

The University of Burdwan



Syllabi for Semesters 1 and 2 of Commerce for 3 Year Degree/4 Year Hons. Degree

[Under Curriculum and Credit Framework for Undergraduate
Programmes (CCFUP) as per NEP- 2020]

w.e.f. the Academic Session 2023-24

Semester- 1					
Course	Course Code	Course Title	Cr.	L-T-P	Marks
Major	Comm1011	Financial Accounting I	4	3-1-0	75
Minor	Comm1021#	Business Mathematics and Statistics I	4	3-1-0	75
Multi/Inter	Comm1031@	Fundamentals of Accounting	3	2-1-0	50
AEC		MIL (L1-1)	2		
SEC	Comm1051	e-Commerce	3	2-1-0	50
VA Course	VAC1061	ENV. Science/Education	4	3-0-1	100

Semester- 2					
Course	Course Code	Course Title	Cr.	L-T-P	Marks
Major	Comm2011	Cost and Management Accounting I	4	3-1-0	75
Minor	Comm2021#	Principles of Economics	4	3-1-0	75
Multi/Inter	Comm2031@	Fundamentals of Management	3	2-1-0	50
AEC		English (L2-1)	2		
SEC	Comm2051	Computer Application in Business	3	2-1-0	50
VA Course	VAC2061	Understanding India/Digital and Technical Solutions/Health & Wellness, Yoga Education, Sports & Fitness	4	3/3-1/0-0/1	100

* Skill-based Vocational Course (additional 4 Credits) for the students who will exit the programme after securing 40 Credits.

A student of Commerce Discipline who has chosen Major Courses 1011 and 2011 must take Minor Courses 1021 and 2021 in Semester 1 and Semester 2 respectively.

A student from any other discipline may also take 1011 and 2011 as Minor Courses if she/he desires.

@ Courses 1031 and 2031 are being offered to students belonging to any other disciplines other than Commerce.

Degree	Name of the Programme
Certificate	Undergraduate Certificate in Accounting
Diploma	Undergraduate Diploma in Accounting and Management
3 Yr Degree	B. Com (Accounting and Management)
4 Yr Hons. Degree	B. Com Honours in Accounting and Management
4 Yr Hons. Degree with Research	B. Com Honours with Research in Accounting and Management

Semester 1

Comm1011: FINANCIAL ACCOUNTING-1

Marks: 75 Course Evaluation: Semester Examination (60 Marks) and Internal Assessment (15 Marks) **Credit: 4** **Lectures: 64 Hours**

Objectives: The objective of this paper is to help students in acquiring conceptual knowledge of financial accounting and to impart skills for recording various kinds of transactions.

Learning Outcomes:

- The students will be able to understand and identify the accounting principles, rules and procedures which are relevant to different types of transactions.
- The students will be able to apply the accounting principles, rules and procedures in recording different types of transactions.

CONTENTS

Unit 1: Theoretical Framework

Lectures: 14 Hours

- Financial accounting conceptual framework: Accounting Principles, GAAP, Concepts and Conventions; Entity, Matching Concept, Dual Aspect, Money Measurement, Going Concern, Cost, Realization, Accruals, Periodicity, Consistency, Conservatism, Materiality and Full Disclosures.
- Accounting Standards: Concepts, benefits, and procedure for issuing accounting standards in India. Salient features of First-time adoption of Indian Accounting Standards (Ind-AS101).
- International Financial Reporting Standards (IFRS): Need and due process to set IFRS.

Unit 2:

Lectures: 15 Hours

- Single Entry:** Distinction between Single Entry System and Double Entry System, Defects of Single Entry System, Preparation of Accounts from Incomplete Records, Conversion from Single Entry System to Double Entry System.
- Sectional Balancing and Self-Balancing Ledger :**
 - Sectional Balancing Ledger: Concept of Sectional Balancing and preparation of Control accounts.
 - Self Balancing Ledger: Advantages, Recording process and preparation of Adjustment accounts.

Unit 3:

Lectures: 10 Hours

Consignment Accounting: Basic features of Consignment; the difference between Consignment and Sales; Preparation of Accounts in the books of Consignor and Consignee at Cost price and Invoice price; Valuation of unsold stock; Ordinary Commission, Del-credere commission, Special Commission; Valuation of normal and abnormal loss; Preparation of Consignment Debtors Account.

Unit 4:

Insurance Claim for Loss of Stock and Loss of Profits:

Lectures: 10 Hours

- Loss of stock: Physical and ownership concept; concept of under-insurance and average clause; computation of claim with price change; consideration of unusual selling line; price reduction etc.
- Loss of Profit: Concept – insured & uninsured standing charges, GP rate, short sales and increased cost of working, average clause and computation of claim.

Unit 5:

Partnership Accounts – I

Lectures: 15 Hours

Preparation of Accounts: P/L Appropriation Account, Capital & Current Account; Guarantee – by the firm, by a partner and both; correction of appropriation items with retrospective effect; change

in the constitution of firm due to change in profit sharing ratio, admission, retirement and admission-cum-retirement – treatment of Goodwill, revaluation of assets and liabilities (with and without alteration of books), treatment of reserve and adjustment relating to capital, treatment of Joint Life Policy; death of a partner.

Suggested Readings:

1. Robert N. Anthony, David Hawkins, Kenneth A. Merchant, Accounting: Text and Cases, McGraw-Hill Education.
2. Charles T. Horngren and Donna Philbrick, Introduction to Financial Accounting, Pearson.
3. M.C. Shukla, T.S. Grewal and S.C. Gupta, Advanced Accounts, Vol.-I. S. Chand & Co.
4. P.C. Tulsian, Financial Accounting, Pearson Education.
5. Rajasekaran, Financial Accounting, Pearson
6. Mukherjee and Mukherjee, Financial Accounting I, Oxford
7. Amitabha Mukherjee, Mohammed Hanif, Financial Accounting I, McGraw Hill Education.
8. V.K. Goyal & Ruchi Goyal, Financial Accounting, PHI Learning.
9. Amitabha Basu and Sibasish Dutta, Financial Accounting I, Tee Dee Publications.
10. Relevant IND ASs.

Comm1021: BUSINESS MATHEMATICS AND STATISTICS -1

Marks: 75 Course Evaluation: Semester Examination (60 Marks) and Internal Assessment (15 Marks) Credit: 4 Lectures: 64 Hours

Objective: The objective of this course is to familiarize the students with the basic mathematical and statistical tools with an emphasis on applications to business and economic situations.

Learning Outcomes: After completion of the course, learners will be able to:

1. understand the basic concepts of algebra
2. analyse how matrices are used as mathematical tools in representing a system of equations.
3. explain mathematical formulation and solution of problems related to finance including different methods of interest calculation, future and present value of money.
4. evaluate business problems involving complex linear relationships between decision variables and their determining factors.
5. examine and understand the various descriptive properties of statistical data.

CONTENTS

Unit 1: Introductory Algebra

Lectures: 15 Hours

- a) **Indices and Logarithms** - Positive indices - Fractional indices - Operation with power functions; General laws of logarithms and its applications
- b) **Set Theory** - Representation of a set, Concept of Subset, Power sets, Size of a set: Set operations- union, intersection, disjoint, set difference, compliment; Properties of union and intersection of sets, associative properties, commutative properties, identity property of union, intersection property of the empty set, distributive properties.
- c) **Permutation and Combination**: Introduction, Fundamental Principle of Counting, Permutation, Combination

Unit 2: Mathematics of Finance:

Lectures: 10 Hours

Compound interest; Formula for compound interest; Present value and discount; Nominal and effective rate of interest; Depreciation of Assets; Growth at a uniform rate.

Annuities-Definition; Amount of an ordinary annuity; Present value of an annuity; Present value of perpetuity; Sinking Fund; Deferred Annuity; Endowment Fund.

Unit 3: Matrix Algebra and Determinants:

Lectures: 15 Hours

- a) Definition of Matrix, Different types of Matrix; Matrix Operations – Equality, Addition, Subtraction and Multiplication. Transpose of matrices, Inverse of a Matrix; Solution of linear simultaneous equations by matrix inversion method (having a unique solution and involving not more than three variables)
- b) Determinant of a square Matrix (up to third order), Expansion of a determinant; Types of determinants; Properties of Determinants, Addition and Multiplication of determinants, Minor and cofactors of a determinant, Solution of a system of linear equations (having a unique solution and involving not more than three variables) using Cramer's Rule.

Unit 4: Linear Programming:

Lectures: 6 Hours

Formulation of linear programming problem (LPP). The graphical solution to LPP. Cases of unique and multiple optimal solutions. Unbounded solutions, infeasibility, and redundant constraints.

Unit 5: Descriptive Statistics:

Lectures: 18 Hours

- a) **Introduction:** Definition of Statistics, Scope and limitation of Statistics, Attribute and variable, Primary and secondary data, Method of data collection, Tabulation of data, Graphs and charts, Frequency distribution, and Diagrammatic presentation of frequency distribution.
- b) **Measures of Central Tendency:** Concept and properties of averages including Mean, Median and Mode.
- c) **Measures of Dispersion:** An overview of Range, Quartile Deviation and Mean Deviation; Standard deviation; Variance and Coefficient of Variation.
- d) **Moments:** Computation and significance of Moments; Skewness; Kurtosis.

Suggested Readings:

1. Ghosh and Saha, Business Mathematics and Statistics, New Central Book Agency (P) Ltd.
2. Nag and Nag, Advanced Business Mathematics and Statistics, Kalyani Publishers.
3. Chakrabarti J., Business Mathematics and Statistics, Dey Book Concern.
4. Nag, N.K. and Nag, S. K., Business Mathematics and Statistics, Kalyani Publishers.
5. Singh J.K., Business Mathematics. Himalaya Publishing House.
6. Kapoor V.K., Essential Mathematics for Commerce and Economics, Sultan Chand.
7. De S.N., Business Mathematics & Statistics - Chhaya Prakashani.
8. Dhar R., Business Mathematics & Statistics - Dishari Prakashani.
9. Jameeruddin, Khanna & Bhamdri, Business Mathematics, Vikash.
10. Das N.G., Statistical Methods, Mc Graw Hill Education.
11. Sarkhel & Dutta, An Insight into Statistics, Book Syndicate
12. Gupta S.P., Statistical Methods, Sultan Chand & Sons

Comm1031: FUNDAMENTALS OF ACCOUNTING

Marks: 50 Course Evaluation: Semester Examination (40 Marks) and Internal Assessment (10 Marks)

Credit: 3

Lectures: 48 Hours

Objectives: The objective of this paper is to help the students to acquire basic knowledge of Accounting and to develop the knowledge to understand financial reports as stakeholders.

Learning Outcomes:

Learners will be able to:

1. understand the basic concepts of Accounting.
2. understand and prepare the Financial Statement of the proprietary concern.

3. understand and prepare the Financial Statement of non-trading concern

CONTENTS

Unit 1: Introduction of Accounting

Lectures: 8 Hours.

- (i) **Accounting:** Meaning, objectives, Types of accounting information, Users of accounting information and their needs. Basis of accounting – cash basis, accrual basis and hybrid basis. Types of accounting – Financial Accounting, Cost Accounting and Management Accounting.
- (ii) **Accounting Principles:** Entity Concept, Money Measurement Concept, Going Concern Concept and Accounting Period Concept.
- (iii) **Basic Accounting Terms:** Transaction, Event, Capital, Drawings, Asset (Fixed and Current), Liabilities (Long term, Short Term or Current), Receipts (Capital & revenue), Expenditure (Capital, Revenue and Deferred Revenue), Income, Profit/Loss, Purchase, Sales, Stock, Debtors, Creditors, Cost, Revenue, Discount (Cash & Trade)

Unit 2: Recording of Transactions and Preparation of Trial Balance

Lectures: 20 Hours

- (i) **Double Entry System:** Introduction, Rule for Debit and Credit – classification of accounts and application of Golden Rule.
- (ii) **Evidence of transactions:** invoice, cash memo, pay-in-slip, cheque; Preparation of Voucher (Cash, Credit and Transfer)
- (iii) **Books of Original Entry:** Meaning, Format & Recording.
- (iv) **Cash Book:** Single Column Cash Book, Double Column Cash Book & Petty Cash Book
- (v) **Special Purpose Books:** Purchase Book, Sales Book, Purchase Return Book, Sales Return Book, Bills Receivable Book, Bills Payable Book and Journal Proper.
- (vi) **Ledger:** Meaning, Utility, Format; posting from Journal, Cash Book and Special Purpose Books; balancing of Ledger Accounts.
- (vii) **Trial Balance:** Meaning, Objectives and Preparation.
- (viii) **Bank Reconciliation Statement:** Meaning, Need and Preparation.

Unit 3: Financial Statement

Lectures: 10 Hours

- (i) **Financial Statement:** Objective and Importance.
- (ii) **Trading and Profit & Loss Account:** Preparation of Accounts.
- (iii) **Balance Sheet:** Need for Preparation, Grouping and Marshaling of Assets & Liabilities.
- (iv) **Preparation of Financial Statement:** Preparation of Trading and Profit & Loss Account and Balance Sheet of sole proprietorship trading concern.

Unit 4: Financial Statement of Non-Profit Seeking Organizations

Lectures: 10 Hours

- (i) **Non-Profit Seeking Organization:** Concept
- (ii) **Receipts and Payments Account:** Need for preparation and features.
- (iii) **Income and Expenditure Account:** Need for preparation and features.
- (iv) **Financial Statement:** Preparation of Income & Expenditure Account and Balance Sheet from the given Receipts & Payments Account and additional information.

Suggested Readings:

1. Charles T. Horngren and Donna Philbrick, Introduction to Financial Accounting, Pearson.
2. M.C. Shukla, T.S. Grewal and S.C. Gupta, Advanced Accounts, Vol.-I. S. Chand & Co.
3. P.C. Tulsian, Financial Accounting, Pearson Education.
4. Amitabha Basu, Financial Accounting I, Tee Dee Publications.
5. T. S. Grewwal, Financial Accounting, Sultan Chand,
6. Rajasekaran, Financial Accounting, Pearson
7. Mukherjee and Mukherjee, Financial Accounting I, Oxford
8. Amitabha Mukherjee, Mohammed Hanif, Financial Accounting I, McGraw Hill Education.

9. S. Anil Kumar, V. Rajesh Kumar and B. Mariyappa, Fundamentals of Accounting, Himalaya Publishing House.

10. V.K. Goyal, Ruchi Goyal, Financial Accounting, PHI Learning.

11. Debashri Bhattacharya, Financial Accounting I, Law Point

Comm1051: E-COMMERCE

Marks: 50 Course Evaluation: Semester Examination (40 Marks) and Internal Assessment (10 Marks)

Credit: 3

Lectures: 45 Hours

Objectives: To enable the student to become familiar with the mechanism for conducting business transactions through electronic means.

Learning Outcomes: After completion of the course, learners will be able to:

1. describe the challenging needs of society in the field of e-commerce.
2. evaluate various applications in the context of online transactions.
3. compare various e-payment systems.
4. analyse security and operational issues in e-commerce.

CONTENTS

Unit 1: Introduction

Lectures: 12 Hours

E-Commerce-meaning, nature, concepts, advantages and disadvantages, types; e-commerce business models B2B [concept, major activities, types of B to B market (independent, buyer oriented, supplier oriented, e-marketplace)], B2C [portals, e-tailer, content provider, transaction broker, real-life examples of B2C], C2C, C2B, etc.; forces behind e-commerce, e-Governance [meaning, types, significance, real-life examples]. Traditional commerce vs. E-commerce, E-commerce vs M-commerce, E-commerce vs. E-business. Impact of E-commerce on society.

Unit 2: E-CRM and SCM

Lectures: 8 Hours

E-CRM-definition, features, goals of E-CRM business framework, phases of E-CRM, types of E-CRM, Functional components of E-CRM, strategies for E-CRM solutions; SCM-definition, features, types of supply chain.

Unit 3: Digital Payment

Lectures: 9 Hours

Methods of e-payments [Debit Card, Credit Card, Smart Cards, e-Money], electronic or digital wallet, digital signature (procedures, working and legal provisions), payment gateways [Core Banking Solution or CBS, Mobile Payment, UPI, NCPI, International Payments], Online banking [meaning, concepts, importance, electronic fund transfer, automated clearing house, automated ledger posting], risks involved in e-payments.

Unit 4: ERP**Lectures: 8 Hours**

Definition, features, major characteristics, levels of ERP, benefits of ERP, enterprise potential of ERP, modules of ERP, phases of ERP implementation, limitations of ERP.

Unit 5: New Trends in E-Commerce**Lectures: 8 Hours**

Social Commerce-concept, definition, features; Digital Marketing-definition, objectives, methods, limitations; Advertisement in Social Media-objectives, advantages and disadvantages, procedures.

Suggested Readings

1. P. T. Joseph, E-Commerce: An Indian Perspective, PHI Learning.
2. Henry Chan, Raymond Lee, Tharam Dillon, Elizabeth Chang, E-Commerce: Fundamentals and Applications, Wiley.
3. Laudon, E-Commerce, Pearson Education India.
4. Schneider G., E-Business, Cengage.
5. Bhaskar, B., E-Commerce, McGraw Hill.
6. Roy, Basu, Agarwal, An introduction to E-commerce and Business Communication, ABS publishing house.

Semester 2**Comm2011: COST AND MANAGEMENT ACCOUNTING-I**

Marks: 75 Course Evaluation: Semester Examination (60 Marks) and Internal Assessment (15 Marks) Credit: 4 Lectures: 64 Hours

Objectives: i) To develop an understanding of the basic concepts and applications to establish the cost associated with the production of products and services,

ii) To develop an understanding of cost accounting statements, and

iii) To acquire the ability to apply information for cost ascertainment, planning, control and decision-making.

Learning Outcomes: After completion of the course, learners will be able to:

1. examine and analyse the different cost concepts.
2. determine various components of the cost of production.
3. classify unit cost and total cost by preparing a cost statement.
4. compute employee cost, employee productivity and employee turnover.

CONTENTS:

Unit 1: Introduction to Cost and Management Accounting Lectures: 14 Hours

Meaning and concept of Cost, Costing, Cost Accounting, and Cost Accountancy. Objectives and Scope of Cost and Management Accounting, Evolution, Advantages and Limitations of Cost and Management Accounting. Users of Cost and Management Accounting information. Role of Cost Accounting department and its relation with other departments. Cost Objects, Cost Units, Cost Centres and Responsibility Centres Installation of Cost Accounting System. Cost Classification. Elements of Cost, Cost Control and Cost Reduction. Cost behaviour pattern, Separating the components of fixed, variable and semi-variable costs. Preparation of Cost Sheets for Manufacturing and Service Sectors. Relationship of Cost Accounting, Financial Accounting, Management Accounting and Financial Management, Methods of Costing and Techniques of Costing.

Unit 2: Material Cost

Lectures: 15 Hours

Concept of Material and Inventory. Material Control-Meaning, Objectives, Prerequisites, Elements and Advantages. Material Procurement: Organization, Methods, Procedures Pricing. Procedures and documentation involved in Procuring, Storing and Issuing material. Various inventory control techniques and determination of various stock levels. Computation of EOQ and apply the EOQ to determine the optimum order quantity. Material Issue procedure and valuation of material issues. Selection of pricing methods- FIFO, LIFO, Average etc. Various methods of inventory accounting and preparation of Stores Ledger/Account. Identification and Treatment of Normal and Abnormal Loss and its accounting treatment. Accounting and Control of Waste, Scrap, Spoilage and Defectives.

Unit 3: Employee /Labour Cost

Lectures: 10 Hours

Meaning and importance of Employee/ Labour Cost in an organization Classification of Labour Cost, Labour cost control, Attendance and payroll procedures: Time Keeping and Time Booking, Meaning, importance, control and accounting treatment of Idle Time, Overtime. Labour turnover --meaning, reasons, methods of measurement and control. Various methods of remuneration and incentive systems in the calculation of wages and bonuses, Time rate and piece rate system, Efficiency rating procedures, and Labour productivity.

Unit 4:Overheads

Lectures: 15 Hours

Overheads: Meaning and importance., Classification, Allocation, Apportionment, and Absorption of Overheads. i) Accounting and Control of Factory/Manufacturing Overheads. Primary distribution and Secondary distribution of factory overhead, Methods of absorbing overheads to various Products/Jobs, Types of overhead rates, Meaning and Treatment of under absorption and over absorption of overheads. and apply the same in cost computations. ii) Accounting and Control of Administrative Overheads. iii) Accounting and Control of Selling and Distribution Overheads. Concepts related to capacity, Treatment

of certain items in costing: interest and financial charges, depreciation, packing expenses, fringe benefits, bad debt, training expenses, research and development cost, canteen expenses, and expenses for welfare activities.

Unit 5: Cost Accounting Systems

Lectures: 10 Hours

Concept of Cost Accounting or Cost Control System, Non-integral System of Accounting. Advantages and limitations of Non-Integral System, Cost Accounting Ledgers and Control Accounts and Scheme of Journal entries. Integrated or Integral Accounting System: Meaning, Advantages, Limitations, Features, and Prerequisites, Procedure of Recording under Integral Accounting System. Reconciliation of Cost and Financial Accounts: Need for reconciliation, Reasons for differences in profit under financial and cost accounting systems. The procedure of preparation of reconciliation statement for profit under financial and cost accounting systems and Preparation of Memorandum Reconciliation Account. Accounting for Management Information and Cost Control.

Suggested Reading:

1. JawaharLal, Cost Accounting, McGraw Hill Education.
2. S.P. Jain and K.L. Narang, Cost Accounting, Kalyani Publishers.
3. M.N. Arora, Cost Accounting, Principles and Practice, Vikas Publishing House.
4. S.N. Maheshwari, and S.N. Mittal, Cost Accounting: Theory and Problems, ShriMahavir Book Depot, New Delhi.
5. S.P. Iyengar, Cost Accounting, Sultan Chand & Sons.
6. B.K. Bhar, Cost Accounting, World Press.
7. V.K Saxsena & C.D.Vashist, Advanced Cost and Management Accounting. Sultan Chand and Sons ,New Delhi.
8. Drury, Management and Cost Accounting, Cengage Learning.
9. Horngren, Cost Accounting, Pearson.
10. Dutta, Cost Accounting: Principles & Practice, Pearson.
11. Debasis Banerjee, Cost Accounting & Management Accounting. Book Syndicate.
12. C.H.Sengupta and B G Chowdhury-Cost and Management Accounting, Dey Book Concern.
13. Goutam Kumar Jana, Cost and Management Accounting(Theory and Practice) .Books andAallied(P) Ltd.
14. Cost and Management Accounting, AmitavaBasuandJ.K.Mitra, Tee Dee Publications.
- 15 . Cost and Management Accounting, Debarshi Bhattacharya, Lawpoint

Competition, Monopsony and Oligopoly.

Perfect Competition: Assumption; Theory of a firm under perfect competition; Demand and Revenue; Equilibrium of the firm in the short run and long run, the long run industry supply curve: increasing, decreasing and constant cost industry.

Monopoly: Short-run and long-run equilibrium of monopoly firm; Concept of supply curve under monopoly; Price discrimination (concepts and types/degrees) – equilibrium of a price discriminating monopolist.

Unit 4: Selected Macroeconomic Principles

Lecture: 12 Hours

Introduction to Macroeconomic Variables – Circular Flow of Income – Closed and Open Economy representation of an economy - Saving-Investment Identity, Measuring National Income - Real vs. Nominal GDP - GDP Deflator – limitations of GDP – fiscal policy (concept only)

Unit 5: Money in a Modern Economy

Lecture: 12 Hours

Concept and measures of money; demand for money; quantity theory of money; liquidity preference and rate of interest; money supply and credit creation; monetary policy Cost of living and inflation: Inflation – Causes, Measurement, Effect, Measures to Control Inflation - Forms of Unemployment – Output Gap and NAIRU (Natural Rate of Unemployment); Inflation & Unemployment – Phillips Curve (short run and long run)

Suggested Readings:

1. R.S. Pindyck, D. L. Rubinfeld and P. L. Mehta, Microeconomics, Pearson Education.
2. N. Gregory Mankiw, Principles of Economics, Cengage Learning.
3. G.S. Maddala and E. Miller, Microeconomics: Theory and Applications, McGraw-Hill.
4. D. Salvatore, Schaum's Outline: Microeconomic Theory, McGraw-Hill, Education.
5. Koutsiyannis, Modern Microeconomics, Palgrave Macmillan
6. Paul A Samuelson and William D Nordhaus, Economics, McGraw-Hill Education.
7. JaydebSarkhel, Microeconomics, Book Syndicate.
8. JaydebSarkhel, Macroeconomics, Book Syndicate.

Comm2031: Fundamentals of Management

Marks: 50 Course Evaluation: Semester Examination (40 Marks) and Internal Assessment (10 Marks)

Credit: 3

Lectures: 48 Hours

Objectives

1. Understanding the basic concepts and various functions of management;
2. Creating awareness among the students about the application of management principles in business organizations.

Learning Outcome

1. The students will be able to understand and identify the management principles and practices which are relevant in the business environmental context.

1. describe the various concepts and terminologies used in computing, computer networks and the internet.
2. develop basic computer skills
3. understand basic concepts of DBMS

CONTENTS

Unit 1: Computer Basics

Lectures: 12 Hours

- a) Definition and Characteristics of Computer. Generations of computers. CPU organization and architecture: Arithmetic/Logic Unit (ALU), Control Unit (CU)
- b) Memory organization: Memory representation, Cache memory, Primary memory – RAM and ROM. Functions of RAM and ROM. Different types of RAM and ROM. Secondary memory – Magnetic and optical storage devices (a brief description of different types).
- c) Input and Output Devices: Major types and their functions.

Unit 2: Operating System:

Lectures: 10 Hours

Concept, types, functions of operating system; Software-Concepts and types of software.

Unit 3: Number System and Binary Arithmetic and Logic Gate

Lectures: 5 Hours

Positional Number Systems – Decimal, Binary, Octal, Hexadecimal; Binary Arithmetic – Addition, Subtraction, Number Representation – One's Complement, Two's Complement.

Digital Logic Gates; Truth Table, Logic Diagrams, Simplified Circuits (Half adder, Full adder)

Unit 4: Internet, and Its Applications

Lectures: 8 Hours

Meaning of Internet, IP Address, URL, Domain Name System, Internet Protocols - TCP/IP, UDP, FTP, TELNET [brief ideas only], HTML, DHTML AND XML [Concepts only]

Unit 5: Introduction to DBMS

Lectures: 10 Hours

Concepts of database and database management system (DBMS). Components of database management system (DBMS) Data abstraction. Architecture – three schema architecture. Data models: hierarchical model, network model and relational model.

Suggested Readings:

1. ITLESL, Introduction to Computer Science, Pearson Education.
2. ITLESL, Introduction to Information Technology, Pearson Education.
3. Sinha & Sinha, Fundamentals of Computers, BPB Publication.
4. Rajaraman, Fundamentals of Computers, PHI.