

# **B.Com (Business Analytics)**

## **Syllabus (CBCS)**

*(w.e.f. 2020–2021)*



**FACULTY OF COMMERCE  
SATAVAHANA UNIVERSITY  
KARIMNAGAR - 505 002 T.S.**

*Faculty of Commerce, Satavahana University, Karimnagar, T.S.*

**B.COM (Business Analytics)  
CBCS COURSE  
STRUCTURE**

| <i>Sl.No.</i>         | <i>Code</i>                       | <i>Course Title</i>   | <i>HPW</i> | <i>Credits</i> | <i>Exam Hrs</i> | <i>Marks</i> |
|-----------------------|-----------------------------------|---|------------|----------------|-----------------|--------------|
| (1)                   | (2)                               | (3)   | (5)        | (6)            | (7)             | (8)          |
| <b>SEMESTER – I</b>   |                                   |   |            |                |                 |              |
| 1.                    | ELS1                              | English (First Language)  | 4          | 4              |                 |              |
| 2.                    | SLS1                              | Second Language   | 4          | 4              |                 |              |
| 3.                    | AECC1                             | a) Environmental Science/<br>b) Basic Computer Skills   | 2          | 2              |                 |              |
| 4.                    | DSC101                            | Financial Accounting-I  | 5          | 5              | 3 hrs           | 80U+20I      |
| 5.                    | DSC102                            | Business Organization and Management  | 5          | 5              | 3 hrs           | 80U+20I      |
| 6.                    | DSC103                            | Data-driven Decision Making   | 3T+4P      | 5              | 1 ½hrs          | 60T+20P+20I  |
| <b>Total</b>          |                                   |   | <b>27</b>  | <b>25</b>      |                 |              |
| <b>SEMESTER – II</b>  |                                   |   |            |                |                 |              |
| 7.                    | ELS2                              | English (First Language)  | 4          | 4              |                 |              |
| 8.                    | SLS2                              | Second Language   | 4          | 4              |                 |              |
| 9.                    | AECC2                             | a) Basic Computer Skills/<br>b) Environmental Science   | 2          | 2              |                 |              |
| 10.                   | DSC201                            | Financial Accounting-II   | 5          | 5              | 3 hrs           | 80U+20I      |
| 11.                   | DSC202                            | Business Laws   | 5          | 5              | 3 hrs           | 80U+20I      |
| 12.                   | DSC203                            | Data Analytics Essentials   | 3T+4P      | 5              | 1 ½hrs          | 60T+20P+20I  |
| <b>Total</b>          |                                   |   | <b>27</b>  | <b>25</b>      |                 |              |
| <b>SEMESTER – III</b> |                                   |   |            |                |                 |              |
| 13.                   | ELS3                              | English (First Language)  | 3          | 3              |                 |              |
| 14.                   | SLS3                              | Second Language   | 3          | 3              |                 |              |
| 15.                   | SEC1 UGC<br>Specified<br>Course   | Communication Skills<br><br>Professional Skills   | 2          | 2              | 1 ½ hrs         | 40U+10I      |
| 16.                   | SEC2Dep<br>t. Specified<br>Course | a) Principles of Insurance/<br>b) Foundation of Digital Marketing &<br>Web Design   | 2          | 2              | 1 ½ hrs         | 40U+10I      |
| 17.                   | DSC301                            | Advanced Accounting   | 5          | 5              | 3 hrs           | 80U+20I      |
| 18.                   | DSC302                            | Business Statistics-I   | 5          | 5              | 3 hrs           | 80U+20I      |
| 19.                   | DSC303                            | Data Analytics Modeling   | 3T+4P      | 5              | 1 ½hrs          | 60T+20P+20I  |
| <b>Total</b>          |                                   |   | <b>27</b>  | <b>25</b>      |                 |              |
| <b>SEMESTER – IV</b>  |                                   |   |            |                |                 |              |
| 20.                   | ELS4                              | English (First Language)  | 3          | 3              |                 |              |
| 21.                   | SLS4                              | Second Language   | 3          | 3              |                 |              |
| 22.                   | SEC3 UGC<br>Specified<br>Course   | Leadership & Management Skills<br>Universal Human Values  | 2          | 2              | 1 ½ hrs         | 40U+10I      |
| 23.                   | SEC4Dep<br>t. Specified<br>Course | a) Practice of Life and General Insurance /<br>b) Social Media Marketing Search Engine<br>Optimization & Online Advertising | 2          | 2              | 1 ½ hrs         | 40U+10I      |
| 24.                   | DSC401                            | Income Tax  | 5          | 5              | 3 hrs           | 80U+20I      |
| 25.                   | DSC402                            | Business Statistics-II  | 5          | 5              | 3 hrs           | 80U+20I      |
| 26.                   | DSC403                            | Forecasting & Predictive Analytics  | 3T+4P      | 5              | 1 ½hrs          | 60T+20P+20I  |
| <b>Total</b>          |                                   |   | <b>27</b>  | <b>25</b>      |                 |              |
| <b>SEMESTER – V</b>   |                                   |   |            |                |                 |              |
|                       |                                   |   | 2          |                |                 |              |

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|     |        |  |                |            |                   |                         |
|-----|--------|--|----------------|------------|-------------------|-------------------------|
| 27. | ELS5   | English (First Language)   | 3              | 3          |                   |                         |
| 28. | SLS5   | Second Language  | 3              | 3          |                   |                         |
| 29. | GE     | a) Business Economics/<br>b) Advanced Aspects of Income Tax  | 4              | 4          | 3 hrs             | 80U+20I                 |
| 30. | DSE501 | a) Cost Accounting/<br>b) Financial Planning & Performance/<br>c) International Financial Reporting-I          | 5              | 5          | 3 hrs             | 80U+20I                 |
| 31. | DSE502 | a) Computerized Accounting/<br>b) Financial Decision Making-I/<br>c) International Tax & Regulation            | 3T+4P/5        | 5          | 1 ½hrs /<br>3 hrs | 60T+20P+20I/<br>80U+20I |
| 32. | DSE503 | a) Advanced Data Visualization/<br>b) Advanced Corporate Accounting/<br>c) Financial Management                | 3T+4P/5        | 5          | 1 ½hrs /<br>3 hrs | 60T+20P+20I/<br>80U+20I |
|     |        | <b>Total</b>   | <b>29/27</b>   | <b>25</b>  |                   |                         |
|     |        | <b>SEMESTER – VI</b>   |                |            |                   |                         |
| 33. | ELS6   | English (First Language)   | 3              | 3          |                   |                         |
| 34. | SLS6   | Second Language  | 3              | 3          |                   |                         |
| 35. | PR     | Research Methodology and Project Report  | 2T+4R          | 4          | 1 ½ hrs           | 40U+10I<br>35R+15VV     |
| 36. | DSE601 | a) Cost Control and Management Accounting/<br>b) Financial control/<br>c) International Financial Reporting-II | 5              | 5          | 3 hrs             | 80U+20I                 |
| 37. | DSE602 | a) Theory and Practice of GST/<br>b) Financial Decision Making-II /<br>c) International Auditing               | 3T+4P/5        | 5          | 1 ½hrs /<br>3 hrs | 60T+20P+20I/<br>80U+20I |
| 38. | DSE603 | a) Business Applications of Emerging<br>Technologies/<br>b) Corporate Governance/<br>c) Investment management  | 3T+4P/5        | 5          | 1 ½hrs / 3<br>hrs | 60T+20P+20I/<br>80U+20I |
|     |        | <b>Total</b>   | <b>31/27</b>   | <b>25</b>  |                   |                         |
|     |        | <b>GRAND TOTAL</b>   | <b>168/162</b> | <b>150</b> |                   |                         |

**ELS:** English Language Skill; **SLS:** Second Language Skill; **AEC:** Ability Enhancement Compulsory Course; **SEC:** Skill Enhancement Course; **DSC:** Discipline Specific Course; **DSE:** Discipline Specific Elective; **GE:** Generic Elective; **T:** Theory; **P:** Practical; **I:** Internal Exam **U:** University Exam; **PR:** Project Report; **VV:** Viva-Voce Examination.

**Note:** If a student should opt for “a” in SEC in III semester, the student has to opt for “a” only in IV semester and so is the case with “b” and “c”. In the case of DSE also the rule applies.

**SUMMARY OF CREDITS**

| Sl. No.                         | Course Category  | No. of Courses                         | Credits Per Course                     | Credits    |
|---------------------------------|------------------|--|--|------------|
| 1                               | English Language | 6                                      | 4/3                                    | 20         |
| 2                               | Modern Language  | 6                                      | 4/3                                    | 20         |
| 3                               | AEC              | 2                                      | 2                                      | 4          |
| 4                               | SEC              | 4                                      | 2                                      | 8          |
| 5                               | GE               | 1                                      | 4                                      | 4          |
| 6                               | Project Report   | 1                                      | 4                                      | 4          |
| 7                               | DSC              | 12                                     | 5                                      | 60         |
| 8                               | DSE              | 6                                      | 5                                      | 30         |
|                                 | <b>TOTAL</b>     | <b>38</b>                              |  | <b>150</b> |
|                                 | Commerce         | 24                                     |  | 106        |
| <b>CREDITS UNDER NON - CGPA</b> |                  | <b>NSS/NCC/Sports/Extra Curricular</b> | Up to 6 (2 in each year)               |            |
|                                 |                  | <b>Summer Internship</b>               | Up to 4 (2 in each after I & II years) |            |
|                                 |                  |  |  |            |
|                                 |                  |  |  |            |

**Paper DSC 101: FINANCIAL ACCOUNTING - I**

**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: JawaharLal, Himalaya Publishing House.

**Paper DSC 102: BUSINESS ORGANISATION AND MANAGEMENT**

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

**UNIT-I: INTRODUCTION AND FORMS OF BUSINESS ORGANISATIONS:**

Concepts of Business, Trade, Industry and Commerce - Objectives and functions of Business – Social Responsibility of a business - Forms of Business Organization - Meaning, Characteristics, Advantages and Disadvantages of Sole Proprietorship –Meaning, Characteristics, Advantages and Disadvantages of Partnership -Kinds of Partners - Partnership Deed -Concept of Limited liability partnership – Meaning, Characteristics, Advantages and Disadvantages of Hindu Undivided Family – Meaning, Advantages and Disadvantages of Co-Operative Organization.

**UNIT-II: 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 (As per Companies Act. 2013).

**UNIT-III:INTRODUCTION TO FUNCTIONS OF MANAGEMENT:**

Management - Meaning - Characteristics - Functions of Management - Levels of Management – Skills of Management- Scientific Management - Meaning - Definition - Objectives - Criticism – Fayol’s 14 Principles of Management .

**UNIT-IV:PLANNING AND ORGANISING:** Meaning - Definition - Characteristics - Types of Plans - Advantages and Disadvantages – Approaches to Planning - Management by Objectives (MBO) - Steps in MBO - Benefits –Weaknesses—Definition of Organizing-Organization-Process of Organizing - Principles 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-V: AUTHORITY, COORDINATION AND CONTROL:**

Meaning of Authority, Power, responsibility and accountability - Delegation of Authority - Decentralization of Authority - Definition, importance, process, and principles 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. Business Organization & Management: Sharma Shashi K. Gupta, Kalyani Publishers
2. Business Organisation & Management: Patrick Anthony, Himalaya Publishing House
3. Business Organization & Management: Dr. Manish Gupta, PBP.
4. Organization & Management: R. D. Agarwal, McGraw Hill.
5. Modern Business Organization: S.A. Sherlekar, V.S. Sherlekar, Himalaya Publishing House
6. Business Organization & Management: C.R. Basu, Tata McGraw Hill
7. Business Organization & Management: M.C. Shukla S. Chand,
8. Business Organisation and Management: D.S. Vittal, S. Chand
9. Organizational Behaviour Text & Cases: V.S.P. Rao, Himalaya Publishing House
10. Business Organization & Management: Uma Shekaram, Tata McGraw Hill
11. Business Organization & Management: Niranjan Reddy & Surya Prakash, Vaagdevi publishers
12. Business Organisation and Management, Dr. Neeru Vasihth, Tax Mann Publications.

**Paper DSC 103: DATA-DRIVEN DECISION MAKING**

**Hours Per Week:** (3T+4P)

**Exam Hours:** 1 ½

**Credits:** 5

**Marks:** 60T+20P+20I

**Objective:** *To make students to learn data-driven decision making.*

**UNIT I: DISRUPTION:**

Challenges: Identify hurdles to becoming a data-driven organization - Opportunities: Analyze data practices in the organization - Identify how data can benefit the organization - Distinguish how to be a proactive data practitioner

**UNIT II: BUSINESS ANALYTICS PRE-REQUISITES:**

Business Analysis Principles: Identify the categories of analytical people - Distinguish and define roles and responsibilities of professionals in data analysis - Data Driven Decision Making: Identify cultural barriers - Distinguish solutions to cultural and cross-functional barriers - Identify six steps of the data-driven decision-making model.

**UNIT III: BUSINESS ANALYTICS ECOSYSTEM:**

Relational Databases: Nature of relational databases - Purpose of the SQL language - Key aspects of ACID - Meaning of ETL - Not Only SQL: Big data and other data storage tools - Interacting with MongoDB - Document stores and graph stores - Big Data: Key functions of big data technologies - Utility of Hadoop - Purpose of MapReduce - Statistical Tool, Machine Learning, and Data Visualization: Tools for statistical analysis - Python and R - Purpose of machine learning - Visualization tools.

**UNIT IV: DATA LIFECYCLE MANAGEMENT:**

Data Life Cycle: Identify the stages in the data life cycle - Data in the organization: Distinguish between ways that data enters the organization - Identify the forms data takes as it is stored and used within the organization.

**UNIT V: REQUIREMENTS GATHERING:**

Requirements gathering process: Analyze why requirement gathering process is critical to proper analysis - 3 V's of data: Distinguish between the ways data is consumed (the three V's of data) - Customer journey map: Understand how requirement gathering fits with the development of a customer journey map - Distinguish between the stages of the customer journey map

**SUGGESTED READINGS:**

1. Data Analysis Fundamentals Certificate; AICPA
2. Fundamentals of Business Analytics, 2nd Edition; R N Prasad, Seema Acharya; Wiley
3. Business Analysis with Microsoft Excel and Power BI, 5th edition; Conrad G. Carlberg; Pearson
4. Monetizing Your Data: A Guide to Turning Data into Profit-Driving Strategies and Solutions; Andrew Roman Wells, Kathy Williams Chiang; Wiley
5. AI and Analytics, Accelerating Business Decisions; Sameer Dhanrajani; Wiley
6. Data Analytics with R; Bharti Motwani; Wiley.

**Paper DSC 201:FINANCIAL ACCOUNTING-II**

**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 Accept or - 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 DSC 202: BUSINESS LAWS**

*Objective: to understand basics of contract act, sales of goods act, IPRs and legal provisions applicable for establishment, management and winding up of companies in India.*

**UNIT-I: INDIAN CONTRACT ACT:**

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 -Modes of Discharge of a contract - Performance of Contracts - Breach of Contract - Remedies for Breach - Significance of Information Technology Act.

**UNIT-II: SALE OF GOODS ACT AND CONSUMER PROTECTION ACT:**

Contract of Sale: Essentials of Valid Sale - Sale and Agreement to Sell – Definition and Types of Goods - Conditions and Warranties - Caveat Emptor - Exceptions - - Unpaid Seller - Rights of Unpaid Seller. Consumer Protection Act 1986: Definitions of Consumer – Person – Goods - Service -Consumer Dispute - Consumer Protection Councils - Consumer Dispute Redressal Agencies - Appeals.

**UNIT-III: INTELLECTUAL PROPERTY RIGHTS:**

Trade Marks: Definition - Registration of Trade Marks - Patents: Definition - Kinds of Patents - Transfer of the Patent Rights - Rights of the Patentee - Copy Rights: Definition -- Rights of the Copyright Owner - Terms of Copy Right - Copy Rights Infringement - Other Intellectual Property Rights: Trade Secrets - Geographical Indications.

**UNIT-IV: MANAGEMENT OF COMPANIES AND MEETINGS:**

Director: Qualification - Disqualification - Position - Appointment - Removal – Duties and Liabilities – Loans – Remuneration – Managing Director – Corporate Social Responsibility – Corporate Governance. 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: Rajashree. – HPH
- 3) Business Law - Kavitha Krishna, Himalaya Publishing House
- 4) Business Laws – Dr. B. K. Hussain, Nagalakshmi - PBP
- 5) Company Law: Prof. G. Krishna Murthy, G. Kavitha, PBP
- 6) Company Law and Practice: GK Kapoor & Sanjay Dhamija, Taxmann Publication.
- 7) Company Law: Revised as per Companies Act- 2013: KC Garg et al, Kalyani Publication.
- 8) Corporate Law: PPS Gogna, S Chand.
- 9) Business Law: D.S. Vital, S Chand
- 10) Company Law: Bagriyal AK, Vikas Publishing House.



**Paper DSC 203: DATA ANALYTICS ESSENTIALS**

Hours Per Week: (3T+4P)

Exam Hours: 1 ½

Credits: 5

Marks: 60T+20P+20I

**Objective:** To make students to learn Essentials of data Analytics.

**UNIT I: VARIABLES FOR DATA ANALYTICS:**

Types of Variables: Determine the nature of variables in data analysis - Differentiate between numerical and categorical. Variables - Distinguish between nominal and ordinal variables - Differentiate between interval and ratio - Distinguish between continuous and discrete

**UNIT II: ESSENTIAL STATISTICS DATA ANALYTICS:**

Central Tendency of Data: Identify the components of central tendency - Calculate mean/median/mode - Identify the steps in calculating weighted/geometric/harmonic means - Measurement and Variability: Determine core aspects of measurement and variability - Calculate range - Calculate quartiles - Calculate interquartile range - Calculate variance - Calculate standard deviation - Analyze permutation with repetition - Analyze combinations without repetition

**UNIT III: PROBABILITY FOR DATA ANALYTICS :**

Basic Probability: Uses of probability - Differentiate between sample space, event, independent and dependent - Calculate probability - Probability and Ven Diagramming: Analyze “this” OR “that” diagram - Analyze “this” AND “that” diagram - Analyze exclusive diagram - Joint probability - Conditional probability - Calculating Probability: Calculate P using a contingency table - Calculate P from trees - Calculate Bayes’ theorem - Calculate the mean in terms of probabilities - Calculate the variance and standard deviation in terms of probabilities - Calculate conditional probability

**UNIT IV: DISTRIBUTIONS:**

Distributions: Analyze distributions - Discrete distributions - Binomial distributions - Poisson distributions - Continuous Distributions: Identify continuous distributions - Calculate continuous distributions - Identify cumulative distributions - Identify normal distributions - Calculate normal distributions - Compare quartiles and normal distributions - Identify skew

**UNIT V: CASE STUDIES USING R:**

Statistics in R Case Study: Apply Vectors in R - Use Data Frames in R - Use data from an external file in R - Apply mean/median/standard deviation in R - Distributions in R Case Study: Use Normal distribution function in R - Use Poisson distribution function in R - Apply Scatter plot in R - Apply Histogram in R - Apply Box Plot in R - Fraud Detection Case Study: Apply scripts in R - Create reusable, user defined function in R - Use Bayes' Theorem in R - Choose a function flexible to allow for different input parameters

**SUGGESTED READING:**

1. Application of Data Analysis Essentials Certificate; AICPA
2. Fundamentals of Business Analytics, 2nd Edition; R N Prasad, SeemaAcharya; Wiley
3. Business Analysis with Microsoft Excel and Power BI, 5th edition; Conrad G. Carlberg; Pearson
4. Data Analytics with R; BhartiMotwani; Wiley.

**Paper SEC - 2 (a): PRINCIPLES OF INSURANCE**

Objectives: To make Students to learn Principles of Insurance.

**UNIT I: RISK MANAGEMENT AND INSURANCE & INSURANCE TERMINOLOGY:**

Risk Management -Types of Risks - Actual and Consequential Losses - Management of Risks - Risk of Dying Early - Risk of Living too Long - Different Classes of Insurance - Importance of Insurance - Management of Risk by Individuals and Insurers - Fixing of Premiums – Reinsurance - Role of Insurance in Economic Development and Social Security - Constituents of Insurance Market - Operations of Insurance Companies - Operations of Intermediaries - Specialist Insurance Companies - Role of Regulators - Common and specific terms in Life and Non-Life Insurance - Understanding Insurance Customers - Customer Behavior at Purchase Point - Customer Behavior when Claim Occurs - Importance of Ethical Behavior

**UNIT II: INSURANCE CONTRACT AND INSURANCE PRODUCTS:**

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 - **Life Insurance Products:** Term Plans - Pure Endowment Plans - Combinations of Plans - Traditional Products - Linked Policies - Features of Annuities and Group Policies - **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:**

1. Principles of Risk Management and Insurance: George E Rejda (13th Edition) 2. Risk Management and Insurance: Trieschman ,Gustavson and Hoyt . South Western College Publishing, 3. Principles of Insurance: A Publication of the Insurance Institute of India 4. Principles of Insurance: Telugu Academy, Hyderabad 5. Guide to Risk Management: SagarSanyal6. Principles of Insurance: Dr V Padmavathi,Dr V Jayalakshmi - PBP 7. Insurance and Risk Management : P.K. Gupta 8. Insurance Theory and Practice :Tripathi PHI 9. Principles of Insurance Management: Neelam C Gulati, Excel Books 10. Life and Health Insurance: Black, JR KENNETH & Harold Skipper, Pearson, Cincinnati,Ohio Suggested Websites: 1) [www.irda.gov.in](http://www.irda.gov.in) 2) [www.policyholder.gov.in](http://www.policyholder.gov.in) 3) [www.irdaindia.org.in](http://www.irdaindia.org.in)

**Paper SEC - 2 (b): FOUNDATION OF DIGITAL MARKETING & WEB DESIGN**

**Objective:**

- i. To make students to understand Foundation of digital marketing.
- ii. To make students to understand the Fundamentals of Web design and Analytics.

**UNIT I: DIGITAL MARKETING FOUNDATIONS& CONTENT MARKETING:**

Digital Marketing Strategy - Exploring Digital Marketing - Starting with the Website - Foundations of Analytics - Search Engine Optimization - Search and Display Marketing - Social Media Marketing - Video Marketing.

Email marketing tools and setup - Email marketing segmentation, personalization and mobile friendly design

Content marketing foundations - Blogs for content marketing - Content marketing for staying relevant - Newsletters for content marketing - Mobile marketing foundations

**UNIT II: WEB DESIGN AND GOOGLE ANALYTICS:**

Exploring and learning web design – Understanding Conversion rate optimization (CRO) – Setting CRO – Understanding target audience – Optimization champion

Getting started with Google Analytics – Core concepts – Additional interface features – Using reports – Audience reports – Acquisition reports – Social reports – Behavior reports – Track events – Conversion reports – Additional features

**SUGGESTED READINGS:**

1. The Art of Digital Marketing: The Definitive Guide to Creating Strategic, Targeted, and Measurable Online Campaigns by Ian Dodson, Wiley
2. Fundamentals of Digital Marketing by Puneet Singh Bhatia, Pearson
3. Digital Marketing by Vandana Ahuja, Oxford
4. Digital Marketing by Seema Gupta, McGraw Hill
5. Digital Marketing For Dummies by Ryan Deiss and Russ Henneberry
6. Don't Make Me Think Revisited: A Common Sense Approach to Web Usability By Steve Krug
7. Web Analytics 2.0 – Avinash Kaushik
8. Successful Analytics by Brian Clifton
9. Math and Stats for Web Analytics and Conversion Optimization by Himanshu Sharma

**Paper DSC 301: ADVANCED ACCOUNTING**

**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.Maheshwari, Vikas.
5. Advanced Accountancy: Dr. G. Yogeshwaran, Julia Allen - PBP
6. Accountancy-III: Tulasian, Tata McGraw Hill Co.
7. Advanced Accountancy: Arulanandam; Himalaya.
8. Accountancy-III: S.P. Jain & K.L Narang, Kalyani Publishers.
9. Guidance Note on the Revised Schedule VI to the Companies Act, 1956, The Institute of Chartered Accounts of India.
10. Advanced Accounting (IPCC): D. G. Sharma, Tax Mann Publications.

**Paper DSC 302: BUSINESS STATISTICS -I**

**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 –I: Dr. Obul Reddy, Dr. D. Shridevi - PBP
5. Business Statistics: Dr. J. K. Thukral, Taxmann Publications
6. Business Statistics: K. Alagar, Tata McGraw Hill
7. Fundamentals of Statistical: S. P Gupta, Sultan Chand
8. Business Statistics: J. K. Sharma, Vikas Publishers
9. Business Statistics: S. L Aggarwal, S. L. Bhardwaj, Kalyani Publications
10. Statistics-Problems and Solutions: Kapoor V.K, S. Chand
11. Statistics - Theory, Methods and Applications: Sancheti D.C. &Kapoor V.K
12. Business Statistics: S. K. Chakravarty, New Age International Publishers
13. Statistics: Andasn,Sweenly,Williams,Cingage.

**Paper DSC 303: DATA ANALYTICS MODELING**

Hours Per Week: (3T+4P)

Credits: 5

Exam Hours: 1 ½

Marks: 60T+20P+20I

**Objective:** To make students to learn data Analytics Modeling.

**UNIT I: UNDERSTANDING YOUR BUSINESS:**

Identify business value - Determine how business and corporate drivers impact the strategic direction of the business - Analyze different project processes used in working with data - Compare different types of data

**UNIT II: DATA PROFILING & CLEANSING:**

Data Profiling: Identify core data profiling tasks - Identify outliers - Use tools for data profiling - Data Cleansing: Identify core data cleansing tasks - Use tools for cleansing

**UNIT III: ETL (EXTRACT, TRANSFORM, AND LOAD):**

Data Quality and MDM: Identify role of data quality in organization - Identify role of MDM in organization - Use tools for data quality and MDM - ETL Tools: Distinguish between ETL processes - Use Talend Data Integration - Use MSSQL SSIS

**UNIT IV: DATA WAREHOUSING:**

Data Warehousing: Identify purpose of data warehousing - Identify between key components of a data warehouse - Distinguish between data warehouses and data lakes - Determine the role of different warehousing techniques - Data Warehousing Tools: Differentiate between utility of relational DW, cubes, and in-memory scenarios - Compare techniques for data integration with regards to warehousing - Use warehousing tools - Use integration tools for warehousing.

**UNIT V: UNDERSTANDING DATA:**

Overview: Identify data roles in the organization - Determine how data moves through the data lifecycle - Data Modeling: Identify the role of data modeling in the organization - Analyze data modeling techniques - Use tools for data modeling - Structured Data Tools: Identify core tools for RDBMS's (structured storage) - Use SQL to perform CRUD tasks against a database - Unstructured Data Tools: Identify tools in unstructured stack - Use tools for unstructured data management

**SUGGESTED READINGS:**

1. Data Analytics Modeling Certificate; AICPA
2. Fundamentals of Business Analytics, 2nd Edition; R N Prasad, SeemaAcharya; Wiley
3. Business Analysis with Microsoft Excel and Power BI, 5th edition; Conrad G. Carlberg; Pearson
4. Data Analytics with R; BhartiMotwani; Wiley

**Paper SEC - 4 (a): PRACTICE OF LIFE AND GENERAL INSURANCE**

**Objective:** To make students to learn Practice of Life and General Insurance

**UNIT-I: PREMIUM CALCULATION AND POLICY DOCUMENTS:**

**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 -General Insurance Policy Documents and Forms - Rating and Premiums - concept of soft and hard markets**

**UNIT-II: SETTLEMENT OF CLAIMS RISK & UNDERWRITINGS AND FINANCIAL PLANNING & TAX SAVING:**

Life Insurance: 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.

General Insurance: Concept of Underwriting—Underwriting Process—Risk sharing and its methods—risk management and steps involved in it—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 Life Insurance&General Insurance: Insurance Institute of India, Mumbai. 2. Insurance and Risk Management: P.K.Gupta, Himalaya Publishing House, Mumbai. 3. Fundamentals of Life Insurance Theories and Applications: Kanika Mishra, Prentice Hall 4. Principles of Life Insurance & Practice of General Insurance– Dr. V. Padmavathi, Dr. V. Jayalakshmi - PBP 5. Managing Life Insurance: Kutty, S.K., Prentice Hall of India: New Delhi 6. Life and Health Insurance: Black, Jr. Kenneth and Harold Skipper Jr., Prentice Hall, Inc., England. 7. Life Insurance: Principles and Practice: K.C. Mishra and C.S. Kumar, Cengage Learning, New Delhi. 8. Life Insurance in India: Sadhak, Respose Books, New Delhi. 9. Practice of General Insurance – D.S. Vittal-HPH, 10.Principles & Practice of Insurance- Dr. P. Periasamy – HPH. 11. Risk Management: A Publication of the Insurance Institute of India. 12. Insurance Theory and Practice: Tripathi PHI 13. Risk Management and Insurance: Trieschman, Gustavson and Hoyt 9. South Western College Publishing Cincinnati, Ohio.

**Paper SEC - 4 (b): SOCIAL MEDIA MARKETING, SEARCH ENGINE OPTIMIZATION & ONLINE ADVERTISING**

**Objective:**

- I. To make students to understand the Social Media marketing.
- II. To make students to understand the Search engine optimization and online advertising.

**UNIT I: SOCIAL MEDIA MARKETING:**

Building an online community – Understanding Social Media Marketing – Marketing and building presence on Facebook – Marketing and building presence on Twitter – Employer branding on LinkedIn

Facebook advertising overview – How Facebook ads work – How to create Facebook ads – Additional advertising options and best practices for Facebook advertising – Marketing and monetizing on YouTube – Customize your YouTube Channel – Video optimization on YouTube – YouTube Analytics

**UNIT II: SEO FOUNDATION & STRATEGIES:**

Understanding SEO — Content optimization – Long-term content planning

Keyword strategy – Linkbuilding strategies – Measuring SEO effectiveness – SEO for Ecommerce – Local search – Mobile SEO UNIT

Pay-Per-Click Advertising – Getting started with Google Adwords – Advertising tracking – Key Google Adwords strategies – Remarketing with Google – Budget and ROI tips – B2B Remarketing Campaigns

**SUGGESTED READINGS:**

1. The Art of Digital Marketing: The Definitive Guide to Creating Strategic, Targeted, and Measurable Online Campaigns by Ian Dodson, Wiley
2. Fundamentals of Digital Marketing by Puneet Singh Bhatia, Pearson
3. Digital Marketing by Vandana Ahuja, Oxford
4. Tuten: Social Media Marketing, Sage
5. Digital Marketing by Seema Gupta, McGraw Hill
6. Social Media Marketing All-In-One for Dummies By Jan Zimmerman and Deborah Ng
7. Facebook Growth Hacking: How to Correctly Set Up and Maintain Your Facebook Presence and Gain Massive Amounts of Fans (Social Media Marketing) by Jeff Abston
8. Youtube Influencer: How To Become a Youtube Influencer, Why Influencer Marketing Matters, and How To Monetize Your Channel by Jeff Abston
9. SEO Fitness Workbook: 2018 Edition: The Seven Steps to Search Engine Optimization Success on Google By Jason McDonald
10. The Art of SEO: Mastering Search Engine Optimization By Eric Enge, Stephan Spencer and Jessie Stricchiola
11. Google Adwords for Beginners: A Do-It-Yourself Guide to PPC Advertising By Cory Rabazinsky, 2015



**Paper DSC 401: INCOME TAX**

**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 - Person – Agricultural Income – Heads of 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. (Theory only)

**UNIT-II: 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-III: 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-IV: PROFITS AND GAINS OF BUSINESS OR PROFESSION:**

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

**UNIT-V: CAPITAL GAINS AND INCOME FROM OTHER SOURCES:**

Introduction - Meaning – Scope of charge – Basis of charge – Short term and Long term Capital Assets – Transfer of Capital Asset – Deemed 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 - General Incomes u/s. 56(1) – Specific Incomes u/s. 56(2) – Dividends u/s. 2(22) – Winnings from lotteries Puzzles, crown world puzzles, Races – 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. (Theory only)

**SUGGESTED READINGS:**

1. Income Tax Law and Practice: V.P. Gaur & D.B Narang, Kalyani Publishers.
2. Taxation: Dr. M.N. Ravi, PBP.
3. Direct Taxes Law & Practice: Dr.Vinod K. Singhania&Dr.KapilSinghania, Taxmann
4. Income Tax: B.B. Lal, Pearson Education.
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.
8. Direct Tax Law and Practice : AhujaGirish
9. Income Tax: Dr. P.V. RamanaRao&Dr. A. Sudhakar, National Publishing Co.

**Paper DSC 402: BUSINESS STATISTICS - II**

**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: THEORITICAL 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 Statics – II: Dr. OBul Reddy, Dr. D. Shridevi - PBP
5. Business Statistics: Dr. J. K. Thukral, Taxmann Publications
6. Business Statistics: K. Alagar, Tata McGraw Hill
7. Fundamentals of Statistical: S. P Gupta , Sultan Chand
8. Business Statistics: J. K. Sharma, Vikas Publishers
9. Business Statistics: Vora, Tata McGraw Hill
10. Statistics-Problems and Solutions: Kapoor V.K, S. Chand
11. Statistics-Theory, Methods and Applications: Sancheti D.C. & Kapoor V.K
12. Business Statistics: S. K. Chakravarty, New Age International Publishers
13. Business Statistics-G.Laxman, Vasudeva Reddy, K.Goud, Taxmann Publications, Hyderabad.

**Paper DSC 403: FORECASTING & PREDICTIVE ANALYTICS**

**Hours Per Week:** (3T+4P)

**Exam Hours:** 1 ½

**Credits:** 5

**Marks:** 60T+20P+20I

**Objective:** To make students to understand the Analytics of Forecasting & Predictive

**UNIT I: REGRESSION, FORECASTING & DISTANCE:**

Bivariate regression: Identify linear regression models and their application in data analysis - Calculate linear bivariate regressions in order to model commonly encountered problems - Determine the quality of fit of a linear model, establishing its usefulness for prediction - Multivariate regression: Identify multivariate linear regression models in data analytics - Calculate linear multivariate regressions in order to model commonly encountered problems - Determine the quality of fit of a multivariate linear model, establishing its usefulness for prediction - Other regressions: Identify logistic regression models and apply those models to common business problems - Determine the quality of fit of a multivariate linear model - Forecasting in time: Identify the components of a time forecast in order to predict future values from a model - Differentiate seasonal variations from trends in order to improve prediction of future values from a model - Calculate seasonal indices so that seasonal variations can be qualified in the model - Measuring Distance: Identify the meaning of dimensionality and its implications in analytics - Calculate different types of distances and identify scenarios when each type is applicable.

**UNIT II: CLASSIFICATION:**

Classification k Nearest Neighbor (KNN): Determine core aspects of classification in order to understand when it's an appropriate technique - Calculate kNN algorithm with fixed or variable number of k and assess the quality of the results - Classification Naïve Bayes: Identify Naïve Bayes classification and when it is applicable - Apply a Naïve Bayes classification to a common business problem - Classification Support Vector Machine: Identify the basics of the support vector machine (SVM) classification algorithm - Identify what a support vector is and its use in the classification algorithm - Calculate a SVM classification to solve common business problems - Classification Decision Trees: Identify the steps to build a decision tree classifier - Apply the steps to create a basic decision tree - Use a decision tree algorithm and appropriate metrics to solve a business problem and assess the quality of the solution

**UNIT III: CLUSTERING:**

Determine core aspects and types of clustering in order to properly apply the algorithms to business problems - Apply various clustering algorithms to data sets in order to solve common, applicable business problems.

**UNIT IV: OPTIMIZATION:**

Identify the goals and constraints of a linear optimization - Calculate a linear optimization in order to solve a business problem.

**UNIT V: SIMULATION:**

Use data analysis performed on historical data and any applicable theory to construct a model - Use a Monte Carlo analysis with the model in order to generate and assess the likelihood of predictions from the model.

**SUGGESTED READINGS:**

1. Forecasting and Predictive Analytics Certificate; AICPA
2. Fundamentals of Business Analytics, 2nd Edition; R N Prasad, Seema Acharya; Wiley
3. Business Analysis with Microsoft Excel and Power BI, 5th edition; Conrad G. Carlberg; Pearson  
Data Analytics with R; Bharti Motwani; Wiley

**Paper GE: a) BUSINESS ECONOMICS**

**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: VanithAgrawal, 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 GE: b) ADVANCED ASPECTS OF INCOME TAX**

**Objective:** To acquire conceptual and legal knowledge about Income Tax provisions relating to computation of Income from certain heads and other provisions relating to clubbing, aggregation of income and assessment procedure.

**UNIT-I: PROFITS AND GAINS OF BUSINESS OR PROFESSION:**

Valuation of Stock Depreciation: Meaning – Assets used for Business – Block of Assets – Rates of Depreciation – Miscellaneous Provisions about depreciation – Computation of Depreciation.

**UNIT-II: INCOME FROM OTHER SOURCES:**

Winnings from lotteries Puzzles, crown world puzzles, Races Problems on computation on Income from Other Sources. Treatment of Agricultural Income. Heads of income: Gross Total Income – Taxable Income – Income Tax Rates. Problems on computation of Total Income of an Individual based on Residential Status.

**UNIT-III: CLUBBING AND AGGREGATION OF INCOME:**

Income of other persons included in the total income of Assesse – 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. KapilSinghania, Taxmann
3. Income Tax: M. Jeevarathinam & C. Vijay Vishnu Kumar, SCITECH Publications.
4. Taxation: R.G. Saha, Himalaya Publishing House Pvt. Ltd.
5. Income Tax: B. Lal, Pearson Education.
6. Income Tax: Johar, McGrawHill Education.
7. Taxation Law and Practice: Balachandran & Thothadri, PHI Learnin

**Paper DSE 501 (a) : COST ACCOUNTING**

**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: PrashantaAthma, 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 DSE 501 (b) : FINANCIAL PLANNING & PERFORMANCE**

**Objective:** *To make students to understand the Financial Planning & Performance.*

**UNIT I: STRATEGIC PLANNING:**

Strategic planning: Analysis of external and internal factors affecting strategy - Long-term mission and goals - Alignment of tactics with long-term strategic goals - Strategic planning models and analytical techniques - Characteristics of successful strategic planning process - Annual profit plan and supporting schedules: Operational budgets - Financial budgets - Capital budgets - Top-level planning and analysis: Pro forma income - Financial statement projections - Cash flow projections.

**UNIT II: BUDGETING AND FORECASTING:**

Budgeting Concepts: Operations and performance goals - Characteristics of a successful budget process - Resource allocation - Forecasting techniques: Regression analysis - Learning curve analysis - Expected value - Budgeting Methodologies: Annual business plans (master budgets) - Project budgeting - Activity-based budgeting - Zero-based budgeting - Continuous (rolling) budgets - Flexible budgeting

**UNIT III: COST AND VARIANCE ANALYSIS:**

Cost and Variance Analysis: Comparison of actual to planned results - Use of flexible budgets to analyze performance - Management by exception - Standard Cost System: Use of standard cost systems - Analysis of variation from standard cost expectations

**UNIT IV: PERFORMANCE MEASURES:**

Performance Measures: Product profitability analysis - Business unit profitability analysis - Customer profitability analysis - Return on investment - Residual income - Investment base issues - Key performance indicators (KPIs) - Balanced scorecard - Responsibility Centers and Reporting Segments: Types of responsibility centers - Transfer pricing - Reporting of organizational segments

**UNIT V: TECHNOLOGY AND ANALYTICS:**

Information Systems: Accounting information systems - Enterprise resource planning systems - Enterprise performance management systems - Data Governance: Data policies and procedures - Life cycle of data - Controls against security breaches - Technology-enabled finance transformation: System Development Life Cycle - Process automation - Innovative applications  
Data analytics: Business intelligence - Data mining - Analytic tools - Data visualization

**SUGGESTED READINGS:**

1. Wiley CMAexcel Learning System, Part 1: Planning, Performance & Analytics
2. Strategic Management and Business Policy: Globalization, Innovation and Sustainability, 15th edition; Wheelen, Thomas L., et. al.; Prentice Hall
3. Cost Management: A Strategic Emphasis, 6th edition; Blocher, Edward, J., Stout, David E., Juras, Paul E., and Cokins, Gary; McGraw Hill
4. Horngreen's Cost Accounting: A Managerial Emphasis, 16th edition; Charles T., Datar, Srikant, and Rajan, Madhav; Pearson
5. Quantitative Methods for Business, 13th Edition; Anderson, David, R., Sweeney, Dennis J., Williams, Thomas A., Camm, Jeff, and Martin, R. Kipp; Cengage Learning
6. Management Accounting: An Integrative Approach; McNair-Connolly, C.J., Merchant, Kenneth A.; IMA.

**Paper DSE 501 (c) :INTERNATIONALFINANCIAL REPORTING -I**

*Objective:To make students to understand the International Financial Reporting..*

**UNIT I: GENERAL PURPOSE OF FINANCIAL ACCOUNTING AND REPORTING AS PER US GAAP AND IFRS:**

Conceptual framework: Standard Setting Bodies & Hierarchy - Elements of F/S - Primary objectives of financial reporting - Qualitative Characteristics of F/S - Fundamental Assumptions & Principles - Accounting Cycle & Preparation of F/S - General-purpose financial statements: Balance sheet - Income statement - Statement of comprehensive income - Statement of changes in equity - Statement of changes cash flows - Public company reporting requirements: SEC Reporting Requirements - Interim Financial Reporting - Segment Reporting - Revenue recognition: 5-Step approach to Revenue Recognition - Certain Customer's Rights & Obligations - Specific Arrangements - Long Term Construction Contracts

**UNIT II: CURRENT ASSETS AND CURRENT LIABILITIES (AS PER US GAAP AND IFRS):**

Monetary Current Assets & Current Liabilities: Cash & Cash Equivalents - Accounts Receivable - Notes Receivable - Transfers & Servicing of Financial Assets - Accounts Payable - Employee-related Expenses Payable - Inventory: Determining Inventory & Cost of Goods Sold - Inventory Valuation - Inventory Estimation Methods

**UNIT III: FINANCIAL INVESTMENTS AND FIXED ASSETS (AS PER US GAAP AND IFRS):**

Financial Investments: Investments in Equity Securities - Investment in Debt Securities - Financial Instruments - Tangible Fixed Assets: Acquisition of Fixed Assets - Capitalization of Interest - Costs Incurred After Acquisition - Depreciation - Impairment - Asset Retirement Obligation - Disposal & Involuntary Conversions - Intangible Assets: Knowledge-based intangibles (R&D, software) - Legal rights based intangibles (patent, copyright, trademark, franchise, license, leasehold improvements) – Goodwill

**UNIT IV: FINANCIAL LIABILITIES (AS PER US GAAP AND IFRS):**

Bonds Payable: Types of Bonds - Convertible bonds vs. Bonds with detachable warrants - Bond Retirement - Fair Value Option & Fair Value Election - Debt Restructuring: Settlement - Modification of terms

**UNIT V: SELECT TRANSACTIONS (AS PER US GAAP AND IFRS):**

Fair value measurements: Valuation techniques - Fair value hierarchy - Fair value concepts -Accounting changes and error correction: Changes in accounting estimate - Changes in accounting principle - Changes in reporting entity - Correction of an error - Contingencies: Possibility of occurrence (remote, reasonably possible or probable) - Disclosure vs. Recognition  
Derivatives and Hedge Accounting: Speculation (non-hedge) - Fair value hedge - Cash flow hedge - Non-monetary exchanges: Exchanges with commercial substance - Exchanges without commercial substance - Leases: Operating lease - Finance lease - Sale leaseback

**SUGGESTED READINGS:**

1. Miles CPA Review Concept Book: Financial Accounting & Reporting, Miles Education
2. Wiley CPA Excel Exam Review Course Study Guide: Financial Accounting and Reporting, Wiley
3. IFRS & US GAAP Best Practices in Accounting World: GAAP Analysis, Rajesh Dhawan
4. Transparency in Financial Reporting: A concise comparison of IFRS and US GAAP 1st Edition, Ruth Ann McEwen, Harriman House Ltd.
5. IFRS and US GAAP: A Comprehensive Comparison, Steven E. Shamrock, Wiley
6. Wiley GAAP: Interpretation and Application of Generally Accepted Principles, Barry J. Epstein and Ralph Nach, Wiley
7. IFRS Simplified with Practical Illustration Part 1 & 2, Mr RammohanBhave and Dr Mrs Anjali RammohanBhave, CNBC TV 18.



**Paper DSE 502 (a) : COMPUTERIZED ACCOUNTING**

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

**UNIT 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.

**UNIT 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.

**UNIT III: RECORDING DAY-TO-DAY TRANSACTIONS IN ERP:**

Introduction-Business Transactions-Source Document for Voucher-Recording Transactions in ERP - Accounting Vouchers-Receipt Voucher (F6)-Contra Voucher (F4)-Payment Voucher (F5)-Purchase Voucher (F9)-Sales Voucher (F8)-Debit Note Voucher-Credit Note (Ctrl+F8)- Journal Voucher (F7).

**UNIT IV: ACCOUNTS RECEIVABLE AND PAYABLE MANAGEMENT:**

Introduction-Accounts Payables and Receivables-Maintaining Bill-wise Details-Activation of Maintain Bill-wise Details Feature-New Reference-Against Reference-Advance-On Account-Stock Category Report-Changing the Financial Year in ERP.

**UNIT V: MIS REPORTS:**

Introduction-Advantages of Management Information Systems -MIS Reports in ERP - Trial Balance - Balance Sheet-Profit and Loss Account-Cash Flow Statement-Ratio Analysis-Books and Reports - Day Book-Receipts and Payments-Purchase Register-Sales Register-Bills Receivable and Bills Payable.

**SUGGESTED READINGS:**

1. Computerised Accounting: GarimaAgarwal, 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 Publications.

**Paper DSE 502 (b): FINANCIAL DECISION MAKING - I**

**Objective:** *To make students to understand the Financial Decision Making.*

**UNIT I: FINANCIAL STATEMENT ANALYSIS**

Basic Financial Statement Analysis: Common size financial statements - Common base year financial statements - Financial Ratios: Liquidity - Leverage - Activity - Profitability - Market Profitability analysis: Income measurement analysis - Revenue analysis - Cost of sales analysis - Expense analysis - Variation analysis - Special issues: Impact of foreign operations - Effects of changing prices and inflation - Off-balance sheet financing - Impact of changes in accounting treatment - Accounting and economic concepts of value and income - Earnings quality

**UNIT II: FINANCIAL MANAGEMENT**

Risk & Return: Calculating return - Types of risk - Relationship between risk and return  
Long-term Financial Management: Term structure of interest rates - Types of financial instruments - Cost of capital - Valuation of financial instruments

**UNIT III: RAISING CAPITAL**

Raising Capital: Financial markets and regulation - Market efficiency - Financial institutions - Initial and secondary public offerings - Dividend policy and share repurchases - Lease financing

**UNIT IV: WORKING CAPITAL MANAGEMENT**

Managing working capital: Cash management - Marketable securities management - Accounts receivable management - Inventory management - Short-term Credit: Types of short-term credit - Short-term credit management

**UNIT V: CORPORATE RESTRUCTURING AND INTERNATIONAL FINANCE**

Corporate Restructuring: Mergers and acquisitions - Bankruptcy - Other forms of restructuring  
International Finance: Fixed, flexible, and floating exchange rates - Managing transaction exposure - Financing international trade - Tax implications of transfer pricing

**SUGGESTED READINGS:**

1. Wiley CMAexcel Learning System, Part 2: Strategic Financial Management
2. Interpretation and Application of International Financial Reporting Standards; Mackenzie, Bruce, Coetsee, Danie, Njikizana, Tapiwa, Chamboko, Raymond, Colyvas, Blaise, and Hanekom, Brandon; Wiley
3. Financial Reporting & Analysis, 13th edition; Gibson, Charles H.; South-Western Cengage Learning
4. Financial Statement Analysis, 10th edition; Subramanyam, K.R., and Wild, John L.; McGraw Hill
5. Principles of Corporate Finance, 11th edition; Brealey, Richard, A., Myers, Stewart C., and Allen, Franklin; McGraw Hill
6. Fundamentals of Financial Management, 13th edition; Van Horn, James, C., and Wachowicz, John M. Jr.; FT / Prentice Hall

**Paper DSE 502 (c) : INTERNATIONAL TAX & REGULATION**

**Objective:** To make students to understand the International Tax & Regulation.

**UNIT I: TAXATION OF INDIVIDUALS:**

Individual Income Tax Return: Filing Status - Cash basis and Accrual basis

Gross Income: Wages, Salaries, Bonus, Commission, Fees & Tips - Interest & Dividend Income - Business Income - Capital Gains & Losses - Passive Income - Farming Income - Deductions: Adjustments - Deductions from AGI - Calculating Tax: Tax Credits - Alternative Minimum Taxes - Other Taxes - Estimated Tax penalty

**UNIT II: PROPERTY TRANSACTIONS & DEPRECIATION:**

Capital Gains & Losses - Gains & Losses from Sale of Long-term Business Property - Depreciation & Amortization

**UNIT III: TAXATION OF CORPORATIONS:**

C-Corporations: Formation - Income Tax Return - Income - Deductions - Reconciliation of Taxable Income with books - Calculating Tax - Corporate Earnings & Distributions - Corporate Liquidation & Reorganizations - S-Corporations: Eligibility criteria - Income Tax Return - Shareholder basis - Earnings and Distribution - Termination of Election

**UNIT IV: TAXATION OF OTHER ENTITIES:**

Partnerships: Formation - Income Tax Return - Partner basis - Partnership Distributions - Sale of Partnership Interest by a Partner - Termination of Partnership - Estate, Trust & Gift Taxation: Estate and Trust Fiduciary Income Tax Return - Estate Tax Return - Gift Tax Return - Generation-skipping transfer Tax - Tax Exempt Organizations: Formation - Income Tax Return

**UNIT V: STATUTORY REGULATIONS, ACCOUNTANT RESPONSIBILITIES, BUSINESS STRUCTURES:**

Federal Security Regulations: Securities Act of 1933 - Securities Exchange Act of 1934 - Other federal security regulations - Professional & Legal Responsibilities: Accountant Common Law Liabilities - Accountant Statutory Liabilities - Accountant Liabilities for Privileged Information - Accountant Criminal Liabilities - Employment Regulations - Environmental Regulations - Antitrust Regulations - Business Structures: Sole Proprietorships - Partnerships - Corporations

**SUGGESTED READINGS:**

1. Miles CPA Review Concept Book: Regulation, Miles Education
2. Wiley CPA Excel Exam Review Course Study Guide: Regulation, Wiley
3. Internal Revenue Code: Income, Estate, Gift, Employment and Excise Taxes, CCH Tax Law Editors
4. Federal Income Tax: Code and Regulations--Selected Sections, Martin B. Dickinson, Wolters Kluwer
5. Federal Income Taxation by Katherine Pratt and Thomas D. Griffith, Wolters Kluwer
6. Federal Income Taxation (Concepts and Insights), Marvin Chirelstein and Lawrence Zelenak, Foundation Press

**Paper DSE 503 (a) : ADVANCED DATA VISUALIZATION**

**Hours Per Week:** (3T+4P)

**Credits:** 5

**Exam Hours:** 1 ½

**Marks:** 60T+20P+20I

**Objective:** *To make students to understand the Advanced data visualization.*

**UNIT I: CHART & GRAPH SELECTION:**

Differentiate between the following graph and chart types and when to use them: Categorical – Continuous - Time series – Bivariate - Distribution

**UNIT II: BUSINESS INTELLIGENCE:**

Overview of Business Intelligence (BI): Identify business intelligence (BI) concepts and their common applications - Differentiate between the major enterprise BI platforms and when each is appropriate - Apply BI techniques (online analytical processing [OLAP], drill through, drill down, drill up) - Report Building and Online Analytical Processing (OLAP): Apply techniques for building reports and identify the best uses of the learned techniques - Distinguish the elements of OLAP (online analytical processing) - Business Intelligence in Action: Identify the steps and benefits of scorecard and strategy management and apply the steps in appropriate situations - Distinguish between effective dashboard techniques

**UNIT III: MASHUPS:**

Identify event streaming techniques and their uses - Differentiate between types of mashups in order to determine the best mashup for a dashboard presentation - Analyze trusted data in order to derive information

**UNIT IV: DATA VISUALIZATION BEST PRACTICES:**

Identify core data visualization rules in order to ensure quality report development - Identify the goals of data visualization and how data visualization can benefit an entity.

Differentiate between the needs of different report users and identify appropriate report styles for each.

**UNIT V: REPORTING:**

Reporting Options: Differentiate between alerts and trends and the appropriate uses for each - Distinguish the appropriateness of Self-Serve reports and their application in common scenarios - Differentiate between best uses for BI techniques in order to ensure effective reporting - What Makes a Good Report: Compare layout options and identify appropriate presentation choices for maximum effectiveness - Differentiate between good and bad report implementations and the potential impact of poor implementation - Constructing Reports: Distinguish between when to use reporting tools versus analysis tools - Use core tools to build report and dashboard layouts to achieve maximum effectiveness

**SUGGESTED READINGS:**

1. Data Visualization Certificate; AICPA
2. Introducing Microsoft Power BI; Alberto Ferrari, Marco Russo; Microsoft Press
3. Introduction to Microsoft Power Bi: Bring Your Data to Life; M.O. Cuddley; Createspace Independent Pub
4. Business Analysis with Microsoft Excel and Power BI, 5th edition; Conrad G. Carlberg; Pearson
5. Microsoft Power BI Dashboards Step by Step, Errin O'Connor, Microsoft Press
6. Storytelling with Data: A Data Visualization Guide for Business Professionals; Cole NussbaumerKnaflic; Wiley.

**Paper DSE 503 (b) : ADVANCED CORPORATE ACCOUNTING**

*Objective: to gain knowledge of AS-19 & 21 and format accounts.*

**UNIT-I: HOLDING COMPANIES (AS-21):**

Nature – Legal requirements – Capital and Revenue Profit/Reserves/Losses – Minority Interest – Cost of Control or Goodwill – Capital Reserve – Inter Company Transactions – Un-realized Profit on Unsold stock - Revaluation of Assets – Interim Dividend by Subsidiary Companies - Debentures in Subsidiary Companies – Consolidated Balance Sheet.

**UNIT-II: ELECTRICITY COMPANIES (DOUBLE ACCOUNTING SYSTEM):**

Meaning of Double Account System – Final Accounts - Calculation of Reasonable Return and Disposal of Surplus – Replacement of an Asset.

**UNIT-III: ACCOUNTING FOR PRICE LEVEL CHANGES:**

Introduction – History – Limitations – Profit measurement under different systems of accounting – Methods of Accounting for Price Level Changes: Current Purchasing Power (CPP) – Current Cost Accounting (CCA).

**UNIT-IV: LEASE ACCOUNTS (AS-19):**

Meaning – Terminology – Advantages and Disadvantages – Types: Financial and Operating Lease – Accounting Treatment in the books of both the parties.

**UNIT-V: HUMAN RESOURCE ACCOUNTING & SOCIAL RESPONSIBILITY ACCOUNTING:**

Human Resource Accounting: Definition – Objectives – Assumptions – Advantages and Limitations – Approaches - Human resource accounting in India (Theory only).

Social Responsibility Accounting: Meaning – Nature – Need – Objectives – Accounting Concepts – Indicators of Social Performance (Theory only).

**SUGGESTED READINGS:**

1. Corporate Accounting: R.L.Gupta, M.RadhaSwamy, Sultan Chand
2. Advanced Corporate Accounting: Srilatha Reddy, Himalaya
3. Advanced Corporate Accounting: Dr. Thangapandi, PBP
3. Advanced Accounting: Tulsania, TataMcGraw-hill Publishing Company
4. Corporate Accounting: Jain &Narang, Kalyani Publications
5. Advanced Accounting: S.M.Shukla, SahityaBhavan
6. Corporate Accounting: PrashantaAthma, Himalaya Publishers.
7. Advanced Accounting (Vol. II): Chandra Bose, PHI

**Paper DSE 503 (c) : FINANCIAL MANAGEMENT**

**Objective:** *To understand basics in Financial Management.*

**UNIT-I: INTRODUCTION:**

Financial Management: Meaning - Nature and Scope – Importance - Objectives - Profit Maximization vs Wealth Maximization – Traditional Functions of Finance Manager – Changing Role of Finance Manager – Relationship between Financial Management and Other Management Areas (Theory).

**UNIT-II: FINANCIAL PLANNING:**

Sources of Finance - Financial Planning: Meaning and Definition – Objectives – Characteristics – Process – Factors - Limitations (Theory).

**UNIT-III: CAPITALIZATION:**

Meaning of Capital and Capitalization – Sources of Capital - Theories of Capitalization – Over Capitalization: Meaning - Causes – Consequences - Remedies - Under Capitalization: Meaning – Causes – Consequences - Remedies - Comparison of Under and Over Capitalization – Watered Stock (Theory).

**UNIT-IV: COST OF CAPITAL:**

Meaning and Definition – Significance – Classification of Costs – Problems in Determination of Cost of Capital – Cost of Debt - Cost of Perpetual and Redeemable Debt - Cost of Preference Capital - Cost of Equity Capital – Cost of retained earnings - Weighted Average Cost of Capital (Simple Problems).

**UNIT-V: CAPITAL STRUCTURE:**

Meaning – Importance – Factors – Types – Optimal Capital Structure – Theories of Capital Structure: Net Income Approach - Net Operating Income Approach - Traditional Approach - Modigliani and Miller Approach (Simple Problems).

**SUGGESTED READINGS:**

1. Financial Management: I MPandey, Vikas Publishing House Pvt Ltd.
2. Financial Management: M.Y. Khan & P.K. Jain, Tata McGraw-Hill
3. Financial Management: Shashi K. Gupta & R.K. Sharma, Kalyani Publishers,
4. Financial Management: R.M. Srivastava, Himalaya Publishing House, Hyderabad.
5. Financial Management: Prasanna Chandra, McGraw Hill
6. Financial Management: Kothari, sage
7. Financial Management: Rustagi, Taxman Publications.
8. Fundamentals of Financial Management: Sharan, Pearson.
9. Financial Management: Tulsian, S. Chand.
10. Financial Management: Satish B Mathur, Trinity Press.
11. Fundamentals of Financial Management: D. Chandra Bose, PHI.

**Paper PR : RESEARCH METHODOLOGY & PROJECT REPORT**

**Objective:** To introduce the basics of conducting research in social sciences.

**UNIT-I: INTRODUCTION, MEASUREMENT AND HYPOTHESIS TESTING:**

Meaning of Research-Steps involved- Identification of Problem- Steps involved in the selection of problem-Research Design-Meaning and Types- Measurement Levels/Scales - Scaling Techniques-Hypothesis-Meaning - Types – Testing Procedure.

**UNIT-II:PARAMETRIC AND NON PARAMETRIC TESTS AND RESEARCH REPORT:**

Introduction - t- Test - F- Test - Chi Square Test - Anova (One Way Anova, Two Way Anova).concepts onlyContents of a Research Report.

**SUGGESTED READINGS:**

1. Research Methodology: Himalaya Publications.
2. Methodology of Research in Social Sciences: Krishna Swamy,
3. Research Methodology: Kothari &Garg, New Age Publication
4. Research Methodology: Paneerselvam R, PHI
5. Research Methodology: Dr Vijay Upagade& Dr ArvindShende, S. Chand Publications
6. Research Methodology: Ranjit Kumar, Pearson Publication
7. Reading in Research Methodology in Commerce & Business Management: Achalpathi KV,
8. Research Methodology: Sashi.K Gupta, PraneethRangi, Kalyani Publishers.

**GUIDELINES FOR PROJECT WORK**

- 1) Project work is a part of the prescribed curriculum to B. Com students.
- 2) Project work is allotted to a group of 4 students.
- 3) During the IV semester, students are expected to undergo internship at a business firm/ Government Department /Software organization/Voluntary organization as per the guidance of teacher concerned.
- 4) Students should get a certificate from the organization.
- 5) At the end of Semester-VI, the project reports would be evaluated by the external examiner designated by the Controller of Examinations, from the panel submitted by the Board of Studies in Commerce. The Examiner would evaluate the project reports for a maximum of 35 marks and conduct Viva-Voce examination for 15 marks. The award lists duly signed would be sent the Controller of Examinations.
- 6) Examiners will examine the following in the project report: i) Survey/Analysis on the topic chosen; ii) Method of data collection; iii) Presentation: Style, Comprehensiveness, graphs, charts etc.; iv) Analysis and inference and implications of the study; v) Bibliography.
- 7) Students must ensure that they maintain **regular contact with their supervisor** and also that they provide the supervisor with drafts of their work at regular intervals.
- 8) Students are required to submit a project report on a topic related/connected with trade, industry & commerce. Project can be done by taking the information from the select organization focusing on areas like marketing, finance, human resource, operations, general management etc.

- 9) Project should be a practical, in-depth study of a problem, issue, opportunity, technique or procedure or some combination of these aspects of business. The Students are required to define an area of investigation, assemble relevant data, analyse the data, draw conclusions and make recommendations.

### ORGANISATION OF PROJECT REPORT

1) Project report should be presented in the following sequence:

i) Title page; ii) Student's declaration; iii) Supervisor's certificate; iv) Internship certificate; v) Abstract; vi) Acknowledgements; vii) Table of contents; viii) List of tables; ix) List of figures; x) List of appendices.

2) Chapter Design should be as follows:

**Chapter-I: Introduction:** this chapter includes the research problem, need for study/significance of the project, objectives, methodology (hypotheses, statistical tools, data source, scope, sample, chapter design).

**Chapter-II: Company Profile:** this chapter should contain a brief historical retrospect about the entity of your study.

**Chapter-III: Data Analysis and interpretation:** this chapter should present the data analysis and inferences.

**Chapter-IV: Summary and Conclusions:** This Chapter should give an overview of the project, conclusions, implications, recommendations and scope for further research.

**Bibliography:** lists the books, articles, and websites that are referred and used for research on the topic of the specific project. Follow Harvard style of referencing.

**Appendices:** the data, used to prepare the tables for analysis, may not be feasible to incorporate as part of chapters, may given as appendices.

### TECHNICAL SPECIFICATIONS OF THE PROJECT

1) Project should be typed on **A4 white paper**, and be **1.5 spaced**.

2) All pages should be **numbered**, and numbers should be placed at the centre of the bottom of the page.

3) **All tables, figures and appendices** should be consecutively numbered or lettered, and suitably labeled.

4) **3 bound copies&a soft-copy** should be handed in to the **principal/director of your college/institute** at the time of submission.

5) **bibliography and referencing: Referencing** is necessary to avoid plagiarism, to verify quotations and to enable readers to follow-up and read more fully the cited author's arguments. Reference is given within the text of the project as well as at the end of the project. The basic difference between citation and a reference list (bibliography) is that the latter contains full details of all the in-text citations.

- **Citation** provides brief details of the author and date of publication for referencing the work in the body of the text.
- **Reference list** is given at the end of the text and is a list of all references used with additional details provided to help identify each source.

Proper referencing is as crucial aspect of your project. You are therefore strongly advised to talk to your supervisor about this, in order to make sure that your project report follows the appropriate referencing system.



**Paper DSE 601 (a) : COST CONTROL AND MANAGEMENT ACCOUNTING**

**Objective:** *To be acquaint with Cost Control techniques, Managerial Accounting decision-making techniques and reporting methods.*

**UNIT-I: INTRODUCTION TO MANAGEMENT ACCOUNTING & MARGINAL COSTING:**

Meaning and Importance of Management Accounting – Marginal Cost Equation – Difference between Marginal Costing and Absorption Costing – Application of Marginal Costing – CVP Analysis – Break Even Analysis: Meaning – Assumptions – Importance - Limitations. Marginal Costing for Decision Making-Make or Buy – Add or Drop Products – Sell or Process Further – Operate or Shut-down – Special Order Pricing – Replace or Retain.

**UNIT-II: BUDGETARY CONTROL AND STANDARD COSTING:**

Budget: Meaning – Objectives – Advantages and Limitations – Essentials of Budgets - Budgetary Control - Classification of Budgets - Preparation of Fixed and Flexible Budgets. Standard Costing: Meaning – Importance – Standard Costing and Historical Costing - Steps involved in Standard Costing. Variance Analysis: Material variance - Labour variance - Overhead variance .

**UNIT-III: TECHNIQUES OF FINANCIAL STATEMENT ANALYSIS:**

Meaning – Objectives - Techniques: Comparative Statement, Common Size Statement, Trend Analysis. Ratios- Meaning , Objectives and Classification—Computation of Activity, Liquidity, Solvency and Profitability Ratios.

**UNIT-IV: FUNDS FLOW ANALYSIS:**

Concept of Funds – Meaning and Importance – Limitations – Statement of Changes in Working Capital – Statement of Sources and Application of Funds.

**UNIT-V: CASH FLOW ANALYSIS (AS-3):**

Meaning – Importance – Differences between Funds Flow and Cash Flow Statements – Procedure for preparation of Cash Flow Statement.

**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

**Paper DSE 601 (b) : FINANCIAL CONTROL**

*Objective: To make students to understand the Financial Control.*

**UNIT I: EXTERNAL FINANCIAL REPORTING DECISIONS (AS PER US GAAP & IFRS):**

Financial Statements: Balance sheet - Income statement - Statement of Comprehensive Income - Statement of changes in equity - Statement of cash flows - Integrated reporting

**UNIT II: RECOGNITION, MEASUREMENT, VALUATION, AND DISCLOSURE (AS PER US GAAP & IFRS) :**

Assets, Liabilities & Equity: Asset valuation - Valuation of liabilities - Equity transactions - Income: Revenue recognition - Income measurement - Major differences between U.S. GAAP and IFRS

**UNIT III: COST MANAGEMENT:**

Measurement concepts: Cost behavior and cost objects - Actual and normal costs - Standard costs - Absorption (full) costing - Variable (direct) costing - Joint and by-product costing - Costing Systems: Joint and by-product costing - Job order costing - Process costing - Activity-based costing - Life-cycle costing - Overhead costs: Fixed and variable overhead expenses - Plant-wide versus departmental overhead - Determination of allocation base - Allocation of service department costs

**UNIT IV: SUPPLY CHAIN MANAGEMENT AND BUSINESS PROCESS IMPROVEMENT:**

Supply chain management: Lean resource management techniques - Enterprise resource planning (ERP) - Theory of constraints - Capacity management and analysis - Business Process Improvement: Value chain analysis - Value-added concepts - Process analysis, redesign, and standardization - Activity-based management - Continuous improvement concepts - Best practice analysis - Cost of quality analysis - Efficient accounting processes

**UNIT V: INTERNAL CONTROLS:**

Governance, Risk & Compliance: Internal control structure and management philosophy - Internal control policies for safeguarding and assurance - Internal control risk - Corporate governance - External audit requirements - System Controls & Security Measures: General accounting system controls - Application and transaction controls - Network controls - Backup controls - Business continuity planning

**SUGGESTED READINGS:**

1. Wiley CMAexcel Learning System, Part 1: Planning, Performance & Analytics
2. Intermediate Accounting, 17th edition; Kieso, Donald E., Weygandt, Jerry J., and Warfield, Terry D.; Wiley
3. Intermediate Accounting, 11th edition; Nikolai, Loren A., Bazley John D., and Jones, Jefferson P., South-Western Cengage Learning
4. Cost Management: A Strategic Emphasis, 6th edition; Blocher, Edward, J., Stout, David E., Juras, Paul E., and Cokins, Gary; McGraw Hill
5. Horngreen's Cost Accounting: A Managerial Emphasis, 16th edition; Charles T., Datar, Srikant, and Rajan, Madhav; Pearson
6. Management Accounting: An Integrative Approach; McNair-Connolly, C.J., Merchant, Kenneth A.; IMA

**Paper DSE 601(c) : INTERNATIONAL FINANCIAL REPORTING - II**

*Objective: To make students to understand the International Financial Reporting.*

**UNIT I: PENSIONS & POST-EMPLOYMENT BENEFITS (AS PER US GAAP & IFRS):**

Defined contribution pension plans - Defined benefit pension plans: Pension obligations - Pension plan assets - Net pension expense - Other Post-retirement benefits

**UNIT II: INCOME TAXES (AS PER US GAAP & IFRS):**

Income tax expense: Current income tax expense - Deferred income tax expense - Deferred taxes on balance sheet: Deferred tax assets - Deferred tax liabilities - Specific accounting - considerations: Net Operating Losses (NOL) - Investee's undistributed dividends

**UNIT III: EQUITY (AS PER US GAAP & IFRS):**

Equity accounts: Common Stock - Preferred Stock - Additional Paid-In Capital - Retained Earnings - Accumulated Other Comprehensive Income - Treasury Stock - Specific accounting considerations: Share-based Payments to Employees - Equity Securities Classified as Debt Presentation of Equity: On Balance sheet - On Statement of Changes in Equity - Earnings per Share (EPS): Basic EPS - Diluted EPS

**UNIT IV: SELECT TRANSACTIONS (AS PER US GAAP & IFRS):**

Business Combinations and Consolidations: Acquisitions - Non-controlling Interest - Intercompany Transactions - Variable Interest Entities (VIE) - Foreign currency: Remeasurement- Translation

**UNIT V: NOT-FOR-PROFIT AND GOVERNMENTAL ACCOUNTING AND REPORTING (AS PER US GAAP):**

Not-for-Profit (NFP) Entities: NFP Financial Statements - Contribution Revenue - Specific Accounting Considerations - Colleges and Universities - Voluntary Health and Welfare Organizations - Health Care Organizations - Governmental Entities: Fund types (Governmental funds, Proprietary funds, Fiduciary funds) - Modified Accrual Accounting - Inter-fund transactions - Government Financial Reporting

**SUGGESTED READINGS:**

1. Miles CPA Review Concept Book: Financial Accounting & Reporting, Miles Education
2. Wiley CPA Excel Exam Review Course Study Guide: Financial Accounting and Reporting, Wiley
3. IFRS & US GAAP Best Practices in Accounting World: GAAP Analysis, Rajesh Dhawan
4. Transparency in Financial Reporting: A concise comparison of IFRS and US GAAP 1st Edition, Ruth Ann McEwen, Harriman House Ltd.
5. IFRS and US GAAP: A Comprehensive Comparison, Steven E. Shamrock, Wiley
6. Wiley GAAP: Interpretation and Application of Generally Accepted Principles, Barry J. Epstein and Ralph Nach, Wiley
7. IFRS Simplified with Practical Illustration Part 1 & 2, Mr RammohanBhave and Dr Mrs Anjali RammohanBhave, CNBC TV 18

**Paper DSE 602(a) : THEORY AND PRACTICE OF GST**

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

**UNIT 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.

**UNIT 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.

**UNIT 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.

**UNIT 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.

**UNIT 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
5. Theory and Practice of GST: Prof. A. Sudhakar, Dr. O. Bhavani& Dr. N. Moses, National Publishing Co.

**Objective:** *To make students to understand the Financial Decision Making.*

**UNIT I: DECISION ANALYSIS:**

Cost/volume/profit analysis: Breakeven analysis - Profit performance and alternative operating levels - Analysis of multiple products - Marginal Analysis: Sunk costs, opportunity costs and other related concepts - Marginal costs and marginal revenue - Special orders and pricing - Make versus buy - Sell or process further - Add or drop a segment - Capacity considerations

**UNIT II: PRICING:**

Pricing decisions: Pricing methodologies - Target costing - Elasticity of demand - Product life cycle considerations - Marketstructure considerations

**UNIT III: RISK MANAGEMENT:**

Enterprise Risk: Types of risk - Risk identification and assessment - Risk mitigation strategies - Managing risk

**UNIT IV: INVESTMENT DECISIONS:**

Capital budgeting process: Stages of capital budgeting - Incremental cash flows - Income tax considerations - Evaluating uncertainty - Capital investment method analysis: Net present value - Internal rate of return - Payback - Comparison of investment analysis methods

**UNIT V: PROFESSIONAL ETHICS:**

Business ethics: Moral philosophies and values - Ethical decision making - Ethical considerations for management accounting and financial management professionals: IMA's Statement of Ethical Professional Practice - Fraud triangle - Evaluation and resolution of ethical issues - Ethical considerations for the organization: Organizational factors and ethical culture - IMA's Statement on Management Accounting, "Values and Ethics: From Inception to Practice" - Ethical leadership - Legal compliance - Responsibility for ethical conduct - Sustainability and social responsibility.

**SUGGESTED READINGS:**

1. Wiley CMAexcel Learning System, Part 2: Strategic Financial Management
2. Cost Management: A Strategic Emphasis, 6th edition; Blocher, Edward, J., Stout, David E., Juras, Paul E., and Cokins, Gary; McGraw Hill
3. Horngreen's Cost Accounting: A Managerial Emphasis, 16th edition; Charles T., Datar, Srikant, and Rajan, Madhav; Pearson
4. Principles of Corporate Finance, 11th edition; Brealey, Richard, A., Myers, Stewart C., and Allen, Franklin; McGraw Hill
5. Fundamentals of Financial Management, 13th edition; Van Horn, James, C., and Wachowicz, John M. Jr.; FT / Prentice Hall
6. Enterprise Risk Management - Integrated Framework; COSO, The Committee of Sponsoring Organizations of the Treadway Commission, 2017

**Paper DSE 602 (c) : INTERNATIONAL AUDITING**

**Objective:** To make students to understand the International Auditing.

**UNIT I: ETHICS, PROFESSIONAL RESPONSIBILITIES AND GENERAL AUDITING**

**PRINCIPLES:**

Introduction to Auditing: Generally Accepted Auditing Standards (GAAS) - International Standards of Auditing (ISA) - Ethics, independence and professional conduct: AICPA Code of Professional Conduct - Sarbanes-Oxley Act (SOX), 2002 - Public Company Accounting Oversight Board (PCAOB) - Securities & Exchange Commission (SEC) - International Standards - Engagement Understanding and Acceptance: Pre-Engagement Acceptance Activities - Engagement Letter - Auditor's communication with those charged with governance

Quality Control: Statements on Quality Control Standards (SQCS) - Elements of a System of Quality control

**UNIT II: ASSESSING AUDIT RISK AND DEVELOPING A PLANNED RESPONSE:**

Audit Risk: Inherent Risk - Control Risk - Detection Risk - Fraud Risk: Fraudulent financial reporting - Misappropriation of assets - Fraud risk factors - Auditor's consideration of fraud

Planning the Audit: Audit Strategy - Audit Plan - Internal Controls: Auditor's Consideration of Internal Control - Operating Cycles - Internal Control Reports and Communications

**UNIT III: PERFORMING FURTHER PROCEDURES AND OBTAINING AUDIT EVIDENCE:**

Audit Evidence: Management's Assertions - Sufficient & Appropriate Audit Evidence - Audit Evidence determined by Risk of Material Misstatement (RMM) - Substantive Procedures: Revenue cycle - Expenditure cycle - Production cycle - Payroll cycle - Investing cycle - Financing cycle - Opening Balances - Illegal Acts - Related Parties - Contingencies - Estimates & Fair Value Measurements - Subsequent Events - Omitted Procedures & Subsequent Discovery of Facts - Using the Work of Others - Evaluating Audit Findings - Audit Documentation - Management Representation Letter - Audit Sampling: Sampling Risks - Attributes Sampling - Classical Variables Sampling - Probability Proportional to Size (PPS) Sampling

**UNIT IV: AUDIT REPORTING:**

Audit Reports: Unmodified opinion - Unmodified Opinion with Emphasis-of-matter and/or Other-matter paragraph - Qualified Opinion - Adverse Opinion - Disclaimer of Opinion - Audit Reporting Considerations: Audit of Comparative financial statements - Supplementary Information - Audit of Group financial statements - Audit of Single financial statements & Specific financial statement elements, accounts or items - Audit of Special Purpose financial statements - Audit of financial statements prepared using financial reporting framework of another country

**UNIT V: OTHER ENGAGEMENTS:**

Accounting & Review Services: Preparation of financial statements - Compilation engagement - Review engagement - Attestation Engagements: Examination - Review - Agreed-upon Procedures - Governmental Auditing: Governmental Auditing Standards - Single Audit Act

**SUGGESTED READINGS:**

1. Miles CPA Review Concept Book: Auditing and Attestation, Miles Education
2. Wiley CPA Excel Exam Review Course Study Guide: Auditing and Attestation, Wiley
3. Wiley Practitioner's Guide to GAAS: Covering all SAS, SSAE's, SSARS, PCAOB, Auditing Standards, and Interpretations, Joanne M. Flood, Wiley
4. Auditing: A Risk Based-Approach to Conducting a Quality Audit, Karla M Johnstone, Audrey A. Gramling and Larry E. Rittenberg, Cengage Learning
5. Principles of Auditing & Other Assurance Services, Ray Whittington and Kurt Pany, McGraw Hill
6. Auditing & Assurance Services: A Systematic Approach, William F Messier Jr, Steven M. Glover and Douglas F. Prawitt, McGraw Hill.

**Paper DSE 603(a) : BUSINESS APPLICATIONS OF EMERGING TECHNOLOGIES**

**Hours Per Week:** (3T+4P)

**Credits:** 5

**Exam Hours:** 1 ½

**Marks:** 60T+20P+20I

**Objective:** To make students to understand the Technologies of Business Applications of Emerging.

**UNIT I: FINANCE TRANSFORMATION:**

Future of finance - Disruption in the business environment - The need to be agile in today's business environment - The role of technology as a disruptive force in a business's Finance function - Opportunities to add value, based on new business models, including the finance value chain and the CGMA Competency Framework - New skills and competencies required to enable the finance professional to add value to their organizations

**UNIT II: ROBOTIC PROCESS AUTOMATION (RPA):**

What RPA is and the business value of RPA - RPA applications and use cases that make the most sense - Decision criteria and steps needed to build a business case - Considerations, risks, and challenges to implementing RPA - Governance and controls considerations for a digital workforce - Accounting, finance, and organizational impact of RPA - Future of RPA and automation trends, with a focus on intelligent process automation (IPA)

**UNIT III: ARTIFICIAL INTELLIGENCE (AI):**

Differences between AI, Machine Learning (ML) and Deep Learning (DL) - Benefits of Artificial Intelligence - AI applications and capabilities and how it drives a competitive advantage - Industry drivers and real-world examples of AI - Focuses on the importance of a data-driven AI strategy - What is an AI strategy for the enterprise? - Considerations for an AI strategy

**UNIT IV: CYBERSECURITY:**

Cybersecurity terminology and digital transformation - Attacks and the security mindset - Data breaches and privacy - Cybersecurity frameworks including NIST CSF - Elements of a cybersecurity risk management program - Benefits of investing in cybersecurity - Options for cybersecurity service offerings

**UNIT V: BLOCKCHAIN:**

History of blockchain and bitcoin - Bitcoin and blockchain characteristics - Push vs pull paradigm - Core components of blockchain technology - Custody, responsibility and control continuum - Permissioned vs permissionless Blockchain -

**SUGGESTED READINGS:**

1. Finance Transformation – Manage Disruption; AICPA
2. Robotic Process Automation Fundamentals for Finance and Accounting Professionals; Edward Brooks, Steve Palomino, Miklos Vasarhelyi, Andrea Rozario, Abigail Zhang; AICPA
3. Artificial Intelligence for Accounting and Finance Professionals; AICPA
4. AI and Analytics, Accelerating Business Decisions; Sameer Dhanrajani; Wiley
5. Cybersecurity Fundamentals for Finance and Accounting Professionals; Christopher J. Romeo; AICPA
6. Blockchain Fundamentals for Accounting and Finance Professionals; Kirk Phillips; AICPA.

**Paper DSE 603(b) : CORPORATE GOVERNANCE**

**Objective:** to acquaint the student with the finer nuances of Corporate Governance.

**UNIT - 1: CORPORATE GOVERNANCE:** Evolution and Significance: Corporate Governance: Meaning – Definition - Evolution – Historical Perspective of Corporate Governance – Nature and Scope of Corporate Governance – Need for Corporate Governance – Essentials of Corporate Governance – Objectives of Corporate Governance - Benefits and Limitations of Corporate Governance - Structure – Theories.

**UNIT – II: CORPORATE GOVERNANCE COMMITTEES AND MODELS:**

CG Committees: Cadbury Committee, Greenbury Committee, Hampel Committee, Sarbanes-Oxley Act, 2002, Blue Ribbon Committee, King Committee, Kumara Mangalam Birla Committee, Narayana Murthy Committee, CII Task Force Committee – CG Models : Anglo-American, German, Japanese and Indian Model.

**UNIT - III: CORPORATE GOVERNANCE AND SOCIAL RESPONSIBILITY:**

Corporate Social Reporting – Meaning – Types of CSR - Role of CSR towards Society – Employees, Government, Stakeholders and Consumers – Nature of CSR – CSR Principles and Strategies - Models – Best Practices of CSR - CSR: Indian Perspective – Sachar Committee Report.

**UNIT - IV: ACCOUNTABILITY IN CORPORATE GOVERNANCE:**

Definition – Importance - Accounts and Financial Reporting - Stakeholders Influence - Social Responsibility and Accountability - Reflection of Stakeholder's Accountability in Legislation, Guidance on Stakeholders and Shareholders Interest. Role of Top Management in Corporate Governance. Role of Auditors in Corporate. Role of Shareholders & Other Stakeholders in Corporate Governance.

**UNIT – V: ISSUES IN CORPORATE GOVERNANCE :**

Role of Promoters - Nominee Directors - Mismanagement – Corporate Frauds - Negligent Role of Auditors – Banks- Supervision and Control of Stock Exchanges – Whistle Blowing Policy - RBI – Ministry of Corporate Affairs – Towards Building Ethical and Sustainable Organization.

**SUGGESTED READINGS:**

1. Business Ethics and Corporate Governance, (2017) Prof. K. ViyyannaRao, Dr. G. Nagaraju I.K., International Publishing House Pvt. Ltd,
2. Corporate Governance,(2014), BholanathDutta and S.K. Podder - Vision Book house,
3. Business Ethics,(2005)2ND Edition, R.V. Badi N.V. Badi,Vrinda Publicationpvt Ltd
4. Business Ethics An Indian Perspective, 2015, A. C. Fernando - Pearson
5. Business Ethics and Corporate Governance, Reprint 2013, C.S.V. Murthy – Himalaya Publication
6. Corporate Governance,(2004) H.R. Machiraju, Himalaya Publication House
7. Business Ethics -Text & Cases 2010, C.S.V. Murthy – Himalaya Publication
8. Business Ethics – Dr. Muninarayanappa, Prof. Manjula, Prof. V. Tamil Selvan, Prof. Raghavendra K.S.- Takur Publishers,2015, Bangalore
9. A Study in Business Ethics, Reprint (2008) RituParna Raj, Himalaya Publishing house
10. Ethics in Business and Management Concepts (Western and Indian) & Cases (National & International), R. P. Banerjee, Himalaya Publishing House.
11. Corporate Governance (with Case Studies), DayanandAchrekar, Surendra Publications, New Delhi.
12. Corporate Governance, Robert A G Monks, Wiley India Pvt. Ltd.



**Paper DSE 603(C) : INVESTMENT MANAGEMENT**

**Objective:** *to familiarize with concepts of risk and return relating to Investment.*

**UNIT-I: INTRODUCTION:**

Investment Management: Meaning and Definition – Objectives - Scope – Investment Vs Speculation – Investment Vs Gambling - Factors affecting Investment Decisions – Investment Alternatives - Types of Investors (Theory).

**UNIT-II: RISK AND RETURN:**

Meaning of Risk – Risk Vs Uncertainty – Causes of Risk – Types of Risks – Risk and Return of a Single Asset – Ex-Ante and Ex-Post – Risk-Return Relationship – Risk-Return Trade off (Simple Problems).

**UNIT-III: MARKET INDICES:**

Concept of Index – Methods of computing stock indices – Leading Stock Price Indices in India – Sensex and Nifty – Uses of Market Index (Simple Problems).

**UNIT-IV: TIME VALUE OF MONEY:**

Concept - Techniques - Compounding Techniques - Doubling Period - Multiple Compounding Period - Present Value Techniques (Simple Problems).

**UNIT-V: PORTFOLIO ANALYSIS:**

Traditional Vs Modern - Rationale of Diversification - Markowitz portfolio theory - Effect of combining the securities - Measurement of expected return and risk of portfolio (Simple Problems).

**SUGGESTED READINGS:**

1. Investment Management (Text and Cases): V.K. Bhalla, S. Chand & Company.
2. Security Analysis and Portfolio Management: Shashi K. Gupta & Rosy Joshi, Kalyani Publishers.
3. Investment Management: Dr. V.A. Avadhani, Himalaya Publishing House.
4. Fundamentals of Investment Management: Preeti Singh, Himalaya Publishing House
5. Security Analysis and Portfolio Management: Kevin, PHI.
6. Investment Analysis and Portfolio Management: Prasanna Chandra, Tata McGraw-Hills
7. Investment Management, Prashanta Athma: Kalyani Publications.
8. Security Analysis and Portfolio Management: Madhumati Ranganathan, Pearson.
9. Investment Management: Masheswari, PHI.
10. Security Analysis and Portfolio Management: Dhanesh Khatri, Trinity Press.