HOLY CROSS COLLEGE (AUTONOMOUS)
TIRUCHIRAPPALLI-620 002
SCHOOL OF MANAGEMENT STUDIES
CHOICE BASED CREDIT SYSTEM
LEARNING OUTCOMES-BASED CURRICULUM
FRAMEWORK (LOCF)
B. COM. WITH SPECIALISATION IN COMPUTER APPLICATIONS

Programme Outcomes (POs)

Upon completion of the B.Com. Degree Programme, the graduate will be able to

PO 1 - Demonstrate ability and attitude to acquire knowledge and skills in the advancing global scenario to apply them effectively and ethically for professional and social development.

PO2- Involve in research and innovative endeavors and share their findings for the wellbeing of the society.

PO3 – Work effectively in teams and take up leadership in multi-cultural milieu.

PO4 – Act with moral, ethical and social values in any situation.

PO5- Excel as empowered woman to empower women

PO6 – Participate in activities towards environmental sustainability goals as responsible citizens.

PO7 – Pursue higher studies in the related field of sciences and humanities.

PO8 - Exhibit business and accounting skills effectively for the betterment of business and economic environment.

PO9 - Establish the role of different business organizations and its challenges with progressive attitude to pursue higher education and research.

Programme Specific Outcomes (PSOs)

Upon completion of these courses the learner would

PSO 1 - Recognize the concepts associated to different phases of Commerce and Computer applications in global insights.

PSO2- Promote professional thinking skills to take up the role as business analysts and professionals in accounting, incorporate theoretical information with real-world experience to fulfil the industry requirements.

PSO3- Apply analytical skills to scrutinize and interpret data to resolve multifaceted business problems, to execute logical and strict analytics with organized and indefinite data.

Programme: B. Com. with Specialisation in Computer Applications

Semester	Part	Course	Title of the Course	Code	Hours/Week	Credits	Marks
I	I	Language	Tamil Paper-I/ Hindi Paper-I/ French Paper-I	U21TL1GEN01 U21HN1HIN01 U21FR1FRE01	3	3	100
	II	English	General English- I	U21EL1GEN01	3	3	100
	III	Major Core-1	Financial Accounting - I	U21CO1MCT01	6	5	100
		Major Core-2	Principles of Marketing	U21CO1MCT02	5	5	100
		Allied -1	Business Mathematics and Statistics	U21MA1ALT04	4	2	100
		Allied -2	Business Economics	U21EC1ALT02	4	2	100
	IV	Environmental Studies	Environmental Studies	U21RE1EST01	2	1	100
		MSBE-1	Entrepreneurship Development	U21CO1SBP01	2	1	100
		Value Education	Ethics-I/ Catechism-I / Bible Studies-I	U21VE2LVE01/ U21VE2LVC01/ U21VE2LVB01	1	-	-
		Service Oriented Course					
		Internship / Field Work / Field Project 30 Hours - Extra Credit		U21SP1ECC01		2	100
		Total			**30**	**22+2**	**900**

Semester	Part	Course	Title of the Course	Code	Hours/Week	Credits	Marks
II	I	Language	Tamil Paper-II/ Hindi Paper-II/ French Paper-II	U21TL2GEN02 U21HN2HIN02 U21FR2FRE02	3	3	100
	II	English	General English- II	U21EL2GEN02	3	3	100
	III	Major Core-3	Financial Accounting II	U21CO2MCT03	5	4	100
		MajorCore-4	Business Law	U21CO2MCT04	5	4	100
		Major Core-5	Banking Theory Law and Practice	U21CO2MCT05	4	3	100
		Allied 3	Computer Applications in Business	U21CA2ALT03	4	2	100
	IV	Skill Based Course (SBC) – 1	Soft Skills Development	U21RE2SBT01	2	1	100
		Skill Based Course (SBC) -2	Sustainable Rural Development and Student Social Responsibility	U21RE2SBT02	2	1	100
		Industrial relations	Investment Basics	U21CO2IRT01	1	1	100
		Value Education	Ethics-I/ Catechism-I /	U21VE2LVE01 U21VE2LVC01	1	1	100

Semester	Part	Course	Title of the Course	Code	Hours /Week	Credits	Marks
III	I	Language	Tamil Paper-III/ Hindi Paper-III/ French Paper-III	U21TL3GEN03 U21HN3HIN03 U21FR3FRE03	3	3	100
	II	English	General English- III	U21EL3GEN03	3	3	100
	III	Major Core-6	Corporate Accounting -I	U21CO3MCT06	5	4	100
		Major Core-7	Business Environment	U21CO3MCT07	4	3	100
		Major Elective-1	Emerging Trends in IT/ Basic Concepts of Programming (From Computer Science)	U21CA3MET01 U21CA3MET02	4	3	100
		Allied – 4	R Programming	U21CA3ALP04	4	2	100
	IV	NME -1	Basic Principles of Accountancy/Marketing practices	U21CO3NMT01 U21CO3NMT01	3	3	100
		MSBE-2	Business Software Tally	U21CO3SBP02	2	1	100
		Gender Studies	Gender Studies	U21WS3GST01	1	1	100
		Value Education	Ethics-I/ Catechism-I / Bible Studies-I	U21VE4LVE02/ U21VE4LVC02/ U21VE4LVB02	1	-	-
		SOC	Service Oriented Course		-	-	-
		Internship	Internship / Field Work / Field Project 30 Hours - Extra Credit	U21SP3ECC03	-	2	100
		Total			**30**	**23+2**	**1000**
			Bible Studies-I	U21VE2LVB01			
		SOC	Service Oriented Course				
		Internship	Internship / Field Work / Field Project 30 Hours - Extra Credit	U21SP2ECC02		2	100
		Total			**30**	**23+2**	**1100**

Semester	Part	Course	Title of the Course	Code	Hours /Week	Credits	Marks
IV	I	Language	Tamil Paper- IV/ Hindi Paper -IV/ French Paper -IV	U21TL4TAM04 U21HN4HIN04 U21FR4FRE04	3	3	100
	II	English	General English- IV	U21EL4GEN04	3	3	100
	III	Major Core-8	Corporate Accounting-II	U21CO4MCT08	4	4	100
		Major Core-9	Organisational Behaviour	U21CO4MCT09	4	4	100
		Major Elective-2	Ethical Hacking (From CS)	U21CA4MET04	4	3	100
		Allied -5	Services Marketing	U21CO4ALT05	4	2	100
		Allied -6	Relational Database Management System	U21CA4ALT06	4	2	100
	IV	NME -2	Basic Principles of Accountancy/ Marketing Practices	U21CO4NMT01 U21CO4NMT02	3	3	100
		Value Education	Ethics-II/ Catechism-II / Bible Studies-II	U21VE4LVE02/ U21VE4LVC02/ U21VE4LVB02	1	1	100
		Online course	Online Course - Extra Credit	U21OC4SBT04	-	2	100
		SOC	Service Oriented Course - Extra Credit	-	-	2	100
		Internship	Internship / Field Work / Field Project 30 Hours - Extra Credit	U21SP4ECC04		2	100
		Total			**30**	**25+6**	**1200**

Semester	Part	Course	Title of the Course	Code	Hours/ Week	Credits	Marks
V	III	Major Core - 10	Income Tax Theory Law and Practice	U21CO5MCT10	6	5	100
	III	Major Core - 11	Cost Accounting	U21CO5MCT11	6	5	100
	III	Major Core - 12	Business Management	U21CO5MCT12	5	4	100
	III	Major Core - 13	Retail Management	U21CO5MCT13	5	4	100
	III	Major Elective-3	Introduction to Python Programming	U20CA5MET05 U20CA5MET06	4	3	100
	IV	NME -3	Costing and Cost control techniques/ Financial services	U21CO5NMT03 U21CO5NMT04	3	3	100
	IV	Value Education	Ethics- III/ Catechism- III / Bible Studies -III	U21VE6LVE03/ U21VE6LVC03/ U21VE6LVB03	1	-	-
	IV	Internship	Internship/Field Work/Field Project- 30 hours - Extra Credit	U21SP5ECC05		2	100
Total					**30**	**24+2**	**700**

Semester	Part	Course	Title of the Course	Code	Hours/ Week	Credits	Marks
VI	III	Major Core-14	Financial Management	U21CO6MCT14	5	4	100
	III	Major Core -15	Management Accounting	U21CO6MCT15	5	4	100
	III	Major Core -16	Principles of Auditing	U21CO6MCT16	5	4	100
	III	Major Core -17	Company Law	U21CO6MCT17	5	4	100
	III	Major Elective-4	Business Data Analytics	U21CA6MEP09	4	3	100
	IV	NME -4	Costing and cost control techniques	U21CO6NMT04	3	3	100
	IV	SBE –3	Research Methodology	U21DS6SBT06	2	1	100
	IV	Value Education	Ethics-III / Catechism-III/ Bible Studies-III	U21VE6LVE03/ U21VE6LVC03/ U21VE6LVB03	1	-	100
	IV	Extension Activity	RESCAPES – Impact study of Project	U21RE6ETF01	-	4	100
		Internship	Internship/Field Work/ Field Project- 30 hours- Extra Credit	U21SP6ECC06		2	100
	Total				30	23+6	1000
	Grand Total				180	140+12	5900

Course Title	MAJOR CORE 1 - FINANCIAL ACCOUNTING-I
Code	U21CO1MCT01
Course type	Theory
Semester	I
Hours/Week	6
Credits	5
Marks	100

CONSPECTUS

This course provides an overview of accounting principles and application of the principles in recording, preparation of final accounts of sole trader and not-for-profit organisations and accounting for consignment and bill transactions. It also enables analysis of transactions for rectification of errors and preparation of bank reconciliation statement.

COURSE OBJECTIVES

1. To understand the accounting concepts and conventions and prepare final accounts of sole trader;
2. To analyse the accounting records to rectify the errors and prepare bank reconciliation statement;
3. To apply the accounting principles for recording bill transactions;
4. To prepare final accounts of not-for-profit concerns;
5. To understand the accounting procedure relating to consignment accounts and prepare consignment accounts.

UNIT – I INTRODUCTION TO ACCOUNTING AND FINAL ACCOUNTS – 18 HRS

Accounting Concepts and Conventions – Need for Accounting Standards – Adjustment and Closing Entries – Final Accounts of a sole trader.

Extra Reading/Keywords: *Accounting principles and Double entry system, Latest developments in the field of Accountancy, Branches of Accounting*

UNIT-II RECTIFICATION OF ERRORS AND BANK RECONCILIATION STATEMENT
                                                                                                    18 HRS

A. Rectification of Errors: Rectification before and after preparation of trial balance, Suspense account.

B. Bank Reconciliation Statement: Causes for difference between balances as per cash book and bank statement, Preparation of BRS.

Extra Reading/Keywords: *Rectification after the preparation of final accounts, Bank statement*

UNIT – III BILL OF EXCHANGE   **18 HRS**

Bills of Exchange: Features, Recording transactions relating to bills: Drawing, accepting, retiring, renewing and honouring of bills, dishonour of bills and insolvency of acceptor.

Extra Reading/Keywords: *Accommodation bills*

UNIT – IV ACCOUNTS OF NOT-FOR-PROFIT ORGANISATIONS   **18 HRS**

Receipts a
nd Payments Account - Income and Expenditure Account - Balance Sheet**.**

Extra Reading/Keywords: *Examples of not-for-profit organisations.*

UNIT – V CONSIGNMENT   **18 HRS**

Consignment Accounts: Valuation of stock, Accounting for losses, Cost price method and Invoice price method.

Extra Reading/Keywords: *Conversion of consignment into joint venture.*

Theory - 20%   Problem: 80%
Note: Extra Reading/Keywords must be tested only through assignment and seminar.

TEXT BOOKS
1. Reddy T.S. & Murthy A. (2018). *Financial Accounting*. Chennai: Margham Publishers.
2. Dalston L. Cecil &Jenitra L. Merwin. (2018). *Financial Accounting*.
   Trichy: Learntech Press.

SUGGESTED READINGS
1. Shukla M.C. & Grewal T.S. (2017). *Advanced Accounts. Volume 1,* New Delhi: S .Chand.
2. Jain S.P. & Narang K.L., (2016) *Principles of Accountancy.* New Delhi: Kalyani Publishers.
3. Gupta R.L. &Radhaswamy M. (2018). *Advanced Financial Accounting.* New Delhi: Sultan Chand & Sons.
4. Charles T Horngren, Gary L Sundern, John A Elliott, Danna R Philbrick. (2017). *Introduction to Financial Accounting.* New Delhi: Pearson.
5. Tulsian P.C. & Bharat Tulsian. (2016). *Financial Accounting.* New Delhi: S. Chand.

WEB REFERENCES

1. Fundamentals of Accounting. Student Portal. ICAI. https://students.icai.org/?page_id=4893.
2. Principles and Practice of Accounting. Study Material relevant for May, 2021 examination onwards. https://www.icai.org/post/sm-foundation-p1-may2021onwards.
3. IFRS. https://www.ifrs.org.

Note: Learners are advised to use latest edition of books.

COURSE OUTCOMES
The learners

CO No.	Course Outcomes	Cognitive Level
CO-1	Recall the basic accounting concepts and conventions.	K1
CO-2	Illustrate the principles of double entry system, the procedure for rectification of errors and the preparation of Bank Reconciliation Statement.	K2
CO-3	Apply the principles in the preparation of final accounts of sole trader and not-for-profit organisations and accounting for consignment and bill transactions.	K3
CO-4	Analyse the accounting records to locate and rectify the errors and to prepare bank reconciliation statement.	K4
CO-5	Evaluate the final accounts of different business enterprises and other entities	K5

(K1=Remember, K2=Understand, K3=Apply, K4=Analyze, K5=Evaluate)

PO – CO MAPPING

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9
CO -1	H	M					H	H	
CO -2	H	M	H	H	M		H	H	M
CO -3	H	M	H	H	M		H	H	H
CO -4	H	M	H	H			H	H	H
CO -5	H	H	H	H	M	M	H	H	M

PSO – CO MAPPING

CO/PSO	PSO 1	PSO 2	PSO 3
CO -1	H		H
CO -2	H		H
CO -3	H	H	H
CO -4	H	H	H
CO -5	H	H	H

Course Title	**MAJOR CORE-2- PRINCIPLES OF MARKETING**
Code	**U21CO1MCTO2**
Course type	**Theory**
Semester	**I**
Hours/Week	**5**
Credits	**5**
Marks	**100**

CONSPECTUS

The course aims to equip the learners with the basic knowledge of concepts, principles, tools and techniques of marketing and to provide knowledge about various developments in marketing.

COURSE OBJECTIVES

1. To remember the marketing concepts & recent trends with segmentation bases and Positioning strategies
2. To understand Product Life cycle, New Product development, product policy and the Market Segmentation
3. To outline the pricing policies and compare the various promotional forms
4. To analyze the distribution channels and examine the factors controlling its selection
5. To apply digital skills in marketing through website designing

UNIT –I INTRODUCTION   **15 Hrs**

Marketing: Meaning, Importance & Functions of Marketing - Marketing Mix – Marketing environment: Micro and Macro – Recent trends in Marketing – Customer driven marketing strategy – Market segmentation: Bases.
Extra Reading / Keywords: *Unique selling point, value proposition*

UNIT –II PRODUCT   **15 Hrs**

Concept, Product classifications – Major product decisions: Product line decisions - Product mix decisions - Product attributes – Branding, Packaging and labeling – New product development – Product life cycle.
Extra Reading / Keywords: *Innovation in products development, Co-branding*

UNIT – III PRICINGANDPROMOTION   **15 Hrs**

Pricing-Pricing objectives - Factors influencing pricing - Pricing strategies. Promotion - Promotion Mix: Advertising, Sales Promotion, Personal selling & Public relations.
Extra Reading / Keywords: *Pricing of consumer goods. Promotional activities of products in the market.*

UNIT – IV CHANNELSOFDISTRIBUTION   **15 Hrs**

Channels of Distribution - Channel Functions - Factors influencing Channel Decisions - Middlemen - Wholesalers - Retailers - Selection of marketing channels-Direct& Indirect Marketing Channels.

Extra Reading / Keywords: *Logistics and Supply chain management*

UNIT – V DIGITAL SKILLS IN MARKETING   **15 Hrs**

Define a Target Group - Creating Web Sites - Writing the SEO content - SEO Optimization Tools and Techniques of Search Engine Optimization - Google Ad Words.

Extra Reading / Keywords: *on line business applications*

Note: Texts given in the Extra reading /Key words must be tested only through Assignment and Seminars.

TEXT BOOKS

1. Rajan Nair, (2018) *Marketing*, New Delhi: Sultan Chand and Sons.
2. Pillai & Bhagavathi (2018) *Marketing Management,* New Delhi: Sultan Chand and Sons.

SUGGESTED READINGS

1. Philip Kotler, (2016) Marketing: An Introduction, New York: Prentice Hall, Englewood Cliffs.
2. Kotler Philip & ArmstrongGary,(2017)Principles of Marketing, New Delhi: Prentice-Hall of India.
3. Ryan, D. (2014). Understanding Digital Marketing: Marketing Strategies for Engaging the Digital Generation, Kogan Page Limited.
4. The Beginner's Guide to Digital Marketing (2015). Digital Marketer. Pulizzi, J. (2014) Epic Content Marketing, McGraw Hill Education.

WEB REFERENCES:

1. https://studentzone-ngasce.nmims.edu › content ›
2. https://www.studocu.com/
3. https://cdn2.hubspot.net/

Note: Learners are advised to use latest edition of books.

COURSE OUTCOMES:

The learners

CO No.	Course Outcomes	Cognitive Level (K1-K6)
CO-1	Recall the marketing concepts and philosophies with the environmental conditions affecting marketing decisions of a firm;	K1
CO-2	Relate the product line and mix decisions with the process of new product development.	K2
CO-3	Develop an understanding on the process of value creation through marketing decisions involving product pricing and promotion mix	K3

CO-4	Examine the various channels of distribution to identify efficient logistics practices; and the SEO content to determine suitable keywords for digital marketing	K4

(K1=Remember, K2=Understand, K3=Apply, K4=Analyze, K5=Evaluate, K6=Create)

PO – CO MAPPING

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9
CO -1	H	H		H	M	M	H	M	H
CO -2		H	M	H	H			H	H
CO -3	M	M	H		M	M		H	H
CO -4	H	H	H	M	H	M		M	H

PSO – CO MAPPING

CO/PSO	PSO 1	PSO 2	PSO 3
CO - 1	H		M
CO - 2	H	H	H
CO - 3	H	M	
CO - 4	H	H	H

Course Title	ALLIED 1: BUSINESS MATHEMATICS AND STATISTICS (For Commerce CA Students)
Code	U22MA1ALT06
Course type	Theory
Semester	I
Hours / Week	4
Credits	2
Marks	100

CONSPECTUS

To acquire the knowledge on application of derivatives, Transportation and Assignment problem and various statistical tools which enables them to compute various problems in business sectors.

COURSE OBJECTIVES

1. To apply differentiation for finding marginal function, elasticity, maxima and minima
2. To evaluate initial basic feasible solution to transportation and assignment problems
3. To understand various method of collection of data and its representation through graphs.
4. To illustrate various measures of dispersion and correlation
5. To evaluate Index numbers using Laspeyre's, Fisher's methods, AggregateExpenditure method and family Budget method

UNIT I: APPLICATIONS OF DIFFERENTIATION   12 HRS

Application of derivatives –marginal functions –elasticity –increasing and decreasing functions –maxima and minima
Extra Reading/ Keywords: *Rolle's Theorem, Arc elasticity, Criticalnumber, Newton's method*

UNIT II: TRANSPORTATION ANDASSIGNMENT PROBLEM   12 HRS

Transportation Problem –North-West Corner Rule –Matrix minima method- Vogels approximation method (only initial basic feasible solution) –Assignment Problem – Hungarian method-Application of transportation and assignment problem in Businessand Industries,
Extra Reading/ Keywords: *Modified Distribution, Sequencing problem, Job sequencing problem, Game theory*

UNIT III: COLLECTION AND PRESENTATION OF DATA   12 HRS

Statistics –meaning and scope –collection of data –classification and tabulation – diagrams and graphs –histogram-polygon –cumulative frequency curves- Application of Statistics in Finance and Marketing.
Extra Reading/ Keywords: *Ogive curve, Glaciology, Pareto chart, Ethnography*

UNIT IV : MEASURES OF DISPERSION AND CORRELATION   **12 HRS**

      Measures of dispersion –range, quartile deviation, mean deviation, standard deviation, coefficient of variation-merits demerits –Karl Pearson's coefficient of correlation, Rank correlation- Application of Dispersion and correlation in the field of Economics.

Extra Reading/ Keywords: *Lorenz curve, Skewness, Kurtosis, Method of moments, Bowley'sco-efficient*

UNIT V: INDEX NUMBERS   **12 HRS**

      Index Numbers – Laspeyer's, Fisher's and Paasche's Index Numbers- Testsfor Index Numbers- Cost of living Index Number - Uses of Index Numbers- Application of Index numbers in the field of Marketing.

Extra Reading/ Keywords: *Order reversal test, Time and factor test, Weighted indexnumbers, Zero-based budget, Cash-Only budgeting, Splicing*

Note: Texts given in the Extra Reading /Key Word must be tested only throughassignment and Seminars.

TEXT BOOKS

1. Navanitham PA. **Business Mathematics and Statistics** (2009), for **Unit I**.
2. Kanti Swarup, Gupta P.K , Manmohan(2017), 19th Edition, **OperationsResearch ,**Sultan Chand, New Delhi for **Unit II.**
3. Pillai R.S.N , Bagavathi .V (2007) **Statistics**, S.Chand and Company,New Delhi for**Units III , IV and V**

SUGGESTED READINGS

1. Kanti Swarup, Gupta PK., Man Mohan (2019), **Operations Research- Introduction to Management Science,** Sultan Chand Publishers, New Delhi.
2. Hamdy Taha A (2019), **Operations Research- An Introduction to Research,** PrenticeHallof India, New Delhi. 10th Edition, Pearson Paperback.
3. Gupta, Hira (1989), **Operations Research,** S.Chand Publishers, New Delhi.
4. SC Gupta, Kapoor VK,(2020), **Fundamentals of Mathematical Statistics,** Sultan Chand & Sons, 12th Edition, New Delhi.
5. Chaudhary Ray, Sharma (2017), **Mathematical Statistics,** Ram PrasadPublications,Agra.
6. Gupta Vikas, Gupta SC., Gupta Sanjeev Kumar (2019), **Problems and Solutions in Mathematical Statistics,** Sultan Chand & Sons Publishers, New Delhi.

WEB REFERENCES

1. https://www.researchgate.net
2. https://www.researchgate.net ; https://journals.plos.org
3. https://studiousguy.com
4. https://www.sciencedirect.com ; https://study.com
5. https://www.youarticlelibrary.com

Note: Learners are advised to use latest edition of books.

COURSE OUTCOMES

CO No.	Course Outcomes	Cogniti e Leve (K1-K
CO-1	Recall various methods of collection of data, classify, tabulate and interpret the data through diagrams and graphs	**K1**
CO-2	Illustrate various Transportation Methods, Hungarian Method of Assignment, Measures of Central Tendency, Dispersion, Co efficient of variation	**K2**
CO-3	Apply the concept of differentiation in Marginal functions, Elasticity and Maxima and Minima of functions and Choose an appropriate type of Index Numbers and Compute Index Number by Laspeyre's, Fisher's Methods, Expenditure Method and family Budget Method	**K3**
CO-4	Compare two kinds of data whether they are related by Correlation technique and Analyze the Time Series Models with respect to different variation	**K4**

(K1=Remember, K2=Understand, K3=Apply, K4=Analyze)

PO – CO MAPPING

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
CO-1	L	M	M	M	H	M	H	H	H
CO-2	M	M	M	M	H	M	H	H	H
CO-3	M	M	L	M	H	M	H	H	H
CO-4	M	M	L	M	H	M	H	H	H

PSO – CO MAPPING

CO/PSO	PSO1	PSO2	PSO3
CO-1	M	H	M
CO-2	M	H	M
CO-3	M	H	M
CO-4	M	H	M

Course Title	MAJOR SKILL BASED ELECTIVE-1- ENTREPRENEURSHIP DEVELOPMENT
Code	U21CO1SBP01
Course type	Practical
Semester	I
Hours/Week	2
Credits	1
Marks	100

CONSPECTUS

This course provides an overview for the development of the practical skills in the art of making jewellery, garland out of pearl, thread and from any other raw materials. It also paves way to become an Entrepreneur by learning the art of beautification and Bridal make-up, using natural products. It also enables the learner to systematically apply an entrepreneurial way of think to identify and create business opportunity to become successful entrepreneurs.

COURSE OBJECTIVES

1. To understand the Basics of Beautification like different styles of bridal make ups and Mehandi designs.
2. To understand the art of making artificial jewellery and types of embroidery
3. To understand the different doll making techniques
4. To apply the different techniques of Artificial and natural garland making
5. To understand the multi cuisine art like cookery items, jam making, cookery item and applies different sales promotion techniques.

UNIT-I BASICS OF BEAUTIFICATION   **6 Hrs**

Threading–Facial– Hair dress – Manicure– Pedicure– Bridal Make up – Mehandi

Extra Reading /Key Word: *nail art and art of wearing saree*

UNIT-II ART OF MAKING JEWELLERY AND EMBROIDERY   **6 Hrs**

Paper- Thread- Silk Thread- Terracotta- Types of Embroidery – Hand Embroidery - Thardhosi- Jemki work- Kundhan stone works.

Extra Reading /Key Word: *Aari works*

UNIT-III   KIDS AMUSEMENT DOLL TECHNIQUES   **6 Hrs**

Material for soft doll Making –Safety measures in soft doll making – Puppy -Squirrel – Teddy

Extra Reading /Key Word: *cushion making*

UNIT- IV ARTIFICIAL AND NATURAL GARLAND MAKING   **6 Hrs**

Natural Flower Garland- Artificial Flower Garland- Bouquet- Flower Vase arrangement

Extra Reading /Key Word: *bridal garland making*

UNIT- V MULTI CUISINE ART   **6 Hrs**

Juice, squash, Jam, Jelly, Bakery items (Cake & Biscuits) Cookery items (Pickle, Sambar podi, Masala podi) & Preparation of Non- Vegetarian items Sales promotion and marketing techniques for all products

Extra Reading /Key Word: *different varieties of juices, salads and starter*
Note: Texts given in the Extra Reading, Key words must be tested only through Assignment and Seminars.
SUGGESTED READINGS

1. Hawkin All - Indian Cook book, Hawkins cookers Limited, Bombay Arts&Craft Vol.5 Aasha Enterprises, Hyderabad -39
2. Arts & Craft. Vol.6 Aasha Enterprises , Hyderabad -39
3. Soft Toys, Part-II Angal Kudumbha Samayal, I.V. Jesudhasan
4. Renu Gupta, 2004, Complete Beautician Course, Diamond Pocket Books Private Limited, New Delhi.

COURSE OUTCOMES
The learners

CO No.	Course Outcomes	Cognitive Level (K1-K6)
CO-1	Recall the basic skills of hair dressing, skin care and makeup applications	K1
CO-2	Apply innovative ideas in making jewellery and different types of hand embroidery with self-introduced designs.	K2
CO-3	Analyse the use of multiplicity of safe materials for doll making used by kids with shapes of animals and birds	K3
CO-4	Categorise how the garland, bouquet and flower vase are to be made using the natural, eco- friendly, health improvising special flowers.	K4
CO-5	Evaluate the demand for Multi cuisine vegetarian and non-vegetarian products and identifies the marketable products like cookery powders and bakery items and different healthy juices.	K5
CO-6	Create innovative sales promotion and marketing techniques and becomes successful entrepreneurs	K6

(K1=Remember, K2=Understand, K3=Apply, K4=Analyze, K5=Evaluate, K6=Create)

PO – CO MAPPING

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
CO-1	H	M	M	M	H		H	M	H
CO-2	H	M	M	M			H		H
CO-3	H	M	M	M	M	H	H	M	H
CO-4	H			M	M	H	H		
CO-5	H	M		H		H	H		H
CO-6	H	H			H	M	H	H	H

PSO – CO MAPPING

CO/PSO	PSO1	PSO2	PSO3
CO-1	H	M	M
CO-2	H	M	M
CO-3	H	M	M
CO-4	H	M	M
CO-5	H	M	M
CO-6	H	H	H

Course Title	MAJOR CORE 3 - FINANCIAL ACCOUNTING - II
Code	U21CO2MCT03
Course type	Theory
Semester	II
Hours/Week	5
Credits	4
Marks	100

CONSPECTUS

To provide basic knowledge of procedure for depreciation accounting, branch and hire purchase system of accounting and to develop skills in the preparation of partnership accounts.

COURSE OBJECTIVES

1. To understand various methods of providing depreciation and determination of claim forloss of stock and loss of profit.
2. To develop knowledge related to accounting for dependent branches.
3. To develop knowledge related to accounting for hire purchase system.
4. To apply the accounting procedures related to admission and retirement of partners.
5. To apply the accounting procedures relating to death and insolvency of partners.

UNIT I - DEPRECIATION ACCOUNTING AND INSURANCE CLAIMS   15 HRS

1.1 Depreciation – Characteristics – Causes – Objectives – Factors affecting depreciation.
1.2 Methods of accounting for depreciation - Straight line method - Written down value method - Sinking fund method - Insurance policy method.
1.3 Insurance Claims: Claim for loss of stock - Loss of profit.
Extra Reading / Keywords: *Annuity Method, Revaluation Method, Accounting entries for fire insurance claims.*

UNIT II - BRANCH ACCOUNTS   15 HRS

2.1 Branch Accounts – Dependent Branch - Features - Accounts in the books of head office - Accounting Systems - Debtors system.
2.2 Stock and Debtors System
Extra Reading / Keywords: *Whole sale branch system, Independent branches, Foreign branches.*

UNIT III - HIRE PURCHASE SYSTEM   15 HRS

3.1.   Hire purchase agreement – Features – Distinction between Hire purchase system and Instalment system.
3.2.   Methods of calculation of interest - Accounting treatment for hire purchase on accrual method.
3.3.   Default and Repossession – Types of Repossession - Accounting treatment in the books of hire vendor and hire purchaser.

Extra Reading / Keywords: *Instalment purchase system, Hire purchase trading account*

UNIT IV - PARTNERSHIP ACCOUNTS   15 HRS

4.1 Admission of a Partner - Sacrificing ratio – Valuation of goodwill – Revaluation account - Adjustment for capital accounts and preparation of balance sheet.

4.2 Retirement and Death of a partner - Gaining ratio – Treatment of Goodwill – Revaluation Account - Adjustment for capital accounts and preparation of balance sheet.

Extra Reading / Keywords: *Admission, Retirement of two or more Partners.*

UNIT V - PARTNERSHIP ACCOUNTS (Continued)   15 HRS

5.2 Dissolution - Modes of dissolution - Accounting treatment.

5.2 Insolvency of partners - Garner vs. Murray Principle - Capital ratio under fixed capital method and fluctuating capital method.

5.3 Insolvency of all the partners - Accounting treatment.

Extra Reading / Keywords: *Dissolution procedures.*

Theory - 20%Problems- 80%

Note: Texts given in the Extra Reading /Key words must be tested only through Assignment and Seminars.

TEXT BOOKS

Reddy T.S. and Murthy A. (2018). *Financial Accounting*. Chennai: MarghamPublishers.

SUGGESTED READINGS

1. Shukla M.C. and Grewal T.S. (2017), *Advanced Accounts. Volume 1,* New Delhi: S .Chand.
2. Jain S.P. and Narang K.L., (2016), *Principles of Accountancy.* New Delhi: Kalyani Publishers.
3. Gupta R.L. and Radhaswamy M. (2018), *Advanced Financial Accounting.* New Delhi: Sultan Chand and Sons.
4. Charles T Horngren, Gary L Sundern, John A Elliott, Danna R Philbrick. (2017), *Introduction to Financial Accounting.* New Delhi: Pearson.

5. Tulsian P.C. & Bharat Tulsian. (2016), *Financial Accounting.* New Delhi: S.Chand.

WEB REFERENCES

1. Fundamentals of Accounting. Student Portal. ICAI. https://www.icai.org/post.html?post_id=17825
2. Principles and Practice of Accounting. https://www.icai.org/post/sm-foundation-p1-may2021onwards.
3. IFRS. https://www.ifrs.org.
4. http://icmai.in/upload/students/syllabus2022/Inter-Study-Mtrllp6-new.pdf

Note: Learners are advised to use latest edition of books.

COURSE OUTCOMES (CO)

CO No.	Course Outcomes	Cognitive Level
CO-1	Recall the terms and concepts of depreciation and insurance claims and branch, hire purchase and partnership accounts.	K1
CO-2	Understand the accounting procedure for depreciation, insurance claim, branch, hire purchase and partnership accounts.	K2
CO-3	Apply the acquired knowledge in the preparation of accounts relating to branch, hire purchase and partnership accounts.	K3
CO-4	Examine the different procedures relating to preparation of financial accounts of branch, hire purchase and partnership accounts.	K4

(K1- Remember, K2 - Understand, K3 - Apply, K4 - Analyse)

PO – CO MAPPING

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9
CO 1	H	M		H	M		H	H	
CO 2	H	M		H	M		M	H	M
CO 3	H	M		H	M		H	H	M
CO 4	H	M		H	M		M	H	M

PSO - CO MAPPING

CO/PSO	PSO 1	PSO 2	PSO 3
CO 1	H		H
CO 2	H		M
CO 3	H	H	
CO 4	H	M	

Course Title	MAJOR CORE 4–BUSINESS LAW
Code	U21CO2MCT04
Course type	Theory
Semester	II
Hours/Week	5
Credits	4
Marks	100

CONSPECTUS

The course provides an understanding of the fundamental concepts and the necessary analytical skills to solve issues arising in real life situations relating to the Indian ContractAct, Sale of Goods Act and The Limited Liability Partnership Act.

COURSE OBJECTIVES

1. To understand the essentials of a contract and the provisions regarding offer,acceptance, consideration and capacity to contract.
2. To understand the provisions regarding free consent, legality of object, voidagreements and contingent contracts.
3. To understand the provisions regarding performance and discharge of contract,remedies for breach of contract and special kinds of contracts.
4. To analyse the provisions relating to Contract of Agency, Limited LiabilityPartnership and Right to Information Act.
5. To understand the provisions of Sale of Goods Act, 1930.

UNIT I - INTRODUCTION TO CONTRACT

15 HRS

1.1 Law of contract – Nature and types of contract
1.2 Essentials of a valid contract - Offer and Acceptance
1.3 Consideration - Capacity to contract.
Extra Reading /Keywords: *Aleatory contract*

UNIT II - ELEMENTS OF VALID CONTRACT **15 HRS**

2.1 Free consent - Coercion - Undue influence - Misrepresentation – Fraud -Mistake
2.2 Legality of object
2.3 Void agreements - Wagering agreement and Contingent contract.
Extra Reading /Keywords: *Case studies relating to agreements opposed to public policy*

UNIT III - PERFORMANCE OF CONTRACT AND SPECIAL CONTRACTS 15 HRS

3.1 Performance of contract - Discharge of contract - Remedies for breach of contract
3.2 Quasi contract - Indemnity and Guarantee

3.3 Bailment and Pledge.

Extra Reading /Keywords: *Any three recent case studies on Breach of Contract*

UNIT IV - CONTRACT OF AGENCY AND LLP 15 HRS

4.1 Contract of Agency - Kinds - Duties - Authority of agent - Relation with third parties

4.2 Liabilities of parties under contract of agency - Termination of agency - Irrevocable agency.

4.3 The Limited Liability Partnership (LLP) Act, 2008 – Limited Liability Partnership - Salient features of LLP - Differences between LLP and partnership - LLP vs Company.Right to Information Act: Features – Objectives - Significance.

Extra Reading /Keywords: *Case laws relating to LLP in India*, *Cyber laws in India*

UNIT V - SALE OF GOODS ACT, 1930 15 HRS

5.1 Sale of Goods Act, 1930 with amendments – Sale and agreement to sell

5.2 Conditions and warranties – Passing of property

5.3 Performance – Remedies for breach – Rights of an unpaid seller.

Extra Reading /Keywords: *Auction sale*

Note: Texts given in the Extra Readings/Keywords must be tested only through assignment and seminar.

TEXT BOOK

Kapoor N.D. (2019), Business Law, Sultan Chand and Sons, New Delhi.

SUGGESTED READINGS

1. Kuchhal M.C., Vivek Kuchhal. (2018), Mercantile Law, New Delhi: VikasPublishing House.

2. Gulshan S.S., Kapoor G. K. (2018), Business Law Including CompanyLaw,New Delhi: New Age International Publishers

3. T.R.Desai (2016), Law relating to Tenders and Government contracts, NewDelhi, Universal Law Publishing Company.

4. Sushma Arora, (2022), *Business Law,* Taxmann Publisher

5. Balachandran .V and Thothadri .S, (2021), *Business Law,* Vijay Nicole ImprintsPvt. Ltd., Chennai

6. Kuchhal M.C and Vivek Kuchhal, (2022), *Business Law,* S.Chand andCo. Ltd.,Noida

7. Tejpal Sheth, (2017), *Business Law,* Pearson Education, Chennai

WEB REFERENCES

1. https://legislative.gov.in
2. www.mca.gov.in
3. https://rti.gov.in
4. https://icmai.in
5. https://www.icai.org
6. https://onlinecourses.swayam2.ac.in/cec21_mg02/preview

Note: Learners are advised to use latest edition of book

COURSE OUTCOMES (CO)

CO No.	Course Outcomes	Cognitive Level (K1-K4)
CO-1	Recall the basic definitions in Indian Contract Act, Sale of Goods Act, LLP Act and RTI Act.	K1
CO-2	Explain the provisions relating to essentials of a valid contract, sale of goods, RTI and LLP.	K2
CO-3	Apply the provisions relating to business law to solve problems in real life situations.	K3
CO-4	Examine the issues relating to contracts and right to information.	K4

(K1- Remember, K2 - Understand, K3 - Apply, K4 - Analyze)

PO – CO MAPPING

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9
CO 1	H	L	M	L	M	L	H	M	H
CO 2	H	L	M	M	M	M	H	M	H
CO 3	H	L	M	H	M	H	H	H	H
CO 4	H	L	M	H	M	H	H	H	H

PSO – CO MAPPING

CO/PSO	PSO 1	PSO 2	PSO 3
CO 1	H	L	M
CO 2	H	L	M
CO 3	H	M	M
CO 4	H	M	M

Course Title	MAJOR CORE 5 – BANKING THEORY LAW AND PRACTICE
Code	U21CO2MCT05
Course Type	Theory
Semester	II
Hours/Week	4
Credits	3
Marks	100

CONSPECTUS

This course aims at providing an understanding of banking law and practices and therecent trends in banking.

COURSE OBJECTIVES

1. To understand the functions of commercial banks, RBI, its organization, functionsand methods of credit control.
2. To analyze the relationship between banker and customer and various types of bank accounts.
3. To understand negotiable instruments and statutory protection to paying banker and collecting banker.
4. T**o** analyze the procedure and policies adopted by banks to provide loans andadvances to customers.
5. To understand the recent trends in banking and Indian financial network.

UNIT I - INTRODUCTION TO BANKING

12 HRS

1.1. Commercial Banks - Functions - Credit creation.
1.2. Reserve Bank of India - Organisation and functions - Methods of credit control.
1.3. Business of Banking Companies - Control over Management- Prohibition of certain activities in relation to banking companies.

Extra Reading /Keywords: *History of banking*

UNIT II - BANKER AND CUSTOMER RELATIONSHIP   **12 HRS**

2.1. Banker and Customer relationship - Special features.
2.2. Different types of accounts - Opening and closing of accounts - Forms used in the operation of bank account.
2.3. Cheque book, Pass book, Mistakes in the pass book.
2.4. Types of account holders.

Extra Reading /Keywords: *Relationship banking strategy*

UNIT III - NEGOTIABLE INSTRUMENTS   **12 HRS**

3.1. Negotiable instruments - Definition - Cheque - Features - Holder and holder in due course - Payment in due course.
3.2. Crossing - Different types. Endorsements - Different kinds.
3.3. Paying banker - Material alteration - Refusal of payment by banks - Statutoryprotection

to the paying banker. Collecting banker - Statutory protection.
Extra Reading /Keywords: *Securitization, Remittance services*

UNIT IV - LOANS AND ADVANCES   12 HRS

4.1. Loans and Advances - Principles of good lending - Credit worthiness of borrowers.

4.2. Modes of securing advances - Lien, Pledge, Mortgage, Reverse Mortgages and Hypothecation.

4.3. Advances against different types of securities - Goods, Documents of title to goods,Life insurance policies, FDR and Government Securities.

Extra Reading /Keywords: *Loan syndication, banc assurance*

UNIT V - RECENT TRENDS IN BANKING   12 HRS

5.1. E-Banking – Internet Banking – Telephone Banking – Mobile Banking – ATMs.

5.2. Cash Machine – Electronic Money - Electronic Fund Transfer System (EFT) – RTGS, NEFT, MICR, KYC norms and Clearing house.

5.3. Indian Financial Network – Customer Grievances Redressal and Ombudsman.

Extra Reading /Keywords: *Core banking, Control mechanism*

Note: Texts given in the Extra Reading /Key words must be tested only through assignment and seminar.

TEXT BOOK

Varshney P.N., and Sundharam K.P.M. (2016), Banking Theory Law and Practice; Sultan Chand Sons; New Delhi.

SUGGESTED REFERENCES

1.Tannan. M.L., (2017) - Banking Law and Practice in India, 27th edition, IndianLaw House, New Delhi.
2. Gordon E and Natarajan, K. (2021)-Banking Theory Law and Practice, HimalayasPublishing House, New Delhi.
3. Maheswari S. N. and Maheswari, S. K. (2014), Banking Law and Practice –Kalyani Publishers, Ansari Rd, Daryaganj, New Delhi 110002.
4. Gupta O.P. and Santosh Kumari Gupta, (2019) Banking Law and Practice in India,Sahitya Bhawan Publications, Khandari, Agra, Uttar Pradesh - 282002.
5. Agarwal, O.P, (2019), Modern Banking of India, Himalaya Publications, Mumbai.
WEB REFERENCES

1. Reserve Bank of India. -
   https://rbidocs.rbi.org.in/rdocs/Publications/PDFs/RBIAM_230609.pdf.
2. Banking Law and Practice:
   https://www.icsi.edu/media/webmodules/publications/9.1%20Banking%20Law%20Professional.pdf.
3. Indian Institute of Banking and Finance - https://www.yumpu.com/user/iibf.org.in

Note: Learners are advised to use latest edition of books.

COURSE OUTCOMES

CO No.	Course Outcomes	Cognitive Level
CO-1	Recall the basic concepts in banking, functions, roles and banking activities.	K1
CO-2	Explain the general and special relationship between banker and customer, framework of negotiable instruments used in banking and modes of securing advances.	K2
CO-3	Apply the banking laws and procedures in day-to-day banking transactions.	K3
CO-4	Analyze the banking activities in relation to various banking regulations.	K4

(K1- Remember; K2- Understand; K3 – Apply; K4 – Analyze.)

PO – CO MAPPING

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9
CO 1	H	M	H	M	L	H	H	H	M
CO 2	H	M	H	H	M	H	H	H	M
CO 3	H	M	H	M	M	H	H	H	M
CO 4	H	M	H	M	M	H	H	H	M

PSO – CO MAPPING

CO/PO	PSO 1	PSO 2	PSO 3
CO 1	H	H	M
CO 2	H	H	M
CO 3	H	H	M
CO 4	H	H	M

Course Title	ALLIED 3 COMPUTER APPLICATIONS IN BUSINESS
Code	U21CA2ALT01
Course type	Theory
Semester	II
Hours/Week	4
Credits	3
Marks	100

CONSPECTUS

To make the students familiar with the use of IT and the various facets of IT and to equip the students with practical skills to use computers.

COURSE OBJECTIVES

1.   To understand the components, importance and roles of information technology and emerging trends in different fields

2. To remember and understands the terminologies of operating system

3. To understand the working of MS-WORD and apply it in creating and editing documents

4. To explain the features of Excel environment and create worksheets

5. To develop power point presentation with multimedia effects

6. To understand ecommerce framework with real-time applications.

UNIT I 12 **Hrs**

INFORMATION TECHNOLOGY: Introduction: Meaning and Need of IT – Components - Importance of information technology in our society. **Role of IT**: It in Business, IT in Manufacturing Industries and Smart Manufacturing, IT in Defense Services, IT in Public Sector, IT in Defense, IT in Media, IT in Publication and IT in Entertainment.

Emerging Trends in IT: E-Commerce, IT And Supply Chain Management, Artificial Intelligence (AI) and Machine Learning, Robotic Process Automation (RPA), Edge Computing, Blockchain, Internet of Things (IoT), 5G, Cyber Security

Extra Reading/ Keywords *: Cyber Law Security and Practices*

UNIT II 12 **Hrs**

BASICS OF OPERATING SYSTEMS: Meaning, Definition and Functions of OS. **Microsoft Window 2007**: Task Bar, Desktop and Customizing, My Computer-Setting, Control Panel Components, Windows Explorer, Using Help and Search Features. **Word Processing Using MS Word 2007**: Basics - Working with Word documents – Working with Text. *Checking Spelling and Grammar*: Using Spelling and Grammar Dialog Box - Using Auto Correct- Using Synonyms and Thesaurus. Adding Graphics and Drawing Objects – Mail Merge.

Extra Reading/ Keywords *: Distributed Operating System*

UNIT III 12 **Hrs**

MS-EXCEL : Spread Sheet Using Microsoft Excel 2007: Excel Environment – *Working With Worksheet*: Entering Data – Navigating Through Cells – Naming And Renaming Cells – Editing A Worksheet – Cut-Copy, Paste Functions - Find And Replace Features. *Formulas and Functions*:
Functions and Formulas - Using Auto Sum, Auto Fill and Command. Creating and Inserting a Chart and Transporting to Word and PowerPoint Documents.

Extra Reading/ Keywords: *Import Excel to analysis tools*

UNIT IV 12 **Hrs**

MS-POWER POINT: *Making Presentation Using Microsoft Power Point 2007*. PowerPoint Environment – *Working with PowerPoint*: Creating a Presentation using Design Templates and Blank Presentation - Working with Different Views. *Designing Presentation*: Working with Slides – Working with Text – Formatting the Text - Graphics and Adding Multimedia Animation - Inserting Pictures and Tables from Other Office Products – Running Slides.

Extra Reading/ Keywords: *Presentation with Hyperlink and Animation.*

UNIT V
12 Hrs

APPLICATIONS OF E-COMMERCE: *Introduction to E-Commerce*: Meaning, Need, Advantages, E-Commerce Framework, Types of E-Commerce. *The Anatomy of E-Commerce Applications*: Electric Consumer Application - Electronic Commerce Organization Application. *Electronic Payment System*: Introduction to EPS, EFT and SET - Types of Payment System. *Technology and Cyber Law*: Basics Concepts and Importance of Cyber Law - Cyber Laws in India (Information Technology Act 2000).

Extra Reading/ Keywords *:Usage of E-purchase Websites*

Note: Tests given in the Extra Reading /Key Word: must be tested only through assignment and seminars.

TEXT BOOKS
1. Alexis Leon, Mathews Leon, Leena Leon, "**Introduction to Information Technology**",

Vijay Nicole, imprints Private Ltd, Chennai.

2.   R. Parameswaran, "**Computer Applications in Business**", S.Chand& Company Ltd.

New Delhi.

SUGGESTED READINGS
1.   V. Rajaraman, "**Introduction to Information Technology**", PHI Learning Pvt Ltd,

New Delhi.

2.   Dr. Ch. Seetha ram, "**Information Technology For Management**", Deep& Deep

Publications Pvt Ltd, New Delhi.

3.   Leon, "**Introduction to Computers**", Vikas Publishing House Pvt Ltd.

4.   Srinivasavallaban SV, "**Computer In Business**", Sultan Chand and Sons, New Delhi.

5.   "**Introduction to Computers with Ms Office**", New Delhi.

WEB REFERENCES

https://www.tutorialspoint.com/computer_concepts
https://connect.comptia.org/blog/emerging-trends-in-information-technology
https://www.tutorialspoint.com/ word /excel/powerpoint/ms_access
https://www.javatpoint.com

Note: Learners are advised to use latest edition of books.

COURSE OUTCOMES

CO No.	Course Outcomes	Cognitive Level (K1-K6)
CO-1	Remember the basic concepts of Information Technology, Operating Systems, MS-Offics and Applications of E-Commerce.	K1
CO-2	Understands the components, roles of information technology, emerging IT trends in different fields, the terminologies of Operating System and features of Microsoft Office	K2
CO-3	Apply MS- Office tools to organize, manage and present information, data and figures.	K3
CO-4	Analyze the needs and construct solutions to solve the real world problems by using Word, to create, polish, and share documents; Excel, to analyze and visualize data; PowerPoint, to create, collaborate, and effectively present ideas	K4

(K1=Remember, K2=Understand, K3=Apply, K4=Analyze, K5=Evaluate, K6=Create)

PO – CO MAPPING

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
CO-1	M	M	M	H	H	H	M	M	M
CO-2	M	M	M	H	H	H	M	M	M
CO-3	H	H	H	H	H	H	M	H	H
CO-4	H	H	H	H	H	H	M	M	M

PSO – CO MAPPING

CO/PSO	PSO1	PSO2	PSO3
CO-1	M	M	M
CO-2	M	M	M
CO-3	H	H	M
CO-4	H	H	M

Course Title	INVESTMENT BASICS
Code	U21CO21RT01
Course Type	Theory
Semester	II
Hours/Week	1
Credit	1
Marks	100

CONSPECTUS

To expose the students to various investment alternatives.

COURSE OBJECTIVES

1. To understand different investment activities.
2. To understand bank and post office deposits.
3. To analyse various types of mutual funds.
4. To analyse various life insurance policies.
5. To understand the basics of financial and non-financial investments.

UNIT I - INTRODUCTION TO INVESTMENTS   3 HRS

Investments- Savings Vs Investments – Importance of savings and investments – Objectives of investments - Investment alternatives - Financial Vs Non-financial assets.
Extra Reading/Keywords: *IRA, CD and money market accounts*

UNIT II – BANK AND POST OFFICE DEPOSITS AND CERTIFICATES   3 HRS

Introduction to Bank Deposits, Types of Deposit Accounts, and Common guidelines of openingand operating accounts, Deposit related services, Deposit services offered to Non-Resident Indians – Post office investment savings schemes – Advantages.
Extra Reading/Keywords: *Sukanya Samriddhi Accounts, Senior Citizen Savings Scheme*

UNIT III - MUTUAL FUNDS   3 HRS

New fund offers and procedure for investing in NFO - Investors rights and obligations. Types of funds – Open ended schemes - Close ended funds – Growth fund, Income fund, Tax saving schemes, Index schemes and Balanced schemes - Diversified large cap funds, Midcap funds.
Extra Reading/Keywords: *Thematic and Arbitrage funds*

UNIT IV – LIFE INSURANCE AND PROVIDENT FUND SCHEMES   3 HRS

Type of life insurance policy - Endowment policy - Term policy - Whole life policy - Money back policy – ULIPs - Kinds of provident funds - Statutory Provident Fund, Recognized Provident Fund and Unrecognized Provident Fund. Equity Linked SavingsSchemes (ELSSs) - Pension Plan.
Extra Reading/Keywords: *Market linked investment plans*, *Retirement planning investment options*

UNIT V – REAL ASSETS AND CORPORATE SECURITIES   **3 HRS**

Investments in Real estate – E-Real estate - E-gold – Commodities – Shares - Debentures – Bonds – Derivatives.

Extra Reading/Keywords: *Collectables, Equity crowd funding*

Note: Texts given in the Extra Reading/ Keywords must be tested only through assignment and seminar.

TEXT BOOKS

1. Punithavathi Pandian, (2018), Security Analysis and Portfolio Management, Vikas Publishing House Pvt ltd, New Delhi.
2. Preethi Singh, (2018), Investment Management, Himalaya Publishing House, New Delhi.

SUGGESTED READINGS

1. Natarajan L, (2018), Investment Management, Security Analysis and Portfolio management, Margham Publications, Chennai.
2. Avadhani VA, (2018), Investment and Securities Market in India, Himalaya Publishing House,Mumbai.
3. Bhalla VK, (2018), Investment Management, Security Analysis and Portfolio Management, S.Chand and Company Ltd, New Delhi.
4. Prasanna Chandra, (2018), Investment Analysis and Portfolio Management, Tata McGraw-HillPublishing Company Limited, New Delhi.
5. Graham and Dodd, (2018), Investment, Tata McGraw - Hill Publishing Company Limited, New Delhi.

WEB REFERENCES

1. https://www.investopedia.com/terms/m/mutualfund.asp
2. https://www.geektonight.com/investment-management-pdf/
3. http://www.aurobindo.du.ac.in/uploads/pdf/1585999470_Mutual_funds_.pdf

Note: Learners are advised to use latest edition of books.

COURSE OUTCOMES (CO)

CO No.	Course Outcomes	Cognitive Level
CO-1	Describe the various investment alternatives.	**K1**
CO-2	Explain the guidelines for investing in financial and non-financial assets.	**K2**
CO-3	Construct the procedure for investment in various deposits	**K3**
CO-4	Analyze the different types of mutual funds and various schemes available for investment.	**K4**

Course Title	MAJOR CORE 6 : CORPORATE ACCOUNTING-I
Code	U21CO3MCT06
Course Type	Theory
Semester	III
Hours/Week	5
Credits	4
Marks	100

CONSPECTUS

To acquaint the students with the procedure for the preparation of company accounts and accounting for issue and redemption of shares and debentures.

COURSE OBJECTIVES

1. To understand the steps involved in issue, forfeiture and reissue of forfeited shares and issue of debentures.
2. To apply the provisions relating to redemption of preference shares and debentures.
3. To apply the procedure involved in preparation of Statement of Profit and Loss and Balance Sheet of Companies.
4. To understand the basic methods of valuation of goodwill and shares.
5. To understand the accounting treatment for acquisition of business and apply the procedure involved in determination of profit prior to incorporation.

UNIT – I ISSUE OF SHARES AND DEBENTURES   15 HRS

1.1 Issue of Shares and Debentures- Rights issue, Bonus issue, Buy back of shares, Sweat equity shares.
1.2 Forfeiture and reissue of forfeited shares
Extra Reading/ Keywords: *Types of shares and debentures.*

UNIT – II REDEMPTION OF PREFERENCE SHARES AND DEBENTURES 15 HRS

2.1. Redemption of preference shares and debentures.
2.2. Sinking fund method. Open market buying of debentures: Cum-interest and ex-interest transactions.
Extra Reading/ Keywords: *Redemption, Cum-interest, Ex-interest*

UNIT – III FINAL ACCOUNTS OF COMPANIES   15 HRS

3.1. Statement of Profit and Loss (Excluding managerial remuneration)
3.2. Balance Sheet of a company
Extra Reading/ Keywords: *Annual report of companies.*

UNIT - IV VALUATION OF GOODWILL AND SHARES   **15 HRS**
4.1. Methods of valuing goodwill: Simple profit method - Super profit method - Annuity method.
4.2. Methods of valuation of shares: Net asset method - Yield method –
Profit Earning Ratio.

Extra Reading/ Keywords: *Value of shares of public sector companies and private sector companies*

UNIT-V ACQUISITION OF BUSINESS AND PROFIT PRIOR TO INCORPORATION
                                        15 HRS
5.1. Accounting treatment for acquisition of business in the books of vendor and purchaser (when new set of books are opened)
5.2. Accounting for profit and loss prior to incorporation

Extra Reading/ Keywords: *Acquisition, Profit prior to incorporation*

Note: Texts given in the Extra Reading/ Keywords must be tested only through assignment and seminar.

 Theory - 20% Problems - 80%

TEXT BOOK
Reddy T.S. & Murthy A., (2020). *Corporate Accounting*, Chennai: Margham Publications

SUGGESTED READINGS
1. Shukla. M.C. & Grewal T.S., (2019). *Advanced Accounts, Volume II,* New Delhi: S .Chand &Co.
2. Gupta. R.L. & Radhaswamy M., (2021). *Advanced Accounts, Volume II,* New Delhi: Sultan Chand.
3. Jain. S.P. & Narang K.L., (2019). *Advanced Accounts, Volume II,* New Delhi: Kalyani Publishers.

 WEB REFERENCES
1. https://www.icsi.edu/media/webmodules/Corporate%20and%20Management%20Accounting.pdf

 Note: Learners are advised to use latest edition of books.
 COURSE OUTCOMES

CO. NO	Course Outcomes	Cognitive Level
CO-1	Recall the accounting treatment relating to various transactions of companies.	K1
CO-2	Explain the concepts relating to issue and redemption of shares and debentures and valuation of shares and goodwill.	K2
CO-3	Apply the accounting procedures relating to issue and redemption of shares and debentures; Prepare final accounts of companies; Calculate the values of goodwill, shares and profit prior to incorporation.	K3
CO-4	Examine the accounting procedures for joint stock companies.	K4

 (K1- Remember; K2- Understand; K3 – Apply; K4 – Analyse)

PO – CO MAPPING

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9
CO 1	H	M		H	M		H	H	
CO 2	H	M		H	M		M	H	M
CO 3	H	M		H	M		H	H	M
CO 4	H	M		H	M		M	H	M

PSO – CO MAPPING

CO/PSO	PSO 1	PSO 2	PSO 3
CO 1	H		H
CO 2	H		M
CO 3	H	H	
CO 4	H	M	

Course Title	MAJOR CORE 7 – BUSINESS ENVIRONMENT
Total Hours	60
Hours/Week	4
Code	U21CO3MCT07
Course Type	Theory
Credits	4
Marks	100

CONSPECTUS

To provide an overview of business environment and the elements of global business environment and its implications.

COURSE OBJECTIVES

1. To understand the concepts of business environment, environment analysis and strategic management.
2. To understand the concepts of economic environment that influence the business.
3. To analyse the policies of the government which influence the business.
4. To analyse the social and cultural environment of the business.
5. To understand the philosophies of global approaches to manage a business successfully in a global environment.

UNIT I: BUSINESS ENVIRONMENT - AN OVERVIEW   **12 HRS**

1.1. Business: Definition - Nature and Scope of business.
1.2. Business Environment: Definition - Nature and Significance - Types
1.3. Environmental Analysis and Strategic Management Process – Importance, Limitations and Approaches to Environmental Analysis.
   Extra Reading/ Keywords: *e business, e business environment.*

UNIT II: ECONOMIC ENVIRONMENT   **12 HRS**

2.1. Brief history of Planning in India – Five Year Plans in India.
2.2. Finance Commission, NITI Aayog- Finances of the Union and the State Governments.
2.3. Economic Parameters – Description of Indices: Corruption Perception Index, Micro Economic Competitiveness Index and Technology Index.
Extra Reading/ Keywords: *Knowledge based economy, e budgets.*

UNIT III: POLITICAL ENVIRONMENT   **12 HRS**

3.1. Constitutional Environment: Features – Fundamental Rights and Duties, Provisions of Indian Constitution pertaining to business.

3.2. Political Environment: Government policies and business - Impact, importance and responsibilities of government towards business.

3.3. Government intervention in business - Environment Protection Act, 1986 and

Competition Act, 2002.

Extra Reading/ Keywords: *e EPA, Intellectual Property Management.*

UNIT IV: SOCIAL AND CULTURAL ENVIRONMENT   **12 HRS**

4.1. Society: Elements – Types - Characteristics and its impact on business.
4.2. Culture: Concepts - Features – Elements - Functions, Traits and Effects of social and cultural environment on business. Foreign culture – Impact of foreign culture on business.
4.3. Business Ethics – Social responsibilities of business towards different groups.

Extra Reading/ Keywords: *e Business Ethics, e Business Culture.*

UNIT V: GLOBAL ENVIRONMENT   **12 HRS**
5.1. Globalisation: Definition - Process- Pre-requisites of globalisation - Strategies for globalisation - Role of various forms of foreign capital.
5.2. Functions of WTO and GATT – Trading blocks in globalisation.
5.3. Impact of globalisation on Indian business- Merits and Demerits of globalisation.
Extra Reading/ Keywords: *Global outsourcing, Global corporate governance practices.*

Note: Texts given in the Extra Reading/Keywords must be tested only through assignment and seminar.

COURSE OUTCOMES (CO)
The learners

CO No.	Course Outcomes	Cognitive Level
CO-1	Recall the concepts of business environment and various factors that influence the environment.	K1
CO-2	Describe the elements of economic, political, cultural, social and global environment of the business.	K2
CO-3	Apply the regulations related to economic, legal , political and global environment of business.	K3
CO-4	Analyse the impact of environmental factors like culture, social, political, legal and provisions related to globalisation on business.	K4

   (**K1- Remember; K2- Understand; K3 – Apply; K4 – Analyse**)

PRESCRIBED TEXT BOOK
C. B. Gupta (2018). *Business Environment*, Sultan Chand and Sons, New Delhi.

SUGGESTED READINGS
1. Aswathappa K. (2019), *Essentials of Business Environment*, Himalaya
        Publishing House, New Delhi.
2. Balaji.C.D (2017), *Business Environment*, Margham Publication, Chennai.
3. Francis Cherunilam, (2019). *Business Environment – Text and Cases,* Himalaya Publishing House, New Delhi.
4. Sankaran. S. (2017), *Business Environment* – 3rd ed, Margham Publication, Chennai.

WEB REFERENCES
1. www. https://www.niti.gov.in/
2. www. https://iimm.org/wp-content/uploads/2019/04/IIMM_BE_Book.pdf.
3. www. https://ximb.edu.in/

Note: Learners are advised to use latest edition of books.

PO – CO MAPPING

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9
CO 1	H	M	H	H	H	H	H	H	H
CO 2	H	H	H	H	H	H	H	H	H
CO 3	H	M	H	H	H	H	H	H	H
CO 4	H	H	H	H	H	H	H	H	H

PSO-CO MAPPING

CO/PO	PSO 1	PSO 2	PSO 3
CO 1	H	H	-
CO 2	H	M	-
CO 3	H	H	-
CO 4	H	H	-

Course Title	MAJOR ELECTIVE -1 - EMERGING TRENDS IN IT
Total Hours	60
Hours/Week	4
Code	U21CA3MET01
Course Type	Theory
Credits	4
Marks	100

GENERAL OBJECTIVE
To understand the concepts of Emerging trends in Information Technology and Explore the currenttechnology innovations to become informed on the latest technology issues

COURSE OBJECTIVES
To enable the learners:

CO No.	Course Objectives
CO-1	Understand the concepts of Cloud Computing Services, Layers and Models;
CO-2	Apply the concepts of Wireless sensor network;
CO-3	Analyze the different Stack layers of big data;
CO-4	Understand the Mobile security;
CO-5	Understand the differences between forward chaining and backward chaining.

CO – Course Objective

UNIT I 12 Hrs

CLOUD COMPUTING OVERVIEW: Layers and Types of Clouds- Desired features of a Cloud- Cloud Infrastructure Management – Infrastructure as a Service Providers – Platform as a Service Provider- Challenges and Risk. **MANAGING INTO A CLOUD:** Broad approaches to Migrating into a Cloud- SevenStep Model of Migration into a Cloud- Data security in the Cloud.
Extra Reading/Keywords: *Services on Cloud, characteristics and different kinds of Cloud.*

UNIT II 12 Hrs
IOT –Introduction to Internet of Things-Definition and Characteristics -IOT-Physical design of IOT - IOT Protocols, IOT Communication models, IOT communication of APIs- IOT enabled Technologies- WirelessSensor Networks, Cloud Computing, Big data Analytics, Communication Protocols, Embedded Systems, Domain Specific IOTs, Home, City, Environment, Energy, Retail, Logistics, Agriculture, Industry, Health

and Lifestyle- IOT and M2M – software defined networks, Network function Virtualization- SDN and NFVfor IOT.
Extra Reading/Keywords: *Analytics, Sensor, Protocols.*

UNIT III   **12 Hrs**
GRASPING THE FUNDAMENTALS OF BIG DATA: The Evolution of Data Management – Understanding the Waves of Managing Data – Defining Big Data – Building a successful Big Data Management Architecture. **EXAMINING BIG DATA TYPES:** Defining Structured Data – Defining Unstructured Data: **DIGGING INTO BIG DATA TECHNOLOGY COMPONENTS:** Exploring the Big Data Stack – Layer 0: Redundant Physical Infrastructure – Layer 1: Security Infrastructure – Interfaces and Feeds to and from Applications and the Internet – Layer 2: Operational Databases – Layer 3: Organizing Data Services and Tools – Layer 4: Analytical Data Warehouses – Big Data Analytics – Big Data Applications.
Extra Reading/Keywords: *Digging, data types of BIG DATA, Layers.*

UNIT IV   **12 Hrs**
MOBILE COMPUTING: Introduction- Mobile Computing Devices- Mobile Computing functions- Wireless Technology- Evolution of Wireless Technology-Types of Wireless Technology- Fundamentals of Cellular System-Adhoc and Sensor Network- Data Delivery Mechanisms- **MOBILE AGENTS**- Characteristics of Mobile Agents-Mobile Agent Platforms – Mobile Agent Security.
Extra Reading/Keywords: *Mobile App, Web Development, XML, Jquery.*

UNIT V   **12 Hrs**
ARTIFICIAL INTELLIGENT: Introduction-Concept-Intelligence-Learning-Reasoning-Problem solving: Perception-Problem Solving approaches: State space Algorithm –Disciplines: subject-Learning Systems- Knowledge representation and Reasoning. **APPLICATIONS OF ARTIFICIAL INTELLIGENCE TECHNIQUES:** Expert System-Image understanding and Computer Vision- Speech and Natural Language
– Scheduling – Intelligent Control.
Extra Reading/Keywords: *Intelligent Agent, Heuristics, Knowledge Representation.*

Note: Texts given in the Extra reading /Keywords must be tested only through Assignment and Seminar.

COURSE OUTCOMES
The learners will be able to:

CO No.	Course Outcomes	Cognitive Level
CO-1	Know the Layers and Models of Cloud computing;	K1
CO-2	Understand the different kinds of drivers in IOT;	K2
CO-3	Apply Apriori algorithms and Find the Frequent Item sets;	K3
CO-4	Understand the Applications of VPN Technologies;	K4
CO-5	Understand the Concepts of Constraint Satisfaction, backtracking and unification.	K5

(**K1- Remember; K2- Understand; K3 – Apply; K4 – Analyse**)

PRESCRIBED TEXT BOOKS
1. Rajkumar Buyya, James Broberg, Andezej Goscinski, **"Cloud Computing Principles andParadigms"**,WILEY Publications , 2013.
       Unit I Chapters – 1, 2, 23
2. Arshdeep Bahga, Vijay Madisetti, **"Internet of Things – A hands-on approach"**, UniversitiesPress,2015.
       Unit II Chapter - 1
3. Judith Hurwitz, Alan Nugent, Dr. Fern Halper and Marcia Kaufman, "**Big Data for**

Dummies", A Wiley Brand - Wiley Publications, 2013.
  Unit III: Chapters 1, 2 ,3, 4
4.   Prashant Kumar Patra, Sanjith Kumar Dash, **"Mobile Computing",**
Second Edition, SCITECH Publications, 2018.
  Unit IV: Chapter 1,18,22
5. S.K. Bansal, **"Artificial Intelligence".** APH Publishing Company, New Delhi, 2013.
  Unit V: Chapters 1

SUGGESTED REFERENCES

1. Cloud Computing (Principles and Paradigms), Edited by Rajkumar Buyya, James Broberg, AndrzejGoscinski, John Wiley & Sons, Inc. 2011
2. Honbo Zhou, "The Internet of Things in the Cloud: A Middleware Perspective", CRC Press,2012.
3. Jure Leskovec, AnandRajaraman, Jeffrey David Ullman, "Mining of Massive Datasets", CambridgeUniversity Press, Second Edition, 2014.
4. Reto Meier, "Professional Android 2 Application Development", Wrox Wiley, 2010.
5. M. Tim Jones, ―Artificial Intelligence: A Systems Approach(Computer Science), Jones and BartlettPublishers, Inc.; First Edition, 2008
 Note: Learners are advised to use latest edition of books.

PO – CO MAPPING

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9
CO 1	H	M	H	H	H	H	H	H	H
CO 2	H	H	H	H	H	H	H	H	H
CO 3	H	M	H	H	H	H	H	H	H
CO 4	H	H	H	H	H	H	H	H	H

PSO-CO MAPPING

CO/PO	PSO 1	PSO 2	PSO 3
CO 1	H	H	M
CO 2	H	M	H
CO 3	H	H	M
CO 4	H	H	M

Course Title	**MAJOR ELECTIVE - 1 - BASIC CONCEPTS OF PROGRAMMING**
Total Hours	**60**
Hours/Week	**4**
Code	**U21CA3MET02**
Course Type	**Theory**
Credits	**4**
Marks	**100**

GENERAL OBJECTIVE

To understand the basic concepts of programming and to develop programming skills using C and C++languages.

COURSE OBJECTIVES

To enable the learners:

CO No.	Course Objectives
CO-1	Explain algorithm and flowchart symbols;
CO-2	Familiarize the concepts of Constants, Variables, Keywords and Data types;
CO-3	Discuss the various types of operators and statements such as Sequential, Conditionaland Decision Making;
CO-4	Understand the Loop constructs, different types of arrays;
CO-5	Understand the basics of functions, procedures and file management.

CO – Course Objective

UNIT I   **12 Hrs**

Overview: Introduction to Computer Program - Introduction to Computer Programming - Uses of Computer Programs – Algorithm and Flowchart **– Programming Environment**: Text Editor - Compiler - Interpreter - Online Compilation; **Basic Syntax**: Hello World Program in C and C++ - Syntax Error

Extra Reading /Keywords: *Algorithms and Flowchart for real time applications*

UNIT II   **12 Hrs**

Constants, Variables and Data Types: Character Set **-** Constants - Creating variables - Store Values in Variables - Access Stored Values in Variables - Variables in C and C++**;** **Keywords**: C and C++ Programming Reserved Keywords

Extra Reading /Keywords: *Programs using I/O operations in C and C++*

UNIT III   **12 Hrs**

Operators: Arithmetic Operators - Relational Operators - Logical Operators - Operators in C and C++**; Sequential and Conditional Statements - Decision Making Statements**: Simple if - if...else statement elseif ladder - The switch statement - Decisions in C and C++

Extra Reading /Keywords: *Additional Programs using Sequential and Control statements in C and C++*

UNIT IV   **12 Hrs**
Loops: The while Loop - The do...while Loop - The break statement - The continue statement – The for Statement – Jumps in Loops - Loops in C and C++**; Arrays**: Create Arrays – Declaration and Initialization of Arrays -Accessing Array Elements – One Dimensional and Two Dimensional Arrays - Arrays in C and C++ ; **Strings**: Basic String Concepts - Strings in C and C++
Extra Reading /Keywords: *Additional Programs using Arrays and Srtings in C and C++*

UNIT V   **12 Hrs**
Functions and Procedures: Defining a Function **-** Calling a Function **-** Defining and Calling a Procedure -Functions in C and C++ - Top-down and Bottom-up programming; **Files:** File Input/Output - File OperationModes - Opening Files - Closing a File - Reading and Writing a File; **Simple Programs in C and C++ Extra Reading /Keywords:** *Additional Programs using Functions and File handling in C and C++*

Note: Texts given in the Extra reading /Key words must be tested only through Assignmentand Seminars.

COURSE OUTCOMES
The learners will be able to:

CO No.	Course Outcomes	Cognitive Level
CO-1	Explain algorithm and flowchart;	K1
CO2	Discuss the concepts of Constants, Variables, Keywords and Data types;	K2
CO-3	Classify the various types of operators and statements such as Sequential, Conditional and Decision Making;	K3
CO-4	Apply the concept of Loop constructs, different types of arrays for solving Simple problems;	K4
CO-5	Apply the concept of functions, procedures and file management for developing Simple Programs – Analyze the difference between C and C++ programs.	K5

(**K1- Remember; K2- Understand; K3 – Apply; K4 – Analyse; K5 - Evaluate)**

PRESCRIBED TEXT BOOKS
1. E. Balagurusamy, "Programming in ANSI C", Seventh Edition, McGraw Hill Education(India) Private Limited, New Delhi, 2017.

2. E. Balagurusamy, "Object-Oriented Programming with C++", 7th Edition, McGraw HillEducation (India) Private Limited, New Delhi, 2017.

SUGGESTED REFERENCES

1. Deitel and Deitel, **"C How to Program"**, Seventh Edition, Pearson Education Pvt. Ltd., 2013.
2. R.G.Dromey, **"How to Solve it by Computer"**, Fifth Edition, Pearson Education Pvt. Ltd.,New Delhi, 2007.
3. K R Venugopal ,Sudeep R Prasad, **"Mastering C"**, Second Edition, McGraw Hill EducationPrivate Limited, 2015.
4. Dr R Rajaram , "Object Oriented Programming And C++ ",Second Edition , New Age International (P) Ltd., 2013.
5. Sourav Sahay , "Object Oriented Programming with C++", Oxford University Press, 2ndedition, 2012.

Note: Learners are advised to use latest edition of books.

Course Title	R Programming Lab (B.Com. (CA))
Total Hours	60
Hours/Week	4
Code	U21CA3ALP04
Course Type	Practical
Credits	2
Marks	100

General Objectives:

To learn use the programming language "R Programming" and perform using variables, data types, strings,operators, vectors, lists, matrices, arrays, data frames, factors, graphics, and statistics

Course Objectives:

The Learner will be able to

CO No.	Course Objectives
CO-1	Demonstrate the programs using R.
CO-2	Apply variables, data types, strings, operators, arrays, and matrices.
CO-3	Learn various data frames, factors and frames.
CO-4	Demonstrate the techniques for graphics.
CO-5	Demonstrate how to plot, and draw the pie chart and bar chart.
CO-6	Design and develop creative applications using R.

Basics:

1. Write a R program to get the first 10 Fibonacci numbers.
2. Write a R program to get all prime numbers up to a given number.
3. Write a R program to print the numbers from 1 to 100 and print "Fizz" for multiples of 3, print "Buzz" formultiples of 5, and print "FizzBuzz" for multiples of both.
4. Write a R program to extract first 10 english letter in lower case and last 10 letters in upper case and extractletters between 22nd to 24th letters in upper case.
5. Write a R program to find the factors of a given number.
6. Write a R program to find the maximum and the minimum value of a given vector.
7. Write a R program to get the unique elements of a given string and unique numbers of vector.
8. Write a R program to create three vectors a,b,c with 3 integers. Combine the three vectors to become a 3×3matrix where each column represents a vector. Print the content of the matrix.

9. Write a R program to create a list of random numbers in normal distribution and count occurrences of each value.

Advanced:

1. Write a R program to create a list of elements using vectors, matrices and a functions. Print the content ofthe list.
2. Write a R program to draw an empty plot and an empty plot specify the axes limits of the graphic.
3. Write a R program to create a simple bar plot of five subjects marks.
4. Write a R program to create a Data frames which contain details of 5 employees and display the details.
5. Write a R program to create a Data Frames which contain details of 5 employees and display summary ofthe data

Course Title	MSBE 2 – BUSINESS SOFTWARE – TALLY
Total Hours	30
Hours/Week	2
Code	U21CO3SBP02
Course Type	Practical
Credits	1
Marks	100

CONSPECTUS

This course aims to equip the students with the practical skills of Tally.

COURSE OBJECTIVES

To understand the concepts of Computerized Accounting.
To understand all types of vouchers.
To analyse Final Accounts with Adjustments.
To understand the preparation of stock ledger.
To analyse accounting for Cost Centre and Cost category.

UNIT–I INTRODUCTION   6 HRS

Computerized Accounting – Meaning – Importance of computerized accounting – Computerized accounting Vs Manual accounting. Introduction to architecture of Tally – Creation of company – Creation of groups – Various kinds of groups – multiple and single – Creation of ledgers – Various kinds of ledgers.
Extra Reading /Keywords: *Computerized Accounting*

UNIT– II VOUCHING   6 HRS

Entering vouchers – Journal voucher, Purchase voucher, Sales voucher, Receipt vouchers, Payment vouchers – Role and importance of function keys.
Extra Reading /Keywords: *Function Keys and Vouchers*

UNIT– III FINAL ACCOUNTS   6 HRS

Extraction of Trial Balance, Trading Account, Profit and Loss Account and Balance Sheet, Simple sums with and without adjustments – Alter – Select – Edit – Delete – Selection of company.
Extra Reading /Keywords: *Final Accounts with Adjustments*

UNIT– IV INVENTORIES   6 HRS

Introduction to inventories – Creation of stock category – Stock groups – Stock items – Editing and deletion of stock items – Usage of stock in voucher entry – Stock voucher or purchase orders – Sales orders – Customer and supply analysis – Extracting simple reports and graphs with tally accounting package.
Extra Reading /Keywords: *Inventories, Stock vouchers*

UNIT–V COST CENTRE   6 HRS

Introduction to cost – Creation of cost category – Cost centre category – Editing and deleting cost centre. Usage of cost category and cost centre in voucher entry – Budget control – Creation of budgets – Editing and deleting budgets –Reports.

Extra Reading /Keywords: *Cost Centre and Cost category.*

Note: Texts given in the Extra Reading /Keywords must be tested only through Assignment and Seminar.

Note: Learners are advised to use latest edition of books.

COURSE OUTCOMES (CO)

CO No.	Course Outcomes	Cognitive Level
CO-1	Recall the concepts of computerized accounting and Tally.	K1
CO-2	Identify the types of vouchers; understand the basics of final accounts, inventory accounting, cost centres and cost categories.	K2
CO-3	Construct the final accounts with adjustments and create vouchers and inventory accounts and bill wise details of cost categories.	K3
CO-4	Demonstrate accounting skills and analytical skills and become employable in all types of business organisations	K4

(K1- Remember; K2- Understand; K3 – Apply; K4 – Analyse)

TEXT BOOK
ICAR and D Team, (2018) Tally 9, New Delhi, Vikas Publishing House Pvt. Ltd.

SUGGESTED READINGS

1. Nadhani A.K. andNadhani K.K, (2007). *Implementing Tally*, New Delhi : BPB Publication.
2. Vishnu Priya Singh (2017), Learn Tally.Erp9 with GST, New Delhi: Computech Publications.
3. Asok K Nadhani (2018), Tally Erp 9 Training Guide, New Delhi: BPB Publications.
4. Srinivasa Vallaban, (2011). Computer Applications in Business, New Delhi: Sultan and Sons.

WEB REFERENCES

1. https://tallysolutions.com/tally/what-is-tally-erp-9-and-how-to-use-it/

2. https://tallysolutions.com/learning-hub/

COMPUTER PRACTICAL FOR BUSINESS SOFTWARE - FOR EXTERNAL EVALUATION
- Petty Cash Entries, Subsidiary Books
- Accounts Only – Accounts with Inventory
- Accounts with Inventory Tax Initialize
- Stock Categories
- Cost Centre

- Cost Categories
- Stock Journal
- Balance Sheet
- Final Accounts Without Adjustments
- Final Accounts with Adjustments
- Order Processing
- Price List
- Bill-wise Details
- Bank Reconciliation Statement
- Interest Calculation
  Note: Learners are advised to use latest edition of books.

PO – CO MAPPING

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9
CO -1	H		M				H	M	M
CO -2	H		M				H	M	M
CO -3	H		M				H	M	M
CO -4	H		M				H	H	H

PSO – CO MAPPING

CO/PSO	PSO 1	PSO 2	PSO 3
CO -1	M	H	M
CO -2	H	H	H
CO -3	H	H	H
CO -4	H	H	H

****

Course Title	MAJOR CORE 8 – CORPORATE ACCOUNTING - II
Code	U21CO4MCT08
Course Type	Theory
Semester	IV
Hours/week	4
Credits	4
Marks	100

CONSPECTUS

To acquaint the students with the procedure for the preparation of company accounts and accounting treatment for amalgamation, liquidation, holding companies and banking companies.

COURSE OBJECTIVES

1. To understand the concept of amalgamation and apply the accounting standards with respect to amalgamation.
2. To apply the provisions relating to alteration of share capital in preparing company accounts.
3. To understand the principle of consolidation and apply the relevant accounting standards in preparing the accounts of holding companies.
4. To understand the concept of liquidation and apply the provisions in preparing liquidation accounts.
5. To apply the statutory provisions relating to preparation of final accounts of banking companies.

UNIT I - AMALGAMATION OF COMPANIES   12 HRS

1.1. Accounting for Amalgamation as per AS14 - Purchase consideration.
1.2. Amalgamation in the nature of merger and purchase
(Excluding inter- company holdings)
Extra Reading /Keywords: *Acquisition, External Reconstruction*

UNIT II - ALTERATION OF SHARE CAPITAL   12 HRS

2.1. Alteration of share capital – Procedure for alteration of share capital.
2.2. Capital reduction - Accounting for reduction of share capital.
Extra Reading /Keywords: *Internal reconstruction, Surrendering of shares*

UNIT III - HOLDING COMPANY ACCOUNTS   12 HRS

3.1. Holding company: Revenue and Capital Profits - Cost of Control - Minority Interest.
3.2. Preparation of Consolidated Balance Sheet (Excluding inter-company holdings)
Extra Reading /Keywords: *Bonus shares, Payment of arrear dividends*

UNIT IV - LIQUIDATION ACCOUNTS   12 HRS

4.1. Liquidation of Companies - Preparation of Statement of Affairs.
4.2. Liquidator's Final Statement of Account.
Extra Reading /Keywords: *Surplus account, Deficiency account*

UNIT V - FINAL ACCOUNTS OF BANKING COMPANIES   12 HRS

5.1. Accounts of Banking Companies (New form)
5.2. Preparation of Income Statement and Balance Sheet with Schedules.
Extra Reading /Keywords: *Non-Performing assets, Money at call and short notice*

Note: Texts given in the Extra Reading/ Keywords must be tested only through assignment and seminar.

Theory - 20% Problems - 80%

TEXT BOOK

Reddy T.S. & Murthy A., (2020). *Corporate Accounting*, Chennai: Margham Publications.

SUGGESTED READINGS

1. Shukla. M.C. & Grewal T.S., (2019). *Advanced Accounts, Volume II,* S .Chand &Co, New Delhi.
2. Gupta. R.L. & Radhaswamy M., (2021). *Advanced Accounts, Volume II,* Sultan Chand, New Delhi.
3. Jain. S.P. & Narang K.L., (2019). *Advanced Accounts, Volume II,* Kalyani Publishers, New Delhi.
4. Maheshwari.S.N &Maheshwari.S.K (2018), Corporate Accounting, Vikas Publishing House Pvt.Ltd.,Noida.
5. Bhushan Kumar Goyal (2022), *Basic Corporate Accounting*, Taxmann Publication, New Delhi.

WEB REFERENCES

1. https://www.icsi.edu/media/webmodules/CMA_Book_010820.pdf
2. https://icmai.in/upload/Students/Syllabus2016/inter/Paper-12-Feb-2022.pdf
3. https://www.mca.gov.in/Ministry/pdf/CompaniesAct2013.pdf

Note: Learners are advised to use latest edition of books.

COURSE OUTCOMES

The learners

CO No.	Course Outcomes	Cognitive Level
CO-1	Recall the concepts of amalgamation, alteration of share capital, holding companies, liquidation accounts and banking companies	**K1**
CO-2	Discuss the different methods of preparing company accounts.	**K2**
CO-3	Apply the procedure for preparing company accounts.	**K3**
CO-4	Examine the application of statutory provisions for company accounts.	**K4**
CO-5	Assess the companies' positions under amalgamation, alteration and liquidation.	**K5**

(**K1- Remember; K2- Understand; K3 – Apply; K4 – Analyse; K5 - Evaluate**)

PO – CO MAPPING

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9
CO 1	M	L	L	M	L	L	H	H	H
CO 2	M	L	L	M	L	L	H	H	H
CO 3	M	L	L	M	L	L	H	H	H
CO 4	M	L	L	M	L	L	H	H	H
CO 5	M	L	L	M	L	L	H	H	H

PSO – CO MAPPING

CO/PSO	PSO 1	PSO 2	PSO 3
CO 1	H	L	H
CO 2	H	L	H
CO 3	H	L	H
CO 4	H	L	H
CO 5	H	L	H

Course Title	MAJOR CORE 9 - ORGANIZATIONAL BEHAVIOUR
Code	U21CO4MCT09
Course Type	Theory
Semester	IV
Hours/ Week	4
Credits	4
Marks	100

CONSPECTUS

To understand individual and group behaviour in an organization and to enhance skills, for managing organizational behavior successfully.

COURSE OBJECTIVES

1. Remember the need, importance and applications of organizational behavior.
2. Understand the concepts of individual behavior and the various factors and theories.
3. Analyse the behaviour modification and methods of motivation.
4. Understand the group behavior and group decision making.
5. Analyse the leadership power, organizational culture and organizational development.

UNIT I - BASICS OF ORGANISATIONAL BEHAVIOUR   12 HRS

1.1 Definition – Need, Importance and Applications of Organizational Behaviour.
1.2 Nature and scope of organizational behavior – Models.
1.3 Organizational Behaviour in the global context.
Extra Reading /Keywords: *Cross-cultural psychology.*

UNIT II - INDIVIDUAL   BEHAVIOUR   12 HRS

2.1   Biographical features – Personality – Types - Factors - Theories. Learning – Types- Process - Theories.
2.2   Attitudes – Characteristics – Components – Formation - Measurement – Values and theories.
2.3   Emotions – Emotional labour - Emotional intelligence - Theories. Perceptions - Importance – Factors – Interpersonal perception.
Extra Reading /Keywords: *Modus operandi of behaviour modification.*

UNIT III - MOTIVATION CONCEPTS   12 HRS

3.1 Motivation- importance – Types - Effects on work behavior.
3.2 Behaviour modification – Participative management – Performance based compensation
3.3 Flexible benefits – Two tier pay systems, Job redesigning – Stress management strategies.
Extra Reading /Keywords: *Noetic, Prosody*

UNIT IV - GROUP BEHAVIOUR   12 HRS

4.1 Group behaviour and group decision making.
4.2 Classification of groups.
4.3 Stages of group development - Group decision-making.
Extra Reading /Keywords: *Bohemianism, Eclecticism*

UNIT V - CONFLICT MANAGEMENT   12 HRS

5.1 Leadership and Power – Sources of power - Tactics – Coalitions – Organizational politics

5.2 Conflict process – Managing inter-group conflict. Organizational culture - Creating and sustaining culture.

5.3 Forces of organizational change – Resistance – Implementation of change – Organizational Development interventions - Grievance Redressal System adopted in various organizations

Extra Reading /Keywords: *Hegemony, Fracas*

Note: Texts given in the Extra Reading /Key words must be tested only through assignment and seminar.

TEXT BOOK

Prasad L.M., (2019) Principles of Organizational Behaviour, Sultan Chand and Sons, New Delhi.

BOOKS FOR REFERENCE

1. Stephen Robbins and Timothy Judge (2021), Essentials of Organizational Behavior, 15thedition, Pearson Education Limited;,Noida, Uttar Pradesh 201301.
2. Steven L Mcshane and Mary Ann Von Glinow, (2022), Organizational Behavior 9th Edition byMcGraw Hill India.
3. Griffin, Phillips, G. (2020), Organizational Behavior 13th Edition, Cengage Publishing PrivateLtd, MayurVihar, Delhi 110091.
4. NeeruVasishth, (2019), Taxmann Publications Private Limited, West punjabiBagh, New Delhi110026.
5. Dr. Saroj Kumar and Vikrant Verma (2021), Thakur Publishers, Jankipuram, Uttar Pradesh,Lucknow-226021.

WEB REFERENCES

1. https://library.iima.ac.in
2. https://www.london.edu
3. https://www.gsb.stanford.edu
4. https://www.hbs.edu

Note: Learners are advised to use latest edition of books.

COURSE OUTCOMES

The learners

CO No.	Course Outcomes	Cognitive Level
CO-1	Remember the fundamental concepts of organizational behaviour.	**K1**
CO-2	Describe the differences in individual behaviour and group behaviour and importance of motivation and conflict management.	**K2**
CO-3	Apply theories of behaviour, motivational concepts and management to overcome the conflicts.	**K3**
CO-4	Analyze the various factors influencing the behaviour and their management process.	**K4**
CO-5	Evaluate the factors determining behaviour, conflicts and methods to manage them successfully.	**K5**

(K1 - Remember; K2 - Understand; K3 – Apply; K4 – Analyse; K5- Evaluate)

PO–CO MAPPING

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
CO1	H	M	M	M	M	H	H	H	H
CO2	H	M	M	M	H	M	H	H	H
CO3	H	M	M	M	M	H	H	H	H
CO4	H	M	M	H	H	H	H	H	H
CO 5	H	M	M	H	H	H	H	H	H

PSO–CO MAPPING

CO/PSO	PSO1	PSO2	PSO3
CO1	H	M	H
CO2	H	M	H
CO3	H	M	H
CO4	H	M	H
CO 5	H	M	M

****

Course Title	ALLIED-5 - SERVICES MARKETING
Code	U21CO4ALT06
Course Type	Theory
Semester	IV
Hours/Week	4
Credits	2
Marks	100

CONSPECTUS

The course provides basic understanding of application of marketing principles in the area of services and the dimensions of service quality.

COURSE OBJECTIVES

1. To understand the services marketing concepts, classification and role of services.
2. To analyse the components of services marketing mix.
3. To understand the measurement of service quality and the challenges to international marketing of services.
4. To analyse the marketing practices in banking, insurance, tourism and hotel services.
5. To analyse the marketing practices in hospitals and educational institutions.

UNIT I - INTRODUCTION TO SERVICES MARKETING   12 HRS

1.1 Services – Features - Reasons for growth in service sector - Role of services in an economy.
1.2 Distinction between goods and services - Classification of services.
1.3 Marketing management process for service marketing.
Extra Reading /Keywords: *Recent trend in service sector*

UNIT II - SERVICES MARKETING MIX   12 HRS

2.1 Development of service marketing mix - Components in the mix.
2.2 Product – Price - Place – Promotion.
2.3 People - Process - Physical evidence.
Extra Reading /Keywords : *Customer contact, Service factory, Forecasting demand*

UNIT III - MANAGING SERVICES QUALITY AND GLOBALISATION OF SERVICES 12 HRS

3.1 Managing service quality: Dimensions and measurement of service quality – Gap analysis.
3.2 Globalisation of services - Challenges to global service marketers.
3.3 Typical international services - Barriers to international marketing of service.
Extra Reading /Keywords : *Quality circle, Protectionism*

UNIT IV - MARKETING PRACTICES OF BANKING, INSURANCE AND HOSPITALITY INDUSTRIES   12 HRS

4.1 Banking and Insurance services - Users – Benefits - Formation of marketing mix for banking and insurance products.
4.2 Hospitality services: Tourism - Marketing mix for tourism - Hotel - Market segmentation for hotels - Marketing mix for hotels.
Extra Reading /Keywords: *Banking and Insurance, Tourism and Hotel services.*

UNIT V - MARKETING PRACTICES OF HEALTH CARE AND EDUCATIONAL INSTITUTIONS   12 HRS

5.1 Marketing of health care - Types of hospitals - Marketing mix for health care.

5.2 Literacy - The concept - Marketing mix for elementary, secondary and higher education.

**Extra Reading /Keywords : ** *Health care, Literacy, Marketing mix for adult education*

Note: Texts given in the Extra Reading /Keywords must be tested only through assignment and seminar.

TEXT BOOK

Vasanthi Venugopal & Raghu V. N, (2019). *Services Marketing*, Himalaya Publishing House, New Delhi.

SUGGESTED READINGS

1. Jha S.M., (2018). *Service marketing*, Himalaya Publishing House, New Delhi.

2. Zeithaml, V.A, Gremler D, Ajay Pandit and Bitner M.J, (2018). *Services Marketing*, McGraw Hill Inc., New Delhi.

3. JochenWirtz& Christopher, H. Lovelock, (2021). *Service Marketing*, World Scientific Publishing Co Inc, USA.

4. Ruchika Sharma &KritikaNagdev, (2019), *Service Marketing,* Sun India Publications.

5. Mathur S.P &NishuMathur, (2018), *Service Marketing,* New Age International Ltd. Publishers.

WEB REFERENCES

1.https://books.google.co.in/books?id=pe6ZhsRRlnoC&printsec=frontcover&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false

2.https://books.google.co.in/books?id=sIJaWp8CVAMC&printsec=frontcover&dq=ebook+on+services+marketing+available&hl=en&newbks=1&newbks_redir=0&source=gb_mobile_search&sa=X&ved=2ahUKEwiDo8DLpsf7AhWmpVYBHVOgCX4Q6AF6BAgGEAM#v=onepage&q&f=false

3. http://www.mim.ac.mw/books/Lovelock%20-%20Services%20Marketing.pdf

4. https://onlinecourses.swayam2.ac.in/imb21_mg51/preview

Note: Learners are advised to use latest edition of books.

COURSE OUTCOMES

CO No.	Course Outcomes	Cognitive Level (K1-K5)
CO-1	Recall the concepts of services marketing and components of services marketing mix.	K1
CO-2	Discuss the role of services at national and international levels.	K2
CO-3	Assess services marketing practices in banking, insurance, hospitality, healthcare and educational services.	K3
CO-4	Examine the development of services marketing mix, challenges of global service marketers and marketing mix elements of various services.	K4
CO-5	Assess the marketing skills required in service sectors.	K5

(K1- Remember, K2 - Understand, K3 – Apply, K4 – Analyse, K5 - Evaluate)

PO – CO MAPPING

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9
CO 1	H	M	M	M	H	H	H	H	H
CO 2	H	M	M	M	H	H	H	H	H
CO 3	H	M	M	M	H	H	H	H	H
CO 4	H	M	M	M	H	H	H	H	H
CO 5	H	M	M	M	H	H	H	H	H

PSO – CO MAPPING

CO/PSO	PSO 1	PSO 2	PSO 3
CO 1	H	H	L
CO 2	H	H	L
CO 3	H	H	L
CO 4	H	H	L
CO 5	H	H	L

****

Course Title	ALLIED 5 - COST AND MANAGEMENT ACCOUNTING (To BCA)
Code	U21CO4ALT07
Course type	Theory
Semester	IV
Hours/Week	4
Credits	2
Marks	100

CONSPECTUS

The course provides basic understanding of computation of cost and application of the various tools of financial analysis.

ZCOURSE OBJECTIVES

1. To understand the accounting procedure in preparation of cost sheet.
2. To apply marginal costing technique.
3. To understand standard costing and analyse material variances.
4. To understand the scope of management accounting and analyse performance of a business based on ratios calculated.
5. To analyse different types of budgets.

UNIT I - INTRODUCTION TO COST ACCOUNTING   12 HRS

1.1   Cost Accounting - Definition - Cost concepts - Cost classification. Methods and techniques of costing.
1.2   Preparation of cost sheet.
Extra Reading/ Keywords: Prime Cost, Works Cost, Cost of Production and Cost of sales.

UNIT II - MARGINAL COSTING   12 HRS

2.1 Marginal Costing: Features - Absorption costing Vs Marginal costing.
2.2 Computation of contribution - Profit Volume ratio – Break Even Point – Margin of Safety.
Extra Reading/ Keywords: *Types of breakeven point.*

UNIT III - STANDARD COSTING AND VARIANCE ANALYSIS   12 HRS

3.1 Standard Costing – Definition and Features.
3.2 Variance Analysis – Material Variances.
Extra Reading/ Keywords: *Standard costing, Absorption costing.*

UNIT IV - INTRODUCTION TO MANAGEMENT ACCOUNTINGAND RATIO ANALYSIS   12 HRS

4.1 Management Accounting - Scope - Relationship between Cost, Financial and Management Accounting - Analysis of financial statements.
4.2 Ratio Analysis - Ratios for Liquidity, Solvency and Profitability. (Excluding balance sheet preparation)
Extra Reading/ Keywords: *Role of professional bodies for Management Accountancy in India*

UNIT V - BUDGETARY CONTROL   12 HRS

5.1 Budget – Budgetary Control - Objectives - Classification of budgets.
5.2 Functional Budgets: Production and Sales Budget - Master Budget - Cash Budget.
5.3 Flexible Budget – Zero-based budgeting.
Extra Reading/ Keywords: *Budgeting practices of business firms*

Note: Texts given in the Extra Reading /Keywords must be tested only throughassignment and seminar.

TEXT BOOK

Reddy, T.S & Hari Prasad Reddy.Y (2017), *Cost and Management Accounting,*

Chennai, Margham Publications.

SUGGESTED READINGS

1. Dalston L. Cecil & Jenitra L. Merwin, (2019) *Management Accounting,* Trichy, Learntech Press.
2. Jain and Narang, (2020), *Cost Accounting Principles and Practices*, Kalyani Publishers, New Delhi.
3. Khan M.Y. & Jain P.K, (2017). *Management Accounting,* New Delhi: McGraw Hill Education.

WEB REFERENCES

1. https://www.icai.org/post.html?post_id=17759
2. https://icmai.in/upload/Students/Syllabus2016/Inter/Paper-10-January-2021.pdf
3. https://www.icsi.edu/media/webmodules/publications/FULL_BOOK_PP-CMA-2017-JULY_4.pdf

Note: Learners are advised to use latest edition of books.

COURSE OUTCOMES

The learners

CO No.	Course Outcomes	Cognitive Level
CO-1	Acquire knowledge on basic concepts of cost and management accounting.	K1
CO-2	Identify the techniques and methods of costing, ratios used for analysis andprocedure for preparation of budgets.	K2
CO-3	Compute total cost, P/V ratio, break-even point, material variances, ratios,and prepare budgets.	K3
CO-4	Examine the various methods and techniques of costing and analyse thefinancial statements using different ratios.	K4
CO-5	Evaluate the various methods and techniques helpful for managerial decisions.	K5

(K1 - Remember; K2 - Understand; K3 – Apply; K4 – Analyse; K5- Evaluate)

PO – CO MAPPING

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9
CO 1	M	L	L	L	L	M	H	H	M
CO 2	M	L	L	L	L	M	H	H	M
CO 3	M	L	L	L	L	M	H	H	M
CO 4	M	L	L	L	L	M	H	H	M
CO 5	M	L	L	L	L	M	H	H	M

PSO – CO MAPPING

CO/PSO	PSO 1	PSO 2	PSO 3
CO 1	H	M	H
CO 2	H	M	H
CO 3	H	M	H
CO 4	H	M	H
CO 5	H	M	H

Course Title	ALLIED 6 – BUSINESS SOFTWARE – TALLY

	(TO BCA)
Code	U21CO4ALT08
Course Type	Practical
Semester	IV
Hours/Week	4
Credits	2
Marks	100

CONSPECTUS

This course aims to equip the students with the practical skills of Tally.

COURSE OBJECTIVES

- To understand the concepts of computerised accounting.
- To apply the procedures for entering different types of vouchers.
- To analyse final accounts with adjustments.
- To understand the preparation of stock ledger.
- To analyse accounting for cost centre and cost category.

UNIT–I INTRODUCTION   6 HRS

Computerised Accounting – Meaning – Importance of Computerised accounting – Computerised accounting Vs Manual accounting. Introduction to architecture of Tally – Creation of company – Creation of groups – Various kinds of groups – Multiple and Single – Creation of ledgers – Various kinds of ledgers.

Extra Reading /Keywords: *Computerised Accounting*

UNIT– II VOUCHING   6 HRS

Entering vouchers – Journal voucher, Purchase voucher, Sales voucher, Receipt vouchers, Payment vouchers – Role and importance of function keys.

Extra Reading /Keywords: *Function keys and Vouchers*

UNIT– III FINAL ACCOUNTS   6 HRS

Extraction of Trial Balance, Trading Account, Profit and Loss Account and Balance Sheet, Simple sums with and without adjustments – Alter – Select – Edit – Delete – Selection of company.

Extra Reading /Keywords: *Final Accounts with adjustments*

UNIT– IV INVENTORIES   6 HRS

Introduction to inventories – Creation of stock category – Stock groups – Stock items – Editing and deletion of stock items – Usage of stock in voucher entry – Stock voucher or purchase orders – Sales orders – Customer and supply analysis – Extracting simple reports and graphs with tally accounting package.

Extra Reading /Keywords: *Inventories, Stock vouchers*

UNIT–V COST CENTRE   6 HRS

Introduction to cost – Creation of cost category – Cost centre category – Editing and deleting cost centre. Usage of cost category and cost centre in voucher entry – Budget control – Creation of budgets – Editing and deleting budgets – Reports.

Extra Reading /Keywords: *Cost centre and Cost category.*

Note: Texts given in the Extra Reading /Keywords must be tested only through assignment and

seminar.
Note: Learners are advised to use latest edition of books.

COURSE OUTCOMES (CO)

The learners:

CO No.	Course Outcomes	Cognitive Level
CO-1	Recall the concepts of Computerised accounting and Tally software	K1
CO-2	Identify the types of vouchers and procedure for preparing final accounts, inventory accounting, cost centers and cost categories.	K2
CO-3	Construct the final accounts with adjustments and create vouchers and inventory accounts and bill wise details of cost categories.	K3
CO-4	Demonstrate accounting skills and analytical skills in using Tally software	K4
CO-5	Examine the accounting procedures to rectify the correctness of accounting procedure for companies	

(K1- Remember; K2- Understand; K3 – Apply; K4 – Analyse)

TEXT BOOK
ICAR and D Team, (2018) Tally 9, New Delhi, Vikas Publishing House Pvt. Ltd.

SUGGESTED READINGS

5. Asok K Nadhani (2018), Tally ERP. 9 Training Guide, New Delhi: BPB Publications.
6. Gaurav Agarawal (2021), Tally Prime with GST book Digital Mumeen Ji, 1st edition
7. Vikas Gupta (2020), Tally ERP with GST in simple steps, DT Editorial Services.
8. Vikas Gupta (2018) Comdex Tally. ERP .9 Dreamtech Press.
9. Srinivasa Vallaban (2019) Computer Applications in Business, New Delhi: Sultan and Sons.

WEB REFERENCES

1. https://tallysolutions.com/tally/what-is-tally-erp-9-and-how-to-use-it/

2. https://tallysolutions.com/learning-hub/

3.https://help.tallysolutions.com/article/Tally.ERP9/Voucher_Entry/Accounting_Vouchers/Voucher_Entry_in_Tally.htm#:~:text=A%20voucher%20is%20a%20document,financial%20position%20of%20the%20company.

COMPUTER PRACTICAL FOR BUSINESS SOFTWARE - FOR EXTERNAL EVALUATION

- Petty Cash Entries, Subsidiary Books
- Accounts Only – Accounts with Inventory
- Accounts with Inventory Tax Initialize
- Stock Categories
- Cost Centre
- Cost Categories
- Stock Journal
- Balance Sheet
- Final Accounts Without Adjustments
- Final Accounts with Adjustments
- Order Processing
- Price List
- Bill-wise Details
- Bank Reconciliation Statement
- Interest Calculation

Note: Learners are advised to use latest edition of books.

PO – CO MAPPING

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9
CO -1	H		M				H	M	M
CO -2	H		M				H	M	M
CO -3	H		M				H	M	M
CO -4	H		M				H	H	H
CO-5	H		M				H	H	H

PSO – CO MAPPING

CO/PSO	PSO 1	PSO 2	PSO 3
CO -1	M	H	M
CO -2	H	H	H
CO -3	H	H	H
CO -4	H	H	H
CO- 5	H	H	H

****

For Candidates admitted in the academic year 2021-22)

Course Title	MAJOR CORE 10– INCOME TAX THEORY LAW AND PRACTICE
Total Hours	90
Hours/Week	6
Code	U21CO5MCT10
Course Type	Theory
Credits	5
Marks	100

CONSPECTUS

The course aims to equip the learners with the basic principles of Income Tax Law and enable the learners to apply the basic principles in computing income tax.

COURSE OBJECTIVES

1. To understand the concepts of income tax and determination of residential status.
2. To apply the provisions concerning income from salary.
3. To apply the provisions relating to income from house property and capital gains.
4. To apply the provisions of income from profits and gains of business or profession
5. To apply the provisions concerning income from other sources and computation of taxliability of an individual.

UNIT – I INTRODUCTION AND RESIDENTIAL STATUS   18 HRS

1.1 Income Tax Act - Introduction and important definitions - Assessment year, previous year, Person, Assessee.
1.2 Determination of residential status of an individual
1.3 Scope of total income.
Extra Reading /Keywords: *Agricultural income, Capital and Revenue receipts*

UNIT – II INCOME FROM SALARIE   18 HRS

2.1 Income from Salaries - Chargeability - Allowances
2.2 Pension – Gratuity - Encashment of earned leave - Perquisites
2.3 Deductions from salary under Section 16 - Computation of salary income.
Extra Reading /Keywords: *Super Annuation Fund, Salary in arrears.*

UNIT – III INCOME FROM HOUSE PROPERTY AND CAPITAL GAINS 18 HRS

3.1 Income from House Property - Annual Value - Let out and Self occupied property
3.2 Deemed to be let out property - Deductions under Sec. 24.
3.3 Capital Gains - Chargeability - Capital asset - Cost of acquisition - Transfer - Computation of capital gains – Exemptions under Sections 54, 54EC, 54F.

Extra Reading /Keywords: *Arrears of rent, Unrealised rent*

UNIT – IV PROFITS AND GAINS OF BUSINESS OR PROFESSION   18 HRS

4.1 Profits and Gains of Business or Profession: Meaning and Scope – Deductions under Sections 36 and 37
4.2 Expenses and payments not deductible

4.3 Computation of income under Profits and Gains of Business or Profession.
Extra Reading /Keywords: *Maintenance of books of accounts, Audit report.*

UNIT – V INCOME FROM OTHER SOURCES AND TAX LIABILITY 18 HRS

5.1 Income from Other Sources - Casual income - Interest income - Tax Deducted at Source and Grossing up.
5.2 Dividends - Winnings from lotteries, Crossword puzzles and Cardgames.
5.3 Deductions in computing total income (Sections 80C, 80D, 80E, 80G, 80U) Computation of tax liability of an individual
Extra Reading /Keywords: *Deep discount bonds, Composite letting.*

Theory - 30%   **Problem - 70%**

Note: Texts given in the Extra Reading /Keywords must be tested only through assignment and seminar.

TEXT BOOK

Vinod K. Singhania, Monica Singhania, Student's Guide to Income Tax Including GST,Assessment year 2023-24, Delhi; Taxmann.

SUGGESTED READINGS

1. Reddy T.S & Hari Prasad Y, Income Tax Theory Law and Practice,Assessment year 2023-24, Margham Publications, Chennai.
2. Srinivasan T, Income Tax Law and Practice, Assessment year 2023-24,Vijay Nicole, Chennai.
3. Manoharan T.N and Hari G.R, Student's Handbook on Taxation (Including Income Tax Law and GST Law), Assessment year 2023-24,Snow White.
4. Murthy A, Income Tax Law and Practice, Assessment year 2023-24,Vijay Nicole, Chennai.

WEB REFERENCES

1. https://www.incometaxindia.gov.in
2. https://www.incometaxindiaefilinggov.in
3. https://www.onlineservicestin.egov-nsdl.com

Note: Learners are advised to use latest edition of books.

COURSE OUTCOME

CO No.	Course Outcomes	gnitive Level
CO-1	Recall the basic concepts of income tax and provisions concerning determination of residential status, income from - salary, house	**K1**
	property, capital gains, profits and gains of business or profession, and income from other sources.	
CO-2	Understand the provisions relating to determination of residential status, income from - salary, house property, capital gains, profits and gains of business or profession, and income from other sources.	**K2**

CO-3	Apply the provisions relating to determination of residential status, income from - salary, house property, capital gains, profits and gains of business or profession, and income from other sources.	K3
CO-4	Analyse the provisions relating to determination of residential status, income from - salary, house property, capital gains, profits and gains of business or profession, and income from other sources.	K4
CO-5	Assess the provisions relating to determination of residential status, income from - salary, house property, capital gains, profits and gains of business or profession, income from other sources and tax liability.	K5
CO-6	Modify the calculation of tax liability of an individual based on the appropriate provisions.	K6

(K1- Remember; K2- Understand; K3 – Apply; K4 – Analyse; K5- Evaluate; K6 – Create)

PO – CO MAPPING

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9
CO 1	H	H	H	H	M	M	H	M	H
CO 2	H	H	M	H	H	M	H	H	H
CO 3	M	M	H	M	M	M	H	H	H
CO 4	H	H	H	M	H	M	H	M	H
CO 5	M	M	H	M	M	M	H	H	H
CO 6	H	H	H	M	H	M	H	M	H

PSO – CO MAPPING

CO/PSO	PSO 1	PSO 2	PSO 3
CO 1	H	H	M
CO 2	H	H	H
CO 3	H	M	H
CO 4	H	H	H
CO 5	H	M	H
CO 6	H	H	H

Course Title	**MAJOR CORE-11 – COST ACCOUNTING**
Code	**U21CO5MCT11**
Course Type	Theory
Semester	V
Hours/Week	6
Credits	5
Marks	100

CONSPECTUS

This course provides an understanding of basic principles of cost accounting and developing skills in the preparation of cost accounts.

COURSE OBJECTIVES

1. To understand the costing concepts and preparation of cost sheet, tenders and Quotations.
2. To understand material cost computation.
3. To understand the preparation of labour cost, allocation and apportionment of overheads.
4. To apply the procedure for the preparation of contract accounts and process accounts
5. To understand the computation of transport cost and to apply the procedure for preparation of reconciliation statement.

UNIT – I   INTRODUCTION TO COST ACCOUNTING   18 HRS

1.1 Cost Accounting – Definition - Scope and Objectives - Cost Center and Cost Unit - Cost Accounting and Financial Accounting
1.2 Methods and Techniques of Costing - Cost Concepts and Classification
1.3 Cost Sheet - Tenders and Quotations
Extra Reading/ Keywords: *Prime Cost, Works Cost, Cost of Production and Cost of sales*

UNIT - II   MATERIAL COST   18 HRS

2.1 Material Cost - Purchase Control - Stores Control - Fixation of various levels - Perpetual Inventory System
2.2 ABC analysis - Control over Issues - Methods of pricing material issues
2.3 FIFO – LIFO - Average Price Method - Base Stock Method.
Extra Reading/ Keywords: *EOQ, FIFO method, LIFO method, Weighted Average Price.*

UNIT - III   LABOUR AND OVERHEAD COST   18 HRS

3.1 Labour Cost - Labour Turnover - Idle time - Overtime
3.2 Computation of Labour Cost - Systems of wage payment - Premium and Bonus Plan
3.3 Overheads – Classification - Allocation   and Apportionment of overheads - Bases of apportionment - Absorption of overheads
3.4 Methods of absorption of manufacturing overheads - Machine Hour Rate – Activity based costing – Steps in Development of an ABC system
Extra Reading/ Keywords: *Labour turnover, Apportionment of overheads, Absorption of overheads, Machine Hour rate*

UNIT - IV CONTRACT COSTING AND PROCESS COSTING   18 HRS

4.1 Contract Costing - Cost Plus Contracts - Escalation Clause.
4.2 Process costing - Normal loss - Abnormal loss - Abnormal gain (excluding Inter process profit & equivalent production).
Extra Reading /Keywords: *Work Certified, Work uncertified - Escalation clause- Equivalent production*

UNIT – V SERVICE COSTING AND RECONCILIATION OF COST & FINANCIAL ACCOUNTING   18 HRS

5.1 Service Costing –Transport Costing.

5.2 Reconciliation of cost and financial accounts - Need for reconciliation – causes for disagreement in profits – Preparation of reconciliation statement.

Extra Reading /Keywords: *Transport Costing, Tonne, Kilometre and passenger Kilometres-Memorandum reconciliation statement.*

Note: Texts given in the Extra Reading /Keywords must be tested only through Assignment and Seminar.

Theory - 20%Problems - 80%

TEXT BOOK

Reddy T.S and Hari Prasad Reddy (2019), *Cost Accounting,* Margham Publications, Chennai.

SUGGESTED READINGS

1. Jain S.P. and Narang, K.L. (2020), *Cost Accounting Principles and Practices*, Kalyani Publishers, NewDelhi.
2. Maheshwari.S.N and Mittal. S.N (2015), *Cost Accounting*, Mahavir Publication,Delhi.
3. Saxena.V.K and Vashist. C.D (2012), *Cost Accounting-Problems and Solutions,* S Chand, Delhi.

WEB REFERENCES

1. https://icmai.in/upload/Students/Syllabus2016/Inter/Paper-8-January-2021.pdf
2. https://www.icai.org/post.html?post_id=17759
3. https://onlinecourses.nptel.ac.in/noc20_mg53/preview
4. https://ugcmoocs.inflibnet.ac.in/index.php/courses/view_ug/198

Note: Learners are advised to use latest edition of books.

COURSE OUTCOMES (CO)

CO No.	Course Outcomes	Cognitive Level
CO-1	Recall cost concepts, tenders, quotations, contract costing and service costing.	**K1**
CO-2	Understand the cost techniques, methods of related to material, labour and overheads, preparation of contract, process and service costing.	**K2**
CO-3	Apply the procedures related to preparation of cost sheet, contract costing, service costing and different elements of cost.	**K3**
CO-4	Examine the treatment for costing techniques and reconciliation of integrated accounts.	**K4**
CO-5	Appraise the methods, techniques and classification of costing and reconcile the cost accounts with financial	**K5**
	accounts	
CO-6	Develop accounting skills relevant to cost data of business entities.	**K6**

(K1- Remember, K2- Understand, K3 – Apply, K4 – Analyse, K5- Evaluate, K6-Create)

PO – CO MAPPING

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9
CO 1	H	M	M	L	H	M	H	H	H
CO 2	H	M	M	L	H	M	H	H	H
CO 3	H	M	M	L	H	M	H	H	H
CO 4	H	M	M	L	H	M	H	H	H
CO 5	H	M	M	L	H	M	H	H	H
CO 6	H	M	M	M	H	M	H	H	H

PSO – CO MAPPING

CO/PSO	PSO 1	PSO 2	PSO 3
CO 1	H	H	M
CO 2	H	H	M
CO 3	H	H	M
CO 4	H	H	M
CO 5	H	H	M
CO 6	H	H	M

Course Title	MAJOR CORE 12– BUSINESS MANAGEMENT
Total Hours	75
Hours/Week	5
Code	U21CO5MCT12
Course Type	Theory
Credits	4
Marks	100

CONSPECTUS

This course aims at providing an understanding about the various functions of business management and to give exposure on the skills required to start and manage a business.

COURSE OBJECTIVES

1. To understand the various functions of management.
2. To analyse the appropriate type of planning to accomplish a task.
3. To evaluate the various types of organisation structures.
4. To evaluate the required attributes needed to be a good communicator and the various leadership styles.
5. To analyse the various control techniques.

UNIT – I INTRODUCTION   15 HRS

1.1 Business Management - Nature - Functions.
1.2 Management Vs Administration - Science or Art.
1.3 Contribution by Taylor and Henry Fayol.
Extra Reading /Keywords: *Scientific management, POSDCORB*

UNIT – II PLANNING   15 HRS

2.1 Planning: Process - Kinds of plans – Objectives.
2.2 Strategies, Policies, Procedure, Methods and Rules - Forecasting and planning - Limitations of planning - Management by Objectives.
2.3 Decision making process - Effective decision making.
Extra Reading /Keywords: *Management by Wandering Around (MBWA)*

UNIT – III ORGANISING   15 HRS

3.1 Organising: Process - Features - Elements - Structure - Different forms.
3.2 Principles of organisation - Departmentation, Delegation and Decentralisation.
3.3 Span of Control - Organisation Charts and Manuals.
Extra Reading /Keywords: *Span of Attention*

UNIT – IV DIRECTING   15 HRS

4.1 Directing and Co-ordination: Principles - Elements- Supervision.
4.2 Motivation - Theories of Motivation.
4.3 Leadership - Communication.
Extra Reading /Keywords: *Performance Indicator, Social Cognitive Theory*

UNIT – V CONTROLLING   **15 HRS**

5.1 Control - Nature - Control Process.

5.2 Control Techniques: Budgetary Control, PERT, CPM.

5.3 Management by Exception, Performance Budgeting and Zero Base Budgeting.

Extra Reading /Keywords: *Feedforward, Concurrent and Feedback Control*

Note: Texts given in the Extra Reading /Keywords must be tested only through assignment and seminar.

TEXT BOOK

1. Prasad L.M.., (2021) *Principles of Management,* Sultan Chand and Sons, New Delhi.

SUGGESTED READINGS

1. Dinkar Pagare, (2018) *Business Management,* Sultan Chand and Sons, New Delhi.
2. Peter F. Drucker (2020). *Management Challenges for the 21st Century:* HarperCollin Publishers Inc., New York, 10022.
3. Prakash Chandra Tripathi, (2017) *Principles of Management,* Tata McGraw Hill Publishing Company, New Delhi.
4. Harold Koontz, Heinz Weihrich, and Mark V. Cannice (2020), *Essentials of Management – Innovation and Leadership Perspective,* Tata McGraw Hill Education, New Delhi.
5. Paul Hoang, (2022), Business Management, IBID Press, Australia.
6. Mishra. N., and Gupta .O.P., (2022) Business Management, SBPD Publishing House, New Delhi.

WEB REFERENCES

1. https://www.shiksha.com
2. https://www.lpude.in/academics/online-study-material-for-management.php
3. https://oms.bdu.ac.in/ec/admin/contents/86_16CCCCA3_2020052911264994.pdf

Note: Learners are advised to use latest edition of books.

COURSE OUTCOMES

The learners

CO No.	Course Outcomes	nitive levels
CO-1	Summarise the various functions of management and contributions by Taylor and Henry Fayol.	**K1**
CO-2	Construct and develop appropriate planning strategy to accomplish the given task.	**K2**
CO-3	Compare and contrast the various types of organisation structures.	**K3**
CO-4	Analyse the need for good communication and motivation and evaluate the various leadership styles.	**K4**
CO-5	Categorise the various control techniques.	**K5**
CO-6	Develop organising skills in managing any organisation in an efficient manner.	**K6**

(K1- Remember; K2- Understand; K3 – Apply; K4 – Analyse; K5- Evaluate; K6 – Create)

PO – CO MAPPING

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9
CO 1	M	H	H	M	H	M	H	M	H
CO 2	H	H	M	M	H	M	H	H	H
CO 3	H	M	H	M	M	M	H	H	H
CO 4	H	H	H	M	H	M	H	M	H
CO 5	M	M	H	M	M	M	H	H	H
CO 6	H	H	H	M	H	M	H	M	H

PSO – CO MAPPING

CO/PSO	PSO 1	PSO 2	PSO 3
CO 1	H	H	M
CO 2	H	H	H
CO 3	H	M	H
CO 4	H	H	H
CO 5	H	M	H
CO 6	H	H	H

Course Title	MAJOR CORE 13– RETAIL MANAGEMENT
Total Hours	75
Hours/Week	5
Code	U21CO5MCT13
Course Type	Theory
Credits	4
Marks	100

CONSPECTUS

To provide an insight into the various concepts and procedures in retail management

COURSE OBJECTIVES

1. To understand the concepts of retailing, problems, factors, issues and challenges at global marketlevel.
2. To understand the traditional retail formats
3. To understand the modern retail formats
4. To analyze the retail strategic planning, location, factors and planning policies
5. To understand the retail marketing strategy, store loyalty, franchising and CRM.

UNIT - I INTRODUCTION TO RETAILING   15 HRS

1.1 Definition – Importance, Functions of a retailer, Problems in retailing
1.2 Factors influencing retailing in India.
1.3 Global retail market: Issues and Challenges – Life cycle in retail
Extra Reading /Keywords: *mass merchandiser, boutiques*

UNIT –II TRADITIONAL RETAIL FORMATS   15 HRS

2.1 Retail formats – Departmental stores, Convenience stores – Super markets – Chain stores – Speciality stores – Door to Door selling – Retail Co-operatives –- Features, merits and demerits.
2.2 Traditional retail formats in India – Kirana shops, weekly markets, neighbourhood shops – street shops ,Hawkers and Public distribution System.
Extra Reading /Keywords: *virtual retailing*

UNIT - III MODERN RETAIL FORMATS   15 HRS

3.1 Single Channel and Multi-Channel Retailing, Direct Marketing: Emerging Trends, Steps in Direct Marketing Strategy.
3.2 Direct Selling, Vending Machines, Electronic Retailing, Video Kiosks, Airport Retailing.
Extra Reading /Keywords: *airport kiosk*

UNIT- IV RETAIL STRATEGIC PLANNING   15 HRS

4.1   Strategic planning - Steps in strategic planning process - Retail location strategy – Factorsinfluencing Retailer's choice of location.
4.2   Merchandise Planning - Factors affecting merchandise planning
4.3   Importance of Human Resource Management in Retailing - Pricing policies
Extra Reading /Keywords: *self-sustaining communities, situation analysis*

UNIT -V RETAIL MARKETING STRATEGY   **15 HRS**

5.1 Retail promotion strategies – Visual Merchandise – Store loyalty – Variables influencing store loyalty – Building Store loyalty.

5.2 Customer Relationship Management: Meaning, Importance, Steps involved in CRM process

5.3 Retail Franchising

Extra Reading /Keywords: *value creation, loyalty cards and points*

Note: Texts given in the Extra Reading /Keywords must be tested only through Assignment and Seminar.

TEXT BOOK

Swapna Pradhan, (2020), Retailing Management - Text and Cases, Tata McGraw Hill Education, Private Limited, New Delhi.

SUGGESTED READINGS

1. Michael Levy, Barton Weitz, Dhruv Grewal, (2021), 9th Edition, Tata Mc Graw Hill, Education, Private Limited, New Delhi.

2. Barry Berman, Joel R. Evans (2017), Retail Management - A Strategic Approach, Prentice Hall of India, New Delhi.

3. Gibson,(2017)Retail Management, Pearson India Education Service Private Limited, Chennai.

4.Nayak, J.K., Prakash C Dash, (2017), Retail Management, Cengage Learning, Private Limited, Noida, Uttar Pradesh, India.

Web References

1. https://ximb.edu.in/
2. http://sim.edu.in/wp-content/uploads/2018/02/RETAIL-MANAGEMENT-Notes.pdf.
3. http://www.imit.ac.in/note/18MBA401Arm.pdf.
4. https://management.ind.in/forum/retail-management-notes-mba-3rd-sem-290335.html.
5. https://mvit.edu.in/wp-content/Files/MBA/Newsletter/MBAsyllabus2016.pdf.

Note: Learners are advised to use latest edition of books.

COURSE OUTCOMES

  The learners

CO No.	Course Outcomes	Cognitive Levels
CO-1	Analyse retailing problems, factors, issues and challenges at global market level.	**K1**
CO-2	Evaluate traditional retail formats	**K2**
CO-3	Classify modern retail formats in current scenario	**K3**
CO-4	Discuss the retail strategic planning, location, factors and planning policies	**K4**
CO-5	Describe the retail marketing strategy, store loyalty, franchising and CRM.	**K5**
CO-6	Develop marketing skills and maintenance of retail outlets to enhance business profits	**K6**

(K1- Remember; K2- Understand; K3 – Apply; K4 – Analyse; K5- Evaluate; K6 – Create)

PO – CO MAPPING

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9
CO 1	H	H	H	M	H	M	H	M	H
CO 2	H	H	M	M	H	M	H	H	H
CO 3	H	M	H	M	M	M	H	H	H
CO 4	H	H	H	M	M	M	H	H	H
CO 5	M	H	H	M	H	M	H	H	H
CO 6	H	H	H	M	H	M	H	M	H

PSO – CO MAPPING

CO/PSO	PSO 1	PSO 2	PSO 3
CO 1	H	H	M
CO 2	H	H	H
CO 3	H	M	H
CO 4	H	H	H
CO 5	H	H	M
CO 6	H	H	H

Course Title	Major Elective - 3 : Introduction to Python Programming
Total Hours	60
Hours/Week	4
Code	U21CA5MEP05
Course Type	Practical
Credits	3
Marks	100

General Objectives:

To provide comprehend basic Python programming concepts and develop programming solutions for small problems.

Course Objectives:

The Learner will be able to

CO No.	Course Objectives
CO-1	Learn the syntax and semantics of Python programming language; understand the necessity and importance of Lists, Dictionaries and Tuples
CO-2	Understand and relate the Functions and Modules to facilitate code reuse
CO-3	Express the different Decision Making and Looping statements
CO-4	Understand and study the Data visualization with different Charts
CO-5	Understand on Arrays and Matrices to perform a number of mathematical Operations

UNIT I 12 Hrs

The Python REPL: Introduction - Features of Python - Python as a Calculator – Variables - String Operations - Print Statements.

Data Types and Variables: Introduction - Numeric Data Types - Boolean Data Type – Strings – Lists - Dictionaries and Tuples.

Matrices and Arrays: Introduction - Installing NumPy – NumPy - Array Creation - ARRAY INDEXING - Array Slicing - Array Operations.

Extra Reading/Keywords: *Python Set types, Python Packages.*

UNIT II 12 Hrs

Functions and Modules: Introduction - Defining Functions in Python - Functions with Multiple Arguments - Functions with Default Arguments - Calling Functions from Other Files - Docstrings in Functions - Positional and Keyword Arguments

Control Structures: If Else Try Except – Introduction - User Input - If statements - Selection Statements - If Else Statements - Try-Except Statements – Flowcharts. *Loops*: Introduction – For Loops - While Loops - Break and Continue - Flowcharts Describing Loops.

Extra Reading/Keywords: *Boolean Operators.*

UNIT III   **12 Hrs**
Exercise programs: Input and Output operations - Operators - Arrays - Strings - Functions.
Extra Reading/Keywords: *System of Linear Equations.*

UNIT IV   **12 Hrs**
Exercise programs: Control structures & loops - Lists - Dictionaries and Tuples
Extra Reading/Keywords: *Boolean Operators.*

UNIT V   **12 Hrs**
Exercise programs: Data visualization with different Charts.
Extra Reading/Keywords: *3D Surface Plots.*

List of Exercises
1. Input and Output operations
  Write a python program to add two numbers using Input and Output Functions
2. Operators
  Write a program to create a menu with the following options
  1. To Perform Addition 2. To Perform Subtraction
  3. To Perform Multiplication 4. To Perform Division
3. Functions and Modules
Accepts users input and perform the operation accordingly. Use functions with arguments.
  To check whether the given string is palindrome or not
  To find factorial of a given number using functions
  To double a given number and add two numbers using lambda()
  To display a particular month of a year using calendar module.
  To print all the months of given year
  To print date, time for today and now
  To print date, time using date and time functions
Python program which accepts the radius of a circle from user and computes the area
(use math module).
Python function that takes two lists and returns True if they are equal otherwise false
4. Lists
  Create a list and perform the following methods
  1) insert() 2) remove() 3) append() 4) len() 5) pop() 6) clear()
5. Dictionaries
  Create a dictionary and apply the following methods
  1) Print the dictionary items 2) access items 3) use get() 4)change values 5) use len()
6. Tuples
  Create a tuple and perform the following methods
  1) Add items 2) len() 3) check for item in tuple 4)Access items
7. Control structures & loops:
  To print a number is positive/negative using if-else
  To find largest number among three numbers
  To read a number and display corresponding day using if_elif_else
  To calculate discount based on input amount
8. Arrays
  Using a numpy module create an array and check the following:
  1. Type of array 2. Axes of array 3. Shape of array 4. Type of elements in array
  To concatenate the data frames with two different objects
  To read a csv file using pandas module and print the first and last five lines of a file.
9. Data visualization with different Charts
  Visualisation using Matplotlib
  To set background color and pic and draw a square and fill the color using turtle module

Course Outcomes:
The Learners

CO No.	Course Outcomes	PSOs Addressed	Cognitive Level
CO-1	Interpret the basic principles of Python programming language; to create and manipulate lists, tuples and dictionaries	PSO 2	R, U, Ap
CO-2	Implement programs using functions and strings.	PSO 2,6	R, U, Ap
CO-3	Develop Python programs with conditionals and loops.	PSO 2	U, Ap, An
CO-4	Illustrate and analyse the data visualization with different charts	PSO 3	U, Ap, An
CO-5	Illustrate and interpret the concepts of arrays and matrices to manipulate and perform mathematical operations	PSO 4	U, Ap

PO-Programme Outcomes; CO – Course Outcome; R- Remember; U-Understand; Ap – Apply; An – Analyse; E- Evaluate; C – Create

TEXT BOOKS
1. Peter D. Kazarinoff, "Problem Solving with Python 3.7 Edition" A beginner's guide to Python & open-source programming tools Paperback – Import, 15 September 2019.

BOOKS FOR REFERENCE
1 Sheetal Taneja, Naveen Kumar**, "**Python Programming A Modular Approach**",** Pearson, 2017.
2. Wesley J Chun, "Core Python Applications Programming", 3rd Edition, Pearson Education India, 2015.
3. Ashok Namdec Kamthane, Ait Ashok Kamthane, "Problem Solving and Python Programming", McGraw Hill Education (India) Private Limited, Chennai.
   4. Jeffrey Elkner, Chris Meyers Allen Downey, Learning with Python, Dreamtech Press, 2015
5. ReemaThareja, "Python Programming using problem solving approach", Oxford University press, 2017.

Course Title	Major Core – 14– MANAGEMENT ACCOUNTING
Total Hours	75
Hours/Week	5 Hrs / Wk
Code	U21CO6MCT14
Course Type	Theory
Credits	5
Marks	100

GENERAL OBJECTIVE

To enable the students understand the various tools of financial analysis and to interpret financial data.

COURSE OBJECTIVES (CO):

The learners will be able to

CO No.	Course Objectives
CO-1	Understand management accounting concepts and various tools of financial statement analysis.
CO-2	Analyse profitability and financial status of a business based on ratios calculated.
CO-3	Understand the preparation of funds flow statement and cash flow statement and analyse the results.
CO-4	Apply marginal costing technique in managerial decision-making problems and evaluate different proposals.
CO-5	Understand different types of budgets and analyse budgets.

UNIT I – INTRODUCTION   15 HRS

Management Accounting - Scope - Relationship between Cost, Financial and Management Accounting
- Analysis of financial statements - Tools for analysis - Comparative Statements - Common Size Statementsand Trend Analysis.
Extra Reading/ Keywords: *Role of professional bodies for Management Accountancy in India.*

UNIT II - RATIO ANALYSIS   15 HRS

Ratio Analysis - Ratios for Liquidity, Solvency and Profitability.
Extra Reading/ Keywords: *Liquidity, Solvency, Profitability*

UNIT III - FUNDS FLOW ANALYSIS AND CASH FLOW ANALYSIS   15 HRS

Funds Flow Analysis - Concept of fund - Schedule of changes in working capital - Funds flow statement. CashFlow Analysis - Cash from operation – Preparation of cash flow statement as per Accounting Standard (Revised).
Extra Reading/ Keywords: *Cash Flow Statement as per New Companies Act, 2013.*

UNIT IV - MARGINAL COSTING AND BREAK-EVEN ANALYSIS   15 HRS

Marginal Costing - Absorption Costing Vs Marginal Costing – Contribution - Profit Volume ratio – BreakEven Point – Cost Volume Profit Analysis - Managerial applications of marginal costing.

Extra Reading/ Keywords: *Types of Breakeven point, Break even pricing.*

UNIT V - BUDGETARY CONTROL   15 HRS

Budget - Budgetary Control - Functional Budgets - Master Budget - Fixed and Flexible Budgets - CashBudget.

Extra Reading/ Keywords: *Budgeting practices of business firms*

Note: Texts given in the Extra Reading /Key words must be tested only through assignment andseminar.

THEORY - 25%, PROBLEMS - 75%

COURSE OUTCOMES

The learners

CO No.	Course Outcomes	PSOs Addressed	Cognitive Level
CO-1	Recognize the relationship between Cost, Financial and Management Accounting and prepare comparative statements, common size statements, trend percentages.	1	U
CO-2	Draw conclusion about the liquidity, solvency and profitability of business entities based on ratio analysis.	2	An
CO-3	Prepare funds flow statement and cash flow statement and make inferences.	3	Ev
CO-4	Compares different proposals based on marginal costing technique and draw conclusion	3	Ev
CO-5	Prepares different types of budgets and make a comparison.	3	Ev
CO-6	Develops accounting skills in managing any organization	2	Ap

PSO – Programme Specific Outcome; R- Remember; U- Understand; Ap – Apply; An – Analyse;E- Evaluate; C – Create

PRESCRIBED TEXT

Reddy T.S and .Hari Prasad Reddy Y (2017), *Management Accounting,* Chennai, Margham Publications.

BOOKS FOR REFERENCE

1. Shashi K. Guptha and Sharma R.K (2014), *Management Accounting,* New Delhi: Kalyani Publishers.
2. Maheswari S.N (2017). *Management Accounting*; New Delhi : Sultan Chand and Sons.
3. Dr. R. Ramachandran and Dr. R. Srinivasan (2018), *Management Accounting*, Trichy: SriRam Pubishers.

Course Title	MAJOR CORE 15 – FINANCIAL MANAGEMENT
Total Hours	75
Hours/Week	5 Hrs / Wk
Code	U21CO6MCT15
Course Type	Theory
Credits	4
Marks	100

GENERAL OBJECTIVE

To enable the students understand the basic financial decision making procedures and to apply incomplex financial management situations.

COURSE OBJECTIVES (CO):

The learners will be able to

CO No.	Course Objectives
CO-1	Understand the basic concepts of financial management and apply the time value of money and various valuation concepts.
CO-2	Analyse the various capital structure theories, leverages and point of indifference
CO-3	Apply the different techniques of capital budgeting.
CO-4	Apply the models of working capital management, cash management and receivables management.
CO-5	Understand and apply the different models of dividend policy.

UNIT I – INTRODUCTION   15 HRS

Financial Management - Nature and Scope - Objectives of Financial Management - Profit Maximization vs Wealth Maximization - Functions of financial manager - Time Value of Money - Discounting Technique, Compounding Technique - Sinking Fund Factor and Capital Recovery Factor -Effective rate of interest. Cost of capital – Computation of specific and weighted average cost of capital.**Extra Reading /Keywords:** *Financial planning*

UNIT II - CAPITAL STRUCTURE THEORIES AND LEVERAGES   15 HRS

Capital Structure Theories - NI approach - NOI approach - MM approach - Traditional approach
– Factors determining capital structure – Analysis of leverages: Operating leverage, financial leverageand combined leverage - EBIT, EPS analysis - Indifference point.
Extra Reading /Keywords: *Debt vs. Equity*

UNIT III - CAPITAL EXPENDITURE DECISIONS   15 HRS

Capital Expenditure Decisions - Methods of ranking investment proposal: Payback period, Net present value, Internal rate of return and Average rate of return.
Extra Reading /Keywords: *Objectives of Capital Expenditure Decisions*

UNIT IV - WORKING CAPITAL MANAGEMENT 15 HRS

Working Capital Planning – Risk profitability trade off - Determination of working capital - Financing of working capital – Management of Cash – Baumol Model, Miller Orr Model - ReceivablesManagement – Credit standards – Credit terms – Collection policies.

Extra Reading /Keywords: *Motives for holding cash*

UNIT V - DIVIDEND POLICIES 15 HRS

Dividend Policies: Issues in dividend decisions - Walter's model - Gordon's model - MMhypothesis - Dividend and uncertainty - Dividend policy in practice.

Extra Reading /Keywords: *Dividend payout policies*

Note: Texts given in the Extra Reading /Key words must be tested only through assignment andseminar.

COURSE OUTCOMES

The learners

CO No.	Course Outcomes	PSOs Addressed	Cognitive Level
CO-1	Understand the concepts and important terms in financial management.	2	U
CO-2	Apply the concepts of time value of money and cost of capital.	2	Ap
CO-3	Analyse the capital structure, various types of leverages, EBIT and EPS.	3	An
CO-4	Evaluate the projects based on various methods of capital budgeting.	3	Ev
CO-5	Determine working capital and the components of working capital.	3	Ap
CO-6	Develops skills relating to capital investment and working capital management in business.	3	Ap

PSO – Programme Specific Outcome; R- Remember; U- Understand; Ap – Apply; An – Analyse; E- Evaluate; C – Create

PRESCRIBED TEXT

Maheswari S.N., *Elements of Financial Management*, New Delhi: Sultan Chand and Sons.

BOOKS FOR REFERENCE

1. Shashi K. Gupta and Sharma R.K. (2008). Financial Management, KalyaniPulishers. NewDelhi:
2. Khan M.Y and Jain P.K, *Financial Management, Text and Problems*; Tata McGraw Hill, NewDelhi.
3. Panday I.M., *Financial Management*; Vikas Publishing House, New Delhi
4. Van Horne J.C., *Financial Management and Policy*; Prentice Hall of India, New Delhi.
5. Prasanna Chandra, Financial Management, Theory and Practice, Tata McGraw Hill, New Delhi:

Course Title	MAJOR CORE 9 - PRINCIPLES OF AUDITING
Total Hours	75
Hours/Week	5Hrs / Wk
Code	U21CO5MCT09
Course Type	Theory
Credits	4
Marks	100

GENERAL OBJECTIVE

To provide an understanding of the principles and practice of auditing and understand the procedure for investigation.

COURSE OBJECTIVES (CO):

The learners will be able to

CO No.	Course Objectives
CO-1	Understand the basic concepts in auditing and internal control techniques.
CO-2	Analyse the procedure for vouching.
CO-3	Analyse the procedure for verification and valuation of assets and liabilities.
CO-4	Understand the role and the liabilities of an auditor.
CO-5	Analyse the various investigation procedures and Auditing and Assurance Standards.

UNIT I – INTRODUCTION   15 HRS

Audit: Objectives - Types - Advantages and Limitations - Qualities of an auditor.
Internal Control: Internal Check and Internal Audit – Audit Programme - Audit note book - Working papers.
Extra Reading /Keywords: *Internal control*

UNIT II – VOUCHING   15 HRS

Vouching: Voucher - Vouching of cash transactions - Vouching of trade transactions: Purchases, Purchases returns, Sales and Sales returns.
Extra Reading /Keywords: *Vouching, Trading expenses*

UNIT III - VERIFICATION OF ASSETS AND LIABILITIES   15 HRS

Verification of assets and liabilities: Fixed assets - Current assets - Wasting assets -Intangible assets - Problems in valuations of assets - Auditor's position as regards the verification and valuation of assets - Valuation of liabilities - Reserves and Provisions - Classification.
Extra Reading /Keywords: *Extensive business reporting knowledge, IFRS*

UNIT IV- STATUTORY AUDITOR   15 HRS

Audit of limited companies - Qualifications of an auditor - Appointment, Removal,Status, Powers and Duties of an auditor - Auditor's report - Clean and qualified report - Liabilities of an auditor: Liabilities in case of non-statutory audit and company audit.
Extra Reading /Keywords: *Independent auditors*, *Auditor's status*

UNIT V - INVESTIGATION AND 'AUDITING AND ASSURANCE STANDARDS' (AASs)   15 HRS

Investigation: Meaning- Characteristics of investigation - Duties of investigator - Purpose of investigation - Difference between audit and investigation - Types of Investigation
- Investigation under different situations – Standards of Auditing: Professional Pronouncements in India - Basic principles governing an audit – Basics of AASs 1 – 5.

Extra Reading /Keywords: *Investigation, Fraud detection*

Note: Texts given in the Extra Reading /Keywords must be tested only through assignment and seminar.

COURSE OUTCOMES

The learners

CO No.	Course Outcomes	PSOs Addressed	Cognitive Level
CO-1	Recognise the basic concepts in auditing and control techniques.	5	U
CO-2	Discuss the procedure for vouching various types of transctions.	5	U
CO-3	Analyze the accounting records for verification and valuation of assets and liabilities.	5	An
CO-4	Understand the role and the liabilities of an auditor.	5	U
CO-5	Examine the procedure for investigation under various circumstances and recall the AASs 1-5.	5	An
CO-6	Develop skill relating to maintaining registers and books of accounts of business	5	Ap

PRESCRIBED TEXT

Tandon B.N.S. Sudharshanam and S. Sundharabahu, (2018). *Principles of Auditing*,New Delhi: S. Chand & Co.

BOOKS FOR REFERENCE

1. Dinkar Pagare (2020), Principles and Practice of Auditing. Delhi : Sultan Chand and Sons.
2. Dr. T.R. Sharma (2021), Auditing (Thoroughly revised on the basis of the CompaniesAct 2013 and the Companies (Amendment) Acts 2019, 2020 and 2021), SahityaBhawan

Publications
3. Sanjib Kumar Basu (2021), Auditing and Assurance, Third Edition, Pearson.
4. Dr. R. Francis (2019), Principles of Auditing, Himalaya publishing house.
5. Dr. K.Muthukumar, Dr. S. Mary Sujatha , Dr. P. Arul Prasad , S. Nandhini (2022), Principles and Practices of Auditing, Wisdom India Publications.

WEB REFERENCE

1. https://www.icai.org/post.html?post_id=16951
2. https://www.iaasb.org/publications/2020-handbook-international-quality-control-auditing-review-other-assurance-and-related-services
3. https://cag.gov.in/en/examination/examination-books

Course Title	MAJOR CORE 16 – COMPANY LAW
Total Hours	75
Hours/Week	5Hrs / Wk
Code	U21CO6MCT16
Course Type	Theory
Credits	4
Marks	100

GENERAL OBJECTIVE

To understand the basic principles and practices of company law.

COURSE OBJECTIVES (CO):

The learners will be able to

CO No.	Course Objectives
CO-1	Understand the concepts of company, its types and the procedure of incorporation.
CO-2	Understand the important statutory documents, its contents and the legal provisions to alter the contents of these documents of a company.
CO-3	Understand the various types of prospectus and the legal provisions for allotment of securities.
CO-4	Understand the administration set up of a company and various meetings of the company.
CO-5	Understand different modes of winding up of a company and legal provisions relating to winding up of a company.

UNIT I – INTRODUCTION   15 HRS

Company - Meaning – Features – Lifting of the Corporate Veil – Types of company: Statutory, Registered, Public Limited, Private Limited, Foreign, Small, Dormant and OnePerson Company, Companies with Charitable Objects – Incorporation procedure of a Company.
Extra Reading /Keywords: *Promoter of a company and his legal position in the company*

UNIT II - STATUTORY DOCUMENTS   15 HRS

Memorandum, of Association: Contents - Change in clause of MOA - Articles of Association: Contents - Doctrine of Ultra vires – Doctrine of Constructive notice - Doctrineof Indoor management - Exceptions.
Extra Reading /Keywords: *Caselaws on Ultravires and Indoor management doctrines*

UNIT III - PROSPECTUS AND ALLOTMENT OF SECURITIES
15 HRS

Prospectus: Meaning and contents – Self prospectus – Red Herring Prospectus – AbridgedProspectus – Misstatements in Prospectus - Allotment of securities - Global depository receipts - Alteration of share capital - Rights issue – Bonus issue – Buyback of securities. **Extra Reading /Keywords:** *Sweat equity shares, Employee stock options*

UNIT IV - COMPANY MANAGEMENT AND MEETINGS   15 HRS

Administration - Directors, Managing Directors, Company Secretary - Qualifications andDisqualification - Appointment - Powers - Duties - Rights and liabilities. Company meeting: Kinds - Notice - Proxies – Quorum - Agenda - Minutes - Resolutions.
Extra Reading /Keywords: *Administration structure of top Ten Indian Companies.*

UNIT V - WINDING UP   15 HRS

Winding up of companies - Different modes of winding up - Consequences of winding up.
Extra Reading /Keywords: *Case laws on recent winding up of Companies in India.*

Note: Texts given in the Extra Reading /Keywords must be tested only through assignment and seminar.

COURSE OUTCOMES

The learners

CO No.	Course Outcomes	PSOs Addressed	Cognitive Level
CO-1	Recall the concepts of company, its types and procedure for incorporation of company.	3	U
CO-2	Explain the important statutory documents of a company and discuss the legal provisions relating to alter the contentsof the statutory documents of a company.	3	U
CO-3	Elucidate the various types of prospectus and the legal provisions of allotment of securities.	3	U
CO-4	Assess the administration setup of a company.	3	An
CO-5	Explains different types of winding up of a company and legal provisions relating to winding up of a company.	3	U
CO-6	Develops skills required for adapting to practical functioning of companies	3	Ap

PSO – Programme Specific Outcome; R- Remember; U- Understand; Ap – Apply;An – Analyse; E- Evaluate; C – Create

PRESCRIBED TEXT

Kapoor N.D, (2008). *Company Law- Incorporating the Provisions of the CompaniesAmendment Act, 2000,* New Delhi: Sultan Chand and Sons.

BOOKS FOR REFERENCE

1.   Gower L.C.B, (2005). *Principles of Modern Company Law*, London:
Stevens and Sons.
2.   Singh Avtar, (2007). *Company Law*, Lucknow: Eastern Book Co.
3.   Gogna. P.P.S. (2016), *Company Law*, S Chand Publishing, New Delhi.

WEB REFERENCES

1.   https://www.icai.org/
2.   https://icmai.in/icmai/
3.   https://swayam.gov.in/Company+law+

Course Title	**BUSINESS DATA ANALYTICS - LAB**
Total Hours	**60**
Hours/Week	**4**
Code	**U21CA6MEP09**
Course Type	**Practical**
Credits	**3**
Marks	**100**

GENERAL OBJECTIVE:
To enable the students to understand R programming logic and to develop skills in problem solving using R programming language.

COURSE OBJECTIVES
The learner will be able to

CO. No.	Course Objectives
CO-1	Setup R programming Environment ; understand and use R Variables, Operators and Data Types
CO-2	Understand and apply the concept Data Function Loops control structure in R programs.
CO-3	Understand and apply the concepts of String, R Data Structures- Arrays, Vectors and Lists.
CO-4	Demonstrate how to import R Packages and Data Setsfrom.csv (comma-separated value)file formatand.xlsx (Excel)file format.
CO-5	Understand how data is analyzed and visualized using statistic functions; to applythe techniques for plot and draw the pie chart and bar chart.

List of Exercises:

1. **Download and Setup R-Programming environment** and install basic packages in R program

2. **Implement R-Programming Data types, Variables, Operators**
   Data inputting from the User - To perform simple programs
3. **Implement Flow Control in R programs**
   - if …. else
   - for loop and while loop
   - break & next
   - Recursive function
   - Switch function

4. **Implement Text Manipulation in R program**
   - R Strings
5. **Loading, Handling and Analyze Data Sets**– To implement Data Structures in R file
- Arrays
- List
- Data Frames and Merging Data Frames

- Reading from csv files

6.Data exploration and visualization – To perform simple applications in R file

- Mode, Mean and Median
- Standard Deviation and Correlation
- Summary Statistics from csv file
- Creating Bar Chart, Pie Chart and Dot plot

SIMPLE APPLICATIONS:

- Employee Pay Bill Preparation
- Income Tax Calculation
- Bank Transactions
- Sales Tax Calculation
- Calculate Summary Statistics from Super Market Sales and various Business Data Set

COURSE OUTCOMES (CO):
The learners

CO.No.	Course Outcomes	PSOs Addressed	Cognitive Level
CO-1	Setup R-Programming environment and interpret the basic principles of R programming key terminologies.	PSO 1,2	R,U, AP
CO-2	Implement R-Programming Data types, Variables, Operators in simple R programs.	PSO 1	R,U, AP
CO-3	Implement the Flow Control statements in R programs.	PSO 1	R, U, AP
CO-4	Creating and Manipulating Text in R program using String functions.	PSO 2	U, AP
CO-5	Loading, Handling and Analyze Data Sets using the concept of Data Structures in R file.	PSO 1,5	U, AP
CO-6	Implement the R programming techniques of Data exploration and visualization in simple applications in R file.	PSO 5	U, AP

PO – Programme Outcomes; CO – Course Outcome; R- Remember;
U- Understand; Ap- Apply; An–Analyse; E-Evaluate; C–Create

TEXT BOOK
Sandip Rakshit, "R Programming for Beginners", McGraw Hill Education (India), 2017, ISBN : 978-93-5260-455-5.

BOOKS FOR REFERENCE:
1. Martin C. Brown, "Python: The Complete Reference", 2001, McGraw-Hill Professional
2. Andrie de Vries, Joris Meys, R for Dummies A Wiley Brand, 2nd Edition, John Wiley and Sons, Inc, 2015, ISBN: 978-1-119-05580-
3. Hadley Wickham, Garrett Grolemund ,"R for data science : Import, Tidy, Transform, Visualize, And Model Data", O′Reilly,2017.
4. Garrett Grolemund, "Hands on Programming With R", Shroff/O'Reilly,2014.
5. Jeremy Miles, Zoe Field, "Discovering Statistics Using R", SAGE Publications Ltd,2012.