

Programme Educational Objectives (PEOs):

On studying this course, the students will be able:	
PEO1	To acquire knowledge on commerce based computer applications using programming languages and to develop computer based solutions for business organizations.
PEO2	To impart adequate knowledge and skills to become professionals and leaders in the business industry / IT sectors.
PEO3	To imbibe an attitude for research and development in the field of commerce, computer and management.
PEO4	To learn and develop web applications with database background for corporate and other enterprise solutions.
PEO5	To familiarize with financial, accounting and business operations towards the sustainable development of the various industrial sectors.

Programme Outcomes (POs):

After completion of this programme, the students will be able to:	
PO1	Build a strong conceptual foundation in accounting, finance, management, computer applications, taxation, marketing and other courses towards industries / information technology.
PO2	Acquire practical foundation with commerce disciplines and develop the skills to manage the computer-based software.
PO3	Develop analytical and critical thinking through business finance, computer programming and marketing research.
PO4	Nurture employability skills in almost all areas of business like trade, industry information technology and even own startup.
PO5	Get transformed into intellectual skills of individual with imbibed ethical values on holistic education.

Programme Specific Outcomes (PSOs):

After the successful completion of this programme, the students are expected to:	
PSO1	Understand the theoretical knowledge to apply the programming, analytical and statistical tools for business, accounting and financial analysis.
PSO2	Apply the programming knowledge and skills learnt towards the business problems of the real world.
PSO3	Apply the skills like business communication, decision making and problem solving in day-to-day business affairs and online transactions.
PSO4	Develop proficiency in computer based projects and the management of an organization.
PSO5	Pursue professional programmes like CA, CMA, ACS and other master programmes in Commerce / Computer Application / Management and Law.

Blooms Cognitive Taxonomy

Action Verbs for Setting Question Paper:

Knowledge	Level	Action Verb
Remember	K1	Choose, Define, Find, Label, List, Match, Name, Recall, Relate, Select, Show, Spell, Tell, What, When, Where, Which, Who, Why, Fix, Single out, Mark, Enumerate, etc.,
Understand	K2	Demonstrate, Explain, Extend, Illustrate, Infer, Outline, Rephrase, Summarize, Translate, Trace, Specify, Cull, List, Arrange, etc.,
Apply	K3	Apply, Experiment with, Identify, Interview, Make use of, Model, Organize, Plan, Select, Solve, Utilize, Compute, Categorize, Classify, Sort, Notice, etc.,
Analyze	K4	Analyze, Assume, Compare, Contrast, Discover, Dissect, Distinguish, Divide, Examine, Function, Inference, Inspect, List, Motive, How, Sequence, Diagnose, Decipher, Infer, Explicate, etc.,
Evaluate	K5	Agree, Appraise, Assess, Award, Conclude, Criteria, Criticize, Decide, Deduct, Defend, Determine, Disprove, Estimate, Evaluate, Importance, Influence, Interpret, Judge, Justify, Measure, Prove, Rate, Recommend, Value, Prove, Validate, Verify, Discover, Scrutinize, Support, Reveal, Substantiate, Deduce, Inspect, Probe, Survey, Test, Portray, Sketch, Delineate, Elucidate, etc.,
Create	K6	Adapt, Build, Change, Combine, Compile, Compose, Construct, Create, Delete, Design, Develop, Discuss, Elaborate, Formulate, Happen, Imagine, Improve, Invent, Make up, Maximize, Minimize, Modify, Predict, Solution, Establish, Redraft, Evolve, Promote, Devise, Conceive, Visualize, Improvise, Extemporize, Fabricate etc.,

INSTRUCTIONS TO THE QUESTION PAPER SETTER				
Section	Bloom Level	Questions	Marks	Number of Questions to be asked
A	K1, K2, K3	1 to 5 (either or type)	5	Minimum 2 questions are to be asked from each of the five units
B	K4, K5	6 to 10 (either or type)	10	Minimum 2 questions are to be asked from each of the five units

Question Paper Pattern:

Question No.	Course Unit	K – Level (K1 – K6)	Course Outcome (CO1-CO5)
SECTION – A (5 X 5 = 25 Marks) Answer All Questions			
1 (a) or 1 (b)	I	K1/K2/K3	CO1
2 (a) or 2 (b)	II	K1/K2/K3	CO2
3 (a) or 3 (b)	III	K1/K2/K3	CO3
4 (a) or 4 (b)	IV	K1/K2/K3	CO4
5 (a) or 5 (b)	V	K1/K2/K3	CO5
SECTION – B (5 X 10 = 50 Marks) Answer All Questions			
6 (a) or 6 (b)	I	K4/K5	CO1
7 (a) or 7 (b)	II	K4/K5	CO2
8 (a) or 8 (b)	III	K4/K5	CO3
9 (a) or 9 (b)	IV	K4/K5	CO4
10 (a) or 10 (b)	V	K4/K5	CO5
Knowledge Level as per Bloom Taxonomy K1 – Remember; K2 – Understand; K3- Apply; K4 –Analyze, K5-Evaluate; K6-Create			
CO1 – CO5 Indicates the Course Outcome in Unit I to Unit 5			

**Ramakrishna Mission Vivekananda College Evening College (Autonomous),
Department of Commerce Computer Applications – B.Com.(C.A.)**

Semester	Major	Course Code	Course Title	Hours	Marks
I	01	UCCAM01	Financial Accounting & Accounting Standard	90	75

Course Objectives	<i>The purpose of learning this course is:</i>
❖ To enable proper understanding and application of accounting standards.	
❖ To explain the theoretical aspects of accounting and measure income of the business.	
❖ To learn and understand the necessary provisions, adjustments and accounting systems.	

Course Outcomes (COs)	<i>On the successful completion of this course, students will be able to:</i>
CO1	Understand the basic concepts of accounting standards and procedures
CO2	Recognize the importance in measure the income of business through final accounts
CO3	Measure the real value of assets after depreciation
CO4	Recognize the departmental and inter-departmental expenses with both cost & selling price
CO5	Maintain stock and debtors in the aspects of branches and its types

UNIT I	Theoretical Framework of Accounting: Meaning and Scope–Objectives–Financial Statements & related concepts–Persons interested in Accounting. Financial accounting standards: Concept, benefits, procedures for issuing accounting standards in India, salient features of accounting standards AS – I (ICAI), International Financial Standards (IFRS) needs and procedures.
UNIT II	Business Income: Measurement of business income – Final Accounts, manufacturing account, trading account, profit / loss account, Balance sheet.
UNIT III	Depreciation Accounting: Meaning, Concept, Causes – Methods of recording depreciation–provision for depreciation A/c is maintained, not maintained –Methods for providing depreciation: SLM, WDV – Change in method of depreciation as per revised AS–6. (Prospective & retrospective effect)
UNIT IV	Departmental Accounting: Meaning, Needs, Advantages–Apportionment of Expenses – Inter - departmental Transfers at cost and at selling price – Stock Reserve – Preparation of Departmental Trading, Profit / Loss account and Balance Sheet.
UNIT V	Accounting for Inland Branches: Meaning – Objects – Types of branches – Accounting under Debtors system – Accounting under Stock and debtors system – Final accounts system – Wholesale Branch Accounting – Independent branches Accounting.
Text Books:	1. Financial Accounting, S P Jain & K L Narang - Kalyani Publishers 2. Advanced Accounting, Gupta R L & Gupta V. K - Sulthan Chand
Reference Books:	1. Financial Accounting - T. S. Reddy and A. Murthy – Margham Publishers 2. Advanced Accountancy, Arunanandam M & Ramanan K. S - Himalaya Publishing

Question Paper Pattern	Theory	Problem	Total Questions	To Answer	Marks per Question	Total Marks
Section A	5	5	10	5	5	25
Section B	2	8	10	5	10	50
Grand Total						75

Mapping Course Outcomes (COs) with Programme Outcomes (POs) : S – Strong ; M – Medium ; L – Low					
COs \ POs	PO1	PO2	PO3	PO4	PO5
CO1	S	S	S	S	M
CO2	S	S	S	S	S
CO3	S	S	S	S	S
CO4	S	S	S	S	S
CO5	S	S	S	S	M

**Ramakrishna Mission Vivekananda College Evening College (Autonomous),
Department of Commerce Computer Applications – B.Com.(C.A.)**

Semester	Major	Course Code	Course Title	Hours	Marks
I	02	UCCAM02	Computer Applications in E-Commerce	90	75

Course Objectives	<i>The purpose of learning this course is:</i>
❖	To know the basics of computer systems and information technology.
❖	To expand the knowledge of e-commerce and to develop the application of commerce in various business fields.

Course Outcomes (COs)	<i>On the successful completion of this course, students will be able to:</i>
CO1	Work on computer hardware and software for different business applications.
CO2	Understand the data processing methods and programming languages.
CO3	Enumerate the technological changes in e-commerce applications from traditional commerce.
CO4	Analyze the data interchange automation and ease of digital payments.
CO5	Increase the qualified traffic in the marketing and preserve the business information from hackers.

UNIT I	Computer: Introduction, Importance and Role in Today's World – Characteristics – Classifications – Memory – Secondary Storage – Input and Output Devices – Software and Hardware. Applications: Online, Real Time, and Business – Computer Related Jobs in Business.
UNIT II	Numbering System: Introduction, Types, Binary, Decimal, Octal, and Hexadecimal – Conversions – ASCII Code. Data and Information: Definition – Data Processing Methods – Algorithm – Flow Chart – Benefits and Symbols. Programming Languages: Machine Language, Assembly Language, and Higher Level Languages – Steps to Develop a Software Program.
UNIT III	E-Commerce: Introduction – E-Commerce versus Traditional Commerce – Objectives – Features – Types – Limitations and Challenges – Future Scope. Applications: Search Engine, Entertainment, E-Shopping, Online Trading, M-Commerce, E-Marketing, E-Banking and E-Learning.
UNIT IV	Electronic Data Interchange: Benefits – Classifications – Non-Partial, Partial, and Fully Integrated EDI – Issues – Legal, Security and Privacy – EDI Software Implementation. Electronic Payment System: Merits and Risks – Payment Gateways – EPS Methods – Smart Card, Credit Card, E-Wallet, E-Cash, NEFT, RTGS, and IMPS.
UNIT V	E-Marketing: Introduction – Techniques – Requirements for E-Commerce Website – E-Catalog and Distributor – E-Enterprise. E-Commerce Security: Client-Server Network Security – Data and Message Security – Security Mechanisms – Authenticity, Integrity, Privacy, Non-Repudiation, Firewall, SET and SSL.
Text Books:	1. Computer Fundamentals: Concepts, Systems & Applications, Pradeep K. Sinha and Priti Sinha, BPB Publications, 2004, ISBN: 9788176567527 2. Understanding Electronic Commerce, David R. Kosiur, Microsoft Press.
Reference Books:	1. Fundamentals of Information Technology, Alexis Leon and Mathews Leon, Vikas Publishing. 2. Electronic Commerce: Framework, Technologies and Applications, Bharat Bhasker, Tata McGraw-Hill Publishing Company Limited, 2006, ISBN: 9780070600959

Question Paper Pattern	Theory	Program	Total Questions	To Answer	Marks per Question	Total Marks
Section A	10	0	10	5	5	25
Section B	10	0	10	5	10	50
Grand Total						75

Mapping Course Outcomes (COs) with Programme Outcomes (POs) : S – Strong ; M – Medium ; L – Low					
COs \ POs	PO1	PO2	PO3	PO4	PO5
CO1	S	S	S	S	S
CO2	S	S	S	S	M
CO3	S	S	S	S	S
CO4	S	S	S	S	S
CO5	S	S	S	S	M

**Ramakrishna Mission Vivekananda College Evening College (Autonomous),
Department of Commerce Computer Applications – B.Com.(C.A.)**

Semester	Allied	Course Code	Course Title	Hours	Marks
I	01	UCCAL01	Essentials of Business Economics	90	75

Course Objectives	<i>The purpose of learning this course is:</i>
❖ To help students to acquire conceptual knowledge of the Business Economics	
❖ To understand the concepts of microeconomics, Consumer behaviour, production and cost analysis.	

Course Outcomes (COs)	<i>On the successful completion of this course, students will be able to:</i>
CO1	Understand the basics of economics and also relating to business
CO2	Recognize the importance in demand and supply over the economic positions in business
CO3	Understand the concepts of utility and consumer equilibrium over budget in business
CO4	Know the factors and function of production with variable proportion and opportunity cost
CO5	Understand the market structure to make strategic decision over the business

UNIT I	Economics: Wealth, Welfare, and Scarcity Definitions – Nature of Economics–Micro & Macro Economics. Business Economics: Definition–Scope of Business Economics – Production Possibility Frontiers (PPF).
UNIT II	Demand: Law of Demand, Determinants – Exceptions – Movement vs Shift in Demand Curve – Demand Forecasting Methods, Elasticity of Demand, Price, Income - Determinants of Elasticity – Methods to Measure Elasticity. Supply: Law of Supply, Determinants – Reasons behind the Shift in the Supply Curve.
UNIT III	Consumer Behaviour: Concept of Utility – Law of Diminishing Marginal Utility – Law of Equi-Marginal Utility – Consumer’s Equilibrium – Indifference Curve Approach - Budget Line and Consumer’s Equilibrium.
UNIT IV	Production: Production Function – Factors of Production - Law of Variable Proportions – Law of Returns to Scale –Producer’s Equilibrium – Economies of Scale. Cost: Opportunity Cost – Short Run Cost Curves – Long Run Cost Curves.
UNIT V	Market Structure: Price and Output Determination under Perfect Competition – Monopoly–Monopolistic Competition – Oligopoly.
Text Books	1. Business Economics, S. Sankaran – Margham Publications 2. Business Economics, S. K. Agarwal – S. Chand publications.
Reference Books	1. Business Economics, R. K. Lekhi – Kalyani Publishers. 2. Business Economics, T. Aryamala – Vijay Nicole

Question Paper Pattern	Theory	Problem	Total Questions	To Answer	Marks per Question	Total Marks
Section A	10	0	10	5	5	25
Section B	10	0	10	5	10	50
Grand Total						75

Mapping Course Outcomes (COs) with Programme Outcomes (POs) : S – Strong ; M – Medium ; L – Low						
COs \ POs	PO1	PO2	PO3	PO4	PO5	
CO1	S	S	S	S	M	
CO2	S	S	S	S	S	
CO3	S	S	M	S	S	
CO4	S	S	S	S	S	
CO5	S	S	S	S	S	

**Ramakrishna Mission Vivekananda College Evening College (Autonomous),
Department of Commerce Computer Applications – B.Com.(C.A.)**

Semester	Major	Course Code	Course Title	Hours	Marks
II	03	UCCAM03	Corporate Accounting and Auditing	90	75

Course Objectives	<i>The purpose of learning this course is:</i>
❖ To impart skills for preparing various kinds of Companies Accounts	
❖ To compute the value of goodwill and shares of different nature of companies	
❖ To understand the essential knowledge required on auditing process	

Course Outcomes (COs)	<i>On the successful completion of this course, students will be able to :</i>
CO1	Understand the process of issuing and forfeiting of shares and its types
CO2	Understand the concepts of underwriting with prior to incorporation of profits
CO3	Recognize the importance of valuation of goodwill and shares over the company
CO4	Maintain the preparation of inflation accounting and HR accounting
CO5	Understand the qualities of the auditor and creation of voucher

UNIT I	Accounting for Share Capital: Classes of Shares – Issue of shares (for cash & consideration other than cash) – Issue of shares at par, premium & discount – Pro-rata Allotment – Forfeiture of shares – Re-issue of forfeited shares – Right, Bonus Issue–Buyback of Shares–Issue and redemption of preference shares, Steps to be followed by auditor while audit of share capital Accounting.
UNIT II	Underwriting of shares and debentures: Meaning, purpose and importance - underwriting commission - types of underwriting, complete underwriting, partial underwriting, and firm underwriting - one, two or more underwriters. Profit prior to Incorporation: meaning, basis of apportionment of expenses – methods, statement method, columnar form.
UNIT III	Valuation of Goodwill: Meaning, needs, factors, Purchase value and computed value of goodwill, Methods of valuing goodwill, average profit method, super profit method and capitalization method. Inflation Accounting: Price level changes accounting, CPP/GPP- steps in preparing financial statement–CCA Method, computation of profit, preparation of current cost accounting Balance Sheet.
UNIT IV	Human Resource Accounting: Meaning – assumptions - Objectives – salient features of HRA - methods of HR valuation. Auditing: Meaning, Objectives, Types, and Qualities of an Auditor – Audit Programmes. Internal Control – Internal Check and Internal Audit – Audit Note Book – Working Papers.
UNIT V	Vouching: Voucher – Vouching of Trading Transactions – Vouching of Impersonal Ledger. Rights and duties of Auditors, verifications and valuation of assets & liabilities – Audit and assurance standards. Forensic Accounting: Fraud Detection Techniques – Risk Assessment – Crime and Economy.
Text Books	1. Corporate Accounting – T. S Reddy & A. Murthy, Margham Publications. 2. Advanced Accountancy – S.P.Jain & K.L.Narang – Kalyani Publishers, New Delhi.
Reference Books	1. Corporate Accounting – Gupta & Radhaswamy, S. Chad & Sons Publications. 2. Corporate Accounting – P. C. Tulsian – Tata McGraw Hill Company

Question Paper Pattern	Theory	Problem	Total Questions	To Answer	Marks per Question	Total Marks
Section A	5	5	10	5	5	25
Section B	2	8	10	5	10	50
Grand Total						75

Mapping Course Outcomes (COs) with Programme Outcomes (POs) : S – Strong ; M – Medium ; L – Low					
COs \ POs	PO1	PO2	PO3	PO4	PO5
CO1	S	S	S	S	S
CO2	S	M	S	S	M
CO3	S	S	S	M	S
CO4	S	S	S	S	S
CO5	S	S	S	S	S

**Ramakrishna Mission Vivekananda College Evening College (Autonomous),
Department of Commerce Computer Applications – B.Com.(C.A.)**

Semester	Major	Course Code	Course Title	Hours	Marks
II	04	UCCAM04	Office Automation Package (Theory)	60	75

Course Objectives	<i>The purpose of learning this course is:</i>
❖ To be skilled in necessary MS Office concepts.	
❖ To familiar with some advanced functions in MS Office package.	

Course Outcomes (COs)	<i>On the successful completion of this course, students will be able to :</i>
CO1	Create professional-looking documents independently.
CO2	Understand how to use PowerPoint in a variety of professional, educational, and personal situations.
CO3	Format and edit the business data.
CO4	Work on mathematical, information and finance related functions.
CO5	Design the database tables for different business Applications.

UNIT I	MS – Word: Definition, Features and Applications - Document Process (Create, Save, Open, Close, Print) - Spelling and Grammar - Ruler - Mailing Labels - Macros - Mail Merge - Formatting Operations (Character Spacing, Alignment, Indentation, Bullets and Numbering, Borders and Shading, Paragraph Formatting) - Working with Tables - Page Setup - Header and Footer.
UNIT II	MS – PowerPoint: Introduction to Presentation - Operations on Slide (Insert, Duplicate, Delete, Hide and Unhide, Slide Number) - Colour Schemes - Inserting Clipart, Pictures and Tables - Animation and Transition with Audio and Movie - Slide Show (Custom, Rehearse Timings).
UNIT III	MS – Excel: Workbook - Definition, Features, Elements and Window - Formatting a Worksheet - Operators - Charts - Data Sorting, Filtering, Validation, Consolidation, Grouping - References: Relative, Absolute and Mixed - Scenarios.
UNIT IV	MS – Excel: Goal Seek - Pivot Table and Pivot Chart Reports – Functions - Mathematical, Logical, Financial, Statistical and Date & Time - Protect and Share Workbook.
UNIT V	MS - Access: Database - Table - Definition and Creation - Data Types - Defining Primary Key - Relationships (Create, Edit and Delete) - Importing, Linking and Exporting Data - Data Filtering and Sorting - Forms - Queries and Its Types - Reports (Create and View).
Text Books	1. Computer Applications in Business & Management – Dr. P. Rizwan Ahmed, Margham Publications. 2. Microsoft Word, Excel, and PowerPoint Just for Beginners – Dorothy House – Outskirts Press
Reference Books	1. MS Office - Dr.S. S.Shrivastava – Lakshmi Publications 2. Mastering MS Office – Bittu Kumar – V&S publishers

Question Paper Pattern	Theory	Program	Total Questions	To Answer	Marks per Question	Total Marks
Section A	10	0	10	5	5	25
Section B	10	0	10	5	10	50
Grand Total						75

Mapping Course Outcomes (COs) with Programme Outcomes (POs) : S – Strong ; M – Medium ; L – Low					
COs \ POs	PO1	PO2	PO3	PO4	PO5
CO1	S	S	S	S	M
CO2	S	S	S	S	S
CO3	S	S	M	S	S
CO4	S	S	S	S	M
CO5	S	S	S	S	S

**Ramakrishna Mission Vivekananda College Evening College (Autonomous),
Department of Commerce Computer Applications – B.Com.(C.A.)**

Semester	Practical	Course Code	Course Title	Hours	Marks
II	01	UCCAP01	Office Automation Package (Practical)	30	75

Course Objectives	<i>The purpose of learning this course is:</i>
❖ To enrich the practical knowledge in MS Office.	
❖ To apply the features of MS Office in different scenarios.	

Course Outcomes (COs)	<i>On the successful completion of this course, students will be able to :</i>
CO1	Formulate high quality document designs and layouts.
CO2	Compose presentation more interesting through the use of multimedia for business organizations.
CO3	Access and manipulate data using the database functions of Excel.
CO4	Generate the report and visualize the business data in different graphs.
CO5	Store, find and modify the data in the database tables through queries.

Exercises	Office Automation Package (Practical)
1.	Create a Class Time Table and perform the following operations: Data Entry, Insertion and Deletion of Rows and Columns, Increasing and Decreasing Row Height and Column Width, Merge Cells, Insert Caption, Cell Alignment and Borders & Shading.
2.	Prepare a Students Association Meeting Letter for 10 members using Mail Merge.
3.	Create an Organization Chart for the Company in the Presentation.
4.	Perform frame movements by ClipArts to illustrate running of an image automatically.
5.	Generate the Electricity Bill.
6.	Prepare the Students' Mark sheet and apply the Data Sorting & Filtering and Graphs.
7.	Create a Report containing the Pay details of the Employee.
8.	Use the different type of charts (Bar, Line, and Pie) to illustrate the sales of a company for three different periods.
9.	Create an invoice using form design view for the products.
10.	Perform the Queries in the Students Result Table.

Question Paper Pattern: Bloom Level (K6)			
Total Questions	To Answer	Marks per Question	Total Marks
5	3	20	60
Viva Questions			10
Record Notebook Submission			05
Grand Total			75

Mapping Course Outcomes (COs) with Programme Outcomes (POs) :S – Strong ; M – Medium ; L – Low					
COs \ POs	PO1	PO2	PO3	PO4	PO5
CO1	S	S	S	S	S
CO2	S	S	S	S	S
CO3	S	S	S	S	S
CO4	S	S	S	S	M
CO5	S	S	S	S	M

**Ramakrishna Mission Vivekananda College Evening College (Autonomous),
Department of Commerce Computer Applications – B.Com.(C.A.)**

Semester	Allied	Course Code	Course Title	Hours	Marks
II	02	UCCAL02	Modern Business Communication	90	75

Course Objectives	<i>The purpose of learning this course is:</i>
❖	To acquire skills in writing, comprehension, and to overcome communication barriers.
❖	To understand the use of electronic media for business communication through modern medium
❖	To improve better listening and using technology enabled communication tools.

Course Outcomes (COs)	<i>On the successful completion of this course, students will be able to :</i>
CO1	Understand the basics of communication skills, principles and barriers
CO2	Recognize the importance in classification of communication
CO3	Understand the importance of good listening and its barriers
CO4	Recognize the medium of communication through modern updates
CO5	Understand the technologies available for communication using its tools

UNIT I	Communication: Meaning, Importance, Objectives, Flow, Process – Media–Types of Communication –Principles of Communication – Barriers to Communication. Communication Styles: Introduction, Communication style Matrix with example for each, Direct, Spirited, Systematic, Considerate Communication style.
UNIT II	Verbal & Non-Verbal Communication: Gestures, postures, facial expression, Body Language – Role of Different Body Parts – Effective use of Body Language – Silence. Presentation: Kinds– Factors Affecting; Group Discussion–Reasons for Conducting Group Discussion – Elements of Group Discussion – Skills Assessed in Group Discussion; Interview–Types–Steps – Limitations.
UNIT III	Listening: Meaning, importance, Difference between listening and hearing, Various listening techniques (Questioning, paraphrasing, submersing) - Requisites for good listening, Barriers of listening, measures to overcome. Perception: Meaning, Process and Importance.
UNIT IV	Written Communication: Preparing for a career – Identification of job openings, Apply for a job, Preparing covering letter, Preparing a CV or Resume and Effective profiling – Preparing agenda and Minutes. Modern Communicating Medium: Mobile, SMS, Video Conferencing, FAX, E-Mail, Telephone, Social media communication.
UNIT V	Technology Enabled Communication: Using technology in communication talks - Computer tools for planning - Computer tools for gathering and collecting information - Tools for analyzing and organizing, Tools for writing, Use of ICT for teaching, Tools for presenting messages, Survey tools - collecting information, analysis using XL sheets and graphics.
Text Books	1. Essentials of Business Communication - Rajendra Pal, J. S. Korlahalli - Sultan Chand & Sons 2. Modern Business Communication – Sathyanarayan Path – Himalaya Publishing House
Reference Books	1. Business Communication - R. C. Bhatia - An e-Books India 2. Essentials of Business Communication – K. Sundar & A. Kumara Raj – Vijay Nicole Imprints

Question Paper Pattern	Theory	Problem	Total Questions	To Answer	Marks per Question	Total Marks
Section A	10	0	10	5	5	25
Section B	10	0	10	5	10	50
Grand Total						75

Mapping Course Outcomes (COs) with Programme Outcomes (POs) :S – Strong ; M – Medium ; L – Low					
COs \ POs	PO1	PO2	PO3	PO4	PO5
CO1	M	S	S	S	S
CO2	S	S	S	S	S
CO3	S	S	S	S	M
CO4	S	S	S	S	S
CO5	S	S	S	S	S

**Ramakrishna Mission Vivekananda College Evening College (Autonomous),
Department of Commerce Computer Applications – B.Com.(C.A.)**

Semester	Major	Course Code	Course Title	Hours	Marks
III	05	UCCAM05	Cost and Management Accounting	90	75

Course Objectives	<i>The purpose of learning this course is:</i>
❖	To help students to acquire conceptual knowledge of the Costing System
❖	To learn the movement of materials in different modes and calculate fair remuneration for labors.
❖	To understand the outcome proportions and planning expectations through marginal costing.

Course Outcomes (COs)	<i>On the successful completion of this course, students will be able to :</i>
CO1	Understand the basics of cost accounting through cost sheets
CO2	Recognize the importance of flow of goods in the store
CO3	Understand the importance of optimization of cost of labour
CO4	Recognize the medium cash flow via different methods of ratio analysis
CO5	Measure the profit and sales expectation via marginal costing

UNIT I	Cost Accounting: Meaning, objectives and scope - Meaning of Cost Centre, Profit Centre, Cost Unit - Installation of Costing System - Cost Classification. Cost Sheet: preparation of cost sheet - Tenders & Quotations.
UNIT II	Material Cost: Purchase procedure–Stores Procedure – EOQ – Fixation of stock levels – Stores ledger under FIFO, LIFO, Simple Average and Weighted Average Method – treatment of Material losses.
UNIT III	Labour Cost: Essentials of a sound wage system – Basis of payment - Time rate & Piece Rate Systems – Incentive plans Halsey, Rowan, Taylor, Merrick, Gantt and Emerson – Treatment of Idle Time and Overtime.
UNIT IV	Ratio Analysis: Meaning, Advantages, Limitations – Classification of ratios – Profitability, Turnover, and Liquidity Ratios – Short, Long term Solvency Ratios. (Individual Ratios and Comprehensive problems).
UNIT V	Marginal Costing: CVP analysis – Profit volume ratio – Break Even Point - Break even analysis – Margin of safety – change in profit and change in sales method - Profit and Sale expectation models.
Text Books	1. Cost and Management Accounting – Dr. A. Moorthy & Dr. S. Gurusamy, Vijay Nicole. 2. Cost and Management Accounting – Ravi M Kishore – Taxmann’s Publisher
Reference Books	1. Cost and Management Accounting - T. S. Reddy & Hariprasad Reddy, Margham Publication. 2. Cost and Management Accounting – Amitabha Basu – TEE DEE Publications

Question Paper Pattern	Theory	Problem	Total Questions	To Answer	Marks per Question	Total Marks
Section A	5	5	10	5	5	25
Section B	2	8	10	5	10	50
Grand Total						75

Mapping Course Outcomes (COs) with Programme Outcomes (POs): S – Strong; M – Medium; L – Low					
COs \ POs	PO1	PO2	PO3	PO4	PO5
CO1	S	S	S	S	S
CO2	S	S	S	S	M
CO3	S	S	S	S	S
CO4	S	S	S	S	S
CO5	S	S	S	S	M

**Ramakrishna Mission Vivekananda College Evening College (Autonomous),
Department of Commerce Computer Applications – B.Com.(C.A.)**

Semester	Major	Course Code	Course Title	Hours	Marks
III	06	UCCAM06	Modern Management Techniques	90	75

Course Objectives	<i>The purpose of learning this course is:</i>
❖	To develop the awareness regarding different practices adopted by the MNC's
❖	To enable the students to gain insight into different measures to cope with stress
❖	To acquaint Japanese techniques as modern management Practice and enable quality standard.

Course Outcomes (COs)	<i>On the successful completion of this course, students will be able to :</i>
CO1	Improve management skills, capacity to enable better application of skills.
CO2	Recognize Business Process Outsourcing and better handling of stress.
CO3	Aware on Japanese management techniques to improve better management practices.
CO4	Recognize the extension on zero defect to enable optimal usage with good waste reduction management
CO5	Understand the six sigma to control and improve quality standards.

UNIT I	Management: Meaning, Nature – Management Process – Levels of Management, Skills, Role – Management principles – Managerial Functions.
UNIT II	Business Process Outsourcing: Meaning, Definition of BPO - Types and Benefits of BPO Stress Management: Meaning, Causes/ Sources of Stress- Individual and Organizational - Consequences/ Effects of Stress - Remedial Measures to control / to cope with Stress.
UNIT III	Japanese Management: History of Japanese Management 5-S System: Meaning and Definition - Micro level techniques Kai Zen: Meaning and Definition - Micro level techniques
UNIT IV	Poka-Yoke: Meaning and Definition - Micro level techniques Zero Defect Programme: Meaning and Definition - Micro level techniques Waste Reduction: Meaning and Definition - Micro level techniques
UNIT V	Quality Standards: ISO Quality Standards Meaning, Importance, Elements of Quality Standards. Six Sigma: Meaning, Definitions and levels of Six Sigma, Steps in Implementing Six Sigma- DMAIC - Define, Measure, Analysis, Improve and Control.
Text Books	1. Management Today – Gene Burton & Manab Thakur Tata McGraw Hill Publishing Co. 2. An Introduction to Modern Management Practices – D.N.Dastoor- Ahmadabad Management Association
Reference Books	1. Modern Management Practices – Dr. Gavai A.K., Phadke Prakashan , Kolhapur. 2. Business Process & Knowledge Process Outsourcing -Deolankar V, Delhi Commerce & Law Publishing.

Question Paper Pattern	Theory	Problem	Total Questions	To Answer	Marks per Question	Total Marks
Section A	10	0	10	5	5	25
Section B	10	0	10	5	10	50
Grand Total						75

Mapping Course Outcomes (COs) with Programme Outcomes (POs) : S – Strong ; M – Medium ; L – Low					
COs \ POs	PO1	PO2	PO3	PO4	PO5
CO1	S	S	M	S	M
CO2	S	S	S	S	S
CO3	S	S	S	S	S
CO4	S	S	S	S	S
CO5	S	S	S	S	M

**Ramakrishna Mission Vivekananda College Evening College (Autonomous),
Department of Commerce Computer Applications – B.Com.(C.A.)**

Semester	Major	Course Code	Course Title	Hours	Marks
III	07	UCCAM07	Programming in Java (Theory)	60	75

Course Objectives	<i>The purpose of learning this course is:</i>
❖ To know how to implement object-oriented designs with Java.	
❖ To understand how to use exception handling in Java applications.	

Course Outcomes (COs)	<i>On the successful completion of this course, students will be able to :</i>
CO1	Comprehend the basic structure and concepts of OOPS in Java
CO2	Pertain the conditions to make a decision of a statement
CO3	Work with Inheritance and Method Overloading, Method Overriding of Java
CO4	Simplify the structure of complex applications using thread
CO5	Apply the concept of exception handling to develop efficient and error free codes

UNIT I	Introduction to Java: Evolution, Features - Structure of Java - Java Compiler and Interpreter - Object Oriented Concepts - Java Tokens - Data Types –Constants and Variables- Type Casting.
UNIT II	Input and Output: Operators and Expressions-Decision making – looping– system class -classes and objects – Arrays – Strings-Vectors.
UNIT III	Constructors: Inheritance - Method Overloading - Method Overriding – final classes and variables - Finalizer and Abstract Methods - Recursion.
UNIT IV	Interfaces: Packages: Definition - Creating, Accessing and using Packages - Naming Conventions. Threads: Definition, Creating, Extending, Stopping and Blocking Threads - Thread Life Cycle - Thread Exception - Thread Priority and Synchronization.
UNIT V	Applets: Definition - Creating Applet - Applet Life Cycle - Adding Applet to HTML file - Running Applets - Passing Parameters to Applet - Graphics Programming. Exception Handling Mechanisms.
Text Books	1. A Primer Programming with Java – E. Balagurusamy – Tata McGraw Hill 2. Thinking in java – Bruce Eckel – Pearson Education Inc
Reference Books	1. The Java Programming Language – Ken Arnold and James Gosling – Addison Wesley 2. Programming With Java – Rohit Khurana – Vikas Publishing House

Question Paper Pattern	Theory	Program	Total Questions	To Answer	Marks per Question	Total Marks
Section A	10	0	10	5	5	25
Section B	10	0	10	5	10	50
Grand Total						75

Mapping Course Outcomes (COs) with Programme Outcomes (POs) :S – Strong ; M – Medium ; L – Low						
COs	POs	PO1	PO2	PO3	PO4	PO5
CO1		S	S	S	S	S
CO2		S	S	S	S	S
CO3		S	S	S	S	S
CO4		S	S	S	M	S
CO5		S	S	S	S	M

**Ramakrishna Mission Vivekananda College Evening College (Autonomous),
Department of Commerce Computer Applications – B.Com.(C.A.)**

Semester	Practical	Course Code	Course Title	Hours	Marks
III	02	UCCAP02	Programming in Java (Practical)	30	75

Course Objectives	<i>The purpose of learning this course is:</i>
❖ To demonstrate skills in writing programs using applet, exception handling techniques and multithreading.	
❖ To exhibit streams and efficient user interface design techniques.	

Course Outcomes (COs)	<i>On the successful completion of this course, students will be able to :</i>
CO1	Implement the OOPS paradigm.
CO2	Construct the packages in Java.
CO3	Develop reusability and execute the different tasks through interface.
CO4	Maintain the normal flow of the application by handling the runtime errors.
CO5	Design event driven GUI and web related applications.

Exercises	Programming in Java (Practical)
1.	Write a program to implement Class and Object.
2.	Write a program to find the length, number of words, vowels, consonants and spaces of the string.
3.	Write a program to generate the numbers randomly and order it.
4.	Write a program to find the given number is Armstrong or not.
5.	Write a program to implement method overloading.
6.	Write a program to implement interface.
7.	Write a program to implement Thread concept.
8.	Write a program to implement Exception Handling Mechanisms.
9.	Write a program to implement Applet.
10.	Write a program to implement graphics.

Question Paper Pattern: Bloom Level (K6)			
Total Questions	To Answer	Marks per Question	Total Marks
5	3	20	60
Viva Questions			10
Record Notebook Submission			05
Grand Total			75

Mapping Course Outcomes (COs) with Programme Outcomes (POs): S – Strong; M – Medium; L – Low					
COs \ POs	PO1	PO2	PO3	PO4	PO5
CO1	S	S	S	S	S
CO2	S	S	S	S	S
CO3	S	S	S	S	S
CO4	S	S	S	M	S
CO5	S	S	S	S	M

**Ramakrishna Mission Vivekananda College Evening College (Autonomous),
Department of Commerce Computer Applications – B.Com.(C.A.)**

Semester	Major	Course Code	Course Title	Hours	Marks
III	08	UCCAM08	Relational Database Management System (Theory)	60	75

Course Objectives	<i>The purpose of learning this course is:</i>
❖ To help the students to acquire conceptual knowledge of the database	
❖ To create the databases for the business-oriented applications.	

Course Outcomes (COs)	<i>On the successful completion of this course, students will be able to :</i>
CO1	Understand the basic concepts of RDBMS
CO2	Structure the ER Model and recognize the database languages
CO3	Evaluate the table design through Normalization
CO4	Execute the SQL Queries
CO5	Format the database tables in various business applications

UNIT I	Introduction to RDBMS: Definition and Advantages - Database Administrator - Database Models - Database Development Life Cycle (DDL) -Data Integrity and Manipulation - Codd's Rules - Security (Authorization and Encryption).
UNIT II	E.R. Model: Class Diagram - Relational Algebra and its Operations - Relational Schema - Tuple Relational Calculus- Domain Relational calculus.
UNIT III	Normalization: First Normal Form – second normal form – third normal form –Boyce – codd normal form- functional dependencies - decomposition
UNIT IV	Structured Query Language (SQL): Introduction - Data Types - Functions –views -Nested Sub queries - Statements - DDL, DML, DCL and TCL.
UNIT V	Database Applications: Decision Support System - Data Mining - Data Warehousing - Spatial Databases - Multimedia - Mobility and Personal Databases - Distributed Information Systems - World Wide Web (WWW).
Text Books	1. Database System Concepts - A. Silberschatz, H.F. Korth, S. Sudarshan - McGraw Hill 2. Relational Database design and implementation –John L. Harrington –Elsevier Science
Reference Books	1. An Introduction to Database Systems, C. J. Date - Seventh Edition. 2. Database management systems - Raghu Ramakrishnan, McGraw Hill

Question Paper Pattern	Theory	Program	Total Questions	To Answer	Marks per Question	Total Marks
Section A	10	0	10	5	5	25
Section B	10	0	10	5	10	50
Grand Total						75

Mapping Course Outcomes (COs) with Programme Outcomes (POs): S – Strong; M – Medium; L – Low						
	POs	PO1	PO2	PO3	PO4	PO5
COs						
CO1		S	S	S	S	M
CO2		S	S	S	S	S
CO3		S	S	S	S	S
CO4		S	S	S	M	S
CO5		S	S	S	S	S

**Ramakrishna Mission Vivekananda College Evening College (Autonomous),
Department of Commerce Computer Applications – B.Com.(C.A.)**

Semester	Practical	Course Code	Course Title	Hours	Marks
III	03	UCCAP03	Relational Database Management System (Practical)	30	75

Course Objectives	<i>The purpose of learning this course is:</i>
❖ To design the databases to connect with the other programming applications.	
❖ To execute the SQL commands.	

Course Outcomes (COs)	<i>On the successful completion of this course, students will be able to :</i>
CO1	Perform the various operations in the database tables.
CO2	Display the records of the table.
CO3	Compute the basic arithmetic operations.
CO4	Return the specific records through SQL functions.
CO5	Implement Trigger and Procedures in SQL.

Exercises	Relational Database Management System (Practical)
1.	Create a table student master with the following fields name, regno, dept and year with suitable data types. Use Select command to do the following. a) Select the student's name column; b) Eliminate the duplicate entry in table. c) Sort the table in alphabetical order; d) Select all the Students of a particular department.
2.	Create a table master _book to contain the information of magazine code, magazine name, and publisher. Perform insert, update, and delete operations on the above table.
3.	From the following table: a) Create a view for those salespeople who belong to the city of New York. b) Create a view for all salespersons. Return salesperson ID, name, and city. <pre> salesman_id name city commission -----+-----+-----+----- 5001 James Hoog New York 0.15 5002 Nail Knite Paris 0.13 5005 Pit Alex London 0.11 5006 Mc Lyon Paris 0.14 5007 Paul Adam Rome 0.13 5003 Lauson Hen San Jose 0.12 </pre>
4.	From the following table: a) write a SQL query to find all salespeople and customers located in the city of London. b) write a SQL query to find distinct salespeople and their cities. Return salesperson ID and city <pre> salesman_id name city commission -----+-----+-----+----- 5001 James Hoog New York 0.15 5002 Nail Knite Paris 0.13 5005 Pit Alex London 0.11 5006 Mc Lyon Paris 0.14 5007 Paul Adam Rome 0.13 5003 Lauson Hen San Jose 0.12 Customer_id cust_name city grade salesman_id -----+-----+-----+-----+----- 3002 Nick Rimando New York 100 5001 3007 Brad Davis New York 200 5001 3005 Graham Zusi California 200 5002 3008 Julian Green London 300 5002 3004 Fabian Johnson Paris 300 5006 3009 Geoff Cameron Berlin 100 5003 </pre>

**Ramakrishna Mission Vivekananda College Evening College (Autonomous),
Department of Commerce Computer Applications – B.Com.(C.A.)**

5.	<p>From the following table:</p> <p>a) Write a SQL query to calculate total purchase amount of all orders. Return total purchase amount.</p> <p>b) Write a SQL query to calculate the average purchase amount of all orders. Return average purchase amount</p> <p>c) Write a SQL query that counts the number of unique salespeople. Return number of salespeople.</p> <pre> ord_no purch_amt ord_date customer_id salesman_id ----- 70001 150.5 2012-10-05 3005 5002 70009 270.65 2012-09-10 3001 5005 70002 65.26 2012-10-05 3002 5001 70004 110.5 2012-08-17 3009 5003 70007 948.5 2012-09-10 3005 5002 70005 2400.6 2012-07-27 3007 5001 70008 5760 2012-09-10 3002 5001 70010 1983.43 2012-10-10 3004 5006 70003 2480.4 2012-10-10 3009 5003 70012 250.45 2012-06-27 3008 5002 70011 75.29 2012-08-17 3003 5007 70013 3045.6 2012-04-25 3002 5001 </pre>
6.	<p>From the following tables</p> <p>a) Write a SQL query to find the salesperson and customer who reside in the same city. ReturnSalesman, cust_name and city.</p> <p>b) Write a SQL query to find those orders where the order amount exists between 500 and 2000. Return ord_no, purch_amt, cust_name, city</p> <pre> salesman_id name city commission -----+-----+-----+----- 5001 James Hoog New York 0.15 5002 Nail Knite Paris 0.13 5005 Pit Alex London 0.11 5006 Mc Lyon Paris 0.14 5007 Paul Adam Rome 0.13 5003 Lauson Hen San Jose 0.12 customer_id cust_name city grade salesman_id -----+-----+-----+-----+----- 3002 Nick Rimando New York 100 5001 3007 Brad Davis New York 200 5001 3005 Graham Zusi California 200 5002 3008 Julian Green London 300 5002 3004 Fabian Johnson Paris 300 5006 3009 Geoff Cameron Berlin 100 5003 3003 Jozy Altidor Moscow 200 5007 3001 Brad Guzan London 5005 ord_nopurch_amtord_datecustomer_idsalesman_id ----- 70001 150.5 2012-10-05 3005 5002 70009 270.65 2012-09-10 3001 5005 70002 65.26 2012-10-05 3002 5001 70004 110.5 2012-08-17 3009 5003 70007 948.5 2012-09-10 3005 5002 70005 2400.6 2012-07-27 3007 5001 70008 5760 2012-09-10 3002 5001 70010 1983.43 2012-10-10 3004 5006 70003 2480.4 2012-10-10 3009 5003 70012 250.45 2012-06-27 3008 5002 70011 75.29 2012-08-17 3003 5007 70013 3045.6 2012-04-25 3002 5001 </pre>

**Ramakrishna Mission Vivekananda College Evening College (Autonomous),
Department of Commerce Computer Applications – B.Com.(C.A.)**

7.	<p>From the following table: a)Write a SQL query to find the highest grade of the customers in each city. Return city, maximum Grade. b) write a SQL query to find the highest purchase amount ordered by each customer. Return customer ID, maximum purchase amount.</p> <pre> customer_id cust_name city grade salesman_id -----+-----+-----+-----+----- 3002 Nick Rimando New York 100 5001 3007 Brad Davis New York 200 5001 3005 Graham Zusi California 200 5002 3008 Julian Green London 300 5002 3004 Fabian Johnson Paris 300 5006 3009 Geoff Cameron Berlin 100 5003 3003 Jozy Altidor Moscow 200 5007 3001 Brad Guzan London 5005 ord_nopurch_amtord_datecustomer_idsalesman_id -----+-----+-----+-----+----- 70001 150.5 2012-10-05 3005 5002 70009 270.65 2012-09-10 3001 5005 70002 65.26 2012-10-05 3002 5001 70004 110.5 2012-08-17 3009 5003 70007 948.5 2012-09-10 3005 5002 70005 2400.6 2012-07-27 3007 5001 70008 5760 2012-09-10 3002 5001 70010 1983.43 2012-10-10 3004 5006 70003 2480.4 2012-10-10 3009 5003 70012 250.45 2012-06-27 3008 5002 70011 75.29 2012-08-17 3003 5007 70013 3045.6 2012-04-25 3002 5001 </pre>
8.	Create a table to contain phone number, user name, address of the phone user. Write a function to search for a address using phone numbers.
9.	Create a table to contain the information about the voters in a particular constituency. Write a proper trigger to update or delete a row in the table.
10.	Create a table stock to contain the itemcode, item name, current stock, date of last purchase. Write a stored procedure to seek for an item using itemcode and delete it, if the date of last purchase is before 1 year from the current date. If not, update the current stock.

Question Paper Pattern : Bloom Level (K6)			
Total Questions	To Answer	Marks per Question	Total Marks
5	3	20	60
Viva Questions			10
Record Notebook Submission			05
Grand Total			75

Mapping Course Outcomes (COs) with Programme Outcomes (POs) : S – Strong ; M – Medium ; L – Low					
COs \ POs	PO1	PO2	PO3	PO4	PO5
CO1	S	S	S	S	S
CO2	S	S	S	S	S
CO3	S	S	S	S	S
CO4	S	S	S	M	S
CO5	S	S	S	S	S

**Ramakrishna Mission Vivekananda College Evening College (Autonomous),
Department of Commerce Computer Applications – B.Com.(C.A.)**

Semester	Allied	Course Code	Course Title	Hours	Marks
III	03	UCCAL03	Quantitative Applications for Business - I	90	75

Course Objectives	<i>The purpose of learning this course is:</i>
❖ To acquire core knowledge of the basic concepts of statistics which include mean, median, mode dispersion	
❖ To analyze and interpret the data and applying different statistical measure	
❖ To improve ability to think and apply in competitive exams the concept of simple interest, compound interest.	

Course Outcomes (COs)	<i>On the successful completion of this course, students will be able to :</i>
CO1	Understand the concept of statistics and apply on to the sample obtained from the population
CO2	Classify and tabulate, diagrammatic representation and the purpose of drawing chart
CO3	Understand and analyze the concept of correlation and regression.
CO4	Identify and analyze the test of significance of data
CO5	Evaluate the concept and apply the statistical tool appropriately

UNIT I	Aptitude Test: Numerical reasoning, Logical ability, Verbal ability, Quantitative Aptitude: Data interpretation. Reasoning Tests, Abstract, Spatial, Visual, Verbal Ability Tests, Logical and Critical Reasoning Tests: Problem-Solving Tests, Decision-Making and Judgment Test. Data Graphs: Bar graphs, pie charts, and other graphs representing data.
UNIT II	Descriptive Statistics: Measure of central tendency, Arithmetic Mean, Mode and Median (with & without grouping), Harmonic Mean (ungrouped data), Quartiles, Standard Deviation.
UNIT III	Skewness: Karl Pearson's coefficient and Bowley's Coefficient of skewness Correlation and Regression: Simple linear correlation, Karl Pearson's coefficient and Spearman's rank correlation coefficient, Simple linear regression.
UNIT IV	Probability and Distributions: Problems based on Addition rule, Multiplication rule, Conditional probability, Baye's rule (without proofs). Binomial, Poisson, Normal distributions with properties.
UNIT V	Sampling and Tests of Significance: Types of sampling schemes–random and non-random sampling. Tests of significance – Z-tests for means and proportions. Confidence intervals for means and proportions (only large samples). T-test for means (single, two and paired samples). F-test for variances. Chi-square tests – for goodness of fit and independence.
Text Books	1. Statistical Methods – S.P.Gupta – Sultan Chand & Sons 2. Business Statistics – G.C. Beri – McGraw Hill Education
Reference Books	1. Business Statistics and Operation Research – P.R.Vittal – Margham Publication 2. Quantitative Aptitude – R.S.Agarwal – S.Chand&Sons

Question Paper Pattern	Theory	Problem	Total Questions	To Answer	Marks per Question	Total Marks
Section A	2	8	10	5	5	25
Section B	2	8	10	5	10	50
Grand Total						75

Mapping Course Outcomes (COs) with Programme Outcomes (POs): S – Strong; M – Medium; L – Low						
	POs	PO1	PO2	PO3	PO4	PO5
COs						
CO1		M	S	S	S	S
CO2		S	S	S	S	M
CO3		S	S	S	S	S
CO4		S	S	S	S	S
CO5		S	S	S	S	M

**Ramakrishna Mission Vivekananda College Evening College (Autonomous),
Department of Commerce Computer Applications – B.Com.(C.A.)**

Semester	Major	Course Code	Course Title	Hours	Marks
IV	09	UCCAM09	Business Finance	90	75

Course Objectives	<i>The purpose of learning this course is:</i>
❖ To acquire conceptual knowledge about scope and significance of finance.	
❖ To determine the various aspects using to appraise project financing	
❖ To assess the requirements of capital and financial	

Course Outcomes (COs)	<i>On the successful completion of this course, students will be able to :</i>
CO1	Understand the significance of business finance and value of money.
CO2	Examine the process of appraisal of project financing and leverages.
CO3	Identify the optimal capital structure required of varied nature of industries.
CO4	Analyze the risk and return possibilities of different investment plans.
CO5	Determine the floating capital requirements of industries.

UNIT I	Business Finance: Meaning, Nature, Significance, Objects and Scope of Business Finance, Functions of Financial Executive in an Organization. Time Value of Money: Introduction, Meaning, Needs, NPV method – advantages, disadvantages, Present value and Future value of money.
UNIT II	Project Financing: Meaning, Steps involved in Project Financing, Appraisal of project, Means of Project finance, Aspect of Project Appraisal. (Theory) Leverages: Concept of Leverages, Operating and Financial Leverages.
UNIT III	Capital structure: Meaning, Factors influencing capital structure – Optimal capital structure, Theories of Capital Structure - Net Income, Net Operating Income, MM Hypothesis and Traditional Approach.
UNIT IV	Capital Budgeting: Meaning, Process, Cash flow Estimation, Payback Period Method, Accounting Rate of Return, Net Present Value (NPV), Net Terminal Value, Internal Rate of Return (IRR), Profitability Index, Capital budgeting under Risk – Certainty Equivalent Approach and Risk Adjusted Discount Rate.
UNIT V	Management of Working Capital: Meaning & Concept, Need or Objects of Working Capital, types, and Advantages of Working Capital, disadvantages of Excessive Working Capital, Determinant's, assessment of Working Capital requirements.
Text Books	1. Financial Management - M.Y. Khan and P.K.Jain – McGraw Hill Education 2. Financial Management : Theory and Practice - Chandra, Prasanna TMH
Reference Books	1. Financial Management. - I. M. Pandey - Vikas 2. Financial Management and Policy : Global Perspective - Srivastava – R.M. Himalaya

Question Paper Pattern	Theory	Problem	Total Questions	To Answer	Marks per Question	Total Marks
Section A	5	5	10	5	5	25
Section B	2	8	10	5	10	50
Grand Total:						75

Mapping Course Outcomes (COs) with Programme Outcomes (POs) : S – Strong ; M – Medium ; L – Low						
COs \ POs	PO1	PO2	PO3	PO4	PO5	
CO1	S	S	S	S	S	
CO2	S	S	S	S	S	
CO3	S	S	S	S	M	
CO4	S	S	S	S	S	
CO5	S	S	S	S	M	

**Ramakrishna Mission Vivekananda College Evening College (Autonomous),
Department of Commerce Computer Applications – B.Com.(C.A.)**

Semester	Major	Course Code	Course Title	Hours	Marks
IV	10	UCCAM10	Legal Applications in Business	90	75

Course Objectives	<i>The purpose of learning this course is:</i>
❖ To impart basic knowledge and essence of the Indian Contract Act.	
❖ To learn the capacity of parties, consideration for a valid agreement.	
❖ To enable proper understand about cyber regulations and appellate tribunal.	

Course Outcomes (COs)	<i>On the successful completion of this course, students will be able to :</i>
CO1	Understand the essence of executing contracts in the field or application areas.
CO2	Identify the capacity of parties and consideration for a valid agreement.
CO3	Measure the essentials for a special contract, rights and duties of parties.
CO4	Analyze the rights and duties of different partners as per Indian Partnership Act, 1932.
CO5	Assess and apply the regulations and procedure for proceeding appellate.

UNIT I	The Indian Contract Act, 1872: Contract: Definition of Contract – Classification of Contracts– Essentials of a Valid Contract. Offer & Acceptance: Legal Rules – Communication of Offer and Acceptance–Revocation.
UNIT II	Consideration –Capacity of Parties – Free Consent – Legality of Object – Void Agreements– Contingent Contracts – Quasi Contracts – Discharge of Contract.
UNIT III	Special Contracts: Contract of Indemnity and Guarantee – meaning, rights and duties of surety. Contract of Bailment – meaning, rights and duties of Bailor & Bailee – Bailment & Pledge.
UNIT IV	The Indian Partnership Act, 1932: Essential Elements of Partnership – Types of Partnerships – Types of Partners – Registration of Firm – Rights & Duties of a Partner – Relation of Partners with Third Parties – Reconstitution of a Firm – Dissolution of a Firm.
UNIT V	The Information Technology Act, 2000: Definitions under the Law – Digital Signature – Electronic Governance– Regulation of Certifying Authorities - Electronic Signature Certificates – Penalties & Adjudication–Offences.
Text Books	1. Business Law, R. S. N. Pillai & Bagavathi, S. Chand & Company Ltd. 2. Elements of Mercantile Law, N. D. Kapoor, Sultan Chand & Sons.
Reference Books	1. Business Law, P.C. Tulsian, Bharath Tulsian, Mc Graw Hill Education. 2. Business Law, M.C. Kuchhal & Vivek Kuchhal, Sultan Chand & Sons (P) Ltd, India.

Question Paper Pattern	Theory	Problem	Total Questions	To Answer	Marks per Question	Total Marks
Section A	10	0	10	5	5	25
Section B	10	0	10	5	10	50
Grand Total						75

Mapping Course Outcomes (COs) with Programme Outcomes (POs): S – Strong; M – Medium; L – Low					
COs \ POs	PO1	PO2	PO3	PO4	PO5
CO1	S	S	S	S	S
CO2	S	S	S	S	M
CO3	S	S	S	S	S
CO4	S	S	S	S	S
CO5	S	S	S	S	M

**Ramakrishna Mission Vivekananda College Evening College (Autonomous),
Department of Commerce Computer Applications – B.Com.(C.A.)**

Semester	Major	Course Code	Course Title	Hours	Marks
IV	11	UCCAM11	Software Development with Visual Basic (Theory)	60	75

Course Objectives	<i>The purpose of learning this course is:</i>
❖ To acquire conceptual knowledge of the Application Development.	
❖ To create an interface to store the data in the database.	

Course Outcomes (COs)	<i>On the successful completion of this course, students will be able to :</i>
CO1	Understand the basic concepts of Visual Basic
CO2	Use the controls to design the applications
CO3	Execute the different functionalities with the documents interface
CO4	Comprehend the dynamic data exchange mechanism
CO5	Establish the database connections and report generation

UNIT I	Introduction to Visual Basic: Event Driven Programming - Data Types - Variables - Toolbox - Working with form properties, methods and events - Arrays - Control Arrays - Access Keys.
UNIT II	Standard Controls - Built-in ActiveX Controls - Message and Input Boxes - Simple program. Determinate Loops - Indeterminate Loops – Conditional Statements.
UNIT III	Built-In Functions (String, Numeric, Financial, Date and Time, Random) - Procedures - Menus - Projects with Multiple Forms - Multiple Document Interface (MDI).
UNIT IV	Dynamic Data Exchange (DDE) - Properties and Methods - Object Linking and Embedding (OLE): Fundamentals, Properties, Container and Control - ActiveX Control: Advantages ActiveX DLL
UNIT V	Open Database Connectivity (ODBC) - Data Access Objects (DAO) – Recordset - Connection & Command Object - Data Environment - Data Report and Controls.
Text Books	1. Visual Basic 6 From The Ground Up - Gary Cornell - Tata McGraw Hill Edition, 1999. 2. VB 6 Programming Black Book - Steven Holzner - Dream Tech Press, New Delhi, 2002.
Reference Books	1. A Beginner’s guide to visual basic 6.0 –Gagan Sahoo – Krishna Publishers, 2002 2. Visual Basic 6: The Complete Reference- Noel Jerke – Tata McGraw Hill Edition,1999.

Question Paper Pattern	Theory	Program	Total Questions	To Answer	Marks per Question	Total Marks
Section A	10	0	10	5	5	25
Section B	10	0	10	5	10	50
Grand Total						75

Mapping Course Outcomes (COs) with Programme Outcomes (POs) : S – Strong ; M – Medium ; L – Low						
COs \ POs	PO1	PO2	PO3	PO4	PO5	
CO1	S	S	S	S	M	
CO2	S	S	S	S	S	
CO3	S	S	S	S	S	
CO4	S	S	S	S	S	
CO5	S	S	S	S	M	

**Ramakrishna Mission Vivekananda College Evening College (Autonomous),
Department of Commerce Computer Applications – B.Com.(C.A.)**

Semester	Practical	Course Code	Course Title	Hours	Marks
IV	04	UCCAP04	Software Development with Visual Basic (Practical)	30	75

Course Objectives	<i>The purpose of learning this course is:</i>
❖ To know the skills and knowledge required to use essential features and capability of Visual Basic	
❖ To create programming system to produce graphical user interface in windows environment	

Course Outcomes (COs)	<i>On the successful completion of this course, students will be able to :</i>
CO1	Design a basic interface using standard controls
CO2	Apply a decision-making mechanism in window programming
CO3	Project the Animation program with various tools
CO4	Develop the customized windows program
CO5	Create graphical user interface windows application connects with database.

Exercises	Software Development with Visual Basic (Practical)
1.	Design a Simple Calculator and perform the Arithmetic Operations.
2.	Write a program to find Odd or Even and Factorial Value of a number.
3.	Write a program to work with RichTextBox, PictureBox, ImageBox using DragDrop and DragOver Events.
4.	Write a program to add the Selected Items using ListBox Control.
5.	Write a program to use Font Face, Size and Style with ActiveX Dialog Box.
Creation of Visual Basic Application with SQL database and perform the operations given below: a) Insertion b) Deletion, c) Modification, d) Generating a report for the following (6, 7, 8, 9, 10) :	
6.	Payroll
7.	Mark sheet Processing
8.	Saving Bank Account for Banking
9.	Inventory System
10	Library Information System

Question Paper Pattern: Bloom Level (K6)			
Total Questions	To Answer	Marks per Question	Total Marks
5	3	20	60
Viva Questions			10
Record Notebook Submission			05
Grand Total			75

Mapping Course Outcomes (COs) with Programme Outcomes (POs) : S – Strong ; M – Medium ; L – Low					
COs \ POs	PO1	PO2	PO3	PO4	PO5
CO1	S	S	S	S	M
CO2	S	S	S	S	S
CO3	S	S	S	S	S
CO4	S	S	S	S	S
CO5	S	S	S	S	M

**Ramakrishna Mission Vivekananda College Evening College (Autonomous),
Department of Commerce Computer Applications – B.Com.(C.A.)**

Semester	Major	Course Code	Course Title	Hours	Marks
IV	12	UCCAM12	Data Analytics with 'R' Programming (Theory)	60	75

Course Objectives	<i>The purpose of learning this course is:</i>
❖ To learn the fundamentals of R.	
❖ To comprehend how data is analyzed and visualized using statistical functions in R Programming.	

Course Outcomes (COs)	<i>On the successful completion of this course, students will be able to :</i>
CO1	Utilize the tokens to develop an R script and execute it.
CO2	Do modular programming to perform a specific task using functions and statements.
CO3	Represent the dataset in a standard dimensional layout.
CO4	Analyze the same type of elements for statistical data computation.
CO5	Design and visualize the database application with connectivity for data analysis.

UNIT I	Introduction: What is R Programming? – How to install & run R package? – Features of R – R Codes, Comments, Scripts, Command Prompt, and Text Editors – R Data types – R Variables – R Operators.
UNIT II	R Decision-Making: if, if-else, and switch. R Loops: for, while, and repeat. R Functions: Built-in, and User-defined. R String Manipulations: substr(), strsplit(), paste(), grep(), toupper(), and tolower().
UNIT III	R Vectors: Creation, Access, and Manipulation. R Lists: Creating, Naming, Accessing, Manipulating, Merging, and Converting list elements. R Matrices: Syntax to create a matrix, Accessing elements, and Computations in Matrix.
UNIT IV	R Arrays: Adding, Deleting, and Naming rows and columns – Accessing, Manipulating, and Calculating array elements. R Factors: Creation and Generation of factor levels. R Statistics: Mean, Median, and Mode– Regressions – Correlation – Chi square test – Time series analysis.
UNIT V	Data Frames: Create a data frame – Extract the data from data frame – Expand data frame – Data reshaping. R Data Interfaces: CSV file, Excel file, Binary file, XML file, Connecting R to MySQL., and Query the database tables. Data Visualization: Pie chart – Bar chart – Boxplot – Histogram – Line Graph – Scatterplot.
Text Books	1. R Programming for Beginners, Sandip Rakshit, McGraw Hill Education 2. The Art of R Programming - A Tour of Statistical Software Design, Norman Matloff, No Starch Press, 2011, ISBN: 9781593273842.
Reference Books	1. R for Everyone: Advanced Analytics and Graphics, Jared P. Lander, Pearson Education. 2. Data Analytics using R, Seema Acharya, McGraw Hill Education.

Question Paper Pattern	Theory	Program	Total Questions	To Answer	Marks per Question	Total Marks
Section A	10	0	10	5	5	25
Section B	10	0	10	5	10	50
Grand Total						75

Mapping Course Outcomes (COs) with Programme Outcomes (POs) : S – Strong ; M – Medium ; L – Low					
COs \ POs	PO1	PO2	PO3	PO4	PO5
CO1	M	S	S	S	S
CO2	S	S	S	S	S
CO3	S	S	S	S	S
CO4	S	S	S	M	S
CO5	S	S	S	S	S

**Ramakrishna Mission Vivekananda College Evening College (Autonomous),
Department of Commerce Computer Applications – B.Com.(C.A.)**

Semester	Practical	Course Code	Course Title	Hours	Marks
IV	05	UCCAP05	Data Analytics with 'R' Programming (Practical)	30	75

Course Objectives	<i>The purpose of learning this course is:</i>
❖ To work on built-in real time cases for statistical data analysis.	
❖ To practice the graphical data visualization in R programming.	

Course Outcomes (COs)	<i>On the successful completion of this course, students will be able to:</i>
CO1	Make use of iteration statements and predefined functions in a dataset.
CO2	Show the updated data elements of the database after the manipulations.
CO3	Collect the homogeneous data and perform the arithmetic operations.
CO4	Create a dataset for statistical analysis and Design a data frame for the organizations.
CO5	Connect the databases and visualize the data in different graphs.

Exercises	Data Analytics with 'R' Programming (Practical)
1.	Find the list of even numbers from 1 to n using R-Loops.
2.	Implement the built-in functions in R Programming
3.	Perform the string manipulations using R.
4.	Create a list containing strings, numbers, and logical values. Do the following over the list. a) Access the first element in the list; b) Give the names to the elements in the list c) Add element at some position in the list; d) Remove the element e) Print the fourth element; f) Update the third element
5.	Create two 3 X 3 matrices A and B and perform the following operations: a) Addition; b) Subtraction; c) Transpose of the matrix
6.	Implement the array concept in R programming.
7.	Create a dataset and perform statistical analysis (Mean, Median, Mode, Correlation, Regression, and Chi-Square Test) on the data using R.
8.	Design a data frame in R for storing about 10 employee details. Create a CSV file named "input.csv" that defines all the required information about the employee such as id, name, salary, start date, dept. Import into R and do the following analysis. a)Find the total number of rows & columns; b)Retrieve the details of an employee with maximum salary; c)Retrieve all the employees working in the IT Department; d)Retrieve the employees in the IT Department whose salary is greater than 20000 and write these details into another file "output.csv".
9.	Create a table in SQL to connect it to R and perform some queries with the table.
10.	Create a pie chart and bar chart using R.

Question Paper Pattern: Bloom Level (K6)			
Total Questions	To Answer	Marks per Question	Total Marks
5	3	20	60
Viva Questions			10
Record Notebook Submission			05
Grand Total:			75

Mapping Course Outcomes (COs) with Programme Outcomes (POs) : S – Strong ; M – Medium ; L – Low					
COs \ POs	PO1	PO2	PO3	PO4	PO5
CO1	M	S	S	S	S
CO2	S	S	S	S	S
CO3	S	S	S	S	S
CO4	S	S	S	M	S
CO5	S	S	S	S	S

**Ramakrishna Mission Vivekananda College Evening College (Autonomous),
Department of Commerce Computer Applications – B.Com.(C.A.)**

Semester	Allied	Course Code	Course Title	Hours	Marks
IV	04	UCCAL04	Quantitative Applications for Business – II	90	75

Course Objectives	<i>The purpose of learning this course is:</i>
❖ To acquire conceptual knowledge of operations research using LPP method.	
❖ To determine the various model use to acquire solutions for transportation problems.	
❖ To identify the assumptions for assignment and travelling salesman problem.	
❖ To learn the networking techniques, plan programme schedules and business data analytics platforms.	

Course Outcomes (COs)	<i>On the successful completion of this course, students will be able to:</i>
COC1	Understand the basic concepts of LPP method to get graphical solutions.
COC2	Outline and test for optimality using different methods of solving transportation problems.
COC3	Apply the solution to TPS and TSP problems.
COC4	Analyze projects to construct network analysis by minimizing time to maximize outcomes.
COC5	Diagnose and illustrate the data analysis with the results.

UNIT I	Introduction to O.R. and Linear Programming Problem (LPP): Origin, Nature and scope of O.R.; Linear Programming Problem – definition, LPP model, assumptions, formulation, graphical solution and simplex solution (only maximization and without artificial variables)
UNIT II	Transportation Problem (TP): Definition, TP model, assumptions, balanced, unbalanced TP, maximization TP, restricted cells, initial solution to TP using NWCR, LCEM / MMM and VAM methods. Test for optimality using MODI method.
UNIT III	Assignment Problem (AP) and Travelling Salesman Problem (TSP): Definition, A P model, assumptions, balanced, unbalanced AP, maximization AP, restricted cells, solution to AP using Hungarian assignment algorithm. Travelling Salesman Problem (TSP)–definition, assumptions, solution to TSP.
UNIT IV	Network Analysis: Definitions, rules to construct network diagram, path, critical path, project duration, CPM and PERT (without crashing), earliest and latest time calculations, slack, float.
UNIT V	Data Interpretation: meaning, understanding, organizing, and interpretation of the given data. Interest: Meaning - forms of interest, simple interest and compound interest. Speed, Time and Distance: Meaning, types of questions, tips and tricks, solved examples. Time and Work: Concept- Types, Negative Work, Work Equivalence, Efficiency,
Text Books	1. Operations Research techniques for management – VK Kapoor, Sultan Chand & Sons 2. Operations Research – Kanti Swaroop, PK Gupta, Man Mohan, Sultan Chand & Sons
Reference Books	1. Operations Research –PR Vittal – Margham Publishers. 2. Quantitative Aptitude - R.S,Aggarwal - S. Chand Publications

Question Paper Pattern	Theory	Problem	Total Questions	To Answer	Marks per Question	Total Marks
Section A	2	8	10	5	5	25
Section B	2	8	10	5	10	50
Grand Total						75

Mapping Course Outcomes (COs) with Programme Outcomes (POs) : S – Strong ; M – Medium ; L – Low					
COs \ POs	PO1	PO2	PO3	PO4	PO5
CO1	S	S	S	S	S
CO2	S	S	S	S	S
CO3	S	S	S	S	S
CO4	S	S	S	M	S
CO5	S	S	S	S	M

**Ramakrishna Mission Vivekananda College Evening College (Autonomous),
Department of Commerce Computer Applications – B.Com.(C.A.)**

Semester	Major	Course Code	Course Title	Hours	Marks
V	13	UCCAM13	Recent Trends in Human Resource Management	90	75

Course Objectives	<i>The purpose of learning this course is:</i>
❖	To understand the value of Human Resource since it is the core of any type of business.
❖	To instill the knowledge about new and recent trends for HR development.
❖	To learn and understand the remuneration system and work life pattern followed by organizations.

Course Outcomes (COs)	<i>On the successful completion of this course, students will be able to:</i>
CO1	Understand the basic concepts and functioning of Human resource department of the organizations.
CO2	Identify the talents and assigning the package by considering relative worth of each job.
CO3	Evaluate skills to develop quality consciousness among the students.
CO4	Analyze the importance of corporate ethics and social responsibility of organizations.
CO5	Evaluate the application aspects of skills and qualities require among the students.

UNIT I	Human Resource Management: Meaning - Objectives, importance and functions of HRM. Recruitment – Selection – Methods of Selection – Uses of various Tests – Interview techniques in Selection and Placement - Performance appraisals – Transfer – Promotion – Career Development.
UNIT II	Compensation: Cost to Company – CTC Fixed and Flexible Pay - Components – Incentives – Benefits – Motivation – Talent Retention- Welfare and Social Security Measures - Opportunities, Challenges, and Recent Trends in Compensation. Quality of Work Life - Meaning, Definition, Features of QWL - Methods of measuring QWL.
UNIT III	Knowledge Management - Meaning, Definition and Object of KM - Process of KM. Developing Quality Consciousness - Meaning, Definition, Features of QC - Components of QC and Strategies for QC. Human Capital - Meaning and Definition - Elements of Human Capital.
UNIT IV	Corporate Ethics: Business Ethics, Concept, Characteristics, Importance and Needs- Sources, code of Ethics- Guidelines for developing code of ethics, Ethics in Human Resource Management. Corporate Social Responsibility: Concept, Scope, Relevance and Importance of CSR in Contemporary Society. CSR towards employees and workers- CSR and environmental concerns, Role of HR professionals in CSR.
UNIT V	Swami Vivekananda’s thought on management and leadership: Leading to Empower – Motivation - Developing Mentally & Skillfully - Dedication & Patience - Institution Building - Leadership and Organization Building - Lesson for Modern Management - Innovator of Management Values - leadership on work performance - Women Empowerment - View on Globalization.
Text Books	1. Human Resource Management, Dr. C. B. Gupta, Sultan Chand & Sons 2. Human Resource Management, Prasad, L M, Sultan Chand & Sons
Reference Books	1. Human Resource Management, Tripathi, Prentice Hall 2. Human Resource Management, C. B. Mamoria & S. V. Gankar, Himalaya Publishing House

Question Paper Pattern	Theory	Problem	Total Questions	To Answer	Marks per Question	Total Marks
Section A	10	0	10	5	5	25
Section B	10	0	10	5	10	50
Grand Total						75

Mapping Course Outcomes (COs) with Programme Outcomes (POs) : S – Strong ; M – Medium ; L – Low					
COs \ POs	PO1	PO2	PO3	PO4	PO5
CO1	S	S	S	S	S
CO2	S	S	S	S	S
CO3	S	S	S	S	M
CO4	S	S	S	S	S
CO5	S	S	S	S	S

**Ramakrishna Mission Vivekananda College Evening College (Autonomous),
Department of Commerce Computer Applications – B.Com.(C.A.)**

Semester	Major	Course Code	Course Title	Hours	Marks
V	14	UCCAM14	Internet and Web Technologies (Theory)	60	75

Course Objectives	<i>The purpose of learning this course is:</i>
❖ To educate the students on the networking concept and uses of the internet.	
❖ To learn on how to design the web pages using various web technologies.	

Course Outcomes (COs)	<i>On the successful completion of this course, students will be able to:</i>
CO1	Understand the network models and internet technologies.
CO2	Develop and validate the basic web pages using html tags.
CO3	Design the web pages using CSS and create the responsive interfaces using JavaScript.
CO4	Store and transport data on the server.
CO5	Build user interface applications and restore data from back-end server

UNIT I	Computer Networks: Concept, Network Topologies – Types of Networks – Advantages – Applications – Threats and Viruses. Internet Basics: History, Uses and Services – Internet Protocols – Internet Connectivity and Domains – WWW – Web Browser and Web Server – Web Pages.
UNIT II	Introduction to HTML: Features, Structure, and HTML Tags – Linking Documents – Table Creation – Image and Attributes – Frames – Lists – Ordered, Unordered, and Definition List – Form and its objects.
UNIT III	DHTML Technologies: Cascading Style Sheet – Syntax, Types, and Changing Font, Text, Color, Background and Border Attributes– JavaScript – Syntax, Advantages, Data Types, Array, Operators, Statements, and Functions – Document Object Model – Events and Event Handlers.
UNIT IV	XML: Concept, Syntax, Attributes, and Validation – Creating XML Documents – Hyperlinks in extensible DOM – XML Query Language – Document Type Declaration – XML Schema – Storing XML files on the Server.
UNIT V	Introduction to Angular JS: Modules– Directives – Controllers – Data Binding – Filters – Displaying Data in a Table – Fetching Data running SQL – Angular JS DOM –Input Controls and Validation in Forms – Angular JS Events.
Text Books	1. Ivan Bayross, “Web Enabled Commercial Application Development Using HTML, JavaScript, DHTML and PHP”, BPB Publications, 2010, ISBN: 9788183330084 2. J. Akilandeswari, and N. P. Gopalan, “Web Technology: A Developer’s Perspective”, PHI.
Reference Books	1. Raj Kamal, “Internet and Web Technologies”, McGraw Hill Education, 2017.

Question Paper Pattern	Theory	Program	Total Questions	To Answer	Marks per Question	Total Marks
Section A	10	0	10	5	5	25
Section B	10	0	10	5	10	50
Grand Total						75

Mapping Course Outcomes (COs) with Programme Outcomes (POs) :S – Strong ; M – Medium ; L – Low

COs \ POs	PO1	PO2	PO3	PO4	PO5
CO1	S	S	S	S	S
CO2	S	S	S	S	S
CO3	S	S	S	S	S
CO4	S	S	S	M	S
CO5	S	S	S	S	M

**Ramakrishna Mission Vivekananda College Evening College (Autonomous),
Department of Commerce Computer Applications – B.Com.(C.A.)**

Semester	Practical	Course Code	Course Title	Hours	Marks
V	06	UCCAP06	Internet and Web Technologies (Practical)	30	75

Course Objectives	<i>The purpose of learning this course is:</i>
❖ To practice on connecting the web pages and applying the different styles.	
❖ To prepare an application using form objects and performing the events.	

Course Outcomes (COs)	<i>On the successful completion of this course, students will be able to:</i>
CO1	Develop the business websites with the knowledge of HTML tags.
CO2	Show the multiple documents in a single web page and load from different servers.
CO3	Use and design the controls with the functionalities.
CO4	Create the interface for the users and display the business data.
CO5	Find and extract the data using XML queries and form validation by AngularJS

Exercises	Internet and Web Technologies (Practical)
1.	Design a website of your department with minimum three links using HTML.
2.	Create a Program using HTML to display the ordered list and unordered list of a Departmental Store.
3.	Create a table to display list of products using row/column span attributes.
4.	Create a Program using HTML to display the ordered list and unordered list of a Departmental Store.
5.	Create a web form for a library application with necessary controls.
6.	Design a CSS style sheet for your department seminar programme.
7.	Create an array of 10 elements and display it.
8.	Design a simple calculator and perform the arithmetic operations with the events.
9.	Write a simple XML code to execute the queries.
10.	Write a program to validate the client-side form using AngularJS.

Question Paper Pattern : Bloom Level (K6)			
Total Questions	To Answer	Marks per Question	Total Marks
5	3	20	60
Viva Questions			10
Record Notebook Submission			05
Grand Total			75

Mapping Course Outcomes (COs) with Programme Outcomes (POs) : S – Strong ; M – Medium ; L – Low					
COs \ POs	PO1	PO2	PO3	PO4	PO5
CO1	S	S	S	S	S
CO2	S	S	S	S	S
CO3	S	S	S	S	S
CO4	S	S	S	M	S
CO5	S	S	S	S	M

**Ramakrishna Mission Vivekananda College Evening College (Autonomous),
Department of Commerce Computer Applications – B.Com.(C.A.)**

Semester	Major	Course Code	Course Title	Hours	Marks
V	15	UCCAM15	Problem Solving Using Python (Theory)	60	75

Course Objectives	<i>The purpose of learning this course is:</i>
❖ To develop general purpose programming through python to solve problems.	
❖ To extend the ability to write database applications in Python.	

Course Outcomes (COs)	<i>On the successful completion of this course, students will be able to:</i>
CO1	Draw a simple structure of python code.
CO2	Delineate python's control statements, conditional statements, and functions.
CO3	Create the modules and packages to organize the python code logically.
CO4	Organize the data using tuples and connect the python with the SQL database.
CO5	Develop a graphical user interface and handle files and errors.

UNIT I	Introduction: Syntax, Features, Characteristics, Applications, Compiler/Interpreter, Installing and Running Python – Identifiers – Reserved Words – Comments – Variables – Data Types – Operators – Writing a simple python code.
UNIT II	Decision Making Statements: if, if-else, and nested if – Looping Statements: for, while, and nested loops – Control Statements: break, continue, and pass – Functions: Built-in, User-defined, Recursion, and Fruitful.
UNIT III	Modules and Packages: Creating and Importing modules – math, random, and time modules – Initializing and Importing packages – Strings: Assign, String Length, Escape Characters, and String Slice – String Operators – String Methods – Lists: Accessing and Updating lists – List Operators – List Functions and Methods.
UNIT IV	Tuples: Definition, Assign, Access, Delete and Update tuples – Basic tuple operations – Tuple functions. Dictionaries: Operations, and Methods. Python with MySql Database: Database tables creation, and Table operations.
UNIT V	GUI in Python: Widgets and its types. Files: Opening and closing a file, Reading and writing a file, Renaming and deleting files – Exceptions: Standard exceptions, Handling exceptions, Exception with Arguments, and User-defined exceptions.
Text Books	1. How to Think Like a Computer Scientist: Learning with Python, Allen Downey, Jeffrey Elkner & Chris Meyers, Green Tea Press, 2002, ISBN: 9780971677500. 2. Learning Python: Powerful Object-Oriented Programming, Mark Lutz, O'Reilly Media.
Reference Books	1. Introduction to Computing & Problem Solving Using Python, E.Balagurusamy, McGraw Hill 2. Core Python Programming, R. Nageswara Rao, Dreamtech Press.

Question Paper Pattern	Theory	Program	Total Questions	To Answer	Marks per Question	Total Marks
Section A	10	0	10	5	5	25
Section B	10	0	10	5	10	50
Grand Total						75

Mapping Course Outcomes (COs) with Programme Outcomes (POs) : S – Strong ; M – Medium ; L – Low						
COs \ POs	PO1	PO2	PO3	PO4	PO5	
CO1	M	S	S	S	S	
CO2	S	S	S	S	S	
CO3	S	S	S	S	S	
CO4	S	S	S	S	S	
CO5	S	S	S	S	M	

**Ramakrishna Mission Vivekananda College Evening College (Autonomous),
Department of Commerce Computer Applications – B.Com.(C.A.)**

Semester	Practical	Course Code	Course Title	Hours	Marks
V	07	UCCAP07	Problem Solving Using Python (Practical)	30	75

Course Objectives	<i>The purpose of learning this course is:</i>
❖ To practice with various concepts of python programming.	
❖ To implement database connection for GUI-based applications in python.	

Course Outcomes (COs)	<i>On the successful completion of this course, students will be able to:</i>
CO1	Compile and run the python code with elementary concepts.
CO2	Bind the modules in a package and accomplish string manipulations.
CO3	Execute python's lists and tuple concepts.
CO4	Manage the data interface in both dictionary and SQL database through python coding.
CO5	Carry out the file operations and switch the exceptions in python.

Exercises	Problem Solving using Python (Practical)
1.	Write a Python program to print the numbers after removing even numbers from a series of numbers.
2.	Write a Python program to print first 10 natural numbers using while loop.
3.	Write a Python program to import module from a package.
4.	Write a Python program to count the number of strings and the first and last characters are same from a given list of strings.
5.	Write a Python program to check a list is empty or not, and remove duplicates from a list.
6.	Write a Python program to find the maximum and minimum product from the pairs of tuple within a given list.
7.	Write a Python program to retrieve the value of the nested key indicated by the given selector list from a dictionary.
8.	Write a Python program to store the data in MySql database with GUI.
9.	Write a Python program to append text to a file and display the text.
10.	Write a Python program to handle the exception with arguments.

Question Paper Pattern : Bloom Level (K6)			
Total Questions	To Answer	Marks per Question	Total Marks
5	3	20	60
Viva Questions			10
Record Notebook Submission			05
Grand Total:			75

Mapping Course Outcomes (COs) with Programme Outcomes (POs) : S – Strong ; M – Medium ; L – Low					
COs \ POs	PO1	PO2	PO3	PO4	PO5
	CO1	M	S	S	S
CO2	S	S	S	S	S
CO3	S	S	S	S	S
CO4	S	S	S	S	S
CO5	S	S	S	S	M

**Ramakrishna Mission Vivekananda College Evening College (Autonomous),
Department of Commerce Computer Applications – B.Com.(C.A.)**

Semester	Major	Course Code	Course Title	Hours	Marks
V	16	UCCAM16	Taxation and its Applications	90	75

Course Objectives	<i>The purpose of learning this course is:</i>
❖ To provide a detailed understanding of the various provisions of I.T. Act	
❖ To enable the students to about the Assessment Procedures and Tax Planning.	
❖ To learn and understand the remuneration system and work life pattern followed by organizations.	

Course Outcomes (COs)	<i>On the successful completion of this course, students will be able to:</i>
CO1	The students will understand the concepts of Income tax.
CO2	Identify the income assessment procedures of individual's income from salary.
CO3	Compute the income from house property as per the legal provisions.
CO4	Asses the profit and gain from business or profession.
CO5	Types of filing and computation of tax from various head.

UNIT I	Income Tax Act: Definition of Income – Assessment year – Previous Year – Assessee – Scope of Income – Charge of Tax – Residential Status – Exempted Income.
UNIT II	Income from Salary: Definition – Allowances – Valuation of perquisites – Deductions from Salary – Gratuity – Pension – Commutation of Pension – Leave Salary – Profits in lieu of Salary - Provident Funds – Deductions under Sec. 80.
UNIT III	Income from House Property: Annual Value – Meaning and Computation – Deductions from Annual Value – Legal Provisions. E-filing & Submission of Returns: E-filing – Concept – Procedure - 26AS – TDS – Traces – Filing of Return – Various Returns – Permanent Account Number (PAN) – Usage of PAN – Concept of Transfer Pricing - Fundamentals.
UNIT IV	Profits and Gains from Business or Profession: Income from Business or Profession – Allowable expenses – Not allowable expenses - General deductions – Provisions relating to Depreciation – Deemed Business Profits - Undisclosed incomes – Investments – Compulsory maintenance of Books of accounts – Audit of Accounts of certain persons – Special provisions for Computing Incomes on estimated basis – Computation of Income from Business or Profession.
UNIT V	Introduction to GST: Definition of GST, Meaning, Need for Introduction of GST, Different Models of GST, Goods and Services Exempted from GST, Registration Process, Taxable Events, Assessee's Liable to Pay GST. (Theory only)
Text Books	1. Income Tax Law & Practice, Gaur & Narang, Kalyani Publishers. 2. Income Tax Theory, Law & Practice, Reddy, T.S. & Hariprasad Reddy, Y, Margham Publications. 3. Sumit Dutt Majumder, GST in India, 2nd edn., (New Delhi: Centax Publications Pvt, Ltd.
Reference Books	1. Income Tax Law & Practice, Murthy. A, Vijay Nicole Imprints Pvt. Ltd. Chennai 2. Income Tax Law & Practice, Hariharan N, Vijay Nicole Imprints Pvt. Ltd. Chennai

Question Paper Pattern	Theory	Problem	Total Questions	To Answer	Marks per Question	Total Marks
Section A	6	4	10	5	5	25
Section B	4	6	10	5	10	50
Grand Total						75

Mapping Course Outcomes (COs) with Programme Outcomes (POs) : S – Strong ; M – Medium ; L – Low					
COs \ POs	PO1	PO2	PO3	PO4	PO5
CO1	S	S	S	S	S
CO2	S	S	S	S	M
CO3	S	S	S	S	S
CO4	S	S	S	S	S
CO5	S	S	S	S	M

**Ramakrishna Mission Vivekananda College Evening College (Autonomous),
Department of Commerce Computer Applications – B.Com.(C.A.)**

Semester	Elective	Course Code	Course Title	Hours	Marks
V	01	UCCAE01	Marketing Research for Business	90	75

Course Objectives	<i>The purpose of learning this course is:</i>
❖	To find out general market conditions and tendencies.
❖	To indicate the distribution methods best suited to the product and market.
❖	To study consumer behavior and get feedback using surveys.

Course Outcomes (COs)	<i>On the successful completion of this course, students will be able to:</i>
CO1	Understand the basic aspects of marketing research process and design.
CO2	Recognize the importance and techniques using in the process of marketing research.
CO3	Identify the data sources of sampling design and its techniques.
CO4	Recognize the data processing and interpretation process and methods.
CO5	Preparing periodical reports and results for better adoption to resolve the ethical issues.

UNIT I	Marketing Research: Definition and Nature. Purpose and Importance, Limitations of Marketing Research and Information System, Organization of marketing Research. Marketing Research Design: Research design - Pre-test, Post-test- Control group and Solomon four-group design - Causal Research - observation techniques - experiments and test markets.
UNIT II	Applications of Marketing Research: Basic Methods - Survey, Observation, Experiment. Specialized Techniques of Marketing Research - Panel, Brand, Barometer - Motivational Research, Advertising Research, New Product Research - Planning the General procedure - Internal business records and their uses - External Research.
UNIT III	Sampling design: Sampling procedure - types of sampling - sample size determination - Sampling Theory. Data Collection: Primary and secondary data - Questionnaire Design and issues – Interviews - Comparative and non-comparative attitude measurement scaling techniques,
UNIT IV	Data processing: Editing – Classification – Tabulation – Interpretation– uses of statistical methods – Technology in data processing. Data Analysis and Interpretation: Analyzing qualitative data collected through interviews and open-ended questions – salient features of different methods.
UNIT V	Reporting the Results: Preparing Marketing research reports and presentation: written report, format of the report, common problems in preparing reports, the critical nature of the report, Graphical presentation of reports. Ethical Issues: Ethical issues related to clients, respondents, sampling, questionnaire design, reporting.
Text Books	1. Marketing Research - An Applied Orientation, Naresh K Malhotra, Satyabhushan Dash, 5/e, Pearson Education, New Delhi. 2. Research Methodology: Methods and Techniques, C.R.Kothari & Gaurav Garg, New Age International Publishers.
Reference Books	1. Marketing Research, Hair, Bush, Ortinau, 3/e, Tata McGraw-Hill Publishing Company Limited. 2. Modern Marketing Research - Kulkarni, Pradhan, Patil - Himalaya publishing House.

Question Paper Pattern	Theory	Problem	Total Questions	To Answer	Marks per Question	Total Marks
Section A	10	0	10	5	5	25
Section B	10	0	10	5	10	50
Grand Total:						75

Mapping Course Outcomes (COs) with Programme Outcomes (POs) : S – Strong ; M – Medium ; L – Low						
COs \ POs	PO1	PO2	PO3	PO4	PO5	
CO1	S	S	S	S	S	
CO2	S	S	S	S	S	
CO3	S	S	S	S	S	
CO4	S	S	S	M	S	
CO5	S	S	S	S	S	

**Ramakrishna Mission Vivekananda College Evening College (Autonomous),
Department of Commerce Computer Applications – B.Com.(C.A.)**

Semester	Major	Course Code	Course Title	Hours	Marks
VI	17	UCCAM17	Banking and Financial Services	90	75

Course Objectives	<i>The purpose of learning this course is:</i>
❖ To provide the students with an overall idea of Indian Banking and financial services	
❖ To identify the services, markets and various instruments available and issuing regulation in India.	
❖ To understand the short-term credit instruments and the impact of rating system on the instruments.	

Course Outcomes (COs)	<i>On the successful completion of this course, students will be able to:</i>
CO1	Understand the basics of banking operations and regulations in India.
CO2	Examine the role and powers of SEBI as a controlling authority.
CO3	Identify the issue mechanism adopted by industries on issuing various instruments.
CO4	Analyze the essential aspects of issuing industrial finance as per needs.
CO5	Assessing the mechanism of mutual fund and system of credit rating.

UNIT I	Banking: Definition, Banker and Customer Relationships– Role of RBI, Banking regulation Act 1949. RBI credit control Measure – Secrecy of customer Account, Opening of account – special types of customer – types of deposit – Bank Pass book.
UNIT II	Securities and Exchange Board of India (SEBI): Functions of SEBI; Role of SEBI in Investor Protection. Financial Services – Meaning – Types; Merchant Banking – Concept – Functions.
UNIT III	New Issues Market: Players – Method of Marketing Securities - Capital Market: Instruments – Stock Exchange – Functions – Factors Influencing Stock Prices – Types of Speculators. Venture Capital: Meaning – Features – Stages of Financing – Factor Affecting Investment Decision.
UNIT IV	Leasing: Essentials – Types – Advantages – Limitations. Hire Purchase: Features – Lease Financing vs. Hire Purchase Financing. Factoring: Types – Mechanism – Functions of a Factor.
UNIT V	Mutual Fund: Meaning, Institutions Involved – Types – Advantages – Disadvantages, Association of Mutual Funds in India (AMFI) Code of Ethics. Credit Rating: Functions, Benefits, Process – Rating Methodology – Credit Rating Agencies in India.
Text Books	1. Banking theory Law & Practice, Sundharam and Varshney, Sultan Chand & Sons.,New Delhi. 2. Financial Markets and Services, E. Gordon & Dr. K. Natarajan, Himalaya Publishing House.
Reference Books	1. Banking and Financial Services – Dr. S. Gurusamy, Vijay Nicole. 2. Financial Services, Shashi K. Gupta & Nisha Aggarwal, Kalyani Publishers.

Question Paper Pattern	Theory	Problem	Total Questions	To Answer	Marks per Question	Total Marks
Section A	10	0	10	5	5	25
Section B	10	0	10	5	10	50
Grand Total						75

Mapping Course Outcomes (COs) with Programme Outcomes (POs) : S – Strong ; M – Medium ; L – Low					
COs \ POs	PO1	PO2	PO3	PO4	PO5
CO1	S	S	S	S	S
CO2	S	S	S	S	M
CO3	S	S	S	S	S
CO4	S	S	S	S	S
CO5	S	S	S	S	M

**Ramakrishna Mission Vivekananda College Evening College (Autonomous),
Department of Commerce Computer Applications – B.Com.(C.A.)**

Semester	Major	Course Code	Course Title	Hours	Marks
VI	18	UCCAM18	Computerized Accounting Applications (Theory)	60	75

Course Objectives	<i>The purpose of learning this course is:</i>
❖	To help students to acquire conceptual knowledge of the Computerized Accounting.
❖	To impart skills for applying Tally based (ERP.9) accounting system.

Course Outcomes (COs)	<i>On the successful completion of this course, students will be able to:</i>
CO1	Understand Company creation, various groups and ledger for business applications
CO2	Work with Inventory Master, Creation of Stock Group an Item.
CO3	Recording day to day transactions systematic in a business.
CO4	Work with Accounts Receivable and Payable in Tally ERP.9.
CO5	Prepare the different MIS reports of diverse business firms.

UNIT I	MAINTAINING CHART OF ACCOUNTS IN ERP: Introduction-Mouse/Keyboard Conventions-Company Creation, Shut, Select, Alter Details - Company Features and Configurations - F11: Company Features - F12: Configuration - Chart of Accounts – Ledger – Group - Ledger Creation – Single, Multi Ledger - Altering and Displaying Ledgers-Group Creation – Single, Multiple Group Creation – Displaying, Deletion of Groups and Ledgers – P2P procure to page.
UNIT II	MAINTAINING STOCK KEEPING UNITS (SKU): Introduction - Inventory Masters in ERP - Creating Inventory Masters - Creation of Stock Group, Units of Measure, Stock Item, Go down - Defining of Stock, Opening Balance in ERP Stock Category - Reports.
UNIT III	RECORDING DAY-TO-DAY TRANSACTIONS IN ERP: Introduction - Business Transactions - Source Document for Voucher - Recording Transactions in ERP - Accounting Vouchers-Receipt Voucher (F6) - Contra Voucher (F4) - Payment Voucher (F5) - Purchase Voucher (F9) - Sales Voucher (F8) - Debit Note Voucher - Credit Note (Ctrl+F8) - Journal Voucher (F7).
UNIT IV	ACCOUNTS RECEIVABLE AND PAYABLE MANAGEMENT: Introduction - Accounts Payables and Receivables - Maintaining Bill - wise Details - Activation of Maintain Bill - wise Details Feature - New Reference - Against Reference - Advance-On Account -Stock Category Report - Changing the Financial Year in ERP.
UNIT V	MIS REPORTS: Introduction - Advantages of Management Information Systems - MIS Reports in ERP – Trial Balance - Balance Sheet - Profit and Loss Account - Cash Flow Statement-Ratio Analysis – Books and Reports - Day Book - Receipts and Payments - Purchase Register - Sales Register - Bills Receivable and Bills Payable.
Text Books	1. Tally ERP 9 – Dr. Riswan Ahemed – Margham Publications. 2. Tally ERP 9 Training Guide – Nadhani – PBP Publications
Reference Books	1. Tally – Dr. Palanivel Murugan – Margham Publications 2. Tally ERP 9 (Power of Simplicity), Shraddha Singh, Navneet Mehra, – V&S publishers.

Question Paper Pattern	Theory	Program	Total Questions	To Answer	Marks per Question	Total Marks
Section A	10	0	10	5	5	25
Section B	10	0	10	5	10	50
Grand Total						75

Mapping Course Outcomes (COs) with Programme Outcomes (POs) : S – Strong ; M – Medium ; L – Low					
COs \ POs	PO1	PO2	PO3	PO4	PO5
CO1	S	S	S	S	S
CO2	S	S	S	S	S
CO3	S	S	S	S	S
CO4	S	S	S	S	M
CO5	S	S	S	S	M

**Ramakrishna Mission Vivekananda College Evening College (Autonomous),
Department of Commerce Computer Applications – B.Com.(C.A.)**

Semester	Practical	Course Code	Course Title	Hours	Marks
VI	08	UCCAP08	Computerized Accounting Applications (Practical)	30	75

Course Objectives	<i>The purpose of learning this course is:</i>
❖ To help the students to acquire Computerized Accounting skills.	
❖ To improve skills for preparing different accounting reports.	

Course Outcomes (COs)	<i>On the successful completion of this course, students will be able to:</i>
CO1	Create different books, groups and ledgers as per the business requirements.
CO2	Maintain different inventory groups and items for every business.
CO3	Create divers Cost Categories and income statement of Companies.
CO4	Develop Order Processing system for products of different companies.
CO5	Prepare Various Financial Reports periodically.

Exercises	Computerized Accounting Applications (Practical)
1.	Petty Cash Entries, Subsidiary Books
2.	Accounts Only – Accounts With Inventory
3.	Accounts With Inventory Tax Initialize
4.	Stock Categories
5.	Cost Categories
6.	Balance Sheet
7.	Final Accounts with Adjustments
8.	Order Processing
9.	Bill-wise Details
10.	Bank Reconciliation Statement

Question Paper Pattern : Bloom Level (K6)			
Total Questions	To Answer	Marks per Question	Total Marks
5	3	20	60
Viva Questions			10
Record Notebook Submission			05
Grand Total			75

Mapping Course Outcomes (COs) with Programme Outcomes (POs) : S – Strong ; M – Medium ; L – Low					
COs \ POs	PO1	PO2	PO3	PO4	PO5
CO1	S	S	S	S	S
CO2	S	S	S	S	S
CO3	S	S	S	S	S
CO4	S	S	S	S	S
CO5	S	S	S	S	M

**Ramakrishna Mission Vivekananda College Evening College (Autonomous),
Department of Commerce Computer Applications – B.Com.(C.A.)**

Semester	Major	Course Code	Course Title	Hours	Marks
VI	19	UCCAM19	Blockchain Technology in Cryptocurrency	90	75

Course Objectives	<i>The purpose of learning this course is:</i>
❖ To understand the role of blockchain in various business domains.	
❖ To learn the usage of bitcoin and to explore the basics of cryptocurrencies	

Course Outcomes (COs)	<i>On the successful completion of this course, students will be able to:</i>
CO1	Maintain a decentralized record of information in various business applications.
CO2	Protect the business data through cryptography and consensus mechanisms.
CO3	Analyze how blockchain is helpful in business models.
CO4	Comprehend the importance of cryptocurrency and its regulations for exchanges.
CO5	Figure out the value of investments in Bitcoin with Ethereum.

UNIT I	Introduction to Blockchain: Definition, Features, Benefits, Risks and Limitations – Blockchain Tiers – Blockchain Architecture. Blockchain Applications: Healthcare, Real Estate, Taxes, Financial Management, Cyber security, Big Data, IoT, and Cryptocurrency – The future of blockchain.
UNIT II	Blockchain Types: Public, Private, Hybrid, and Consortium – Blockchain Identity. Cryptography: Encryption, Decryption, Public Key, Private Key, Secret Key, Digital Signature, and Secure Hash Algorithm. Consensus Mechanisms in Blockchain: PoS, PoW, PoA, PoI, and PBFT.
UNIT III	Blockchain Business Models: Need for business models – Understanding the traditional business model – Classifications of Blockchain Business Models: BaaS, Token Economy, Blockchain-based Software Products, P2P business model, Development Platforms, and Blockchain Professional Services – Block chain for Banking and Financial transactions. Blockchain Use Cases: Trade Finance, SCM, Capital Markets, and KYC.
UNIT IV	Introduction to Cryptocurrency: Concept, Cryptocurrency Users, Tokens, Cryptocurrency Mining, Cryptocurrency Exchanges, Merits and Demerits of Cryptocurrency – Types of Cryptocurrency– Risks and returns of Cryptocurrency. Cryptocurrency Regulations: Stakeholder, Legal Framework, Black Market and Global Economy.
UNIT V	Bitcoin: Definition, Creation, Hashing in the Bitcoin, Bitcoin Network, Bitcoin Decentralization, Storing and using bitcoins, and Bitcoin Wallets – Bitcoin Mining Mechanisms – Bitcoin Protocols – Bitcoin Applications and Security. Ethereum: Definition, Features and Limitations –Ethereum Cash – Elements of Ethereum– Ethereum Network – Applications of Ethereum.
Text Books	1. Blockchain Technology: Concepts & Applications, Kumar Saurabh, Ashutosh Saxena, Wiley Pubs. 2. Bitcoin and Cryptocurrency Technologies: A Comprehensive Introduction, Arvind Narayanan, Joseph Bonneau, Edward Felten, Andrew Miller, Steven Goldfeder, Princeton University Press.
Reference Books	1. Blockchain Applications: A Hands-On Approach, Arshdeep Bahga, Vijay Madiseti, VPT Pubs.

Question Paper Pattern	Theory	Program	Total Questions	To Answer	Marks per Question	Total Marks
Section A	10	0	10	5	5	25
Section B	10	0	10	5	10	50
Grand Total						75

Mapping Course Outcomes (COs) with Programme Outcomes (POs) : S – Strong ; M – Medium ; L – Low					
COs \ POs	PO1	PO2	PO3	PO4	PO5
CO1	S	S	S	S	S
CO2	S	M	S	S	S
CO3	S	S	S	S	M
CO4	S	S	S	S	S
CO5	S	S	S	S	S

**Ramakrishna Mission Vivekananda College Evening College (Autonomous),
Department of Commerce Computer Applications – B.Com.(C.A.)**

Semester	Elective	Course Code	Course Title	Hours	Marks
VI	02	UCCAEO2	Entrepreneurial Development	90	75

Course Objectives	<i>The purpose of learning this course is:</i>
❖ To understand and learn the professional behavior expected of an entrepreneur	
❖ To identify significant changes and trends which create the environment for potential business opportunities.	

Course Outcomes (COs)	<i>On the successful completion of this course, students will be able to:</i>
CO1	Understand on the basic concepts of entrepreneurship and business opportunities
CO2	Specify the skills and qualities required for successful entrepreneurs.
CO3	Identify the business opportunities and its environment around us.
CO4	Examine the licensing regulations and quality conscious under practice.
CO5	Apply knowledge about business and project reports for starting new ventures on team based.

UNIT I	Entrepreneurship: Meaning, Skills, Functions, Origin & development, Theories, Role, Types of entrepreneur, Entrepreneur V/s Intra-preneur - Barriers to entrepreneurship, Recent trends – socio-preneur, edu-preneur, eco-preneur, and agro-preneur - Women entrepreneurs - Self Help Groups.
UNIT II	Creativity and Entrepreneurship: Steps in Creativity - Innovation and inventions - Using left brain skills to harvest right brain ideas - Legal Protection of innovation - Skills of an entrepreneur - Decision making process - Problem Solving. Industrial Park: Meaning, features, & examples - Special Economic Zone: Meaning, features & examples.
UNIT III	Identification of Business Opportunities: Sources and steps involved - SWOT analysis - Environment scanning – meaning, benefits, Factors considered - socio-cultural, economic, technical, demographic, legal and political, geographical and international factors. Market Research: meaning, techniques - field survey, test marketing, Delphi technique, desk research, observation & experiment method.
UNIT IV	License: Environmental Clearance - National Small Industries Corporation (NSIC) - Government Stores Purchase scheme (e-tender process) - Excise exemptions & concession - Exemption from income tax. Startup India: Benefits – policies – action plan – simplification & handholding – funding supports & incentives – industry academia partnership & incubation.
UNIT V	Small Scale Industry: Definition, objectives – role, Steps to start an SSI – impact of LPG on SSI – effect of WTO / GATT. Project Report: Introduction - Selection of Idea, Product / Service - Phases - Contents of a Project Report – Proforma of Project Report for the diverse Organizations.
Text Books	1. Entrepreneurial Development – Dr, C, B. Gupta and Dr. N.P. Srinivasan, S. Chand & Sons. 2. Women Entrepreneurs and Entrepreneurial skills development – Imusti
Reference Books	1. Entrepreneurial Development –Dr, Jayashree Suresh, Margam Publications. 2. Entrepreneurial Development – S.S. Khanka, S. Chand Publications.

Question Paper Pattern	Theory	Problem	Total Questions	To Answer	Marks per Question	Total Marks
Section A	10	0	10	5	5	25
Section B	10	0	10	5	10	50
Grand Total						75

Mapping Course Outcomes (COs) with Programme Outcomes (POs) : S – Strong ; M – Medium ; L – Low					
COs \ POs	PO1	PO2	PO3	PO4	PO5
CO1	S	S	S	S	S
CO2	S	S	S	S	S
CO3	S	S	S	S	S
CO4	S	S	S	S	S
CO5	S	S	S	S	M

**Ramakrishna Mission Vivekananda College Evening College (Autonomous),
Department of Commerce Computer Applications – B.Com.(C.A.)**

Semester	Elective	Course Code	Course Title	Hours	Marks
VI	03	UCCA03	Project Work – Report & Viva-Voce	90	75

Level of knowledge: Working knowledge

Course Objectives: To help students to acquire practical knowledge required for doing research.

Students should decide the area and topic for his project work as per their interest under the guidance of a faculty member. The student must prepare a project report in a prescribed format and need to be submitted to the college 30 days before the end of the sixth semester.

The viva-voce examination shall be conducted by the internal examiner and external examiner, who shall be from the panel of examiners suggested by the university from time to time. The approved project report has to be submitted to the university 15 days prior to the commencement of the university examinations.

The students who fail in the project will have to redo the project work and submit the same to the college for external examination by the university.

Project Evaluation Pattern:

Internal : Continuous Internal Assessment (CIA)	
Periodical Reviews	15
Model Viva-Voce	10
Total (A)	25
External : Semester End Examination (SEE)	
Project Report	25
Semester Viva-Voce	50
Total (B)	75
Grand Total (A+B)	100

**Ramakrishna Mission Vivekananda College Evening College (Autonomous),
Department of Commerce Computer Applications – B.Com.(C.A.)**

Semester	NME	Course Code	Course Title	Hours	Marks
I	01	UCCAX01	Elements of Tally	18	75

Course Objectives	<i>The purpose of learning this course is:</i>
❖ To enable the students to acquire conceptual knowledge about computerized accounting	
❖ To make the students familiarize with the accounting procedures using Tally ERP.9	

Course Outcomes (COs)	<i>On the successful completion of this course, students will be able to:</i>
CO1	Understand the fundamentals of Tally
CO2	Create the cost sheets
CO3	Work with accounting vouchers
CO4	Categorize the various stock groups and items
CO5	Return or cancel the purchase/sales orders

UNIT I	Introduction to tally -Accounting Information-MenurelatedtoAccounts-Ledgers-single–multiple–creation and displaying multiple ledgers.
UNIT II	Cost categories – single and multiple modes – cost centers – single & multiple modes
UNIT III	Vouchers: configuration - creating - customizing-displaying and altering vouchers – types – predefined - contra, purchase, payment, receipt, journal, optional and post – dated vouchers.
UNIT IV	Inventory information: Creation of stock groups – categories – Pure Inventory voucher -Receipt note voucher.
UNIT V	Rejections -in vouchers, Delivery note vouchers.
Text Books	1. Tally – Palanivel Murugan– Margham Publications.
Reference Books	1. Tally ERP.9 – Rezwan Ahmed, Margam Publications.

Question Paper Pattern	Theory	Problem	Total Questions	To Answer	Marks per Question	Total Marks
Section A	10	0	10	5	5	25
Section B	10	0	10	5	10	50
Grand Total						75

Mapping Course Outcomes (COs) with Programme Outcomes (POs) : S – Strong ; M – Medium ; L – Low						
COs \ POs	PO1	PO2	PO3	PO4	PO5	
CO1	S	S	S	S	S	
CO2	S	S	S	S	S	
CO3	S	S	S	S	S	
CO4	S	S	S	S	S	
CO5	S	S	S	S	M	

**Ramakrishna Mission Vivekananda College Evening College (Autonomous),
Department of Commerce Computer Applications – B.Com.(C.A.)**

Semester	NME	Course Code	Course Title	Hours	Marks
II	02	UCCAX02	Tally Reports	18	75

Course Objectives	<i>The purpose of learning this course is:</i>
❖ To understand the preparation of order statements, invoices and the various reports using Tally ERP.9	
❖ To make the students understand the application of Accounting Reports.	

Course Outcomes (COs)	<i>On the successful completion of this course, students will be able to:</i>
CO1	Understand how to create and delete the Purchase order and Sales order
CO2	Work with Invoice configuration and entry.
CO3	Generate the reports for balance sheet and trial balance
CO4	Analyze the financial performance, operating and solvency position of business.
CO5	Generate periodic business financial and analytical reports.

UNIT I	Purchase and Sales orders – creation-altering and deleting of purchase and sales order-viewing order positions.
UNIT II	Invoices – entry – configuration & Printing of invoices.
UNIT III	Reports - Trial balance, Balance sheet – configuration-P&L Account, stock summary,
UNIT IV	Ratio analysis , display menu-Accounts book-cash book – bank book"-statement of accounts, inventory books, day book.
UNIT V	Reports: Cash Flow – Funds flow Summary details – Day Book, Important features of tally – foreign exchange – currencies and rate of exchange.
Text Books	1. Tally – Palanivel Murugan– Margham Publications.
Reference Books	1. Tally ERP.9 – Rezwan Ahmed, Margam Publications.

Question Paper Pattern	Theory	Problem	Total Questions	To Answer	Marks per Question	Total Marks
Section A	10	0	10	5	5	25
Section B	10	0	10	5	10	50
Grand Total						75

Mapping Course Outcomes (COs) with Programme Outcomes (POs) : S – Strong ; M – Medium ; L – Low					
COs \ POs	PO1	PO2	PO3	PO4	PO5
CO1	S	S	S	S	S
CO2	S	S	S	S	S
CO3	S	S	S	S	S
CO4	S	S	S	S	S
CO5	S	S	S	S	M