Accountancy Class 12 Syllabus

Course Structure

Units	Chapters	Marks
Part A	Accounting for Partnership Firms and Companies	
	Unit 1. Accounting for Partnership Firms	35
	Unit 2. Accounting for Companies	25
		60
Part B	Financial Statement Analysis	
	Unit 3. Analysis of Financial Statements	12
	Unit 4. Cash Flow Statement	8
		20
Part C	Project Work	20
	OR	
Part B	Computerized Accounting	
	Unit 3. Computerized Accounting	20

Part A: Accounting for Partnership Firms and Companies

Unit 1: Accounting for Partnership Firms

- Partnership: features, Partnership Deed.
- Provisions of the Indian Partnership Act 1932 in the absence of partnership deed.
- Fixed v/s fluctuating capital accounts.Preparation of Profit and Loss Appropriation account- division of profit among partners, guarantee of profits.
- Past adjustments (relating to interest on capital, interest on drawing, salary and profit sharing ratio).
- Goodwill: nature, factors affecting and methods of valuation average profit, super profit and capitalization.

Note: Interest on partner's loan is to be treated as a charge against profits.

Accounting for Partnership firms - Reconstitution and Dissolution.

Change in the Profit Sharing Ratio among the existing partners - sacrificing ratio, gaining ratio, accounting for revaluation of assets and reassessment of liabilities and treatment of reserves and accumulated profits. Preparation of revaluation account and balance sheet.

Admission of a partner - effect of admission of a partner on change in the profit sharing ratio, treatment of goodwill (as per AS 26), treatment for revaluation of assets and reassessment of liabilities, treatment of reserves and accumulated profits, adjustment of capital accounts and preparation of balance sheet.

Retirement and death of a partner: effect of retirement / death of a partner on change in profit sharing ratio, treatment of goodwill (as per AS 26), treatment for revaluation of assets and reassessment of liabilities, adjustment of accumulated profits and reserves, adjustment of capital accounts and preparation of balance sheet. Preparation of loan account of the retiring partner.

Calculation of deceased partner's share of profit till the date of death. Preparation of deceased partner's capital account, executor's account and preparation of balance sheet.

Dissolution of a partnership firm: types of dissolution of a firm. Settlement of accounts - preparation of realization account, and other related accounts: capital accounts of partners and cash/bank a/c (excluding piecemeal distribution, sale to a company and insolvency of partner(s)).

Unit-2 Accounting for Companies

Accounting for Share Capital

20

Share and share capital: nature and types.

Accounting for share capital: issue and allotment of equity shares, private placement of shares, Employee Stock Option Plan (ESOP). Public subscription of shares - over subscription and under subscription of shares; issue at par and at premium, calls in advance and arrears (excluding interest), issue of shares for consideration other than cash.

Concept of Private Placement and Employee Stock Option Plan (ESOP).

Accounting treatment of forfeiture and re-issue of shares.

Disclosure of share capital in company"s Balance Sheet.

Accounting for Debentures

Debentures: Issue of debentures at par, at a premium and at a discount. Issue of debentures for consideration other than cash; Issue of debentures with terms of redemption; debentures as collateral security-concept, interest on debentures.

Redemption of debentures: Lump sum, draw of lots and purchase in the open market (excluding ex-interest and cum-interest). Creation of Debenture Redemption Reserve.

Conversion method.

Note: Related sections of the Indian Companies Act, 2013 will apply.

Part B: Financial Statement Analysis

Unit 3: Analysis of Financial Statements

Financial statements of a company: Statement of Profit and Loss and Balance Sheet in the prescribed form with major headings and sub headings (as per Schedule III to the Companies Act, 2013).

Financial Statement Analysis: Objectives, importance and limitations.

Tools for Financial Statement Analysis: Comparative statements, common size statements, cash flow analysis, ratio analysis.

Accounting Ratios: Objectives, classification and computation.

Liquidity Ratios: Current ratio and Quick ratio.

Solvency Ratios: Debt to Equity Ratio, Total Asset to Debt Ratio, Proprietary Ratio and Interest Coverage Ratio.

Activity Ratios: Inventory Turnover Ratio, Trade Receivables Turnover Ratio, Trade Payables Turnover Ratio and Working Capital Turnover Ratio.

Profitability Ratios: Gross Profit Ratio, Operating Ratio, Operating Profit Ratio, Net Profit Ratio and Return on Investment.

Unit 4: Cash Flow Statement

Meaning, objectives and preparation (as per AS 3 (Revised) (Indirect Method only)

Part B: Computerised Accounting

Unit 3: Computerised Accounting

Overview of Computerised Accounting System.

- Introduction: Application in Accounting.
- Features of Computerised Accounting System.
- Structure of CAS.
- Software Packages: Generic; Specific; Tailored.

Accounting Application of Electronic Spreadsheet.

- Concept of electronic spreadsheet.
- Features offered by electronic spreadsheet.
- Application in generating accounting information bank reconciliation statement; asset accounting; loan
- repayment of loan schedule, ratio analysis
- Data representation graphs, charts and diagrams.

Using Computerized Accounting System.

- Steps in installation of CAS, codification and Hierarchy of account heads, creation of accounts.
- Data: Entry, validation and verification.
- Adjusting entries, preparation of balance sheet, profit and loss account with closing entries and opening entries. Need and security features of the system.

Database Management System (DBMS)

- Concept and Features of DBMS.
- DBMS in Business Application.
- Generating Accounting Information Payroll.

Biology Class 12 Syllabus

Exam Structure

Unit	Title	Marks
VI	Reproduction	14
VII	Genetics and Evolution	18
VIII	Biology and Human Welfare	14
IX	Biotechnology and its Applications	10
Х	Ecology and Environment	14
	Total	70

Unit VI. Reproduction

Chapter-1: Reproduction in Organisms

Reproduction, a characteristic feature of all organisms for continuation of species; Asexual reproduction Modes of reproduction-Asexual and sexual reproduction; Modes-Binary fission, sporulation, budding, gemmule, fragmentation; vegetative propagation in plants.

Chapter-2: Sexual Reproduction in Flowering Plants

Flower structure; Development of male and female gametophytes; Pollination-types, agencies and examples; Outbreedings devices; Pollen-Pistil interaction; Double fertilization; Post fertilization events-Development of endosperm and embryo, Development of seed and formation of fruit; Special modes-apomixis, parthenocarpy, polyembryony; Significance of seed and fruit formation.

Chapter-3: Human Reproduction

Male and female reproductive systems; Microscopic anatomy of testis and ovary; Gametogenesis-spermatogenesis & oogenesis; Menstrual cycle; Fertilisation embryo development upto blastocyst formation, implantation; Pregnancy and placenta formation (Elementary idea); Parturition (Elementary idea); Lactation (Elementary idea).

Chapter-4: Reproductive Health

Need for reproductive health and prevention of sexually transmitted diseases (STD); Birth control – Need and Methods, Contraception and Medical Termination of Pregnancy (MTP); Amniocentesis; Infertility and assisted reproductive technologies - IVF, ZIFT, GIFT (Elementary idea for general awareness).

Unit VII. Genetics and Evolution

Chapter-5: Principles of Inheritance and Variation

Mendelian Inheritance; Deviations from Mendelism-Incomplete dominance, Co-dominance, Multiple alleles and Inheritance of blood groups, Pleiotropy; Elementary idea of polygenic inheritance; Chromosome theory of inheritance; Chromosomes and genes; Sex determination - in humans, birds, honey bee; Linkage and crossing over; Sex linked inheritance - Haemophilia, Colour blindness; Mendelian disorder in humans - Thalassemia; chromosomal disorders in humans; Down's syndrome, Turner's and Klinefelter's syndromes.

Chapter-6: Molecular Basis of Inheritance

Search for genetic material and DNA as genetic material; Structure of DNA and RNA; DNA packaging; DNA replication; Central dogma; Transcription, genetic code, translation; Gene expression and regulation - Lac Operon; Genome and human ganeome project; DNA fingerprinting.

Chapter-7: Evolution

Origin of life; Biological evolution and evidences for biological evolution (Paleontological, comparative anatomy, embryology and molecular evidence); Darwin's contribution, Modern Synthetic theory of Evolution; Mechanism of evolution - Variation (Mutation and Recombination) and Natural Selection with examples, types of natural selection; Gene flow and genetic drift; Hardy - Weinberg's principle; Adaptive Radiation; Human evolution.

Unit VIII. Biology and Human Welfare

Chapter-8: Human Health and Diseases

Pathogens; parasites causing human diseases (Malaria, Filariasis, Ascariasis, Typhoid, Pneumonia, common cold, amoebiasis, ring worm); Basic concepts of immunology - vaccines; Cancer, HIV and AIDs; Adolescene, drug and alcholol abuse.

Chapter-9: Strategies for Enhancement in Food Production

Improvement in food p

Improvement in food production : Plant breeding, tissue culture, single cell protein, Biofortification, Apiculature and Animal husbandry.

Chapter-10: Microbes in Human Welfare

In household food processing, industrial production, sewage treatment, energy generation and as biocontrol agents and biofertilizers. Antibiotics; production and judicious use.

Unit IX. Biotechnology and Its Applications

Chapter-11: Biotechnology - Principles and Processes

Genetic engineering (Recombinant DNA technology).

Chapter-12: Biotechnology and its Application

Application of Biotechnology in health and agriculture: Human insulin and vaccine production, gene therapy; Genetically modified organisms-Bt crops; Transgenic Animals; biosafety issues, biopiracy and patents.

Unit X. Ecology and Environment

Chapter-13: Organisms and Populations

Organisms and environment: Habitat and niche, Population and ecological adaptations; Population interactions-mutualism, competition, predation, parasitism; Population attributes growth, birth rate and death rate, age distribution.

Chapter-14: Ecosystem

Patterns, components; productivity and decomposition; energy flow; pyramids of number, biomass, energy; nutrient cycles (carbon and phosphorous); ecological succession; ecological services - carbon fixation, pollination, seed dispersal, oxygen release (in brief).

Chapter-15: Biodiversity and its Conservation

Concept of biodiversity; patterns of biodiversity; importance of biodiversity; loss of biodiversity; biodiversity conservation; hotspots, endangered organisms, extinction, Red Data Book, biosphere reserves, national parks, sanctuaries and Ramsar sites.

Chapter-16: Environmental Issues

Air pollution and its control; water pollution and its control; agrochemicals and their effects; solid waste management; radioactive waste management; greenhouse effect and climate change; ozone layer depletion; deforestation; any one case study as success story addressing environmental issue(s).

Biotechnology Class 12 Syllabus

Exam Structure

Units	Topics	Marks
Unit V	Protein and Gene Manipulation	40
Unit VI	Cell Culture and Genetic Manipulation	30
	Practicals	30
	Total	100

Unit V: Protein and Gene Manipulation

Chapter-1: Recombinant DNA Technology

Introduction; Tool of rDNA Technology; Marketing Recombinant DNA; Introduction of Recombinant DNA into Host Cells; Identification of Recombinants; DNA Library; DNA Probes; Hybridization Techniques; Polymerase Chain Reaction (PCR); DNA Secquencing; Sitedirected Mutagenesis

Chapter-2: Protein Structure and Engineering

Introduction to the World of Proteins; 3-D Shape of Proteins; Structure-Function Relationship in Proteins Purification of Proteins; Characterization of Proteins; Protein based Products; Designing Proteins (protein engineering)

Chapter-3: Genomics and Bioinformatics

Introduction; Genome Sequencing Projects; Gene Prediction and Counting; Genome Similarity, SNPs and Comparative Genomics; Functional Genomics; Proteomics; History of Bioinformatics; Sequences and Nomenclature; Information Sources; Analysis using Bioinformatics Tools

Unit VI: Cell Culture and Genetic Manipulation

Chapter-1: Microbial Culture and Applications

Introduction, Microbial culture techniques, Measurement and kinetics of microbial growth, Scale up of microbial process, Isolation of microbial products, Strain isolation and improvement, Applications of microbial culture technology, Biosafety issues in microbial technology

Chapter-2: Plant Cell Culture and Applications

Introduction; Cell and Tissue Culture Techniques; Applications of Cell and Tissue Culture; Gene Transfer Methods in Plants; Transgenic Plants with Beneficial Traits; Biosafety in Plant Genetic Engineering

Chapter-3: Animal Cell Culture and Applications

Introduction, Animal cell culture techniques, Characterisation of cell lines, Methods of gene delivery into cells, Scale-up of animal culture process, Applications of animal cell culture, Stem cell technology, Tissue engineering

Practicals

- 1. Use of special equipment in biotechnology experiments.
- 2. Isolation of bacterial plasmid DNA
- 3. Detection of DNA by gel electrophoreses
- 4. Isoloation of Genomic DNA (CTAB method)
- 5. Estimation of DNA
- 6. Bacterial transformation using any plasmid
- 7. Restriction digestion of plasmid DNA & its analysis by gel electrophoreses
- 8. Isolation of bacterial grom curd & staining of bacteria
- 9. Cell viability assay
- 10. Data retrieval and data base search using internet site NCBI and download a DNA and protein sequence from internet, analyse it and comment on it
- 11. Reading of a DNA sequencing gel to arrive at the sequence
- 12. Project work

Business Studies Class 12 Syllabus

Exam Structure

Units		Marks
Part A	Principles and Functions of Management	
1	Nature and Significance of Management	16
2	Principles of Management	
3	Business Environment	
4	Planning	14
5	Organizing	
6	Staffing	20
7	Directing	
8	Controlling	
Part B	Business Finance and Marketing	
9	Financial Management	15
10	Financial Markets	-

	Total	100
		<u>.</u>
Part C	Project Work	20
12	Consumer Protection	
11	Marketing Management	15

Part A: Principles and Functions of Management

Unit I: Nature and Significance of Management

- Management concept, objectives and importance
- Management as Science, Art and Profession
- Levels of management
- Management functions planning, organising, staffing, directing and controlling
- Coordination concept, characteristics and importance

Unit 2: Principles of Management

- Principles of Management concept, nature and significance
- Fayol's principles of management
- Taylor's Scientific Management principles and techniques

Unit 3: Management and Business Environment

- Business Environment concept and importance
- Dimensions of Business Environment Economic, Social, Technological, Political and Legal
- Impact of Government policy changes on business with special reference to liberalization, privatization and globalisation in India.

Unit 4: Planning

- Concept, importance and limitations
- Planning process
- Single use and Standing Plans Objectives, Strategy, Policy, Procedure, Method, Rule, Budget and Programme.

Unit 5: Organising

- Concept and importance.
- Organizing Process.
- Structure of organization functional and divisional.
- Formal and informal organization.
- Delegation: concept, elements and importance.
- Decentralization: concept and importance.

Unit 6: Staffing

- Concept and importance of staffing
- Staffing as a part of Human Resource Management
- Staffing process: Recruitment sources; Selection process
- Training and Development Concept and importance. Methods of training- on the job and off the job- Induction training, vestibule training, apprenticeship training and internship training.

Unit 7: Directing

- Concept and importance
- Elements of Directing: Supervision concept, functions of a supervisor.; Motivation -Concept, Maslow's hierarchy of needs; Financial and non-financial incentives.; -Leadership - concept, styles - authoritative, democratic and laissen faire.; -Communication - concept, formal and informal communication; barriers to effective; communication, how to overcome the barriers.

Unit 8: Controlling

- Concept, nature and importance
- Relationship between planning and controlling
- Steps in the process of control

Part B: Business Finance and Marketing

Unit 9: Financial Management

- Concept and objectives of financial management.
- Financial decisions : investment, financing and dividend and factors affecting.
- Financial planning concept and importance.
- Capital Structure concept and factors affecting.
- Fixed and Working Capital concept and factors affecting their requirements.

Unit 10: Financial Markets

- Financial Markets: concept and types.
- Money market and its instruments.
- Capital market and its types (primary and secondary).

- Stock Exchange functions and training procedure. Depository Services and D'mat Account.
- Securities and Exchange Board of India (SEBI) objectives and functions.

Unit 11: Marketing Management

- Marketing concept and functions.
- Marketing management philosophies.
- Marketing Mix concept
- Product concept, branding, labeling and packaging. Price factors determining price.
- Physical distribution- concept, channels of distribution: types, choice of channels.
- Promotion -concept and elements; advertising- concept, role, objections against advertising, personal selling concept and qualities of a good salesman, sales promotion concept and techniques, public relations concept and role.

Unit 12: Consumer Protection

- Concept and importance of consumer protection.
- Consumer Protection Act 1986
 - Meaning of consumer and consumer protection.
 - Rights and responsibilities of consumers
 - Who can file a complaint and against whom?
 - Redressal machinery.
 - Remedies available.
- Consumer awareness Role of consumer organizations and Non-Governmental Organizations (NGOs).

Unit 13: Project Work

Chemistry Class 12 Syllabus

Exam Structure

Unit	Title	Marks
Ι	Solid State	23
Π	Solutions	
III	Electrochemistry	
IV	Chemical Kinetics	
V	Surface Chemistry	
VI	Isolation of Elements	19
VII	p-Block Elements	
VIII	d- and f-Block Elements	
IX	Coordination Compounds	
Х	Haloalkanes and Haloarenes	28
XI	Alcohols, Phenols and Ethers	
XII	Aldehydes, Ketones and Carboxylic Acids	

XIII	Organic Compounds containing Nitrogen	
XIV	Biomolecules	
XV	Polymers	
XVI	Chemistry in Everyday Life	
	Total	70

Unit I: Solid State

Classification of solids based on different binding forces: molecular, ionic, covalent and metallic solids, amorphous and crystalline solids (elementary idea). Unit cell in two dimensional and three dimensional lattices, calculation of density of unit cell, packing in solids, packing efficiency, voids, number of atoms per unit cell in a cubic unit cell, point defects, electrical and magnetic properties.

Band theory of metals, conductors, semiconductors and insulators and n & p type semiconductors.

Unit II: Solutions

Types of solutions, expression of concentration of solutions of solids in liquids, solubility of gases in liquids, solid solutions, colligative properties - relative lowering of vapour pressure, Raoult's law, elevation of boiling point, depression of freezing point, osmotic pressure, determination of molecular masses using colligative properties, abnormal molecular mass, van't Hoff factor.

Unit III: Electrochemistry

Redox reactions, conductance in electrolytic solutions, specific and molar conductivity, variations of conductivity with concentration, Kohlrausch's Law, electrolysis and law of electrolysis (elementary idea), dry cell -electrolytic cells and Galvanic cells, lead accumulator, EMF of a cell, standard electrode potential, Nernst equation and its application to chemical cells, Relation between Gibbs energy change and emf of a cell, fuel cells, corrosion.

Unit IV: Chemical Kinetics

Rate of a reaction (Average and instantaneous), factors affecting rate of reaction: concentration, temperature, catalyst; order and molecularity of a reaction, rate law and specific rate constant, integrated rate equations and half life (only for zero and first order reactions), concept of collision theory (elementary idea, no mathematical treatment). Activation energy, Arrhenious equation.

Unit V: Surface Chemistry

Adsorption - physisorption and chemisorption, factors affecting adsorption of gases on solids, catalysis, homogenous and heterogenous activity and selectivity; enzyme catalysis colloidal state distinction between true solutions, colloids and suspension; lyophilic, lyophobic multimolecular and macromolecular colloids; properties of colloids; Tyndall effect, Brownian movement, electrophoresis, coagulation, emulsion - types of emulsions.

Unit VI: General Principles and Processes of Isolation of Elements

Principles and methods of extraction - concentration, oxidation, reduction - electrolytic method and refining; occurrence and principles of extraction of aluminium, copper, zinc and iron.

Unit VII: p - Block Elements

Group 15 Elements: General introduction, electronic configuration, occurrence, oxidation states, trends in physical and chemical properties; nitrogen preparation properties & uses ; compounds of nitrogen, preparation and properties of ammonia and nitric acid, oxides of nitrogen (Structure only) ; Phosphorus - allotropic forms, compounds of phosphorus: preparation and properties of phosphine, halides PCI3 , PCI5 and oxoacids (elementary idea only).

Group 16 Elements: General introduction, electronic configuration, oxidation states, occurrence, trends in physical and chemical properties, dioxygen: Preparation, Properties and uses, classification of oxides, Ozone, Sulphure -allotropic forms; compounds of sulphure: Preparation properties and uses of sulphur-dioxide, sulphuric acid: industrial process of manufacture, properties and uses; oxoacids of sulphur (Structures only).

Group 17 Elements: General introduction, electronic configuration, oxidation states, occurrence, trends in physical and chemical properties; compounds of halogens, Preparation properties and uses of chlorine and hydrochloric acid, interhalogen compounds, oxoacids of halogens (structures only).

Group 18 Elements: General introduction, electronic configuration, occurrence, trends in physical and chemical properties, uses.

Unit VIII: d and f Block Elements

General introduction, electronic configuration, occurrence and characteristics of transition metals, general trends in properties of the first row transition metals - metallic character,

ionization enthalpy, oxidation states, ionic radii, colour, catalytic property, magnetic properties, interstitial compounds, alloy formation, preparation and properties of K2Cr2O7 and KMnO4.

Lanthanoids - Electronic configuration, oxidation states, chemical reactivity and lanthanoid contraction and its consequences.

Actinoids - Electronic configuration, oxidation states and comparison with lanthanoids.

Unit IX: Coordination Compounds

Coordination compounds - Introduction, ligands, coordination number, colour, magnetic properties and shapes, IUPAC nomenclature of mononuclear coordination compounds. Bonding, Werner's theory, VBT, and CFT; structure and stereo isomerism, importance of coordination compounds (in qualitative inclusion, extraction of metals and biological system).

Unit X : Haloalkanes and Haloarenes

Haloalkanes: Nomenclature, nature of C-X bond, physical and chemical properties, mechanism of substitution reactions, optical rotation.

Haloarenes: Nature of C -X bond, substitution reactions (Directive influence of halogen in monosubstituted compounds only.

Unit XI: Alcohols, Phenols and Ethers

Alcohols: Nomenclature, methods of preparation, physical and chemical properties(of primary alcohols only), identification of primary, secondary and tertiary alcohols, mechanism of dehydration, uses with special reference to methanol and ethanol.

Phenols: Nomenclature, methods of preparation, physical and chemical properties, acidic nature of phenol, electrophillic substitution reactions, uses of phenols.

Ethers: Nomenclature, methods of preparation, physical and chemical properties, uses.

Unit XII: Aldehydes, Ketones and Carboxylic Acids

Aldehydes and Ketones: Nomenclature, nature of carbonyl group, methods of preparation, physical and chemical properties, mechanism of nucleophillic addition, reactivity of alpha hydrogen in aldehydes: uses.

Carboxylic Acids: Nomenclature, acidic nature, methods of preparation, physical and chemical properties; uses.

Unit XIII: Organic compounds containing Nitrogen

Amines: Nomenclature, classification, structure, methods of preparation, physical and chemical properties, uses, identification of primary, secondary and tertiary amines.

Cyanides and Isocyanides - will be mentioned at relevant places in context.

Diazonium salts: Preparation, chemical reactions and importance in synthetic organic chemistry.

Unit XIV: Biomolecules

Carbohydrates - Classification (aldoses and ketoses), monosaccahrides (glucose and fructose), D-L configuration oligosaccharides (sucrose, lactose, maltose), polysaccharides (starch, cellulose, glycogen) importance.

Proteins - Elementary idea of α - amino acids, peptide bond, polypeptides, proteins, structure of proteins - primary, secondary, tertiary structure and quaternary structures (qualitative idea only), denaturation of proteins; enzymes. Hormones - Elementary idea excluding structure.

Vitamins - Classification and functions.

Nucleic Acids: DNA and RNA.

Unit XV: Polymers

Classification - natural and synthetic, methods of polymerization (addition and condensation), copolymerization, some important polymers: natural and synthetic like polythene, nylon polyesters, bakelite, rubber. Biodegradable and non-biodegradable polymers.

Unit XVI: Chemistry in Everyday life

Chemicals in medicines - analgesics, tranquilizers antiseptics, disinfectants, antimicrobials, antifertility drugs, antibiotics, antacids, antihistamines.

Chemicals in food - preservations, artificial sweetening agents, elementary idea of antioxidants.

Cleansing agents - soaps and detergents, cleansing action.

Economics Class 12 Syllabus

Exam Structure

Units		Marks
Part A	Introductory Microeconomics	40
	Introduction	4
	Consumer's Equilibrium and Demand	13
	Producer Behaviour and Supply	13
	Forms of Market and Price Determination	10
Part B	Introductory Macroeconomics	40
	National Income and Related Aggregates	10
	Money and Banking	6
	Determination of Income and Employment	12
	Government Budget and the Economy	6
	Balance of Payments	6
Part C	Project Work	20

Total	100

Part A: Introductory Microeconomics

Unit 1: Introduction

Meaning of microeconomics and macroeconomics

What is an economy? Central problems of an economy : what, how and for whom to produce; concepts of production possibility frontier and opportunity cost.

Unit 2: Consumer Equilibrium and Demand

Consumer's equilibrium – meaning of utility, marginal utility, law of diminishing marginal utility, conditions of consumer's equilibrium using marginal utility analysis.

Indifference curve analysis of consumer's equilibrium-the consumer's budget (budget set and budget line), preferences of the consumer (indifference curve, indifference map) and conditions of consumer's equilibrium.

Demand, market demand, determinants of demand, demand schedule, demand curve and its slope, movement along and shifts in the demand curve; price elasticity of demand - factors affecting price elasticity of demand; measurenment of price elasticity of demand - (a) percentage-change method and (b) geometric method (linear demand curve); relationship between price elasticity of demand and total expenditure.

Unit 3: Producer Behaviour and Supply

Production function - Short-Run and Long-Run

Total Product, Average Product and Marginal Product.

Returns to a Factor.

Cost and Revenue: Short run costs - total cost, total fixed cost, total variable cost; Average cost; Average fixed cost, average variable cost and marginal cost-meaning and their relationship.

Revenue - total, average and marginal revenue - meaning and their relationship.

Producer's equilibrium-meaning and its conditions in terms of marginal revenue-marginal cost.

Supply, market supply, determinants of supply, supply schedule, supply curve and its slope, movements along and shifts in supply curve, price elasticity of supply; measurement of price elasticity of supply – (a) percentagechange method and (b) geometric method.

Unit 4: Forms of Market and Price Determination

Perfect competition - Features; Determination of market equilibrium and effects of shifts in demand and supply.

Other Market Forms - monopoly, monopolistic competition, oligopoly - their meaning and features.

Simple Applications of Demand and Supply: Price ceiling, price floor.

Part B: Introductory Macroeconomics

Unit 5: National Income and related aggregates

Some basic concepts: consumption goods, capital goods, final goods, intermediate goods; stocks and flows; gross investment and depreciation.

Circular flow of income; Methods of calculating National Income – Value Added or Product method, Expenditure method, Income method.

Aggregates related to National Income: Gross National Product (GNP), Net National Product (NNP), Gross and Net Domestic Product (GDP and NDP) - at market price, at factor cost; National Disposable Income (gross and net), Private Income, Personal Income and Personal Disposable Income; Real and Nominal GDP.

GDP and Welfare

Unit 6: Money and Banking

Money - its meaning and functions.

Supply of money - Currency held by the public and net demand deposits held by commercial banks.

Money creation by the commercial banking system.

Central bank and its functions (example of the Reserve Bank of India): Bank of issue, Govt. Bank, Banker's Bank, Controller of Credit through Bank Rate, CRR, SLR, Repo Rate and Reverse Repo Rate, Open Market Operations, Margin requirement.

Unit 7: Determination of Income and Employment

Aggregate demand and its components. Propensity to consume and propensity to save (average and marginal).

Short–run equilibrium output; investment multiplier and its mechanism.

Meaning of full employment and involuntary unemployment.

Problems of excess demand and deficient demand; measures to correct them - change in government spending, taxes and money supply.

Unit 8: Government Budget and the Economy

Government budget - meaning, objectives and components.

Classification of receipts - revenue receipts and capital receipts; classification of expenditure - revenue expenditure and capital expenditure.

Measures of government deficit - revenue deficit, fiscal deficit, primary deficit their meaning.

Unit 9: Balance of Payments

Balance of payments account - meaning and components; balance of payments deficit-meaning.

Foreign exchange rate - meaning of fixed and flexible rates and managed floating.

Determination of exchange rate in a free market.

Engineering Graphics Class 12 Syllabus

Exam Structure

S.No.	Unit	Marks
Ι	Isometric Projections of Solids	25
II	Machine Drawing	45
	A. Drawing of Machine parts	
	B. Assembly Drawing and Dis-assembly drawings	
	Practical	30
	Total	100

Unit I: Isometric Projection of Solids

(i) Construction of isometric scale showing main divisions of 10 mm and smaller divisions of 1 mm, also showing the leading angles. Drawing helping view/s such as triangles, pentagon, hexagon, etc., using isometric scale.

(ii) Isometric projections (drawn to isometric scale) of solids such as cube, regular prism and pyramids (triangular, square, pentagonal and hexagonal), cone, cylinder, sphere, hemisphere, frustum of right regular pyramids (triangular, square, pentagonal, hexagonal) and cone, when they are cut by a plane parallel to the base. The axis and the base side of the solid should be either perpendicular to HP / VP or parallel to HP and VP. (Indicate the direction of viewing)

(iii) Combination of two solids (except "frustum" of Pyramids and Cone) Keeping the base side parallel or perpendicular to HP/VP and placed centrally together, axis of both the solids should not be given parallel to HP.

Note:

- (1) Question on frustum will be asked in vertical position only.
- (2) Hidden lines are not required in isometric projection.

Unit II: Machine Drawing

A. Drawing of machine parts

(i) Drawing to full size scale with instruments.

(Internal choice will be given between any two of the following).

Introduction of threads: Standard profiles of screw threads square, knuckle, B.S.W., Metric (external and internal). Bolts (Square, Hexagonal, Tee and Hook); Nuts: (Square and Hexagonal), Plain washer, combination of nut and bolt with or without washer for assembling two parts together, Single riveted lap joint with standard dimensions.

(ii) Free-hand sketches

(Internal choice will be given between any two of the following).

Conventional representation of external and internal threads; studs (plain, square-neck and collar), screws (round-head, cheese-head, 900 flat counter sunk-head, hexagonal sockethead and grub-screw). Types of rivets:- snap head, pan head-without tapered neck, flat head and 600 countersunk flat head. Types of sunk-keys (rectangular taper, woodruff and double-head feather key with gib head on both ends).

B. Assembly drawings and Dis-Assembly drawings

(Internal choice will be given between an Assembly drawing and a Dis-Assembly drawing).

Note:

1. In all Assembly drawings, half sectional front view will be asked. Side/End view or Top View/Plan will be drawn without section.

2. In all the Dis-assembly drawings, only two orthographic views (one of the two views may be half in section or full in section) of any two parts.

3. (a) In all sectional views, hidden lines / edges are not to be shown. (b) In all full views, hidden /edges are to be shown.

1. Bearings

- (i) Open-Bearing
- (ii) Bushed-Bearing

2. Rod-Joints

- (i) Cotter-joints for circular-rods (socket and spigot joint)
- (ii) Cotter-joints for round-rods (sleeve and cotter joint)
- (iii) Cotter-joints for square rods (Gib and cotter-joint)

3. Tie-rod and Pipe-joint

- (i) Turnbuckle
- (ii) Flange pipe joint

4. Couplings

- (i) Unprotected Flange Coupling (having socket and spigot arrangement)
- (ii) Protected Flange Coupling

5. Pulleys

• (i) Solid cast iron pulley – (up to 200 mm diameters) having solid web

English Core Class 12 Syllabus

Exam Structure

Section	Area of Learning	Marks
А	Reading Comprehension	30
В	Writing Skills	30
С	Literature & Long Reading Text	40
	Total	100

Section A: Reading Comprehension

Passage 1

One unseen passages with a variety of very short answer / short answer or MCQ type questions to test comprehension, interpretation and inference. Vocabulary such as word formation and inference of meaning will also be tested.

The total length of the passage will be between 800 - 900 words. The passage will include following questions:

- 5-MCQs (1 mark each)
- 9-Very short answer type questions including 3 Questions on vocabulary for 1 mark each
- 3-Short answer type question (2 marks each)

Passage 2

A second passage of 400-500 words. There will be two long answer type questions of 5 marks each.

Section B: Writing Skills

Short Answer Questions, e.g., advertisement and notices, designing or drafting posters, writing formal and informal invitations and replies.

Long Answer Questions: Letters based on verbal / visual input.

Letter types include

- Business or official letters (for making enquiries, registering complaints, asking for and giving information, placing orders and sending replies)
- Letters to the editor (giving suggestions or opinion on issues of public interest
- Application for a job

Very Long Answer Questions: Two compositions based on visual and/or verbal Input may be descriptive or argumentative in nature such as an article, a debate or a speech.

Section C: Literature and Long Reading Text

Flamingo and Vistas

- Very Short Answer Questions Based on an extract from poetry to test comprehension and appreciation.
- Short Answer Questions Based on prose / drama / poetry from both the texts.
- Long Answer Question Based on texts to test global comprehension and extrapolation beyond the texts to bring out the key messages and values.
- Long Answer Question Based on texts to test global comprehension along with analysis and extrapolation.
- Long Answer Question Based on theme, plot and incidents from the prescribed novels.
- Long Answer Question Based on understanding appreciation, analysis and interpretation of the character sketch.

Prescribed Books

- 1. Flamingo: English Reader published by NCERT
- 2. Vistas: Supplementary Reader published by NCERT

Lessons Deleted

Flamingo - 1. Poets and Pancakes; 2. The Interview; 3. A Road Side Stand (Poetry)

Vistas - 4. The Third Level; 5. Journey to the End of the Earth

Extended Reading Text: (either one)

- **The Invisible Man** by H.G. Wells
- Silas Marner by George Eliot

English Elective Class 12 Syllabus

Exam Structure

Section	Unit	Marks
А	Reading Skills	20
В	Writing Skills and Grammar	40
С	Literary Texts & Long Reading	40
	Total	100

Section A: Reading Skills

Very short answer / Short answer and MCQ type questions:

Two unseen passages (including poems) with a variety of questions including 04 marks for vocabulary such as word formation and inferring meaning. The total range of the two passages including a poem or a stanza, should be around 1000-1100 words to assess comprehension, analysis, inference, evaluation and literary appreciation.

- 1. 550-600 words in length (for note-making and summarising)
- 2. 450-500 words in length (to test comprehension)

The passage could be of any one of the following types:

- Factual passages, e.g., illustrations, description, reports
- Discursive passages involving opinion, e.g., argumentative, persuasive
- Literary passages, e.g., poems, extracts from fiction, biography, autobiography, travelogue, etc. In the case of a poem, the text may be shorter than the prescribed word limit.

Section B: Writing Skills and Grammar

Short Answer Question: Notices, advertisements, factual description of people, places and objects, drafting posters, drafting, accepting and declining invitations.

Long Answer Question: Letter of any of the following types based on a verbal or visual input:

- a) Official letters for making inquiries, suggesting changes registering and responding to complaints, asking for and giving information, placing orders and sending replies.
- b) Letters to the editor on various social, national and international issues.
- c) Application for a job including CV (Curriculum Vitae) / Resumé.

Very Long Answer Question: Sustained writing task such as writing a speech, an article for a magazine or a report based on verbal / visual input.

Grammar

A variety of questions, as listed below may be asked, involving the application of grammar items in context (i.e., not in isolated sentences). The grammar syllabus will be sampled each year. Though only modals, determiners, voice and tense forms have been dealt with in class XI, however, other grammar items such as prepositions, verb forms, connectors which have been learnt earlier would also be included.

Very Short Questions and Multiple Choice Questions

- Reordering of words and sentences
- Composing a dialogue based on a given input
- Error correction in sentences
- Drafting questions / questionnaires based on given input

Section C: Literature: Prescribed Books and Long Reading Text (Novel)

Questions to test comprehension at different levels and of different kinds - local, global, interpretative, inferential, evaluative and extrapolatory.

Very Short and Short Answer Questions: Two based on out of three extracts from different poems to test theme, setting and literary devices.

Short Answer Questions: Based on different prose / drama / poetry / pieces from the Literature Reader; to test local and global comprehension of ideas and languages used in the text.

Long Answer Question: Extended questions based on one of the prose texts or play in the Literature Reader to test global comprehension and for extrapolation beyond the text.

Long Answer Questions: To test understanding, appreciation, analysis, inference in a plot and writing a character sketch.

Note: Values based questions for 4 marks may be asked in Sections - B or C

Prescribed Books

1. Language Skills book - Class XII English Elective CBSE published by Central Board of Secondary Education, Delhi.

2. Literature Reader - Class XII English Elective CBSEpublished by Central Board of Secondary Education, Delhi.

- 3. Extended Reading Text (either one)
 - i. The Invisible Man (unabridged) by H.G. Wells
 - ii. Silas Marner (unabridged) by George Eliot

Geography Class 12 Syllabus

Exam Structure

Part / Unit	Chapter	Marks
Α	Fundamentals of Human Geography	35
Unit 1	Human Geography	
Unit 2	People	
Unit 3	Human Activities	
Unit 4	Transport, Communication and Trade	
Unit 5	Human settlements	
	Map Work	5
В	India: People and Economy	35
Unit 6	People	
Unit 7	Human Settlements	
Unit 8	Resources and Development	
Unit 9	Transport, Communication and International Trade	

Unit 10	Geographical Perspective on selected issues and problems	
	Map Work	5
С	Practical Work	30
Unit 1	Processing of Data and Thematic Mapping	15
Unit 2	Field study or Spatial Information Technology	10
Unit 3	Practical Record Book and Viva Voce	5

A. Fundamentals of Human Geography

Unit 1: Human Geography: Nature and Scope

Unit 2: People

Population-distribution, density and growth

Population change-spatial patterns and structure; determinants of population change;

Age-sex ratio; rural-urban composition;

Human development - concept; selected indicators, international comparisons

Unit 3: Human Activities

Primary activities - concept and changing trends; gathering, pastoral, mining, subsistence agriculture, modern agriculture; people engaged in agricultural and allied activities - some examples from selected countries.

Secondary activities-concept; manufacturing: types - household, small scale, large scale; agro based and mineral based industries; people engaged in secondary activities - some examples from selected countries.

Tertiary activities-concept; trade, transport and tourism; services; people engaged in tertiary activities - some examples from selected countries.

Quatenary activities - concept; people engaged in quatenary activities - case study from selected countries.

Unit 4: Transport, Communication & Trade

Land transport - roads, railways; trans-continental railways.

Water transport - inland waterways; major ocean routes.

Air transport - Intercontinental air routes.

Oil and gas pipelines.

Satellite communication and cyber space- Importance and usage for geographical information; use of GPS.

International trade-Bases and changing patterns; ports as gateways of international trade, role of WTO in International trade.

Ocean: National rights and international treaties.

Unit 5: Human settlements

Settlement types - rural and urban; morphology of cities (case study); distribution of mega cities; problems of human settlements in developing countries.

Map Work

Map Work on identification of features based on 1-5 units on the outline/Physical/Political map of World.

B. India: People and Economy

Unit 6: People

Population: distribution, density and growth; composition of population - linguistic, religious; sex, rural-urban and occupational-regional variations in growth of population.

Migration: international, national-causes and consequences.

Human development: selected indicators and regional patterns.

Population, environment and development.

Unit 7: Human Settlements

Rural settlements - types and distribution.

Urban settlements - types, distribution and functional classification.

Unit 8: Resources and Development

Land resources - general land use; agricultural land use, Geographical conditions and distribution of major crops (Wheat, Rice, Tea, Coffee, Cotton, Jute, Sugarcane and Rubber), agricultural development and problems.

Water resources - availability and utilization-irrigation, domestic, industrial and other uses; scarcity of water and conservation methods -rain water harvesting and watershed management.

Mineral and energy resources - distribution of metallic (Iron ore, Copper, Bauxite, Manganese); non-metallic (Mica, Salt) minerals; conventional (Coal, Petroleum, Natural gas and Hydroelectricity) and non-conventional energy sources (solar, wind, biogas) and conservation.

Industries - types, factors of industrial location; distribution and changing pattern of selected industries-iron and steel, cotton textiles, sugar, petrochemicals, and knowledge based industries; impact of liberalization, privatisation and globalisation on industrial location; industrial clusters.

Planning in India - target group area planning (case study); idea of sustainable development (case study).

Unit 9: Transport, Communication and International Trade

Transport and communication-roads, railways, waterways and airways: oil and gas pipelines; Geographical information and communication networks.

International trade - changing pattern of India's foreign trade; sea ports and their hinterland and airports.

Unit 10: Geographical Perspective on selected issues and problems

Environmental pollution; urban - waste disposal.

Urbanisation, rural-urban migration; problems of slums.

Land degradation.

Map Work

Map work on locating and labelling of features based on above units on outline map of India.

C. Practical Work

- Unit 1: Processing of Data and Thematic Mapping
 Unit 2: Field study or Spatial Information Technology
 Unit 3: Practical Record Book and Viva Voce

History Class 12 Syllabus

Exam Structure

Units	Торіс	Marks
Units 1 - 4	Themes in Indian History Part - I	25
Units 5 - 9	Themes in Indian History Part - II	25
Units 10 - 15	Themes in Indian History Part - III	25
Unit 16	Map Work	05
	Project work	20
	Total	100

Themes in Indian History Part-I

1. The Story of the First Cities: Harappan Archaeology

Early urban centres.

2. Political and Economic History: How Inscriptions tell a story

Political and economic history from the Mauryan to the Gupta period.

3. Social Histories: Using the Mahabharata

Issues in social history, including caste, class, kinship and gender.

4. A History of Buddhism: Sanchi Stupa

- a. A brief review of religious histories of Vedic religion, Jainism, Vaisnavism, Saivism.
- b. Focus on Buddhism

Themes in Indian History Part-II

5. Agrarian Relations: The Ain-i-Akbari

- a. Structure of agrarian relations in the 16th and 17th centuries.
- b. Patterns of change over the period.

6. The Mughal Court: Reconstructing Histories through Chronicles

- a. Outline of political history 15th-17th centuries.
- b. Discussion of the Mughal court and politics.

7. New Architecture: Hampi

- a. Outline of new buildings during Vijayanagar period-temples, forts, irrigation facilities.
- b. Relationship between architecture and the political system.

8. Religious Histories: The Bhakti-Sufi tradition

- a. Outline of religious developments during this period.
- b. Ideas and practices of the Bhakti-Sufi saints.

9. Medieval Society Through Travelers' Accounts

Outline of social and cultural life as they appear in travelers' accounts.

Themes in Indian History Part-III

10. Colonialism and-Rural Society: Evidence from Official Reports

- a. Life of zamindars, peasants and artisans in the late 18th century
- b. East India Company, revenue settlements and surveys.
- c. Changes over the nineteenth century.

11. Representations of 1857

- a. The events of 1857-58.
- b. How these events were recorded and narrated.

12. Colonialism and Indian Towns: Town Plans and Municipal Reports

The growth of Mumbai, Chennai, hill stations and cantonments in the 18th and 19th centuries.

13. Mahatma Gandhi through Contemporary Eyes

a. The Nationalist Movement 1918 - 48.

b. The nature of Gandhian politics and leadership.

14. Partition through Oral Sources

- a. The history of the 1940s.
- b. Nationalism, Communalism and Partition.

15. The Making of the Constitution

- a. Independence and the new nation state.
- b. The making of the Constitution.

Unit 16: Map Work

Home Science Class 12 Syllabus

Exam Structure

Unit	Chapter	Marks
Ι	Human Development: Life Span Approach (Part II)	30
Π	Nutrition for Self, Family and Community	
III	Money Management and Consumer Education	35
IV	Apparel: Designing, Selection and Case	
V	Community Development and Extension (Part II)	5
VI	Career Option after Home Science Education	
	Practical	30
	Total	100

Unit I: Human Development: Life Span Approach (Part II)

A. Adolescence (12 - 18 years)

- (i) Growth & Development Domains and principles.
- (ii) Meaning, characteristics and needs.
- (iii) Influences on identity formation

- (a) Biological and Physical changes-early and late matures. (Role of heredity and environment)
- (b) Social, culture and media.
- (c) Emotional changes.
- (d) Cognitive changes.

(iv) Specific issues and concerns

- (a) Eating disorders-Causes, consequences and management Anorexia Nervosa, Bulimia.
- (b) Depression
- (c) Substance Abuse
- (d) Related to sex
- (e) Handling stress and peer pressure

B. Adulthood:

(i) Young & middle adulthood: Understanding and management of new responsibilities, carrier marriage and family.

(ii) Late Adulthood/Old age:

- (a) Health and Wellness: physical, social, emotional, financial, recreational needs
- (b) Care for elderly (at home and outside old age home)
- (c) Anger management

Unit II: Nutrition for Self, Family and Community

(a) Meal Planning: Meaning and importance, principles and factors affecting meal planning; Nutritional needs, food preferences and modifications of diets in different age groups: infants, children, adolescence, adults, elderly and in special conditions: pregnancy and lactation (including traditional foods given in these conditions)

- (i) Use of basic food groups (ICMR) and serving size in meal planning
- (ii) Factors influencing selection of food: culture, family food practices, media, peer group, availability of foods, purchasing power, individual preference & health.

(b) Food safety and quality:

- (i) Safe food handling (personal, storage, kitchen, cooking and serving).
- (ii) Safety guards against food adulteration, definition and meaning of food adulteration as given by FSSAI (Food Safety and Standard Authority of India).
- (iii) Common adulterants present in cereals, pulses, milk and milk products, fats and oils, sugar, jaggery, honey, spices and condiments.
- (iv) Effects of some of the adulterants present in the foods: kesari dal, metanil yellow, argemone seeds.

• (v) Food standards (FPO, Agmark, ISI).

(c) Therapeutic modification of normal diet with respect to consistency, frequency, foodstuffs, nutrients and methods of cooking.

(d) Modification of diet according to common ailments: diarrhoea, fever, jaundice, hypertension, diabetes and constipation. Physiological changes, clinical symptoms, requirements and dietary requirements in each condition.

Unit III: Money Management and Consumer Education

(a) Family Income:

(i) Various sources of family income:

- money income
- real income, (direct and indirect)
- psychic income

(ii) Supplementing family income-need and ways; need and procedure for maintaining household accounts (daily, weekly and monthly).

(b) Savings and Investment:

(i) Meaning and importance of savings.

(ii) Basis for selection of investment methods: risk, security, profit, tax saving.

(iii) Ways/methods of investment -

- Bank schemes (saving, fixed, recurring);
- Post Office schemes (savings, recurring deposit, monthly income scheme, National saving certificate, Senior citizen scheme);
- Insurance schemes (whole life, mediclaim);
- Public Provident Fund (PPF), Provident Fund (PF).

(iv) Consumer Protection and Education: Meaning, problems faced by consumer, Consumer Protection Amendment Act (2011); Consumer aids: labels, standardization marks, (ECO Mark, Hallmark, Wool mark, Silk mark), advertising, leaflets, and Consumer redressal forum, Internet.

Unit IV: Apparel: Designing, Selection and Care

(i) Application of elements of art and principles of design in designing apparel.

(ii) Selection and purchase of fabrics- purpose, cost, season, quality, durability, ease of maintenance and comfort.

(iii) Selection of apparel- factors influencing selection of apparel- age, size, climate, occupation, figure, occasion, fashion, drape cost and workmanship.

(iv) Care and maintenance of clothes: Cleansing agents: soaps and detergents (basic differences and their utility); General principles of stain removal, stain removal of tea, coffee, lipstick, ball pen, Grease, Curry and Blood.

(v) Storage of clothes.

Unit V: Community Development and Extension (Part II)

(i) Water safety: Safe drinking water-importance of potable water for good health, and its qualities, simple methods of making water safe for drinking; boiling, filtering (traditional and modern technology), use of alum, chlorine.

(ii) Salient features of income generating schemes

- DWCRA (Development of Women and Children in Rural Area)
- MGNREGA (Mahatma Gandhi National Rural Employment Guarantee Act, 2005)

Unit VI: Career Options after Home Science Education

Career options of self and wage employment of various fields of Home Science.

Legal Studies Class 12 Syllabus

Exam Structure

S. No.	Units	Marks
1	Judiciary	15
2	Topics in Law	15
3	Arbitration, Tribunal Adjudication and Alternate Dispute Resolution	15
4	Human Rights in India	15
5	Legal Profession in India	15
6	Legal Services	15
7	International Context	10
	Total	100

Unit 1: Judiciary

- Constitution, Roles and Impartiality
- Structure, Hierarchy of Courts, and Legal Offices in India
- Appointments, Trainings, Retirement and Removal of Judges
- Judicial Review

Unit 2: Topics in Law

- Property
- Contracts

- Torts
- Crimes
- Administrative Law

Unit 3: Arbitration, Tribunal Adjudication and Alternate Dispute Resolution

- Adversarial and Inquisitorial System
- Arbitration
- Administrative Tribunals
- Ombudsman
- Mediation and Conciliation
- Lok Adalats
- Lokpal and Lokayukt

Unit 4: Human Rights in India

- Human Rights Laws Constitution, Statutes
- Complaint Mechanisms and Human Rights Commissions

Unit 5: Legal Profession in India

- History of Legal profession in India
- Role and types of functions of judges and lawyers
- Barristers, Solicitors and Advocates
- Changes Affected by Indian Advocates Act, 1961

Unit 6: Legal Services

- Legal Services
- Boards
- Funding

Unit 7: International Context

- Introduction to International Law
- Sources of International Law
- International Institutions
- International Human Rights

Mathematics Class 12 Syllabus

Exam Structure

Unit	Торіс	Marks
I.	Relations and Functions	10
II.	Algebra	13
III.	Calculus	44
IV.	Vectors and 3-D Geometry	17
V.	Linear Programming	06
VI.	Probability	10
	Total	100

Unit I: Relations and Functions

1. Relations and Functions

Types of relations: reflexive, symmetric, transitive and equivalence relations. One to one and onto functions, composite functions, inverse of a function. Binary operations.

2. Inverse Trigonometric Functions

Definition, range, domain, principal value branch. Graphs of inverse trigonometric functions. Elementary properties of inverse trigonometric functions.

Unit II: Algebra

1. Matrices

Concept, notation, order, equality, types of matrices, zero and identity matrix, transpose of a matrix, symmetric and skew symmetric matrices. Operation on matrices: Addition and multiplication and multiplication with a scalar. Simple properties of addition, multiplication and scalar multiplication. Noncommutativity of multiplication of matrices and existence of non-zero matrices whose product is the zero matrix (restrict to square matrices of order 2).Concept of elementary row and column operations. Invertible matrices and proof of the uniqueness of inverse, if it exists; (Here all matrices will have real entries).

2. Determinants

Determinant of a square matrix (up to 3 x 3 matrices), properties of determinants, minors, cofactors and applications of determinants in finding the area of a triangle. Adjoint and inverse of a square matrix. Consistency, inconsistency and number of solutions of system of linear equations by examples, solving system of linear equations in two or three variables (having unique solution) using inverse of a matrix.

Unit III: Calculus

1. Continuity and Differentiability

Continuity and differentiability, derivative of composite functions, chain rule, derivatives of inverse trigonometric functions, derivative of implicit functions. Concept of exponential and logarithmic functions.

Derivatives of logarithmic and exponential functions. Logarithmic differentiation, derivative of functions expressed in parametric forms. Second order derivatives. Rolle's and Lagrange's Mean Value Theorems (without proof) and their geometric interpretation.

2. Applications of Derivatives

Applications of derivatives: rate of change of bodies, increasing/decreasing functions, tangents and normals, use of derivatives in approximation, maxima and minima (first derivative test motivated geometrically and second derivative test given as a provable tool). Simple problems (that illustrate basic principles and understanding of the subject as well as real-life situations).

3. Integrals

Integration as inverse process of differentiation.Integration of a variety of functions by substitution, by partial fractions and by parts, Evaluation of simple integrals of the following types and problems based on them.

$$\int \frac{dx}{x^2 \pm a^2}, \int \frac{dx}{\sqrt{x^2 \pm a^2}}, \int \frac{dx}{\sqrt{a^2 - x^2}}, \int \frac{dx}{ax^2 + bx + c}, \int \frac{dx}{\sqrt{ax^2 + bx + c}}$$
$$\int \frac{px + q}{ax^2 + bx + c} dx, \int \frac{px + q}{\sqrt{ax^2 + bx + c}} dx, \int \sqrt{a^2 \pm x^2} dx, \int \sqrt{x^2 - a^2} dx$$
$$\int \sqrt{ax^2 + bx + c} dx, \int (px + q)\sqrt{ax^2 + bx + c} dx$$

Definite integrals as a limit of a sum, Fundamental Theorem of Calculus (without proof). Basic properties of definite integrals and evaluation of definite integrals.

4. Applications of the Integrals

Applications in finding the area under simple curves, especially lines, circles/parabolas/ellipses (in standard form only), Area between any of the two above said curves (the region should be clearly identifiable).

5. Differential Equations

Definition, order and degree, general and particular solutions of a differential equation.Formation of differential equation whose general solution is given.Solution of differential equations by method of separation of variables solutions of homogeneous differential equations of first order and first degree. Solutions of linear differential equation of the type:

dy/dx + py = q, where p and q are functions of x or constants.

dx/dy + px = q, where p and q are functions of y or constants.

Unit IV: Vectors and Three-Dimensional Geometry

1. Vectors

Vectors and scalars, magnitude and direction of a vector.Direction cosines and direction ratios of a vector. Types of vectors (equal, unit, zero, parallel and collinear vectors), position vector of a point, negative of a vector, components of a vector, addition of vectors, multiplication of a vector by a scalar, position vector of a point dividing a line segment in a given ratio. Definition, Geometrical Interpretation, properties and application of scalar (dot) product of vectors, vector (cross) product of vectors, scalar triple product of vectors.

2. Three - dimensional Geometry

Direction cosines and direction ratios of a line joining two points.Cartesian equation and vector equation of a line, coplanar and skew lines, shortest distance between two lines.Cartesian and vector equation of a plane.Angle between (i) two lines, (ii) two planes, (iii) a line and a plane.Distance of a point from a plane.

Unit V: Linear Programming

1. Linear Programming

Introduction, related terminology such as constraints, objective function, optimization, different types of linear programming (L.P.) problems, mathematical formulation of L.P. problems, graphical method of solution for problems in two variables, feasible and infeasible regions

(bounded and unbounded), feasible and infeasible solutions, optimal feasible solutions (up to three non-trivial constraints).

Unit VI: Probability

1. Probability

Conditional probability, multiplication theorem on probability. independent events, total probability, Baye's theorem, Random variable and its probability distribution, mean and variance of random variable. Repeated independent (Bernoulli) trials and Binomial distribution.

Physics Class 12 Syllabus

Exam Structure

Unit	Chapter / Topic	Marks
Ι	Electrostatics	15
	Chapter-1: Electric Charges and Fields	
	Chapter-2: Electrostatic Potential and Capacitance	
Π	Current Electricity	
	Chapter-3: Current Electricity	
III	Magnetic Effect of Current & Magnetism	16
	Chapter-4: Moving Charges and Magnetism	
	Chapter-5: Magnetism and Matter	
IV	Electromagnetic Induction & Alternating Current	
	Chapter-6: Electromagnetic Induction	
	Chapter-7: Alternating Current	
V	Electromagnetic Waves	

	Chapter-8: Electromagnetic Waves	17
VI	Optics	
	Chapter-9: Ray Optics and Optical Instruments	
	Chapter-10: Wave Optics	
VII	Dual Nature of Matter	10
	Chapter-11: Dual Nature of Radiation and Matter	
VIII	Atoms & Nuclei	
	Chapter-12: Atoms	
	Chapter-13: Nuclei	
IX	Electronic Devices	12
	Chapter-14: Semiconductor Electronics	
X	Communication Systems	
	Chapter-15: Communication Systems	
	Total	70

Unit I: Electrostatics

Chapter-1: Electric Charges and Fields

Electric Charges; Conservation of charge, Coulomb's law-force between two point charges, forces between multiple charges; superposition principle and continuous charge distribution.

Electric field, electric field due to a point charge, electric field lines, electric dipole, electric field due to a dipole, torque on a dipole in uniform electric field.

Electric flux, statement of Gauss's theorem and its applications to find field due to infinitely long straight wire, uniformly charged infinite plane sheet and uniformly charged thin spherical shell (field inside and outside).

Chapter-2: Electrostatic Potential and Capacitance

Electric potential, potential difference, electric potential due to a point charge, a dipole and system of charges; equipotential surfaces, electrical potential energy of a system of two point charges and of electric dipole in an electrostatic field.

Conductors and insulators, free charges and bound charges inside a conductor. Dielectrics and electric polarisation, capacitors and capacitance, combination of capacitors in series and in parallel, capacitance of a parallel plate capacitor with and without dielectric medium between the plates, energy stored in a capacitor.

Unit II: Current Electricity

Chapter-3: Current Electricity

Electric current, flow of electric charges in a metallic conductor, drift velocity, mobility and their relation with electric current; Ohm's law, electrical resistance, V-I characteristics (linear and non-linear), electrical energy and power, electrical resistivity and conductivity. Carbon resistors, colour code for carbon resistors; series and parallel combinations of resistors; temperature dependence of resistance.

Internal resistance of a cell, potential difference and emf of a cell, combination of cells in series and in parallel. Kirchhoff's laws and simple applications. Wheatstone bridge, metre bridge.

Potentiometer - principle and its applications to measure potential difference and for comparing emf of two cells; measurement of internal resistance of a cell.

Unit III: Magnetic Effects of Current and Magnetism

Chapter-4: Moving Charges and Magnetism

Concept of magnetic field, Oersted's experiment.

Biot - Savart law and its application to current carrying circular loop.

Ampere's law and its applications to infinitely long straight wire. Straight and toroidal solenoids, Force on a moving charge in uniform magnetic and electric fields. Cyclotron.

Force on a current-carrying conductor in a uniform magnetic field. Force between two parallel current-carrying conductors-definition of ampere. Torque experienced by a current loop in uniform magnetic field; moving coil galvanometer-its current sensitivity and conversion to ammeter and voltmeter.

Chapter-5: Magnetism and Matter

Current loop as a magnetic dipole and its magnetic dipole moment. Magnetic dipole moment of a revolving electron. Magnetic field intensity due to a magnetic dipole (bar magnet) along its axis and perpendicular to its axis. Torque on a magnetic dipole (bar magnet) in a uniform magnetic field; bar magnet as an equivalent solenoid, magnetic field lines; Earth's magnetic field and magnetic elements.

Para-, dia- and ferro - magnetic substances, with examples. Electromagnets and factors affecting their strengths. Permanent magnets.

Unit IV: Electromagnetic Induction and Alternating Currents

Chapter-6: Electromagnetic Induction

Electromagnetic induction; Faraday's laws, induced emf and current; Lenz's Law, Eddy currents.

Self and mutual induction.

Chapter-7: Alternating Current

Alternating currents, peak and rms value of alternating current/voltage; reactance and impedance; LC oscillations (qualitative treatment only), LCR series circuit, resonance; power in AC circuits, wattless current.

AC generator and transformer.

Unit V: Electromagnetic waves

Chapter-8: Electromagnetic Waves

Basic idea of displacement current, Electromagnetic waves, their characteristics, their transverse nature (qualitative ideas only).

Electromagnetic spectrum (radio waves, microwaves, infrared, visible, ultraviolet, X-rays, gamma rays) including elementary facts about their uses.

Unit VI: Optics

Chapter-9: Ray Optics and Optical Instruments

Ray Optics:: Reflection of light, spherical mirrors, mirror formula. Refraction of light, total internal reflection and its applications, optical fibres, refraction at spherical surfaces, lenses, thin lens formula, lensmaker's formula. Magnification, power of a lens, combination of thin lenses in contact combination of a lens and a mirror. Refraction and dispersion of light through a prism.

Scattering of light - blue colour of sky and reddish apprearance of the sun at sunrise and sunset.

Optical instruments: Microscopes and astronomical telescopes (reflecting and refracting) and their magnifying powers.

Chapter-10: Wave Optics

Wave optics: Wave front and Huygen's principle, reflection and refraction of plane wave at a plane surface using wave fronts. Proof of laws of reflection and refraction using Huygen's principle. Interference Young's double slit experiment and expression for fringe width, coherent sources and sustained interference of light. Diffraction due to a single slit, width of central maximum. Resolving power of microscopes and astronomical telescopes. Polarisation, plane polarised light Brewster's law, uses of plane polarised light and Polaroids.

Unit VII: Dual Nature of Matter and Radiation

Chapter-11: Dual Nature of Radiation and Matter

Dual nature of radiation. Photoelectric effect, Hertz and Lenard's observations; Einstein's photoelectric equation-particle nature of light.

Matter waves-wave nature of particles, de Broglie relation. Davisson-Germer experiment (experimental details should be omitted; only conclusion should be explained).

Unit VIII: Atoms & Nuclei

Chapter-12: Atoms

Alpha-particle scattering experiment; Rutherford's model of atom; Bohr model, energy levels, hydrogen spectrum.

Chapter-13: Nuclei

Composition and size of nucleus, atomic masses, isotopes, isobars; isotones. Radioactivityalpha, beta and gamma particles/rays and their properties; radioactive decay law.

Mass-energy relation, mass defect; binding energy per nucleon and its variation with mass number; nuclear fission, nuclear fusion.

Unit IX: Electronic Devices

Chapter-14: Semiconductor Electronics: Materials, Devices and Simple Circuits

Energy bands in conductors, semiconductors and insulators (qualitative ideas only)

Semiconductor diode - I-V characteristics in forward and reverse bias, diode as a rectifier;

Special purpose p-n junction diodes: LED, photodiode, solar cell and Zener diode and their characteristics, zener diode as a voltage regulator.

Junction transistor, transistor action, characteristics of a transistor and transistor as an amplifier (common emitter configuration), basic idea of analog and digital signals, Logic gates (OR, AND, NOT, NAND and NOR).

Unit X: Communication Systems

Chapter-15: Communication Systems

Elements of a communication system (block diagram only); bandwidth of signals (speech, TV and digital data); bandwidth of transmission medium. Propagation of electromagnetic waves in the atmosphere, sky and space wave propagation, satellite communication. Need for modulation, amplitude modulation.

Optical instruments: Microscopes and astronomical telescopes (reflecting and refracting) and their magnifying powers.

Chapter-10: Wave Optics

Wave optics: Wave front and Huygen's principle, reflection and refraction of plane wave at a plane surface using wave fronts. Proof of laws of reflection and refraction using Huygen's principle. Interference Young's double slit experiment and expression for fringe width, coherent sources and sustained interference of light. Diffraction due to a single slit, width of central maximum. Resolving power of microscopes and astronomical telescopes. Polarisation, plane polarised light Brewster's law, uses of plane polarised light and Polaroids.

Unit VII: Dual Nature of Matter and Radiation

Chapter-11: Dual Nature of Radiation and Matter

Dual nature of radiation. Photoelectric effect, Hertz and Lenard's observations; Einstein's photoelectric equation-particle nature of light.

Matter waves-wave nature of particles, de Broglie relation. Davisson-Germer experiment (experimental details should be omitted; only conclusion should be explained).

Unit VIII: Atoms & Nuclei

Chapter-12: Atoms

Alpha-particle scattering experiment; Rutherford's model of atom; Bohr model, energy levels, hydrogen spectrum.

Chapter-13: Nuclei

Composition and size of nucleus, atomic masses, isotopes, isobars; isotones. Radioactivityalpha, beta and gamma particles/rays and their properties; radioactive decay law.

Mass-energy relation, mass defect; binding energy per nucleon and its variation with mass number; nuclear fission, nuclear fusion.

Unit IX: Electronic Devices

Chapter-14: Semiconductor Electronics: Materials, Devices and Simple Circuits

Energy bands in conductors, semiconductors and insulators (qualitative ideas only)

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Political Science Class 12 Syllabus

Exam Structure

Part A: Contemporary World-Politics (50 Marks)

Unit	Торіс	Marks
1	Cold War Era	14
2	The End of bipolarity	
3	US Hegemony in World Politics	16
4	Alternative centres of Power	
5	Contemporary South Asia	
6	International Organizations	10
7	Security in Contemporary World	
8	Environment and Natural Resources	10
9	Globalisation	
	Total	50

Part B: Politics in India since Independence

Unit	Торіс	Marks
10	Challenges of Nation-Building	16
11	Era of One-Party Dominance	
12	Politics of Planned Development	
13	India's External Relations	6
14	Challenges to the Congress System	12
15	Crisis of the Democratic order	
16	Rise of Popular Movements	16
17	Regional Aspirations	
18	Recent Developments in Indian Politics	
	Total	50

Part A: Contemporary World Politics

1. Cold War Era

Emergence of two power blocs after the second world war. Arenas of the cold war. Challenges to Bipolarity: Non Aligned Movement, quest for new international economic order. India and the cold war.

2. The End of Bipolarity

New entities in world politics: Russia, Balkan states and Central Asian states, Introduction of democratic politics and capitalism in post-communist regimes. India's relations with Russia and other post-communist countries.

3. US Hegemony in World Politics

Growth of unilateralism: Afghanistan, first Gulf War, response to 9/11 and attack on Iraq. Dominance and challenge to the US in economy and ideology. India's renegotiation of its relationship with the USA.

4. Alternative Centres of Power

Rise of China as an economic power in post-Maoera, creation and expansion of European Union, ASEAN. India's changing relations with China.

Democratisation in Pakistan and Nepal. Ethnic conflict in Sri Lanka, Impact of economic globalization on the region. Conflicts and efforts for peace in South Asia. India's relations with its neighbours.

6. International Organizations

Restructuring and the future of the UN. India's position in the restructured UN. Rise of new international actors: new international economic organisations, NGOs. How democratic and accountable are the new institutions of global governance?

7. Security in Contemporary World

Traditional concerns of security and politics of disarmament. Non-traditional or human security: global poverty, health and education. Issues of human rights and migration.

8. Environment and Natural Resources

Environment movement and evolution of global environmental norms. Conflicts over traditional and common property resources. Rights of indigenous people. India's stand in global environmental debates.

9. Globalisation

Economic, cultural and political manifestations. Debates on the nature of consequences of globalisation. Anti-globalisation movements. India as an arena of globalization and struggle against it.

Part B: Politics in India since Independence

10. Challenges of Nation-Building

Nehru's approach to nation-building; Legacy of partition: challenge of 'refugee' resettlement, the Kashmir problem. Organisation and reorganization of states; Political conflicts over language.

11. Era of One-Party Dominance

First three general elections, nature of Congress dominance at the national level, uneven dominance at the state level, coalitional nature of Congress. Major opposition parties.

12. Politics of Planned Development

Five year plans, expansion of state sector and the rise of new economic interests. Famine and suspension of five year plans. Green revolution and its political fallouts.

13. India's External Relations

Nehru's foreign policy. Sino-Indian war of 1962, Indo-Pak war of 1965 and 1971. India's nuclear programme. Shifting alliance in world politics.

14. Challenges to the Congress System

Political succession after Nehru. Non-Congressism and electoral upset of 1967, Congress split and reconstitution, Congress' victory in 1971 elections, politics of 'garibi hatao'.

15. Crisis of the Democratic Order

Search for 'committed' bureaucracy and judiciary. Navnirman movement in Gujarat and the Bihar movement. Emergency: context, constitutional and extra-constitutional dimensions, resistance to emergency. 1977 elections and the formation of Janata Party. Rise of civil liberties organisations.

16. Popular Movements in India

Farmers' movements, Women's movement, Environment and Development-affected people's movements. Implementation of Mandal Commission report and its aftermath.

17. Regional Aspirations

Rise of regional parties. Punjab crisis and the anti Sikh riots of 1984. The Kashmir situation. Challenges and responses in the North East.

18. Recent Developments in Indian Politics

Participatory upsurge in1990s. Rise of the JD and the BJP. Increasing role of regional parties and coalition politics. Coalition governments: NDA (1998 - 2004), UPA (2004 - 2014), NDA (2014 onwards)

Prescribed Books:

- Contemporary World Politics, Class XII, Published by NCERT
 Politics in India since Independence, Class XII, Published by NCERT

Psychology Class 12 Syllabus

Exam Structure

Unit	Торіс	Marks
Ι	Variations in Psychological Attributes	9
II	Self and Personality	10
III	Meeting Life Challenges	7
IV	Psychological Disorders	10
V	Therapeutic Approaches	7
VI	Attitude and Social Cognition	8
VII	Social Influence and Group Processes	7
VIII	Psychology and Life	6
IX	Developing Psychological Skills	6
	Total	70

Unit-I: Variations in Psychological Attributes

- 1. Introduction
- Individual Differences in Human Functioning
 Assessment of Psychological Attributes

- 4. Intelligence
- 5. Theories of Intelligence
 - a. Theory of Multiple Intelligences
 - b. Triarchic Theory of Intelligence
 - c. Planning, Attention-arousal, and Simultaneous successive Model of Intelligence
- 6. Individual Differences in Intelligence
 - a. Variations of Intelligence
- 7. Culture and Intelligence
- 8. Emotional Intelligence
- 9. Special Abilities
 - a. Aptitude: Nature and Measurement
- 10. Creativity

Unit-II: Self and Personality

- 1. Introduction
- 2. Self and Personality
- 3. Concept of Self
- 4. Cognitive and Behavioural Aspects of Self
 - a. Self-esteem, Self-efficacy and Self-regulation
- 5. Culture and Self
- 6. Concept of Personality
- 7. Major Approaches to the Study of Personality
 - a. Type Approaches
 - b. Trait Approaches
 - c. Psychodynamic Approach
 - d. Behavioural Approach
 - e. Cultural Approach
 - f. Humanistic Approach
- 8. Assessment of Personality
 - a. Self-report Measures
 - b. Projective Techniques
 - c. Behavioural Analysis

Unit-III: Meeting Life Challenges

- 1. Introduction
- 2. Nature, Types and Sources of Stress
- 3. Effects of Stress on Psychological Functioning and Health
 - a. Stress and Health
 - b. General Adaptation Syndrome
 - c. Stress and Immune System
 - d. Lifestyle
- 4. Coping

with

Stress

a. Stress Management Techniques

 Promoting Positive Health and Well-being a. Life Skills

Unit-IV: Psychological Disorders

- 1. Introduction
- 2. Concepts of abnormality and psychological Disorders
- 3. Classification of Psychological Disorders
- 4. Factors Underlying Abnormal Behaviour
- 5. Major Psychological Disorders
 - a. Anxiety Disorders
 - b. Somatoform Disorders
 - c. Dissociative Disorders
 - d. Mood Disorders
 - e. Schizophrenic Disorders
 - f. Behavioural and Developmental Disorders
 - g. Substance-use Disorders

Unit-V: Therapeutic Approaches

- 1. Nature and process of psychotherapy
 - a. Therapeutic relationship
- 2. Types of therapies
 - a. Psychodynamic Therapy
 - b. Behaviour Therapy
 - c. Cognitive Therapy
 - d. Humanistic-existential Therapy
 - e. Biomedical Therapy
 - f. Alternative Therapies
- 3. Rehabilitation of the Mentally III

Unit-VI: Attitude And Social Cognition

- 1. Introduction
- 2. Explaining Social Behaviour
- 3. Nature and Components of Attitudes
- 4. Attitude Formation and Change
 - a. Attitude Formation
 - b. Attitude Change
 - c. Attitude-Behaviour Relationship
- 5. Prejudice and Discrimination
- 6. Strategies for Handling Prejudice
- 7. Social Cognition
- 8. Schemas and Stereotypes
- 9. Impression Formation and Explaining
- 10. Behaviour of Others through Attributions

- a. Impression Formation
- b. Attribution of Causality
- 11. Behaviour in the Presence of Others
- 12. Pro-social Behaviour
 - a. Factors Affecting Pro-social Behaviour

Unit-VII: Social Influence And Group Processes

- 1. Introduction
- 2. Nature and Formation of Groups
- 3. Type of Groups
- 4. Influence of Group on Individual Behaviour
 - a. Social Loafing
 - b. Group Polarisation
- 5. Conformity, Compliance, and Obedience
- 6. Cooperation and Competition
 - a. Determinants of Cooperation and Competition
- 7. Social Identity
- 8. Intergroup Conflict: Nature and Causes
- 9. Conflict Resolution Strategies

Unit-VIII: Psychology and Life

- 1. Introduction
- 2. Human-Environment Relationship
 - a. Different Views of the Human-Environment Relationship
- 3. Environmental Effects on Human Behaviour
 - a. Human Influence on the Environment
 - b. Noise
 - c. Pollution
 - d. Crowding
 - e. Natural Disasters
- 4. Promoting Pro-environmental Behaviour
- 5. Psychology and Social Concerns
 - a. Poverty and Discrimination
 - b. Aggression, Violence, and Peace
 - c. Mahatma Gandhi on Non-violence
 - d. Health
 - e. Impact of Television on Behaviour

Unit-IX: Developing Psychological Skills

- 1. Introduction
- 2. Developing as an effective Psychologist
- 3. General Skills
- 4. Observational Skills

- 5. Specific Skills
- a. Communication Skills
 b. Psychological Testing Skills
 6. Interviewing Skills
 7. Counselling Skills

Sociology Class 12 Syllabus

Exam Structure

Unit	Торіс	Marks
А.	Indian Society	32
1	Introducing Indian Society (Non-evaluative)	-
2	Demographic Structure & Indian Society	6
3	Social Institutions-Continuity and change	6
4	Market as a Social Institution	6
5	Pattern of Social Inequality and Exclusion	6
6	Challenges of Cultural Diversity	8
7	Suggestions for Project Work (Non-evaluative)	-
В.	Change and Development in Indian Society	48
8	Structural Change	6
9	Cultural Change	6
10	The Story of Democracy	6

	Total	80
15	Social Movements	6
14	Mass Media and Communications	6
13	Globalization and Social Change	6
12	Change and Development in Industrial Society	6
11	Change and Development in Rural Society	6

A. INDIAN SOCIETY

Unit 1: Introducing Indian Society

• Colonialism, Nationalism, Class and Community

Unit 2: Demographic Structure and Indian Society

- Theories and concepts in demography
- Rural-Urban Linkages and Divisions

Unit 3: Social Institutions: Continuity and Change

- Family and Kinship
- The Caste System

Unit 4: Market as a Social Institution

- Sociological perspectives on markets and the economy.
- Globalization Interlinking of Local, Regional, National and International Markets.

Unit 5: Pattern of Social Inquality and Exclusion

- Caste Prejudice, Scheduled Castes and Other Backward Classes
- Marginalization of Tribal Communities
- The Struggle for Women's Equality

• The struggles of the Differently Abled

Unit 6: The Challenges of Cultural Diversity

- Cultural communities and the nation state
- Problems of Communalism, Regionalism and Casteism
- The Nation state, religion related issues and identities
- Communalism, secularism and the nation state
- State and Civil Society

Unit 7: Suggestions for Project Work

B. CHANGE AND DEVELOPMENT IN INDIA

Unit 8: Structural Change

• Colonialism, Industrialization, Urbanization

Unit 9: Cultural Change

- Modernization, Westernization, Sanskritisation, Secularization
- Social Reform Movements and Laws

Unit 10: The Story of Democracy

- The Constitution as an instrument of Social Change
- Parties, Pressure Groups and Democratic Politics
- Panchayati Raj and the Challenges of Social Transformation

Unit 11: Change and Development in Rural Society

- Land Reforms, Green Revolution and Emerging Agrarian society
- Agrarian Structure : Caste & class in Rural India
- Land Reforms
- Green revolution and its social consequencess
- Transformation in Rural Society
- Globalization, Liberalization and Rural Society

Unit 12: Change and Development in Industrial Society

- From Planned Industrialization to Liberalization
- Getting a Job
- Work Processes

Unit 13: Globalisation and Social Change

• Dimensions of Globalization

Unit 14: Mass Media and Communication

- Types of Mass Media: Radio, Television and Print Media
- Changing Nature of Mass Media

Unit 15: Social Movements

- Theories and Classification of Social Movements
- Class-Based Movements: Workers, Peasants
- Caste-Based Movements: Dalit Movement, Backward Castes, Trends in Upper Caste Responses
- Women's Movements in Independent India
- Tribal Movements
- Environmental Movements