relational databases (up to BCNF) - Query Forms.							15	
3	Files and RDBMs Record Storage and Primary File Organization - Secondary Storage Devices - Operations on Files - Heap File - Sorted Files - Hashing Techniques - Index Structure for Files - Different Types of Indexes - B-Tree - B+Tree - Query Processing - Multimedia Databases -Basic Concepts and Applications - Indexing and Hashing - Text Databases - Overview of RDBMs - Advantages of RDBMs over DBMs.							15	
4	Data Definition and Manipulation Language Data Definition Language - Data Manipulation Language - Transaction Control - Data Control Language Grant - Revoke Privilege Command - Set Operators - Joins- Kinds of Joins - Table Aliases - Sub queries - Multiple and Correlated Sub Queries - Functions - Single Row - Date, Character, Numeric, Conversion and Group Functions							15	
5	Constraints and MYSQL Constraints - Domain, Equity, Referential Integrity Constraints - Locks - Types of Locks, Table Partitions - Synonym - Introduction to PL/SQL - Introduction - MySQL as an RDBMS Tool - Data types and Commands.							15	

CO	Course Outcomes	Knowledge Level
1	Identify models and schemes in DBMS and LINUX	K1,K2
2	Demonstrate Queries in SQL	K1,K2,K3
3	Discuss handling files and databases	K1,K2
4	Apply skills on functions and operators in RDBMS	K1,K2,K3,
5	Apply constraints and locks in SQL	K1,K2,K3

Textbooks:	
1	Ramakrishnan Raghu and Gehrke Johannes, “Database Management Systems”, McGraw–Hill, USA.
2	Rajendra Prasad Mahapatra and GovindVerma, “Database Management System”, Khanna Publications, New Delhi.
Reference Books:	
1	Ramon A Mata-Toledo and Pauline K Cushman, “Database Management System”, 30 Schaun’s Outlines, New York.
2	Abraham Silberschatz, Henry F Korth and S. Sudarshan, “Database System Concepts” McGraw–Hill, USA.
Web Resources:	
1	http://education-portal.com/academy/lesson/what-is-a-database-managementsystempurpose-and-function.html .
2	http://www.comptechdoc.org/os/linux/usersguide/linux_ugbasics.html .
3	http://www.dummies.com/how-to/content/common-linux-commands.html

Mapping with Programme Outcomes and Programme Specific Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	2	2	3	3	2	2	2	3	2	3
CO2	3	2	3	3	2	2	2	2	3	2	2
CO3	3	2	2	3	2	2	2	1	3	2	2
CO4	3	2	2	3	2	2	2	2	3	2	2
CO5	3	2	2	3	2	2	2	1	3	2	2
Total	15	10	12	15	11	10	10	8	15	10	11
Average	3	2	2.4	3	2.2	2	2	1.6	3	2	2.2

3 – Strong, 2- Medium, 1- Low

Department of Mathematics		L	T	P/S	Credits	Hours	Marks		
Regulation 2026-2027							CIA	ESE	Total
Course Code	Title of the Course								
26PCCE12	Business Statistics & Operations Research -I	3	1	1	3	5	25	75	100
Category	Discipline Centric Elective	Theory 20% and Problem 80%							
Learning Objectives									
LO1	To Gain understanding of probability concepts in discrete and continuous distributions.								
LO2	To Acquire knowledge of sampling methods and hypothesis testing principles.								
LO3	To develop knowledge of relationships among multiple variables using regression and techniques.								
LO4	To Comprehend models related to replacement of deteriorating items.								
LO5	To Familiarize with the concepts and types of queuing systems.								
Unit	Content	Hours							
1	Probability Distribution : Introduction – Concepts of Probability-Definition of Probability- Probability Distribution Function – Cumulative Probability Distribution Function – Expected Value and Variance of a Random Variable-Discrete Probability Distributions- Binomial, Continuous Probability Distributions -Normal . Chapter 7 :Section: 7.1-7.5	15							
2	Sampling : Introduction –Reasons of Sample Survey-Types of Bias During Sample Survey -Population Parameters and Sample Statistics –Principles of Sampling-Sampling Methods. Hypothesis Testing: Introduction-Hypothesis and Hypothesis Testing-The Rationale for Hypothesis Testing-General Procedure for Hypothesis Testing-Direction of the Hypothesis Test-Errors in Hypothesis Testing- Hypothesis Testing for Population Parameters with Large Samples Chapter 8: Section : 8.1-8.6 Chapter 10 :Section : 10.1-10.7	15							
3	Partial , Multiple Correlation and Regression Analysis: Introduction-Assumptions in Multiple Linear Regression-Estimating Parameters of Multiple Regression Model-Standard Error of Estimate for Multiple Regression-Coefficient of Multiple Determination-Multiple	15							

	Correlation Analysis-Partial Correlation Analysis. Chapter 15 :Section : 15.1-15.7	
4	Replacement Decisions: Introduction –Failure Mechanism of Items –Replacement of Items which Deteriorate with time –Types of Replacement Decisions. Chapter 7 : Sections: 7.1-7.4	15
5	Queuing (or Waiting Line Theory): Introduction-Elements of the queuing system-Types of queuing models-Managerial Applications of queuing theory- Advantages and limitations of queuing theory-Symbols and notations-Single channel queuing model-Multiple channel queuing model. Chapter 8 :Sections: 8.1-8.8	15
CO	Course Outcomes	Knowledge Level
The Students will be able to		
1	Employ probability distributions to solve problems involving uncertainty.	K1,K2,K3
2	Perform statistical inference using sampling techniques and hypothesis testing..	K1,K2,K4
3	Utilize multiple regression and partial correlation methods to interpret real-world data.	K2,K3,K4
4	Apply replacement strategies in practical decision-making situations.	K1,K2,K4
5	Analyze service systems using appropriate queuing models.	K1,K2,K3,K4

Text books:	
1	J.K .Sharma , Business Statistics –Second Edition -2013(Unit I ,II & III)
2	V.K Kapoor , Operations Research –Sultan Chand & Sons -1999 (Unit IV & V)
Reference Books:	
1	P.K Gupta and D.S Hira., Operations Research”,7thEdition, S.Chand, Noida(UP)- (2022)“
2	J.K. Sharma, Business Statistics- Pearson Education
3	Business statistics and operations research, Dr D Joseph Anbarasu, Lintech press Trichy
4	N.Nagarajan “Text Book of Operations Research: A Self Learning Approach”, New Age Publications, Chennai. (2017)
5	J.K Sharma “Operations Research”, 6thEdition, Lakshmi Publications, Chennai. (2016)

Web Resources:	
1	https://rblacademy.com/wp-content/uploads/2023/05/partialmulti-correlation-and-regression-1.pdf
2	https://www.fmtvaranasi.edu.in/sites/default/files/Replacement%20Problem.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	2	2	3	2	3	3	2
CO2	3	3	3	3	3	3	3	3	3	3	3
CO3	2	2	3	2	2	3	2	2	3	3	2
CO4	2	3	2	3	3	2	3	3	2	2	3
CO5	3	2	3	3	2	2	3	2	3	3	2
Total	13	12	14	14	12	12	14	12	14	14	12
Average	2.6	2.4	2.8	2.8	2.4	2.4	2.8	2.4	2.8	2.8	2.4

3 – Strong, 2- Medium, 1- Low

Department of Commerce CA		L	T	P	Credits	Hours	Marks		
Regulation 2026-27							CIA	ESE	Total
Course Code	Title of the Course								
26PCCE13	Big Data Analytics	4	0	0	3	4	25	75	100
Category	Discipline Centric Elective	Theory only							
Learning Objectives									
LO1	To introduce big data tools & Information Standard formats.								
LO2	To understand the basic concepts of big data.								
LO3	To learn Hadoop, HDFS and Map Reduce concepts.								
LO4	To teach the importance of No SQL.								
LO5	To explore the big data tools such as Hive, H Base and Pig.								
Unit	Content								Hours
1	Big Data and Analytics: Classification of Digital Data: Structured Data- Semi Structured Data and Unstructured Data. Introduction to Big Data: Characteristics – Evolution – Definition - Challenges with Big Data - Other Characteristics of Data - Big Data - Traditional Business Intelligence versus Big Data - Data Warehouse and Hadoop.								12
2	Technology Landscape: No SQL, Comparison of SQL and No SQL, Hadoop RDBMS Versus Hadoop - Distributed Computing Challenges – Hadoop Overview - Hadoop Distributed File System - Processing Data with Hadoop - Managing Resources and Applications with Hadoop YARN - Interacting with Hadoop Ecosystem								12
3	Mongodb and Mapreduce Programming: MongoDB: Mongo DB - Terms used in RDBMS and Mongo DB - Data Types - MongoDB Query Language. Map Reduce: Mapper – Reducer – Combiner – Partitioner – Searching – Sorting – Compression								12
4	Hive: Introduction – Architecture - Data Types - File Formats - Hive Query Language Statements – Partitions – Bucketing – Views - Sub- Query – Joins – Aggregations - Group by and Having – RCFile - Implementation - Hive User Defined Function - Serialization and Deserialization.								12
5	Pig: Introduction - Anatomy – Features – Philosophy - Use Case for Pig - Pig Latin Overview - Pig Primitive Data Types - Running Pig - Execution Modes of Pig - HDFS Commands - Relational Operators - Eval Function - Complex Data Types - Piggy Bank - User-Defined Functions - Parameter Substitution – Diagnostic Operator - Word Count Example using Pig - Pig at Yahoo! - Pig Versus Hive								12
K1- Remember, K2- Understand, K3- Apply, K4- Analyze, K5- Evaluate, K6- Create									

CO	Course Outcomes- On the successful completion of the course, students will be able to:	Knowledge Level
1	Understand illustrate and evaluate the concepts and techniques of Data Science, Big Data Analytics and its tools	K1, K2
2	Collaborate apply and review the computing for big data in Hadoop, and NoSQL environment.	K1,K2,K3, K4
3	Comprehend implement and review the concepts of data science and big data analytics projects using MapReduce, and MongoDB	K1,K2,K3, K4
4	Understand use and analyze the concepts of big data analytics projects using HIVE database.	K1,K2
5	Illustrate develop and review the concepts of PIG K1-K6 database in Hadoop environment.	K1,K2,K3, K4

Textbooks:	
1	Seema Acharya, Subhashini Chellappan, —Big Data and Analytics, Wiley Publications, First Edition,2015
2	Judith Huruwitz, Alan Nugent, Fern Halper, Marcia Kaufman, —Big data for dummies, John Wiley & Sons, Inc. (2013)
3	Tom White, —Hadoop The Definitive Guidel, O'Reilly Publications, Fourth Edition, 2015
4	Dirk Deroos, Paul C.Zikopoulos, Roman B.Melnky, Bruce Brown, Rafael Coss, —Hadoop For Dummies, Wiley Publications, 2014
Reference Books:	
1	Robert D.Schneider, —Hadoop For Dummies, John Wiley & Sons, Inc. (2012)
2	Paul Zikopoulos, —Understanding Big Data: Analytics for Enterprise Class Hadoop and Streaming Data, McGraw Hill, 2012 Chuck Lam, —Hadoop In Action, Dreamtech Publication
Web Resources:	
1	https://www.mygreatlearning.com/academy/learn-for-free/courses/mastering-big-data-analytics
2	https://nptel.ac.in/courses/106104189

Mapping with Programme Outcomes and Programme Specific Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	2	1	1	2		1	1	2	2	1
CO2	3	3	2	2	3		1	1	3	3	2
CO3	3	3	3	2	3	1	1	1	3	3	3
CO4	3	3	3	3	3	1	1	1	3	3	3
CO5	3	3	3	3	3	1	2	2	3	3	3
Total	15	14	12	11	14	3	6	6	14	14	12
Average	3	2.8	2.4	2.2	2.8	1	1.2	1.2	2.8	2.8	2.4

3 – Strong, 2- Medium, 1- Low

Department of Commerce CA		L	T	P	Credits	Hours	Marks		
Regulation 2026-27							CIA	ESE	Total
Course Code	Title of the Course								
26PCCE14	Mobile Computing	4	-	-	3	4	25	75	100
Category	Discipline Centric Elective	Theory only							
Learning Objectives									
LO1	To introduce the basic concepts of Mobile Computing								
LO2	To learn Overview of Mobile IP								
LO3	To up skill the Global System for Mobile Communication								
LO4	To understand the Ad-Hoc Basic Concepts								
LO5	To gain the Knowledge about Mobile Platforms and Applications								
Unit	Content								Hours
1	Introduction to Mobile Computing: Mobile Computing – Mobile Computing Vs wireless Networking – Mobile Computing Applications – Characteristics of Mobile computing – Structure of Mobile Computing Application. MAC Protocols – Wireless MAC Issues – Fixed Assignment Schemes – Random Assignment Schemes – Reservation Based Schemes.								12
2	Overview of Mobile IP: Overview of Mobile IP – Features of Mobile IP – Key Mechanism in Mobile IP – route Optimization. Overview of TCP/IP – Architecture of TCP/IP- Adaptation of TCP Window – Improvement in TCP Performance.								12
3	Global System for Mobile Communication: Global System for Mobile Communication (GSM)-Architecture Components-Key Technologies-Services & Applications-Comparison & Evolution-Security Protocols – General Packet Radio Service (GPRS) – Universal Mobile Telecommunication System (UMTS).								12
4	Ad-Hoc Basic Concepts : Ad-Hoc Basic Concepts – Characteristics – Applications – Design Issues – Routing – Essential of Traditional Routing Protocols –Popular Routing Protocols – Vehicular Ad Hoc networks (VANET) – MANET Vs VANET – Security.								12
5	Mobile Platforms and Applications: Mobile Platforms and Applications - Mobile Device Operating Systems – Special Constrains & Requirements – Commercial Mobile Operating Systems – Software Development Kit: iOS, Android, BlackBerry, Windows Phone – M-Commerce – Structure – Pros &								12

	Cons – Mobile Payment System – Security Issues.	
CO	Course Outcomes On the successful completion of the course, students will be able to	Knowledge Level
CO1	Understand about basic concepts of Mobile Computing	K1, K2
CO2	Learn about Overview of Mobile IP	K1,K2,K3
CO3	Learn about Global System for Mobile Communication	K1,K2,K3
CO4	Understand Ad-Hoc Networks	K1,K2
CO5	Apply about Mobile Platforms and Applications	K1,K2,K4

Textbooks:	
1	Prasant Kumar Pattnaik, Rajib Mall, “Fundamentals of Mobile Computing”, PHI Learning Pvt. Ltd, New Delhi – 2012.
Reference Books:	
1	Jochen H. Schller, “Mobile Communications”, Second Edition, Pearson Education, New Delhi, 2007.
2	Dharma Prakash Agarval, Qing and An Zeng, "Introduction to Wireless and Mobile systems", Thomson Asia Pvt Ltd, 2005.
3	Uwe Hansmann, Lothar Merk, Martin S. Nicklons and Thomas Stober, “Principles of Mobile Computing”, Springer, 2003.
4	William. C.Y. Lee, “Mobile Cellular Telecommunications-Analog and Digital Systems”, Second Edition, Tata Mc Graw Hill Edition , 2006.
5	C.K. Toh, “AdHoc Mobile Wireless Networks”, First Edition, Pearson Education,
WebResources:	
1	https://www.techtarget.com/searchmobilecomputing/definition/nomadic-computing
2	https://en.wikipedia.org/wiki/Mobile_computing
3	https://www.geeksforgeeks.org/cloud-computing/what-is-mobile-cloud-computing/

Mapping with Programme Outcomes and Programme Specific Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	2	2	1	3	3	3	3	3	3	3	2
CO2	3	3	3	3	3	3	3	3	3	2	3
CO3	2	2	1	2	2	2	2	3	2	3	2
CO4	3	2	2	1	2	2	2	3	2	2	2
CO5	3	3	1	3	3	1	3	3	3	1	3
Total	13	12	8	12	13	12	13	15	13	12	12
Average	2.6	2.4	1.6	2.4	2.6	2.4	2.6	3	2.6	2.4	2.4

3 – Strong, 2- Medium, 1- Low

Department of Commerce CA		L	T	P	Credits	Hours	Marks		
Regulation 2026-27							CIA	ESE	Total
Course Code	Title of the Course								
26PCCA11	Digital Marketing	2	-	-	2	2	25	75	100
Category	Ability Enhancement Compulsory Course	Theory Only							
Learning Objectives									
LO1	To assess the evolution of digital marketing								
LO2	To appraise the dimensions of online marketing mix								
LO3	To infer the techniques of digital marketing								
LO4	To analyse online consumer behaviour								
LO5	To interpret data from social media and to evaluate game-based marketing								
Unit	Content								Hours
1	Introduction to Digital Marketing Digital Marketing – Transition from traditional to digital marketing – Rise of internet–Growth of e-concepts–Growth of e-business to advanced e-commerce– Emergence of digital marketing as a tool – Digital marketing channels.								6
2	Online Marketing Mix Online marketing mix- E-product–E-promotion–E-price–E-place–Consumer segmentation–Targeting–Positioning–Consumers and online shopping issues– Website characteristics affecting online purchase decisions–Distribution and implication on online marketing mix decisions–Digitization and implication on online marketing mix decisions.								6
3	Digital media channels Digital media channels – Search engine marketing – ePR – Affiliate marketing – Interactive display advertising – Opt-in-email marketing and mobile text messaging.								6
4	Social media and Viral Marketing viral marketing – Online campaign management using – Face book, Twitter, Instagram, Snap chat, Pin interest – Metaverse marketing –Advantages and disadvantages of digital media channels – Metaverse marketing								6
5	Digital Analytics and Gamification Digital Analytics – Concept – Measurement framework – Demystifying web data – Owned social metrics – Measurement metrics for various media platforms – Earned social media metrics – Digital brand analysis Gamification and game-based marketing – Benefits – Consumer motivation for playing online games.								6

CO	Course Outcomes After studying this course, student will be able to	Knowledge Level
1	Explain the dynamics of digital marketing	K1, K2
2	Examine online marketing mix	K1,K2, K3,K4
3	Compare digital media channels	K1,K2,K3, K4
4	Explain online consumer behavior	K1,K2
5	Analyse social media data	K1,K2,K3, K4

TEXT BOOK

1.	Puneet Singh Bhatia, (2019) “Fundamentals of Digital Marketing”, 2 nd Edition,Pearson Education Pvt Ltd, Noida.
2.	Dave Chaffey, Fiona Ellis-Chadwick,(2019) “Digital Marketing”, Pearson Education Pvt Ltd, Noida.
3.	Chuck Hemann &KenBurbary,(2019)“Digital Marketing Analytics”,Pearson Education Pvt Ltd, Noida.

REFERENCE BOOKS

1.	VandanaAhuja,(2016)“DigitalMarketing”,OxfordUniversityPress.London.
2.	Ryan Deiss& Russ Henneberry, (2017) “Digital Marketing”, John Wileyand Sons Inc. Hoboken.
3.	Alan Charlesworth,(2014),“Digital Marketing-APractical Approach”, Routledge, London.

Web Resources

1.	https://www.digitalmarketer.com/digital-marketing/assets/pdf/ultimate-guide-to-digital-marketing.pdf
2.	https://uwaterloo.ca/centre-for-teaching-excellence/teaching-resources/teaching-tips/educational-technologies/all/gamification-and-game-based-learning
3.	https://journals.ala.org/index.php/ltr/article/download/6143/7938

Mapping with Programme Outcomes and Programme Specific Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3
CO1	3	3	2	3	3	3	3	3	3
CO2	3	3	2	3	3	3	3	3	3
CO3	3	3	2	2	3	2	3	3	2
CO4	3	3	2	2	3	3	3	3	3
CO5	3	3	1	3	3	2	3	3	2
Total	15	15	9	13	15	13	15	15	13
Average	3	3	1.8	2.6	3	2.6	3	3	2.6

3 – Strong, 2- Medium, 1- Low

Department of Commerce CA		L	T	P	Credits	Hours	Marks		
Regulation 2026-27							CIA	ESE	Total
Course Code	Title of the Course								
26PCCC21	Advance Accounts - II	3	1	2	5	6	25	75	100
Category	Core Course	Theory 20% & Problem 80%							
Learning Objectives									
LO1	To know about the accounting procedures related to preparation of bank accounts								
LO2	To know the types of Amalgamation, Internal and external Reconstruction								
LO3	To enable the students to acquire knowledge in valuation of shares and goodwill								
LO4	To have an insight on modes of winding up of a company								
LO5	To know the human resource accounting system								
Unit	Content								Hours
1	Accounting of Banking Company Final Statements of Banking Companies (As Per New Provisions) – Non-Performing Assets - Rebate on Bills Discounted- Profit and Loss a/c - Balance Sheet as Per Banking Regulation Act 1949.								18
2	Amalgamation, Absorption, External and Internal Reconstruction Amalgamation – Meaning - Purchase Consideration - Lump sum Method, Net Assets Method, Net Payment Method, Intrinsic Value Method, Absorption: Meaning- Accounting Treatment-External Reconstruction- Internal Reconstruction.								18
3	Valuation of Goodwill & Shares Valuation of Goodwill – Meaning – Need for Valuation of Goodwill – Methods of Valuing Goodwill – Average Profit – Super Profit – Annuity and Capitalization Method. Valuation of Shares – Need for Valuation of Shares – Methods of Valuation of Shares – Net Assets Method – Yield and Fair Value Methods.								18
4	Liquidation of Companies Meaning-Modes of Winding Up – Preparation of Statement of Affairs - Order of Payment – Liquidators Remuneration- Liquidator’s Final Statement of Accounts.								18
5	Human Resource Accounting Human Resource Accounting – Need and Development – Importance of Human Resource Accounting – Objections against Human Resource Accounting – Human Resource Accounting in India. Corporate Social Reporting – Concept and Objectives.								18

CO	Course Outcomes After studying this course, student will be able to	Knowledge Level
1	Construct Profit and Loss account and Balance Sheet of Banking Companies in accordance in the prescribed format.	K1,K2,K3, K4,K5,K6
2	Evaluate the accounting treatment of amalgamation, Internal and external reconstruction.	K1, K2,K3,K4, K5
3	Compute the value of goodwill and shares under different methods and assess its applicability	K1,K2k3,, K4
4	Preparation of liquidator's final statement of account	K1,K2,K3, K4
5	Know about Human Resource Accounting in India	K1,K2,K3

Textbooks:	
1	T.S. Reddy, A. Murthy – Corporate Accounting- Margham Publication, Chennai.
	S.P. Jain and N.L. Narang, Advanced Accounting Vol I, Kalyani Publication, New Delhi.
	M.C.Shukla, Advanced accounting Vol I and II, S.Chand, New Delhi
	R.L. Gupta – Corporate Accounting, Sultan Chand & Sons, New Delhi.
	R.L. Gupta , Radha- Corporate Accounting, Sultan Chand & Sons, New Delhi.
Reference Books:	
1	Anil Kumar, Rajesh kumar, Corporate accounting I, Himalaya Publishing house, Mumbai.
	S.N. Maheswari – Advanced Accountancy, Sultan Chand
	Shukla, Grewal and Gupta- Advanced Accounts Voll,S.Chand, New Delhi.
	R.L. Gupta and M. Radha swamy, Advanced Accounts Vol I, Sultan Chand, New Delhi
Web Resources:	
1	https://www.slideshare.net/debchat123/accounts-of-banking-companies

2	https://www.accountingnotes.net/amalgamation/amalgamation-absorption-andreconstructionaccounting/126
3	https://www.taxmann.com/bookstore/bookshop/bookfiles/chapter12valuationofgoodwillandshares.pdf
	https://www.accountingnotes.net/liquidation/liquidation-of-companiesaccounting/12862
	https://www.slideshare.net/slideshow/human-resource-accounting-69465076/69465076

Mapping with Programme Outcomes and Programme Specific Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	2	2	1	3	3	3	3	3	3	3	2
CO2	3	3	3	3	3	3	3	3	3	2	3
CO3	2	2	1	2	2	2	2	3	2	3	2
CO4	3	2	2	1	2	2	2	3	2	2	2
CO5	3	3	1	3	3	1	3	3	3	1	3
Total	13	12	8	12	13	12	13	15	13	12	12
Average	2.6	2.4	1.6	2.4	2.6	2.4	2.6	3	2.6	2.4	2.4

3 – Strong, 2- Medium, 1- Low

Department of Commerce CA		L	T	P	Credits	Hours	Marks		
Regulation 2026-27							CIA	ESE	Total
Course Code	Title of the Course								
26PCCC22	Advanced Cost Accounting	3	1	2	5	6	25	75	100
Category	Core Course	Theory 40% & Problem 60%							
Learning Objectives									
LO1	To enhance the understanding of the basic concepts in Cost Accounting								
LO2	To extend the knowledge of Methods of Costing								
LO3	To facilitate the students to have the deep understanding of Standard Costing and Variance analysis								
LO4	To bring about the awareness of Cost Control and Cost Reduction.								
LO5	To let the students to know about Benefits from adoption of ABC analysis and Just in Time Costing (JIT).								
Unit	Content								Hours
1	Introduction: Nature and significance of cost accounts-Definition of Costing, Scope, Objectives, Functions and limitations of cost accounting-Installation of costing system-Elements of Cost- Cost Centre and profit Centre-Preparation of Cost sheet, tender of quotations.								18
2	Methods of Costing: Process costing, Treatment of equivalent production- Inter process profit-Joint and by product Costing-Preparation of Contract account, Cost plus contract and escalation clause.								18
3	Standard Costing and Variance Analysis: - Material -Labour- Overheads - Fixed - Variable -Sales Variance- Reporting of variances.								18
4	Cost Management Techniques: Cost Control: Meaning and Prerequisites - Cost Reduction: Meaning and Scope – Differences between Cost control and Cost Reduction - Pareto Analysis: Meaning, importance and applications – Theory only.								18
5	Activity Based Cost Management and Just in Time (JIT): Activity Based Cost Management- Concept, Purpose, Stages, Benefits, Relevance in Decision making and its Application in Budgeting – Role of ABC analysis in E-Commerce- Just in Time - Introduction, Benefits, Use of JIT in Measuring the Performance – Practical problems.								18
CO	Course Outcomes								Knowledge Level
	After studying this course, student will be able to								
1	Understand the basic concepts in Cost Accounting and also familiarizing with the preparation of Cost Sheets, Tenders and Quotations.								K1,K2,,K3, K4

2	Prepare of Process Costing and Contract Costing.	K1,K2,K3, K4
3	Know the Standard Costing and Variance Analysis and reporting of Variances.	K1,K2,K3, K4
4	Aware of the Cost Control and Cost Reduction and its applications. Student Can Able to Prepare Pareto Diagram.	K1,K2,K3, K4
5	Develop the knowledge about Activity based costing and Just in Time.	K1,K2,K3, K4

Textbooks:	
1	Cost and Management Accounting-T.S.Reddy and Y.H. Reddy, Margam Publications, Chennai.
	Cost accounting- S.P. Jain and K.L. Narang , Kalyani Publishers-New Delhi.
Reference Books:	
1	Advanced Management Accounting - Ravi M Kishore, Taxman 's-New Delhi,
	Cost Accounting- B.K. Bhar, Academic publishers, Calcutta.
	Cost Accounting - A Managerial Emphasis- C.T.Horangren, Pearson education-New Delhi.
	Cost Accounting- Jawaharlal, Tata Mc. Graw Hill
	Advanced Management Accounting - Robert S. Kaplan-Anthony A. Atkinson, Prentice Hall of India-New Delhi 8.
	Cost Accounting and Cost Methods - Weldon's, Mc. Donald and Evens Limited.
Web Resources:	
1	https://in.search.yahoo.com/search?fr=mcafee&type=E210IN826G0&p=methods+of+costing
2	https://in.search.yahoo.com/search?fr=mcafee&type=E210IN826G0&p=cost+management+techniques
3	https://in.search.yahoo.com/search?fr=mcafee&type=E210IN826G0&p=standard+costing+and+variance+analysis

Mapping with Programme Outcomes and Programme Specific Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	2	2	1	3	3	3	3	3	3	3	2
CO2	3	3	3	3	3	3	3	3	3	2	3
CO3	2	2	1	2	2	2	2	3	2	3	2
CO4	3	2	2	1	2	2	2	3	2	2	2
CO5	3	3	1	3	3	1	3	3	3	1	3
Total	13	12	8	12	13	12	13	15	13	12	12
Average	2.6	2.4	1.6	2.4	2.6	2.4	2.6	3	2.6	2.4	2.4

3 – Strong, 2- Medium, 1- Low

Department of Commerce CA		L	T	P	Credits	Hours	Marks		
Regulation 2026-27							CIA	ESE	Total
Course Code	Title of the Course								
26PCCC23P	Financial Accounting Package – Tally Prime Lab	-	-	5	3	5	25	75	100
Category	Core Course	Practical only							
Learning Objectives									
LO1	To Understand company creation and management in accounting software.								
LO2	To Create and manage ledgers, groups, vouchers, and budgets effectively.								
LO3	To Apply inventory management concepts using stock groups, items, and godowns.								
LO4	To Implement tax systems such as TDS, TCS, VAT, and GST in accounting records.								
LO5	To Generate and analyze financial reports like Trial Balance, Profit & Loss, and Balance Sheet.								
Unit	Content								Hours
1	Creation of Company, Select, Alter and Shut Company, Creation of Company Groups, Ledger and Vouchers								75
2	Creation of Stock Group, Stock Category, Stock Item, Unit of Measures								
3	Creation of Budget								
4	Creation of Godown								
5	Creation of Interest Calculation								
6	Creation of TCS-Tax Collected at Source								
7	Creation of TDS-TaxDeducted at Source								
8	Creation of VAT-Value Added Tax								
9	Creation of GST-Goods and Service Tax								

10	Display Trial Balance, Profit and Loss Account, Balance Sheet, Day Book, Ratio Analysis	
Course Outcomes		
CO	After studying this course, student will be able to	Knowledge Level
1	Use accounting software to create and manage company records.	K1,K2,K3
2	Maintain ledgers, vouchers, budgets, and company groups.	K1,K2,K3
3	Manage inventory using stock groups, items, and godowns.	K1,K2,K3
4	Apply tax concepts like TDS, TCS, VAT, and GST in accounts.	K1,K2, K3
5	Prepare and interpret financial statements and reports.	K1,K2,K3

Textbooks:	
1	SundaraPandian.P, Muthulakshmi. S & Vijayakumar, T (2022), Research Methodology & Applications of SPSS in Social Science Research, Sultan Chand & Sons, New Delhi
2	Morgan George. A, Barrett C Karen, Leech L Nancy and Gloeckner Gene W(2019), IBM SPSS for Introductory Statistics, Routledge, 6 th Edition, U.K
3	Official Guide to Financial Accounting using TallyPrime (2021), BPB Publication, Delhi
4	ChhedaRajesh, U(2020), Learn TallyPrime, Ane Books, 4 th Edition, New Delhi
Reference Books:	
1	Kulas John, Renata Garcia Prieto Palacios Roji, Smith Adams (2021), IBM SPSS Essentials: Managing and Analysing Social Sciences Data, 2 nd Edition, John Wiley & Sons Inc., New York
2	Rajathi.A, Chandran.P(2011), SPSS for You, MJP Publishers, Chennai
3	Sangwan Rakesh (2022), Learn Tally Prime in English, Ascend Prime Publication, Pilani
4	Lodha Roshan (2022), Tally Prime with GST Accounting, Law Point Publication, Kolkata
Web Resources:	
1	https://www.spss-tutorials.com/basics/
2	https://www.tallyclub.in/
3	https://tallysolutions.com/business-guides/inventory-management-in-tally-erp9/

Mapping with Programme Outcomes and Programme Specific Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	2	2	1	3	3	3	3	3	3	3	2
CO2	3	3	3	3	3	3	3	3	3	2	3
CO3	2	2	1	2	2	2	2	3	2	3	2
CO4	3	2	2	1	2	2	2	3	2	2	2
CO5	3	3	1	3	3	1	3	3	3	1	3
Total	13	12	8	12	13	12	13	15	13	12	12
Average	2.6	2.4	1.6	2.4	2.6	2.4	2.6	3	2.6	2.4	2.4

3 – Strong, 2- Medium, 1- Low

Department of Commerce CA		L	T	P	Credits	Hours	Marks		
Regulation 2026-27							CIA	ESE	Total
Course Code	Title of the Course								
26PCCE21	Setting up of Business Entities	5	-	-	3	5	25	75	100
Category	Discipline Centric Elective	Theory only							
Learning Objectives									
LO1	To understand the startup landscape and its financing								
LO2	To analyse the formation and registration of Section 8 company								
LO3	To outline the concept of LLP and business collaboration								
LO4	To understand the procedure for obtaining registration and license								
LO5	To create awareness about the legal compliances governing business entities								
Unit	Content								Hours
1	Startups in India Start ups-Evaluation-Definition of a Start up – Choice of business Organisation-Types of business organizations – Factors governing selection of an organisation – Startups and its Registration-Startup India policy – Funding support and incentives – Indian states with Startup policies – Exemptions for startups – Life cycle of a Startup – Financing options available for Startups.								15
2	Not-Profit Organisations Formation and registration of NGOs – Section 8 Company – Definition – Features – Exemptions – Requirements of Section 8 Company – Application for incorporation – Trust: Objectives of a trust – Persons who can create a trust – Differences between a public and private trust – Exemptions available to trusts – Formation of a trust - Trust deed–Society–Advantages–Disadvantages–Formation of a society–Tax exemption to NGOs.								15
3	Limited Liability Partnership and Joint Venture Limited Liability Partnership: Definition – Nature and characteristics - Advantages and disadvantages – Procedure for incorporation – LLP agreement – Annual compliances of LLP-Business collaboration: Definition – Types – Joint venture: Advantages and disadvantages–Types–Joint venture agreement–Successful joint ventures in India–Special Purpose Vehicle– Meaning–Benefits – Formation.								15

4	<p>Registration and Licenses Registration and Licenses: Introduction – Business entity registration – Mandatory registration – PAN – Significance – Application and registration of PAN – Linking of PAN with Aadhar –TAN – Persons liable to apply for TAN – Relevance of TAN – Procedure to apply for TAN –GST: Procedure for registration —MSME registration – Clearance from Pollution Control Board – FSSAI registration and license – Trade mark, Patent and Design registration.</p>	15
5	<p>Environmental Legislations in India Geographical Indication of Goods (Registration and Protection) Act, 1999: Objectives, Salient Features - The Environmental Protection Act,1986:Prevention, control and abatement of environmental pollution-The Water (Prevention And Control of Pollution) Act, 1974: The Central and State Boards for Prevention and Control of Water Pollution - Powers and Functions of Boards - Prevention and Control of Water Pollution - Penalties and Procedure- The Air (Prevention and Control of Pollution) Act, 1981:</p>	15
Course Outcomes		
CO	After studying this course, student will be able to	Knowledge Level
1	Understand & evaluate the various avenues of acquiring finance to set up a business entities	K1,K2,K3,
2	Know and analyse the legal requirements for section and company	K1,K2,K3, K4
3	Understand, prepare and analyse the proceedings for LLP	K1,K2,K3
4	Able to analyse the registration and licensing procedure	K1,K2,K3, K4
5.	Know and analyse the compliance of regulatory framework regarding environment	K1,K2,K3, K4

TEXT BOOK	
1.	KailashThakur,(2007)“EnvironmentProtectionLawandPolicyinIndia”,2 nd Edition, Deep & Deep Publication Pvt. Ltd., New Delhi.
2.	Avtar Singh,(2015),“Intellectual PropertyLaw”, Eastern Book Company, Bangalore
3.	ZadN.SandDivyaBajpai,(2022)“SettingupofBusinessEntitiesandClosure” (SUBEC), Taxmann, Chennai
4.	AmitVohra & RachitDhingra (2022) “Setting Up Of Business Entities & Closure”, 6 th Edition, Bharath Law House, New Delhi
REFERENCE BOOKS	

1.	Setting up of Business Entities and Closure (2021), Module 1, Paper 3, The Institute of Company Secretaries of India, MP Printers, Noida
2.	The Air (Prevention and Control of Pollution) Act, 1981, Bare Act, 2022 Edition, Universal/LexisNexis, Noida
3.	The Water (Prevention and Control of Pollution) Act, 1974, Bare Act, 2022 Edition, Universal/LexisNexis, Noida

Mapping with Programme Outcomes and Programme Specific Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2	PSO3
CO1	3	3	3	3	3	3	3	1	3
CO2	3	2	2	3	2	3	2	3	3
CO3	3	3	2	3	3	3	3	3	3
CO4	3	3	3	3	3	3	3	3	3
CO5	3	3	3	3	3	3	3	3	3
Total	15	14	13	15	14	15	14	13	15
Average	3	2.8	2.6	3	2.8	3	2.8	2.6	3

3 – Strong, 2- Medium, 1- Low

Department of Commerce CA		L	T	P	Credits	Hours	Marks		
Regulation 2026-27							CIA	ESE	Total
Course Code	Title of the Course								
26PCCE22	Introduction to Industry 4.0	5	-	-	3	5	25	75	100
Category	Discipline Centric Elective	Theory only							
Learning Objectives									
LO1	To enable the students 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.								15
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.								15
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.								15
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.								15
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.								15

CO	Course Outcomes After studying this course, student will be able to	Knowledge Level
1	Discuss on the change from industry 1.0 to 4.0	K1,K2
2	Discover the challenges and future prospects of applying artificial intelligence	K1,K4,K5, K6
3	Apply big data for industrial growth and development	K1,K2,K3
4	Apply IoT in various sectors like Manufacturing, Healthcare, Education, Aerospace and Défense	K1,K2,K3
5	Appraise why education has to be aligned with industry 4.0	K1,K2,K4, K5

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”, 3rd 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. 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 with Programme Outcomes and Programme Specific Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	2	2	1	3	3	3	3	3	3	3	2
CO2	3	3	3	3	3	3	3	3	3	2	3
CO3	2	2	1	2	2	2	2	3	2	3	2
CO4	3	2	2	1	2	2	2	3	2	2	2
CO5	3	3	1	3	3	1	3	3	3	1	3
Total	13	12	8	12	13	12	13	15	13	12	12
Average	2.6	2.4	1.6	2.4	2.6	2.4	2.6	3	2.6	2.4	2.4

3 – Strong, 2- Medium, 1- Low

Department of Commerce CA		L	T	P	Credits	Hours	Marks		
Regulation 2026-27							CIA	ESE	Total
Course Code	Title of the Course								
26PCCE23	Logistics and Supply Chain Management	5	-	-	3	5	25	75	100
Category	Discipline Centric Elective	Theory only							
Learning Objectives									
LO1	To identify the primary differences between logistics and supply chain management								
LO2	To understand the individual processes of supply chain management and their Interrelationships within individual companies and across the supply chain.								
LO3	To evaluate the management components of supply chain management								
LO4	To analyse the tools and techniques applied in implementing supply chain management.								
LO5	To create awareness about information technology in supply management								
Unit	Content								Hours
1	Supply Chain Management Supply Chain Management: Concept, Features, Evolution, Importance, Process and Barriers of Supply Chain Management – Principles of Supply Chain Strategies – Supply Chain Intermediaries – Concept and Types, Channels of Distribution for Industrial Goods and Consumer Goods, Channels of Distribution at Services Level, Factors for Selection of Suitable Channels.								15
2	Global Perspectives Global Perspectives: Measuring and Analyzing the Value and Efficiency of Global Supply Chain Networks, Global Market Forces, Types of Global Supply Chain-Indian Perspectives: Measuring and Analyzing the Value and Efficiency of Domestic Supply Chain Networks, Economic Effects of Supply Chains.								15
3	Framework of Logistics Logistics: Introduction – Positioning of Information in Logistics and Supply Chain Management – Logistics Information System (LIS) - Logistics Management: Concept and Process, Competitive Advantages and Three C's, Changing Logistics Environment, Reverse Logistics, Importance of Inventory Control -Elements of Inventory Management – Inbound and outbound logistics, Bull-whip effect – distribution and warehousing management - Transport Functions and Participants in Transportation Decisions - Transport Infrastructure.								15
4	SCM-Warehousing Warehousing - Logistics Challenge - Functions – Warehouse: Options – Site Selections – Layout Design – Decision Model – Costing – Warehousing Strategies – Virtual Warehouse – Warehouse Charter – Performance Parameter – Warehouse in India – Cold Chain Infrastructure								15

5	SCM-Information Technology and Supply Chain Role of IT in Supply Chain – Supply Chain IT Framework – CRM in SCM – Internal Supply Chain Management – Supplier Relationship Management – Future of IT in Supply Chain – Supply Chain in IT Practice – The Role of E-Business in SCM – E-Business Framework – EBusiness in Practice.	15
CO		Knowledge Level
1	Recall the concepts and features of SCM K	K1
2	Summarise global and Indian perspectives of SCM K2	K2,K2
3	Examine changing logistics environment pertaining to materials management, warehousing and distribution	K1,K2,K3, K4
4	Explain strategic warehousing for SCM K2	K1,K2
	Outline the role of information technology in SCM	K1, K2

Textbooks:	
1	Christopher Martin, “Logistics and Supply Chain Management” (2016) 5 th Edition, FT Publishing International, India
2	Chopra, Sunil, Meindl, Peter and Kalra, D.V.; Supply Chain Management: Strategy, Planning and Operation; Pearson Education Pvt. Ltd, Noida
Reference Books:	
1	Sahay, B.S., Supply Chain Management, 2 nd Edition; Macmillan Publishers India
2	Ballou, R.H. Business Logistics Management. Prentice-Hall Inc.
3	Bowersox D.J.,Closs D.J, Bixby Cooper. M., Supply Chain Logistics Management, (2002), 9 th Edition, McGraw-Hill Higher Education, Noida
Web Resources:	
1	1. http://www.wisdomjobs.com/e-universit/production-and-operations-managementtutorial-295/principles-of-material-handling-9576.html
2	http://www.marketing91.com/logistics-activitiesw/
3	https://www.fcoco.com/services/warehouse-strategies .
	https://cleartax.in/s/just-in-time-jit-inventory-management

Mapping with Programme Outcomes and Programme Specific Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	2	2	1	3	3	3	3	3	3	3	2
CO2	3	3	3	3	3	3	3	3	3	2	3
CO3	2	2	1	2	2	2	2	3	2	3	2
CO4	3	2	2	1	2	2	2	3	2	2	2
CO5	3	3	1	3	3	1	3	3	3	1	3
Total	13	12	8	12	13	12	13	15	13	12	12
Average	2.6	2.4	1.6	2.4	2.6	2.4	2.6	3	2.6	2.4	2.4

3 – Strong, 2- Medium, 1- Low

Department of Mathematics		L	T	P/S	Credits	Hours	Marks		
Regulation 2026-2027							CIA	ESE	Total
Course Code	Title of the Course								
26PCCE24	Business Statistics & Operations Research -II	3	1	1	3	5	25	75	100
Category	Discipline Centric Elective	Theory 20% Problem 80%							
Learning Objectives									
LO1	To Understand Student's t-test and F-test for testing means and variances in small samples.								
LO2	To learn and apply Chi-square Test and Analysis of Variance (ANOVA) for hypothesis testing and data analysis.								
LO3	To Acquire insight into decision-making environments and decision tree analysis.								
LO4	To Comprehend inventory concepts, costs, and control techniques including EOQ.								
LO5	To Familiarize with statistical quality control methods and control charts.								
Unit	ent	Hours							
1	Small Sample -t-Test and F- test Introduction of t test -Properties-Uses-Hypothesis Testing for Population Mean – Hypothesis Testing for difference of two population mean (independent and dependent samples) - Hypothesis Testing based on F – Distribution-Properties-Assumptions-Comparing two population variances. Chapter :10 Sections: 10.10-10.11						15		
2	Chi-square Test: Introduction –Properties-The Chi-square Test-Statistic – Applications of chi square test. Analysis of Variance (ANOVA): Introduction-Analysis of Variance Approach-Testing Equality of Population (Treatment) Means: One-way Classification-Inferences about Population (Treatment) Means- Testing Equality of Population (Treatment) Means: Two-Way Classification. Chapter 11 : Sections: 11.1, 11.3--11.5.1 Chapter 12 : Sections: 12.1-12.5						15		
3	Decision Theory : Introduction-Structure of decision making problem-Types of decision -making environments-Decision tree. Chapter 9 : Sections: 9.1-9.4						15		

4	<p>Inventory Management : Introduction-Types of inventory-The meaning of inventory control-Relevant inventory costs-Factors affecting inventory control-Economic order quantity (EOQ)-Inventory Modelling-Types of inventory models-Inventory control approaches (or Practices)-Selecting inventory control approaches. Chapter 10: Sections: 10.1-10.10</p>	15
5	<p>Statistical Quality Control : Introduction-Chance causes and assignable causes-Benefits of statistical quality control-Process and product control-Control Charts. Chapter 17 : Sections: 17.1-17.5</p>	15
CO	Course Outcomes	Knowledge Level
The Students will be able to		
1	Apply Student's t-test and F-test to analyze small sample data and compare population parameters.	K1,K2,K3,K4
2	Analyze data and test significance using Chi-square Test and Analysis of Variance (ANOVA) techniques.	K1,K2,K3
3	Utilize decision theory concepts to solve decision-making problems under uncertainty.	K1,K2,K3
4	Determine optimal inventory policies using appropriate models and approaches.	K1,K3,K4
5	Understand the basics of Statistical Quality Control and its role in quality improvement.	K1,K2,K3

Text books:	
1	J.K. Sharma, Business Statistics- Pearson Education, Second Edition (Unit – I & II)
2	V.K Kapoor ., Operations Research –Sultan Chand & Sons -1999 (Unit – III, IV & V)
Reference Books:	
1	D.C. Samcheri and V. K. Kapoor, “Business statistics”, Sultan Chand and sons, New Delhi
2	Richard I Levin and David S. Rubit., “Statistics for management”, Seventh Edition, Pearson education, New Delhi, 2002
3	Dr. D. Joseph Anbarasu, Business statistics and operations research, Lintech press, Trichy
4	J.K. Sharma, “Operations Research”, 6th Edition, Lakshmi Publications, Chennai, 2016

5	N. Nagarajan, "Text Book of Operations Research: A Self Learning Approach", New Age Publications, Chennai, 2017
Web Resources:	
1	https://stats.libretexts.org/Bookshelves/Probability_Theory/Probability_Mathematical_Statistics_and_Stochastic_Processes_%28Siegrist%29/11%3A_Bernoulli_Trials/11.02%3A_The_Binomial_Distribution.
2	https://epub.uni-regensburg.de/27256/1/ubr13608_ocr.pdf

Mapping with Programme Outcomes and Programme Specific Outcomes

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

3 – Strong, 2- Medium, 1- Low

Department of Commerce CA		L	T	P	Credits	Hours	Marks		
Regulation 2026-27							CIA	ESE	Total
Course Code	Title of the Course								
26PCCS21	Advertising and Media Management	3	-	-	2	3	25	75	100
Category	Skill Enhancement Course	Theory only							
Learning Objectives									
LO1	To acquaint students with creative strategies in advertising								
LO2	To educate students on the importance of media advertising								
LO3	To assist students to create an Advertisement Copy								
LO4	To acquaint students with creative strategies in advertising								
LO5	To educate students on the importance of media advertising								
Unit	Content								Hours
1	Introduction Meaning, Definition and Evolution of Advertising – Role of Advertising– Advertising as a Promotional tool – Economic, Social and Ethical Aspects of Advertising– Advertising as a Communication Process								9
2	Creative Strategy Management Advertisement Copy and Advertisement Designing Meaning – Preparation and process– Types of Advertisement Copy–Elements of Advertisement Copy and advertisement Design Advertisement Layout Structure of an Advertisement Layout – Principles of Advertisement Layout								9
3	Advertising and Campaign Planning Marketing Strategy and Situational Analysis–Advertising Plan and Objectives – DAGMAR Approach–Preparation of Campaign-Stages in Campaign Process								9
4	Advertising Media Strategy Role of Media, Types of Media Indoor, Outdoor, Electronic and Online Advantages and Disadvantages – Media Planning Selection and Scheduling)								9
5	Media Management strategies Media Choice Criteria – Factors affecting Choice of Media –Choosing the right Agency Role, Types and Functions of Advertisement Agencies, Selection and Coordination of Advertising Agency – Advertisement Budgeting- Types-Affordable Rate Method, Percentage of Sales Method, Competitive Parity Method and Objective and Task Method								9
Course Outcomes									
CO	After studying this course, student will be able to								Knowledge Level
1	Create their own Advertisement Copy								K1,K2,K4,

		K6
2	Analyze individual media businesses and understand the economic drivers of the media economy	K1,K2, K4,K5
3	Gain a perspective on the facets of media	K1,K2,K3, K4
4	Develop an integrated marketing plan using a wide variety of media	K1,K2,K4, K5,K6
5	Create their own Advertisement Copy	K1,K2,K4, K5,K6

Textbooks:	
1	Belch. Advertising and Promotion. New Delhi, Tata Mc Graw Hill, 2017
2	Kenneth, E. Clow & Donald E. Baack. Integrated Advertising Promotion & Marketing Communication. New Delhi: Prentice Hall, 2015.
Reference Books:	
1	Aaker, David A. etc., Advertising Management, 4th edition, PHI, 1985 2. 3. 4. i 5.
2	Ogilvy David, Ogilvy on Advertising, London, Longman.
3	Jones, John Philip, What's in a brand, Tata McGraw Hill, New Delhi
4	Chunawalla, S.A., Advertising, Sales and Promotion Management, Himalaya Publishing House, Mumbai.
Web Resources:	
1	https://ahsec.assam.gov.in/wp-content/uploads/2025/10/Sales-Management-and-Avertising-2025.pdf
2	https://sist.sathyabama.ac.in/sist_coursematerial/uploads/SBAA7010.pdf
3	https://sist.sathyabama.ac.in/sist_coursematerial/uploads/SBAA7010.pdf

Mapping with Programme Outcomes and Programme Specific Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	2	2	1	3	3	3	3	3	3	3	2
CO2	3	3	3	3	3	3	3	3	3	2	3
CO3	2	2	1	2	2	2	2	3	2	3	2
CO4	3	2	2	1	2	2	2	3	2	2	2
CO5	3	3	1	3	3	1	3	3	3	1	3
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Average	2.6	2.4	1.6	2.4	2.6	2.4	2.6	3	2.6	2.4	2.4

3 – Strong, 2- Medium, 1- Low