M.Com. (Sem I)

Unit I Managerial Economics

Lesson 1 Nature and Scope of Managerial Economics

Definition, Nature and Scope of Managerial Economics - Traditional Economics vs. Managerial Economics. Managerial Economist's Roles and Responsibilities - Relation with Economics and other Disciplines. Business Objective Models – Profit Maximization, Sales Maximisation, Managerial Discretion and Behavioural Models. Fundamental Economic Concepts – Incremental, Opportunity Cost, Discounting and Equi-Marginal or Substitution Concepts

Lesson 2 Theory of Consumer Demand and Demand Elasticity

Cardinal Utility Analysis of Demand; Ordinal Utility Analysis of Demand; Revealed Preference and Logical Ordering Analysis of Demand; Consumer's Choice; Individual and Market Demand Functions. Demand Distinctions; Law of Demand - Price, Income and Substitution Effects. Elasticity of Demand - Determinants and Distinctions, Degrees and Measurements of Price, Income, Cross Advertising and Expectation Elasticities and Applications in Business Decisions. Demand Estimation- Functional Forms, Demand Forecasting, need for and Steps in Demand Forecasting and Demand Forecasting Techniques for Established as well as New Products.

Lesson 3 Production Function and Market Structure

Production Function; Laws of Variable Proportions; Producer's Equilibrium - Traditional Analysis, Isoquant, Isocost and Ridge Lines and Modern Analysis of Producer's Equilibrium-Expansion Path and Returns to Scale as per Isoquants; Economies and Diseconomies of Scale – Internal and External. Implications of Costs – Real, Alternative and Money Costs; Cost Distinctions and Functions; Cost Behaviour in Short-Run and Economic Capacity; Derivation of Long Run Costs; Modern Analysis of Costs - Average Fixed and Average Variable Costs and Reserve Capacity; Real and Pecuniary Economies; Relevance of Costs in Business Decisions.

Types of Market – Perfect and Imperfect Competition. Pricing Practices-Cost Plus Pricing, Marginal or Incremental Pricing, Product Line Pricing, Differential Pricing, Pioneer Pricing - Skimming and Penetrating Pricing. Profit-Concept and Measurement; Profit Theories– Traditional and Modern; Profit Policies-Rationale for Profit Restraints Profit Planning – CVP Analysis – Applications of CVP Analysis in Managerial Decisions - Attainment of Profit Targets, Management of Change in Price and Variable Cost, Product Mix, Capacity Expansion and Make/Buy.

Unit II Organisation Theory

Lesson 4 Organisation: Theories, Structure, Culture and Conflict

Organisation - Concept, Features, Types, Forms and Significance; Organisational Vs. Individual Goals and their Integration; Role of Positive Thinking in Organisations. Classical

Theories-Scientific Management; Process Management; Bureaucratic Model; Neo Classical Theories-Human Relations and Behavioral Science; Modern Theories - System, Contingency and Quantitative. Organisational Structure- Concept and Factors Influencing Organisational Structure; Departmentalisation; Span of Management; Centralisation and Decentralisation; Delegation of Authority; Organisational Culture – Impact of Organisational Culture; Socio-Cultural features of India and its Impact; Organisational Conflicts-Positive and Negative Impact; Level of Organisational Conflicts-Individual Group and Organisational Measures to minimise conflict.

Lesson 5 Motivation and Group Dynamics

Concept, Process and Significance of Motivation, Theories of Motivation-Need Hierarchy Theory, Theory X and Theory Y, Two Factor Theory, Ouchi's Theory Z and Victor Vroom's Expectancy Theory; Group Dynamics –Definition and Importance, Types of Groups, Formal vs. Informal Groups and Influencing Informal Groups; Quality Circle. Leadership - Concept, Significance and Styles; Leadership Theories-Trait Theory, Behavioural Theory, Fiedler's Contingency Theory, Managerial Grid and Likert's Four Systems of Leadership

Lesson 6 Organizational Change and Organizational Development

Management of Change -Nature, Causes, Process and Chain Effect of Change; Resistance to Change-Individual and Organisational; Overcoming Resistance to Change; Change Models - Lewin's Three Step Model; Change Agents. Meaning and Process of Organisational Development; OD Interventions – Sensitivity Training; Survey Feedback; Process Consultation; Team Building; MBO; Problems in OD; Organisational Effectiveness-Concept and Approaches; Organisational Vs. Managerial Effectiveness; Factors Causing Ineffectiveness

Unit III Business Environment

Lesson 7 Business Environment

Concept, Nature and Signification of Business Environment; Economic Systems - Capitalism, Socialism and Mixed Economy, Indian Financial System - Financial Markets, Financial Intermediaries – SEBI and RBI. Constitution of India-Preamble, Features, Fundamental Rights, Directive Principles and Union - State Relations, Business Pressure Groups – Concept and Importance; CII, FICCI; FEMA, Consumer Protection Act 1986

Lesson 8 Economic Environment

Public Sector, Private Sector, Joint Sector and Co-operative Sector in India; Five Year Plans - Aims, Objectives, Development Strategy, Outlay and Financial Resources; Progress under the Plans Industrial Policy, Economic Policy, Monetary Policy, Fiscal Policy, Export-Import Policy and Balance of Payment; Special Economic Zones (SEZs); Micro, Small and Medium Enterprises (MSMEs); Village and Cottage Industry; Parallel Economy; Privatization; Devaluation of Rupee and Disinvestments.

Lesson 9 Socio-Cultural Environment and International Environment

Nature of Indian Society and Ethos; Social Interest, Institutions and Values Vis-a-vis Industrial Development; Responsibility of Business-Rationale, Scope, Responsibility Towards Self, Owners, Creditors, Depositors and Employees, Business Ethics-Meaning, Assumptions, Features, Principles, Need and Importance; Standards, Consumerism; Social Audit-Definition, Characteristics, Importance, Scope, Audit Process and Social Audit in India. Globalization-Concept, Merits, Demerits, and Interdependency; India's International Trade; MNCs-Meaning; Characteristics; Merits and Demerits; Multinational and Govt. Policy; Foreign Capital Inflows-Concept, Merits, Demerits and Present Trend; Collaborations and Agreements-Bilateral, Multilateral; Memorandum of Understandings (MOUs); International Economic Institutions – GATT, WTO, UNCTAD, World Bank, IMF; Transfer of Technology; Technology Policy

Unit IV Managerial Accounting

Lesson 10 Managerial Accounting

Nature, Scope and Functions of Managerial Accounting; Difference between Managerial Accounting and Financial Accounting; Controllership Functions, Financial Statement Analysis & Interpretation: Meaning & Types of Financial Statement, Limitation of Financial Statement, Objective & Methods of Financial Statement Analysis, Comparative Analysis and Common-Size Statement Analysis, Trend Analysis, Cash Flow (Revised AS3), Fund Flow Statement, Ratio Analysis, Classification of Ratios- Profitability, Liquidity, Turnover Ratios, Advantages & Limitation of Ratio Analysis

Lesson 11 Marginal Costing and Responsibility Accounting

Marginal Costing and Absorption Costing, Uses of Marginal Costing in Managerial Decisions, Break-even Analysis-Assumptions and Limitations; Break-even chart. P/V ratio; Practical, Application of Break-even Analysis. C-V-P Analysis and its applications in business. Responsibility Accounting- Concept; Responsibility Centres – Cost, Profit, and Investment Centres; Advantages, Transfer Pricing - Market-based Price and Cost-based Price, Cost Control and Cost Reduction: Process and Technique

Lesson 12 Budgetary Control, Standard Costing and Contemporary Issues

Budget and Budgetary Control; Essentials for Effective Budgeting; Advantages. Types of Budgets; Cash Budget and Sales Budget. Flexible Budgeting. Zero–base Budgeting, Performance Budgeting. Concept and Objects of Standard Costing; Setting of Standards; Variance Analysis- Material, Labour, Overhead and Sales Variances, Reasons for the Variances, Advantages & Limitation of Standard Costing.

Activity Based Costing, Target Costing, Quality Costing: Meaning, Need, Process and Benefits, Value Chain Analysis: Meaning, Importance, Balanced Scorecard: Meaning, Importance, Four Perspectives.

Unit V Advanced Business Statistics

Lesson 13 Basic Elements of Probablity and Parametric Statistical Inference

Probability- Random phenomena, outcomes, sample space and events. Axiomatic definition of probability of an event; the case of finite sample spaces. Conditional Probability. Bayes Theorem and its application to business problems, Binomial, Poisson and Normal Distributions- Characteristics and Applications. Estimation- Statistics and Parameter; Qualities of a Good Estimator; Point Estimation of mean, variance and percent. Testing of Hypothesis- Statistical Hypothesis, Tests of Significance, Types of Errors in Testing of Hypothesis, Level of Significance; Test Statistics, Critical Values, Acceptance and Rejection Regions; P-value; Two tailed and One tailed Tests based on normal distribution for the population mean. Test for equality of two means.

Lesson 14 Small Sample Tests and Interval Estimation

Sampling Distribution of Students t and F. Small Sample Significance Tests: One-sample Student's t-test for mean and Student's t-test for equality of two means, Concept of a Confidence Interval, Confidence Level. Interval estimation for the population mean in small and large samples, One-way Analysis of Variance-Assumptions and its Applications

Lesson 15 Non-Parametric Tests and Elements of Statistical Decision Making

Meaning and Characteristics of Non-Parametric Tests; Difference between Parametric and Nonparametric Tests; Chi-square Test for Goodness of Fit of a Model; WilcoxonMann-Whitney Test Statistical Decision Making: Introduction; Decision Making Environments; Decision Making under Uncertainty - Criterion of Optimism, Criterion of Pessimism, Equally likely Decision (Laplace) Criterion, Criterion of Realism and Criterion of Regret; Decision Making under Risk- Expected Monetary Value and Expected Monetary Loss Criteria.

Unit VI Business Communication and Soft Skills

Lesson 16 Business Communication and Communication Barriers

Meaning, its concepts & objectives, Principles of effective communication (7 Cs), Media for communication (covering written, oral, face-to-face, audio-visual, computer aided, silence), model of communication process. Types of communication: Formal (upward, downward, horizontal, diagonal), Informal (grapevine, consensus), Ethics in communication. Communication in global scenario. Non-verbal communication, Barriers to communication.

Lesson 17 Business Letters and Personal Skills

Need, kinds of business letters, essentials of effective business letter, business letter styles (full block, semi-block, hanging indentation, special letter form), business enquiries and reply, purchase orders, complaints, payment collection letters, circular letters, sales letters, correspondence with banks, memos, office orders, circulars, application letters. Corporate communication and Report, Interview and Report writing

Unit VII Statistical Software for Business Analyses

Lesson 18 MS Excel for Data Analysis

Lesson 19 SPSS, Eviews

MA Economics (Sem I)

Unit I Micro Economics-1 (MAE 01)

Lesson 1 Consumer Theory and Microeconomic Analysis: Concepts, Decisions, and Welfare

Concepts and Methods of Micro-economic Analysis, Scarcity and Choice, Optimization and Equilibrium, Comparative Statics (10), Theory of Consumer: Preference relations and their properties, Consumption Decision. (Optimizing Behavior of the consumer under alternative preference structures- Utility, Indifference curves and revealed preference). Comparative statics of the consumer's decision, Slutsky Equation, Derivation of Demand Curves. Demand elasticities. Welfare evaluation of economic change (prices). Consumer's surplus (10)

Lesson 2 Theory of the Firm: Production, Cost, and Supply Analysis

The Classical Firm and its Characteristics. Alternative Theories of the Firm, Critical evaluation of marginal analysis; (5), Theory of Production and Costs. The Production function-Assumptions, Variation in Scale, Variation in input proportions, The multi-product firm and production possibility set. Minimization of costs in the long and the short run. Derivation of cost functions from production functions; derived demand for factors of production, Supply: Profit maximization in the short and the long run. The multi-product case. Comparative statics-The firm's Supply function. Technical progress. Cobb-Douglas, CES, and Trans-log production functions and their properties; (15)

Lesson 3 Price and Output Determination under Alternative Markets

Price and Output Determination under alternative markets- perfect competition — short run and long run equilibrium of the firm and industry, supply curve; Monopoly — short run and long run equilibrium, price discrimination, welfare aspects, monopoly control and regulation; Monopolistic competition — general and Chamberlin approaches to equilibrium, equilibrium of the firm and the group with product differentiation and selling costs, excess capacity under monopolistic and imperfect competition, criticism of monopolistic competition; (10) Oligopoly — Non-collusive (Cournot, Bertrand, Edgeworth, Chamberlin, kinked demand curve and Stackelberg's solution) and collusive (Cartels and mergers, price leadership and basing point price system) models; Price and output determination under monopsony and bilateral monopoly;Workable competition — Structure, conduct and performance norms.(10)

Unit II Mathematical Methods in Economics

Lesson 4 Mathematical Foundations for Economic Analysis: Functions, Calculus, and Optimization

Concept of a function; Limits, continuity and differentiability of a real valued function; Convex and concave functions; Multivariable functions, Differentiation-Total and Partial; Interpretation of partial derivatives; Optimization with single and multivariable functions-Unconstrained and constrained optimization in simple economic problems; Integration-simple and Definite; (20),

Lesson 5 Vector, Matrix and Differential Equations

Concept of a vector - its properties; Concept of matrix - their types, Simple operations on matrices, matrix inversion. Determinants and their basic properties; Solution of simultaneous equations through Cramer's rule; Input-output Analysis Difference equations - Solution of first order and second order difference equations; Differential Equations (20)

Lesson 6 Linear Programming

Linear programming — Basic concept; Formulation of a linear programming problem — Its structure and variables; Nature of feasible, basic and optimal solution; Solution of simple linear programming problems through graphical and simplex method*; Concept of duality and statement of duality theorems; Formulation of the Dual and its interpretation; Shadow prices and their uses; Game Theory; Strategies - simple and mixed; Value of a game; Saddle point solution; Simple applications. (20)

Unit III Statistical Methods in Economics (MAE 04)

Lesson 7 Economic Data and Descriptive Statistics: Types, Sources, and Sampling Methods

Typical data sets arising in economics, Qualitative, Quantitative, Income, Expenditure, Time Series and Panel data. Major sources of data sets: Census, Government agencies, e-resources, Graphical representations, Measures of Central tendency, Measures of dispersion. Sampling methods: Census, simple random sample with and without replacement, stratified sampling methods.

Lesson 8 Probability

Probability theory: Laws of addition and multiplication; Independence of events, Conditional probability and concept of independence; Bayes theorem with applications; Random variable; Discrete and Continuous random variables; Probability density functions; Binomial, Poisson and Normal distributions, their mean and variance, graphs of normal density functions.

Lesson 9 Statistical Methods: Correlation, Regression, Estimation, and Hypothesis Testing

Correlation: Pearson's product moment and Spearman's rank correlation-their properties; Partial and multiple correlations, linear and nonlinear regression. Estimation: Concept of an estimator and its sampling distribution: Desirable properties of a good estimator; Point and Interval estimation. Testing of statistical hypotheses – Formulation of the problem; Null and alternative hypothesis; Type 1 and Type 2 errors, Goodness of fit; Confidence intervals and level of significance; Hypothesis testing for means, variance, regression coefficients based on standard normal, t, Chi-square and F tests.

Unit IV Macro Economics-1 (MAE 05)

Lesson 10 Basic Concepts of Macroeconomis

Macroeconomic Variable- Stocks and Flows, Macroeconomic relationships, Micro assumptions of macroeconomics, Problem of Aggregation: Macroeconomic Equilibrium, Flow

equilibrium and Stock equilibrium, Full equilibrium. National Income Accounts, Flow of Funds Accounts and Input-Output Accounts, Concept of Wealth and Price Indices

Lesson 11 Determination of Income and Employment

Models of Income and Employment Determination: An Overview, Walrasian interpretation of Keynesian unemployment- Patinkin, Clower, Leijonhufuud, New Keynesian Interpretation, Post-Keynesian Interpretation-Sidney Weintraub, Paul Davidson, Kalecki and Minsky, New Classical Economics

Lesson 12 Money, Inflation, Consumption and Investment Functions

Demand for Money- Friedman, Baumol, Tobin, Patinkin's Real Balance Effect, Issues regarding endogenous and exogenous supply of money, R.B.I.'s Approach to Supply of Money Demand-Pull and Cost-Push Inflation, Phillips Curve Controversy, Natural Rate of Unemployment-Adaptive expectation and Rational expectation models, Lessons from the Indian Economy, Life Cycle Hypothesis, Permanent Income Hypothesis, Random Walk Hypothesis, Classical Theory of Investment, Keynesian Theory of Investment, Accelerator, Neo-Classical and New Classical Theories of Investment.

Unit V Introduction to Environment and Ecology

Lesson 13 Planet and Concept of Eco-system

The Planet and Concept of eco-system; Major eco-systems of the world; Solar energy Flow; Bio-Geo chemical cycles:- Carbon Cycle, Hydrological Cycle, Nitrogen cycles; Climate systems and Oceanic Currents

Lesson 14 Natural Resources and Economy-Environment Interactions

Economy-Environment Interaction; Entropy law and Material balance - resources and waste generation; Stock and Flow of exhaustible resources and Fund services of Eco-system resources; Problems of Resources Depletion and degeneration; Classification of resources: Renewable and Non-renewable. Biotic and Abiotic, Exhaustible and Non-exhaustible resources Biotic Resources: Vegetation and forests; Agriculture, Fishery and livestock; Biodiversity: Exhaustion and Degradation Abiotic Resources: Land and Soil, Surface Water and ground water; Energy resources; Non-Energy mineral resources; Problems of their depletion and exhaustion (Land and Soil use and erosion must be covered here)

Lesson 15 Pollution and Sustainable Development

Problems of Pollution due to Overuse of Ecosystem Services (With reference to sectoral activities of agriculture, mining, industry and other activities such as transport and Health services)
Air Pollution: Types of pollutants and their impact; Ozone Depletion; Global Warming; Acid rain; Urban Pollution and Urban Health Water Pollution- The Concepts of BOD and COD, Ph values, Fluoride; Biotic Waste; Fertilizer use; Euthrophication of water Bodies; Arsenic pollution; Heavy metals and Toxic wastes; Sewage Land Degradation- the problem of Solid waste disposal and contamination; The problem of Salinity and water logging, Concept, Sustainable resource use and pollution control policy. (This is to provide an interface with economics. The teacher is not expected to teach the theory of sustainable development.)

Unit VI Dynamics of Communication Skills and Technical Writing (MAES 02)

Lesson 16 Language Skills

a. Usage of Grammar: Tenses, Articles and Modals b. Vocabulary Building: Antonyms, Synonyms, Prefix and Suffix

Lesson 17 Technical Communication

Letters & Resume Writing: Formal and Informal Letters and Resume writing b. Presentation Skills: Types of presentation, preparing presentations, audience recognition, , skills for seminar.

Lesson 18 Interview, and Reading and Presentation Skills

Types of Interviews: Preparing for interviews, Mock interview drills, frequently asked questions, about the organization etc. b. Group Discussion: Developing group communication skills, case studies and role-play. Reading books (original books written by Keynes, Hicks, Schumpeter, Adam Smith etc.), reports, articles and present in front of class (and respective subject teachers).

MA English (Sem I)

Unit I RENAISSANCE TO RESTORATION

Lesson 1 Elizabethan Period and Jacobean Period

Christopher Marlowe: Dr. Faustus
William Shakespeare: Hamlet
John Milton: Paradise Lost Book I
Francis Bacon: Of Studies

Lesson 2 Metaphysical Poetry

John Donne:' A Valediction: Forbidding Mourning'
Andrew Marvell: To His Coy Mistress.
George Herbert: 'The Collar'
Henry Vaughan: 'The Retreat

Lesson 3 Restoration Drama

Webster: The Duchess of Malfi
W. Congreve: The Way of the World

Unit II NEO-CLASSICISM TO ROMANTICISM

Lesson 4 Neo Classical and Early Romantics

Alexander Pope: The Rape of the Lock
Jonathan Swift: Last book of Gulliver Travels
William Blake: Tyger
William Wordsworth: Intimations of Immortality from Recollections of Early Childhood

Lesson 5 The Later Romantics and Romantic Poetry

P. B. Shelley: 'Ode to the West Wind'
John Keats : 'Ode on a Grecian Urn'
S. T. Coleridge : Kubla Khan
Lord Byron : When We Two Parted

Lesson 6 Romantic Fiction

Mary Shelley: Frankenstein
Jane Austen : Pride and Prejudice

Unit III LITERARY CRITICISM

Lesson 7 Classical Literary Criticism and Early Literary Criticism

Aristotle: Poetics (with particular reference to tragedy)
Longinus: On the Sublime (Extracts)
Alexander Pope: Essay on Criticism(excerpts)
Samuel Johnson: Preface to Shakespeare (excerpts)

Lesson 8 Romantic English Criticism and 19th Century English Criticism

Coleridge: Biographia Literaria (Chapter IV/ the ones on Imagination)
Mathew Arnold: The Function of Criticism at the Present Time

Lesson 9 Modern English Literary Criticism

T.S. Eliot: Tradition and Individual Talent
I.A. Richards: Practical Criticism (Four Kinds of Meaning/ Two Uses of Language)

Unit IV AMERICAN LITERATURE

Lesson 10 Prose and Poetry -I

The American Scholar
The Art of Fiction
Walt Whitman: Passage to India
Emily Dickenson: This is My Letter to the World, I Felt a Funeral in my Brain

Lesson 11 Poetry -2 and Fiction

Robert Frost: West Running Brook
Wallace Stevens: Anecdote of the Jar
Langston Hughes: Harlem
Nathaniel Hawthorne: Young Goodman Brown
F. Scott Fitzgerald: The Great Gatsby

Lesson 12 Drama and Autobiography

Tennessee Williams: A Streetcar Named Desire
Harriet Jacobs: Selections (Chapter 1 & 2) from Incidents in the Life of a Slave Girl (1861), New York, OUP, 1988

Unit V READING SKILLS

Lesson 13 Basics and Essentials of Reading

Academic Reading & Reading for Leisure
Fundamentals of Reading Comprehension (time taken; identifying important parts; difficulty in comprehension)
Modes of Reading Comprehension (General and Analytical)
Reading Analysis

Lesson 14 Reading Strategies and Developing Reading Skill

Strategies of Inference and Preventing Regression
Expanding Fixations, Critical Thinking and Counterarguments
Extracting Relevant Information (editorial, financial news, education, culture, science, art, literature, politics, history, environment)
Skilful Gathering of Ideas during and after reading

Lesson 15 Practical Aspects of Reading and Handing Reading tests

Effective Reading Strategies (Skimming, Scanning)
Understanding Question Types
Understanding Paragraphing
Reading Comprehension for International Tests (IELTS, TOEFL, SAT, GRE, GMAT, CAT)

एम ए हिंदी (सेमेस्टर I)

[MA Hindi (Sem I)]

इकाई 1- हिंदी साहित्य का इतिहास (आदिकाल से रीतिकाल तक)

पाठ 1: आदिकालीन और भक्तिकालीन कवि एवं काव्य प्रवृत्तियाँ

हिंदी साहित्य का आदिकाल, प्रमुख रासो ग्रंथ, जैन साहित्य, सिद्ध, बौद्ध तथा नाथ साहित्य, प्रमुख कवियों एवं युगीन प्रवृत्तियों का परिचय, प्रमुख कवि; भक्तिकाल के उदय के सामाजिक-आर्थिक कारण, प्रमुख कवि एवं प्रवृत्तियाँ, भक्ति का स्वरूप, संत, सूफी, राम तथा कृष्ण काव्यधाराएँ, वैष्णव भक्ति का उदय एवं आलवार संत

पाठ 2: निर्गुण-सगुण काव्यधाराएँ एवं प्रमुख कवि

निर्गुण काव्य एवं प्रमुख कवि : कबीर, दादू, नानक तथा रैदास, जायसी, कुतबन तथा मंझन; सगुण भक्ति काव्य एवं प्रमुख कवि : तुलसी, सूरदास, अष्टछाप के अन्य कवि, मीराबाई, रसखान

पाठ 3: रीतिकालीन कवि एवं काव्य प्रवृत्तियाँ

रीतिकालीन साहित्य का उद्भव और विकास, सामाजिक-राजनीतिक सांस्कृतिक साहित्यिक परिस्थितियाँ, प्रमुख प्रवृत्तियाँ; रीतिकालीन साहित्य की प्रमुख धाराएँ : रीति बद्ध, रीति सिद्ध, रीति मुक्त धाराएँ एवं उनके प्रमुख कवि

इकाई 2- हिंदी भाषा का स्वरूप एवं इतिहास

पाठ 4: हिंदी भाषा का उद्भव और विकास

भाषा : अर्थ, परिभाषा, विशेषताएँ और प्रकृति, भाषा और समाज का अंतःसंबंध, भाषायी विविधता, भाषा एवं बोली में संबंध, स्त्री भाषा और पुरुष भाषा। विश्व के भाषा परिवार, भारोपीय भाषा परिवार।

हिंदी भाषा का उद्भव विकास और परंपरा (पालि, प्राकृत, अपभ्रंश, पुरानी हिंदी)। अपभ्रंश, अवहट्ट तथा पुरानी हिंदी का संबंध। काव्य भाषा के रूप में अवधी और ब्रज का उदय एवं विकास, दक्खिनी हिंदी।

पाठ 5: हिंदी की प्रमुख बोलियाँ और देवनागरी लिपि

खड़ी बोली हिंदी तथा अन्य जनपदीय बोलियाँ, हिंदी प्रसार के प्रमुख आंदोलन तथा प्रमुख संस्थान, हिंदी की प्रमुख बोलियों का परिचय, हिंदी, उर्दू और हिंदुस्तानी। देवनागरी लिपि का आधुनिकीकरण, भाषा नियोजन। अर्थविज्ञान, ध्वनिविज्ञान।

पाठ 6: हिंदी की सांविधिक स्थिति एवं वैश्विक परिप्रेक्ष्य

हिंदी की सांविधिक स्थिति, राजभाषा, संपर्क भाषा और राष्ट्रभाषा के रूप में हिंदी, वैश्विक परिप्रेक्ष्य में हिंदी, विश्व में हिंदी शिक्षण और शैक्षणिक संस्थाएँ

इकाई 3- प्राचीन एवं मध्यकालीन हिंदी काव्य

पाठ 7: बीसलदेव रासो, विद्यापति पदावली और पद्मावत

बीसलदेव रासो - नरपति नाल्ह (सं. माता प्रसाद) पद संख्या 67-76, विद्यापति पदावली (सं. रामवृक्ष बेनीपुरी) पद संख्या 1-5; पद्मावत का नागमती वियोग खंड - मलिक मुहम्मद जायसी

पाठ 8: भ्रमरगीत सार और विनय पत्रिका

सूरदास - भ्रमरगीत सार (सं. रामचंद्र शुक्ल) - पद संख्या 21, 22, 23, 24, 31, 38, 42, 52, 62, 64; तुलसीदास - विनय पत्रिका पद संख्या 79, 90, 100, 105, 111, 162, 172, 174, 178, 245

पाठ 9: मीरा की पदावली, रहीम, बिहारी सतसई, घनानंद कवित्त

मीरा - वृहत पदावली (सं. नरोत्तमदास) - पद संख्या 1-15, उत्तर मध्यकालीन काव्य - रहीम - 10 दोहे, (नीतिपरक दोहे); बिहारी सतसई - 10 दोहे (बिहारी रत्नाकर - जगन्नाथदास रत्नाकर से चयनित 10 दोहे), घनानंद - घनानंद कवित्त (सं. विश्वनाथ प्रसाद मिश्र) पद संख्या 1-6

इकाई 4- हिंदी आलोचना

पाठ 10: हिंदी आलोचना का उद्भव और विकास

आलोचना स्वरूप एवं पद्धति, हिंदी आलोचना का उद्भव एवं विकास

पाठ 11: हिंदी के प्रमुख आलोचक

हिंदी आलोचना की पद्धतियाँ, आचार्य रामचंद्र शुक्ल, हज़ारीप्रसाद द्विवेदी, नंददुलारे वाजपेयी, रामविलास शर्मा

पाठ 12: समकालीन हिंदी आलोचना

डॉ. नगेंद्र, विजयदेवनारायण साही, रामस्वरूप चतुर्वेदी, समकालीन हिंदी आलोचना

इकाई 5- अनुवाद कौशल

पाठ 13: अनुवाद : अवधारणा एवं प्रविधि

अनुवाद - अवधारणा एवं स्वरूप, अनुवाद का महत्त्व; अनुवाद प्रविधि

पाठ 14: अनुवाद एवं अनुवादक

अनुवाद के प्रकार, अनुवादक के गुण

पाठ 15: हिंदी-अंग्रेजी-हिंदी अनुवाद

हिंदी से अंग्रेजी अनुवाद, अंग्रेजी से हिंदी अनुवाद

MSc Computer Science (Sem I)

Unit I Introduction to Artificial Intelligence

Lesson 1 AI and Informed Search

Introduction to AI, Historical Development, Turing Test. Problem Solving, Search Algorithms, State-space and Solution Space Search, State space as graph- state v/s node; Evaluating Search Strategies - Time, Space, Completeness, Optimality. Uninformed search: Breadth First Search, Depth First Search, Iterative Deepening Search, Bi-directional Search, Uniform Cost Search. Informed Search: Best First Search, Heuristic Search, A* Search, Admissible heuristic, Consistent heuristic, optimality and admissibility, IDA* search, Weighted A* search and inconsistency. Hill Climbing, Local Search, Simulated Annealing, local beam search and Genetic Algorithm.

Lesson 2 Adversarial Search and Constraint Satisfaction Problems

Adversarial Search and Game Playing, Min-max Algorithm, Alpha-beta pruning, partially observable games, stochastic games. Constraint Satisfaction Problems: Introduction to CSPs, Constraint Networks, Binary and non-binary constraints, qualitative and quantitative CSPs, Consistencies - Local and global consistencies; Constraint propagation and generalizations − Related Methods: backtracking search; dynamic programming; variable elimination; Handling Spatial and Temporal constraints.

Lesson 3 AI planning and Probabilistic reasoning

AI Planning: Introduction, complexity, PDDL, Domain Independent Planning, Domain Description, PDDL (syntax), forward vs. backward search, planning graph. Graph Plan. Probabilistic Reasoning: Uncertainties in AI; Markov random fields; Markov networks; Baye's Theorem; Bayesian networks – Concepts, Representation and Inference; Hidden Markov Model and Dynamic Bayesian Network. Dempster-Shaffer Framework of Evidential Reasoning.

Unit II Discrete Structures and Graph Theory

Lesson 4 Sets and Graph Theory

Sets: Definition and types, Set operations, Partition of set, Cardinality (Inclusion-Exclusion & Addition Principles), Recursive definition of set. Functions, Relations, Properties of binary relations, closure, Partial Ordering Relations, The Pigeonhole & Generalized Pigeonhole Principles, Composition of Functions Concept, Mathematical induction. Graph Theory: Graphs – Directed, Undirected, Simple, Adjacency & Incidence, Degree of Vertex, Subgraph, Complete graph, Cycle & Wheel Graph, Bipartite & Complete Bipartite Graph, Weighed Graph, Union of Simple Graphs. Complete Graphs. Isomorphic Graphs, Path, Cycles & Circuits Euclerian & Hamiltonian Graphs.

Lesson 5 Planar Graph and Language of Logic

Planar Graph: Kuratowski's Two Graphs, Euler's Formula, Kuratowski's Theorem. Trees: Spanning trees- Kruskal's Algo, Finding Spanning Tree using Depth First Search, Breadth First Search, Complexity of Graph, Minimal Spanning Tree, Graph Coloring. Language of Logic: Proposition, Compound Proposition, Conjunction, Disjunction, Implication, Converse, Inverse & Contrpositive, Bi-conditional Statements, tautology, Contradiction & Contingency, Logical Equivalences, Quantifiers, Arguments Groups, Ring, fields and Lattice.

Lesson 6 Linear Programming and Combinatorial Optimization Problems

Linear programming problem, Simplex method, Revised Simplex method, Duality, Dual Simplex, Interior Point Method. Combinatorial Optimization Problems: Transportation problem, Assignment problem.

Unit III Probability & Statistics

Lesson 7 Probability Theory and Advanced Probability Distributions

Probability Theory: Axioms of Probability theory, Probability Spaces, Conditional Probability, random variables. Probability densities, joint densities, marginal densities, conditional densities, expectation and covariances, Bayesian probabilities, Gaussian distribution.

Lesson 8 Decision Theory

Decision theory, Introduction to information theory, Exponential family of distribution, Non-parametric methods.

Lesson 9 Introduction to Statistical Methods and Inference

Descriptive statistics, presentation of data, averages, measures of variation. Elementary probability, binomial and normal distributions. Sampling distributions. Statistical inference, estimation, confidence intervals, testing hypotheses, linear regression, and correlation.

Unit IV Advanced Algorithms

Lesson 10 Advanced Algorithmic Techniques and Problem Solving

Overview of complexity notations, Divide and Conquer method, Greedy and Dynamic Programming. Backtracking, Branch and Bound, Max Flow Problem, String Matching etc.

Lesson 11 Advanced Data Structures and Algorithm Analysis

Brief overview of Notations and Recurrence analysis, Amortized analysis, B- Trees, AVL trees. Dictionaries and tries, Binomial Heaps, Fibonacci Heaps, Disjoint Sets, Union by Rank and Path Compression.

Lesson 12 Randomized Algorithms, Parallel Algorithms and Combinatorial Optimization

Randomized Algorithms and Parallel Algorithms: Randomized Algorithms: Las Vegas and Monte Carlo algorithms, Applications on graph problems, Finger Printing, Pattern Matching, Primality testing algorithm. Introduction: Combinatorial optimization, approximation factor,

PTAS, FPTAS, Approximation algorithms for vertex cover, set cover, TSP, subset-sum problem etc., Analysis of the expected time complexity of the algorithms.

Unit V Programming in Python

Lesson 13 Basics of Python Programming and Python Operators

Basics of Python Programming: python identifiers, indentation, comments in Python, data types, python strings. Python Operators: arithmetic, assignment, relational operators etc. Decision making and loop control structures.

Lesson 14 Python Functions and Data Structure

Built-in functions in python, built-in string methods. User-defined functions, keyword arguments. Lambda functions. Python lists, tuples, dictionaries. Performing basic operations on lists, tuples and dictionaries.

Lesson 15 Python Modules and Graphs in Python

Python modules, namespace and scoping. File handling, access modes, reading and writing files, renaming and deleting files. Plotting graphs in python, Introduction to Matplotlib. Developing basic GUI applications using Tkinter.

Unit VI Professional Communication

Lesson 16 Grammar, Vocabulary and Oral Communication

Tenses, subject–verb agreement. Sentence Analysis: Simple, Compound and Complex sentences. Phrases: Adjective, Adverb and Noun Phrase, Clauses: Adjective, Adverb and Noun Phrase. Voice, Narration, Gerund, Participle. Oral Communication.

Lesson 17 Communications Skills: Listening, Speaking and Reading

Listening Skill – Active listening, Barriers to active listening. Speaking Skill-Stress patterns in English, Questioning skills, Barriers in Speaking. Reading Skill-Skimming, Scanning, Intensive reading, linking devices in a text, Different versions of a story/incident.

Lesson 18 Written Communication and Soft Skills

Written communication: Writing process, paragraph organization, writing styles. Types of Writing - Technical vs. creative; Types of technical writing, Scientific Writing: Writing a Scientific Report Soft Skills. Body Language– Gesture, posture, facial expression. Group Discussion– Giving up of PREP, REP Technique. Presentation Skills: (i) How to make power point presentation (ii) Body language during presentation (iii) Resume writing: Cover letter, career objective, Resume writing (tailor made). Interview Skills: Stress Management, Answering skills.

MBA (Ist Sem.)

Unit I Management Principles and Organizational Behaviour

Lesson 1 Contemporary Perspectives of Management/ Organizational Behaviour

Challenges and opportunities for Management/ OB; Overview and definition of Management, Managerial roles and skills; Evolution of management thought: scientific management, administrative approach, behavioural approach, systems approach, contingency approach. Management functions: Planning, Organizing, Controlling; Decision Making; Contemporary issues in management: Management by Objectives, Total Quality Management, Business Process Reengineering, and Sustainable Business.

Lesson 2 Foundations of Organizational Behaviour

OB: Overview and definition; Disciplines that contribute to OB; OB model; Individual behaviour: Biographical characteristics, intellectual and physical abilities, emotions, personality types, transactional analysis, Johari window. Perception: definition, process, factors influencing perception. Diversity management.

Lesson 3 Leadership, Motivation, Groups and Teams, and Organisational Culture

Leadership: Meaning and theories. Motivation: Meaning and theories. Groups and teams. Organisational culture, change management, stress management, conflict management, negotiation

Unit II Managerial Economics

Lesson 4 Concept of Managerial Economics and Demand Analysis

Introduction: Meaning and scope of Managerial Economics, Role and responsibilities of Managerial Economist, Objectives of firm, Fundamental concepts of Economics - Incremental reasoning, contribution, Time perspective, Risk and uncertainty, Discounting principle, Opportunity cost, Profit maximization model, Growth maximization model and Behavioral model of firm. Case study analysis. Demand Analysis: Demand and revenue, Elasticity of demand its significance and its applications in business, Demand function, Determinants of demand, Demand forecasting, Case study analysis

Lesson 5 Cost, Production, and Market Structure Analysis

Cost and Production Function Analysis: Cost concepts relevant to business decisions, Cost Functions, Production function, Laws of returns and returns to scale, Estimation of production and Estimation of cost, Case study analysis Market Structure: Theory of pricing, Perfect

competition, Imperfect Competition, Monopoly, Monopolistic competition, Monopsony, Duopoly and Oligopoly, Case study analysis

Lesson 6 Pricing Strategies and Fundamentals of the New Economy

Pricing Methods: Pricing decisions, General theory of pricing, Peak load pricing, Pricing over life cycle of a product, Cost plus pricing, Multiproduct pricing, Transfer pricing and Cost oriented prices, Case study analysis Fundamentals of Macroeconomics: National Income, its Components, Methods of measurement, Problems in estimating, economic welfare and industrial growth, The flat world economy, Characteristics of new economy, , Icons of new economy, Demographic dividend and Rules of the game in new economy, Case study analysis

Unit III Accounting for Managers

Lesson 7 Fundamentals of Financial Accounting and Financial Statements

Introduction: Objectives of accounting, Financial accounting, Concept, Importance, Scope, Accounting as an information system, Accounting concepts & conventions and Generally Accepted Accounting Principles (GAAP). Financial Statements: Nature and Usefulness of financial statements, Preparation of financial statements-Trading account, Profit & Loss a/c, Balance sheet and Adjustments in final accounts.

Lesson 8 Management Accounting and Cost Accounting

Management Accounting: Concept, Importance and Scope. Distinction between financial accounting, cost accounting and management accounting, Functions of management accountant. Cost Accounting: Concepts, Cost Centre, Profit Centre & Investment Centre, Elements of Cost, Methods of costing, Techniques of costing

Lesson 9 Cost and Management Accounting for Business Decision Making

Preparation of cost sheet, Marginal costing. Application of CVP analysis in business decision making, Absorption costing, Standard costing & Variance analysis, Budget and Budgetary Control.

Unit IV Quantitative Techniques

Lesson 10 Decision Theory and Game Theory

Decision Theory, Decision making under uncertainty, Criterion of Maximin and minimax, Decision making under risk Bayesian approach, Criterion of Maximum likelihood, Decision Tree-Applications. Decision making in a Competitive Situation-Game Theory, Types of Games, Two person zero sum games, Mixed strategy and Method of solution.

Lesson 11 Transportation, Assignment, Queuing Theory, and Simulation

Transportation Model, North West Corner Rule, Stepping Stone Method, VAM, MODI, Application of Transportation Model, Assignment Models, Hungarian method of assignment, Application of Assignment model Queuing theory , Characteristics, Business application of waiting lines, Simulation for business, Monte Carlo method and application of simulation in business situations.

Lesson 12 PERT, CPM, Linear Programming, and Advanced Methods

PERT & CPM, Network construction and analysis, Critical path, Time-cost trade off, Crash activity analysis, Planning and scheduling, Project costs, Controlling project costs. Linear Programming, Problem formulation and graphical methods of solution, Simplex method, Elementary ideas about duality, Sensitivity Analysis, Integer Programming and Goal Programming.

Unit V Business Research and Statistical Software

Lesson 13 Introduction to Business Research and Sampling

Introduction: Introduction to Business Research, Research process and Types of Research, problem formulation and Statement of Research Objectives, Importance of literature review. Business Research Design: Steps involved in a research design. Exploratory research, Descriptive research, Causal research, Various types of experimental designs, types of errors affecting research design.Case study analysis Sampling: Sampling and sampling distribution: Meaning, Steps in Sampling process, Types of Sampling - Probability and nonprobability Sampling Techniques, sample size determination.

Lesson 14 Data Collection, Central Tendency and Dispersion

Primary and Secondary data – Sources, Data collection Methods: Observations, Survey, Interview and Questionnaire design, Qualitative Techniques of data collection. Data entry and visual plots in MS Excel Measurement & Scaling Techniques: Nominal, Ordinal, Interval and Ratio Scale, Criteria for good measurement, attitude measurement – Likert's Scale, Semantic Differential Scale Central tendency and Dispersion: Measures of Central Tendency- Mean, Median, Mode, Measures of dispersion mean deviation and standard deviation. Binomial, Poisson and Normal distributions- their characteristics and applications. Measures of Variation. Skewness, Moments and Kurtosis. Application in MS Excel and SPSS software

Lesson 15 Data analysis, Data Interpretation and Report Design

Validity & normality of data, Qualitative vs Quantitative data analyses, Hypothesis testing: Parametric and Non-Parametric Tests , t – test, Z test, ANOVA, Correlation & regression Analysis, chi square test, sign test, run test, Mann-Whitney U Test, Kruskal-Wallis H test. Time Series Analysis, Data entry, variable specification and Hypothesis tests in SPSS software. Case study analysis Report Design: Basics of research report, Contents of report, need of executive summary – chaptalization, contents of chapter, report writing, report format, Ethics in research. Case study analysis

Unit VI Soft Skills & Business Communication

Lesson 16 Effective Communication Skills: Principles, Media, Barriers, and Ethical Considerations

Communication as Soft Skill. Meaning, concepts, objectives, process & Principles of effective communication (7 Cs), Media for communication (covering written, oral, face-to-face, audio-visual, computer aided). Listening, Determinants of good listening, Feedback in communication. Barriers to Communication Skills required in different Model of communication process: Formal (upward, downward, horizontal, diagonal), Informal (grapevine, consensus), Ethics in business communication.

Lesson 17 Business Correspondence and Report Writing: Types, Formats, and Essentials

Skill related to business correspondence. Business letters: kinds of business letters, essentials of effective business letter, business letter styles (full block, semi-block, hanging indentation, special letter form). Business enquiries and reply, purchase orders, sales letters, complaints, payment collection letters, circular letters, correspondence with banks, memos, office orders HR Related Correspondence: Application letter, curriculum vitae, interview letter, references letter, offer of employment, letter of acceptance, letter of resignation, writing routine and persuasive letters. Business Report writing, Essentials of Good Report Writing

Lesson 18 Non-Verbal Communication and Business Presentation Skills

Non-verbal communication Skills: Kinesics, paralanguage, art factual communication, proxemics, Chronemics, silent communication. Skill related to other means of business communication: Telephone, fax, telex, email, voice mail, answering machine, teleconferencing, SMS, MMS, posters Business Presentation and Interview Skills. Types & preparation, Mock Interview. Presentation skills: Stages of Presentations, 4Ps (Planning, Preparation, Practice and Perform)–Choosing a method of speaking–Analyzing the audience–Nonverbal Dimensions of Presentations–Speeches for commemorative occasions–Effective presentation strategies. Public speaking, Persuasive speaking

BSc Computer Science (Sem I)

Unit I Core 1: Foundation of Computer Science

Lesson 1 Fundamentals of Computer Systems and Programming Concepts

Introduction to Computer, Von Neumann Architecture, Generation of Computer, Storage Device- Primary Memory and Secondary Storage, Random, Direct, Sequential access methods. Concept of High- Level, Assembly and Low Level programming languages, Program Development Steps, Representing Algorithms through flow chart, pseudo code.

Lesson 2 Number Systems

Number systems, Binary number system, Binary to decimal conversion, Decimal to binary conversion ,Binary operations: addition, subtraction, complement of a number - 1's complementary subtraction, 2's complementary subtraction , binary multiplication, binary division, Representation of binary number as electrical signals, octal number system, octal to decimal conversion – decimal to octal conversion, binary to octal conversion, octal to binary conversion, advantages of octal number system, hexadecimal number system, binary to hexadecimal conversion, hexadecimal to binary conversion

Lesson 3 Introduction to Social Media

Introduction to social media, Impact of Social Media, Types of Social Media, Social media practices, Social media platforms, Social media monitoring, Blogging, social bookmarking, Building communities-pages & Channel, Hangouts, Hashtag, Viral content, Social media marketing, Social media privacy, Challenges, opportunities and pitfalls in online social network, Security issues related to social media, Flagging and reporting of inappropriate content, Laws regarding posting of inappropriate content, Best practices for the use of Social media, Case studies.

Lesson 4 Cyber Crimes

Classification of cyber crimes, Common cyber crimes- cyber crime targeting computers and mobiles, cyber crime against women and children, financial frauds, social engineering attacks, malware and ransomware attacks, zero day and zero click attacks, Cybercriminals modus-operandi , Reporting of cyber crimes, Remedial and mitigation measures, Legal perspective of cyber crime, IT Act 2000 and its amendments, Cyber crime and offences, Organisations dealing with Cyber crime and Cyber security in India, Case studies.

Unit II SEC 1: Programming in 'C'

Lesson 5 Structure of C Program

Structure of C program, A Simple C program, identifiers, basic data types and sizes, Constants, variables, arithmetic, relational and logical operators, increment and decrement operators, conditional operator, bit-wise operators, assignment operators, expressions, type conversions, conditional expressions, precedence and order of evaluation.

Lesson 6 Structured Programming in C: Control Structures and Functions

Input-output statements, statements and blocks, if and switch statements, loops- while, do-while and for statements, break, continue, goto and labels, programming examples. Designing structured programs, Functions, basics, parameter passing, storage classes- extern, auto, register, static, scope rules, block structure, user defined functions, standard library functions, recursive functions, header files, example C programs.

Lesson 7 Introduction to Arrays

Introduction to Arrays- concepts, declaration, definition, accessing elements, storing elements, arrays and functions, two-dimensional and multi-dimensional arrays, applications of arrays. String and String functions.

Lesson 8 Advanced Concepts in C: Structures, Pointers, and File Handling

Derived types- structures & Union- declaration, definition, Pointers- concepts, Character pointers and functions, pointers to pointers, pointers and multidimensional arrays, Concept of Files, File opening in various modes and closing of a file, Reading from a file, Writing onto a file, Appending to a file.