Marudhar Kesari Jain College for Women (Autonomous)

Vaniyambadi – 635 751

PG Department of Commerce CA

For

Undergraduate Programme

Bachelor of Commerce (Computer Applications)

From the Academic Year 2024-25

		Semester - I							Semester – II					
Code	**Course Title**	**Hours Distribution**				**C**	**Code**	**Course Title**	**Hours Distribution**				**C**
		L	T	P	S				L	T	P	S	
24UFTA11	Tamil - 1	4	1	0	0	3	24UFTA21	Tamil – 2	4	1	0	0	3
24UFEN11	English - 1	4	1	0	0	3	24UFEN21	English – 2	4	1	0	0	3
24UCCC11	CC-1- Financial Accounting I-	3	1	2	0	5	24UCCC21	CC – 3 - Financial Accounting II	3	1	2	0	5
24UCCC12	CC- 2 Principles of Management	3	1	0	0	3	24UCCC22	CC -4 Business Law	3	1	0	0	4
24UCCA11P	EC – Software and Tally Lab	0	0	4	0	3	24UCCA21P	EC – Advanced Excel Lab	0	0	4	0	2
24UCCS11	SEC (NME) –Fundamentals of Commerce	2	0	0	0	2	24UCCA22	EC –Modern Marketing/Human Resource Management	2	0	0	0	2
24UCCS12	SEC – Business Organisation	2	0	0	0	2	24UCCS21	SEC -Internet and its Applications	2	0	0	0	2
24UCCF11	FC – Fundamentals of Information Technology	2	0	0	0	2	24UAEC21	AEC – 1 Life Skills through Yoga	1	1	0	0	2
					30	**23**						**30**	**23**

		Semester - III							Semester – IV					
24UFTA31	Tamil – 3	4	1	0	0	3	24UFTA41	Tamil – 4	4	1	0	0	3
24UFEN31	English – 3	4	1	0	0	3	24UFEN41	English – 4	4	1	0	0	3
24UCCC31	CC – 5 Corporate Accounting I	3	1	2	0	5	24UCCC41	CC – Corporate Accounting- II	3	1	2	0	5
24UCCC32	CC - Programming in C++	3	0	0	0	3	24UCCC42	CC –RDBMS	3	0	0	0	2
23UCCC33P	CP- Practical – C++ Programming Lab	0	0	2	0	1	24UCCC43P	CP- RDBMS LAB	0	0	3	0	2
24UMAA34	EC - Business Statistics	2	0	3	0	4	24UCCA41/ 24UCCA42	EC – 4 Banking Theory Law and Practice/ Introduction to Data Science	3	0	1	0	4
24UCCS31	SEC – E – Commerce and its Applications	2	0	0	0	2	24UCCS41	SEC –Social Media Marketing	1	1	0	0	2
24UAEC31S	AEC – 2 Human Values and Ethics	1	1	0	0	2	24UAEC41	AEC – 3 Environmental Studies	1	1	0	0	2
					30	**23**						**30**	**23**

Students must complete at least one online course (MOOC) from platforms like SWAYAM, NPTEL, or Nanmudalvan within the fifth 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*.

Part – 1 & 2	Tamil & English	8	SEC	Skill Elective Course	5
CC	Core Course	15	FC	Foundation Course	1
EC-AL	Elective Course – Applied	7	AEC	Ability Enhancement Course	4
EC	Elective Course - Major	4	SLC	Self-Learning Course	1

Course Code	Course Name	Category	L	T	P	S	Credits	Hours	Marks		
									CIA	External	Total
24UCCC31	**CORPORATE ACCOUNTING I**	Core	**6**	**0**	0	**0**	**5**	**6**	25	75	100

	Learning Objectives	
LO1	To understand the issue of shares and pro-rata allotment.	
LO2	To understand the underwriting of shares and redemption of Preference Shares.	
LO3	To know about Issue and Redemption of Debentures.	
LO4	To learn the form and contents of financial statements as per Schedule III of Companies Act 2013	
LO5	To examine the various methods of valuation of Goodwill and shares.	
Unit	**Content**	**Hours**
1	**Issue of Shares** Issue of Shares – Premium - Discount - Forfeiture - Reissue – Pro-rata Allotment.	18
2	**Redemption of Preference Shares and underwriting of Shares and Debentures** Underwriting of Shares and Debentures – Underwriting Commission - Types of Underwriting. Redemption of Preference Shares– Provisions of Companies Act– Capital Redemption Reserve – Minimum Fresh Issue – Redemption at Par, Premium and Discount. Underwriting of Shares and Debentures – Underwriting Commission - Types of Underwriting.	18
3	**Issue and Redemption of Debentures** Debentures: Issue and Redemption – Meaning – Methods – In One lot–in Instalment – Purchase in the Open Market includes- Ex Interest and Cum Interest - Sinking Fund Investment Method.	18
4	**Companies Final Accounts** Introduction – Final Accounts – Form and Contents of Financial Statements as Per Schedule III of Companies Act 2013 – Part I Form of Balance Sheet – Part II Form of Statement of Profit and Loss.	18
5	**Valuation of Goodwill & Shares** Valuation of Goodwill – Meaning – Need for Valuation of Goodwill – Methods of Valuing Goodwill – Average Profit – Super Profit – Annuity and Capitalisation Method. Valuation of Shares – Need for Valuation of Shares – Methods of Valuation of Shares – Net Assets Method – Yield and Fair Value Methods.	18

Theory 20% Problem 80%

Course Outcome	
Student will be able to	
CO1	Prepare and account for various entries to be passed in case of issue of shares.
CO2	Understand the Redemption of preference shares.
CO3	Gain knowledge about issue and redemption of debentures.
CO4	Construct Financial Statements applying relevant accounting treatments
CO5	Compute the value of goodwill and shares under different methods and assess its applicability.
Textbooks	
1	T.S. Reddy, A. Murthy – Corporate Accounting- Margham Publication, Chennai.
2	S.P. Jain and N.L. Narang, Advanced Accounting Vol I, Kalyani Publication, New Delhi
3	R.L. Gupta and M. Radha swamy, Advanced Accounts Vol I, Sultan Chand, New Delhi.
Reference Book	
1	M.C. Shukla, Advanced accounting Vol I, S. Chand, New Delhi
2	Shukla, Grewal and Gupta- Advanced Accounts VolI, S. Chand, New Delhi.
3	Anil Kumar, Rajesh Kumar, Corporate accounting I, Himalaya Publishing house, Mumbai.
Web Resources	
1	Corporate Accounting
2	Core-Corporate-Accounting-I.pdf
3	Corporate Accounting Notes, PDF	B COM, BBA, MBA 2025
4	Study-Materials-for-Corporate-Accounting.pdf

Mapping with Programme Outcomes and Programme Specific Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	2	2	2	3	1	2	1	2	3	2
CO2	3	2	2	2	3	1	2	1	2	3	2
CO3	3	2	2	2	3	1	2	1	2	3	2
CO4	3	2	2	2	3	1	2	1	2	3	2
CO5	3	2	2	2	3	1	2	1	2	3	2
TOTAL	15	10	10	10	15	5	10	5	10	15	10
AVERAGE	3	2	2	2	3	1	2	1	2	3	2

3 – Strong, 2- Medium, 1- Low

SECOND YEAR – SEMESTER – III

Course Code	Course Name	Category	L	T	P	S	Credits	Hours	CIA	External	Total
									Marks		
24UCCC32	**Programming in C++**	CC	3	0	0	0	2	3	25	75	100

	Learning Objectives
LO1	Describe the concept of OOPS and Functions overloading.
LO2	To understand the concepts of Objects.
LO3	Describe the concept of operator overloading.
LO4	To gain the knowledge of Constructor, destructors and inheritance.
LO5	To understand the concepts of binary I/O and Polymorphism, Exception handling.

Unit	Content	Hours
1	What is Object Oriented Programming – C++ Console I/O-Classes: Introducing Function Overloading -Constructor and Destructor Functions- Constructors take parameters- Introducing Inheritance – Object Pointers – In line Functions	6
2	Assigning Objects – Passing Object to Functions – Returning Object from Functions- Arrays of objects – Using Pointers to Objects –delete – references– Passing references to objects - Returning references Independent References and restrictions.	6
3	Overloading Constructor Functions- Creating and Using a Copy constructor- Using default arguments- the basics of operator overloading- overloading binary operators- overloading the relational and logical operators- overloading a Unary operator – using friend operator functions- overloading the subscript () operator.	6
4	Constructors, destructors and inheritance - multiple inheritance virtual bas classes- Some C++ I/O basics-formatted I/O using width (), precision () and fill() – using I/O manipulators-Creating your own inserters.	6
5	File I/O basics- unformatted, binary I/O- more unformatted I/O functions- random access- checking the I/O status- customized I/O and files- Pointers and derived classes- Introduction to virtual functions-applying polymorphism- Exception handling.	6

CO	Course Outcomes
CO1	To make the students familiar with function overloading
CO2	To motivate the students for the concepts of Objects.
CO3	Describe the concept of operator overloading.
CO4	Implement Constructor, destructors and inheritance.
CO5	To understand the concepts of binary I/O and Polymorphism, Exception handling.

TEXT BOOK	
1.	Herbert Scheldt, "Teach Yourself C++", III edition, Tata McGraw Hill 5th Reprint 2000
REFERENCE BOOKS	
1.	Reema Thareja "Object Oriented Programming with C ++", Oxford University Press, 2015
2.	Hubbard, "Programming with C++", 2/e, Schaum Outline Series,TMH, 2006
3.	Bjarne Stroustrup, "The C++ Programming Language", Addison Wesley Publications, Second Edition, 1991
4.	Sarang Proonachandra, "Object Oriented Programming with C++", PHI, 2006

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	3	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

Course Code	Course Name	Category	L	T	P	S	Credits	Hours	Marks		
									CIA	External	Total
23UCCC33P	**Programming in C++ Lab**	CP	0	0	2	0	1	2	25	75	100

Learning Objectives	
LO1	Apply the concepts of class, objects and function overloading
LO2	Apply the language of constructor and inline function
LO3	Implement the concepts of operator overloading and conversion function
LO4	Develop the program using of Inheritance
LO5	Develop the program using of Polymorphism.

List of Programs
1.Write a C++ program that implements Classes and objects
2.Write a C++ program using Function overloading
3.Write a C++ program using Constructors
4. Write a C++ program using Inline function
5.Write a C++ program perform Operator overloading
6.Write a C++ program Conversion function
7.Write a C++ program that implements Inheritance
8.Write a C++ program using Polymorphism

CO	Course Outcomes
CO1	To make the students familiar the program structure of C++ with its syntax and semantics
CO2	To motivate the students for the Understand the programming principles in C++ (operators, functions)
CO3	To Apply the programming principles learnt in real time problems
CO4	To make the students aware of Analyze the various methods of solving a problem and choose the best method
CO5	To Analyze the various methods of solving a problem and choose the best method

TEXT BOOK	
1.	Herbert Scheldt, "Teach Yourself C++", III edition, Tata McGraw Hill 5th Reprint 2000.
REFERENCE BOOKS	
1.	Reema Thareja , "Object Oriented Programming with C ++", Oxford University Press, 2015
2.	Hubbard, "Programming with C++", 2/e, Schaum Outline Series,TMH, 2006.
3.	Bjarne Stroustrup, "The C++ Programming Language", Addison Wesley Publications, Second Edition, 1991
4.	Sarang Proonachandra, "Object Oriented Programming with C++", PHI, 2006.

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	3	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

Course Code	Course Name	Category	L	T	P	S	Credits	Hours	Marks		
									CIA	External	Total
24UCCS31	**E Commerce and its Applications**	SEC	**2**	**0**	0	**0**	**2**	**2**	25	75	100

Learning Objectives	
LO1	To impart knowledge of E-commerce.
LO2	To understand the concepts of EDI and examine the digital economy.
LO3	To examine the concepts of E-Marketing and web enabled services.
LO4	To gain knowledge of e- payment system
LO5	To Gain an understanding of the legal frame work of E-commerce.

Unit	Content	Hours
1	**Introduction to E-Commerce** Introduction to E-Commerce - E-Trade - E-Business -E-Market – Advantages and Disadvantages of E Commerce – E-Business Models – Introduction to Mobile Commerce.	6
2	**Electronic Data Interchange** Benefits of EDI, EDI technology, EDI standards, EDI communications, EDI -Implementation, EDI Agreements, EDI Security. Electronic Payment Systems, Need of Electronic Payment System- Digital economy: Identify the methods of payments on the net – Electronic Cash, cheques and credit cards on the Internet.	6
3	**E-Marketing** E- Marketing –Meaning - Channels- E-Marketing Mix – Web Salesmanship – online shopping avenues - Advertising on Network.	6
4	**E-Payment System** E-Payment System– Types– Business Issues and Economic implications – Components of an effective E-Payment System.	6
5	**Legal Framework** Legal Framework for E-Commerce – Net Threats – Cyber Laws – Aims and Salient Features of Cyber Laws in India- Cyber Crimes.	6

CO	Course Outcomes On the completion of Course students will be able to
CO1	Recall the basic concepts of E Commerce
CO2	Asses the concepts of EDI and examine the digital economy
CO3	To understand e – retailing concepts and web enabled services
CO4	Analyse the risk involved in e- commerce.
CO5	Explore the current legal challenges and issues in E -commerce.

TEXT BOOK	
1.	Ravi Kalkota and Andrew B Whinston, "Frontiers of Electronic Commerce", Pearson, Noida.
2.	Henry Chan, Raymond Lee, Tharam Dillon, Elizabeth Chang, "E-Commerce Fundamentals and Applications, Wiley Publishers, New Delhi.
3.	Richard Hammer (1998), "Enterprise Resource Planning",
REFERENCE BOOKS	
1.	Efraim Turban, Jae Lee, David King ,H. Michael Chung (2001), "Electronic Commerce - A Managerial Perspective", Addison-Wesley, USA.
2.	Anita Agrawal, Rahul Kotian, Tushar Agarwal and Vijalakshmi Kannan, (2016), "E Commerce and Digital Marketing", Himalaya Publishing House, Mumbai.
WEB REFERENCES	
	https://www.slideshare.net/kamalgulati7/full-notes-on-ecommerce-study-materialfor-ecommerce
	https://www.techtarget.com/searchcio/definition/e-commerce?amp=1

Mapping with Programme Outcomes and Programme Specific Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	2	1	2	2	2	2	2	2	2	1
CO2	3	2	3	2	2	2	2	2	2	2	1
CO3	2	2	2	2	2	2	2	2	2	2	1
CO4	3	2	2	2	2	1	2	2	2	2	1
CO5	2	1	1	1	1	1	2	2	2	2	1
TOTAL	13	9	9	9	9	8	10	10	10	10	5
AVERAGE	2.6	1.8	1.8	1.8	1.8	1.6	2	2	2	2	1

Strong, 2- Medium, 1- Low-3

Course Code	Course Name	Category	L	T	P	S	Credits	Hours	Marks		
									CIA	External	Total
24UCCC41	**CORPORATE ACCOUNTING - II**	**Core**	3	1	2	0	5	6	**25**	**75**	**100**

Learning Objectives	
LO1	To know the types of Amalgamation, Internal and external Reconstruction
LO2	To know Final statements of banking companies
LO3	To understand the accounting treatment of Insurance company accounts
LO4	To understand the procedure for preparation of consolidated Balance sheet
LO5	To have an insight on modes of winding up of a company

Unit	Content	Hours
1	**Amalgamation, Absorption and Internal Reconstruction and External Reconstruction** Amalgamation – Meaning - Purchase Consideration - Lump sum Method, Net Assets Method, Net Payment Method, Intrinsic Value Method – Absorption - Internal Reconstruction – External Reconstruction.	18
2	**Accounting of Banking Companies** 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
3	**Insurance Company Accounts** Meaning of Insurance – Principles – Types – Preparation of Final Accounts of Insurance Companies – Accounts of Life Insurance Business – Accounts of General Insurance Companies -New Format.	20
4	**Consolidated Financial Statements** Introduction-Holding & Subsidiary Company-Legal Requirements Relating to Preparation of Accounts - Preparation of Consolidated Balance Sheet (Excluding Inter-Company Holdings).	19
5	**Liquidation of Companies** Meaning-Modes of Winding Up – Preparation of Statement of Affairs - Order of Payment – Liquidators Remuneration- Liquidator's Final Statement of Accounts.	15

Theory 20% Problem 80%

CO	Course Outcomes
	The students can able to
CO1	Understand the accounting treatment of amalgamation, Internal and external reconstruction.
CO2	Construct Profit and Loss account and Balance Sheet of Banking Companies in accordance in the prescribed format.
CO3	Prepare final accounts of Insurance companies in the prescribed format
CO4	Examine the consolidated accounts of holding companies
CO5	Prepare of liquidator's final statement of account

Textbooks:

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

Reference Books:

1	Advanced Accounts, R.L. Gupta and M. Radhaswamy, Sultan Chand, New Delhi
2	Advanced Accounting,M.C.Shukla, S.Chand, New Delhi

Web resources:

1	https://www.accountingnotes.net/amalgamation/amalgamation-absorption-andreconstructionaccounting/126
2	https://www.slideshare.net/debchat123/accounts-of-banking-companies
3	https://byjus.com/govt-exams/principles-of-insurance/
4	https://boslive.icai.org/pdf/20230912_91_HOLDING_COMPANY_BOOK_PDF_AJAY_RATHI_1694482952.pdf
5	https://kb.icai.org/pdfs/PDFFile664adb98e9f1c0.38817652.pdf

Mapping with Programme Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	2	3	2	2	2	3	3	3	2	2
CO2	3	2	3	3	3	2	3	2	3	3	3
CO3	3	2	3	2	3	3	3	3	3	2	2
CO4	3	3	2	3	2	2	3	2	3	3	2
CO5	3	2	3	2	2	2	3	3	3	2	2
Total	15	11	14	12	12	11	15	13	15	12	11
Average	3	2.2	2.8	2.4	2.4	2.2	3	2.6	3	2.5	2.2

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
24UCCC42	**RELATIONAL DATABASE MANAGEMENT SYSTEM**	CC	3	-	-	-	2	3	25	75	100

	Learning Objectives	
LO1	Gain a good understanding of the architecture and functioning of Database Management Systems	
LO2	Understand the ER diagram and Advanced Structure of Relational database.	
LO3	Apply Normalization techniques to normalize a database.	
LO4	Understand the concept Structured Query Language of (SQL) and its syntax.	
LO5	To enable the students to know about SQL Join Operators	

Unit	Content	Hours
1	Introduction to DBMS– Data and Information - Database – Database Management System – Objectives- Advantages – Components - Architecture. ER Model: Building blocks of ER Diagram.	9
2	Relationship Degree – Classification – ER diagram to Tables – ISA relationship – Constraints –Aggregation and Composition – Advantages Structure of Relational Database. Introduction to Relational Database Design - Objectives – Tools –Redundancy	9
3	Functional Dependency - Normalization – 1NF – 2NF – 3NF BCNF. Transaction Processing – Database Security.	9
4	Introduction to SQL: Data Definition Commands – Data Manipulation Commands – SELECT Queries – Additional Data Definition Commands – Additional SELECT Query Keywords – Joining Database Tables. Advanced SQL: Relational SET Operators: Union – Union All.	9
5	SQL Join Operators: Cross Join – Natural Join – Join USING Clause – JOIN ON Clause – Outer Join. Sub Queries and Correlated Queries: Where – In – Having – Any and All – From.	9

CO	CourseOutcomes After Completing the course, students will be able to:
CO1	Describe basic concepts of database system
CO2	Design a Data model and Schemas in RDBMS
CO3	To understand the concepts of Normalization techniques
CO4	To make the students familiar withStructured Query Language of SQL
CO5	To motivate the students for the concepts SQL Join Operators

Textbooks:	
1	S. Sumathi, S. Esakkirajan, "Fundamentals of Relational Database Management System",Springer International Edition 2007.
2	Ramakrishnan Raghu and Gehrke Johannes, "Database Management Systems", McGraw–Hill, USA.
3	Rajendra Prasad Mahapatra and GovindVerma, "Database Management System", Khanna Publications, New Delhi.
4	Database System Concepts" by Abraham Silberschatz, Henry F. · 2. "Fundamentals of Database Systems" by Ramez Elmasri and Shamkant B.
Reference Books:	
1	Abraham Silberchatz, Henry F. Korth, S. Sudarshan, "Database System Concepts",McGrawHill2019, 7th Edition.
2	Alexis Leon & Mathews Leon, "Fundamentals of DBMS", Vijay Nicole Publications 2014, 2ndEdition.
3	Ramon A Mata-Toledo and Pauline K Cushman, "Database Management System", Schaun's Outlines, New York.
4	Abraham Silberschatz, Henry F Korth and S. Sudarshan, "Database System Concepts" McGraw–Hill, USA.
Web resources	
1	https://nptel.ac.in/courses/106106093/
2	https://nptel.ac.in/courses/106106095/
3	NPTEL & MOOC courses titled Relational Database Management Systems

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	3	2
CO2	3	2	2	2	2	2	2	2	3	3	2
CO3	3	2	3	3	3	2	3	3	3	3	2
CO4	3	2	2	2	2	2	2	2	3	3	2
CO5	3	2	3	3	2	2	3	3	3	3	2
TOTAL	14	10	13	13	13	10	13	13	15	14	10
AVERAGE	2.8	2	2.6	2.6	2.6	2	2.6	2.6	3	2.8	2

3 – Strong, 2- Medium, 1- Low

Course Code	Course Name	Category	L	T	P	S	Credits	Hours	Marks		
									CIA	External	Total
24UCCC43P	RELATIONAL DATABASE MANAGEMENT SYSTEM LAB	CP	-	-	3	-	2	3	25	75	100

Learning Objectives	
LO1	To understand the concepts of DDL/DML/DCL/TCL commands.
LO2	To understand the concepts of Join queries
LO3	To understand the concepts of exception handling.
LO4	To understand the concepts of cursors.
LO5	To understand the concepts of packages.

List of the Programs	Hours
1.Execute a single line query and group Functions	
2. Execute DDL Commands	
3. Execute DML Commands	
4. Execute DCL and TCL Commands	
5. Implement the Nested Queries	
6. Implement Join operations in SQL	
7. Create views for a Particular table	45
8. Implement Locks for a particular table.	
9. Write PL/SQL procedure for an application using exception handling.	
10. Write PL/SQL procedure for an application using cursors.	
11. Write a PL/SQL procedure for an application using functions	
12. Write a PL/SQL procedure for an application using package	

CO	**Course Outcomes** **After Completing the course, students will be able to:**
CO1	Describe basic concepts of database group function and DDL Commands in SQL.
CO2	To understand the concepts of DML and DCL Commands in SQL.
CO3	To understand the concepts of TCL Commands in SQL
CO4	To motivate the students for the Understand the Queries Join Operations in SQL
CO5	To make the students familiar with SQL tables

Textbooks:	
1	S. Sumathi, S. Esakkirajan, "Fundamentals of Relational Database Management System",Springer International Edition 2007.
2	Ramakrishnan Raghu and Gehrke Johannes, "Database Management Systems", McGraw–Hill, USA.
3	Rajendra Prasad Mahapatra and GovindVerma, "Database Management System", Khanna Publications, New Delhi.
4	Database System Concepts" by Abraham Silberschatz, Henry F. · 2. "Fundamentals of Database Systems" by Ramez Elmasri and Shamkant B.
Reference Books:	
1	Abraham Silberchatz, Henry F. Korth, S. Sudarshan, "Database System Concepts",McGrawHill2019, 7th Edition.
2	Alexis Leon & Mathews Leon, "Fundamentals of DBMS", Vijay Nicole Publications 2014, 2ndEdition.
3	Ramon A Mata-Toledo and Pauline K Cushman, "Database Management System", Schaun's Outlines, New York.
4	Abraham Silberschatz, Henry F Korth and S. Sudarshan, "Database System Concepts" McGraw–Hill, USA.
Web resources	
1	https://nptel.ac.in/courses/106106093/
2	https://nptel.ac.in/courses/106106095/
3	NPTEL & MOOC courses titled Relational Database Management Systems

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

Course Code	Course Name	Category	L	T	P	S	Credits	Hours	Marks		
									CIA	External	Total
24UCCA41	BANKING THEORY LAW & PRACTICE	EC	3	0	1	0	4	4	25	75	100

	Learning Objectives										
LO1	To help the students understand various provision of Banking Regulation Act 1949 applicable to banking companies including cooperative banks										
LO2	To trace the evolution of central bank concept and prevalent central banking system around the world and their roles and function										
LO3	To throw light on Central Bank in India, its formation, nationalizing its organization structure, role of bank to government, role in promoting agriculture and industry, role in financial inclusion										
LO4	To understand how capital fund of commercial banks, objectives and process of Asset securitization etc.										
LO5	To explore practical banking systems relationship of bankers and customers, crossing of cheques, endorsement etc.										

Unit	Content	Hours
1	**Introduction to Banking** History of Banking- Provisions of Banking Regulations Act 1949 - Components of Indian Banking -Indian Banking System-Phases of Development - Banking Structure in India – Public Sector Banks, Private Banks, Foreign Banks, RRB, UCB, Payment Banks and Small Finance Banks - Banking System	12
2	**Central Bank and Commercial Bank** Central Banking: Definition –Need - Principles- Central Banking Vs Commercial Banking-Functions of Central Bank-Credit Creation. Commercial Banking: Definition - Functions -Personal Banking -Corporate Banking -Role of Banks in Economic Development.	12
3	**Banking Practice** Types of Accounts CASA – Types of Deposits - Opening Bank Account- Account Statement vs Passbook vs e-statement - Banker Customer Relationship - Special Types of Customers –KYC norms - securities of lending Factors influencing bank lending.	12
4	**Negotiable Instruments** Negotiable Instruments – Meaning & Definition – Characteristics -Types of negotiable instruments. Crossing of Cheques– Concept – Objectives- Types of Crossing-Consequences of Non-Crossing. Endorsement-Meaning-Components-Kinds of Endorsements-Cheques payable to fictitious person Endorsement by legal representative Negotiation bank–Banking Ombudsman.	12

5	**Digital Banking** Meaning- Services - e-banking and financial services-Internet banking Vs Traditional Banking Mobile banking - ATM – Concept - Features - Types-. Electronic money-Meaning-Categories-Merits of e-money - National Electronic Funds Transfer (NEFT), RTGS, IMPS, UPI and Digital currency	12

CO	Course Outcomes After Completing the course, students will be able to:
CO1	Aware of various provision of Banking Regulation Act 1949 applicable to
CO2	Analyse the evolution of Central Banking concept and prevalent Central Banking system in India and their roles and function
CO3	Gain knowledge about the Central Bank in India, its formation, nationalizing its organization structure, role of bank to government, role in promoting agriculture and industry, role in financial inclusion
CO4	Evaluate the role of capital fund of commercial banks, objectives and process of Asset Securitization
CO5	Define the practical banking systems relationship of bankers and customers, crossing of cheques, endorsement etc.

Textbooks:	
1	Gurusamy S, Banking Theory: Law and Practice, Vijay Nicole Publication, Chennai
2	Muraleedharan, Modern Banking: Theory and Practice, Prentice Hall India Learning Private Ltd, New Delhi 3
3	Gupta P.K. Gordon E.Banking and Insurance, Himalaya publication,Kolkatta
4	Gajendra,A Text on Banking Theory Law & Practice, Vrinda Publication, Delhi K P Kandasami, S Natarajan & Parameswaran, Banking Law and Practice,S Chand Publication
Reference Books:	
1	B. Santhanam, Banking & Financial System, Margam Publication, Chennai
2	KataitSanjay, Banking Theory and Practice, Lambert Academic Publishing
3	Henry Dunning Macleod, The Theory And Practice Of Banking, Hard Press Publishing, Old New Zealand
4	William Amasa Scott, Money And Banking: An Introduction ToThe Study Of Modern Currencies, Kesinger publication, USA
Web Resources	
1	https://www.rbi.org.in/
2	https://businessjargons.com/e-banking.html
3	https://www.wallstreetmojo.com/endorsement/

Mapping with Programme Outcomes and Programme Specific Outcomes

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

3 – Strong, 2- Medium, 1- Low

Course Code	Course Name	Category	L	T	P	S	Credits	Hours	Marks		
									CIA	External	Total
24UCCA42	**INTRODUCTION TO DATA SCIENCE**	EC	3	0	1	0	4	4	25	75	100

Learning Objectives	
LO1	To introduce the concepts, techniques and tools in Data Science collection
LO2	To acquire the knowledge on data science process and including data
LO3	To understand the various facets of data science practice
LO4	To interact exploratory data analysis, predictive modelling, descriptive modelling and effective communication
LO5	To apply the case study in data science.

Unit	Content	Hours
1	**Introduction:** Benefits and uses – Facets of data – Data science process – Big data ecosystem and data science	12
2	**The Data science process:** Overview – research goals - retrieving data - transformation – Exploratory Data Analysis – Model building - Data Visualization	12
3	**Algorithms:** Machine learning algorithms – Modelling process – Types – Supervised – Unsupervised - Semi-supervised	12
4	**Introduction to Hadoop:** Hadoop framework – Spark – replacing Map Reduce– No SQL – ACID – CAP – BASE – types	12
5	**Case Study:** Prediction of Disease - Setting research goals - Data retrieval – preparation - exploration - Disease profiling - presentation and automation	12

CO	Course Outcomes After Completing the course, students will be able to:
CO1	Describe the concept of Data Science
CO2	Analyse what Statistical Inference means& Identify probability distributions
CO3	Fita model to data and use tools for basic analysis and communication
CO4	Understand and apply hadoop framework and
CO5	To analyse case studies

Textbooks:	
1	Davy Cielen, Arno D. B. Meysman, Mohamed Ali, "Introducing Data Science",manning publications 2016
2	Roger Peng, "The Art of Data Science", lulu.com 2016.
3	MurtazaHaider, "Getting Started with Data Science – Making Sense of Data with Analytics", IBM press, E-book
Reference Books:	
1	Davy Cielen, Arno D.B. Meysman, Mohamed Ali,"Introducing Data Science:Big Data, Machine Learning, and More, Using Python Tools, Dreamtech Press,2016.
2	Annalyn Ng, Kenneth Soo, "Numsense! Data Science for the Layman: No Math Added", 2015,1st Edition.
3	Cathy O'Neil, Rachel Schutt, "Doing Data Science Straight Talk from the Frontline", O'Reilly Media 2013.
4	Lillian Pierson, "Data Science for Dummies", 2015 II Edition

Mapping with Programme Outcomes and Programme Specific Outcomes

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

3 – Strong, 2- Medium, 1- Low

Course Code	Course Name	Category	L	T	P	S	Credits	Hours	Marks		
									CIA	External	Total
24UCCS41	**SOCIAL MEDIA MARKETING**	SEC	1	1	-	-	2	2	25	75	100

	Learning Objectives
LO1	To understand the foundations of social media and its role in marketing
LO2	To conceptualize social media marketing strategy formulation
LO3	To understand the typology of social media platforms and their utility for marketers
LO4	To become familiar with social media analytics and metrics
LO5	To become familiar with marketing through social media platforms.

Unit	Content	Hours
1	**Foundations of Social Media Marketing:** Social Media and its role within Marketing, Social media environment – Social consumers – Social applications – Social business ecosystem – Network structure and group influences in social media	6
2	**Social Media Marketing Strategy and Planning**: Rules of engagement for social media marketing- Target audience – Influencers – Message/Content Developing a Social media marketing plan	6
3	**Social Media Platforms Activities:** Typology, scope and utility, Scope and marketing utility of blogging, micro-blogging, social networks, social bookmarking, collaboration, video sharing, podcasts, picture sharing, live streaming, webinars	6
4	**Social Media Data Management and Measurement**: Social media analytics, social media metrics – Introduction to analytics tools for popular social media (Facebook, Twitter, LinkedIn, YouTube, Instagram) Social media monitoring and Online reputation management	6
5	**Marketing through Social Media Platforms**: Marketing through Face book– Community building and engagement Marketing through LinkedIn – B2B lead generation and personal branding Marketing through Twitter – Driving traffic and conversations Marketing through YouTube – Viral marketing, Marketing through Instagram – Visual story telling Planning and creating multi-channel, Social media strategy.	6

CO	Course Outcomes After Completing the course, students will be able to:
CO1	Understand the foundation of Social media marketing
CO2	Conceptualize social media marketing strategy formulation
CO3	Understand the typology of social media platforms
CO4	Become familiar with media analytics and metrics
CO5	Perform marketing through social media platforms.

Textbooks& Reference books:	
1	Social Media Marketing: A Strategic Approach (2e). Barker, Barker, Bormann, Zahay and Roberts, 2017,)
2	Social Media Marketing (3e), Tuten and Solomon, 2018, Sage Publications
3	Social Media Marketing for Dummies (3e). Singh and Diamond, 2014, Wiley
4	Social Media Marketing: Next generation of business engagement, Evans and McKee, 2010, Wiley
Web resources	
1.	https://www.wordstream.com/social-media-marketing
2.	https://engage.marketo.com/rs/460-TDH-945/images/The-Definitive-Guide-to-Social-Media-Marketing-Marketo.pdf
3.	https://www.researchgate.net/publication/256296291_Social_Media_Marketing_SOCIAL_MEDIA_MARKETING_ADVANTAGES_AND_DISADVANTAGES

Mapping with Programme Outcomes and Programme Specific Outcomes

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	2	2	2	1	2	1	1	1
CO2	3	1	2	2	1	1	1	2
CO3	2	2	2	2	2	1	2	2
CO4	2	2	2	2	2	2	2	2
CO5	2	2	2	2	2	1	2	2
TOTAL	11	9	10	9	9	6	8	9
AVERAGE	5.5	4.5	5	4.5	4.5	3	4	4.5

3 – Strong, 2- Medium, 1- Low