

B.Com (Computers)

(w.e.f. 2016–2017)

First Year Syllabus (CBCS)



**FACULTY OF COMMERCE,
MAHATMA GANDHI UNIVERSITY
NALGONDA – 508 254 (T.S)**

DEPARTMENT OF COMMERCE, M.G.U.

*Structure of B.Com (Computers) (CBCS) for Mahatma Gandhi University,
Nalgonda. (w.e.f. Academic Year 2016-17)*

B.COM (Computers) PROGRAMME**FIRST YEAR:****SEMESTER-I**

Sl.No.	Code	Course Title	Course Type	HPW	Credits
(1)	(2)	(3)	(4)	(5)	(6)
1.	BC101	Environmental Studies	AECC-1	2	2
2.	BC102	English	CC-1A	5	5
3.	BC103	Second Language	CC-2A	5	5
4.	BC104	Financial Accounting - I	DSC-1A	5	5
5.	BC105	Business Economics	DSC-2A	5	5
6.	BC106	Business Organization	DSC-3A	4	4
7.	BC107	Information Technology	DSC-4A	3T+2P	4
		Total		31	30

SEMESTER-II

8.	BC201	Gender Sensitisation	AECC-2	2	2
9.	BC202	English	CC-1B	5	5
10.	BC203	Second Language	CC-2B	5	5
11.	BC204	Financial Accounting - II	DSC-1B	5	5
12.	BC205	Managerial Economics	DSC-2B	5	5
13.	BC206	Principles of Management	DSC-3B	4	4
14.	BC207	Management Information System	DSC-4B	3T+2P	4
		Total		31	30

SECOND YEAR:**SEMESTER-III**

15.	BC301	Principles of Insurance	SEC-1	2	2
16.	BC302	English	CC-1C	5	5
17.	BC303	Second Language	CC-2C	5	5
18.	BC304	Advanced Accounting	DSC-1C	5	5
19.	BC305	Income Tax-I	DSC-2C	5	5
20.	BC306	Business Statistics-I	DSC-3C	4	4
21.	BC307	Programming with C	DSC-4C	3T+2P	4
		Total		31	30

SEMESTER-IV

22.	BC401	Practice of Life Insurance	SEC-2	2	2
23.	BC402	English	CC -1D	5	5
24.	BC403	Second Language	CC-2D	5	5
25.	BC404	Corporate Accounting	DSC-1D	5	5
26.	BC405	Income Tax-II	DSC-2D	5	5
27.	BC406	Business Statistics-II	DSC-3D	4	4
28.	BC407	Objective Oriented Programming with C++	DSE-4D	3T+2P	4
		Total		31	30

THIRD YEAR:**SEMESTER-V**

29.	BC501	Practice of General Insurance	SEC-3	2	2
30.	BC502		GE-1	2	2
31.	BC503	Cost Accounting	DSC-1E	4	4
32.	BC504	Business Law	DSC-2E	4	4
33.	BC505	Banking Theory & Practice	DSC-3E	4	4
34.	BC506	Auditing	DSC-4E	4	4
35.	BC507	Computerised Accounting	DSE-1A	4T+2P	5
36.	BC508	E-Commerce	DSE-2A	4T+2P	5
		Total		32	30

SEMESTER-VI

37.	BC601	Regulation of Insurance Business	SEC-4	2	2
38.	BC602		GE-2	2	2
39.	BC603	Managerial Accounting	DSC-1F	4	4
40.	BC604	Company Law	DSC-2F	4	4
41.	BC605	Financial Institutions & Markets	DSC-3F	4	4
42.	BC606	Commerce Lab	DSC-4F	2T+4P	4
43.	BC607	Web Technologies	DSE-1B	4T+2P	5
44.	BC608	Relational Database Management Systems	DSE-2B	4T+2P	5
		Total		34	30
		GRAND TOTAL		190	180

AECC: Ability Enhancement Compulsory Course; **SEC:** Skill Enhancement Course; **DSC:** Discipline Specific Course; **DSE:** Discipline Specific Elective; **GE:** Generic Elective; **T=Theory; P=Practicals;**

SUMMARY OF CREDITS

Sl. No.	Course Category	No. of Courses	Credits Per Course	Credits
1	AECC	2	2	4
2	SEC	4	2	8
3	CC Language	8	5	40
	DSC	8	5	40
		16	4	64
4	DSE	4	5	20
5	GE	2	2	4
	TOTAL	44		180
	Commerce Total	28		124

SYLLABUS**Paper : (BC 104) : FINANCIAL ACCOUNTING - I**

Paper: BC104
THPW: 5 Hrs
Credits : 5

Max. Marks: 50
Exam Duration: 3 Hrs

Objective: to acquire conceptual knowledge of basics of accounting and preparation of final accounts of sole trader.

UNIT-I: ACCOUNTING PROCESS:

Financial Accounting: Introduction – Definition – Evolution – Functions-Advantages and Limitations – Users of Accounting Information- Branches of Accounting – Accounting Principles: Concepts and Conventions- Accounting Standards– Meaning – Importance – List of Accounting Standards issued by ASB – Accounting System- Types of Accounts – Accounting Cycle- Journal- Ledger and Trial Balance. (Including problems)

UNIT-II: SUBSIDIARY BOOKS:

Meaning –Types - Purchases Book - Purchases Returns Book - Sales Book - - Sales Returns Book - Bills Receivable Book - Bills Payable Book – Cash Book - Single Column, Two Column, Three Column and Petty Cash Book - Journal Proper.(Including problems)

UNIT-III: BANK RECONCILIATION STATEMENT:

Meaning – Need - Reasons for differences between cash book and pass book balances –Favourable and over draft balances – Ascertainment of correct cash book balance (Amended Cash Book) - Preparation of Bank Reconciliation Statement. (Including problems)

UNIT-IV: RECTIFICATION OF ERRORS AND DEPRECIATION:

Capital and Revenue Expenditure – Capital and Revenue Receipts: Meaning and Differences - Differed Revenue Expenditure. Errors and their Rectification: Types of Errors - Suspense Account – Effect of Errors on Profit. (Including problems)

Depreciation (AS-6): Meaning – Causes – Difference between Depreciation, Amortization and Depletion - Objectives of providing for depreciation – Factors affecting depreciation – Accounting Treatment – Methods of depreciation: Straight Line Method - Diminishing Balance Method (Including problems)

UNIT-V: FINAL ACCOUNTS:

Final Accounts of Sole Trader: Meaning -Uses -Preparation of Manufacturing, Trading and Profit & Loss Account and Balance Sheet – Adjustments – Closing Entries.(Including problems)

SUGGESTED READINGS:

1. Accountancy-I: Haneef and Mukherjee, Tata McGraw Hill Company.
2. Principles & Practice of Accounting: R.L.Gupta&V.K.Gupta, Sultan Chand.
3. Accountancy-I: S.P. Jain & K.L Narang, Kalyani Publishers.
4. Accountancy–I: Tulasian, Tata McGraw Hill Co.
5. Introduction to Accountancy: T.S.Grewal, S.Chand and Co.
6. Advanced Accountancy-I: S.N.Maheshwari& V.L.Maheswari, Vikas.
7. Fundamentals of Financial Accounting: Deepak Sehgil, Tax Mann Publication.
8. Financial Accounting: Jawahar Lal, Himalaya Publishing House.

Paper : (BC 105) : BUSINESS ECONOMICS

Paper: BC105
THPW: 5 Hrs
Credits : 5

Max. Marks: 50
Exam Duration: 3Hrs

Objective: to acquire knowledge for application of economic principles and tools in business practices.

UNIT-I: INTRODUCTION:

Business Economics: Meaning - Nature – Characteristics - Importance and Role - Micro & Macro Economics - Scope - Objectives - Law of Diminishing marginal utility - Law of Equi-marginal utility.

UNIT- II: DEMAND ANALYSIS:

Meaning – Function - Factors influencing Demand -Types of Demand -Demand Curve - Law of Demand –Exceptions to the law of demand-Elasticity of Demand: Concept - Types of elasticity of demand-price, income and cross Elasticity of Demand –measurement of elasticity—arc and point methods—Importance of various Elasticity of Demand

UNIT-III: SUPPLY ANALYSIS:

Law of Supply - Factors influencing Supply - Market Equilibrium- Consumer Surplus - Theory of Consumer behavior - Utility and indifference curve analysis.

UNIT-IV: PRODUCTION ANALYSIS:

Concept of Production –production function-Total Production - Marginal Production - Average Production –returns to a factor- Law of Variable Proportions - Law of Returns to Scale - Isocost – Isoquants - Economies and Dis-economies of Scale.

UNIT-V: COST AND REVENUE ANALYSIS:

Theory of Cost - Concepts of Cost - Short run and Long run cost curves - Traditional and Modern Approaches -Revenue Curves—relationship between total marginal and average revenues- --Break Even Analysis—Meaning – Assumptions – Uses and Limitations.

SUGGESTED READINGS:

1. Business Economics: V. G. Mankar, Himalaya Publishing House
2. Managerial Economics: Vanith Agrawal, Pearson Education
3. Business Economics: H. L. Ahuja, S. Chand & Co. Ltd.
4. Business Economics : R. K. Lekhi, Kalyani Publishers
5. Business Economics: D. M. Mithani, Himalaya Publishing House
6. Business Economics: P. N. Chopra, Kalyani Publishers
7. Essential of Business Economics: D. N. Dwivedi, Vikas Publishers
8. Managerial Economics: Varshney and Maheswari, Sultan Chand
9. Business Economics: P. K. Mehta, Tax Mann Publication.

Paper : (BC 106) : BUSINESS ORGANISATION

Paper: BC106
THPW: 4 Hrs
Credits : 4

Max. Marks: 50
Exam Duration: 3Hrs

Objective: To acquaint the students with the basics of Commerce and Business concepts and functions and forms of Business Organization

UNIT-1: FUNDAMENTAL CONCEPTS:

Concepts of Business, Trade, Industry and Commerce - Classification - Relationship between Trade, Industry and Commerce - Nature of Business - Objectives of Business – Functions of Business- Social Responsibility of a business - Steps to Start an Enterprise

UNIT-II: BUSINESS ORGANIZATION:

Forms of Business Organization - Classification - Factors Influencing the Choice of Suitable Form of Organization - Sole Proprietorship – Meaning, Definition - Characteristics - Advantages and Disadvantages - Suitability of Sole Proprietorship - Partnership -Kinds of Partners - - Partnership Deed -- Meaning – Contents - Registration of Partnership Advantages and Disadvantages of Partnership - Suitability of Partnership - Limited liability partnership – Hindu Undivided Family - Meaning - Characteristics - Advantages and Disadvantages - Co-Operative Organization – Characteristics -Types of Co-Operative Societies - Limitations of Cooperatives.

UNIT-III: FORMATION OF JOINT STOCK COMPANY:

Joint Stock Company - Meaning - Definition - Characteristics - Advantages and Disadvantages - Kinds of Companies -Promotion - Stages of Promotion - Promoter - Characteristics - Kinds - Preparation of Important Documents - Memorandum of Association - Clauses - Articles of Association - Contents – Prospectus - Contents – Red herring Prospectus- Statement in lieu of Prospectus.

UNIT-IV: SOURCES OF FINANCE:

Industrial Finance - Long Term and Short Term Finance - Fixed and Working Capital Finance - Sources of Corporate Finance (A brief introduction to Shares and Debentures, Retained Earnings, Underwriting, Inter Company Investments and Venture Capital, Angel Investors, lease, hire purchase, franchising) .

UNIT V: STOCK EXCHANGE AND MUTUAL FUNDS:

Stock Exchange, Functions — Working of Stock Exchanges, Mutual Funds –Importance, Functions, Types — Role of SEBI in Regulating Stock Exchanges and Mutual Funds in India

SUGGESTED READINGS:

1. Business Organization & Management: Sharma Shashi K. Gupta, Kalyani Publishers
2. Business Organization: Sharma Shashi K. Gupta, Kalyani publishers.
3. Organization & Management: R. D. Agarwal, McGraw Hill.
4. Modern Business Organization: S.A. Sherlekar, V.S. Sherlekar, Himalaya Publishing House
5. Business Organization & Management: C.R. Basu, Tata McGraw Hill
6. Business Organization & Management: R. N. Gupta, S. Chand,
7. Organizational Behaviour Text & Cases: V.S.P. Rao, Himalaya Publishing House
8. Business Organization & Management: Uma Shekaram, Tata McGraw Hill
9. Business Organization & Management: Niranjana Reddy & Surya Prakash, Vaagdevi publishers.
10. Business Organisation and Management, Dr. Neeru Vasihth, Tax Mann Publications.

Paper : (BC 107) : INFORMATION TECHNOLOGY

Paper: BC 107
 THPW: 5 (3T & 2P)
 Credits :4

Max. Marks: 35T + 15P
 Time: 3 Hrs.

Objective: to acquire basic knowledge in Information Technology and its applications in the areas of business.

UNIT-I: INTRODUCTION:

Introduction to computers - Generations of computers – An overview of computer system - Types of computers - Input & Output Devices.

Hardware: Basic components of a computer system - Control unit – ALU - Input/output functions - Memory – RAM – ROM – EPROM - PROM and Other types of memory.

UNIT-II: OPERATING SYSTEM (OS):

Meaning - Definition & Functions - Types of OS - Booting process - DOS – Commands (internal & external) - Wild card characters – Virus & Hackers – Cryptography & cryptology.

Windows: Using the Start Menu –Control Panel – Using multiple windows – Customizing the Desktop – Windows accessories (Preferably latest version of windows or Linux Ubuntu).

UNIT-III: WORD PROCESSING:

Application of word processing - Menus & Tool Bars - Word processor – Creating – Entering - Saving & printing the document - Editing & Formatting Text - Mail Merge and Macros (Preferably latest version of MS Word or Libre Office Writer).

UNIT-IV: SPREAD SHEET:

Application of work sheet/spread sheet - Menus & Tool bars - Creating a worksheet - Entering and editing of numbers - Cell reference - Worksheet to analyze data with graphs & Charts.

Advanced tools: Functions – Formulae – Formatting numbers - Macros – Sorting - Filtering - Validation & Consolidation of Data (Preferably latest version of MS Excel or Libre Office Calc).

UNIT-V: POWER POINT PRESENTATION:

Application of Power Point Presentation – Menus & Tool bars – Creating presentations – Adding - Editing and deleting slides - Templates and manually – Slide show – Saving - Opening and closing a Presentation – Types of slides - Slide Views - Formatting – Insertion of Objects and Charts in slides - Custom Animation and Transition (Preferably latest version of MS Power Point presentation - Libre Office Impress).

Internet & Browsing: Services available on internet – WWW – ISP – Browsers.

Multimedia: Application of multimedia – Images – Graphics - Audio and Video – IT security.

SUGGESTED READINGS:

1. Introduction to Computers: Peter Norton, McGraw Hill.
2. Fundamentals of Information Technology: Dr. NVN Chary, Kalyani Publishers.
3. Computer Fundamental: Anitha Goel, Pearson.
4. Information Technology Applications for Business: Dr. S. Sudalaimuthu, Himalaya
5. Introduction to Information Technology: IITL ESL, Pearson.
6. Introduction to Information Technology: V. Rajaraman, PHI.
7. Fundamental of Computers: Balaguruswamy, McGraw Hill.
8. PC Software under Windows: Puneet Kumar, Kalyani Publishers.
9. Information Technology and C language: Rajiv Khanna, New Age International.
10. Fundamentals of Information Technology: Alexis Leon, Vikas Publishing House.
11. Informational Technology: P. Mohan, Himalaya Publishing House.
12. Information Technology: R. Renuka, Vaagdevi Publishers.
13. OS-Linux Spoken Tutorials & Libre Office Spoken Tutorials by IIT Bombay.
14. Fundamentals of Information Technology: Rajiv Midha, Tax Mann Publications.

Paper : (BC 204) : FINANCIAL ACCOUNTING-II

Paper: BC204

THPW: 5Hrs

Credits : 5

Max. Marks: 50

Exam Duration: 3 Hrs

***Objective:** to acquire accounting knowledge of bills of exchange and other business accounting methods.*

UNIT-I: BILLS OF EXCHANGE:

Bills of Exchange - Definition- Distinction between Promissory note and Bills of exchange-Accounting treatment of Trade bills: Books of Drawer and Acceptor- Honour and Dishonour of Bills- Renewal of bills- Retiring of bills under rebate- Accommodation bills.(Including problems)

UNIT-II: CONSIGNMENT ACCOUNTS:

Consignment – Meaning – Features– Proforma invoice - Account sales – Del credere commission-Accounting treatment in the books of the consignor and the consignee - Valuation of consignment stock –Treatment of Normal and abnormal Loss - Invoice of goods at a price higher than the cost price. (Including problems)

UNIT-III: JOINT VENTURE ACCOUNTS:

Joint Venture – Meaning –Features-Difference between Joint Venture and Consignment- Accounting Procedure-Methods of Keeping Records for Joint Venture Accounts-Method of Recording in co-ventures books-Separate Set of Books Method- Joint Bank Account-Memorandum Joint Venture Account (Including problems)

UNIT-IV: ACCOUNTS FROM INCOMPLETE RECORDS:

Single Entry System – Meaning -Features–Difference between Single Entry and Double Entry systems -Defects in Single Entry System - Books and accounts maintained - Ascertainment of Profit - Statement of Affairs and Conversion method (Including problems)

UNIT-V: ACCOUNTING FOR NON-PROFIT ORGANIZATIONS:

Non- Profit Organization – Meaning – Features – Receipts and Payments Account – Income and Expenditure Account – Balance Sheet(Including problems)

SUGGESTED READINGS:

1. Accountancy-I: Haneef and Mukherjee, Tata McGraw Hill Co.
- 2.Principles and Practice of Accounting: R.L. Gupta & V.K. Gupta,Sultan Chand & Sons.
3. Accountancy–I: Tulasian, Tata McGraw Hill Co.
4. Accountancy–I: S.P. Jain & K.L Narang, Kalyani.
5. Advanced Accountancy-I: S.N.Maheshwari&V.L.Maheswari, Vikas.
6. Advanced Accountancy: M Shrinivas& K Sreelatha Reddy, Himalaya Publishers.
7. Financial Accounting: M.N Arora, Tax Mann Publications.

Paper : (BC 205) : MANAGERIAL ECONOMICS

Paper: BC205

THPW: 5 Hrs

Credits : 5

Max. Marks: 50

Exam Duration: 3Hrs

Objective: to impart conceptual and practical knowledge of managerial economics.

UNIT-I: NATURE AND SCOPE OF MANAGERIAL ECONOMICS:

Characteristics of managerial economics – Nature and scope of managerial economics -Importance of managerial economics- Basic economic tools in managerial economics- managerial economist role and responsibility

UNIT-II: DEMAND FORECASTING:

Demand estimations for major consumer durables and non-durable products – Demand forecasting techniques: Statistical and Non-Statistical techniques.

UNIT-III: MARKET ANALYSIS:

Definition of market – Market structure (Perfect competition, Imperfect competition) – Price determination -Firms equilibrium in perfect competition, monopoly, monopolistic, oligopoly and duopoly

UNIT-IV: MACRO-ECONOMICS FOR MANAGERS:

National income – Concepts – Methods - Measurement of national income – GDP and GVA—Business cycles- nature –Phases – Causes—Inflation - Causes and control – Deflation and stagflation.

UNIT-V: FISCAL AND MONETARY POLICY

Fiscal Policy- deficits-budgetary deficit-primary deficit-revenue deficit-fiscal deficit-Objectives of FRBM Act - Monetary Policy- Objectives – Repo Rate- Reverse Repo Rate- CRR- SLR- Finance Commission- role and objectives

SUGGESTED READINGS:

1. Managerial Economics: Craig H Peterson and Jain, Pearson education
2. Managerial Economics: Gupta, Tata McGraw Hill
3. Managerial Economics: Maheshwari and Gupta, Sultan Chand & Sons
4. Managerial Economics: Dr. P.C. Thomas, Kalyani Publishers
5. Managerial Economics: H.L. Ahuja, S. Chand and Company
6. Managerial Economics: Mithani, Himalaya Publications
7. Managerial Economics: R.L. Varshney and K.L. M Maheshwari, Sultan Chand
8. Managerial Economics: P. Venkataiah and Surya Prakash, Vaagdevi Publishers
9. Managerial Economics: P.L. Mehta, Tata McGraw Hill
10. Managerial Economics: R.N. Chopra, Kalyani Publishers
11. Managerial Economics: D.N. Dwivedi, Vikas Publishers
12. Managerial Economics: Thomas, Maurice, Sarkar, Tata McGraw Hill
13. Managerial Economics: YogeshMaheshwari, PHI Learning Pvt. Limited
14. Managerial Economics: P.K. Mehta, Tax Mann Pulications.

Paper : (BC 206) : PRINCIPLES OF MANAGEMENT

Paper: BC206

THPW: 4 Hrs

Credits : 4

Max. Marks: 50

Exam Duration: 3Hrs

Objective: To acquaint the students with the Principles, functions and practices of management

UNIT-I: INTRODUCTION

Management - Meaning - Characteristics - Administration Vs Management - Scope of Management - Importance of Management - Functions of Management - Levels of Management - Skills of Management -- Leader Vs. Manager - Scientific Management - Meaning - Definition - Objectives - Criticism – Fayol’s 14 Principles of Management .

UNIT-II: PLANNING

Meaning - Definition - Characteristics - Types of Plans - Advantages and Disadvantages – Approaches to Planning - Management by Objectives (MBO) - Steps in MBO - Benefits -Weaknesses

UNIT-III: ORGANIZING:

Organizing-Meaning, Definition – Organization Meaning, Definition - Process of Organizing - Principles of Organization - Types of Organization - Formal and Informal Organizations - Line, Staff Organizations - Line and Staff Conflicts - Functional Organization - - Span of Management - Meaning - Determining Span - Factors influencing the Span of Supervision

UNIT-IV: DELEGATION AND DECENTRALIZATION:

Authority – Meaning - Delegation - Definition - Characteristics: - Elements - Principles, Types of Delegation - Importance of Delegation: - Factors Influencing Degree of Delegation - Barriers - Guidelines for Making Delegation Effective - Centralization - Meaning – Decentralization- Meaning - Difference between Delegation and Decentralization.

UNIT-V: COORDINATION AND CONTROL:

Meaning - Definition - Principles of Coordination – Importance- Process of Coordination-techniques of Effective Coordination - Control - Meaning - Definition – relationship between planning and control- Steps in Control – Types (post, current and pre-control) - Requirements for effective control.

SUGGESTED READINGS:

1. Principles and Practice of Management: R. S. Gupta, B. D. Sharma, W.S. Bhalla, Kaylani
2. Management: Stephen P. Robbins, Person
3. Principles of Management: T Ramasamy, Himalaya Publication
4. Principles of Management Concept: Rajeshviwanathan, Himalaya Publication
5. Management Theory and Practices: P Subba Rao, Himalaya Publishing House
6. Essential of Management: Harold Kontz, McGraw Education
7. Principles of Management, Chandan JS, Vikas Publishers.
8. Fundamentals of Management, Dr. Pradeep Kumar, S. Chand
9. Principles of Management: Neeru Vasishth, Tax Mann Pulications.

Paper : (BC 207) : MANAGEMENT INFORMATION SYSTEM

Paper: BC 207
THPW: (3T+2P) 4 Hrs
Credits : 4

Max. Marks: 50
Exam Duration: 3Hrs

Objective: to equip the students with finer nuances of MIS.

UNIT-I: AN OVERVIEW OF MANAGEMENT INFORMATION SYSTEMS (MIS):

Concept & Definition of MIS - MIS Vs. Data Processing - MIS & Decision Support Systems - MIS & Information Resources Management - End User Computing – MIS Structure - Managerial View of IS – Functions of Management - Management Role - Levels of Management.

UNIT-II: FOUNDATION OF INFORMATION SYSTEMS:

Introduction to Information System in Business - Fundamentals of Information Systems - Solving Business Problems with Information Systems - Types of Information Systems, Effectiveness and Efficiency Criteria in Information System - Frame Work For IS - Sequence of Development of IS.

UNIT-III: CONCEPT OF PLANNING & CONTROL:

Concept of Organizational Planning - Planning Process - Computational Support for Planning - Characteristics of Control Process - Nature of Control in an Organization.

IS Planning – Determination of Information Requirements - Business Systems Planning - End Means Analysis - Organizing the Plan.

UNIT-IV: BUSINESS APPLICATIONS OF INFORMATION TECHNOLOGY:

Internet & Electronic Commerce – Intranet - Extranet & Enterprise Solutions - Information System for Business Operations - Information System for Managerial Decision Support - Information System for Strategic Advantage.

UNIT-V: ADVANCED CONCEPTS IN INFORMATION SYSTEMS:

Enterprise Resource Planning - Supply Chain Management - Customer Relationship Management and Procurement Management - Systems Analysis and Design – System Development Life Cycle – Prototyping – Sad - Project Management - Cost Benefit Analysis - Detailed Design - Implementation.

SUGGESTED READINGS:

1. Management Information System: O Brian, TMH.
2. Management Information System: Gordon B.Davis & Margrethe H.Olson, TMH.
3. Information System for Modern Management: Murdick, PHI.
4. Management Information System: Jawadekar, TMH.

SECOND YEAR SYLLABUS

Paper : (BC 301): PRINCIPLE OF INSURANCE

Paper: BC 301

PPW: 2 Hrs

Credits : 2

Max. Marks: 100

Exam Duration: 3Hrs

Objectives: *The objectives of the course are : 1) to provide a basic understanding of the Insurance Mechanism. 2) identify the relationship between Insurers and their Customers and the importance of Insurance Contracts. 3) give an overview of major Life Insurance and General Insurance Products*

UNIT I: RISK MANAGEMENT AND INSURANCE : Understanding of Risk Management – Different Types of Risks – Actual and Consequential Losses – Management of Risks – Loss Minimization Techniques – Basics, Evolution and Nature of Insurance – Concept of Pooling in Insurance – Different Classes of Insurance – Importance of Insurance – Unexpected Eventualities

UNIT II: INSURANCE BUSINESS AND MARKET : Management of Risk by Individuals – Management of Risk by Insurers – Fixing of Premiums – Reinsurance and its Importance for Insurers – Role of Insurance in Economic Development and Social Security – Contribution of Insurance to the Society – Constituents of Insurance Market – Operations of Insurance Companies – Operations of Intermediaries – Specialist Insurance Companies – Insurance Specialists – Role of Regulators – Other Bodies Connected with Insurance

UNIT III: INSURANCE TERMINOLOGY AND INSURANCE CUSTOMERS : Common Terms in Insurance: Life and Non Life – Specific Terms in Insurance: Life and Non Life – Usage of Insurance Terms – Understanding Insurance Customers – Different Customer Needs – Importance of Customers – Customer Mindsets – Customer Satisfaction – Customer Behavior at Purchase Point – Customer Behavior when Claim Occurs – Importance of Ethical Behavior

UNIT IV: INSURANCE CONTRACT : Insurance Contract Terms – Principles of Insurance: Principle of Insurable Interest, Principle of Indemnity, Principle of Subrogation, Principle of Contribution, Relevant Information Disclosure, Principle of utmost Good Faith, Relevance of Proximate Cause

UNIT V: INSURANCE PRODUCTS : a) *Life Insurance Products:* Risk of Dying Early – Risk of Living too Long –Products offered – Term Plans – Pure Endowment Plans – Combinations of Plans – Traditional Products – Linked Policies – Features of Annuities and Group Policies. b) *General Insurance Products:* Risks faced by Owner of Assets – Exposure to Perils – Features of Products Covering Fire and Allied Perils – Products covering Marine and Transit Risks – Products covering Financial Losses due to Accidents – Products covering Financial Losses due to Hospitalization – Products Covering Miscellaneous Risks

SUGGESTED READINGS

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| 1. Risk Management and Insurance | : Vaughan and Vaughan |
| 2. Risk Management | : A Publication of the Insurance Institute of India |
| 3. Role of Insurance in Financial inclusion | : Brinda Publishing House, Hyderabad |
| 3. Guide to Risk Management | : Sagar Sanyal |
| 4. Insurance and Risk Management | : P.K. Gupta |
| 5. Insurance Theory and Practice | : Tripathi PHI |
| 6. Principles of Insurance Management | : Neelam C Gulati, Excel Books |
| 7. Life and Health Insurance | : Black, JR KENNETH & Harold Skipper, Pearson |
| 8. Principles of Risk Management and Insurance | : (13 th Edition), George E Rejda |
| 9. Risk Management and Insurance | : Trieschman ,Gustavson and Hoyt . South Western College Publishing Cincinnati, Ohio |

Suggested Websites : 1) www.irda.gov.in 2) www.policyholder.gov.in 3) www.irdaindia.org.in

Paper: (BC 304) ADVANCED ACCOUNTING

Paper:BC 304

PPW: 5 Hrs

Credits : 5

Max. Marks: 100

Exam Duration: 3 Hrs

Objective: To acquire accounting knowledge of partnership firms and joint stock companies

UNIT-I: PARTNERSHIP ACCOUNTS-I:

Meaning – Partnership Deed - Capital Accounts (Fixed and Fluctuating) – Admission of a Partner – Retirement and Death of a Partner (Excluding Joint Life Policy)(Including problems)

UNIT-II: PARTNERSHIP ACCOUNTS–II:

Dissolution of Partnership – Insolvency of a Partner (excluding Insolvency of all partners) – Sale to a Company(Including problems)

UNIT-III: ISSUE OF SHARES, DEBENTURES, UNDERWRITING AND BONUS SHARES:

Issue of Shares at par, premium and discount - Prorata allotment – Forfeiture and Re-issue of Shares – Issue of Debentures with Conditions of Redemption – Underwriting:Meaning – Conditions- Bonus Shares: Meaning – SEBI Guidelines for Issue of Bonus Shares – Accounting of Bonus Shares(Including problems)

UNIT-IV: COMPANY FINAL ACCOUNTS AND PROFIT PRIOR TO INCORPORATION:

Companies Act 2013: Structure – General Instructions for preparation of Balance Sheet and Statement of Profit and Loss – Part-I: Form of Balance Sheet – Part-II: Statement of Profit and Loss – Preparation of Final Accounts of Companies - Profits Prior to Incorporation- Accounting treatment. (Including problems)

UNIT-V: VALUATION OF GOODWILL AND SHARES:

Valuation of Goodwill: Need – Methods: Average Profits, Super Profits and Capitalization Methods -Valuation of Shares: Need –Net Assets, Yield and Fair Value Methods. (Including problems)

SUGGESTED READINGS:

1. Principles and Practice of Accounting: R.L. Gupta & V.K. Gupta, Sultan Chand & Sons.
2. Advanced Accountancy: Shukla and Grewal, S.Chand & Co.
3. Advanced Accountancy: R.L.Gupta&Radhaswamy, Sultan Chand & Sons.
4. Advanced Accountancy (Vol-II): S.N.Maheshwari&V.L.Maheswari, Vikas.
5. Accountancy–III: Tulasian, Tata McGraw Hill Co.
6. Advanced Accountancy: Arulanandam; Himalaya.
7. Accountancy–III: S.P. Jain & K.L Narang, Kalyani Publishers.
8. Guidance Note on the Revised Schedule VI to the Companies Act, 1956, The Institute of Chartered Accounts of India.
9. Advanced Accounting (IPCC): D. G. Sharma, Tax Mann Publications.

Paper: (BC 305): INCOME TAX – I

Paper: BC 305
PPW: 5 Hrs
Credits : 5

Max. Marks: 100
Exam Duration: 3Hrs

***Objective:** To acquire conceptual and legal knowledge about Income Tax provisions relating to computation of Income from different heads with reference to an Individual Assessee.*

UNIT-I: INTRODUCTION:

Direct and Indirect Taxes – Canons of Taxation - Features and History of Income Tax in India – Definitions and Basic Concepts of Income Tax: Assessee – Deemed Assessee – Assessee-in-default – Assessment Year – Previous Year - Income Tax general rule and Exemptions to the Rule– Person – Income – Gross Total Income – Total Income — Incomes Exempt from Tax. Residential Status and Scope of Total Income: Meaning of Residential Status – Conditions applicable to an Individual Assessee – Incidence of Tax – Types of Incomes – Problems on computation of Total Income of an Individual based on Residential Status.

UNIT-II: AGRICULTURAL INCOME:

Introduction – Definition – Tests to determine Agricultural Income – Partly Agricultural and partly Non-Agricultural Income – Integration: conditions – provisions – computation of Tax on Integration process. Heads of income: Gross Total Income – Taxable Income – Income Tax Rates.

UNIT-III: INCOME FROM SALARIES:

Definition of ‘Salary’ – Characteristics of Salary – Computation of Salary Income: Salary u/s 17(1) – Annual Accretion – Allowances – Perquisites – Profits in lieu of Salary – Deductions u/s. 16 – Problems on computation of Income from Salary.

UNIT-IV: INCOME FROM HOUSE PROPERTY:

Definition of ‘House Property’ – Exempted House Property incomes– Annual Value – Determination of Annual Value for Let-out House and Self-occupied House – Deductions u/s.24 – Problems on computation of Income from House Property.

UNIT-V: PROFITS AND GAINS OF BUSINESS OR PROFESSION:

Definition of ‘Business and Profession’ – Procedure for computation of Income from Business – Rules – Revenue and Capital nature of Incomes and Expenses – Allowable Expenses u/s. 30 to 37 – Expenses expressly disallowed – Deemed Profits – Valuation of Stock – Miscellaneous provisions u/s 44. Depreciation: Meaning – Conditions for charge of depreciation – Assets used for Business – Block of Assets – Rates of Depreciation – Miscellaneous Provisions about depreciation – Computation of Depreciation –problems on computation of Income from Business. Income from Profession: Rules– procedure – problems on computation of Income from Profession.

SUGGESTED READINGS:

1. Income Tax Law and Practice: V.P. Gaur & D.B Narang, Kalyani Publishers.
2. Direct Taxes Law & Practice: Dr. Vinod K. Singhania & Dr. Kapil Singhania, Taxmann
3. Income Tax: B.B. Lal, Pearson Education.
4. Taxation: R.G. Saha, Himalaya Publishing House Pvt. Ltd.
5. Income Tax: Johar, McGrawHill Education.
6. Taxation Law and Practice: Balachandran & Thothadri, PHI Learning.

Paper: (BC 306): BUSINESS STATISTICS-I

Paper: BC 306

PPW: 4Hrs

Credits :4

Max. Marks: 100

Exam Duration: 3hrs

Objective: To inculcate analytical and computational ability among the students.

UNIT-I: INTRODUCTION:

Origin and Development of Statistics – Definition - Importance and Scope - Limitations of Statistics - Distrust of Statistics.

Statistical Investigation: Planning of statistical investigation - Census and Sampling methods - Collection of primary and secondary data - Statistical errors and approximation - classification and Tabulation of data - Frequency distribution.

UNIT – II: DIAGRAMMATIC AND GRAPHIC PRESENTATION:

Diagrammatic presentation: One Dimensional and Two Dimensional Diagrams – Pictograms – Cartograms Graphic presentation: Technique of Construction of Graphs - Graphs of Frequency Distribution - Graphs of Time Series or Histograms.

UNIT-III: MEASURES OF CENTRAL TENDENCY:

Introduction –Significance -Arithmetic Mean- Geometric Mean - Harmonic Mean - Mode – Median - Quartiles and Percentiles - Simple and Weighted Averages - Uses and Limitations of different Averages.

UNIT-IV: MEASURES OF DISPERSION, SKEWNESS AND KURTOSIS:

Measures of Dispersion: Significance - Characteristics - Absolute and Relative Measures - Range - Quartile Deviation - Mean Deviation- Standard Deviation - Coefficient of Variation.

Measures of Skewness - Karl Pearson's Coefficient of Skewness - Bowley's Coefficient of Skewness - Kelly's Measure of Skewness – Kurtosis: Mesokurtosis, Platy kurtosis and Leptokurtosis.

UNIT-V: CORRELATION:

Meaning -Types - Correlation and Causation – Methods: Scatter Diagram - Karl Person's Coefficient of Correlation - Probable Error and Interpretation of Coefficient of Correlation - Rank Correlation - Concurrent Deviation Method.

SUGGESTED READINGS:

1. Statistics for Management: Levin & Rubin, Pearson
2. Fundamentals of Statistics: Gupta S.C, Himalaya
3. Statistics: E. Narayanan Nadar, PHI Learning
4. Business Statistics: Dr. J. K. Thukral, Taxmann Publications
5. Business Statistics: K. Alagar, Tata McGraw Hill
6. Fundamentals of Statistical: S. P Gupta, Sultan Chand
7. Business Statistics: J. K. Sharma, Vikas Publishers
8. Business Statistics: S. L Aggarwal, S. L. Bhardwaj, Kalyani Publications
9. Statistics-Problems and Solutions: Kapoor V.K, S. Chand
10. Statistics - Theory, Methods and Applications: Sancheti D.C. & Kapoor V.K
11. Business Statistics: S. K. Chakravarty, New Age International Publishers
12. Statistics: Andasn,Sweenly,Williams,Cingage.

Paper: (BC 307): PROGRAMMING WITH C

Paper: BC 307
PPW: 4 (3T+2P)

Max. Marks: 70T + 30P
Exam Duration: 3 Hrs.

Credits : 4

Objectives: *To gain the skills of Structured (Procedural/Functional) Programming using C Language.*

UNIT-I: INTRODUCTION TO C LANGUAGE, DATA TYPES AND I/O OPERATIONS:

Introduction: Types of Languages – History of C language – Basic Structure – Creating – Compiling - Linking and Executing the C Program - Pre-processors in “C”.

Types and I/O operations: Keywords & Identifiers – Constants – Variables - Scope and Life of a Variable - Data types - Storage classes - Reading a character or values - Writing a character or value - Formatted Input and Output operations.

UNIT-II: OPERATORS, EXPRESSIONS AND DECISION MAKING:

Operators: Introduction – Arithmetic – Relational – Logical – Assignment - Conditional - Special operators – Expressions: Arithmetic – Evaluation - Type conversions.

Decision Making & Looping: Introduction - If statements - If-else statements - Switch statements - Conditional statements - While statements - Do statements - For Statements.

UNIT-III: ARRAYS AND STRINGS:

Arrays: Introduction - Defining an array - Initializing an array - One dimensional array – Two dimensional array - Dynamic array.

Strings: Introduction - Declaring and initializing string variables - Reading and Writing strings - String handling functions.

UNIT-IV: BUILT-IN FUNCTIONS AND USER-DEFINED FUNCTIONS:

Built-in functions: Mathematical functions - String functions - Character functions - Date functions. User defined functions: Introduction - Need for user defined functions - Elements of functions - Return values and their types - Function declaration - Function calls - Recursive functions.

UNIT-V: STRUCTURES AND POINTERS:

Structures: Introduction - Declaring structures variables - Accessing structure members - Functions and Structures - Array of structures - Enumerated Data types - Introduction to Unions.

Pointers: Fundamentals - Understanding pointers - Address - Declaration of Pointers.

LAB: PROGRAMS USING C.

SUGGESTED READINGS:

1. Programming in ANSCI C: Balaguruswamy, McGraw Hill.
2. Programming in C: Ashok Kamthane, Pearson.
3. C How to Program: P.J. Deitel & H.M. Deitel, Pearson & PHI.
4. Programming in C: K.S. Kahlon, Kalyani Publishers.
5. Fundamental of C: Dr. N. Guruprasad, Himalaya Publishing House.
6. C: Learning and Building Business and System Applications: Susant Rout, PHI.
7. Mastering C: K.R. Venugopal, McGraw Hill.
8. Programming in C: J.B. Dixit, Firewal Media.
9. The C Programming Language: B.W.Kernighan & D.M.Ritehie, PHI.
10. C: The Complete Reference: H.Schildt, McGraw Hill.
11. Let Us C: Y.Kanetkar, BPB.
12. C++ Spoken Tutorials by IIT Bombay

Paper : (SEC-2) : PRACTICE OF LIFE INSURANCE

Paper: SEC-2

PPW: 2 Hrs

Credits : 2

Max. Marks: 50 (40+10)

Exam Duration: Hrs

Objectives:a)To make the student understand Life Insurance Market in India. b) To discuss the issues related to risk management in view of life insurance.

UNIT-I: INTRODUCTION TO LIFE INSURANCE AND TYPES OF LIFE INSURANCE

POLICIES AND PREMIUM CALCULATION :Meaning evolution, growth and principles of Life Insurance —Life Insurance Organizations in India-- Competition and Regulation of Life Insurance.Types of Life Insurance Policies – Term, Whole Life, Endowment, Unit Linked and with or without Profit Policies –Customer Evaluation – Policy Evaluation — Group and Pension Insurance Policies – Special features of Group Insurance /Super Annuation Schemes – Group Gratuity Schemes.Computation of Premiums—Meaning of Premium, its calculation--Rebates – Mode of Rebates – Large sum assured Rebates – Premium Loading – Rider Premiums – Computation of Benefits – Surrender value – Paid up value

UNIT-II: SETTLEMENT OF CLAIMS RISK & UNDERWRITINGS AND FINANCIAL

PLANNING & TAX SAVING: Settlement of claims: Intimation Procedure, documents and settlement procedures.Underwriting: The need for underwriting – Guiding principles of Underwriting – Factors affecting Insurability – Methods of Life Classification – Laws affecting Underwriting.Financial Planning and taxation: Savings – Insurance vis-à-vis- Investment in the Units Mutual Funds, Capital Markets – Life Insurance in Individual Financial Planning – Implications in IT treatment.

SUGGESTED READINGS:

1. Insurance Institute of India, Practice of Life Insurance, Mumbai.
2. P.K.Gupta, Insurance and Risk Management, Himalaya Publishing House, Mumbai.
3. Kanika Mishra, Fundamentals of Life Insurance: Theories and Applications, Prentice Hall
4. Kutty, S.K., Managing Life Insurance, Prentice Hall of India: New Delhi
5. Black, Jr. Kenneth and Harold Skipper Jr., Life and Health Insurance, Prentice Hall, Inc., England.
6. K.C. Mishra and C.S. Kumar, Life Insurance: Principles and Practice, Cengage Learning: New Delhi.
7. Sadhak, Life Insurance in India, Respose Books: New Delhi

Paper: (BC 404): CORPORATE ACCOUNTING

Paper: BC 404

PPW: 5 Hrs

Credit : 5

Max. Marks: 100

Exam Duration: 3 Hrs

***Objective:** To acquire knowledge of AS-14 and preparation of accounts of banking and insurance companies.*

UNIT-I: COMPANY LIQUIDATION:

Meaning – Modes - Contributory Preferential Payments – Statements of Affairs - Liquidator's Remuneration - Preparation of Liquidator's Final Statement of Account (Including problems)

UNIT-II: AMALGAMATION (AS-14):

Amalgamation: In the nature of merger and purchase – Calculation of Purchase Consideration – Accounting Treatment in the books of transferor and transferee companies. (Including problems)

UNIT-III: INTERNAL RECONSTRUCTION AND ACQUISITION OF BUSINESS:

Internal Reconstruction: Accounting treatment – Preparation of final statement after reconstruction- Acquisition of business when new set of books are opened- Debtors and Creditors taken over on behalf of vendors- When same set of books are continued(Including problems)

UNIT-IV: ACCOUNTS OF BANKING COMPANIES:

Books and Registers maintained – Slip system of posting – Rebate on Bills Discounted – Non-Performing Assets – Legal Provisions relating to final accounts - Final Accounts. (Including problems)

UNIT-V: ACCOUNTS OF INSURANCE COMPANIES AND INSURANCE CLAIMS:

Introduction – Formats-Revenue Account–Net Revenue Account - Balance Sheet - Valuation Balance Sheet – Net Surplus – General Insurance - Preparation of final accounts with special reference to Fire and Marine Insurance - Insurance claims- Meaning – Loss of Stock and Assets – Average Clause – Treatment of Abnormal Loss - Loss of Profit. (Including problems)

SUGGESTED READINGS:

1. Advanced Accountancy (Vol-II): S.N.Maheshwari&V.L.Maheswari, Vikas.
2. Accountancy–III: Tulasian, Tata McGraw Hill Co.
3. Advanced Accountancy: Arulanandam; Himalaya
4. Accountancy–III: S.P. Jain & K.L Narang, Kalyani Publishers
5. Advanced Accounting (Vol-II): Chandra Bose, PHI
6. Advanced Accountancy: Shukla and Grewal, S.Chand& Co
7. Advanced Accountancy: R.L.Gupta&Radhaswamy, Sultan Chand & Sons
8. Corporate Accounting: Sakshi Vasudeva, Himalaya.

Paper: (BC 405): INCOME TAX – II

Paper: BC 405
PPW: 5 Hrs
Credit :5

Max. Marks: 100
Exam Duration: 3Hrs

Objective: To acquire conceptual and legal knowledge about Income Tax provisions relating to computation of Income from different heads with reference to an Individual Assessee.

UNIT-I: CAPITAL GAINS:

Introduction - Meaning – Scope of charge – Basis of charge – Short term and Long term Capital Assets – Transfer of Capital Asset – Deemed Transfer – Transfer not regarded as Transfer – Determination of Cost of Acquisition – Procedure for computation of Long-term and Short-term Capital Gains/Losses – Exemptions in respect of certain Capital Gains u/s. 54 – Problems on computation of capital gains.

UNIT-II: INCOME FROM OTHER SOURCES:

General Incomes u/s. 56(1) – Specific Incomes u/s. 56(2) – Dividends u/s. 2(22) – Interest on Securities – Gifts received by an Individual – Casual Income – Family Pension – Rent received on let out of Furniture- Plant and Machinery with/without Building – Deductions u/s. 57 - Problems on computation on Income from Other Sources.

UNIT-III: CLUBBING AND AGGREGATION OF INCOME:

Income of other persons included in the total income of Assessee – Income from Firm and AOP – Clubbing Provisions – Deemed Incomes – Provisions of set-off and Carry forward of losses – computation of Gross Total Income – Deductions from GTI u/s 80C to 80U – Problems on Computation of Taxable Income

UNIT-IV: ASSESSMENT OF INDIVIDUALS:

Computation of Tax Liability – Applicability of Alternate Minimum Tax on Individual u/s 115JC – Problems on Computation of tax liability

UNIT-V: ASSESSMENT PROCEDURE:

Income tax returns – Types of returns – Filing of e-return – Assessment – Types of assessment – Self assessment – Provisional assessment – Regular assessment – Best judgement assessment – Reassessment – Rectification of mistakes – Notice on demand.

SUGGESTED READINGS:

1. Income Tax Law and Practice: V.P. Gaur & D.B- Narang, Kalyani Publishers.
2. Direct Taxes Law & Practice: Dr. Vinod K. Singhania & Dr. Kapil Singhania, Taxmann
3. Income Tax: B. Lal, Pearson Education.
4. Income Tax: M.Jeevarathinam & C. Vijay Vishnu Kumar, SCITECH Publications.
5. Taxation: R.G. Saha, Himalaya Publishing House Pvt. Ltd.
6. Income Tax: Johar, McGrawHill Education.
7. Taxation Law and Practice: Balachandran & Thothadri, PHI Learning

Paper: (BC 406): BUSINESS STATISTICS-II

Paper: BC 406

PPW: 4Hrs

Credit: 4

Max. Marks: 100

Exam Duration: 3hrs

OBJECTIVE: *To inculcate analytical and computational ability among the students.*

UNIT-I: REGRESSION:

Introduction - Linear and Non Linear Regression – Correlation Vs. Regression - Lines of Regression - Derivation of Line of Regression of Y on X - Line of Regression of X on Y - Using Regression Lines for Prediction.

UNIT-II: INDEX NUMBERS:

Introduction - Uses - Types - Problems in the Construction of Index Numbers - Methods of Constructing Index Numbers - Simple and Weighted Index Number (Laspeyre - Paasche, Marshall – Edgeworth) - Tests of Consistency of Index Number: Unit Test - Time Reversal Test - Factor Reversal Test - Circular Test - Base Shifting - Splicing and Deflating of Index Numbers.

UNIT-III: TIME SERIES:

Introduction - Components – Methods-Semi Averages - Moving Averages – Least Square Method - Deseasonalisation of Data – Uses and Limitations of Time Series.

UNIT-IV: PROBABILITY:

Probability – Meaning - Experiment – Event - Mutually Exclusive Events - Collectively Exhaustive Events - Independent Events - Simple and Compound Events - Basics of Set Theory – Permutation – Combination - Approaches to Probability: Classical – Empirical – Subjective - Axiomatic - Theorems of Probability: Addition – Multiplication - Baye’s Theorem.

UNIT-V: THEORITCAL DISTRIBUTIONS:

Binomial Distribution: Importance – Conditions – Constants - Fitting of Binomial Distribution. Poisson Distribution: – Importance – Conditions – Constants - Fitting of Poisson Distribution. Normal Distribution: – Importance - Central Limit Theorem - Characteristics – Fitting a Normal Distribution (Areas Method Only).

SUGGESTED READINGS:

1. Statistics for Management: Levin & Rubin, Pearson,
2. Fundamentals of Statistics: Gupta S.C, Himalaya
3. Business Statistics: Theory & Application, P. N. Jani, PHI Learning
4. Business Statistics: Dr. J. K. Thukral, Taxmann Publications
5. Business Statistics: K. Alagar, Tata Mc Graw Hill
6. Fundamentals of Statistical: S. P Gupta , Sultan Chand
7. Business Statistics: J. K. Sharma, Vikas Publishers
8. Business Statistics: Vora, Tata Mc Graw Hill
9. Statistics-Problems and Solutions: Kapoor V.K, S. Chand
10. Statistics-Teory, Methods and Applications: Sancheti D.C. & Kapoor V.K
11. Business Statistics: S. K. Chakravarty, New Age International Publishers
12. Business Statistics-G.Laxman, Vasudeva Reddy, K.Goud, Taxmann Publications, Hyderabad.

Paper: (BC 407): OBJECT ORIENTED PROGRAMMING IN C++

Paper: BC 407
PPW: 4 (3T+2P)
Credits : 4

Max. Marks: 70T + 30P
Exam Duration: 3 Hrs.

Objective: To gain skills of Object Oriented Programming using C++ Language.

UNIT-I: INTRODUCTION:

Object Oriented Programming: Concepts – Benefits – Languages - Structured vs. Object Oriented Programming. C++: Genesis - Structure of a program – Tokens - Data Types – Operators - Control Structures - C vs C++ - Functions.

UNIT-II: CLASSES, OBJECTS, CONSTRUCTORS AND DESTRUCTORS:

Encapsulation - Hiding - Abstract data types - Object & Classes – Attributes - Methods - C++ class declaration - State identity and behaviour of an object. Purpose of Constructors - Default Constructor - Parameterized Constructors - Copy Constructor - Instantiation of objects - Default parameter value - Object types - C++ garbage collection - Dynamic memory allocation – Meta class / Abstract classes.

UNIT-III: OVERLOADING, CONVERSIONS, DERIVED CLASSES AND INHERITANCE:

Function and Operator Overloading - Overloading Unary and Binary Operators - Data and Type Conversions - Derived Classes - Concept of Reusability - Visibility modes - Types of Inheritance - Single and Multiple Inheritance - Multilevel Inheritance.

UNIT-IV: POLYMORPHISM, VIRTUAL FUNCTION, STREAMS AND FILES:

Polymorphism - Virtual - Classes - Pointer to Derived class - Virtual functions - Rules for Virtual function - Pure Virtual functions - Stream Classes - Types of I/O - Formatting Outputs - File Pointers – Buffer - C++ Stream - Unformatted console I/O operations – Functions: get() - put() – formatted console I/O operations - IOS class format functions - Manipulators.

UNIT-V: EXCEPTION HANDLING AND DATA STRUCTURES IN C++:

Exceptions in C++ Programs - Try and Catch Expressions - Exceptions with arguments. Data Structures: Introduction - Linked list - Stacks - Queues.

SUGGESTED READINGS:

1. Objected Oriented Programming with C++: E. Balagurusamy, McGraw Hill.
2. C++ Programming-A Practical Approach: Madhusudan Mothe, Pearson.
3. Object Oriented Programming Using C++: Chadha & Chadha, Kalyani.
4. Programming in C++: A. N. Kamthane, Pearson.
5. The Complete Reference C++: H. Schildt, McGraw Hill.
6. C++:How to Program: Deitel & Deitel, PHI.
7. Mastering C++: KR.Venugopal & R.Buyya, McGraw Hill.
8. Schaum's Outlines: Programming with C++: by John R Hubbard.
9. Object Oriented Programming using C++: Somashekara, PHI.
10. C++ Spoken Tutorials by IIT Bombay.

THIRD YEAR:					
SEMESTER-V					
29.	BC501	Practice of General Insurance	SEC-3	2	2
30.	BC502	Introduction to Indian Economy	GE-1	2	2
31.	BC503	Cost Accounting	DSC	4	4
32.	BC504	Business Law	DSC	4	4
33.	BC505	Banking Theory & Practice	DSC	4	4
34.	BCC506	Excel Foundation	DSC	4T+2P	4
35.	BCC507(a)	Computerised Accounting/ Business Analytics	DSE	4T+2P	5
	BCC507(b)		DSE	5	5
36.	BCC508(a)	Web Technology/ Business Simulation	DSE	4T+2P	5
	BCC508(b)		DSE	5	5
		Total		30/32	30
SEMESTER-VI					
37.	BC601	Regulation of Insurance Business	SEC-4	2	2
38.	BC602	Sectors of Indian Economy	GE-2	2	2
39.	BC603	Theory and Practice of GST	DSC	3T+2P	4
40.	BC604	Company Law	DSC	4	4
41.	BC605	Managerial Accounting	DSC	4	4
42.	BC606	Commerce Lab	DSC	2T+4P	4
43.	BCC607(a)	E-Commerce/ Business Forecasting	DSE	4T+2P	5
	BCC607(b)		DSE	5	5
44.	BCC608(a)	Relational Database Management Systems/ Business Analytics Programming	DSE	4T+2P	5
	BCC608(b)		DSE	5	5
		Total		33/35	30
		GRAND TOTAL		187	180

AECC: Ability Enhancement Compulsory Course; SEC: Skill Enhancement Course; DSC: Discipline Specific Course; DSE: Discipline Specific Elective; GE: Generic Elective; T=Theory; P=Practicals;

SUMMARY OF CREDITS

Sl. No.	Course Category	No. of Courses	Credits Per Course	Credits
1	AECC	2	2	4
2	SEC	4	2	8
3	CC Language	8	5	40
		8	5	40
		16	4	64
4	DSE	5	4	20
5	GE	2	2	4
	TOTAL	44		180
	Commerce Total	28		124

SYLLABUS

Paper : (BC 501) : PRACTICE OF GENERAL INSURANCE

Paper: BC501
PPW: 2 Hrs

Max. Marks: 40+10
Exam Duration: 1½ hrs

Unit I: GENERAL INSURANCE POLICIES:

Introduction to General Insurance-Origin of general insurance—Classification of General Insurance Companies—Indian and International Insurance Market—various roles in Insurance industry—Policy Documents and forms—insurance proposals and forms—General Insurance Products-Fire, Marine, Motor, Liability, Personal Accident and Specialty Insurance, Engineering and other insurance.

Unit II: UNDERWRITING, PREMIUMS, CLAIMS AND INSURANCE RESERVES AND ACCOUNTING:

Concept of Underwriting—Underwriting Process—Risk sharing and its methods—risk management and steps involved in it—Rating and Premiums—concept of soft and hard markets—Concept of Claim-understanding the process of claim management—claims fraud and fraud prevention—Insurance reserves and accounting—different types of reserves of insurance companies—reserving process followed by insurance companies—Insurance accounting.

SUGGESTED READINGS :

1. Practice of General Insurance – Insurance Institute of India.
2. Practice of General Insurance – D.S. Vittal-HPH.
3. Principles & Practice of Insurance- Dr. P. Periasamy – HPH.
4. Risk Management : A Publication of the Insurance Institute of India.,
5. Practice of General Insurance: Dr. V. Padmavathi, Dr. V. Jayalakshmi, PBP.
6. Insurance Theory and Practice: Tripathi PHI
7. Life and Health Insurance: Black, JR KENNETH & Harold Skipper, Pearson
8. Risk Management and Insurance : Trieschman ,Gustavson and Hoyt
9. South Western College Publishing Cincinnati, Ohio.

Paper : (BC 502) : INTRODUCTION TO INDIAN ECONOMY

Paper: BC502

Max. Marks: 40+10

PPW: 2 Hrs

Exam Duration: 1½ Hrs

Objectives: 1) to provide an overview of Indian economy
2) to make the student acquaint with the latest developments in the economy

UNIT I: STRUCTURE OF THE INDIAN ECONOMY:

Indian Economy-Characteristics-Developmental issues-Structural changes in the Indian Economy-Human Development-concept and measures-Occupational distribution and economic development-Natural Resource: Land, Forest, Water & Minerals-Environmental degradation-Infrastructure: Energy, Power, Transport-Social infrastructure

UNIT II: POLICY ASPECTS OF INDIAN ECONOMY:

Liberalization - Privatization-Globalization-Poverty- Unemployment: nature and problems - The parallel economy – Industrial Policy.

SUGGESTED READINGS:

- 1) Meera Naidu “Introduction to Indian Economy” HPH
- 2) Ruddar Datt and K.P.M. Sundharam “Indian Economy”, S. Chand & Company Ltd., New Delhi, 2013.
- 3) S.K.Misra & V.K.Puri “Indian Economy-Its Development Experience”Himalaya Himalaya Publishing Company, New Delhi, 2013.
- 4) Introduction to Indian Economy: Dr. P. Venugopal Rao, PBP.
- 5) Vivek Mittal “Business Environment” Excel Publications, New Delhi, 2013.
- 6) Aswathappa.K. “Essentials of Business Environment – Text, cases & Exercises” Himalaya Himalaya Publishing Company, New Delhi, 2013.
- 7) Economic Survey—Government of India, Ministry of Finance, Oxford University Press, New Delhi,
- 8) The Economic Times, News paper
- 9) Business Line, News paper

-:-

Paper : (BC 503) : COST ACCOUNTING

Paper: BC503
PPW: 4 Hrs

Max. Marks: 80 + 20
Exam Duration: 3 Hrs

Objective: *to make the students acquire the knowledge of cost accounting methods.*

UNIT-I: INTRODUCTION:

Cost Accounting: Definition – Features – Objectives – Functions – Scope – Advantages and Limitations - Essentials of a good cost accounting system- Difference between Cost Accounting and Financial Accounting – Cost concepts – Cost Classification.

UNIT-II: MATERIAL:

Direct and Indirect Material cost – Inventory Control Techniques – Stock Levels – EOQ – ABC Analysis – JIT - VED - FSND - Issue of Materials to Production – Pricing methods: FIFO - LIFO with Base Stock and Simple and Weighted Average methods.

UNIT-III: LABOUR AND OVERHEADS:

Labour: Direct and Indirect Labour Cost – Methods of Payment of Wages (only Incentive Plans): Halsey, Rowan, Taylor Piece Rate and Merrick Multiple Piece Rate Methods.
Overheads: Classification - Methods of Allocation - Apportionment and Absorption of overheads.

UNIT-IV: UNIT AND JOB COSTING:

Unit Costing: Features - Cost Sheet – Tender and Estimated Cost Sheet.
Job Costing: Features - Objectives – Procedure - Preparation of Job Cost Sheet.

UNIT-V: CONTRACT AND PROCESS COSTING:

Contract Costing: Features – Advantages - Procedure of Contract Costing – Guidelines to Assess profit on incomplete Contracts.
Process Costing: Meaning – Features – Preparation of Process Account – Normal and Abnormal Losses.

SUGGESTED READINGS:

1. Cost Accounting: Jain and Narang, Kalyani
2. Cost Accounting: Srihari Krishna Rao, Himalaya
3. Cost and Management Accounting: Prashanta Athma, Himalaya
4. Cost Accounting: Dr. G. Yogeshweran, PBP.
4. Cost Accounting: Jawaharlal, Tata Mcgraw Hill
5. Cost Accounting: Theory and Practice: Banerjee, PHI
6. Introduction to Cost Accounting: Tulsian, S.Chand
7. Cost Accounting: Horngren, Pearson
8. Cost Accounting: Ravi M. Kishore, Tax Mann Publications.

Paper : (BC 504) : BUSINESS LAW

Paper: BC504

PPW: 4 Hrs

Max Marks: 80 + 20

Exam Duration: 3Hrs

Objective: to make the students acquire basic conceptual knowledge of different laws relating to Business.

UNIT-I: INTRODUCTION:

Development of Business Law - Development of Law in Independent India Contract Act 1872: Agreement and contract - Essentials of a valid contract - Types of contracts - Offer and Acceptance - Essentials of valid offer and acceptance - Communication and revocation of offer and acceptance – Consideration definition - Essentials of valid consideration - Doctrine of “Stranger to a contract”- “No consideration- No contract” - Capacity to a contract - Minors agreements.

UNIT-II: CONTRACT ACT 1872:

Legality of Object and Consideration - Agreements Expressly Declared To Be Void - Wagering Agreements - Contingent Contracts.

Discharge of Contract: Modes of Discharge - Performance of Contracts - Breach of Contract - Remedies for Breach.

UNIT-III: SALE OF GOODS ACT 1930:

Contract of Sale: Essentials of Valid Sale - Sale and Agreement to Sell – Definition and Types of Goods - Conditions and Warranties - Caveat Emptor - Exceptions - Transfer or Passing of Property: Time When Property Passes, Rules of Transfer of Property, Transfer of Ownership - Sale by Non-Owners and its Exceptions - Unpaid Seller - Rights of Unpaid Seller.

Consumer Protection Act 1986: Definitions of Consumer – Person – Goods - Service -Consumer Dispute - Unfair Trade Practice - Restrictive Trade Practice – Defect - Deficiency - Consumer Protection Councils - Consumer Dispute Redressal Agencies - District Forum - State Commission and National Commission - Procedure to Lodge a Complaint for Redressal – Appeals.

UNIT-IV: TRADE MARKS, PATENTS, COPY RIGHTS & INTELLECTUAL PROPERTY RIGHTS:

Trade Marks: Definition - Procedure for Registration of Trade Marks - Patents: Definition - Kinds of Patents - Transfer of the Patent Rights - Rights of the Patentee - Copy Rights: Definition - Essential Conditions for Copy Rights to be Protected - Rights of the Copyright Owner - Terms of Copy Right - Copy Rights Infringement - Other Intellectual Property Rights: Trade Secrets - Geographical Indications.

UNIT-V: INFORMATION TECHNOLOGY ACT & ENVIRONMENTAL PROTECTION ACT:

Information Technology Act-2000: Objectives - Digital Signature - Electronic Governance - Penalties and Adjudication.

Environmental Protection Act 1986: Object - Scope and Scheme of the Act – Definitions - General Powers of the Central Government – Prevention - Control and Abatement of Environmental Pollution – Offences and Penalties.

SUGGESTED READINGS:

- 1) Company Law: Kapoor, Sultan Chand and Co.
- 2) Business Law: Sandhya KVN, Himalaya
- 3) Business Laws: KC Garg & RC Chawla , Kalyani Publishers.
- 4) Business Law: Prof. G. Krishna Murthy, PBP.
- 5) Business Law: PC Tulsian & Bharat Tulsian, McGraw Hill Education
- 6) Business Law: Tejpal Sheth, Pearson.
- 7) Business Law: MC Kuchal & Vivek Kuchal, Vikas Publishing House.
- 8) Business Law: Mathur, McGraw Hill Education.
- 9) Business Law including company Law: SS Gulshan & GK Kapoor, New Age
- 10) Business Law: Peddina Mohan Rao, PHI.
- 11) Business Law: P.N. Bansal, Tax Mann Publications.
- 12) Business Law: R.S.N. Pillai and Bagavathi, S. Chand.

Paper : (BC 505) : BANKING THEORY AND PRACTICE

Paper: BC505
PPW: 4 Hrs

Max. Marks: 80 + 20
Exam Duration: 3Hrs

Objective: to acquire knowledge of working of Indian Banking system.

UNIT-I: INTRODUCTION:

Origin and Growth of Banking in India - Unit Vs Branch Banking - Functions of Commercial Banks - Nationalization of Commercial Banks in India - Emerging Trends in Commercial Banking in India: E-Banking – Mobile Banking - Core Banking – Bank Assurance – OMBUDSMAN.

UNIT-II: RESERVE BANK OF INDIA:

RBI Constitution - Organizational Structure – Management - Objectives – Functions – Monetary Policy.

UNIT-III: TYPES OF BANKS:

District Co-Operative Central Banks – Contemporary Banks - Regional Rural Banks - National Bank for Agriculture and Rural Development (NABARD) – SIDBI – Development Banks.

UNIT-IV: BANKER AND CUSTOMER RELATIONSHIP:

Definition of Banker and Customer - Relationship Between Banker and Customer - KYC norms - General and Special Features of Relationship - Opening of Accounts - Special Types of Customers Like Minor, Married Women, Partnership Firms, Companies, Clubs and other Non-Trading Institutions.

UNIT-V: NEGOTIABLE INSTRUMENTS:

Descriptions and their Special Features - Duties and Responsibilities of Paying and Collecting Banker - Circumstances under which a Banker can refuse Payment of Cheques - Consequences of Wrongful Dishonors - Precautions to be taken while Advancing Loans Against Securities – Goods - Documents of Title to Goods - Loans against Real Estate -Insurance Policies - Against Collateral Securities – Banking Receipts.

Rule in Clayton’s Case - Garnishee Order – Loans against Equitable Mortgage - Legal Mortgage - Distinction between them - Latest Trends in Deposit Mobilization.

SUGGESTED READINGS:

1. Banking Theory & Practices: Dr. P. K. Srivatsava, Himalaya Publishers
2. Banking Theory & Practices: K.E. Shekar, Vikas Publications
3. Banking theory & Practices: Santhi Vedula, HPH.
4. Banking Theory & Practices: Dr. J. Jayanthi, PBP.
5. Banking Theory, Law & Practices: R. R Paul, Kalyani Publishers
6. Money Banking and Financial Markets: Averbach, Rabort. D, MacMillan. Landon
7. Banking: N.T. Somashekar, New Age International Publishers
8. Fundamentals of International Banking: Rup Narayan Bose, Trinity Publishers
9. Modern Commercial Banking: H.R. Machiraju, New Age International Publishers
10. Banking Theory & Practices: R. Rajesh, Tata McGraw Hill
11. Merchant Banking & Financial Services: S. Guruswamy, Tata McGraw Hill
12. Management of Banking & Financial Services; Padmalatha Suresh, Pearson
13. Modern Banking: D. Muralidharan, PHI

Paper : (BCCA 506) :EXCEL FOUNDATION

Paper: BCCA 506

Max. Marks: : 60+20+20

THPW: 4 Hrs

Exam Duration: 3 Hrs

Objective: Students will learn how to start working with M S Excel right from basics to Tables, Templates and Printing of their work.

UNIT-I: INTRODUCING EXCEL: Workbooks and Worksheets, Moving Around a Worksheet, Ribbon tabs, Types of commands on the Ribbon, Using Shortcut Menus, Working with Dialogue Boxes, Task Panes, Getting started on your worksheet, Creating a chart, Printing your worksheet, Saving your worksheet, Exploring Data Types, Modifying Cell Contents, Deleting, Replacing, Editing of a cell. Some handy data entry techniques, Number Formatting.

UNIT-II: WORKSHEET OPERATIONS: Moving and resizing windows, Switching among windows, Activating a worksheet, Adding, Deleting a worksheet, Changing a sheet tab color, Rearranging your worksheets, Hiding, un-hiding a worksheet, Worksheet View, Comparing sheets side by side, Selecting ranges, complete rows and columns, noncontiguous ranges, multi-sheet ranges, special types of cells. Copying or Moving Ranges. Paste Special dialogue box, Adding comments to cells.

UNIT-III: TABLES AND FORMATTING: Creating a Table, Changing the Look of a Table, Navigating in a Table, Selecting parts of a Table, Adding, Deleting new rows or columns, Moving a Table, Working with the Total Row, Removing duplicate rows from a table. Sorting and filtering a table, Converting Table into Range. Formatting tools on the Home tab, Mini Toolbar, Fonts, Text Alignment, Wrapping text to fit a cell, Colors and Shading, Borders and Lines. Naming Styles.

UNIT-IV: EXCEL FILES & TEMPLATES: Creating a New Workbook, Filtering filenames, Saving and Auto Recovery, Password-Protecting a Workbook, Recovering unsaved work, Protect Workbook options, Checking Compatibility. Creating a Excel Templates, Modifying a template, Custom Excel Templates, Default Templates, Editing your Template, Resetting the default workbook, Saving your Custom Templates, Getting ideas for creating Templates.

UNIT-V: PRINTING YOUR WORK: Normal, Page Layout, Page Break View, Choosing your printer, Specifying what you want to print, Changing Page Orientation, Specifying paper size, Adjusting page margins, Inserting a page break, Removing manual page breaks, Printing Row and Column Titles, Scaling printed output, Header or Footer Options, Preventing certain cells, Objects from being printed, Creating Custom Views of your Worksheet. Creating PDF files.

Introducing Excel:

SUGGESTED READINGS:

1. Excel 2013 Bible: John Walkenbach, Wiley.
2. Microsoft Excel 2013: Data Analysis and Business Modeling: Winston, PHI
3. Excel Data Analysis - Modeling and Simulation: Hector Guerrero, Springer.
4. Excel Functions and Formulas: Bernd Held,BPB Publications.
5. Financial Analysis and Modeling using Excel and VBA: Chandan Sengupta, Wiley

Paper : (BC 507) (a) : COMPUTERISED ACCOUNTING

Paper: BC507(a)
PPW: 5 (4T & 2P)

Max. Marks: 60+20+20
Exam Duration: 3 Hrs.

Objective: To make the students to acquire the knowledge of computer software

CHAPTER I: MAINTAINING CHART OF ACCOUNTS IN ERP:

Introduction-Getting Started with ERP - Mouse/Keyboard Conventions-Company Creation-Shut a Company-Select a Company-Alter Company Details-Company Features and Configurations-F11: Company Features-F12: Configuration-Chart of Accounts-Ledger-Group-Ledger Creation-Single Ledger Creation-Multi Ledger Creation-Altering and Displaying Ledgers-Group Creation-Single Group Creation-Multiple Group Creation-Displaying Groups and Ledgers-Displaying Groups-Display of Ledgers-Deletion of Groups and Ledgers – P2P procure to page.

CHAPTER II: MAINTAINING STOCK KEEPING UNITS (SKU):

Introduction-Inventory Masters in ERP - Creating Inventory Masters-Creation of Stock Group-Creation of Units of Measure-Creation of Stock Item-Creation of Godown-Defining of Stock Opening Balance in ERP Stock Category-Reports.

CHAPTER 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).

CHAPTER 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.

CHAPTER 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.

REFERENCE BOOKS:

1. Computerised Accounting: Garima Agarwal, Himalaya
2. Computerised Accounting: A. Murali Krishna, Vaagdevi publications
3. Computerised Accounting: Dr. G. Yogeshweran, PBP.
4. Aakash Business Tools: Spoken Tutorial Project IIT Bombay
5. Mastering Tally: Dinesh Maidasani, Firewal Media
6. Implementing Tally ERP 9: A.K Nadhani and K.K Nadhani, BPB Publications
7. Computerised Accounting and Business Systems: Kalyani Publications
8. Manuals of Respective Accounting Packages
9. Tally ERP 9: J.S. Arora, Kalyani Publicatio

Paper : (BCC 507) (b): BUSINESS ANALYTICS

Paper: BCC 507 (b)

Max. Marks: 80+20

PPW: 5 Hrs

Exam Duration: 3 Hrs

Objective: To acquire knowledge for application of Business Analysis techniques and tools in a given business scenario

UNIT-I: INTRODUCTION:

To Decision Science: History of Operations Research/Decision Science, Definition and Features of Decision Science. Approach to Problem Solving, Methodology of Decision Science, Opportunities and Shortcomings of the Decision Science Approach, Applications of Decision Science. Computer Software for Decision Science.

UNIT-II: INTRODUCTION TO LINEAR PROGRAMMING:

Structure of Linear Programming Model, Advantages and Limitations of Linear Programming, Application areas of Linear Programming, General Mathematical Model of Linear Programming Problems, Guidelines of Linear Programming Model Formulation

UNIT-III: METHODS OF LINEAR PROGRAMMING - I:

The Graphical Method, Important Definitions, Extreme Point Solution Method, Examples on Maximization LP Problem, Examples on Minimization LP Problem; Examples on Mixed Constraints LP Problem, Iso-Profit (Cost) Function Line Method.

UNIT-IV: METHODS OF LINEAR PROGRAMMING - II:

The Simplex Method, Simplex Algorithm (Maximization case), Simplex Algorithm (Minimization case), Two Phase Method, Big M Method, Some Complications and their Resolutions: Unrestricted Variables, Tie for Entering Basic Variable, Tie for Leaving Basic Variable, Degeneracy.

UNIT-V: EXPLORATORY DATA ANALYSIS: Exploring Central Tendency of Data, Exploring Dispersion of Data in terms of Standard Deviation, Skewness and Kurtosis, Standard Error of Mean, Designing Confidence Intervals, Identifying Outliers through Box Plot.

SUGGESTED READINGS:

1. Operations Research: J K Sharma, Macmillan.
2. Operations Research: Anand Sharma, HPH
3. Operations Research: Hamdy A. Taha, Pearson.
4. Operations Research: Mote and Madhaan, Wiley
5. Quantitative Techniques in Management: N. D. Vohra, Tata McGraw Hill.
6. Quantitative Techniques for Managerial Decisions: U. K. Srivastava, G. V. Shenoy and S. C. Sharma. New Age International Ltd.

BCC 508: WEB TECHNOLOGY

Paper: BCC 508
PPW: 5 (4T + 2P)

Max.Marks:60+20+20
Exam Duration: 3 Hrs

Objective: to gain skills of usage of Web Technologies to design Web pages.

UNIT-I: INTRODUCTION:

Art of creating a web site - Markup language (HTML) – Hypertext - Formatting text - Forms & formulating instructions & formulation elements – Commenting code – Anchors - Back grounds – Images - Hyperlinks – Lists –Tables – Frames - Web design principles.

UNIT-II: AN OVER VIEW OF DYNAMIC WEB PAGES & DYNAMIC WEB PAGE:

An over view of dynamic web pages and dynamic web page technologies: Introduction to Dynamic HTML programing - Cascading style sheets (CSS) - Basic syntax and structure -Events handling - Changing Text and Attributes - Dynamically changing style - Text Graphics and placements - Creating multimedia effects with filters and Transactions.

UNIT-III: JAVA SCRIPT:

Introduction - Client side Java script - Server side Java script - Core features - Data types and variables – Operators - Expressions and statements – Functions – Objects – Array - Date and math related objects - Document object model - Event handling.

UNIT-IV: EVENTS AND EVENT HANDLERS:

General information about Events – Event – OnAbort – OnClick - Ondbl click - Ondrag drop – Onerror - Onfocus - Onkey Press – Onkey Up – Onload - Onmouse Down – Onmouse Move - Onmouse Out – Onmouse Over - Onmove - Onrest – Onresize - Onselect - On submit - Onunload.

UNIT-V: EXTENSIBLE MARKUP LANGUAGE (XML):

Introduction - Creating XML Documents - XML style Sheet - Hyperlinksin XML Document Object Model - XML Query Language.

LAB WORK: CREATING A WEBSITE WITH DYNAMIC FUNCTIONALITY USING CLIENT- SIDE AND SERVER SIDE SCRIPTING.

SUGGESTED READINGS:

1. Web Technology: Pradeep Kumar, HPH
2. Internet & World Wide Web How to Program: Deitel & Deitel, Pearson.
3. Web programming: Chris Bates.
4. HTML & XML An Introduction NIIT, PHI.
5. HTML for the WWW with XHTML & CSS: Wlizabeth Castro, Pearson
6. Internet and Web Technologies: Raj Kamal, McGraw Hill.
7. Web Technology: A Developer’s Perspective: Gopalan & Sivaselvan, PHI.
8. The Complete Reference PHP: S. Holzner, McGraw Hill.
9. Internet Technology and Web Page Design: R.Singh&M.Sonia, Kalyani.
10. Web Programming using PHP and MySQL: A.Babu, K.Meena & Sivakumar, HPH.
11. Web Technology and Design by Xavier, New Age International Pub.

Paper : (BCC 508) : BUSINESS SIMULATION

Paper: BCC 508

Max. Marks: 80+20

PPW: 5 Hrs

Exam Duration: 3 Hrs

Objective: Students will learn how to build simulation models using M S Excel.

UNIT-I: FUNCTIONS AND FORMULAS: Understanding Screen Layout - Creating Auto List & Custom List - Entering, Selecting and Editing Data - Understanding References (Relative, Absolute & Mixed) - Working on Various Functions & Formulas - Common Basic Functions - Logical Functions - Text Functions - Date & Time Functions - Lookup & Reference Functions - Mathematical Functions - Conditional Functions - Referring Data from Different Worksheet & Workbook Formula–Auditing -Various Calculation Techniques - Working on Ranges.

UNIT-II: PRESENTATION OF DATA: Sorting Techniques - Various Data Filtering Techniques - Formatting Techniques - Conditional Formatting - Number Formatting - Table Formatting - Protecting Sheets & Files - Understanding Various Excel Window Techniques - Viewing Excel Spreadsheet in various Layouts - Advanced Printing Techniques - Templates - Themes.

UNIT-III: DATA ANALYSIS TOOLS: Data Consolidation - Text to Columns - Flash Fill - Remove Duplicates - Advanced Data Validation Techniques - What-if Analysis - Goal Seek - Data Table - Solver – Scenarios; Working with Tables - Creating Charts - Understanding Sparklines (Line, Column, Win/Loss) - Pivot Tables & Pivot Charts.

UNIT – IV: SIMULATION – I: Simulations, Decision Trees and Forecasting, when should we use simulation, simulation modeling cycle. Introduction to Monte Carlo Simulation, generating random values, discrete and continuous functions,Excel for simple simulation.

UNIT – V: SIMULATION – II: Managerial applications of risk analysis, performing a simulation using @Risk, analyzing the simulation output, generating various plots. Simulation in forecasting, Advanced simulation techniques, simulations for: stocks, financial statements, games, taxes (Any two).

SUGGESTED READINGS:

1. Excel 2013 Bible: John Walkenbach, Wiley.
2. Excel Data Analysis - Modeling and Simulation: Hector Guerrero, Springer.
3. Excel Functions and Formulas: Bernd Held,BPB Publications.
4. Microsoft Excel 2013: Data Analysis and Business Modeling: Winston, PHI
5. Financial Analysis and Modeling using Excel and VBA: Chandan Sengupta, Wiley

BC 601: REGULATIONS OF INSURANCE BUSINESS

Paper: BC601

Max. Marks: 40+10

PPW: 2 Hrs

Exam Duration: 1½ Hrs

Objective: To equip the students with the knowledge regarding Insurance Business Regulations

UNIT I: INSURANCE LEGISLATION IN INDIA:

History of life and non-life insurance legislation—nationalization—insurance reforms—insurance business Act, 1972—IRDA and its functions including licensing functions—Web aggregators—regulation for intermediaries—CCS-SPV-PoS-insurance repositories-TPAs—Role and duties of surveyors—Origin and development of micro-insurance—regulation of ULIPs—pension schemes—money laundering—KYC—methods of receipt of premium—Exchange control regulations relating to General and Life Insurance—IRDA Health Insurance Regulations, 2016—Health plus life combi products.

UNIT II: POLICY HOLDERS RIGHTS OF ASSIGNMENT, NOMINATION AND TRANSFER:

Assignment and transfer of insurance policies—provisions related to nomination—repudiation—Fraud—protection of policyholder interest—stages in insurance policy-presale stage-post sale stage-free look period—grievance redressal—claim settlement—key feature document—dispute resolution mechanism—insurance ombudsman—solvency margin and investments—international trends in insurance regulation.

SUGGESTED READINGS :

1. Regulation of Insurance Business – Insurance Institute of India
2. Regulation of Insurance Business – D.S. Vittal, HPH
3. Regulation of Insurance Business: Dr. V. Padmavathi, PBP
4. Risk Management : A Publication of the Insurance Institute of India
5. Insurance Theory and Practice: Tripathi PHI
6. Life and Health Insurance: Black, JR KENNETH & Harold Skipper, Pearson
7. Risk Management and Insurance : Trieschman ,Gustavson and Hoyt
8. South Western College Publishing Cincinnati, Ohio.
9. Insurance Management – S.C. Sahoo & S.C. Das-HPH.

BC 602: SECTORS OF INDIAN ECONOMY

Paper: BC602
PPW: 2 Hrs

Max. Marks: 40+10
Exam Duration: 1½ Hrs

Objective: To equip the students with the knowledge regarding Basics of Indian Economy

UNIT I: AGRICULTURE IN INDIA:

Place of agriculture: Progress-Green revolution-Present state-New thrust areas-Food security: Legislation-Schemes-Public distribution system-Agricultural Marketing: Types-warehousing-Agricultural Labour-Minimum wages-Rural credit-RRBs-NABARD.

UNIT II: INDUSTRIES AND TERTIARY SECTOR IN INDIA:

Role and pattern of industrialization-Large-scale industry- Small-scale industry-Information Technology Industry-Labour problems-Labour Policy-Social Security-Trade Union Movement-Industrial Disputes-Unorganized Sector-Foreign Trade - Balance of Payments - SEZs- Foreign Exchange- Convertibility-Banking Sector-Money Market- Public Finance-Financial relations between Centre and States;

SUGGESTED READINGS:

- 1) Ruddar Datt and K.P.M. Sundharam “Indian Economy”, S. Chand & Company Ltd., New Delhi, 2010.
- 2) S.K.Misra & V.K.Puri “Indian Economy-Its Development Experience”Himalaya Himalaya Publishing Company, New Delhi, 2010.
- 3) Vivek Mittal “Business Environment” Excel Publications, New Delhi, 2007.
- 4) Sectors of India Economy: Dr. P. Venugopal Rao, PBP
- 5) Anjaneyulu, “Introduction to Indian Economy” Himalaya Himalaya Publishing Company, New Delhi, 2011.
- 6) Economic Survey—Government of India, Ministry of Finance, Oxford University Press, New Delhi,
- 7) Sectors of Indian Economy: Satya Sudha, Himalaya
- 8) The Economic Times, News paper
- 9) Business Line, News paper

BC 603: THEORY AND PRACTICE OF GST

Paper: BC603

Max. Marks: 60+20+20

PPW: 3T+2P

Exam Duration: 3Hrs

Objective: To equip the students with the knowledge regarding Theory and Practice of GST

CHAPTER I: INTRODUCTION TO GST:

Introduction – GST - Taxes Subsumed under GST -Determination of Tax - Registration -Process of Registration - Cancellation and renovation of registration - Supply of Goods and Services - Transition to GST - Registered Business -Availed Input Tax Credit -Unavailed CENVAT credit and Input VAT on capital goods-Availing the input credit held in closing stock -Invoicing -Tax Invoice -Bill of Supply - Credit Note, Debit Note and Supplementary Invoice-Transportation of goods without issue of Invoice - Input Credit Mechanism - Input Tax - GST Returns - Payment of Tax.

CHAPTER II: GETTING STARTED WITH GST:

Introduction - Enabling GST and Defining Tax Details-Transferring Input Tax credit to GST -Intrastate Supply of Goods-Intrastate Inward Supply -Intrastate Outward Supply -Interstate -Interstate Outward Supply - Return of Goods -Purchase Returns -Sales Returns -Supplies Inclusive of Tax -Defining Tax Rates at Master and Transaction Levels - Defining GST Rates at Stock Group Level-Defining GST Rate at Transaction Level -Hierarchy of Applying Tax Rate Details –Reports.

CHAPTER III: RECORDING ADVANCED ENTRIES, GST ADJUSTMENT AND RETURN FILING:

Introduction -Accounting of GST Transactions -Purchases from Composition Dealer -Purchases from Unregistered Dealers-Exports -Imports -Exempted Goods -SEZ Sales -Advance Receipts and payments - Mixed Supply and Composite Supply under GST -Mixed Supply of Goods -Composite Supply of Goods - GST Reports - Generating GSTR- Report in ERP -Input Tax Credit Set Off -GST Tax Payment -Time line for payment of GST tax -Modes of Payment -Challan Reconciliation -Exporting GSTR- return and uploading in GST portal.

CHAPTER IV: GETTING STARTED WITH GST (SERVICES):

Introduction -Determination of supply of services -Determining the Place of Supply of Services -Enabling GST and Defining Tax Details-Transferring Input Tax credit to GST -Intrastate Supply of Goods - Intrastate Inward Supply-Intrastate Outward Supply -Interstate Supply -Interstate Outward Supply - Interstate Inward Supply -Interstate Outward Supply of Services -Cancellation of Services -Cancellation of Inward Supplies -Cancellation of Outward Supply of Services -Defining Tax Rates at Master and Transaction Levels.

CHAPTER V: RECORDING ADVANCED ENTRIES AND MIGRATION TO ERP:

Introduction - Accounting Multiple Services in a Single Supply - Recording Partial Payment to Suppliers -Outward Supplies - Recording Outward Supply with Additional Expenses - Supply of services -Business to consumers - Time of Supply of Services - Place of Supply of Services - Determining place of supply of services - Exempt Supply of Services under GST -Export Supply of Services - Reverse Charge on Services under GST - Advance Receipts from Customers under GST - Advance Receipt and issuing Invoice on same month -Advance Receipt and issuing Invoice on different month - Reversal of GST on account of cancellation of advance receipt - Generating GSTR- Report in ERP - Input Tax Credit Set Off - Migration to ERP - Activate Goods and Services Tax (GST) in ERP - Set up GST rates - Update Masters - Update party GSTIN/UIN - Creation of GST Duty ledgers.

SUGGESTED READINGS:

1. Taxmann's Basics of GST
2. Taxmann's GST: A practical Approach
3. Theory & Practice of GST, Srivathsala, HPH
4. Theory & Practice of GST: Dr. Ravi M.N, PBP.

BC 604: COMPANY LAW (2013Act)

Paper: BC604
PPW: 4

Max. Marks:80 + 20
Exam Duration: 3Hrs

Objective: *to understand legal provisions applicable for establishment, management and winding up of companies in India as per Companies Act 2013.*

UNIT-I: INCORPORATION OF COMPANIES:

Company: Meaning and Definition – Characteristics - Classification – Legislation on Companies – Incorporation - Promotion – Registration - Memorandum of Association – Articles of Association – Certificate of Incorporation - Prospectus – Statement in lieu of Prospectus – Commencement of business.

UNIT-II: MANAGEMENT OF COMPANIES:

Director: Qualification - Disqualification - Position - Appointment - Removal – Duties and Liabilities – Loans – Remuneration – Managing Director – Corporate Social Responsibility – Corporate Governance.

UNIT-III: COMPANY SECRETARY:

Company Secretary: Definition – Appointment – Duties – Liabilities – Company Secretary in Practice – Secretarial Audit.

UNIT-IV: COMPANY MEETINGS:

Meeting: Meaning – Requisites - Notice – Proxy - Agenda – Quorum – Resolutions – Minutes – Kinds – Shareholder Meetings - Statutory Meeting - Annual General Body Meeting – Extraordinary General Body Meeting – Board Meetings.

UNIT-V: WINDING UP:

Meaning – Modes of Winding Up –Winding Up by tribunal – Voluntary Winding Up – Compulsory Winding Up – Consequences of Winding Up – Removal of name of the company from Registrar of Companies – Insolvency and Bankruptcy code - 2016.

SUGGESTED READINGS:

- 1) Company Law: ND Kapoor, Sultan Chand and Co.
- 2) Company Law: Rajasri. – HPH
- 3) Company Law: Prof. G. Krishna Murthy, G. Kavitha, PBP
- 4) Company Law and Practice: GK Kapoor & Sanjay Dhamija, Taxmann Publication.
- 5) Company Law: Revised as per Companies Act- 2013: KC Garg et al, Kalyani Publication.
- 6) Corporate Law: PPS Gogna, S Chand.
- 7) Company Law: Bagrial AK: Vikas Publishing House.

BC 605: MANAGERIAL ACCOUNTING

Paper: BC605
PPW: 5 Hrs

Max. Marks: 80 + 20
Exam Duration: 3 Hrs

***Objective:** to acquire Managerial Accounting decision-making techniques and reporting methods.*

UNIT-I: INTRODUCTION:

Managerial Accounting: Features – Objectives – Scope – Functions – Advantages and Limitations – Relationship between Cost, Management and Financial Accounting.

UNIT-II: MARGINAL COSTING:

Meaning – Importance – Marginal Cost Equation – Difference between Marginal Costing and Absorption Costing – Application of Marginal Costing – CVP Analysis – Break Even Analysis: Meaning – Assumptions – Importance - Limitations.

UNIT-III: DECISION MAKING:

Make or Buy – Add or Drop Products – Sell or Process Further – Operate or Shut-down – Special Order Pricing – Replace or Retain.

UNIT-IV: BUDGETS AND BUDGETARY CONTROL:

Budget: Meaning – Objectives – Advantages and Limitations – Essentials of Budgets - Budgetary Control - Classification of Budgets - Preparation of Budgets.

UNIT-V: STANDARD COSTING AND VARIANCE ANALYSIS:

Standard Costing: Meaning – Importance – Standard Costing and Historical Costing - Steps involved in Standard Costing.

Variance Analysis: Material variance - Labour variance - Overhead variance - Sales variance.

SUGGESTED READINGS:

1. Management Accounting- Principles & Practice: Sharma RK & Shashi K. Gupta, Kalyani
2. Advanced Managerial Accounting: Srihari Krishna Rao, Himalaya
3. Advanced Managerial Accounting: Dr. Sundaram, PBP
3. Advanced Management Accounting: Robert S. Kaplan & Anthony A. Atkinson, Prentice-Hall
4. Management Accounting: Rustagi R.P, Galgotia
5. Managerial Accounting: Ronald W. Hilton, TMH

BC 606: COMMERCE LAB

Paper: BC606
PPW: 4 (2T+4P)

Max. Marks: 70PF* + 30VV
Exam Duration:

***Objective:** to become familiar with various business documents and acquire practical knowledge, which improve over all skill and talent.*

UNIT-I: BASIC BUSINESS DOCUMENTS:

Trade license under Shops and Establishments Act - Labor license from Department of labor - Partnership Deed - Pollution, Health licenses – Quotation - Invoice form and preparation - Computation of simple interest, compound interest and EMI - Way bill used during transport - Debit Note and Credit Note - Audit Report.

UNIT-II: FINANCE, BANKING AND INSURANCE DOCUMENTS:

Promissory Note - Bill of exchange – Cheque - Pay in slip - Withdrawal form - Account opening and Nomination form KYC - Deposit form and Deposit Receipts - Loan application form - Insurance Proposal form and Insurance Policy - ATM Card Application form - Credit appraisal report - Insurance agency application procedure - ESI / PF membership form.

UNIT-III: DOCUMENTS FOR INCORPORATION A COMPANY:

Memorandum of Association - Articles of Association - Certificate of Incorporation – Prospectus - Certificate of Commencement of Business - Annual Report – Chairman’s Speech - Model bye-laws of some society - Society/ Trust registration form - Complaint in a Consumer forum - Complaint under Right to Information Act.

UNIT-IV: DOCUMENTS OF TAXATION:

PAN application under Income Tax Act - TAN application under Income Tax Act - Form:16 to be issued by Employer - TDS and its certificate u/s15 - Income Tax payment challans and Refund Order - Income Tax Returns including TDS Return - Notices under Income Tax Act - Assessment Order - GST Dealer-Application and License - Registration under GST.

UNIT-V: BUSINESS CHARTS:

Elements of business - Forms of business organizations - Procedure of incorporation of companies - Classification of partners with salient features of each of them - International, National, State level and Regional entrepreneurs - Hierarchy of Banking business in India - Tax administration in India - Various taxes imposed in India - Export and import procedure - Purpose and powers of authorities like RBI, SEBI, IRDA, ROC.

COMMERCE LAB FACILITIES:

- i) Colleges are required to provide a commerce lab containing all the documents related to commerce and facilities as, computer, printer, OHP, LCD Projector with sufficient furniture.
 - ii) Teachers should practically explain the documents and help in filling the same in the simulated environment.
 - iii) Students are required to do the above personally and gain the knowledge of filling the above documents and the same are to be kept in a portfolio.
 - iv) At the end of semester, the portfolios would be evaluated by the external examiner designated by the Controller of Examinations, Osmania University, from the panel submitted by the Board of Studies in Commerce. The Examiner would evaluate the portfolio for a maximum of 35 marks and conduct viva-voce examination for 15 marks. The award lists duly signed are to be sent the Controller of Examinations.
- *the student has to collect the various documents prepare activity charts and submit the same in the form of a record.**

Paper : (BC 607) (a) : E-COMMERCE

Paper: BC607 (a)

Max Marks: 60+20+20

PPW: 5 (4T + 2P)

Exam Duration: 3 Hrs

Objective: to acquire conceptual and application knowledge of e-commerce.

UNIT-I: INTRODUCTION:

E-Commerce: Meaning - Advantages & Limitations - E-Business: Traditional & Contemporary Model, Impact of E-Commerce on Business Models - Classification of E-Commerce: B2B - B2C - C2B - C2C - B2E - Applications of Ecommerce: E-Commerce Organization Applications - E-Marketing - E-Advertising - E-Banking - Mobile Commerce - E-Trading - E-Learning - E-Shopping.

UNIT-II: FRAMEWORK OF E-COMMERCE:

Framework of E-Commerce: Application Services - Interface Layers - Secure Messaging - Middleware Services and Network Infrastructure - Site Security - Firewalls & Network Security - TCP/IP – HTTP - Secured HTTP – SMTP - SSL.

Data Encryption: Cryptography – Encryption – Decryption - Public Key - Private Key - Digital Signatures - Digital Certificates.

UNIT-III: CONSUMER ORIENTED E-COMMERCE APPLICATIONS:

Introduction - Mercantile Process Model: Consumers Perspective and Merchant's Perspective - Electronic Payment Systems: Legal Issues & Digital Currency - E-Cash & E-Cheque - Electronic Fund Transfer (EFT) - Advantages and Risks - Digital Token-Based E-Payment System - Smart Cards.

UNIT-IV: ELECTRONIC DATA INTERCHANGE:

Introduction - EDI Standards - Types of EDI - EDI Applications in Business – Legal - Security and Privacy issues if EDI - EDI and E-Commerce - EDI Software Implementation.

UNIT-V: E-MARKETING TECHNIQUES:

Introduction - New Age of Information - Based Marketing - Influence on Marketing - Search Engines & Directory Services - Charting the On-Line Marketing Process - Chain Letters - Applications of 5P's (Product, Price, Place, Promotion, People) E-Advertisement - Virtual Reality & Consumer Experience - Role of Digital Marketing.

Lab work: Using Microsoft Front Page Editor and HTML in Designing a Static Webpage/Website.

SUGGESTED READINGS:

1. Frontiers of Electronic Commerce: Ravi Kalakota, Andrew B Whinston, Pearson
2. E-Commerce: Tulasi Ram Kandula, Himalaya Publishing House.
3. E-Commerce: An Indian Perspective: P.T. Joseph, S.J, PHI
4. Electronic Commerce, Framework Technologies & Applications: Bharat Bhasker, McGraw Hill
5. Introduction To E-Commerce: Jeffrey F Rayport, Bernard J. Jaworski: Tata McGraw Hill
6. Electronic Commerce, A Managers' Guide: Ravi Kalakota, Andrew B Whinston
7. E-Commerce & Computerized Accounting: Rajinder Singh, Er. Kaiser Rasheed, Kalyani
8. E-Commerce & Mobile Commerce Technologies: Pandey, Saurabh Shukla, S. Chand
9. E-Business 2.0, Roadmap For Success: Ravi Kalakota, Marcia Robinson, Pearson
10. Electronic Commerce: Pete Loshin / John Vacca, Firewall Media
11. E-Commerce, Strategy, Technologies And Applications : David Whiteley, Tata Mcgraw Hill
12. Digital Commerce and Its Applications (Student's Handbook): K Goyal, Kalyani Publication

Paper : (BCC 607) (b) : BUSINESS FORECASTING

Paper: BCC 607 (b)

PPW: 5Hrs

Max. Marks: 80+20

Exam Duration: 3 Hrs

Objective: To acquire knowledge for application of Business Forecasting techniques and tools in a given business scenario

UNIT-I: INTRODUCTION TO FORECASTING: Types of Forecasting Methods, Time Series Analysis, Components of Time Series- Secular Trend, Seasonal Variations, Cyclical Variations, Random Variations, The Additive Model and Multiplicative Model, Measurements of Error in Forecasting (MAD, MAPE, RMSE), Freehand Method

UNIT-II: TIME SERIES ANALYSIS: Smoothing Techniques, Moving Averages Method, Weighted Moving Averages Method, Semi-Averages Method, Exponential Smoothing Method, Double Exponential Smoothing Method, Regression Trend Analysis, Autocorrelation and Auto regression.

UNIT-III: LINEAR REGRESSION: Introduction to Simple Linear Regression, Determination of Intercept and coefficient of Regression, Coefficient of Determination, Standard Error of Estimate, Measuring Autocorrelation- Durbin Watson Statistics, Testing of slope, Estimate of population of coefficient of regression, Testing the overall Model.

UNIT-IV: MULTIPLE LINEAR REGRESSION: Multiple Regression model with more than one Independent Variable, Determination of Coefficient of Multiple Determination (R^2), Adjusted R^2 , Standard Error of Estimate, Testing Assumptions of Linear Regression.

UNIT-V: LOGISTIC REGRESSION: The Odds and Probabilities, Logit Function, Logistic Regression Coefficients, Nagelkerke R Square, Classification Matrix, Sensitivity and Specificity, ROC Curve.

SUGGESTED READINGS:

1. Business Statistics: Naval Bajpai, Pearson.
2. Multivariate Data Analysis: Hair, Black, Babin, Anderson, Pearson.
3. Statistics for Management: Anand Sharma, HPH
4. Applied Multivariate Statistical Analysis: Richard A. Johnson, Pearson.
5. Statistics for Business and Economics: Anderson, Cengage Learning.
6. Statistics for Management: R. I. Levin, D. S. Rubin, S. Rastogi & M. H. Siddiqui, Pearson.
7. Statistical Tools for Managers: D P Apte, Excel Books.

BCCA 608 (a): RELATIONAL DATABASE MANAGEMENT

Paper: BCCA 608 (a)
PPW: 5 (4T + 2P)

Max. Marks: 60+20+20
Exam Duration: 3 Hrs

Objective: to acquire basic conceptual background necessary to design and develop simple database system, Relational database mode, ER model and distributed databases, and to write good queries using a standard query language called SQL.

UNIT-I: BASIC CONCEPTS:

Database Management System - File based system - Advantages of DBMS over file based system - Database Approach - Logical DBMS Architecture - Three level architecture of DBMS or logical DBMS architecture - Need for three level architecture - Physical DBMS Architecture - Database Administrator (DBA) Functions & Role - Data files indices and Data Dictionary - Types of Database.

Relational and ER Models: Data Models - Relational Model – Domains - Tuple and Relation - Super keys - Candidate keys - Primary keys and foreign key for the Relations - Relational Constraints - Domain Constraint - Key Constraint - Integrity Constraint - Update Operations and Dealing with Constraint Violations - Relational Operations - Entity Relationship (ER) Model – Entities – Attributes – Relationships - More about Entities and Relationships - Defining Relationship for College Database - E-R Diagram - Conversion of E-R Diagram to Relational Database.

UNIT-II: DATABASE INTEGRITY AND NORMALISATION:

Relational Database Integrity - The Keys - Referential Integrity - Entity Integrity - Redundancy and Associated Problems – Single Valued Dependencies – Normalisation - Rules of Data Normalisation - The First Normal Form - The Second Normal Form - The Third Normal Form - Boyce Codd Normal Form - Attribute Preservation - Lossless-join Decomposition - Dependency Preservation.

File Organisation : Physical Database Design Issues - Storage of Database on Hard Disks - File Organisation and Its Types - Heap files (Unordered files) - Sequential File Organisation - Indexed (Indexed Sequential) File Organisation - Hashed File Organisation - Types of Indexes - Index and Tree Structure - Multi-key File Organisation - Need for Multiple Access Paths - Multi-list File Organisation - Inverted File Organisation.

UNIT-III: STRUCTURES QUERY LANGUAGE (SQL):

Meaning – SQL commands - Data Definition Language - Data Manipulation Language - Data Control Language - Transaction Control Language - Queries using Order by – Where - Group by - Nested Queries.

Joins – Views – Sequences - Indexes and Synonyms - Table Handling.

UNIT-IV : TRANSACTIONS AND CONCURRENCY MANAGEMENT:

Transactions - Concurrent Transactions - Locking Protocol - Serialisable Schedules - Locks Two Phase Locking (2PL) - Deadlock and its Prevention - Optimistic Concurrency Control.

Database Recovery and Security: Database Recovery meaning - Kinds of failures - Failure controlling methods - Database errors - Backup & Recovery Techniques - Security & Integrity - Database Security - Authorization.

UNIT-V: DISTRIBUTED AND CLIENT SERVER DATABASES:

Need for Distributed Database Systems - Structure of Distributed Database - Advantages and Disadvantages of DDBMS - Advantages of Data Distribution - Disadvantages of Data Distribution - Data Replication - Data Fragmentation.

Client Server Databases: Emergence of Client Server Architecture - Need for Client Server Computing - Structure of Client Server Systems & its advantages.

LAB: SQL QUERIES BASED ON VARIOUS COMMANDS.

SUGGESTED READINGS:

1. Database Systems: R.Elmasri & S.B. Navathe, Pearson.
2. Relational Database Management Systems: Tulasi Ram Kandula, HPH
3. Introduction to Database Management System: ISRD Group, McGraw Hill.
4. Database Management System: R.Ramakrishnan & J.Gehrke, McGraw Hill.
5. Modern Database Management: J.A.Hoffer, V.Rames & H.Topi, Pearson.
6. Database System Concepts: Silberschatz, Korth & Sudarshan, McGraw Hill.
7. Simplified Approach to DBMS: Parteek Bhaia, Kalyani Publishers.
8. Database Management System: Nirupma Pathak, Himalaya.
9. Database Management Systems: Pannerselvam, PHL.
10. Relational Database Management System: Srivastava & Srivastava, New Age
11. PHPMySQL Spoken Tutorials by IIT Bombay.
12. Oracle Database: A Beginner's Guide: I.Abramson, McGraw Hill.

Paper : (BCC 608) (b):BUSINESS ANALYTICS PROGRAMMING

Paper: BCC 608(b)
PPW: 5 Hrs

Max. Marks: 80+20
Exam Duration: 3Hrs

Objective: Students will learn how to master basics of most used Analytical Softwares like Base-SAS, R and Python.

UNIT-I: INTRODUCTION: Database Management Systems – Definition, What is MySql? MySql Installer, Download sample Database, Loading Sample Database, Structured Query Language, Data types.

UNIT-II: DATA DEFINITION AND MANIPULATION: Creating Table, Data Integrity, Creating constraints, Querying Database, Retrieving result sets, Functions and Joins, Sub Queries.

UNIT-III: BASICS OF SAS: Introduction to SAS, Installation of SAS university Edition, prerequisites for data analysis using SAS, SAS architecture, Data Types, formats and informat, SAS coding- Data step and proc step, libraries, Importing external data, Reading and manipulating Data, functions, Data Transformations, Conditional Statements.

UNIT-IV: PYTHON: Basics of Python – various tools, Installation of Anaconda Navigator, Data types – string, tuples, set, lists, dictionary, Arrays. Spyder and Documentation with Jupyter.

UNIT-V: R PROGRAMMING: Basics of R, Installation of R studio, Vectors, Matrices, Data types, Importing files, Writing files, Merging Files, Data Manipulation and Data Cleaning, Functions,

SUGGESTED READINGS:

1. R : Hands-on Programming; Garrett Grolemond, O’ Reilly Media Publishers
2. R : R Cookbook; Teetor Paul, O’ Reilly Media Publishers
3. Python : Mastering Python for Data Science; Samir Madhavan, Packt Publishing
4. Python : Python for Data Analysis; W McKinney, O’ Reilly Media Publishers
5. SAS : The little SAS book; Lora D Delwiche, SAS Institute
6. SAS : SAS for dummies; Chris Hemedinger and Stephen McDaniel, Wiley
7. MySql : MYSQL in a nutshell; Russell Dyer, O’ Reilly Media Publishers
8. MySql : MySQL cookbook by Paul DuBois, O’ Reilly Media Publishe