



DEPARTMENT OF B.COM (CA)

**CHOICE BASED CREDIT SYSTEM (CBCS) &
LEARNINGOUTCOMES-BASED CURRICULAR FRAME WORK (LOCF)**

BACHELOR OF COMMERCE WITH COMPUTER APPLICATIONS

2024 – 2027 BATCH



DEPARTMENT OF COMMERCE WITH COMPUTER APPLICATIONS
CHOICE BASED CREDIT SYSTEM (CBCS) & LEARNING OUTCOMES BASED CURRICULAR FRAMEWORK
(LOCF)

BACHELOR OF COMMERCE WITH COMPUTER APPLICATIONS-2024-2027 BATCH ONWARDS

Sem	Part	Course Code	Title of the Course	Course Type	Instruction hours/week	Contact hours	Tutorial	Duration of Examination	Examination Marks			Credits	
									CA	ESE	TOTAL		
I	I	TAM2301A/ HIN2301A/ FRE2301A	Tamil Paper I/ Hindi Paper I/ French Paper I	L	4	58	2	3	25	75	100	3	
	II	ENG2301A	English Paper I	E	4	58	2	3	25	75	100	3	
	III	CM23C01	Principles of Accounting	CC	5	73	2	3	25	75	100	3	
	III	BP24C02	e-business Applications	CC	6	88	2	3	25	75	100	4	
	III	TH24A07	Mathematics for Commerce	GE	5	73	2	3	25	75	100	4	
	III	BP24CP1	Financial Forecasting and Analytics Practical	CC	4	60	-	3	15	35	50*	2	
	IV	Non Tamil Students											2
		NME23B1/ NME23A1	Basic Tamil I/ Advanced Tamil I	AEC	2	28	2	-	100	-	100		
		Students with Tamil as Language											
		NME23ES	Introduction to Entrepreneurship	AEC	2	30	-	-	100	-	100		
I-V	VI	24BONL1 24BONL2 24BONL3	Online Course I Online Course II Online Course III	ACC	-	-	-	-	-	-	-		
	I	TAM2302A/ HIN2302A/ FRE2302A	Tamil Paper II/ Hindi Paper II/ French Paper II	L	4	58	2	3	25	75	100	3	
	II	ENG2302A	English Paper II	E	4	58	2	3	25	75	100	3	
	III	BP24C03	Object Oriented Programming with C++	CC	6	88	2	3	25	75	100	4	

II	III	CM23C04	Financial Accounting	CC	5	73	2	3	25	75	100	3
	III	TH24A16	Statistics for Commerce	GE	5	73	2	3	25	75	100	4
	III	BP24CP2	Programming with C++ Practical	CC	4	60	-	3	15**	35**	50	2
	IV	NM24UHR	Universal Human values and Human Rights	AECC	2	30	-	-	100	-	100	2
		*NME23B2 NME23A2	Basic Tamil II/ Advanced Tamil II	AEC	-	-	-	-	100	-	100	Gr
	VI	NM23GAW	General Awareness	AECC	SS	-	-	-	100	-	100	Gr
	VI	COM15SER	Community Service 30Hours	GC	-	-	-	-	-	-	-	-
I-V	VI	24BONL1 24BONL2 24BONL3	OnlineCourse1 OnlineCourse2 Online Course3	ACC	-	-	-	-	-	-	-	-
III	I	TAM2303/ HIN2303A/ FRE2303A	Tamil Paper III/ Hindi Paper III/ French Paper III	L	4	58	2	3	25	75	100	3
	II	ENG2403A	English Paper III	E	4	58	2	3	25	75	100	3
	III	BP24C05	Fundamentals of Corporate Accounting	CC	5	73	2	3	25	75	100	4
	III	EC24C06	Relational Database Management System	CC	4	58	2	3	25	75	100	3
	III	BP23A01/ BP24A02/ EC24A01	Business Management and Ethics/ Human Resource Management/ Company Law	GE	5	73	2	3	25	75	100	4
	III	EC24CP3	Database Programming Practical	CC	3	45	-	3	15	35	50*	2
	III	BP24SBP1	Data Analytics with Power BI and Tableau Practical	SEC	3	41	4	-	100	-	100	3

	IV	NM23DTG	Design Thinking	AEC	2	30	-	-	100	-	100	2
I -III	VI	COM15SER	Community Services 30 Hours	GC	-	-	-	-	-	-	-	-
I -V	VI	24BONL1 24BONL2 24BONL3	Online Course I Online Course II Online Course III	ACC	-	-	-	-	-	-	-	-

L-Language

CC–Core Courses

GE – Generic Elective

AEC–Ability Enhancement Course

GC-General Course

****CAconductedfor25andconvertedinto15,ESE conducted for 75 and converted into35**

***After class hours**

E-English

SS–Self study

CA–Continuous Assessment

ESE–End Semester Examination

ACC–Additional Credit Course

AECC-Ability Enhancement Compulsory Courses

Examination System

One test for continuous assessment will be conducted on pre-determined dates i.e., commencing on the 50th day from the date of reopening. The Model exam will be conducted after completing 85th working days. Marks for ESE and CA with reference to the maximum for the courses will be as follows

23-24Batchonwards

CA Question Paper Pattern and distribution of marks UG Language and English

Section A	5x 1(No choice)	:	5 Marks
Section B	4x5 (4out of6)	:	20Marks(250words)
Section C	2x10(2outof3)	:	20 Marks(500words)
Total:			45

Marks UG-Core and Allied-(First 3Units)

CA Question from each unit comprising of

One question with a weightage of 2 Marks

(Internal Choice at the same CLO level) :2x3=6

One question with a weightage of 5 Marks

(Internal Choice at the same CLO level) :5x3=15

One question with a weightage of 8 Marks

(Internal Choice at the same CLO level) : 8x3=24

Total: 45 Marks

EndSemesterExamination–QuestionPaperPatternandDistributionofMarksLanguageandEnglish–UG

Section A	10x1(10outof12):		10Marks
Section B	5 x5(5outof7)	:	25Marks(250words)
Section C	4x10(4outof6)	:	40Marks(600-700words)
Total			: 75Marks

UG-Core and Allied courses:**ESE Question Paper Pattern: 5x15=75 Marks****Question from each unit comprising of**

One question with a weightage of 2 Marks: $2 \times 5 = 10$

One question with a weightage of 5 Marks
(Internal Choice at the same CLO level) : $5 \times 5 = 25$

One question with a weightage of 8 Marks
(Internal Choice at the same CLO level) : $8 \times 5 = 40$

ESE Question Paper Pattern: (for Accounts Paper) 5x15=75 Marks**Question from each unit comprising of**

One question with a weightage of 2 Marks : $2 \times 5 = 10$

One question with a weightage of 5 Marks: $5 \times 5 = 25$

One question with a weightage of 8 Marks
(Internal Choice at the same CLO level) : $8 \times 5 = 40$

Continuous Internal Assessment Pattern Theory**I Year UG (24 Batch)**

CIA Test	:	5 marks (conducted for 45 marks after 50 days)
Model Exam	:	7 marks (Conducted for 75 marks after 85 days (Each Unit 15 Marks))
Seminar/Assignment/Quiz	:	5 marks Class
Participation	:	5 marks
Attendance	:	3 marks
Total	:	25 Marks

Part IV**Introduction to Entrepreneurship/Universal Human values and Human Rights**

Quiz	:	50 marks
Assignment	:	25 marks
Project / Case study	:	25 marks
Total	:	100 Marks

Core Practical

Lab Performance	:	7 Marks
Regularity	:	5 Marks
Model Exam	:	10 Marks
Attendance	:	3 Marks
Total	:	25 Marks

Skill Based Practical Courses

Test I	:	30 Marks(Conductedfor50marksandConvertedto30Marks) Test
II	:	50 Marks
Lab Performance	:	10 Marks
Regularity	:	10 Marks
Total	:	100 Marks

Design Thinking

Quiz	:	50Marks
Assignment	:	25Marks
Project/Case study	:	25Marks
Total	:	100 Marks

MAPPING OF PLOs WITH CLOs

COURSE LEARNING OUTCOMES	PROGRAMME LEARNING OUTCOMES				
	PLO1	PLO2	PLO3	PLO4	PLO5
COURSE–CM23C01					
CLO1	S	M	S	M	S
CLO2	S	M	S	M	M
CLO3	S	M	M	M	M
CLO4	S	M	S	M	S
COURSE–BP24C02					
CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	S	S	S	S	M
CLO2	S	S	S	S	S
CLO3	S	M	S	S	M
CLO4	S	S	M	S	M
COURSE–BP24CP1					
CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	S	S	S	S	M
CLO2	S	S	M	S	M
CLO3	S	S	S	S	M
CLO4	M	S	M	M	M
COURSE–BP24C03					
CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	S	S	M	S	S
CLO2	M	S	S	M	S
CLO3	S	M	S	M	S
CLO4	S	S	M	L	L
COURSE–CM23C04					
CLO1	S	S	M	M	S

CLO2	S	S	M	M	S
CLO3	S	S	S	S	M
CLO4	S	S	S	S	M
COURSE–BP24CP2					
CLO1	S	S	M	M	M
CLO2	S	M	S	M	M
CLO3	S	M	M	S	L
CLO4	M	S	M	S	L
COURSE-BP24C05					
CLO1	S	S	S	M	S
CLO2	S	S	M	S	S
CLO3	S	M	S	M	S
CLO4	M	S	S	S	M
COURSE– EC24C06					
CLO1	M	S	S	S	M
CLO2	S	M	S	S	M
CLO3	S	S	S	L	M
CLO4	M	S	M	M	M
COURSE– BP23A01					
CLO1	S	S	S	S	S
CLO2	S	S	S	M	S
CLO3	S	S	M	S	S
CLO4	S	S	M	M	M
COURSE– BP24A02					
CLO1	S	S	S	S	M
CLO2	S	S	S	S	M
CLO3	S	S	S	S	M
CLO4	S	S	S	S	M
COURSE– EC24A01					

CLO1	S	L	S	S	M
CLO2	M	S	M	S	S
CLO3	S	S	S	S	S
CLO4	S	S	S	S	S
COURSE– EC24CP3					
CLO1	S	S	S	S	L
CLO2	S	S	S	S	L
CLO3	S	S	S	S	L
CLO4	S	S	S	S	L
COURSE–BP24SBP1					
CLO1	S	S	S	S	M
CLO2	S	S	S	L	L
CLO3	S	S	M	S	S
CLO4	S	S	S	L	M

S-Strong; M-Medium;L-Low

COURSE CODE	COURSENAME	CATEGORY	L	T	P	CREDIT
CM23C01	PRINCIPLESOFACCOUNTING	THEORY	73	2	-	3

Preamble

To enable the students to apply the conceptual principles and to develop an expertise in handling accounts of business entities and the consolidation of accounts through appropriate accounting techniques and policies.

Prerequisite

- Basic Knowledge in Financial Statements

Course Learning Outcomes

On the successful completion of the course, students will be able to

CLO Number	CLO Statement	Knowledge Level
CLO1	Define the concepts and conventions in accounting.	K1
CLO2	Interpret accounting statement using basic concepts.	K2
CLO3	Apply the procedures of recording transactions and preparation of Reports.	K3
CLO4	Articulate the accounting concepts to interpret the performance of a Firm.	K4

Mapping with Programme Learning Outcomes

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	S	M	S	M	S
CLO2	S	M	S	M	M
CLO3	S	M	M	M	M
CLO4	S	M	S	M	S

S-Strong; M-Medium;

Syllabus

PRINCIPLES OF ACCOUNTING-CM23C01 (73Hrs)

Unit I (14Hrs)

Basic Accounting Concepts (AS-1)-Rectification of errors-Final Accounts-Bank Reconciliation Statement.

Unit II (14Hrs)

Average due date-Bills of exchange (trade bills only)-Joint Venture (AS-27).

Unit III (15Hrs)

Departmental Accounts-Basis for allocation of expenses .Branch Accounts (Dependent Branches- Debtors and Stock &Debtors System-Independent Branches only).

Unit IV (15Hrs)

Hire purchase Accounts: Default and Repossession-Hire purchase Trading Account-Installment purchase system.

Unit V (15Hrs)

Depreciation (excluding change in method of depreciation)-Investment Account(AS-13).

Text Book

S. No	Authors	Title	Publishers	Year of Publication
1.	Reddy TS & A Murthy	Financial Accounting	Margham Publications	Reprint 2021, 7 th Edition

Reference Books

S. No	Authors	Title	Publishers	Year of Publication
1.	RL Gupta & Radhasamy	Advanced Accountancy (Vol I)	Sultan Chand & Sons.	2018, 13 th Edition
2.	Jain S.P & Narang K.L	Principles of Accountancy	Kalyani Publishers	2018, 7 th Edition.
3.	MC Shukla, T.S. Grewal & S.C. Gupta	Advanced Accountancy	S. Chand & sons	2016, 19 th Edition.

Skill Components

- Identifying concepts and conventions adopted by a firm in their financial statement.
- Prepare a Bank Reconciliation Statement for the business concern.
- Study a firm's financial statement and present a report on the accounting policies followed.
- To calculate the due date and amount on discounting of bills for a firm.
- Analyzing the financial statement of a hire purchase company and present a report on the collection system.
- Analyse the treatment of depreciation for different firms.

Pedagogy

Lecture through PowerPoint presentations, Discussion ,Assignment, Quiz, and Seminar

Course Designers

1. Dr.S.Sujatha, Department of Commerce
2. Dr.G.Indrani, Department of Commerce

COURSECODE	COURSENAME	CATEGORY	L	T	P	CREDIT
BP24C02	e-BUSINESSAPPLICATIONS	THEORY	88	2	-	4

Preamble

To enable the students

- To understand about the fundamentals of computers and programming languages
- To provide in-depth understanding about Computer based Information system
- To impart knowledge about E-Commerce working models

Prerequisite

- Basic Knowledge in E-commerce

Course Learning Outcomes

On the successful completion of the course, students will be able to

CLO Number	CLO Statement	Knowledge Level
CLO1	Understand the computing concepts and computer applications in Business with security policies.	K1
CLO2	Associating data processing, network programming and multimedia tools Application with the business.	K2
CLO3	Develop and interpret the technical framework required for an e-Business, E-commerce in Internet, Ethics in E-commerce.	K3
CLO4	Analyzing computer characteristics in business and evaluating Multimedia tools' significance within a business context.	K4

Mapping with Programme Learning Outcomes

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	S	S	S	S	M
CLO2	S	S	S	S	S
CLO3	S	M	S	S	M
CLO4	S	S	M	S	M

S-Strong ;M-Medium;

e- BUSINESS APPLICATIONS–BP24C02 (88Hrs)

Syllabus

UNIT –I

(18Hrs)

*Computer- Characteristics- Importance – *Computer applications in various areas of Business– General application of computers in various fields*. Data and Information—Data processing— *Steps of data processing*. Data structure – File Organisation and Maintenance – Programming Language – Machine language, Assembly language, High Level Languages – Programming tools- Steps in developing a computer Program – Computer networks- Features-Network Structure- *Types of networks*- *Multimedia tools**

UNIT –II

(17Hrs)

*Introduction to E-Commerce-Defining E-Commerce-Features, Importance, Objectives of E-Commerce-E-Commerce industry framework- *Types of E-Commerce-Levels*- Need for E-Commerce- Application of E-Commerce- *Challenges in E-Commerce application*- E-Commerce and E-Business- *Future of E-Commerce*- E-Service: E-Service technologies– E-Commerce Opportunities in India. EDI- Features of EDI- Introduction to cloud and grid computing-Android applications. E-tailing: Traditional retailing and e retailing, Benefits of e retailing, *Models of e-retailing, Features of e-retailing**

UNIT–III

(18Hrs)

*E-commerce over the Internet-Concept of networking-Advantages of networking- *classification of networking*. Electronic payment methods-overview of EPS- *modes of E-payment*. Ethics in E-Commerce Issues in Ecommerce Understanding Ethical, Social and Political issues in E-Commerce: A model for Organizing the issues, *Basic Ethical Concepts, Analyzing Ethical Dilemmas*, Candidate Ethical principles Privacy and Information Rights: *Information collected at E-Commerce Websites*- E-Commerce Process and Payment Solutions.*

UNIT –IV**(18Hrs)**

E-Banking: Introduction Concepts and Meaning-Need for computerization-Electronic delivery channels-Automated teller machine - **Electronic Fund Transfer –Uses**-Computerization in clearing houses-Telebanking-Computer bank branches-**E-Cheque-MICR Cheque**-e-Banking in India. Threats in Computer System: Virus, Cybercrime Network Security: Encryption, Protecting Web server with firewall, **Firewall and Security policy**, Network firewalls and Application Firewalls, **Proxy Server**.E –Locking Technique – E – Locking Products – E – Locking Services

UNIT –V**(17Hrs)**

E- Business Communication – Importance of E – Technology. SSL protocol – Legal Aspects of E-Business, Internet frauds–CyberLaws.IntroductiontoIndustry4.0-**Need–Reasons for AdoptingIndustry4.0**-Definition–GoalsandDesignPrinciples–Technologiesof Industry4.0- Skills required for Industry4.0- **Advancements in Industry4.0**– Impact of Industry4.0on Society, Business, Government and People - **Introduction to 5.0.**

Highlighted Content offered in Blended Mode*Text Book**

S.No	Author Name	Title of the Book	Publisher	Year and Edition
1	R.SaravanaKumar, R. Parameswaran T.Jayalakshmi(unitI)	A textbook of Information Technology	S.Chand&Coltd New Delhi	16 th Edition 2016.
2	RayuduC.S (unitII-IV)	E Commerce–E- Business	Himalaya Publishing House.	1 st Edition 2015.
3	Kenneth C.Laud on and Carol Guercio Traver (Unit V)	E-Commerce2022	Pearson Publications	1 st Edition 2022.

Reference Books

S.No	Author Name	Title of the Book	Publisher	Year and edition
1	Joseph PT,	E Commerce ,an Indian Perspective	Margham Publications	5 th Edition2015
2	Murthy CSV	E Commerce–Concepts, Models, Strategies	Himalaya Publishing House.	1 st Edition2016

Pedagogy

- Lecture, Assignment, Group Discussion, PowerPoint Presentation and Seminar.

Course Designer

1. Dr.S.NithyaSumathi
2. Mrs.L.Mahalakshmi

COURSE CODE	COURSENAME	CATEGORY	L	T	P	CREDIT
BP24CP1	FINANCIALFORECASTINGAND ANALYTICSPRACTICAL	PRACTICAL	-	-	60	2

Preamble

To enable the students

- To adopt new tools and techniques in financial analysis using spreadsheets
- To use financial analysis tools in LibreOffice Calc to support decision-making processes and solve complex financial problems.

Course Learning Outcomes

On the successful completion of the course, students will be able to

CLO Number	CLO Statement	Knowledge Level
CLO1	Understanding spread sheet fundamentals using Libre Office Calc	K1
CLO2	Organise and summarization of financial data.	K2
CLO3	Extract the relevant financial statements and make the Financial decisions	K3
CLO4	Develop skills in building financial models to analyse and Evaluate business decisions.	K4

Mapping with Programme Learning Outcomes

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	S	S	S	S	M
CLO2	S	S	M	S	M
CLO3	S	S	S	S	M
CLO4	M	S	M	M	M

S-Strong; M-Medium;

FINANCIALFORECASTINGANDANALYTICS-BP24CP1 (60Hrs)

1. Calculation of present and future values (NPV and IRR) for Investment Analysis.
2. Calculation of Depreciation using Straight line and diminishing balance method.
3. Preparation of Loan amortization Table.
4. Integrating Data Validation using V LOOK UP and H LOOKUP
5. Organising, summarizing and Data manipulation through pivot table.
6. Financial Analysis using Sensitivity Analysis and What-If Analysis

7. Calculation of Break-Even Analysis using Goal Seek.
8. Preparation of Gantt chart to monitor project progress and priorities activities
9. Developing three Statement Financial Model- Income Statement, Balance sheet and Cash Flow Statement
10. Horizontal and vertical Analysis off financial data of the company
11. Preparation of financial projection template of the business.
12. Forecasting Model-Straight line, Moving Average and Linear regression model.
13. Preparation of merger and acquisition mode l(M&A)Model.
14. Preparation of Discounted Cash Flow Analysis (DCF) Model.
15. Preparation of comparable company analysis (CCA)model

Pedagogy

Lecture, Demoin System

Course Designer

1. Dr.R.Jayasathya
2. Dr.C.Esakkiammal

COURSE CODE	COURSENAME	CATEGORY	L	T	P	CREDIT
NME23ES	INTRODUCTION TO ENTREPRENEURSHIP	THEORY	30	-	-	2

Unit1

(6hrs)

Introduction:

Entrepreneurship- Introduction-Factors-Barriers-Entrepreneurial Traits and Types-Steps for starting a Small Industry- MSMEs – Social entrepreneurship.

Unit2

(6hrs)

Entrepreneurship Development Programmes-Institutional Framework(IFCI, ICICI, IDBI, IRBI, EXIM Bank, NSIC, SIDBI, SFC, SIPCOT AND TIIIC)-Role of Incentives and Subsidies

Unit3

(6hrs)

Innovation-Types–Role-Creative Problem Solving-Incubators-Angel Investors-Venture Capital.

Unit4

(6hrs)

Intellectual Property-Meaning-Copy Right Registration-Patents-Trademark-Design and Procedure for registration.

Unit5**(6hrs)****Project Preparation**

Project identification and Classification - Project Formulation- Project Appraisal- Project Report
Presentation

Text Books

Sl. No.	Author(s)	Title of the Book	Publisher	Year of Publication
1.	Gupta.C.Band Srinivasan.N.P	Entrepreneurial Development	SultanChandand Sons	2020
2	SauhariVinnieand BhushanSudhashu	Innovation Management	Oxford	2014

Reference Books

Sl. No.	Author(s)	Title of the Book	Publisher	Year of Publication
1.	KolbBonitaM	Entrepreneurship for the Creative and cultural industries	Routedge	2015
2.	P.T.Vijayashree& M.Alagammai	Entrepreneurship and Small Business Management	Margham	2020

COURSE CODE	COURSE TITLE	CATEGORY	L	T	P	CREDIT
BP24C03	OBJECTORIENTED PROGRAMMINGWITH C++	THEORY	88	2	-	4

Preamble

The course provides an introduction to object-oriented programming using C++ language. It enables the students to apply C++ features in program design and implementation.

Prerequisite

- Basic Computer Skills, Basic Math Skills

Course Learning Outcomes

On the successful completion of the course, students will be able to

CLOs	CLO Statement	Knowledge Level
CLO1	Define key concepts and principles of OOP's, C++ syntax, and file Handling.	K1

CLO2	Associating the significance and functionality of OOP features and C++ constructs.	K2
CLO3	Use OOP's, C++ features, and file management techniques for developing a program	K3
CLO4	Evaluate and compare programming paradigms, inheritance types, and run time features.	K4

Mapping with Programme Learning Outcomes

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	S	S	M	S	S
CLO2	M	S	S	M	S
CLO3	S	M	S	M	S
CLO4	S	S	M	L	L

S-Strong;M-Medium;L-Low

OBJECT ORIENTED PROGRAMMING WITH C++ - BP24C03 (88 Hrs)

UNIT I (17Hours)

Object Oriented Programming: A New Paradigm – Evaluation of Programming Paradigm- Principles of Object Oriented Programming: ***Benefits of OOPs – Applications of OOPs*** – Beginning with C++: Structure of C++ program. Basic and user defined data types, Objects – **Data members and member functions** – private and public access specifies - Static members - **Constructors – Destructors.**

UNIT II (18Hours)

C++ statements – operators in C++ **Scope Resolution Operator*** – Functions in C++: The Main Functions – Function Prototyping– **Friend Functions and Friend Classes** - Array of objects– **Pointer to objects** - this pointer **Function Overloading: Overloading a function** - Default arguments–Operator Overloading: Overloading an operator as a member function –Overloading an operator as a friend function.

UNIT III (17Hours)

Inheritance: Defining derived classes – Single Inheritance – ***Multilevel Inheritance *** Multiple Inheritance – ***Hierarchical Inheritance*** – Hybrid Inheritance .Run-time Polymorphism: **Virtual Functions**

UNIT IV (18Hours)

Polymorphism: ***Virtual Base Classes ***– Abstract classes –***Constructors in Derived**

Classes*. Function overriding - Pure virtual function –Templates: **Function templates** – **Overloading a function template**–Class templates. Exception Handling: Exceptions–try, catch, throw– Rethrowing an exception–Restricting exceptions-**Handling exceptions in derived classes**.

UNIT V

(18Hours)

Managing Console I/O Operations: C++ streams – ***C++ stream classes*** – Unformatted I/O operations – ***Formatted console I/O operations*** – Managing output with manipulators. Working with files: Classes for file stream operations – ***opening and closing a file***– **Detecting End – of - File** – sequential I/O operations–***Error handling during file operations*** - implementation. Binary search algorithm and implementation.

***Highlighted Content offered in Blended Mode**

Text Books

S.No	Author	Title of the Book	Publisher	Year of Publication & Edition
1	E.Balagurusamy	Object Oriented Programming with C++	TataMcGraw Hill Publications.	2013and 6 th Edn.

Reference Books

S.No	Author	Title of the Book	Publisher	Year of Publication & Edition
1	BjarneStroustrup	The C++Programming Language	Pearson Education.	2014and 4 th Edn.
2	RajeshK.Shukla	Object Oriented Programming in C++	WilseyIndia Pvt.Ltd.,	2008and 1 st Edn.
3	RobertLafore	Object Oriented Programming in C++	Galgotia Publications, Pvt Ltd.,	2001and 4 th Edn.
4	TonyGaddis, JudyWalfers, GodferyMuganda	Starting Outwith C++: Early Objects	Addison-Wesley Publication.	2013and 8th Edn.

Pedagogy

LecturethroughPowerPoint presentations,Discussion,Assignment,Quiz,and Seminar

CourseDesigners

1. Dr.A.Meenakshi
2. Mrs.A. Sasikala

COURSE CODE	COURSE TITLE	CATEGORY	L	T	P	CREDIT
CM23C04	FINANCIAL ACCOUNTING	THEORY	73	2	-	3

Preamble

AS

- To enable the students to apply the conceptual principles in financial Accounting
- To develop an expertise in handling the accounts and thereby to increase their level of understanding about the financial statements relating to partnership firms, insurance claims & insolvency.
- To enhance knowledge in partnership insurance and insolvency accounting

Prerequisite

Basic Knowledge in accountancy

Course Learning Outcomes

On the successful completion of the course, students will be able to

CLOs	CLO Statement	Knowledge Level
CLO1	Define the concepts of Partnership Firms, Fire Insurance Claims and Insolvency Accounts	K1
CLO2	Describe the accounting treatment of Partnership Firms, Fire Insurance Claims and Insolvency Accounts	K2
CLO3	Apply the procedures related to partnership firms, calculation of insurance claims and Insolvency Accounts	K3
CLO4	Analyze and prepare financial accounts for partnership firms in different situations, Insurance claims and Insolvency Accounts	K4

Mapping with Programme Learning Outcomes

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	S	S	M	M	S
CLO2	S	S	M	M	S
CLO3	S	S	S	S	M
CLO4	S	S	S	S	M

S-Strong; M-Medium

Syllabus

FINANCIAL ACCOUNTING-CM23C04-73HOURS

Unit I

(15Hrs)

Partnership Accounts: Division of Profits – Fixed & Fluctuating Capital – Past Adjustments – Guarantee of Profits – Admission of a partner – **Limited Liability Partnership** : Introduction-Definition– LLP Act 2008 - Features – Advantages and Disadvantages (Theory Only)

Unit II

(14Hrs)

Retirement of a Partner: Retirement Cum Admission -Death of a partner- Joint Life Policy – Accounting Treatment

Unit III

(15Hrs)

Dissolution of a Firm: Insolvency– Rule in Garner Vs Murray – Piece – Meal Distribution.(Maximum Loss Method only).Sale of Partnership to a Limited Company.

Unit IV

(15Hrs)

Fire Insurance Claims: Computation of Claim for Loss of Stock and loss of profit (excluding normal & abnormal loss)

Unit V

(14Hrs)

Insolvency Accounts: Relevant Act- Statement of Affairs – Deficiency Accounts - The Insolvency & Bankruptcy code 2016

Text Book

S. No	Authors	Title	Publishers	Year of Publication & Edition
1.	Reddy TS & A Murthy	Financial Accounting	Margham Publications	Reprint 2023

Reference Books

S. No	Authors	Title	Publishers	Year of Publication & Edition
1.	RL Gupta & Radhasamy	Advanced Accountancy (Vol I)	Sultan Chand & Sons.	2018, & 13 th Edition
2.	Jain S.P & Narang K.L	Principles of Accountancy	Kalyani Publishers	2018 & 12 th Edition
3.	MC Shukla, T.S. Grewal & S.C. Gupta	Advanced Accountancy	S. Chand & sons	2019 & 13 th Edition

Skill Component

- Working on practical aspects of admission and retirement with partners' capital
- Preparation of partnership deed with important terms and conditions
- Preparation of deficiency statement for a real time partnership firm
- Calculation of Insurance claims for real time losses
- Case study analysis on Insolvency and Bankruptcy code

Pedagogy

Lecture, PPT, Assignment ,Seminar, Group Discussion ,Activity based Learning

Course Designers:

- Dr.S.Sujatha,Departmentof Commerce
- Dr. L.Nithya,DepartmentofCommerce

COURSE CODE	COURSE TITLE	CATEGORY	L	T	P	CREDIT
BP24CP2	PROGRAMMINGWITHC++ PRACTICAL	PRACTICAL	-	-	60	2

Preamble

To enable the students to enhance practical knowledge in C++Programming.

Course Learning Outcomes

On the successful completion of the course, students will be able to

CLO Number	CLO STATEMENT	Knowledge Level
CLO1	Defining basic programming concepts of c++ which includes arithmetic operations, decision-making, and file handling.	K1
CLO2	Interpreting the principles of object-oriented programming, inheritance, operator overloading, and exception handling.	K2
CLO3	Use control structures, arrays ,classes ,inheritance, and file operations to solve problems.	K3
CLO4	Evaluate the functionality and efficiency of programs using advanced features of C++.	K4

Mapping with Programme Learning Outcomes

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	S	S	M	M	M
CLO2	S	M	S	M	M
CLO3	S	M	M	S	L
CLO4	M	S	M	S	L

S-Strong;M-Medium;L- Low

PROGRAMMINGWITHC++PRACTICAL-BP24CP2 (60Hrs)

Syllabus

1. Develop a C++program to perform addition of two numbers.
2. Create a C++program to determine whether a given number is even or odd.
3. Implement a C++program that exchanges(Swap)the values of two numbers.
4. Craft a C++program to identify the largest number among three input values.
5. Construct a C++program to verify the given number is prime or not.
6. Design a C++program to compute the result of raising a number to a specified power.
7. Formulate a C++program to determine the average of elements within an array.
8. Design a C++program to check if a word is palindrome or not.
9. Design a class representing a "Student" with attributes like name, roll number, and age. Include member functions to set and display the student information.
10. Construct a program using classes and objects with single inheritance.
11. Write a C++program to implement the Unary Operator Overloading.
12. Develop a program utilizing constructors and destructors in C++.
13. Write a program to implement Pure Virtual Functions
14. Write a C++program that reads and prints the content of a text file.
15. Create a program that attempts to open a file .If the file is not found ,throw an exception, and display an appropriate error message.

Pedagogy

- Lecture, Demo in System

Course Designers

1. Dr.A.Meenakshi
2. Mrs.A.Sasikala

COURSE NUMBER	COURSE TITLE	CATEGORY	L	T	P	CREDIT
NM24UHR	UNIVERSAL HUMAN VALUES AND HUMAN RIGHTS	AEC	30	-	-	2

This course aims at making learners conscious about universal human values in an integral manner, without ignoring other aspects that are needed for learner's survival at hard ships and personality development.

Objectives: The present course deals with meaning, purpose, and relevance of universal human values and how to inculcate and practice them consciously to be a good human being and realise one's potentials.

Unit I: Introduction to value Education:

5Hours

Education system in India, value erosion at various levels-personal, family, society, national and international, Values-concept and need, Types of values-personal, family and society, importance of value education , Incorporating Universal Human Values in Higher Education.

Unit II: Introduction to Universal Values

6Hours

Introduction to Universal Values: Introduction, needs and basic understanding .Universal Values-Love, truth, non violence, peace and righteousness.

Love: Need of Love, Cultivating Love, and Value aspects of Love.

Peace: Approaches to peace, Conflict–prevention and resolution, Fostering Culture of Peace in the Classroom.

Truth: Universal truth, Importance of Truth Benefits of Truthfulness.

Nonviolence: Need, Gandhian Principles of Non-violence, Nonviolence-Its application in handling today's conflict, Six Guidelines to Carryout Nonviolent Action, ways to promote principles of non-violence.

Righteousness (Dharma): Meaning ,functioning of Dharma, Characteristics of Dharma ,Dharma of a Student, Practicing Dharma in daily life.

Unit III : Promoting Universal Human Values

6Hours

Harmony in the Human Being: Understanding the Human Being as Co-existence of Self ('I') and Body, Discriminating between the Needs of the Self and the Body, The Body as an Instrument of 'I', Understand Harmony in the Self ('I'), Harmony of the Self ('I') with the Body.

Harmony in the Family and Society: Harmony in the Family – the Basic Unit of Human Interaction, Values in Human – to – Human Relationships, 'Trust' – the Foundational Value in Relationships, 'Respect' – as the Right Evaluation, Understand Harmony in the Society.

Harmony in the Nature (Existence): Understand Harmony in the Nature, Inter connectedness, Self-regulation and Mutual Fulfillment among the Four Orders of Nature, Realizing 'Existence is Co-existence' at All Levels, The Holistic Perception of Harmony in Existence

Unit IV Holistic Well-Being

7Hours

Influence of universal human values on holistic wellbeing – Definition of well-being (state of being comfortable, healthy, happy and equanimity) – Types of Well Being: Hedonic (Subjective) and Eudaimonic (Psychological) – 8 Pillars of Holistic Wellness (Physical, Emotional, Social, Spiritual, Intellectual, Occupational, Financial, Environment) – Resilience: Meaning and definition of Resilience – Learning from setbacks, Well-being and resilience.

Unit V: Indian Constitutional Values

6Hours

Human Rights: Meaning, characteristics of human rights, Human Rights and UNO, UDHR- Universal Declaration of Human Rights, Indian Constitution-Preamble, Fundamentals of Rights, fundamental duties, Right to Information Act (RTI), National Human Rights Commission (NHRC), State Human Rights Commission, Tamil Nadu.

REFERENCES:

- Choudhary, T., & Madnawat, A. (2017). Spirituality and compassionate love in psychiatrists and psychiatric social workers. *Indian Journal of Positive Psychology*, 8(1), 79. Fisher, J. (2011).
- Narayan, R.S., A Text Book on Professional Ethics and Human Values, New Age International Publishers, New Age International (P) Ltd, New Delhi, 2006.
- Norman, R., the Moral Philosophy An Introduction to Ethics, Oxford University Press, Oxford, 1998.
- Nicotera, N., & Laser-Maira, J.A. (2017). *Innovative Skills to Support Well-Being and Resiliency in Youth*. Oxford University Press.
- Pradeep Kumar, Raman Charla, Human Values & Professional Ethics, Paramount Publishing House, Hyderabad, 2013.
- Susairathinam, A.A. (2020). Lived experiences of separated women in Tamil Nadu, India: Psychological well-being. *Indian Journal of Positive Psychology*, 11(2), 93–104.

Activities:

- Quiz - At the end of each session
- Assignment - After completion of each unit
- Project Submission

COURSE CODE	COURSE TITLE	CATEGORY	L	T	P	CREDIT
BP24C05	FUNDAMENTALS OF CORPORATE ACCOUNTING	THEORY	73	2	-	4

Preamble

- ❖ To explore a comprehensive understanding of corporate accounting principles, focusing on key areas such as share issuance, forfeiture, redemption, financial statements, business reconstruction, and company liquidation.
- ❖ It emphasizes legal and regulatory compliance in line with the Companies Act.

Prerequisite

- Basic Knowledge in Company Accounts

Course Learning Outcomes

On the successful completion of the course, students will be able to understand the accounting procedures and the key role in business operations.

CLO Number	CLO Statement	Knowledge Level
CLO1	Recall fundamental concepts and legal provisions related to issue, forfeiture, reissue, redemption, and liquidation of shares and debentures as per the Companies Act.	K1
CLO2	Explain the principles and regulatory framework of corporate financial transactions including right issue, bonus issue, Underwriting, amalgamation, and internal reconstruction.	K2
CLO3	Apply accounting procedures to prepare final accounts of companies and compute financial statements in compliance with Schedule III of the Companies Act, 2013	K3
CLO4	Analyze various methods of amalgamation and internal reconstruction to evaluate their impact on company structure and share holder interests	K4

Mapping with Programme Learning Outcomes

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	S	S	S	M	S
CLO2	S	S	M	S	S
CLO3	S	M	S	M	S
CLO4	M	S	S	S	M

S-Strong; M-Medium

FUNDAMENTALSOFCORPORATEACCOUNTING-BP24C05-73 HRS

Unit I (14 Hrs)

Issue, Forfeiture and Reissue of shares: – Pro-rata Allotment – Right Issue – Bonus Issue - Underwriting of Shares and Debentures – Underwriting Commission - Types of Underwriting.

Unit II (14Hrs)

Issue and Redemption of Preference Shares and Debenture: – Provisions of Companies Act–Capital - Redemption Reserve – Minimum Fresh Issue – Redemption at Premium. Debentures: Issue and Redemption (Basic problems only).

Unit III (15 Hrs)

Final Accounts of Companies: - Introduction – 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 – Ascertaining Profit for Managerial Remuneration.

Unit IV (15 Hrs)

Amalgamation and Internal Reconstruction: - Amalgamation – Meaning - Purchase Consideration - Lump Sum Method, Net Assets Method, Net Payment Method, Intrinsic Value Method - Types of Methods of Accounting for Amalgamation -The Pooling of Interest Method - The Purchase Method (Excluding Inter-Company Holdings) Internal Reconstruction – Conversion of Stock – Increase and Decrease of Capital – Reserve Liability

Unit V (15 Hrs)

Liquidation of Companies: Types of Liquidation - Preparation of Liquidators Final Statement of Accounts – Order of Payment – Liquidator's Remuneration – Calculation of Preferential Creditors (Excluding Statement of Affairs). Indian Accounting Standards (AS 1-6, 10-15, 20-23) - Elementary Introduction to International Financial Reporting Standard. (Theoretical Aspects only)

Distribution of Marks:Theory20%Problem 80%

Textbook

S.No	Authors	Title	Publishers	Yearand Edition
1	Reddy.TSandMurthy.A	Corporate Accounting	Margham Publications	2023,7 th Edn, Reprint

Books for Reference

S.No	AuthorName	Title	Publishers	Yearand Edition
1	S.P.Jain& K.L.Narang	Corporate Accounting	Kalyani Publishers	2018, 19 th Edn
2	Gupta.RL and.Radhasamy.M	Corporate Accounting Vol-II	Sultan Chand &Sons	2021,14 th Edn
3	Pillai.RSN,Bhagavathy andUma.S	Advanced Accountancy Vol-II	S Chand Publisher	2016,2 nd Edn

Pedagogy

PowerPoint Presentations ,Group Discussion ,Seminar ,Quiz Assignment, Experience Discussion, Brainstorming, Activity, Case Study

Course Designers

1. Dr.M.Deepalakshmi
2. Dr.R. Eswari

S.NO	LEARNINGMETHODS	PERCENTAGE
1	Participatory Learning	50
2	Problem Solving	30
3	Experiential Learning	20

COURSE CODE	COURSE TITLE	CATEGORY	L	T	P	CREDIT
EC24C06	RELATIONALDATABASE MANAGEMENT SYSTEM	THEORY	58	2	-	3

Preamble

- ❖ To provide comprehensive knowledge about relational database management system
- ❖ To enlighten prominent commands used in structured query language

Prerequisite

- No prerequisite required

Course Learning Outcomes

On the successful completion of the course, students will be able to

CLO Number	CLO Statement	Knowledge Level
CLO1	Interpret about DBMS ,Relational database management Concepts and normalization	K1
CLO2	Develop the tables using normalization and knowledge about Key relationships, Demonstrate PL/SQL built in functions	K2
CLO3	Demonstrate PL/SQL built in functions ,know the basic	K3

	Storage database structure and extract database using data Warehouse and data mart.	
CLO4	To understand the architecture, data distribution, query optimization, and advanced features of Distributed and Object-Oriented Database Management Systems.	K4

Mapping with Programme Learning Outcomes

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	M	S	S	S	M
CLO2	S	M	S	S	M
CLO3	S	S	S	L	M
CLO4	M	S	M	M	M

S-Strong; M-Medium; L-Low

RELATIONAL DATABASE MANAGEMENT SYSTEM-EC24C06-58 HRS

Unit I

(12 Hrs)

Data, Databases, Database Management System – Components of Database – Data Dictionary – Architecture: Overall Architecture of DBMS, Three level architecture. Data Models Types of Database models: Hierarchical Database Model, Network Database Model.

Introduction Relational Database Management System: Relational Database Model, E-R model: Entities - Attributes – Relationships – E-R diagram – Samples.

Unit II

(11Hrs)

CODD's rules – Components of DBMS – Table Structure – Records, rows, tuples, attributes. Keys: Primary key, foreign key, composite key. Metadata – Data Dictionary – Data Integrity – Data constraints and validation – Types of constraints. Normalization Benefits – Normal forms: 1st Normal form, 2nd Normal form, 3rd Normal form.

Unit III

(12Hrs)

Introduction to SQL: SQL data types - Data Definition Commands – Data Manipulation Commands – Data retrieval commands .My SQL Operators and Expressions Types of Operators – Arithmetic, Comparison and logical operators – Pattern matching.

Unit IV**(11Hrs)**

Built-in Functions Single row functions – Aggregate functions – Conversion functions. Querying the table selecting rows using Where, Order by, group by & having clauses. Sub-queries – correlated sub-queries. Introduction to PL/SQL- user defined functions-Trigger and Stored Procedures.

Introduction to Data warehousing and Data mining – Applications – Data marts. Big Data: Definition – Characteristics – Various Technologies used – Applications.

Unit V**(12 Hrs)**

Distributed Database Management Systems (DDBMS) – Components, Architecture, and Data Distribution – Data Fragmentation, Replication, and Allocation – Distributed Query Processing & Optimization – Concurrency Control & Transaction Management – Parallel Databases: Query Execution, Load Balancing – Sorting & Indexing in DDBMS – Object-Oriented Databases: Features, Data Modeling, and Real-World Applications.

Textbook

S.No	Authors	Title	Publishers	Year and Edition
1	Ramon A Mata-Toledo Pauline KCushman	Database Management System	Tata Mc Graw- Hill Publishing company limited, New Delhi.	2010, 2 nd Edn.
2	Riktesh Sri Vastava, Rajita Sri Vatsava	Relational Database Management	New Age International Publications	January 2014, 1 st Edn.

Books for Reference

S.No	Authors	Title	Publishers	Year and Edition
1	Ramakrishnan & Gehrke	Database Management Systems	Tata McGraw Hill	2009, 8 th Edn.
2	Nilesh Shah	Database Systems using Oracle	PHI learning Pvt Ltd	2014, 2 nd Edn.
3.	Spectrum all in One	Relational Database Management System	SIA Publishers and Distributors	2021, 2 nd Edn.

Pedagogy

Power Point Presentation, Lecture, Assignment, Group Discussion and Seminar.

Course Designers

1. Mrs. T. Subamathi, Department of BCom (e-Com) & (SF)
2. Mrs. A. Sasikala, Department of BCom (CA)

S.NO	LEARNINGMETHODS	PERCENTAGE
1	Participatory Learning	50
2	Experiential Learning	30
3	Problem Solving	20

COURSE CODE	COURSE TITLE	CATEGORY	L	T	P	CREDIT
BP23A01	BUSINESSMANAGEMENTAND ETHICS	THEORY	73	2	-	4

Preamble

- ❖ To provide the students with an understanding of the basic principles of management in the functional areas of business to pursue careers in management with ethics

Prerequisite

- Basic Knowledge on Business Management

Course Learning Outcomes

On the successful completion of the course, students will be able to

CLOs	CLO Statement	Knowledge Level
CLO1	Recognize the fundamental concepts and principles of management, Planning, Organisation, leadership and control including the function and its nature.	K1
CLO2	Identify the management process and decision making in Management functions	K2
CLO3	Apply the theories and identify various case studies for practical Applications of management concepts	K3
CLO4	Analyse the process of management functions and evaluate the social responsibility and ethical issues in business situations	K4

Mapping with Programme Outcomes

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	S	S	S	S	S
CLO2	S	S	S	M	S
CLO3	S	S	M	S	S
CLO4	S	S	M	M	M

S-Strong;M-Medium

BUSINESS MANAGEMENT AND ETHICS- BP23A01 (73 HOURS)

UNIT I

(15Hrs)

Management –Definition - Nature and Scope – ***Functions– Managerial Skills– Levels of Management*** – Roles and Skills of a Manager- Contributions by Henry Fayol, FW Taylor, Peter F Drucker, McGregor, Elton Mayo-***Management as a Science, Art, Profession- Management and Administration***– Principles of Management

UNITII

(15 Hrs)

Planning: Meaning – Nature- ***Importance- Purpose of Planning***- Planning Process - Advantages and Limitations- Types of Plans – ***Objectives – Policies – Strategies –Procedures – Programmes – Obstacles to Effective Planning*** - Decision Making:Steps in Decision Making – Role of MIS for Decision Making. ***MBO – MBE - Policy and Strategy***.

UNITIII

(15 Hrs)

Organization–Meaning-NatureandImportance–***Processoforganization–Organization structure– Organization chart–Organization manuals***–Types of Organization - Departmentation - Span of Management - ***Authority – Responsibility - Accountability*** - Power – Delegation – Centralization -Decentralization-Staffing-Case study

UNITIV

(14 Hrs)

Leadership –Meaning and Importance –***Functions of Leadership–Leadership styles– Qualitiesofgoodleader***–Theories&ApproachesofLeadership-Directing-Functions- ***Coordination–Meaning–Definition–Principles-Advantages&Disadvantages***-Case study

UNITV

(14 Hrs)

Control –Meaning - and Importance –***Process & Techniques of control***-Ethics- Meaning– Importance Nature & ***Relevance-Structure of ethics management-Ethics in business***-Factors affecting ethical practice in business-Social Responsibility of Business.

***Highlighted Content offered in Blended Mode (Link Provided)**

Text Books

S. No	Authors	Title	Publishers	Year& Edition
1.	R K Sharma & Shashi K Gupta	Principles of Management	Kalyani Publishers	2017 reprint – 1 st Edn.
2.	Dinkar Pagare	Principles of Management	Sultan Chand & sons	2018 reprint – 1 st Edn

Reference Books

S. No	Authors	Title	Publishers	Year& Edition
1.	Dr. C. N. Sontakkai	Principles of Management	Kalyani Publishers,	2016 reprint – 1 st Edn.
2.	P. C. Tripathi & P. N. Reddy	Principles of Management	Tata Mcgraw Hill Publishing Co Ltd	2017 ed. – 1 st Edn.
3.	Robbins, DeCenzo, & Coulter.	Fundamentals of Management	Pearson Education Ltd	2017, 10th Edn.

Pedagogy

➤ PPT presentation, Quiz, Group Discussion, Seminar, Quiz, Assignment, Experience Discussion, Brainstorming, Activity, Case Study

Skill Components

- Preparation of different types of organisation charts
- Construct a standing plan for a new business venture
- Demonstrate different leadership styles through role play
- Study the ethical practices followed in the organization
- Select any one company and prepare SWOT analysis
- Prepare a report of CSR activities followed in an organisation

Course Designers

1. Dr. A. Meenakshi - Department of BCom(CA)
2. Dr. Nithya Ramadass - Department of BCom(CA)

S.NO	LEARNING METHODS	PERCENTAGE
1	Participatory Learning	50
2	Experiential Learning	30
3	Problem Solving	20

COURSE CODE	COURSE TITLE	CATEGORY	L	T	P	CREDIT
BP24A02	HUMAN RESOURCE MANAGEMENT	THEORY	73	2	-	4

Preamble

- To emphasize the skill, knowledge, ability and ethics required for the work force to work efficiently.
- To acquire specialized knowledge in new possibilities for optimizing recruitment, enhancing employee engagement, enabling data-driven decision-making through AI technologies.

Prerequisite

- No Basic Knowledge required

Course Learning Outcomes

On the successful completion of the course, students will be able to

CLO Number	CLO Statement	Knowledge Level
CLO1	Define the basic concepts of human resource management, framework, analysis, evaluation, performance appraisal and placement induction play a key role in effective business administration.	K1
CLO2	Interpret the elements relate to various aspects of HRM ,such as Using AI in recruitment, placement, evaluation, compensation and employee welfare.	K2
CLO3	Identify the importance of HRM and organizational outcomes, recruitment, appraisal and stress management system to outline the Practical situations.	K3
CLO4	Analyze the issues, strategies and welfare, performance, induction and incentives to develop manpower resources for effective human resource.	K4

Mapping with Programme Learning Outcomes

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	S	S	S	S	M
CLO2	S	S	S	S	M
CLO3	S	S	S	S	M
CLO4	S	S	S	S	M

HUMAN RESOURCE MANAGEMENT-BP24A02-73 HRS

Unit I (14hrs)

Human Resource Management - Introduction - Characteristics - scope of HRM- Objectives -***System approach to HRM - Importance and Functions of HRM - Qualities of human resource manager*** – Role of human resource manager. Human Resource Planning – Concept – Objective-Need and Importance – Process – Levels – Problems- ***Guidelines for effective human resource planning. ***

Unit II (14hrs)

Job analysis-introduction,objectives-Significance–Process–techniques–Job description– Job specification–Role analysis.Job Design–Concept–Approaches-Methods.

Recruitment :Introduction– Automated Screening and Shortlisting –Candidate Matching -Automated Interviews–Sourcing-AI-driven chatbots–Selection–Introduction–Steps– *Testing and Competency Mapping.

Unit III (15hrs)

Placement and Induction-Concept of placement and induction –objectives –advantages-induction in Indian industries – Contents – Steps to make induction effective. ***Using AI in Employee Training:** Objectives - Types – AI Tools in Employee Training – Benefits – Challenges –Evaluating training effectiveness. Career Planning and Development – Meaning – Objective – Process – Advantages – Limitations – ***Making career planning successful – Career Development. *** Case Studies.

Unit IV (15hrs)

Performance Appraisal– Concept – Objective – Importance – Process – Problems – Essentials – Methods – ***Performance appraisal through MBO – 360-degree appraisal techniques- Performance Management. *** Job Evaluation – Concept – Objectives – Process – Advantages – Limitations –Essentials– Methods. Incentive Compensation – Meaning– ***Essentials – Types–wages incentives in India.***Case Studies

Unit V (15hrs)

Employee Welfare- Meaning–Significance – Agencies – Types –Statutory provisions for employee welfare. Social Security – Concept –Scope – ***The workmen’s compensation – State insurance – Provident fund – Maternity benefit*** – Payment of Gratuity – Group life insurance. Job Satisfaction – Concept – Measurement – Determinants. Quality of work life – Concept–Measure–Dimension–Principles.Management of Stress–Concept–Sources– ***Consequences–Coping with stress–Methods of stress management. ***

***Highlighted Content offered in Blended Mode(Link Provided)**

Text Book

S. No	Authors	Title	Publishers	Year and Edition
1	Gupta C.B	Human Resource Management	Sultan Chand & Sons	2017, 16 th Edn.

Books for Reference

S. No	Authors	Title	Publishers	Year and Edition
1	Dwivedi R.S	Human Resource Management	Vikas Pub House – Noida	2009, 6 th Edn.
2	Gary Dessler	Human Resource Management	Prentice Hall of India	2020, 16 th Edn.
3	Rao V.S.P	Human Resource Management	Excel Books	2020, 4 th Edn.

Pedagogy

- Powerpoint presentations, Group Discussion, Seminar, Quiz, Assignment, Experience Discussion, Brainstorming, Activity, Case Study

Skill Components

- Gain basic understanding of human resource management and its essential role in contemporary organizations
- Plan a role play on job analysis for placing right candidate at the right place
- Creation of ideas for induction and retention of employees
- Preparation of a sample framework for awarding and rewarding the employees based on performance appraisal

Analyse the various strategies to cope up stress among employees in an organisation.

Course Designers

1. Dr. J. Rini Mercy
2. Ms. R. Sangeetha

S.NO	LEARNING METHODS	PERCENTAGE
1	Participatory Learning	50
2	Experiential Learning	30
3	Problem Solving	20

COURSE CODE	COURSE TITLE	CATEGORY	L	T	P	CREDITS
EC24CP3	DATABASE PROGRAMMING PRACTICAL	PRACTICAL	-	-	45	2

Preamble

- To enhance practical knowledge in Database Management

Course Learning Outcomes

On the successful completion of the course students will be able to

CLO Number	CLO Statement	Knowledge Level
CLO1	Relate the database application environment and queries using built-in functions and operators	K1
CLO2	Enumerate and demonstrate the database using SQL	K2
CLO3	Illustrated at a definition and manipulation languages in SQL	K3
CLO4	Analyse constraints and queries on a database using RDBMS	K4

Mapping with Programme Learning Outcomes

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	S	S	S	S	L
CLO2	S	S	S	S	L
CLO3	S	S	S	S	L
CLO4	S	S	S	S	L

S-Strong; M-Medium; L-Low

DATABASE PROGRAMMING PRACTICAL-EC24CP3-45Hrs

1. Data Definition Language

Table: Student

Reg no	number(5) primary key
Stud name	varchar2(15)

Gender	char(6)
Dept name	char(25)
Address	char(25)
Percentage	number(4,2)

Queries:

- To create a table
- To describe a table
- To alter a table
- To drop a table
- To truncate a table

2. Data Manipulation Language

Table: Student

Reg no	number(5)primary key
Stud name	varchar2(15)
Gender	char(6)
Dept name	char(25)
Address	char(25)
Percentage	number(4,2)

Queries:

- To insert values
- To retrieve records
- To update records
- To delete record

3. Create an Employee table with following field.

Table: Employee

E no	number(5)primary key
E name	varchar2(20)not null
Dept no	number(2)not null
Desig	char(10)not null
Sal	number(9,2)not null
Comm.	number(7,2)null

Queries:

- a. Insert values and display the records
- b. Display sum, maximum amount of basicpay
- c. List the name of the clerkswor~~k~~in~~the~~department20
- d. Display name that begins with—Gl
- e. List the names having—I~~l~~as the second character
- f. List the names of employees whose designation are—Analyst~~l~~and
—Salesman~~l~~
- g. List~~the~~different~~designation~~available~~in~~theEmployee~~table~~withoutduplication
(distinct)

4. Createatable"Company"withthefollowingfieldsandinsertthevaluesfor 10employees.

Table: Company

Comp id	number(6)primary key
Comp name	varchar2(15)not null
Proprietor	varchar2(15)not null
Address	varchar2(25)not null
Sup name	varchar2(15)
No of employ	number(4)
GP Percent	number(6,2)

Queries:

- a. Display all the records of the company which are in ascending order of GP Percent.
 - b. Display the name of the company whose supplier name is—Telcol.
 - c. Display the details of the company whose GP Percent is greater
than 20 &order by GP Percent.
 - d. Display the details of the company having the employee rangingfrom300to
1000.
 - e. Display the name of the company whose supplier is same as the—Tatal.
5. Create a table" Product" with the following fields and insert the values

Table: Product

Prod no	number(6)
Prod name	varchar2(15)
Unit of measure	varchar2(15)
Qty	number(6,2)

Rate per unit	number(8,2)
Tot amt	number(8,2)

Queries:

- Using update statements calculate the total amount and then select the record.
 - Select the records whose unit of measure is Kg
 - Select the records whose quantity is greater than 10 and less than or equal to 20.
 - Calculate the entire total amount by using sum operation.
 - Calculate the number of records whose unit price is greater than 50 with count operation.
6. Create the table Payroll with the following fields and insert the values:

Table: Payroll

Emp no	number(8)
Emp name	varchar2(8)
Dept	varchar2(10)
Basic pay	number(8,2)
HRA	number(6,2)
DA	number(6,2)
PF	number(6,2)
Net pay	number(8,2)

Queries:

- Update the records to calculate the net pay.
- Arrange the records of the employees in ascending order of their net pay.
- Display the details of the employees whose department is Sales.
- Select the details of employees whose $HRA \geq 1000$ and $DA \leq 900$.
- Select the records in descending order.

7. Create a table Deposit and Loan with the following fields:

Table: Deposit

Acc no	number(3)
Account Type	varchar2(6)
Branch Name	varchar2(15)
Cust name	varchar2(20)
Balance amt	varchar2(10)

Table: Loan

Loan no	number(5)
B name	varchar2(15)
Cust name	varchar2(30)
Loan amt	number(10)

Queries:

- Insert the records into the table.
 - Describe the structure of the table.
 - Display the records of Deposit and Loan.
 - Find the number of loans with an amount between 10000 and 50000.
 - List in the alphabetical order the names of all customers who have a loan at the Coimbatore branch.
 - Find the average account balance at the Coimbatore branch.
 - Update deposit to add interest at 5% to the balance.
 - Arrange the records in descending order of the loan amount.
 - Find the total amount of deposit in —Trichy branch.
8. Create the course and batch table with following fields

Table: Course

Course no	number(5)primary key
Course name	varchar2(20)
Fees	Number(8,2)

Table: Batch

Batch no	number(5)primary key
Course no	number(5)foreign key
Start date	date
Duration	varchar2(15)

Queries:

- Insert values and display the records
- Display the records from batch table whose Course no is —9
- Display the Course no, Course name for the batch starting from—25 June 2000
- List Batch no for the batch starting before—30th June 2001 and after —December 2001
- List the details of the batch who have joined before the end of—September 2001

9. Create Employee and Department table with following fields

Table: Employee

E no	number(5)primary key
E name	varchar2(20)not null
Dept no	number(2)not null
Desig	char(10)not null
Sal	number(9,2)not null
Comm.	number(7,2)null
PF	Number(9,2)

Table: Department

Dept no	varchar2(15)primary key
Dept name	varchar2(15)

Queries:

- Display the details of department table
- List the name ,salary and PF amount of all the employees(PF is calculated as 10% of salary)
- List the department numbers and number of employees in each department (Group by)
- List the average salary from each job excluding managers
- List the jobs and the number of employees in each job. The result should be in descending order of the number of employees
- List the employees who are eligible for 5% commission whose salary >25000
- List the names of the employees who are not managers

10. Create Employee Salary and Department table with following fields

Table: Employee Salary

E no	number(5)primary key
E name	varchar2(20)not null
Dept no	number(2)not null
Desig	char(10)not null
Sal	number(9,2)not null
Comm.	number(7,2)null
Shift	Varchar2(15)

Table: Department

Dept no	varchar2(15)primary key
Dept name	varchar2(15)

Queries:

- List the department number and the total salary payable in each department
- List the total salary, maximum and minimum salary and the average salary of employees designation wise
- Display the emp no, name whose shift is—FN
- List average salary for all departments employing more than five people
- List jobs of all the employees where maximum salary is greater than or equal to 5000(having)
- Raiseemployeesalaryby0.15for the employees working as—programmers
- Delete the records where commission is—null
- Listtheaveragesalaryandnumberofemployeesworkinginthedepartment—20

11. Create Library with the following

fields Table: **Library**

Book no	number(5)
Book nm	varchar2(10)
Author nm	varchar2(10)
Price	number(3,8)
Status	varchar2(5)
Category	varchar2(5)

Queries:

- Display the author name ,price of tax book
- Display the price of book banking
- Display the count of category—commerce
- List the book details in ascending order of price (order by)
- List the book details in descending order of book no and price(order by)

12. Createasimplestudentmarksprocessingusingparallel-stylelogicontwoseparate tables

a) Com_ Student – table name

Student _id	UNSIGNED,INT,AUTOINCREMENT, PRIMARY KEY
First_ name	VARCHAR(60)
Last_ name	VARCHAR(60)

Marks	INT(5)
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b) IT Student-table name

Student _id	FOREIGN KEY refers to user _id field of user table
First _name	VARCHAR(60)
Last_ name	VARCHAR(60)
Marks	INT(5)

a. SELECT all the users along with their marks to calculate Parallel-style Query

(Combine & Calculate Average)

b. List the students who scored more than 80 in any department using Parallel-Style Filter.

13. Sales in Multiple Regions (East & West) using Distributed Data base style.

Table: East region

Sales_ id	INT PRIMARY KEY
Product _name	VARCHAR(20)
City	VARCHAR(20)
Amount	Numeric(12,2)

Table: West_ region

Sales _id	INT PRIMARY KEY
Product _name	VARCHAR(20)
City	VARCHAR(20)
Amount	Numeric(12,2)

Queries:

- Retrieve the Query: Show All Sales from Both Branches.
- Retrieve all the Sales Above ₹10,000 from both the regions.
- Find the Highest Sale in Each Region.

Pedagogy

Lecture, Demo in System

Course Designers

- Mrs.T.Subamathi, Department of BCom(e-Com)&(SF)
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S.NO	LEARNINGMETHODS	PERCENTAGE
1	Participatory Learning	50
2	Experiential Learning	50

COURSE CODE	COURSE TITLE	CATEGORY	L	T	P	CREDIT
BP24SBP1	DATA ANALYTICS WITH POWERBI AND TABLEAU PRACTICAL	PRACTICAL	-	4	41	3

Preamble

- To impart practical knowledge in Power BI and Tableau

Course Learning Outcomes

On the successful completion of the course, students will be able to

CLO Number	CLO Statement	Knowledge Level
CLO1	Define the basic workings of Power BI and Tableau to perform basic statistical analyses.	K1
CLO2	Understand the importance of data visualization for business intelligence and decision making.	K2
CLO3	Apply basic data wrangling techniques including filtering, grouping, and handling nulls.	K3
CLO4	Interpret dashboard results to support data-driven decision-making.	K4

Mapping with Programme Learning Outcomes

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5
CLO1	S	S	S	S	M
CLO2	S	S	S	L	L
CLO3	S	S	M	S	S
CLO4	S	S	S	L	M

S-Strong ;M-Medium ;L-Low

DATA ANALYTICS WITH POWER BI AND TABLEAU PRACTICAL-BP24SBP1 (41HRS)

Power BI

1. Import of data from various data sources and cleaning of data for visualisation
2. Creation of production efficiency tracker using various data filters and statistical measures
3. Creation of visualization -Company's sales performance dashboard.
4. Evaluate company 's individual sales person performance.
5. Creation of overall business dashboard and sharing with other stakeholders.

Tableau

6. Connection of data and Basic data preparation of data for visualisation
7. Application of data aggregation and statistical function for visualisation.
8. Creation of work sheet containing sales report of different region.
9. Creation of interactive Geo maps using the business report of a company.
10. Creation of company 's dash board by summarization of worksheet.

Pedagogy

Lecture, Demo in System

Course Designers

1. Dr.C.Esakkiammal
2. Dr.A.Meenakshi

S.NO	LEARNING METHODS	PERCENTAGE
1	Participatory Learning	60
2	Experiential Learning	20
3	Problem Solving	20