

KARTET Syllabus – Paper 1 and Paper 2

Karnataka Teacher Eligibility Test · Department of School Education, Karnataka

Exam pattern

Paper	Classes	Questions	Marks	Duration
Paper 1	1-5	150	150	2 hours 30 minutes
Paper 2	6-8	150	150	2 hours 30 minutes

- **Paper 1 (Classes 1-5):** Language I (compulsory) – e.g. Kannada – 30; Language II (compulsory) – e.g. English – 30; Child Development and Pedagogy (compulsory) – 30; Mathematics – 30; Environmental Studies (EVS) – 30; Social Studies – only for visually impaired candidates, in place of Mathematics and EVS – 60
- **Paper 2 (Classes 6-8):** Language I (compulsory) – e.g. Kannada – 30; Language II (compulsory) – e.g. English – 30; Child Development and Pedagogy (compulsory) – 30; Mathematics and Science (for Mathematics and Science teachers) – 60; Social Studies / Social Science (for Social Science teachers) – 60
- **Negative marking:** No negative evaluation
- **Qualifying marks:** General / 2A / 2B / 3A / 3B – 60%; SC / ST / Category-1 / differently-abled (PwD) – 55%
- 150 multiple-choice questions (MCQs), 150 marks, one mark per question; four options, only one correct; answers shaded on the OMR sheet
- 20 minutes per hour, i.e. 50 minutes extra, for differently-abled candidates
- All subjects other than languages are printed in Kannada, English, Urdu, Tamil, Telugu, Hindi and Marathi; answer in the medium chosen at application.

Syllabus

Paper 1 – Classes 1-5

Language I (compulsory) – e.g. Kannada · 30 questions · 30 marks

Questions on Language I are based on proficiency in the language of the medium of instruction.

Kannada – Syllabus, Subject: Kannada, Paper-1 and Paper-2

- Kannada language, literature and grammar: Origin of the Kannada language, stages of its development
ಕನ್ನಡ ಭಾಷೆ, ಸಾಹಿತ್ಯ ಮತ್ತು ವ್ಯಾಕರಣ: ಕನ್ನಡ ಭಾಷೆಯ ಉಗಮ, ಬೆಳವಣಿಗೆಯ ಹಂತಗಳು
- History of Kannada literature: Old Kannada (Halegannada), Middle Kannada (Nadugannada) and Modern Kannada (Hosagannada)
ಕನ್ನಡ ಸಾಹಿತ್ಯ ಚರಿತ್ರೆ: ಹಳಗನ್ನಡ, ನಡುಗನ್ನಡ, ಮತ್ತು ಹೊಸಗನ್ನಡ
- Grammar: alphabet, conjunct consonants (samyuktakshara), consonant-vowel combinations (gunitakshara), nouns, verbs, sandhi, samasa, krudanta, taddhitanta, indeclinables (avyaya), reduplication (dvirukti), paired words (jodunudi), echo words (padenudi), idioms (nudigattu), word meanings, punctuation marks, sentences and types of sentences, letter writing, gender, number, case (vibhakti) and case suffixes
ವ್ಯಾಕರಣ: ವರ್ಣಮಾಲೆ, ಸಂಯುಕ್ತಾಕ್ಷರ, ಗುಣಿತಾಕ್ಷರ, ನಾಮಪದ, ಕ್ರಿಯಾಪದ, ಸಂಧಿ, ಸಮಾಸ, ಕೃದಂತ, ತದ್ಧಿತಾಂತ, ಅವ್ಯಯ, ದ್ವಿರುಕ್ತಿ, ಜೋಡುನುಡಿ, ಪಡೆನುಡಿ, ನುಡಿಗಟ್ಟು, ಪದಗಳ ಅರ್ಥ, ಲೇಖನ ಚಿಹ್ನೆಗಳು, ವಾಕ್ಯ ಮತ್ತು ವಾಕ್ಯ ಪ್ರಕಾರಗಳು, ಪತ್ರಲೇಖನ, ಲಿಂಗ, ವಚನ, ವಿಭಕ್ತಿ

ಮತ್ತು ವಿಭಕ್ತಿ ಪ್ರತ್ಯಯಗಳು.

- Synonyms – words with multiple meanings – antonyms
ಸಮನಾರ್ಥಕ-ನಾನಾರ್ಥಕ-ವಿರುದ್ಧಾರ್ಥಕ ಪದಗಳು
- Tatsama – Tadbhava
ತತ್ಸಮ-ತದ್ಭವ
- 'Alankara' (figures of speech) and 'Chandassu' (prosody)
'ಅಲಂಕಾರ' ಮತ್ತು 'ಚಂದಸ್ಸು'
- Kannada language teaching methods / pedagogy: Values and objectives of teaching Kannada
ಕನ್ನಡ ಭಾಷಾ ಬೋಧನಾ ವಿಧಾನ / ಬೋಧನಾ ಶಾಸ್ತ್ರ; ಕನ್ನಡ ಬೋಧನೆಯ ಮೌಲ್ಯ ಮತ್ತು ಉದ್ದೇಶಗಳು
- Techniques for teaching language and the various literary forms
ಭಾಷೆ ಮತ್ತು ವಿವಿಧ ಸಾಹಿತ್ಯ ಪ್ರಕಾರಗಳ ಬೋಧನಾ ತಂತ್ರಗಳು
- Plans for teaching Kannada language and literature
ಕನ್ನಡ ಭಾಷೆ ಮತ್ತು ಸಾಹಿತ್ಯ ಬೋಧನೆಯ ಯೋಜನೆಗಳು
- Language skills – teaching of the skills
ಭಾಷಾ ಕೌಶಲಗಳು - ಕೌಶಲಗಳ ಬೋಧನೆ
- Teaching resources
ಬೋಧನಾ ಸಂಪನ್ಮೂಲಗಳು
- Evaluation of language learning
ಭಾಷಾ ಕಲಿಕೆಯ ಮೌಲ್ಯಮಾಪನ
- General, academic and professional qualities of a Kannada language teacher
ಕನ್ನಡ ಭಾಷಾ ಬೋಧಕನ ಸಾಮಾನ್ಯ, ಶೈಕ್ಷಣಿಕ ಮತ್ತು ವೃತ್ತಿ ಅರ್ಹತೆಗಳು
- Methods of mother-tongue teaching
ಮಾತೃ ಭಾಷಾ ಬೋಧನಾ ಪದ್ಧತಿಗಳು
- Action research
ಕ್ರಿಯಾ ಸಂಶೋಧನೆ

English — 1. English Language I

- Language Comprehension Reading unseen passages – Answering the question based on the given unseen passage. (Prose, Drama or Poetry.)
- Pedagogy of Language Development: Learning and acquisition, Principles of language Teaching, Role of listening and Speaking, function of language and how children use it as a tool.
- Critical perspective on the role of grammar in learning a language for communicating ideas verbally and in written form.
- Challenges of teaching language in a diverse classroom and Language Skills.
- Teaching – learning Materials: Textbook, multi-media materials, multilingual resource of the classroom, Remedial Teaching.

Language II (compulsory) – e.g. English · 30 questions · 30 marks

Questions on Language II are based on the basic elements of that language, communication and comprehension ability.

English — 2. English Language II

- Language Comprehension Reading unseen passages – Answering the question based on the given unseen passage. (Prose, Drama or Poetry.)
- Pedagogy of Language Development: Learning and acquisition, Principles of language Teaching, Role of listening and Speaking, function of language and how children use it as a tool.
- Critical perspective on the role of grammar in learning a language for communicating ideas verbally and in written form.
- Challenges of teaching language in a diverse classroom and Language Skills.

- Teaching – learning Materials: Textbook, multi-media materials, multilingual resource of the classroom, Remedial Teaching.

Kannada — Syllabus, Subject: Kannada, Paper-1 and Paper-2 (same list as Language I)

- Kannada language, literature and grammar: Origin of the Kannada language, stages of its development
ಕನ್ನಡ ಭಾಷೆ, ಸಾಹಿತ್ಯ ಮತ್ತು ವ್ಯಾಕರಣ: ಕನ್ನಡ ಭಾಷೆಯ ಉಗಮ, ಬೆಳವಣಿಗೆಯ ಹಂತಗಳು
- History of Kannada literature: Old Kannada (Halegannada), Middle Kannada (Nadugannada) and Modern Kannada (Hosagannada)
ಕನ್ನಡ ಸಾಹಿತ್ಯ ಚರಿತ್ರೆ: ಹಳಗನ್ನಡ, ನಡುಗನ್ನಡ, ಮತ್ತು ಹೊಸಗನ್ನಡ
- Grammar: alphabet, conjunct consonants (samyuktakshara), consonant-vowel combinations (gunitakshara), nouns, verbs, sandhi, samasa, krudanta, taddhitanta, indeclinables (avyaya), reduplication (dvirukti), paired words (jodunudi), echo words (padenudi), idioms (nudigattu), word meanings, punctuation marks, sentences and types of sentences, letter writing, gender, number, case (vibhakti) and case suffixes
ವ್ಯಾಕರಣ: ವರ್ಣಮಾಲೆ, ಸಂಯುಕ್ತಾಕ್ಷರ, ಗುಣಿತಾಕ್ಷರ, ನಾಮಪದ, ಕ್ರಿಯಾಪದ, ಸಂಧಿ, ಸಮಾಸ, ಕೃದಂತ, ತದ್ಧಿತಾಂತ, ಅವ್ಯಯ, ದ್ವಿರುಕ್ತಿ, ಜೋಡುನುಡಿ, ಪಡೆನುಡಿ, ನುಡಿಗಟ್ಟು, ಪದಗಳ ಅರ್ಥ, ಲೇಖನ ಚಿಹ್ನೆಗಳು, ವಾಕ್ಯ ಮತ್ತು ವಾಕ್ಯ ಪ್ರಕಾರಗಳು, ಪತ್ರಲೇಖನ, ಲಿಂಗ, ವಚನ, ವಿಭಕ್ತಿ ಮತ್ತು ವಿಭಕ್ತಿ ಪ್ರತ್ಯಯಗಳು.
- Synonyms – words with multiple meanings – antonyms
ಸಮನಾರ್ಥಕ-ನಾನಾರ್ಥಕ-ವಿರುದ್ಧಾರ್ಥಕ ಪದಗಳು
- Tatsama – Tadbhava
ತತ್ಸಮ-ತದ್ಭವ
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- Kannada language teaching methods / pedagogy: Values and objectives of teaching Kannada
ಕನ್ನಡ ಭಾಷಾ ಬೋಧನಾ ವಿಧಾನ / ಬೋಧನಾ ಶಾಸ್ತ್ರ: ಕನ್ನಡ ಬೋಧನೆಯ ಮೌಲ್ಯ ಮತ್ತು ಉದ್ದೇಶಗಳು
- Techniques for teaching language and the various literary forms
ಭಾಷೆ ಮತ್ತು ವಿವಿಧ ಸಾಹಿತ್ಯ ಪ್ರಕಾರಗಳ ಬೋಧನಾ ತಂತ್ರಗಳು
- Plans for teaching Kannada language and literature
ಕನ್ನಡ ಭಾಷೆ ಮತ್ತು ಸಾಹಿತ್ಯ ಬೋಧನೆಯ ಯೋಜನೆಗಳು
- Language skills – teaching of the skills
ಭಾಷಾ ಕೌಶಲಗಳು - ಕೌಶಲಗಳ ಬೋಧನೆ
- Teaching resources
ಬೋಧನಾ ಸಂಪನ್ಮೂಲಗಳು
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ಕನ್ನಡ ಭಾಷಾ ಬೋಧಕನ ಸಾಮಾನ್ಯ, ಶೈಕ್ಷಣಿಕ ಮತ್ತು ವೃತ್ತಿ ಅರ್ಹತೆಗಳು
- Methods of mother-tongue teaching
ಮಾತೃ ಭಾಷಾ ಬೋಧನಾ ಪದ್ಧತಿಗಳು
- Action research
ಕ್ರಿಯಾ ಸಂಶೋಧನೆ

Child Development and Pedagogy (compulsory) · 30 questions · 30 marks

Focused on the psychology of children aged 6–11 and on teaching and learning; includes what teachers should know to meet the needs of children from varied learning backgrounds and improve their learning levels.

CDP (Paper I & II) – Syllabus for child Development & Pedagogy

- Childhood
- Adolescence
- Learning

- Individual Differences
- Inclusive Education : Children with Special Needs
- Personality
- Mental Health
- Intelligence
- Growth and Development
- gender as a Social Construct
- Pedagogy
- Factors of Learning

Mathematics · 30 questions · 30 marks

Questions on Mathematics and EVS cover basic concepts of the subject, problem-solving ability and understanding of its pedagogy.

Mathematics syllabus Paper –1

- Number system –Natural numbers, whole numbers , Integers , Rational numbers , Irrational numbers , Real numbers. Playing with numbers
- Fractions and decimals –Types , Basic operations , conversion and applications in daily life.
- Square and square roots , cube and cube roots.
- Data handling –Types of data , Measures of central tendency , pictorial representation .
- Ratio and proportion–Ratio, proportions, types , direct proportion, inverse proportions , applications in daily life situations.
- Comparing quantities– percentage , profit and loss , discount , simple interest , compound interest , Sales tax , VAT , GST , mathematics in daily life
- Algebra – Basics of algebra , Algebraic expressions , operations on algebraic expressions , identities.
- Equations – Types of equations , Linear equation in one variable and two variables , pair of linear equations in two variables , applications in daily life situations , graphs.
- Exponents and powers.
- Factors and factorizations – Factors , factorisation , H.C.F and L.C.M ,
- Polynomials– types of polynomials , value of a polynomial, zeros of polynomials, factors theorem, remainder theorem.
- Introduction to Euclid's Geometry.
- Lines and angles.
- Triangles– concept , types of triangles, properties of triangles, congruency of triangles, theorems on triangles , Exterior angle theorem, Angle sum properties.
- Quadrilaterals–Concept , types of quadrilaterals and their properties , area and perimeter , theorems related to Quadrilateral and its types.
- Circles – Basic concepts on circles , theorems on circles , area and perimeter of circles , angles in circles, cyclic quadrilaterals.
- Constructions – Construction of angles , Triangles , Circles , Quadrilaterals and its types.
- Visualising solid shapes.
- Mensuration – Area and perimeter of 2 dimensional plane figures, surface area and volumes of 3 dimensional solids– Cube , cuboid, cylinder, Cone, frustum of a cone, sphere , Hemisphere , combination of solids , conversion of solids.
- Probability.

Environmental Studies (EVS) · 30 questions · 30 marks

For Paper I Science Reference books –CBSE, ICSE and State Syllabus books / High school syllabus (EVS)

10TH science

- Chemical reactions : Chemical equation, Balanced chemical equation, implication of a balanced chemical equation, types of chemical reactions : Combination, decomposition, displacement, double displacement, precipitation, neutralization, oxidation and reduction.
- Acids, bases and salts : Their definitions in terms of furnishing of H^+ and OH^- ions, General properties, examples and uses, concept of pH scale (Definition relating to logarithm not required), importance of pH in everyday life; preparation and uses of Sodium Hydroxide, Bleaching powder, Baking soda, Washing soda and Plaster of Paris.
- Metals and non-metals : Properties of metals and non-metals; Reactivity series; Formation and properties of ionic compounds; Basic metallurgical processes; Corrosion and its prevention. and non-metals : Properties of metals and non-metals; Reactivity series; Formation and properties of ionic compounds; Basic metallurgical processes;
- Carbon and Its compounds : Covalent bonding in carbon compounds. Versatile nature of carbon. Homologous series. Nomenclature of carbon compounds containing functional groups (halogens, alcohol, ketones, aldehydes, alkanes and alkynes), difference between saturated hydrocarbons and unsaturated hydrocarbons. Chemical properties of carbon compounds (combustion, oxidation, addition and substitution reaction). Ethanol and Ethanoic acid (only properties and uses), soaps and detergents .
- Periodic classification of elements : Need for classification, Early attempts at classification of elements (Döbereiner's Triads, Newland's Law of Octaves, Mendeleev's Periodic Table), Modern periodic table, gradation in properties, valency, atomic number, metallic and non-metallic properties. Corrosion and its prevention.
- Life processes : 'Living Being'. Basic concept of nutrition, respiration, transport and excretion in plants and animals.
- Control and co-ordination in animals and plants : Topic movements in plants; Introduction of plant hormones; Control and co-ordination in animals; Nervous system; Voluntary, involuntary and reflex action;
- Chemical co-ordination: animal hormones. Control and co-ordination in animals and plants : Topic movements in plants;
- Reproduction: Reproduction in animals and plants (asexual and sexual) reproductive health-need and methods of family planning. Safe sex vs HIV / AIDS. Child bearing and women's health.
- Heredity and Evolution : Heredity; Mendel's contribution – Laws for inheritance of traits : Sex determination : brief introduction; Basic concepts of evolution.
- Reflection of light by curved surfaces; Images formed by spherical mirrors, centre of curvature, principal axis, principal focus, focal length, mirror formula (Derivation not required), magnification. Refraction; Laws of refraction, refractive index. Refraction of light by spherical lens; Image formed by spherical lenses; Lens formula (Derivation not required); Magnification. Power of a lens.
- Functioning of a lens in human eye, defects of vision and their corrections, applications of spherical mirrors and lenses. Refraction of light through a prism, dispersion of light, scattering of light, applications in daily life.
- Electric current, potential difference and electric current. Ohm's law; Resistance, resistivity, Factors on which the resistance of a conductor depends. Series combination of resistors, parallel combination of resistors and its applications in daily life. Heating effect of electric current and its applications in daily life. Electric power, Interrelation between P, V, I and R.
- Magnetic effects of current : Magnetic field, field lines, field due to a current carrying conductor, field due to current carrying coil or solenoid; Force on current carrying conductor, Fleming's Left Hand

Rule, Electric Motor, Electromagnetic induction. Induced potential difference, Induced current. Fleming's Right Hand Rule, Electric Generator, Direct Current. Alternating current : frequency of AC. Advantage of AC over DC. Domestic electric circuits.

- Sources of energy : Different forms of energy, conventional and non-conventional sources of energy : Fossil fuels, solar energy; biogas; wind, water and tidal energy; Nuclear energy. Renewable versus non-renewable sources of Energy.
- Out environment: Eco-system and related terms, Environmental problems, food chain Ozone depletion, waste production and their solutions. Biodegradable and non-biodegradable substances.
- Management of natural resources : Conservation and judicious use of natural resources. Forest and wild life; Coal and Petroleum conservation. Examples of people's participation for conservation of natural resources. Big dams: advantages and limitations; alternatives, if any. Water harvesting. Sustainability of natural resources.

9 science

- Matter-Nature and Behaviour. Definition of matter; solid, liquid and gas; characteristics – shape, volume, density etc; change of state-melting (absorption of heat), freezing, evaporation (cooling by evaporation), condensation, sublimation. Nature of matter : Elements, compounds and mixtures. Heterogeneous homogenous mixtures, colloids and suspensions and their properties.
- Atoms and molecules: Law of chemical combinations, Atomic and molecular masses.
- Mole concept : Relationship of mole to mass of the particles and numbers and volume. Calculations related various formulae.
- Structure of atom in detail : Electrons, protons and neutrons, valency, chemical formula of common compounds. Isotopes and Isobars.
- Organization in the Living World Cell – Basic Unit of life, prokaryotic and eukaryotic cells, multicellular organisms; cell membrane and cell wall, cell organelles and cell inclusions; chloroplast, mitochondria, vacuoles, endoplasmic reticulum, Golgi apparatus; nucleus, chromosomes – basic structure and functions of cell organelles.
- Tissues, Organs, Organ System, Organism: Structure and functions of animal and plant tissues.
- Biological Diversity: Diversity of plants and animals – basic issues in scientific naming, basis of classification. Hierarchy of categories / groups, Major groups of plants (salient features) (Bacteria, Thallophyta, Bryophyta, Pteridophytes, Gymnosperms and Angiosperms). Major groups of animals (salient features) (Non-chordates up to phyla and chordates upto classes).
- Motion, Force and Work : Motion : Distance and displacement, velocity; uniform and non-uniform motion along a straight line; acceleration, distance-time and velocity-time graphs for uniform motion and uniformly accelerated motion, derivation of equations of motion by graphical method; elementary idea of uniform circular motion.
- Force and Newton's laws : Force and Motion, Newton's Laws of Motion, Action and reaction forces, Inertia of a body, Inertia and mass, Momentum, Force and Acceleration. Elementary idea of conservation of Momentum.
- Gravitation : Gravitation; Universal Law of Gravitation, Force of Gravitation of the earth (gravity), Acceleration due to Gravity; Mass and Weight; Free fall. Floatation : Thrust and Pressure. Archimedes' Principle; Buoyancy; Elementary Idea of Relative Density.
- Work, energy and power : Work done by a Force, Energy, Power; Kinetic and Potential energy; Law of conservation of energy.
- Sound : Nature of sound and its propagation in various media, speed of sound, range of hearing in humans; ultrasound; reflection of sound; echo and SONAR. Structure of the Human Ear. Calculations related to various concepts.

- Health and Diseases: Health and its failure. Infectious and Non-infectious diseases, their causes and manifestation. Diseases caused by microbes (Virus, Bacteria and Protozoans) and their prevention; Principles of treatment and prevention. Pulse Polio programmes.
- Natural resources :Air, Water, Soil. Air for respiration, for combustion, for moderating temperatures; movements of air and its role in bringing rains across India. Air, water and soil pollution (brief introduction). Holes in the ozone layer and the probable damages. Bio- geo-chemical cycles : Water, Oxygen, Carbon, and Nitrogen.
- Food production : Plant and animal breeding and selection for quality improvement and management; Use of fertilizers and manures; Protection from pests and diseases; Organic farming.

VI

- Plant parts and animals : products as sources of food; herbivores, carnivores, omnivores. Carbohydrates, fats, proteins, vitamins, minerals, fibres, their sources and significance for human health; balanced diet; diseases and disabilities due to food deficiencies.
- Separation techniques :Threshing, winnowing, hand picking, sedimentation, filtration.
- Different types of cloth, materials – cotton, wool, silk and synthetics. Development of clothing materials. Plant fibre, especially cotton and jute; production of cotton, jute and other locally available plant fibres; types of soil required for the growth of different fibrous plants.
- Grouping things on the basis of common properties: Some changes can be reversed and other can not be reversed.
- Solubility, saturated solutions. Amount of substance dissolving varies with temperature. At the same temperature amounts of different substances that dissolve varies.
- Living/non-living characteristics: habitat; biotic, abiotic (light, temperature, water, air, soil, fire) Habitat varies – aquatic, deserts, mountains etc. –plants and animals show adaptation; other plant part modifications like tendrils, thorns etc.
- Animals in deserts and water. Morphological structure and function of root, stem and leaves. Structure of the flower, differences.
- Structure and functions of the animal body; Human skeletal system, some other animals e.g. fish, bird, cockroach, snail.
- Need to measure distance (length). Measurement of length. Motion as change in position with time.
- Electric current: Electric circuit (current flows only when a cell and other components are connected in an unbroken loop) Conductor, Insulator.
- Magnets : Poles of a magnet. A freely suspended magnet always aligns in a particular direction. North and South poles. Like poles repel and unlike poles attract each other.
- Evaporation and condensation : water in different states. Water cycle.
- Light :Classification of various materials in terms of transparent, translucent and opaque, Shadow. Reflecting surfaces; images are different from shadows.
- Importance of water : dependence of the living on water. Droughts and floods.
- Habitat :Some animals and plants live in water; some live on land and some live in upper layers of soil; but all need air to breathe/to respire.
- Waste : Recycling of waste products; things that rot and things that don't. Rotting is supported by animals/animal and plant products.

CLASS VII SCIENCE

- Autotrophic and heterotrophic nutrition; parasites, saprophytes; photosynthesis. Types of nutrition, nutrition in amoeba and human beings, Digestive system – human, ruminants; types of teeth; link with transport and respiration.
- Wool, silk – animal fibres: Process of extraction of silk; associated health problems.

- Heat flow :Related concepts.
- Classification of substances : Acidic, basic and neutral substances ;indicators.
- Chemical substances and reactions – in a chemical reaction a new substance is formed. Substances can be separated by crystallisation.
- Climate, soil types, soil profile, absorption of water in soil, suitability for crops, adaptation of animals to different climates
- Respiration in plants and animals. Herbs, shrubs, trees; Transport of food and water in plants; circulatory and excretion system in animals; sweating.
- Vegetative, asexual and sexual reproduction in plants : pollination – cross, self-pollination; pollinators, fertilisation, fruit, seed.
- Appreciation of idea of time and need to measure it. Measurement of time using periodic events. Idea of speed of moving objects – slow and fast motion along a straight line.
- Electric circuit : symbols for different elements of circuit. Heating effect of current. Principle of fuse. A current-carrying wire has an effect on a magnet. A current-carrying coil behaves like a magnet. Working of an electric bell.
- High-speed winds and heavy rainfall have disastrous consequences for human and other life.
- Light :Rectilinear propagation of light. Reflection, certain surfaces reflect light. Real and virtual images. White light is composed of many colours.
- Water : Exists in various forms in nature. Scarcity of water and its effect on life.
- Interdependence of plants and animals in forests. Forests contribute to purification of air and water.
- Sewage; need for drainage/sewer systems that are closed and related concepts.

Class 8

- Crop production: Soil preparation, selection of seeds, sowing, applying fertilizers, irrigation, weeding, harvesting and storage; nitrogen fixation, nitrogen cycle.
- Micro-organisms – structure. classification, useful and harmful microbes.
- Synthetic clothing materials. Other synthetic materials, especially plastics; usefulness of plastics and problems associated with their excessive use.
- There are a variety of fibrous materials in use. A material is chosen based on desired property.
- Metals and non-metals. Physical and chemical properties.
- Combustion, flame : All fuels release heat on burning. Fuels differ in efficiency, cost etc. Natural resources are limited. Burning of fuels leads to harmful by products.
- Conservation of biodiversity/wild life/ plants; zoos, sanctuaries, forest reserves etc. flora, fauna endangered species, red data book; endemic and exotic species, migration.
- Cell structure, plant and animal cells, use of stain to observe, cell organelles – nucleus, vacuole, chloroplast, cell membrane, cell wall.
- Sexual reproduction and endocrine system in animals, secondary sexual characters, reproductive health; internal and external fertilisation.
- Idea of force-push or pull; change in speed, direction of moving objects and shape of objects by applying force; contact and non-contact forces.
- Friction – factors affecting friction, sliding and rolling friction, moving; advantages and disadvantages of friction for the movement of automobiles, airplanes and boats/ships; increasing and reducing friction.
- Idea of pressure; pressure exerted by air/liquid; atmospheric pressure.
- Various types of sound; sources of sound; vibration as a cause of sound; frequency; medium for propagation of sound; idea of noise as unpleasant and unwanted sound and need to minimise noise.

- Water conducts electricity depending on presence/ absence of salt in it. Other liquids may or may not conduct electricity. Chemical effects of current. Basic idea of electroplating.
- Clouds carry electric charge. Positive and negative charges, attraction and repulsion. Principle of lightning conductor.
- Laws of reflection. Characteristics of image formed with a plane mirror.
- Regular and diffused reflection. Reflection of light from an object to the eye. Multiple reflection. Dispersion of light. Structure of the eye. Lens becomes opaque, light not reaching the eye. Visually challenged use other senses to make sense of the world around. Alternative technology available. Role of nutrition in relation to blindness.
- Idea about heavenly bodies/celestial objects and their classification –moon, planets, stars, constellations. Motion of celestial objects in space; the solar system.
- Phenomena related to earthquakes in details .
- Natural resources :Consequences of deforestation: scarcity of products for humans and other living beings, change in physical properties of soil, reduced rainfall. Reforestation; recycling of paper. Formation of coal and petroleum in nature. Consequences of over extraction of coal and petroleum.
- Water and air are increasingly getting polluted and therefore become scarce for use.
- Biological and chemical contamination of water; effect of impure water on soil and living beings; effect of soil containing excess of fertilisers and insecticides on water resources. Potable water.

Social Studies – only for visually impaired candidates, in place of Mathematics and EVS · 60

questions · 60 marks

Syllabus: the same as the Paper 2 Social Studies syllabus below.

Paper 2 – Classes 6–8

Language I (compulsory) – e.g. Kannada · 30 questions · 30 marks

Questions on Language I are based on proficiency in the language of the medium of instruction.

Kannada – Syllabus, Subject: Kannada, Paper-1 and Paper-2

- Kannada language, literature and grammar: Origin of the Kannada language, stages of its development
ಕನ್ನಡ ಭಾಷೆ, ಸಾಹಿತ್ಯ ಮತ್ತು ವ್ಯಾಕರಣ: ಕನ್ನಡ ಭಾಷೆಯ ಉಗಮ, ಬೆಳವಣಿಗೆಯ ಹಂತಗಳು
- History of Kannada literature: Old Kannada (Halegannada), Middle Kannada (Nadugannada) and Modern Kannada (Hosagannada)
ಕನ್ನಡ ಸಾಹಿತ್ಯ ಚರಿತ್ರೆ: ಹಳಗನ್ನಡ, ನಡುಗನ್ನಡ, ಮತ್ತು ಹೊಸಗನ್ನಡ
- Grammar: alphabet, conjunct consonants (samyuktakshara), consonant-vowel combinations (gunitakshara), nouns, verbs, sandhi, samasa, krudanta, taddhitanta, indeclinables (avyaya), reduplication (dvirukti), paired words (jodunudi), echo words (padenudi), idioms (nudigattu), word meanings, punctuation marks, sentences and types of sentences, letter writing, gender, number, case (vibhakti) and case suffixes
ವ್ಯಾಕರಣ: ವರ್ಣಮಾಲೆ, ಸಂಯುಕ್ತಾಕ್ಷರ, ಗುಣಿತಾಕ್ಷರ, ನಾಮಪದ, ಕ್ರಿಯಾಪದ, ಸಂಧಿ, ಸಮಾಸ, ಕೃದಂತ, ತದ್ಧಿತಾಂತ, ಅವ್ಯಯ, ದ್ವಿರುಕ್ತಿ, ಜೋಡುನುಡಿ, ಪಡೆನುಡಿ, ನುಡಿಗಟ್ಟು, ಪದಗಳ ಅರ್ಥ, ಲೇಖನ ಚಿಹ್ನೆಗಳು, ವಾಕ್ಯ ಮತ್ತು ವಾಕ್ಯ ಪ್ರಕಾರಗಳು, ಪತ್ರಲೇಖನ, ಲಿಂಗ, ವಚನ, ವಿಭಕ್ತಿ ಮತ್ತು ವಿಭಕ್ತಿ ಪ್ರತ್ಯಯಗಳು.
- Synonyms – words with multiple meanings – antonyms
ಸಮನಾರ್ಥಕ-ನಾನಾರ್ಥಕ-ವಿರುದ್ಧಾರ್ಥಕ ಪದಗಳು
- Tatsama – Tadbhava
ತತ್ಸಮ-ತದ್ಭವ
- 'Alankara' (figures of speech) and 'Chandassu' (prosody)
'ಅಲಂಕಾರ' ಮತ್ತು 'ಚಂದಸ್ಸು'
- Kannada language teaching methods / pedagogy: Values and objectives of teaching Kannada

ಕನ್ನಡ ಭಾಷಾ ಬೋಧನಾ ವಿಧಾನ / ಬೋಧನಾ ಶಾಸ್ತ್ರ: ಕನ್ನಡ ಬೋಧನೆಯ ಮೌಲ್ಯ ಮತ್ತು ಉದ್ದೇಶಗಳು

- Techniques for teaching language and the various literary forms
ಭಾಷೆ ಮತ್ತು ವಿವಿಧ ಸಾಹಿತ್ಯ ಪ್ರಕಾರಗಳ ಬೋಧನಾ ತಂತ್ರಗಳು
- Plans for teaching Kannada language and literature
ಕನ್ನಡ ಭಾಷೆ ಮತ್ತು ಸಾಹಿತ್ಯ ಬೋಧನೆಯ ಯೋಜನೆಗಳು
- Language skills – teaching of the skills
ಭಾಷಾ ಕೌಶಲಗಳು - ಕೌಶಲಗಳ ಬೋಧನೆ
- Teaching resources
ಬೋಧನಾ ಸಂಪನ್ಮೂಲಗಳು
- Evaluation of language learning
ಭಾಷಾ ಕಲಿಕೆಯ ಮೌಲ್ಯಮಾಪನ
- General, academic and professional qualities of a Kannada language teacher
ಕನ್ನಡ ಭಾಷಾ ಬೋಧಕನ ಸಾಮಾನ್ಯ, ಶೈಕ್ಷಣಿಕ ಮತ್ತು ವೃತ್ತಿ ಅರ್ಹತೆಗಳು
- Methods of mother-tongue teaching
ಮಾತೃ ಭಾಷಾ ಬೋಧನಾ ಪದ್ಧತಿಗಳು
- Action research
ಕ್ರಿಯಾ ಸಂಶೋಧನೆ

English — 1. English Language I

- Language Comprehension Reading unseen passages – Answering the question based on the given unseen passage. (Prose, Drama or Poetry.)
- Pedagogy of Language Development: Learning and acquisition, Principles of language Teaching, Role of listening and Speaking, function of language and how children use it as a tool.
- Critical perspective on the role of grammar in learning a language for communicating ideas verbally and in written form.
- Challenges of teaching language in a diverse classroom and Language Skills.
- Teaching – learning Materials: Textbook, multi-media materials, multilingual resource of the classroom, Remedial Teaching.

Language II (compulsory) – e.g. English · 30 questions · 30 marks

Questions on Language II are based on the basic elements of that language, communication and comprehension ability.

English — 2. English Language II

- Language Comprehension Reading unseen passages – Answering the question based on the given unseen passage. (Prose, Drama or Poetry.)
- Pedagogy of Language Development: Learning and acquisition, Principles of language Teaching, Role of listening and Speaking, function of language and how children use it as a tool.
- Critical perspective on the role of grammar in learning a language for communicating ideas verbally and in written form.
- Challenges of teaching language in a diverse classroom and Language Skills.
- Teaching – learning Materials: Textbook, multi-media materials, multilingual resource of the classroom, Remedial Teaching.

Kannada — Syllabus, Subject: Kannada, Paper-1 and Paper-2 (same list as Language I)

- Kannada language, literature and grammar: Origin of the Kannada language, stages of its development
ಕನ್ನಡ ಭಾಷೆ, ಸಾಹಿತ್ಯ ಮತ್ತು ವ್ಯಾಕರಣ: ಕನ್ನಡ ಭಾಷೆಯ ಉಗಮ, ಬೆಳವಣಿಗೆಯ ಹಂತಗಳು
- History of Kannada literature: Old Kannada (Halegannada), Middle Kannada (Nadugannada) and Modern Kannada (Hosagannada)
ಕನ್ನಡ ಸಾಹಿತ್ಯ ಚರಿತ್ರೆ: ಹಳಗನ್ನಡ, ನಡುಗನ್ನಡ, ಮತ್ತು ಹೊಸಗನ್ನಡ

- Grammar: alphabet, conjunct consonants (samyuktakshara), consonant-vowel combinations (gunitakshara), nouns, verbs, sandhi, samasa, krudanta, taddhitanta, indeclinables (avyaya), reduplication (dvirukti), paired words (jodunudi), echo words (padenudi), idioms (nudigattu), word meanings, punctuation marks, sentences and types of sentences, letter writing, gender, number, case (vibhakti) and case suffixes

ವ್ಯಾಕರಣ: ವರ್ಣಮಾಲೆ, ಸಂಯುಕ್ತಾಕ್ಷರ, ಗುಣಿತಾಕ್ಷರ, ನಾಮಪದ, ಕ್ರಿಯಾಪದ, ಸಂಧಿ, ಸಮಾಸ, ಕೃದಂತ, ತದ್ಧಿತಾಂತ, ಅವ್ಯಯ, ದ್ವಿರುಕ್ತಿ, ಜೋಡುನುಡಿ, ಪಡೆನುಡಿ, ನುಡಿಗಟ್ಟು, ಪದಗಳ ಅರ್ಥ, ಲೇಖನ ಚಿಹ್ನೆಗಳು, ವಾಕ್ಯ ಮತ್ತು ವಾಕ್ಯ ಪ್ರಕಾರಗಳು, ಪತ್ರಲೇಖನ, ಲಿಂಗ, ವಚನ, ವಿಭಕ್ತಿ ಮತ್ತು ವಿಭಕ್ತಿ ಪ್ರತ್ಯಯಗಳು.

- Synonyms – words with multiple meanings – antonyms
ಸಮನಾರ್ಥಕ-ನಾನಾರ್ಥಕ-ವಿರುದ್ಧಾರ್ಥಕ ಪದಗಳು
- Tatsama – Tadbhava
ತತ್ಸಮ-ತದ್ಭವ
- 'Alankara' (figures of speech) and 'Chandassu' (prosody)
'ಅಲಂಕಾರ' ಮತ್ತು 'ಚಂದಸ್ಸು'
- Kannada language teaching methods / pedagogy: Values and objectives of teaching Kannada
ಕನ್ನಡ ಭಾಷಾ ಬೋಧನಾ ವಿಧಾನ / ಬೋಧನಾ ಶಾಸ್ತ್ರ: ಕನ್ನಡ ಬೋಧನೆಯ ಮೌಲ್ಯ ಮತ್ತು ಉದ್ದೇಶಗಳು
- Techniques for teaching language and the various literary forms
ಭಾಷೆ ಮತ್ತು ವಿವಿಧ ಸಾಹಿತ್ಯ ಪ್ರಕಾರಗಳ ಬೋಧನಾ ತಂತ್ರಗಳು
- Plans for teaching Kannada language and literature
ಕನ್ನಡ ಭಾಷೆ ಮತ್ತು ಸಾಹಿತ್ಯ ಬೋಧನೆಯ ಯೋಜನೆಗಳು
- Language skills – teaching of the skills
ಭಾಷಾ ಕೌಶಲಗಳು - ಕೌಶಲಗಳ ಬೋಧನೆ
- Teaching resources
ಬೋಧನಾ ಸಂಪನ್ಮೂಲಗಳು
- Evaluation of language learning
ಭಾಷಾ ಕಲಿಕೆಯ ಮೌಲ್ಯಮಾಪನ
- General, academic and professional qualities of a Kannada language teacher
ಕನ್ನಡ ಭಾಷಾ ಬೋಧಕನ ಸಾಮಾನ್ಯ, ಶೈಕ್ಷಣಿಕ ಮತ್ತು ವೃತ್ತಿ ಅರ್ಹತೆಗಳು
- Methods of mother-tongue teaching
ಮಾತೃ ಭಾಷಾ ಬೋಧನಾ ಪದ್ಧತಿಗಳು
- Action research
ಕ್ರಿಯಾ ಸಂಶೋಧನೆ

Child Development and Pedagogy (compulsory) · 30 questions · 30 marks

Focused on the psychology of children aged 11-14 and on teaching and learning.

CDP (Paper I & II) – Syllabus for child Development & Pedagogy

- Childhood
- Adolescence
- Learning
- Individual Differences
- Inclusive Education : Children with Special Needs
- Personality
- Mental Health
- Intelligence
- Growth and Development
- gender as a Social Construct
- Pedagogy
- Factors of Learning

Mathematics and Science (for Mathematics and Science teachers) · 60 questions · 60 marks

30 questions each in Mathematics and Science

Mathematics · 30 questions

Mathematics syllabus Paper –2

- Number system –Natural numbers, whole numbers , Integers , Rational numbers , Irrational numbers , Real numbers. Euclid's division lemma , Fundamental theorem of arithmetic , prime factorisation , HCF and LCM.
- Fractions and decimals – Types of fractions , Basic operations , conversions and applications in daily life.
- Square and square roots , cube and cube roots.
- Data handling – Types of data , Measures of central tendency , pictorial representation .
- Ratio and proportion–Ratio, proportions , types , direct proportion, inverse proportions , application examples in daily life situations.
- Comparing quantities– percentage , profit and loss , discount , simple interest , compound interest , Sales tax , VAT , GST , mathematics in daily life
- Arithmetic progression.
- Algebra – Basics of algebra , operations on Algebraic expressions and identities.
- Equations – Types , Linear equation in one variable and two variables , pair of linear equations in two variables , Quadratic equations.
- Exponents and powers.
- Factors and factorizations – Factors , factorisation , H.C.F and L.C.M
- Polynomials– types of polynomials , the value of a polynomial, zeros of polynomials, factorization of polynomials, division of polynomials, factors theorem, remainder theorem, HCF and LCM. , division of polynomials.
- Trigonometry and applications of trigonometry
- Introduction to Euclid's Geometry.
- Lines and angles.
- Coordinate geometry.
- Triangles– types of triangles, properties of triangles, congruence of triangles, similarity of triangles , area of triangles , theorems on triangle , Exterior angle theorem, Angle sum properties , Heron's formula.
- Constructions – Construction of angles , Triangles , Circles , Quadrilaterals and its types , division of line segment , construction of similar triangles.
- Quadrilaterals– Types of quadrilaterals and their properties , area and perimeter , theorems related to Quadrilateral and its types.
- Circles – Basic concepts on circles , theorems on circles , area and perimeter of circles , angles in circles, areas related to circles , cyclic quadrilaterals.
- Visualising solid shapes.
- Mensuration – Area and perimeter of 2 dimensional plane figures, surface area and volumes of 3 dimensional solids– Cube ,cuboid, cylinder, Cone, frustum of a cone, sphere , Hemisphere , combination of solids , conversion of solids.
- Statistics and Probability.

Science · 30 questions

For Paper –II : Syllabus up to 12 standard

Physics 11 — Unit I: Physical World and Measurement

Chapter–1: Physical World

- Physics–scope and excitement; nature of physical laws, physics, technology and society.

Chapter–2: Units and Measurements

- Need for measurement: Units of measurement; systems of units; SI units, fundamental and derived units. Length, mass and time measurements; accuracy and precision of measuring instruments; errors in measurement; significant figures.
- Dimensions of physical quantities, dimensional analysis and its applications.

Physics 11 — Unit II: Kinematics

Chapter–3: Motion in a Straight Line

- Frame of reference, Motion in a straight line: Position–time graph, speed and velocity.
- Elementary concepts of differentiation and integration for describing motion, uniform and non–uniform motion, average speed and instantaneous velocity, uniformly accelerated motion, velocity – time and position–time graphs.
- Relations for uniformly accelerated motion (graphical treatment).

Chapter–4: Motion in a Plane

- Scalar and vector quantities; position and displacement vectors, general vectors and their notations; equality of vectors, multiplication of vectors by a real number; addition and subtraction of vectors, relative velocity, Unit vector; resolution of a vector in a plane, rectangular components, Scalar and Vector product of vectors.
- Motion in a plane, cases of uniform velocity and uniform acceleration projectile motion, uniform circular motion.

Physics 11 — Unit III: Laws of Motion

Chapter–5: Laws of Motion

- Intuitive concept of force, Inertia, Newton's first law of motion; momentum and Newton's second law of motion; impulse; Newton's third law of motion.
- Law of conservation of linear momentum and its applications.
- Equilibrium of concurrent forces, Static and kinetic friction, laws of friction, rolling friction, lubrication.
- Dynamics of uniform circular motion: Centripetal force, examples of circular motion (vehicle on a level circular road, vehicle on a banked road).

Physics 11 — Unit IV: Work, Energy and Power

Chapter–6: Work, Energy and Power

- Work done by a constant force and a variable force; kinetic energy, work energy theorem, power.
- Notion of potential energy, potential energy of a spring, conservative forces: conservation of mechanical energy (kinetic and potential energies); non conservative forces: motion in a vertical circle; elastic and inelastic collisions in one and two dimensions.

Physics 11 — Unit V: Motion of System of Particles and Rigid Body

Chapter–7: System of Particles and Rotational Motion

- Centre of mass of a two–particle system, momentum conservation and centre of mass motion. Centre of mass of a rigid body; centre of mass of a uniform rod. Moment of a force, torque, angular momentum, law of conservation of angular momentum and its applications. Equilibrium of rigid bodies, rigid body rotation and equations of rotational motion, comparison of linear and rotational motions. Moment of inertia, radius of gyration, values of moments of inertia for simple geometrical

objects (no derivation). Statement of parallel and perpendicular axes theorems and their applications.

Physics 11 — Unit VI: Gravitation

Chapter–8: Gravitation

- Kepler's laws of planetary motion, universal law of gravitation. Acceleration due to gravity and its variation with altitude and depth.
- Gravitational potential energy and gravitational potential, escape velocity, orbital velocity of a satellite, Geo-stationary satellites.

Physics 11 — Unit VII: Properties of Bulk Matter

Chapter–9: Mechanical Properties of Solids

- Elastic behaviour, Stress-strain relationship, Hooke's law, Young's modulus, bulk modulus, shear modulus of rigidity, Poisson's ratio; elastic energy.

Chapter–10: Mechanical Properties of Fluids

- Pressure due to a fluid column; Pascal's law and its applications (hydraulic lift and hydraulic brakes), effect of gravity on fluid pressure.
- Viscosity, Stokes' law, terminal velocity, streamline and turbulent flow, critical velocity, Bernoulli's theorem and its applications.
- Surface energy and surface tension, angle of contact, excess of pressure across a curved surface, application of surface tension ideas to drops, bubbles and capillary rise.

Chapter–11: Thermal Properties of Matter

- Heat, temperature, thermal expansion; thermal expansion of solids, liquids and gases, anomalous expansion of water; specific heat capacity; C_p , C_v – calorimetry; change of state – latent heat capacity.
- Heat transfer–conduction, convection and radiation, thermal conductivity, qualitative ideas of Blackbody radiation, Wein's displacement Law, Stefan's law, Greenhouse effect.

Physics 11 — Unit VIII: Thermodynamics

Chapter–12: Thermodynamics

- Thermal equilibrium and definition of temperature (zeroth law of thermodynamics), heat, work and internal energy. First law of thermodynamics, isothermal and adiabatic processes.
- Second law of thermodynamics: reversible and irreversible processes, Heat engine and refrigerator.

Physics 11 — Unit IX: Behaviour of Perfect Gases and Kinetic Theory of Gases

Chapter–13: Kinetic Theory

- Equation of state of a perfect gas, work done in compressing a gas.
- Kinetic theory of gases – assumptions, concept of pressure. Kinetic interpretation of temperature; rms speed of gas molecules; degrees of freedom, law of equi-partition of energy (statement only) and application to specific heat capacities of gases; concept of mean free path, Avogadro's number.

Physics 11 — Unit X: Oscillations and Waves

Chapter–14: Oscillations

- Periodic motion – time period, frequency displacement as a function of time, periodic functions.
- Simple harmonic motion (S.H.M) and its equation; phase; oscillations of a loaded spring– restoring force and force constant; energy in S.H.M. Kinetic and potential energies; simple pendulum derivation of expression for its time period. Free, forced and damped oscillations (qualitative ideas only), resonance.

Chapter–15: Waves

- Wave motion: Transverse and longitudinal waves, speed of travelling wave, displacement relation for a progressive wave, principle of superposition of waves, reflection of waves, standing waves in strings and organ pipes, fundamental mode and harmonics, Beats, Doppler effect.

Physics CLASS XII — 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.

Physics CLASS XII — Unit II: Current Electricity 18 Periods

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.

Physics CLASS XII — 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 (only qualitative treatment), 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.

Physics CLASS XII — Unit IV: Electromagnetic Induction and Alternating Currents 20 Periods

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, power factor, wattless current.
- AC generator and transformer.

Physics CLASS XII — 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.

Physics CLASS XII — 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, refraction of light through a prism.
- Scattering of light – blue colour of sky and reddish appearance 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 microscope and astronomical telescope, polarisation, plane polarised light, Brewster's law, uses of plane polarised light and Polaroids.

Physics CLASS XII — Unit VII: Dual Nature of Radiation and Matter

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

Physics CLASS XII — Unit VIII: Atoms and 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, Radioactivity, alpha, beta and gamma particles/rays and their properties; radioactive decay law, half life and mean life.
- Mass-energy relation, mass defect; binding energy per nucleon and its variation with mass number; nuclear fission, nuclear fusion.

Physics CLASS XII – 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.

Unit I: Some Basic Concepts of Chemistry

- General Introduction: Importance and scope of chemistry.
- Nature of matter, laws of chemical combination, Dalton's atomic theory: concept of elements, atoms and molecules.
- Atomic and molecular masses, mole concept and molar mass, percentage composition, empirical and molecular formula, chemical reactions, stoichiometry and calculations based on stoichiometry.

Unit II: Structure of Atom

- Discovery of Electron, Proton and Neutron, atomic number, isotopes and isobars. Thomson's model and its limitations. Rutherford's model and its limitations, Bohr's model and its limitations, concept of shells and subshells, dual nature of matter and light, de Broglie's relationship, Heisenberg uncertainty principle, concept of orbitals, quantum numbers, shapes of s, p and d orbitals, rules for filling electrons in orbitals – Aufbau principle, Pauli's exclusion principle and Hund's rule, electronic configuration of atoms, stability of half filled and completely filled orbitals.

Unit III: Classification of Elements and Periodicity in Properties

- Significance of classification, brief history of the development of periodic table, modern periodic law and the present form of periodic table, periodic trends in properties of elements –atomic radii, ionic radii, inert gas radii, Ionization enthalpy, electron gain enthalpy, electro negativity, valency. Nomenclature of elements with atomic number greater than 100.

Unit IV: Chemical Bonding and Molecular structure

- Valence electrons, ionic bond, covalent bond, bond parameters, Lewis structure, polar character of covalent bond, covalent character of ionic bond, valence bond theory, resonance, geometry of covalent molecules, VSEPR theory, concept of hybridization, involving s, p and d orbitals and shapes of some simple molecules, molecular orbital theory of homo nuclear diatomic molecules(qualitative idea only), hydrogen bond.

Unit V: States of Matter: Gases and Liquids

- Three states of matter, intermolecular interactions, types of bonding, melting and boiling points, role of gas laws in elucidating the concept of the molecule, Boyle's law, Charles law, Gay Lussac's law, Avogadro's law, ideal behaviour, empirical derivation of gas equation, Avogadro's number, ideal gas equation.
- Deviation from ideal behaviour, liquefaction of gases, critical temperature, kinetic energy and molecular speeds (elementary idea), Liquid State- vapour pressure, viscosity and surface tension

(qualitative idea only, no mathematical derivations)

Unit VI: Chemical Thermodynamics

- Concepts of System and types of systems, surroundings, work, heat, energy, extensive and intensive properties, state functions.
- First law of thermodynamics –internal energy and enthalpy, heat capacity and specific heat, measurement of ΔU and ΔH , Hess's law of constant heat summation, enthalpy of bond dissociation, combustion, formation, atomization, sublimation, phase transition, ionization, solution and dilution.
- Second law of Thermodynamics (brief introduction) Introduction of entropy as a state function, Gibb's energy change for spontaneous and non spontaneous processes, criteria for equilibrium.
- Third law of thermodynamics (brief introduction).

Unit VII: Equilibrium

- Equilibrium in physical and chemical processes, dynamic nature of equilibrium, law of mass action, equilibrium constant, factors affecting equilibrium – Le Chatelier's principle, ionic equilibrium– ionization of acids and bases, strong and weak electrolytes, degree of ionization, ionization of poly basic acids, acid strength, concept of pH, Henderson Equation, hydrolysis of salts (elementary idea), buffer solution, solubility product, common ion effect (with illustrative examples).

Unit VIII: Redox Reactions

- Concept of oxidation and reduction, redox reactions, oxidation number, balancing redox reactions, in terms of loss and gain of electrons and change in oxidation number, applications of redox reactions.

Unit IX: Hydrogen

- Position of hydrogen in periodic table, occurrence, isotopes, preparation, properties and uses of hydrogen, hydrides–ionic covalent and interstitial; physical and chemical properties of water, heavy water, hydrogen peroxide –preparation, reactions and structure and use; hydrogen as a fuel.

Unit X: s-Block Elements (Alkali and Alkaline Earth Metals)

- Group 1 and Group 2 Elements
- General introduction, electronic configuration, occurrence, anomalous properties of the first element of each group, diagonal relationship, trends in the variation of properties (such as ionization enthalpy, atomic and ionic radii), trends in chemical reactivity with oxygen, water, hydrogen and halogens, uses.
- Preparation and Properties of Some Important Compounds: Sodium Carbonate, Sodium Chloride, Sodium Hydroxide and Sodium Hydrogen carbonate, Biological importance of Sodium and Potassium.
- Calcium Oxide and Calcium Carbonate and their industrial uses, biological importance of Magnesium and Calcium.

Unit XI: Some p –Block Elements

- General Introduction to p –Block Elements
- Group 13 Elements: General introduction, electronic configuration, occurrence, variation of properties, oxidation states, trends in chemical reactivity, anomalous properties of first element of the group, Boron – physical and chemical properties, some important compounds, Borax, Boric acid, Boron Hydrides, Aluminium: Reactions with acids and alkalis, uses.
- Group 14 Elements: General introduction, electronic configuration, occurrence, variation of properties, oxidation states, trends in chemical reactivity, anomalous behaviour of first elements. Carbon– catenation, allotropic forms, physical and chemical properties; uses of some important compounds: oxides. Important compounds of Silicon and a few uses: Silicon Tetrachloride, Silicones, Silicates and Zeolites, their uses.

Unit XII: Organic Chemistry –Some Basic Principles and Technique

- General introduction, methods of purification, qualitative and quantitative analysis, classification and IUPAC nomenclature of organic compounds.
- Electronic displacements in a covalent bond: inductive effect, electromeric effect, resonance and hyper conjugation.
- Homolytic and heterolytic fission of a covalent bond: free radicals, carbocations, carbanions, electrophiles and nucleophiles, types of organic reactions.

Unit XIII: Hydrocarbons Classification of Hydrocarbons

- Aliphatic Hydrocarbons: Alkanes – Nomenclature, isomerism, conformation (ethane only), physical properties, chemical reactions including free radical mechanism of halogenation, combustion and pyrolysis.
- Alkenes – Nomenclature, structure of double bond (ethene), geometrical isomerism, physical properties, methods of preparation, chemical reactions: addition of hydrogen, halogen, water, hydrogen halides (Markownikov's addition and peroxide effect), ozonolysis, oxidation, mechanism of electrophilic addition.
- Alkynes – Nomenclature, structure of triple bond (ethyne), physical properties, methods of preparation, chemical reactions: acidic character of alkynes, addition reaction of – hydrogen, halogens, hydrogen halides and water.
- Aromatic Hydrocarbons: Introduction, IUPAC nomenclature, benzene: resonance, aromaticity; chemical properties: mechanism of electrophilic substitution. Nitration, sulphonation, halogenation, Friedel Craft's alkylation and acylation, directive influence of functional group in mono substituted benzene. Carcinogenicity and toxicity.

Unit XIV: Environmental Chemistry

- Environmental pollution – air, water and soil pollution, chemical reactions in atmosphere, smog, major atmospheric pollutants, acid rain, ozone and its reactions, effects of depletion of ozone layer, greenhouse effect and global warming– pollution due to industrial wastes, green chemistry as an alternative tool for reducing pollution, strategies for control of environmental pollution

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 and 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, Arrhenius equation.

Unit V: Surface Chemistry

- Adsorption – physisorption and chemisorption, factors affecting adsorption of gases on solids, catalysis, homogeneous and heterogeneous activity and selectivity; enzyme catalysis colloidal distinction between true solutions, colloids and suspension; lyophilic, lyophobic multi-molecular 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 O8 Periods

- 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 and 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 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, Sulphur – allotropic forms; compounds of Sulphur: 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 $K_2Cr_2O_7$ and $KMnO_4$.
- 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 stereoisomerism, 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).
- Uses and environmental effects of – dichloromethane, trichloromethane, tetrachloromethane, iodoform, freons, DDT.

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, electrophilic 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 nucleophilic addition, reactivity of α -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 text.
- Diazonium salts: Preparation, chemical reactions and importance in synthetic organic chemistry.

Unit XIV: Biomolecules

- Carbohydrates – Classification (aldoses and ketoses), monosaccharides (glucose and fructose), D–L configuration oligosaccharides (sucrose, lactose, maltose), polysaccharides (starch, cellulose, glycogen); Importance of carbohydrates.
- Proteins – Elementary idea of – 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 – preservatives, artificial sweetening agents, elementary idea of antioxidants.
- Cleansing agents – soaps and detergents, cleansing action.

I. Diversity in Living World

- What is living?; Biodiversity; Need for classification; Three domain of life; Taxonomy & Systematics; Concept of species and taxonomical hierarchy; Binomial nomenclature; Tools for study of Taxonomy– Museums, Zoos, Herbaria, Botanical gardens.
- Five kingdom classification; Salient features and classification of Monera; Protista and Fungi into major groups; Lichens; Viruses and Viroids.
- Salient features and classification of plants into major groups– Algae, Bryophytes, Pteridophytes, Gymnosperm and Angiosperm (three to five salient and distinguishing features and at least two examples of each category); Angiosperms– classification up to class, characteristic features and examples.
- Salient features and classification of animals– non chordate up to phyla level and chordate up to classes level (three to five salient features and at least two examples).

II. Structural Organisation in Animals and Plants

- Morphology and modifications; Tissues; Anatomy and functions of different parts of flowering plants: Root, stem, leaf, inflorescence– cymose and racemose, flower, fruit and seed (To be dealt along with the relevant practical of the Practical Syllabus).
- Animal tissues; Morphology, anatomy and functions of different systems (digestive, circulatory, respiratory, nervous and reproductive) of an insect (cockroach).

III. Cell Structure and Function

- Cell theory and cell as the basic unit of life; Structure of prokaryotic and eukaryotic cell; Plant cell and animal cell; Cell envelope, cell membrane, cell wall; Cell organelles– structure and function; Endomembrane system– endoplasmic reticulum, Golgi bodies, lysosomes, vacuoles; mitochondria, ribosomes, plastids, microbodies; Cytoskeleton, cilia, flagella, centrioles (ultra structure and function); Nucleus–nuclear membrane, chromatin, nucleolus.
- Chemical constituents of living cells: Biomolecules–structure and function of proteins, carbohydrates, lipid, nucleic acids; Enzymes–types, properties, enzyme action.
- Cell division : Cell cycle, mitosis, meiosis and their significance.

IV. Plant Physiology

- Transport in plants: Movement of water, gases and nutrients; Cell to cell transport– Diffusion, facilitated diffusion, active transport; Plant – water relations– Imbibition, water potential, osmosis, plasmolysis; Long distance transport of water– Absorption, apoplast, symplast, transpiration pull, root pressure and guttation; Transpiration– Opening and closing of stomata; Uptake and translocation of mineral nutrients– Transport of food, phloem transport, Mass flow hypothesis; Diffusion of gases
- Mineral nutrition: Essential minerals, macro and micronutrients and their role; Deficiency symptoms; Mineral toxicity; Elementary idea of Hydroponics as a method to study mineral nutrition; Nitrogen metabolism – Nitrogen cycle, biological nitrogen fixation.
- Photosynthesis: Photosynthesis as a means of Autotrophic nutrition; Where does photosynthesis take place; How many pigments are involved in Photosynthesis (Elementary idea); Photochemical and biosynthetic phases of photosynthesis; Cyclic and non cyclic photophosphorylation; Chemiosmotic hypothesis; Photorespiration; C₃ and C₄ pathways; Factors affecting photosynthesis.
- Respiration: Exchange of gases; Cellular respiration – glycolysis, fermentation (anaerobic), TCA cycle and electron transport system (aerobic); Energy relations – Number of ATP molecules generated; Amphibolic pathways; Respiratory quotient.

- Plant growth and development: Seed germination; Phases of plant growth and plant growth rate; Conditions of growth; Differentiation, dedifferentiation and redifferentiation; Sequence of developmental process in a plant cell; Growth regulators—auxin, gibberellin, cytokinin, ethylene, ABA; Seed dormancy; Vernalisation; Photoperiodism.

V. Human Physiology

- Digestion and absorption: Alimentary canal and digestive glands; Role of digestive enzymes and gastrointestinal hormones; Peristalsis, digestion, absorption and assimilation of proteins, carbohydrates and fats; Calorific value of proteins, carbohydrates and fats (for box item not to be evaluated); Egestion; Nutritional and digestive disorders— PEM, indigestion, constipation, vomiting, jaundice, diarrhea.
- Breathing and Respiration: Respiratory organs in animals (recall only); Respiratory system in humans; Mechanism of breathing and its regulation in humans— Exchange of gases, transport of gases and regulation of respiration, Respiratory volumes; Disorders related to respiration—Asthma, Emphysema, Occupational respiratory disorders.
- Body fluids and circulation: Composition of blood, blood groups, coagulation of blood; Composition of lymph and its function; Human circulatory system— Structure of human heart and blood vessels; Cardiac cycle, cardiac output, ECG; Double circulation; Regulation of cardiac activity; Disorders of circulatory system—Hypertension, Coronary artery disease, Angina pectoris, Heart failure.
- Excretory products and their elimination: Modes of excretion – Ammonotelism, ureotelism, uricotelism; Human excretory system—structure and function; Urine formation, Osmoregulation; Regulation of kidney function— Renin—angiotensin, Atrial Natriuretic Factor, ADH and Diabetes insipidus; Role of other organs in excretion; Disorders—Uraemia, Renal failure, Renal calculi, Nephritis; Dialysis and artificial kidney.
- Locomotion and Movement: Types of movement – ciliary, flagellar, muscular; Skeletal muscle – contractile proteins and muscle contraction; Skeletal system and its functions (To be dealt with the relevant practical of Practical syllabus); Joints; Disorders of muscular and skeletal system— Myasthenia gravis, Tetany, Muscular dystrophy, Arthritis, Osteoporosis, Gout.
- Neural control and coordination: Neuron and nerves; Nervous system in humans— central nervous system, peripheral nervous system and visceral nervous system; Generation and conduction of nerve impulse; Reflex action; Sensory perception; Sense organs; Elementary structure and function of eye and ear.
- Chemical coordination and regulation: Endocrine glands and hormones; Human endocrine system—Hypothalamus, Pituitary, Pineal, Thyroid, Parathyroid, Adrenal, Pancreas, Gonads; Mechanism of hormone action (Elementary Idea); Role of hormones as messengers and regulators, Hypo—and hyperactivity and related disorders (Common disorders e.g. Dwarfism, Acromegaly, Cretinism, goiter, exophthalmic goiter, diabetes, Addison's disease).

I. Reproduction

- Reproduction in organisms: Reproduction, a characteristic feature of all organisms for continuation of species; Modes of reproduction – Asexual and sexual; Asexual reproduction; Modes— Binary fission, sporulation, budding, gemmule, fragmentation; vegetative propagation in plants.
- Sexual reproduction in flowering plants: Flower structure; Development of male and female gametophytes; Pollination—types, agencies and examples; Outbreeding 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.

- 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).
- 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)

II. Genetics and Evolution

- Heredity 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 disorders in humans– Thalassaemia; Chromosomal disorders in humans; Down's syndrome, Turner's and Klinefelter's syndromes.
- 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 genome project; DNA finger printing.
- 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

III Biology and Human Welfare

- Health and Disease: Pathogens; parasites causing human diseases (Malaria, Filariasis, Ascariasis, Typhoid, Pneumonia, common cold, amoebiasis, ring worm); Basic concepts of immunology– vaccines; Cancer, HIV and AIDs; Adolescence, drug and alcohol abuse.
- Improvement in food production: Plant breeding, tissue culture, single cell protein, Biofortification; Apiculture and Animal husbandry.
- Microbes in human welfare: In household food processing, industrial production, sewage treatment, energy generation and as biocontrol agents and biofertilizers.

IV Biotechnology and Its Applications

- Principles and process of Biotechnology: Genetic engineering (Recombinant DNA technology). 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.

V Ecology and environment

- 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.
- Ecosystems: Patterns, components; productivity and decomposition; Energy flow; Pyramids of number, biomass, energy; Nutrient cycling (carbon and phosphorous); Ecological succession; Ecological Services– Carbon fixation, pollination, oxygen release.

- 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 and sanctuaries.
- 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 global warming; Ozone depletion; Deforestation; Any three case studies as success stories addressing environmental issues.

Social Studies / Social Science (for Social Science teachers) · 60 questions · 60 marks

History Section

1. Sources

- Why are sources needed for writing history?
ಚರಿತ್ರೆ ರಚನೆಗೆ ಆಧಾರಗಳು ಏಕೆ ಬೇಕು?
- Importance and types of sources
ಆಧಾರಗಳ ಮಹತ್ವ, ವಿಧಗಳು
- Study of inscriptions
ಶಾಸನಗಳ ಅಧ್ಯಯನ
- Study of coins
ನಾಣ್ಯಗಳ ಅಧ್ಯಯನ
- Study of monuments and remains
ಸ್ಮಾರಕಗಳು ಮತ್ತು ಅವಶೇಷಗಳ ಅಧ್ಯಯನ
- Oral sources
ಮೌಖಿಕ ಆಧಾರಗಳು
- Legends / traditions
ಐತಿಹ್ಯಗಳು
- Role of sources in the reconstruction of history
ಇತಿಹಾಸ/ಚರಿತ್ರೆಯ ಪುನರ್‌ರಚನೆಯಲ್ಲಿ ಆಧಾರಗಳ ಪಾತ್ರ

2. Bharatavarsha

- Geographical features of India
ಭಾರತದ ಭೌಗೋಳಿಕ ಲಕ್ಷಣ
- Prehistoric period, or the pre-historic age
ಪ್ರಾಗೈತಿಹಾಸಿಕ ಕಾಲ ಅಥವಾ ಚರಿತ್ರೆಯ ಪೂರ್ವಕಾಲ
- Sites used for living
ಬದುಕಿಗಾಗಿ ಬಳಸಿಕೊಂಡ ತಾಣಗಳು
- Knowledge of fire
ಬೆಂಕಿಯ ಬಗೆಗಿನ ತಿಳಿವು
- Drawings found in caves
ಗುಹೆಗಳಲ್ಲಿ ಕಂಡು ಬರುವ ರೇಖಾಚಿತ್ರಗಳು
- The changing environment
ಬದಲಾಗುತ್ತಿರುವ ಪರಿಸರ

3. Ancient civilisations

- Sindhu-Saraswati civilisation
ಸಿಂಧೂ-ಸರಸ್ವತಿ ನಾಗರಿಕತೆ
- Egyptian civilisation
ಈಜಿಪ್ಟ್ ನಾಗರಿಕತೆ
- Mesopotamian civilisation
ಮೆಸಪಟೊಮಿಯಾ ನಾಗರಿಕತೆ

- Chinese civilisation
ಚೀನಾ ನಾಗರಿಕತೆ
- Greek and Roman civilisation
ಗ್ರೀಕ್ ಮತ್ತು ರೋಮನ್ ನಾಗರಿಕತೆ
- Civilisations of America
ಅಮೆರಿಕಾದ ನಾಗರಿಕತೆಗಳು

(unnumbered as printed; sits between 3 and 5). Sanatana Dharma

- Meaning and scope of Sanatana Dharma
ಸನಾತನ ಧರ್ಮದ ಅರ್ಥ ಮತ್ತು ವ್ಯಾಪ್ತಿ
- Meaning of Veda
ವೇದದ ಅರ್ಥ
- Classification of Vedic literature
ವೇದಸಾಹಿತ್ಯದ ವಿಂಗಡಣೆ
- Nature of the Vedas
ವೇದಗಳ ಸ್ವರೂಪ
- Astika and Nastika schools
ಆಸ್ತಿಕ ಮತ್ತು ನಾಸ್ತಿಕ ಪಂಥಗಳು
- Three divisions of Smriti literature
ಸ್ಮೃತಿಸಾಹಿತ್ಯದ ಮೂರು ವಿಭಾಗಗಳು
- Sects (matas) and their acharyas
ಮತಗಳು ಹಾಗೂ ಮತಾಚಾರ್ಯರು
- Beginning of idol worship
ವಿಗ್ರಹಾರಾಧನೆಯ ಪ್ರಾರಂಭ
- A diverse religion despite unity
ಐಕ್ಯ ಇದ್ದರೂ ವೈವಿಧ್ಯಮಯ ಧರ್ಮ

5. Jainism and Buddhism

- Jainism
ಜೈನ ಮತ
- The four principles taught by Parshvanatha
ಪಾರ್ಶ್ವನಾಥನು ಬೋಧಿಸಿದ ನಾಲ್ಕು ತತ್ವಗಳು
- Vardhamana Mahavira
ವರ್ಧಮಾನ ಮಹಾವೀರ
- Gautama Buddha
ಗೌತಮ ಬುದ್ಧ
- Their teachings, principles, sects and followers
ಇವರುಗಳ ಬೋಧನೆಗಳು, ತತ್ವಗಳು, ಪಂಥಗಳು, ಅನುಯಾಯಿಗಳು

6. Foreign invasion

- Alexander-Porus battle
ಅಲೆಗ್ಸಾಂಡರ್-ಪೊರವರ ಕದನ

7. India – our pride

- Bharata Khanda, Hindustan, India, Jambudvipa
ಭರತ ಖಂಡ, ಹಿಂದೂಸ್ತಾನ, ಇಂಡಿಯಾ, ಜಂಬೂದ್ವೀಪ
- Europeans who revealed India's grandeur
ಭಾರತದ ಭವ್ಯತೆಯನ್ನು ತೆರೆದಿಟ್ಟ ಯುರೋಪಿಯನ್ನರು
- Indians' contribution to the field of mathematics
ಗಣಿತ ಕ್ಷೇತ್ರಕ್ಕೆ ಭಾರತೀಯರ ಕೊಡುಗೆ
- Influence of Indian culture abroad

ವಿದೇಶಗಳಲ್ಲಿ ಭಾರತೀಯ ಸಂಸ್ಕೃತಿಯ ಪ್ರಭಾವ

- Timeless Indian values
ಸರ್ವಕಾಲಿಕ ಭಾರತೀಯ ಮೌಲ್ಯಗಳು

8. Our proud state Karnataka

- Administrative divisions: historical background, natural resources, agriculture, industry, art, literature, folklore, drama, music, dances, education, health, cultural wealth and freedom fighters.
ಆಡಳಿತ ವಿಭಾಗಗಳು :ಚಾರಿತ್ರಿಕ ಹಿನ್ನೆಲೆ,ಪ್ರಾಕೃತಿಕ ಸಂಪನ್ಮೂಲಗಳು, ಕೃಷಿ,ಉದ್ಯಮ, ಕಲೆ,ಸಾಹಿತ್ಯ,ಜಾನಪದ,ನಾಟಕ,ಸಂಗೀತ,ನೃತ್ಯಗಳು,ಶಿಕ್ಷಣ,ಆರೋಗ್ಯ,ಸಾಂಸ್ಕೃತಿಕ ಸಂಪತ್ತು ಮತ್ತು ಸ್ವಾತಂತ್ರ್ಯ ಹೋರಾಟಗಾರರು.

9. The Mauryas and the Kushanas

- The Mauryan empire
ಮೌರ್ಯ ಸಾಮ್ರಾಜ್ಯ
- The Kushanas
ಕುಶಾನರು
- Prominent kings and their achievements
ಪ್ರಮುಖ ಅರಸರು ಮತ್ತು ಅವರ ಸಾಧನೆಗಳು
- Administrative, social, religious and economic conditions
ಆಡಳಿತ,ಸಾಮಾಜಿಕ,ಧಾರ್ಮಿಕ ಮತ್ತು ಆರ್ಥಿಕ ಪರಿಸ್ಥಿತಿಗಳು
- Contributions to literature, art and architecture
ಸಾಹಿತ್ಯ, ಕಲೆ ಮತ್ತು ವಾಸ್ತುಶಿಲ್ಪಕ್ಕೆ ನೀಡಿರುವ ಕೊಡುಗೆಗಳು

10. The Guptas and the Vardhanas

- Prominent kings of the Guptas and Vardhanas and their achievements
ಗುಪ್ತರ ಮತ್ತು ವರ್ಧನರ ಪ್ರಮುಖ ಅರಸರು ಮತ್ತು ಸಾಧನೆಗಳು
- Administrative, social, religious and economic conditions
ಆಡಳಿತ,ಸಾಮಾಜಿಕ,ಧಾರ್ಮಿಕ ಮತ್ತು ಆರ್ಥಿಕ ಪರಿಸ್ಥಿತಿಗಳು
- Contributions to literature, art and architecture
ಸಾಹಿತ್ಯ, ಕಲೆ ಮತ್ತು ವಾಸ್ತುಶಿಲ್ಪಕ್ಕೆ ನೀಡಿರುವ ಕೊಡುಗೆಗಳು
- Visits of foreign travellers
ವಿದೇಶಿ ಪ್ರವಾಸಿಗರ ಭೇಟಿ

11. Ancient dynasties of South India

- Sangam literature, Sangam age
ಸಂಘಂ ಸಾಹಿತ್ಯ, ಸಂಘಂ ಯುಗ
- The Satavahanas
ಶಾತವಾಹನರು
- The Kadambas
ಕದಂಬರು
- The Gangas
ಗಂಗರು
- The Chalukyas of Badami
ಬಾದಾಮಿಯ ಚಾಲುಕ್ಯರು
- The Pallavas of Kanchi
ಕಂಚಿಯ ಪಲ್ಲವರು
- The Rashtrakutas of Manyakheta
ಮಾನ್ಯಖೇಟದ ರಾಷ್ಟ್ರಕೂಟರು
- The Chalukyas of Kalyana
ಕಲ್ಯಾಣದ ಚಾಲುಕ್ಯರು
- The Hoysalas of Dwarasamudra
ದ್ವಾರಸಮುದ್ರದ ಹೊಯ್ಸಳರು

- The Cholas, Cheras and Pandyas
ಚೋಳ,ಚೇರ ಮತ್ತು ಪಾಂಡ್ಯರು
- Administrative, social, religious and economic conditions of these dynasties; their contributions to literature, art and architecture
ಈ ಮನೆತನಗಳ ಆಡಳಿತ,ಸಾಮಾಜಿಕ, ಧಾರ್ಮಿಕ ಮತ್ತು ಆರ್ಥಿಕ ಪರಿಸ್ಥಿತಿಗಳು,ಸಾಹಿತ್ಯ, ಕಲೆ ಮತ್ತು ವಾಸ್ತುಶಿಲ್ಪಕ್ಕೆ ನೀಡಿರುವ ಕೊಡುಗೆಗಳು

12. Some dynasties of North India

- Ahom dynasty – administrative, social, religious and economic conditions of these dynasties; contributions to literature, art and architecture
ಅಹೋಮ ರಾಜವಂಶ-ಈ ಮನೆತನಗಳ ಆಡಳಿತ,ಸಾಮಾಜಿಕ, ಧಾರ್ಮಿಕ ಮತ್ತು ಆರ್ಥಿಕ ಪರಿಸ್ಥಿತಿಗಳು ಸಾಹಿತ್ಯ, ಕಲೆ ಮತ್ತು ವಾಸ್ತುಶಿಲ್ಪಕ್ಕೆ ನೀಡಿರುವ ಕೊಡುಗೆಗಳು

13. Invasions of the Arabs, Turks and Afghans

- The invasions and their consequences
ದಾಳಿಗಳು ಮತ್ತು ಅವುಗಳ ಪರಿಣಾಮಗಳು

14. India from the 6th to the 14th century (numeral as printed: ೬ ರಿಂದ ೧೪)

- Rajput dynasties that ruled in North India and their contributions
ಉತ್ತರ ಭಾರತದಲ್ಲಿ ಆಳ್ವಿಕೆ ಮಾಡಿದ ರಜಪೂತ ಮನೆತನಗಳು ಹಾಗೂ ಕೊಡುಗೆಗಳು
- The Karkota empire of Kashmir
ಕಾಶ್ಮೀರದ ಕಾರ್ಕೋಟ ಸಾಮ್ರಾಜ್ಯ
- Afghan invaders
ಆಫ್ಘನ್ ದಾಳಿಕೋರರು
- Delhi Sultans – dynasties, prominent sultans and their achievements
ದೆಹಲಿ ಸುಲ್ತಾನರು-ಸಂತತಿಗಳು, ಪ್ರಮುಖ ಸುಲ್ತಾನರು ಮತ್ತು ಅವರ ಸಾಧನೆಗಳು
- Administrative, social, religious and economic conditions
ಆಡಳಿತ, ಸಾಮಾಜಿಕ,ಧಾರ್ಮಿಕ,ಆರ್ಥಿಕ ಸ್ಥಿತಿಗತಿಗಳು
- Literature, art and architecture
ಸಾಹಿತ್ಯ, ಕಲೆ ಮತ್ತು ವಾಸ್ತುಶಿಲ್ಪ

15. Religious founders/preceptors of India

- Shankaracharya
ಶಂಕರಾಚಾರ್ಯ
- Madhvacharya
ಮಧ್ವಾಚಾರ್ಯ
- Ramanujacharya
ರಾಮಾನುಜಾಚಾರ್ಯ
- Basaveshwara
ಬಸವೇಶ್ವರ
- – their lives and contributions (dash sub-line under the four names)
– ಇವರ ಜೀವನ ಮತ್ತು ಕೊಡುಗೆಗಳು

16. The Vijayanagara empire and the Bahmani kingdom

- Prominent kings and sultans of the Vijayanagara empire and the Bahmani kingdom – their achievements
ವಿಜಯ ನಗರ ಸಾಮ್ರಾಜ್ಯ ಮತ್ತು ಬಹಮನಿ ರಾಜ್ಯದ ಪ್ರಮುಖ ಅರಸರು ಮತ್ತು ಸುಲ್ತಾನರು-ಅವರ ಸಾಧನೆಗಳು
- Administrative, social, economic and religious conditions
ಆಡಳಿತ,ಸಾಮಾಜಿಕ,ಆರ್ಥಿಕ,ಧಾರ್ಮಿಕ ಸ್ಥಿತಿಗತಿಗಳು
- Contributions to literature, art and architecture
ಸಾಹಿತ್ಯ,ಕಲೆ ಮತ್ತು ವಾಸ್ತುಶಿಲ್ಪಕ್ಕೆ ನೀಡಿರುವ ಕೊಡುಗೆಗಳು
- Land revenue, army and judicial administration

ಕಂದಾಯ, ಸೈನ್ಯ ಮತ್ತು ನ್ಯಾಯಾಡಳಿತ

- Decline
ಅವನತಿ

17. The Ahom dynasty, the Mughals and the Marathas

- Sultans/kings of the Ahom dynasty, the Mughals and the Maratha dynasties – their achievements and contributions
ಅಹೋಮ್ ರಾಜಮನೆತನ, ಮೊಘಲರು ಮತ್ತು ಮರಾಠ ಮನೆತನಗಳ ಸುಲ್ತಾನರು /ಅರಸರು, ಅವರ ಸಾಧನೆಗಳು ಮತ್ತು ಕೊಡುಗೆಗಳು
- The Peshwas
ಪೇಶ್ವೆಗಳು
- Administrative, social, economic and religious conditions
ಆಡಳಿತ,ಸಾಮಾಜಿಕ,ಆರ್ಥಿಕ,ಧಾರ್ಮಿಕ ಸ್ಥಿತಿಗತಿಗಳು
- Contributions to literature, painting, art and architecture
ಸಾಹಿತ್ಯ,ಚಿತ್ರಕಲೆ,ಕಲೆ ಮತ್ತು ವಾಸ್ತುಶಿಲ್ಪಕ್ಕೆ ನೀಡಿರುವ ಕೊಡುಗೆಗಳು
- Decline
ಅವನತಿ

18. The Bhakti movement and the Sufi tradition

- Bhakti tradition of South India
ದಕ್ಷಿಣ ಭಾರತದ ಭಕ್ತಿ ಪರಂಪರೆ
- Bhakti tradition of North India
ಉತ್ತರ ಭಾರತದ ಭಕ್ತಿ ಪರಂಪರೆ
- Main proponents and their teachings and contributions
ಪ್ರಮುಖ ಪ್ರತಿಪಾದಕರು ಮತ್ತು ಅವರ ಬೋಧನೆಗಳು,ಕೊಡುಗೆಗಳು
- Effects of the Bhakti movement
ಭಕ್ತಿಪಂಥದ ಪರಿಣಾಮಗಳು
- Prominent Sufis and their contributions
ಪ್ರಮುಖ ಸೂಫಿಗಳು ಮತ್ತು ಅವರ ಕೊಡುಗೆಗಳು
- The Chishti order
ಚಿಸ್ತಿ ಪಂಥ
- Ramananda
ರಮಾನಂದ
- Kabir
ಕಬೀರ್
- Chaitanya
ಚೈತನ್ಯ
- Guru Nanak, Mirabai
ಗುರುನಾನಕ್,ಮೀರಾಬಾಯಿ
- Srimanta Shankaradeva and Madhavadeva
ಶ್ರೀಮಂತ ಶಂಕರದೇವ ಹಾಗೂ ಮಾಧವದೇವ

19. Arrival of the Europeans in India

- The Portuguese, the Dutch, the English and the French – Carnatic wars, Battle of Plassey, Battle of Buxar, the dual government system
ಪೋರ್ಚುಗೀಸರು,ಡಚರು,ಇಂಗ್ಲಿಷರು ಮತ್ತು ಫ್ರೆಂಚರು-ಕರ್ನಾಟಕ್ ಯುದ್ಧಗಳು, ಪ್ಲಾಸಿ ಕದನ, ಬಕ್ಸರ್ ಕದನ,ದ್ವಿಸರ್ಕಾರ ಪದ್ಧತಿ

(unnumbered as printed; sits between 19 and 20). Eighteenth-century India

- Dominance of the Marathas
ಮರಾಠರ ಪ್ರಾಬಲ್ಯ
- Carnatic wars
ಕರ್ನಾಟಕ್ ಯುದ್ಧಗಳು

- Beginning of English rule in Bengal
ಬಂಗಾಳದಲ್ಲಿ ಇಂಗ್ಲಿಷರ ಆಡಳಿತದ ಆರಂಭ
- Battle of Plassey (1757)
ಪ್ಲಾಸಿ ಕದನ (೧೭೫೭)

20. Effects of British rule

- Civil service
ನಾಗರಿಕ ಸೇವೆ
- Military administration
ಸೈನ್ಯಾಡಳಿತ
- Police system
ಪೊಲೀಸ್ ವ್ಯವಸ್ಥೆ
- Judicial system
ನ್ಯಾಯಾಂಗ ವ್ಯವಸ್ಥೆ
- Permanent Zamindari system
ಖಾಯಂ ಜಮೀನ್ದಾರಿ ಪದ್ಧತಿ
- Ryotwari system
ರೈತವಾರಿ ಪದ್ಧತಿ
- Mahalwari system
ಮಹಲ್ವಾರಿ ಪದ್ಧತಿ
- English education
ಇಂಗ್ಲಿಷ್ ಶಿಕ್ಷಣ
- Trade and commerce
ವ್ಯಾಪಾರ ಮತ್ತು ವಾಣಿಜ್ಯ
- Administrative reforms
ಆಡಳಿತ ಸುಧಾರಣೆಗಳು
- Land revenue policies
ಭೂಕಂದಾಯ ನೀತಿಗಳು
- Various Acts that aided India's constitutional development
ಭಾರತದ ಸಂವಿಧಾನಾತ್ಮಕ ಬೆಳವಣಿಗೆಗೆ ನೆರವಾದ ವಿವಿಧ ಕಾಯಿದೆಗಳು
- Trade and commerce (repeated as printed)
ವ್ಯಾಪಾರ ಮತ್ತು ವಾಣಿಜ್ಯ

21. Expansion of British rule in India

- Anglo-Maratha wars
ಆಂಗ್ಲೋ-ಮರಾಠ ಯುದ್ಧಗಳು
- Anglo-Sikh wars
ಆಂಗ್ಲೋ-ಸಿಖ್ ಯುದ್ಧಗಳು
- Anglo-Mysore wars
ಆಂಗ್ಲೋ-ಮೈಸೂರು ಯುದ್ಧಗಳು
- Subsidiary alliance system
ಸಹಾಯಕ ಸೈನ್ಯ ಪದ್ಧತಿ
- Doctrine of lapse (no right for adopted children)
ದತ್ತು ಮಕ್ಕಳಿಗೆ ಹಕ್ಕಿಲ್ಲ ನೀತಿ

22. Mysore and other princely states

- The Wodeyars of Mysore and their contributions
ಮೈಸೂರು ಒಡೆಯರು ಮತ್ತು ಅವರ ಕೊಡುಗೆಗಳು
- Keladi, Chitradurga, Yelahanka, Kodagu, Kittur, Tulunadu and Hyderabad Karnataka
ಕೆಳದಿ, ಚಿತ್ರದುರ್ಗ, ಯೆಲಹಂಕ, ಕೊಡಗು, ಕಿತ್ತೂರು, ತುಳುನಾಡು ಮತ್ತು ಹೈದರಾಬಾದ್ ಕರ್ನಾಟಕ

- Hyderabad-Karnataka liberation struggle
ಹೈದರಾಬಾದ್-ಕರ್ನಾಟಕ ವಿಮೋಚನಾ ಹೋರಾಟ

23. Resistance to British rule in Karnataka

- Hyder Ali and Tipu Sultan
ಹೈದರಾಲಿ ಮತ್ತು ಟಿಪ್ಪು ಸುಲ್ತಾನ್
- Dhondiya Wagh
ದೊಂಡಿಯಾ ವಾಘ್
- Revolt of Kittur – Veerarani Chennamma
ಕಿತ್ತೂರಿನ ಬಂಡಾಯ – ವೀರರಾಣಿ ಚೆನ್ನಮ್ಮ
- Sangolli Rayanna
ಸಂಗೊಳ್ಳಿ ರಾಯಣ್ಣ
- Amarasulya revolt, Puttabasappa's uprising
ಅಮರಸುಲ್ಯ ಬಂಡಾಯ, ಪುಟ್ಟ ಬಸಪ್ಪನ ದಂಗೆ
- Surapura and Koppal revolts
ಸುರಪುರ ಮತ್ತು ಕೊಪ್ಪಳ ಬಂಡಾಯ
- Uprising of the Bedas of Halagali
ಹಲಗಲಿ ಬೇಡರ ದಂಗೆ

24. Social and religious reform movements

- Brahmo Samaj, Arya Samaj, Prarthana Samaj, Satyashodhak Samaj, Aligarh movement, Ramakrishna Mission, Theosophical Society, Sri Narayana Guru.
ಬ್ರಹ್ಮಸಮಾಜ, ಆರ್ಯಸಮಾಜ, ಪ್ರಾರ್ಥನಾ ಸಮಾಜ, ಸತ್ಯಶೋಧಕ ಸಮಾಜ, ಅಲಿಘರ್ ಚಳವಳಿ, ರಾಮಕೃಷ್ಣ ಮಿಷನ್, ಥಿಯೋಸಾಫಿಕಲ್ ಸೊಸೈಟಿ, ಶ್ರೀ ನಾರಾಯಣಗುರು.

25. India's First War of Independence

- Causes
ಕಾರಣಗಳು
- Outbreak and spread of the struggle
ಹೋರಾಟದ ಸ್ಫೋಟ ಮತ್ತು ಹರಡುವಿಕೆ
- Consequences
ಪರಿಣಾಮಗಳು

26. Freedom struggle

- Major events and developments from 1885 to 1919
೧೮೮೫ ರಿಂದ ೧೯೧೯ರ ವರೆಗಿನ ಪ್ರಮುಖ ಘಟನೆಗಳು ಮತ್ತು ಬೆಳವಣಿಗೆ
- Major events and developments from 1919 to 1947
೧೯೧೯ ರಿಂದ ೧೯೪೭ರ ವರೆಗಿನ ಪ್ರಮುಖ ಘಟನೆ ಮತ್ತು ಬೆಳವಣಿಗೆಗಳು

27. Post-independence India

- Problems of post-independence India
ಸ್ವಾತಂತ್ರ್ಯೋತ್ತರ ಭಾರತದ ಸಮಸ್ಯೆಗಳು
- Formation of government, merger of the princely states
ಸರ್ಕಾರದ ರಚನೆ, ದೇಶೀಯ ಸಂಸ್ಥಾನಗಳ ವಿಲೀನ
- Formation of linguistic states
ಭಾಷಾವಾರು ರಾಜ್ಯಗಳ ರಚನೆ

28. Unification of Karnataka and border disputes

- Historical background; role of journalism and literature
ಚಾರಿತ್ರಿಕ ಹಿನ್ನೆಲೆ, ಪತ್ರಿಕೋದ್ಯಮ ಮತ್ತು ಸಾಹಿತ್ಯದ ಪಾತ್ರ
- Stages of the unification movement
ಏಕೀಕರಣ ಚಳವಳಿಯ ಹಂತಗಳು

- Post-unification Karnataka
ಏಕೀಕರಣೋತ್ತರ ಕರ್ನಾಟಕ
- Border disputes
ಗಡಿವಿವಾದಗಳು

29. Socially oriented movements of Karnataka

- Environmental movements
ಪರಿಸರ ಚಳವಳಿಗಳು
- Women's movement
ಮಹಿಳಾ ಚಳವಳಿ
- Farmers' movement
ರೈತ ಚಳವಳಿ
- Dalit movement
ದಲಿತ ಚಳವಳಿ
- Kannada protection movement
ಕನ್ನಡ ಕಾವಲು ಚಳವಳಿ
- Gokak movement
ಗೋಕಾಕ್ ಚಳವಳಿ

30. Economic and social change in Karnataka

- Land reforms
ಭೂ ಸುಧಾರಣೆಗಳು
- Backward classes commissions
ಹಿಂದುಳಿದ ವರ್ಗಗಳ ಆಯೋಗಗಳು
- Panchayat Raj system
ಪಂಚಾಯತ್‌ರಾಜ್ ವ್ಯವಸ್ಥೆ

31. Progress in various fields in Karnataka

- Mass media
ಸಮೂಹ ಮಾಧ್ಯಮಗಳು
- Information technology
ಮಾಹಿತಿ ತಂತ್ರಜ್ಞಾನ
- Biotechnology
ಜೈವಿಕ ತಂತ್ರಜ್ಞಾನ
- Agricultural and industrial development
ಕೃಷಿ ಮತ್ತು ಕೈಗಾರಿಕಾಭಿವೃದ್ಧಿ

32. Major world events and Western religions

- Judaism (Jewish religion)
ಯಹೂದಿ ರಿಲಿಜನ್
- Parsi (Zoroastrian) religion
ಪಾರ್ಸಿ ರಿಲಿಜನ್
- Christianity
ಕ್ರೈಸ್ತ ರಿಲಿಜನ್
- Islam
ಇಸ್ಲಾಂ ರಿಲಿಜನ್
- Religious wars
ರಿಲಿಜನ್ ಯುದ್ಧಗಳು
- The Mongols
ಮಂಗೋಲರು
- The Ottoman Turks

ಆಟೋಮನ್ ಟರ್ಕರು

- Chronology of history
ಇತಿಹಾಸದ ಕಾಲಗಣನೆ

33. Major events of world and European history / Medieval Europe

- Renaissance
ಪುನರುಜ್ಜೀವನ
- Religious reformation
ಧಾರ್ಮಿಕ ಸುಧಾರಣೆ
- Geographical explorations
ಭೌಗೋಳಿಕ ಅನ್ವೇಷಣೆಗಳು
- Industrial revolution
ಕೈಗಾರಿಕಾ ಕ್ರಾಂತಿ
- American War of Independence
ಅಮೆರಿಕಾ ಸ್ವಾತಂತ್ರ್ಯ ಸಂಗ್ರಾಮ
- The French Revolution
ಫ್ರಾನ್ಸಿನ ಮಹಾಕ್ರಾಂತಿ
- Unification of Italy and Germany
ಇಟಲಿ ಮತ್ತು ಜರ್ಮನಿ ಏಕೀಕರಣಗಳು

34. Modern Europe

- Renaissance
ಪುನರುಜ್ಜೀವನ
- Geographical exploration
ಭೌಗೋಳಿಕ ಅನ್ವೇಷಣೆ
- Discoveries (land discoveries)
ಭೂಶೋಧನೆಗಳು
- Religious reformation
ರಿಲಿಜನ್ ಸುಧಾರಣೆ
- Counter-reformation movement
ಪ್ರತಿಸುಧಾರಣಾ ಚಳವಳಿ
- Industrial revolution
ಕೈಗಾರಿಕಾ ಕ್ರಾಂತಿ

35. Revolutions and the rise of nation-states

- American War of Independence
ಅಮೆರಿಕಾ ಸ್ವಾತಂತ್ರ್ಯ ಸಂಗ್ರಾಮ
- The French Revolution
ಫ್ರಾನ್ಸಿನ ಮಹಾಕ್ರಾಂತಿ
- Unification of Italy
ಇಟಲಿಯ ಏಕೀಕರಣ
- Unification of Germany
ಜರ್ಮನಿಯ ಏಕೀಕರಣ

36. The World Wars and India's role

- First World War
ಪ್ರಥಮ ಮಹಾಯುದ್ಧ
- Rise of dictators
ಸರ್ವಾಧಿಕಾರಿಗಳ ಉದಯ
- Second World War
ಎರಡನೇ ಮಹಾಯುದ್ಧ

- India's role in the World Wars
ಮಹಾಯುದ್ಧಗಳಲ್ಲಿ ಭಾರತದ ಪಾತ್ರ

Geography

1. Globe and maps

- Model sphere (globe) – meaning – features – uses – maps – types of maps – components of a map – uses of maps – geographical symbols – map reading
ಮಾದರಿ ಗೋಳ (ಗ್ಲೋಬ್)-ಅರ್ಥ-ಲಕ್ಷಣಗಳು-ಉಪಯೋಗಗಳು-ನಕ್ಷೆಗಳು (ನಕಾಶೆಗಳು)-ನಕಾಶೆಗಳ ವಿಧಗಳು-ನಕ್ಷೆಯ ಮೂಲಾಂಶಗಳು-ನಕಾಶೆಗಳ ಉಪಯೋಗ- ಭೌಗೋಳಿಕ ಸಂಕೇತಗಳು-ನಕಾಶೆಯನ್ನು ಓದುವಿಕೆ

2. Landforms of the earth

- Major landforms – types of landforms – major natural regions of the world
ಪ್ರಮುಖ ಭೂಸ್ವರೂಪಗಳು-ಭೂಸ್ವರೂಪಗಳ ವಿಧಗಳು-ಪ್ರಪಂಚದ ಪ್ರಮುಖ ಸ್ವಾಭಾವಿಕ ಪ್ರದೇಶಗಳು

3. Earth – our living planet

- Size of the earth, land and water bodies – latitudes and longitudes – local time – standard time – time zones – International Date Line
ಭೂಮಿಯ ಗಾತ್ರ, ಭೂಭಾಗ ಮತ್ತು ಜಲರಾಶಿ-ಅಕ್ಷಾಂಶಗಳು ಮತ್ತು ರೇಖಾಂಶಗಳು-ಸ್ಥಾನಿಕವೇಳೆ- ಪ್ರಮಾಣವೇಳೆ-ವೇಳಾವಲಯಗಳು-ಅಂತರರಾಷ್ಟ್ರೀಯ ದಿನಾಂಕ ರೇಖೆ

4. Lithosphere

- Meaning and importance – structure and composition of the earth's interior – rocks – forces of the earth's crust – erosion
ಅರ್ಥ ಮತ್ತು ಪ್ರಾಮುಖ್ಯ-ಭೂಮಿಯ ಅಂತರಾಳದ ರಚನೆ ಮತ್ತು ಸಂಯೋಜನೆ- ಶಿಲೆಗಳು-ಭೂಕವಚದ ಶಕ್ತಿಗಳು-ಭೂ ಸವಕಳಿ

5. Atmosphere

- Meaning and importance of the atmosphere – composition of the atmosphere – structure of the atmosphere – elements of weather – temperature zones – atmospheric pressure – winds – humidity – clouds – rain – weather and climate
ವಾಯುಗೋಳದ ಅರ್ಥ ಮತ್ತು ಪ್ರಾಮುಖ್ಯ-ವಾಯುಗೋಳದ ಸಂಯೋಜನೆ-ವಾಯುಮಂಡಲದ ರಚನೆ – ಹವಾಮಾನದ ಘಟಕಾಂಶಗಳು-ಉಷ್ಣಾಂಶ ವಲಯಗಳು-ವಾಯುಮಂಡಲದ ಒತ್ತಡ – ಮಾರುತಗಳು-ಆದ್ರ್ವತೆ-ಮೋಡಗಳು – ಮಳೆ – ಹವಾಮಾನ ಮತ್ತು ವಾಯುಗುಣ

6. Hydrosphere

- Distribution of water bodies – landforms of the ocean floor – temperature and salinity of ocean water – ocean currents – tides – conservation of oceans
ಜಲರಾಶಿಗಳ ಹಂಚಿಕೆ – ಸಾಗರ ತಳದ ಭೂ ಸ್ವರೂಪಗಳು- ಸಾಗರದ ನೀರಿನ ಉಷ್ಣಾಂಶ ಮತ್ತು ಲವಣತೆ-ಸಾಗರ ಪ್ರವಾಹಗಳು – ಉಬ್ಬರ ಇಳಿತಗಳು-ಸಾಗರಗಳ ಸಂರಕ್ಷಣೆ

7. Biosphere

- Meaning – ecology – environment – types of pollution – global warming – greenhouse effect – ozone layer depletion – acid rain – biodiversity
ಅರ್ಥ-ಜೀವಿ ಪರಿಸರ ಶಾಸ್ತ್ರ-ಪರಿಸರ-ಮಾಲಿನ್ಯದ ವಿಧಗಳು-ಜಾಗತಿಕ ತಾಪಮಾನ-ಹಸಿರು ಮನೆಯ ಪರಿಣಾಮ-ಓಜೋನ್ ಪದರ ಕ್ಷೀಣತೆ-ಆಮ್ಲೀಯ ಮಳೆ-ಜೀವ ವೈವಿಧ್ಯ

8. Our state – Karnataka – physiographic divisions

- Background of the name – geographical location – area – physiographic divisions
ಹೆಸರಿನ ಹಿನ್ನೆಲೆ-ಭೌಗೋಳಿಕ ಸ್ಥಾನ-ವಿಸ್ತೀರ್ಣ-ಪ್ರಾಕೃತಿಕ ವಿಭಾಗಗಳು

9. Natural diversity of Karnataka

- Climate of Karnataka – climatic seasons – soils of Karnataka – natural vegetation – distribution of forests – fauna (animal wealth)
ಕರ್ನಾಟಕದ ವಾಯುಗುಣ-ವಾಯುಗುಣದ ಋತುಗಳು-ಕರ್ನಾಟಕದ ಮಣ್ಣುಗಳು-ಸ್ವಾಭಾವಿಕ ಸಸ್ಯವರ್ಗ-ಅರಣ್ಯಗಳ ಹಂಚಿಕೆ-ಪ್ರಾಣಿ ಸಂಪತ್ತು

10. Water resources of Karnataka

- Rivers of Karnataka – irrigation in Karnataka – hydroelectricity
ಕರ್ನಾಟಕದ ನದಿಗಳು- ಕರ್ನಾಟಕದ ನೀರಾವರಿ- ಜಲವಿದ್ಯುಚ್ಛಕ್ತಿ

11. Land resources of Karnataka

- Land use – land-use patterns of Karnataka – agriculture – major crops of Karnataka
ಭೂ ಬಳಕೆ- ಕರ್ನಾಟಕದ ಭೂ ಬಳಕೆಯ ಮಾದರಿಗಳು- ವ್ಯವಸಾಯ – ಕರ್ನಾಟಕದ ಪ್ರಮುಖ ಬೆಳೆಗಳು

12. Mineral resources of Karnataka

- Introduction to minerals found in Karnataka and their importance – distribution and production of Karnataka's major minerals
ಕರ್ನಾಟಕದಲ್ಲಿ ದೊರೆಯುವ ಖನಿಜಗಳ ಪರಿಚಯ ಮತ್ತು ಅವುಗಳ ಪ್ರಾಮುಖ್ಯತೆ-ಕರ್ನಾಟಕದ ಪ್ರಮುಖ ಖನಿಜಗಳ ಹಂಚಿಕೆ ಹಾಗೂ ಉತ್ಪಾದನೆ

13. Transport system in Karnataka

- Road transport – rail transport – air transport – water transport
ರಸ್ತೆ ಸಾರಿಗೆ- ರೈಲು ಸಾರಿಗೆ- ವಾಯು ಸಾರಿಗೆ- ಜಲ ಸಾರಿಗೆ

14 (number obscured by a punch hole; inferred from sequence). Industries of Karnataka

- Importance of Karnataka's industries – major industrial regions of Karnataka – distribution and production of iron and steel industries – cotton textile, sugar, cement, paper industries – Bengaluru, India's major information-technology industry centre
ಕರ್ನಾಟಕದ ಕೈಗಾರಿಕೆಗಳ ಮಹತ್ವ-ಕರ್ನಾಟಕದ ಪ್ರಮುಖ ಕೈಗಾರಿಕಾ ವಲಯಗಳು-ಕಬ್ಬಿಣ ಮತ್ತು ಉಕ್ಕಿನ ಕೈಗಾರಿಕೆಗಳ ಹಂಚಿಕೆ ಮತ್ತು ಉತ್ಪಾದನೆ-ಹತ್ತಿ ಬಟ್ಟೆ, ಸಕ್ಕರೆ, ಸಿಮೆಂಟ್, ಕಾಗದ ಕೈಗಾರಿಕೆಗಳು-ಬೆಂಗಳೂರು ಭಾರತದ ಪ್ರಮುಖ ಮಾಹಿತಿ ತಂತ್ರಜ್ಞಾನ ಕೈಗಾರಿಕೆಯ ಕೇಂದ್ರ

15. Major tourist centres of Karnataka

- Hill stations of Karnataka – waterfalls of Karnataka – wildlife sanctuaries of Karnataka – historical places – pilgrimage centres – forts of Karnataka
ಕರ್ನಾಟಕದ ಗಿರಿಧಾಮಗಳು – ಕರ್ನಾಟಕದ ಜಲಪಾತಗಳು – ಕರ್ನಾಟಕದ ವನ್ಯಜೀವಿಧಾಮಗಳು – ಐತಿಹಾಸಿಕ ಸ್ಥಳಗಳು (ಚಾರಿತ್ರಿಕ ಸ್ಥಳಗಳು) – ಯಾತ್ರಾಸ್ಥಳಗಳು- ಕರ್ನಾಟಕದ ಕೋಟೆಗಳು

16. India: geographical location and physical features

- India's position in the world – size – India's location – land boundaries and neighbouring countries – physiographic divisions
ಪ್ರಪಂಚದಲ್ಲಿ ಭಾರತದ ಸ್ಥಾನ – ಗಾತ್ರ – ಭಾರತದ ಸ್ಥಾನ – ಭೂಮೇರಿಗಳು ಮತ್ತು ನೆರೆಯ ರಾಷ್ಟ್ರಗಳು-ಪ್ರಾಕೃತಿಕ ವಿಭಾಗಗಳು

17. Seasons of India

- Main features of India's climate – climatic conditions of India's seasons – distribution and effects of India's seasonal rainfall
ಭಾರತದ ವಾಯುಗುಣದ ಪ್ರಮುಖ ಲಕ್ಷಣಗಳು –ಭಾರತದ ಋತುಮಾನಗಳ ವಾಯುಗುಣದ ಪರಿಸ್ಥಿತಿ- ಭಾರತದ ಋತುಕಾಲಿಕ ಮಳೆಯ ಹಂಚಿಕೆ ಮತ್ತು ಪರಿಣಾಮಗಳು

18. Soils of India

- Types and distribution of soils in India – soil erosion and its causes – effects of soil erosion – soil conservation and management.
ಭಾರತದಲ್ಲಿನ ಮಣ್ಣಿನ ವಿಧಗಳು ಹಾಗೂ ಹಂಚಿಕೆ-ಮಣ್ಣಿನ ಸವೆತ ಹಾಗೂ ಸವೆತಕ್ಕೆ ಕಾರಣಗಳು-ಮಣ್ಣಿನ ಸವೆತದ ಪರಿಣಾಮಗಳು- ಮಣ್ಣಿನ ಸಂರಕ್ಷಣೆ ಮತ್ತು ನಿರ್ವಹಣೆ.

19. Forests of India

- Types and distribution of India's forests – forest conservation, methods of conservation – wildlife sanctuaries, national parks – biosphere reserves
ಭಾರತದ ಅರಣ್ಯಗಳ ವಿಧಗಳು, ಹಂಚಿಕೆ- ಅರಣ್ಯಗಳ ಸಂರಕ್ಷಣೆ, ಸಂರಕ್ಷಣಾ ವಿಧಾನಗಳು- ವನ್ಯಜೀವಿ ಧಾಮಗಳು, ರಾಷ್ಟ್ರೀಯ ಉದ್ಯಾನವನಗಳು-ಜೈವಿಕ ಸಂರಕ್ಷಣಾ ವಲಯಗಳು

20. Water resources of India

- Importance of irrigation – types of irrigation – multipurpose river valley projects – India's major hydroelectric projects – national power grid – rainwater harvesting.
ನೀರಾವರಿ ಮಹತ್ವ-ನೀರಾವರಿ ವಿಧಗಳು-ವಿವಿಧೋದ್ದೇಶ ನದಿ ಕಣಿವೆ ಯೋಜನೆಗಳು-ಭಾರತದ ಪ್ರಮುಖ ಜಲ ವಿದ್ಯುಚ್ಛಕ್ತಿ ಯೋಜನೆಗಳು-ರಾಷ್ಟ್ರೀಯ ವಿದ್ಯುತ್‌ಜಾಲ- ಮಳೆನೀರು ಸಂಗ್ರಹಣೆ.

21. Land use and agriculture in India

- Factors influencing land use – types of land use – meaning and importance of agriculture – importance of agriculture – types of agriculture – distribution of crops – factors determining the cropping pattern – crop seasons or agricultural periods – food crops, commercial crops, fibre crops, beverage crops, horticulture, floriculture.
ಭೂ ಬಳಕೆಯ ಮೇಲೆ ಪ್ರಭಾವ ಬೀರುವ ಅಂಶಗಳು-ಭೂ ಬಳಕೆಯ ಪ್ರಕಾರಗಳು-ವ್ಯವಸಾಯದ ಅರ್ಥ ಮತ್ತು ಪ್ರಾಮುಖ್ಯತೆ-ವ್ಯವಸಾಯದ ಪ್ರಾಮುಖ್ಯತೆ-ವ್ಯವಸಾಯದ ವಿಧಗಳು-ಬೆಳೆಗಳ ಹಂಚಿಕೆ-ಬೆಳೆಯ ಮಾದರಿಯನ್ನು ನಿರ್ಧರಿಸುವ ಅಂಶಗಳು-ಬೆಳೆ ಋತುಗಳು ಅಥವಾ ವ್ಯವಸಾಯದ ಅವಧಿಗಳು-ಆಹಾರದ ಬೆಳೆಗಳು, ವಾಣಿಜ್ಯ ಬೆಳೆಗಳು, ನಾರಿನ ಬೆಳೆಗಳು, ಪಾನೀಯ ಬೆಳೆಗಳು, ತೋಟಗಾರಿಕೆ, ಪುಷ್ಪ ಬೇಸಾಯ.

22. Mineral and energy resources of India

- Introduction to minerals found in India and their importance – distribution and production of India's major minerals – non-conventional energy sources, solar energy, wind energy, need – shortage and conservation of energy resources and remedies – causes of shortage of energy resources.
ಭಾರತದಲ್ಲಿ ದೊರೆಯುವ ಖನಿಜಗಳ ಪರಿಚಯ ಮತ್ತು ಅವುಗಳ ಪ್ರಾಮುಖ್ಯತೆ-ಭಾರತದ ಪ್ರಮುಖ ಖನಿಜಗಳ ಹಂಚಿಕೆ ಹಾಗೂ ಉತ್ಪಾದನೆ-ಅಸಂಪ್ರದಾಯಿಕ ಶಕ್ತಿ ಮೂಲಗಳು, ಸೌರಶಕ್ತಿ, ಪವನಶಕ್ತಿ ಅವಶ್ಯಕತೆ-ಶಕ್ತಿ ಸಂಪನ್ಮೂಲಗಳ ಕೊರತೆ ಮತ್ತು ಸಂರಕ್ಷಣೆ ಹಾಗೂ ಪರಿಹಾರಗಳು-ಶಕ್ತಿ ಸಂಪನ್ಮೂಲಗಳ ಕೊರತೆಗೆ ಕಾರಣಗಳು.

23. Transport and communication in India

- Types of transport – problems of road transport – major ports – major airports – communication – types of communication – importance of communication – Geographic Information System – Global Positioning System – remote sensing technology
ಸಾರಿಗೆಯ ವಿಧಗಳು-ರಸ್ತೆ ಸಾರಿಗೆಯ ತೊಡಕುಗಳು-ಪ್ರಮುಖ ಬಂದರುಗಳು- ಪ್ರಮುಖ ವಿಮಾನ ನಿಲ್ದಾಣಗಳು- ಸಂಪರ್ಕ-ಸಂಪರ್ಕದ ವಿಧಗಳು-ಸಂಪರ್ಕದ ಪ್ರಾಮುಖ್ಯತೆ-ಭೌಗೋಳಿಕ ಮಾಹಿತಿ ವ್ಯವಸ್ಥೆ-ಗ್ಲೋಬಲ್ ಪೊಜಿಶನಿಂಗ್ ಸಿಸ್ಟಂ-ದೂರ ಸಂವೇದಿ ತಂತ್ರಜ್ಞಾನ

24. Major industries of India

- Importance of India's industries and major industrial regions – factors influencing the location of industries – introduction to various industries – knowledge-based industries: information technology, biotechnology, high technology.
ಭಾರತದ ಕೈಗಾರಿಕೆಗಳ ಮಹತ್ವ ಮತ್ತು ಪ್ರಮುಖ ಕೈಗಾರಿಕಾ ಪ್ರದೇಶಗಳು-ಕೈಗಾರಿಕೆಗಳ ಸ್ಥಾನೀಕರಣದ ಮೇಲೆ ಪ್ರಭಾವ ಬೀರುವ ಅಂಶಗಳು-ವಿವಿಧ ಕೈಗಾರಿಕೆಗಳ ಪರಿಚಯ-ಜ್ಞಾನಾಧಾರಿತ ಕೈಗಾರಿಕೆಗಳು; ಮಾಹಿತಿ ತಂತ್ರಜ್ಞಾನ, ಜೈವಿಕ ತಂತ್ರಜ್ಞಾನ, ಉನ್ನತ ತಂತ್ರಜ್ಞಾನ.

25. Natural disasters

- Cyclones – floods – landslides – coastal erosion – earthquakes – causes, effects, precautionary measures
ಚಂಡಮಾರುತಗಳು-ಪ್ರವಾಹಗಳು-ಭೂಕುಸಿತ- ಕಡಲಕೊರೆತ-ಭೂಕಂಪಗಳು- ಕಾರಣಗಳು, ಪರಿಣಾಮಗಳು, ಮುನ್ನೆಚ್ಚರಿಕೆ ಕ್ರಮಗಳು

26. The continent of Asia

- Location, area and geographical setting – regional divisions of Asia – physical features – major rivers and agriculture – climate and natural vegetation – major minerals – major industrial regions – population of Asia
ಸ್ಥಾನ, ವಿಸ್ತೀರ್ಣ ಮತ್ತು ಭೌಗೋಳಿಕ ಸನ್ನಿವೇಶ -ಏಷ್ಯದ ಪ್ರಾದೇಶಿಕ ವಿಭಾಗಗಳು-ಪ್ರಾಕೃತಿಕ ಲಕ್ಷಣಗಳು-ಪ್ರಮುಖ ನದಿಗಳು ಮತ್ತು ವ್ಯವಸಾಯ-ವಾಯುಗುಣ ಮತ್ತು ಸ್ವಾಭಾವಿಕ ಸಸ್ಯವರ್ಗ-ಪ್ರಮುಖ ಖನಿಜಗಳು-ಪ್ರಮುಖ ಕೈಗಾರಿಕಾ ಪ್ರದೇಶಗಳು-ಏಷ್ಯದ ಜನಸಂಖ್ಯೆ

27. The continent of Europe

- Location, area and geographical setting – physical features – climatic regions and natural vegetation – natural vegetation – agriculture, dairying and fishing – minerals – major industries – major industrial regions of Europe – population

ಸ್ಥಾನ, ವಿಸ್ತೀರ್ಣ ಮತ್ತು ಭೌಗೋಳಿಕ ಸನ್ನಿವೇಶ-ಪ್ರಾಕೃತಿಕ ಲಕ್ಷಣಗಳು-ವಾಯುಗುಣ ಪ್ರದೇಶಗಳು ಮತ್ತು ಸ್ವಾಭಾವಿಕ ಸಸ್ಯವರ್ಗ- ಸ್ವಾಭಾವಿಕ ಸಸ್ಯವರ್ಗ-ವ್ಯವಸಾಯ, ಹೈನುಗಾರಿಕೆ ಮತ್ತು ಮೀನುಗಾರಿಕೆ-ಖನಿಜಗಳು- ಪ್ರಮುಖ ಕೈಗಾರಿಕೆಗಳು- ಯೂರೋಪಿನ ಪ್ರಮುಖ ಕೈಗಾರಿಕಾ ಪ್ರದೇಶಗಳು-ಜನಸಂಖ್ಯೆ

28. The continent of Africa

- Location, area and geographical setting – physical features – water resources – climate, natural vegetation and fauna – natural vegetation – fauna – agriculture and industries – precious minerals – population: growth, distribution and density

ಸ್ಥಾನ, ವಿಸ್ತೀರ್ಣ ಮತ್ತು ಭೌಗೋಳಿಕ ಸನ್ನಿವೇಶ-ಪ್ರಾಕೃತಿಕ ಲಕ್ಷಣಗಳು-ಜಲಸಂಪನ್ಮೂಲಗಳು-ವಾಯುಗುಣ, ಸ್ವಾಭಾವಿಕ ಸಸ್ಯವರ್ಗ ಮತ್ತು ಪ್ರಾಣಿ ಸಂಪತ್ತು- ಸ್ವಾಭಾವಿಕ ಸಸ್ಯವರ್ಗ- ಪ್ರಾಣಿಸಂಪತ್ತು- ವ್ಯವಸಾಯ ಮತ್ತು ಕೈಗಾರಿಕೆಗಳು-ಬೆಲೆಬಾಳುವ ಖನಿಜಗಳು-ಜನಸಂಖ್ಯೆ: ಬೆಳವಣಿಗೆ, ಹಂಚಿಕೆ ಮತ್ತು ಸಾಂದ್ರತೆ

29. North America

- Setting, location and area – physiographic divisions – rivers and the great lakes – climate and natural vegetation – agriculture – major minerals and industries – population

ನೆಲೆ, ಸ್ಥಾನ ಮತ್ತು ವಿಸ್ತೀರ್ಣ-ಪ್ರಾಕೃತಿಕ ವಿಭಾಗಗಳು- ನದಿಗಳು ಮತ್ತು ದೊಡ್ಡ ಸರೋವರಗಳು- ವಾಯುಗುಣ ಮತ್ತು ಸ್ವಾಭಾವಿಕ ಸಸ್ಯವರ್ಗ- ಕೃಷಿ-ಪ್ರಮುಖ ಖನಿಜಗಳು ಮತ್ತು ಕೈಗಾರಿಕೆಗಳು-ಜನಸಂಖ್ಯೆ

30. South America

- Setting, extent and physical aspects – surface (relief) features – rivers and lakes – climate – natural vegetation – wildlife – agriculture and animal husbandry – population

ನೆಲೆ, ವಿಸ್ತಾರ ಮತ್ತು ಭೌತಿಕ ಅಂಶಗಳು- ಮೇಲ್ಮೈ ಲಕ್ಷಣಗಳು- ನದಿಗಳು ಮತ್ತು ಸರೋವರಗಳು- ವಾಯುಗುಣ-ಸ್ವಾಭಾವಿಕ ಸಸ್ಯವರ್ಗ- ವನ್ಯ ಜೀವಿಗಳು- ಕೃಷಿ ಮತ್ತು ಪ್ರಾಣಿಸಾಕಣೆ- ಜನಸಂಖ್ಯೆ

31. Australia

- Location, area and geographical setting – physiographic divisions and river systems – climate and natural vegetation – natural vegetation and fauna – agriculture and animal husbandry – minerals and industries – population

ಸ್ಥಾನ, ವಿಸ್ತೀರ್ಣ ಮತ್ತು ಭೌಗೋಳಿಕ ಸನ್ನಿವೇಶ- ಪ್ರಾಕೃತಿಕ ವಿಭಾಗಗಳು ಮತ್ತು ನದಿಗಳ ವ್ಯವಸ್ಥೆ- ವಾಯುಗುಣ ಮತ್ತು ಸ್ವಾಭಾವಿಕ ಸಸ್ಯವರ್ಗ- ಸ್ವಾಭಾವಿಕ ಸಸ್ಯವರ್ಗ ಮತ್ತು ಪ್ರಾಣಿ ಸಂಪತ್ತು- ವ್ಯವಸಾಯ ಮತ್ತು ಪಶುಸಂಗೋಪನೆ- ಖನಿಜ ಮತ್ತು ಕೈಗಾರಿಕೆಗಳು- ಜನಸಂಖ್ಯೆ

32. Antarctica

- Location, area and geographical setting – surface features – flora and fauna – Antarctic expeditions – Antarctic Treaty – major research stations

ಸ್ಥಾನ, ವಿಸ್ತೀರ್ಣ ಮತ್ತು ಭೌಗೋಳಿಕ ಸನ್ನಿವೇಶ-ಮೇಲ್ಮೈ ಲಕ್ಷಣಗಳು-ಸಸ್ಯ ಮತ್ತು ಪ್ರಾಣಿಸಂಪತ್ತು-ಅಂಟಾರ್ಟಿಕ ಯಾನ – ಅಂಟಾರ್ಟಿಕ ಒಪ್ಪಂದ-ಪ್ರಮುಖ ಸಂಶೋಧನಾ ಕೇಂದ್ರಗಳು

Civics / Political Science

1. Meaning and importance of Political Science

- Meaning and importance of Political Science
ರಾಜ್ಯಶಾಸ್ತ್ರದ ಅರ್ಥ, ಪ್ರಾಮುಖ್ಯತೆ
- Major thinkers of Political Science
ರಾಜ್ಯಶಾಸ್ತ್ರದ ಪ್ರಮುಖ ಚಿಂತಕರು

2. Citizen and citizenship

- Meaning of citizen and citizenship
ಪೌರ ಮತ್ತು ಪೌರತ್ವದ ಅರ್ಥ
- Rights and duties of citizens
ಪೌರರ ಹಕ್ಕುಗಳು ಮತ್ತು ಕರ್ತವ್ಯಗಳು
- Differences between citizens and foreigners
ಪೌರ ಮತ್ತು ವಿದೇಶೀಯರ ನಡುವಿನ ವ್ಯತ್ಯಾಸಗಳು
- Methods of acquiring and losing citizenship

ಪೌರತ್ವ ಪಡೆಯುವ ಮತ್ತು ಕಳೆದುಕೊಳ್ಳುವ ವಿಧಾನಗಳು

- Citizenship Act 1955
ಪೌರತ್ವ ಕಾಯಿದೆ ೧೯೫೫

3. Democracy

- Meaning and significance of democracy
ಪ್ರಜಾಪ್ರಭುತ್ವದ ಅರ್ಥ, ಮತ್ತು ಮಹತ್ವ
- Types of democracy
ಪ್ರಜಾಪ್ರಭುತ್ವದ ವಿಧಗಳು
- Features of democracy
ಪ್ರಜಾಪ್ರಭುತ್ವದ ಲಕ್ಷಣಗಳು
- Challenges of democracy
ಪ್ರಜಾಪ್ರಭುತ್ವದ ಸವಾಲುಗಳು
- Merits and demerits of democracy
ಪ್ರಜಾಪ್ರಭುತ್ವದ ಅನುಕೂಲ ಮತ್ತು ಅನಾನುಕೂಲಗಳು
- Various forms of government
ವಿವಿಧ ರೂಪದ ಸರ್ಕಾರಗಳು
- Universal adult franchise
ಸಾರ್ವತ್ರಿಕ ವಯಸ್ಕ ಮತದಾನ ಪದ್ಧತಿ
- Elections
ಚುನಾವಣೆಗಳು

4. The Constitution of India

- Constitution drafting committee
ಸಂವಿಧಾನ ರಚನಾ ಸಮಿತಿ
- Preamble to the Constitution
ಸಂವಿಧಾನದ ಪ್ರಸ್ತಾವನೆ
- Features of the Constitution
ಸಂವಿಧಾನದ ಲಕ್ಷಣಗಳು
- Fundamental rights
ಮೂಲಭೂತ ಹಕ್ಕುಗಳು
- Fundamental duties
ಮೂಲಭೂತ ಕರ್ತವ್ಯಗಳು
- Directive principles of state policy
ರಾಜ್ಯನಿರ್ದೇಶಕ ತತ್ವಗಳು

5. The Union government

- Structure of the Union legislature
ಕೇಂದ್ರ ಶಾಸಕಾಂಗ ರಚನೆ
- Union executive: President, Prime Minister and Council of Ministers: functions
ಕೇಂದ್ರ ಕಾರ್ಯಾಂಗ : ರಾಷ್ಟ್ರಪತಿಗಳು, ಪ್ರಧಾನಮಂತ್ರಿಗಳು ಮತ್ತು ಮಂತ್ರಿಮಂಡಲ : ಕಾರ್ಯಗಳು

6. The State government

- Structure of the State government
ರಾಜ್ಯ ಸರ್ಕಾರದ ರಚನೆ
- Structure of the State legislature
ರಾಜ್ಯ ಶಾಸಕಾಂಗದ ರಚನೆ
- Structure of the State executive, powers and functions
ರಾಜ್ಯ ಕಾರ್ಯಾಂಗ ರಚನೆ, ಅಧಿಕಾರ ಕಾರ್ಯಗಳು

7. The Judiciary

- Powers and functions of the Supreme Court
ಸರ್ವೋಚ್ಚ ನ್ಯಾಯಾಲಯದ ಅಧಿಕಾರ ಕಾರ್ಯಗಳು
- Qualifications and tenure of Supreme Court judges
ಸರ್ವೋಚ್ಚ ನ್ಯಾಯಾಲಯದ ನ್ಯಾಯಾಧೀಶರ ಅರ್ಹತೆಗಳು ಮತ್ತು ಅಧಿಕಾರದ ಅವಧಿ
- High Court – powers and functions
ಉಚ್ಚ ನ್ಯಾಯಾಲಯ – ಅಧಿಕಾರ ಕಾರ್ಯಗಳು
- Subordinate courts
ಅಧೀನ ನ್ಯಾಯಾಲಯಗಳು
- Revenue courts
ಕಂದಾಯ ನ್ಯಾಯಾಲಯಗಳು

8. Electoral system

- Composition of the Election Commission
ಚುನಾವಣಾ ಆಯೋಗದ ರಚನೆ
- Process of the electoral system
ಚುನಾವಣಾ ವ್ಯವಸ್ಥೆಯ ಪ್ರಕ್ರಿಯೆ
- Adult franchise
ವಯಸ್ಕ ಮತದಾನ ಪದ್ಧತಿ
- Political parties
ರಾಜಕೀಯ ಪಕ್ಷಗಳು
- Media and democracy
ಮಾಧ್ಯಮ ಮತ್ತು ಪ್ರಜಾಪ್ರಭುತ್ವ
- Coalition governments
ಸಮ್ಮಿಶ್ರ ಸರ್ಕಾರಗಳು

9. Local self-governments

- Background of the formation of local self-governments
ಸ್ಥಳೀಯ ಸ್ವಯಂ ಸರ್ಕಾರಗಳ ರಚನೆ ಹಿನ್ನೆಲೆ
- Objectives and functions of local self-governments
ಸ್ಥಳೀಯ ಸ್ವಯಂ ಸರ್ಕಾರಗಳ ಉದ್ದೇಶಗಳು ಮತ್ತು ಕಾರ್ಯಗಳು
- Structure and functions of various local bodies
ವಿವಿಧ ಸ್ಥಳೀಯ ಸಂಸ್ಥೆಗಳ ರಚನೆ, ಕಾರ್ಯಗಳು
- Gram Panchayat, Taluk Panchayat, Zilla Panchayat, Town Panchayat, urban local bodies and Municipal Corporations
ಗ್ರಾಮಪಂಚಾಯತ್, ತಾಲ್ಲೂಕು ಪಂಚಾಯತ್, ಜಿಲ್ಲಾ ಪಂಚಾಯತ್, ಪಟ್ಟಣ ಪಂಚಾಯತ್, ನಗರ ಸ್ಥಳೀಯ ಸಂಸ್ಥೆಗಳು ಮತ್ತು ಮಹಾನಗರ ಪಾಲಿಕೆಗಳು

10. Defence of the country / Defence forces

- Organisation of our armed forces
ನಮ್ಮ ಸೇನಾ ಪಡೆಗಳ ರಚನೆ
- Types and functions of the armed forces
ಸೇನಾ ಪಡೆಗಳ ವಿಧಗಳು ಮತ್ತು ಕಾರ್ಯಗಳು
- Development of the military sector
ಸೇನಾಕ್ಷೇತ್ರದ ಅಭಿವೃದ್ಧಿ
- Second line of defence: organisation and functions
ಎರಡನೇ ಸಾಲಿನ ರಕ್ಷಣಾ ವ್ಯವಸ್ಥೆ : ರಚನೆ ಮತ್ತು ಕಾರ್ಯಗಳು

11. National integration and national symbols

- Meaning and significance of national integration
ರಾಷ್ಟ್ರೀಯ ಭಾವೈಕ್ಯತೆಯ ಅರ್ಥ ಮತ್ತು ಮಹತ್ವ

- Factors that foster national integration
ರಾಷ್ಟ್ರೀಯ ಭಾವೈಕ್ಯತೆ ಮೂಡಿಸುವ ಅಂಶಗಳು
- National symbols and their significance
ರಾಷ್ಟ್ರೀಯ ಚಿಹ್ನೆಗಳು ಮತ್ತು ಮಹತ್ವ
- National festivals and their significance
ರಾಷ್ಟ್ರೀಯ ಹಬ್ಬಗಳು ಮತ್ತು ಮಹತ್ವ

12. Challenges facing India and their remedies

- Communalism, illiteracy, status of women, poverty, regionalism, profiteering, corruption, smuggling, population growth – their causes and remedial measures
ಕೋಮುವಾದ, ಅನಕ್ಷರತೆ, ಮಹಿಳೆಯರ ಸ್ಥಾನಮಾನ, ಬಡತನ, ಪ್ರಾದೇಶಿಕತೆ, ಲಾಭಕೋರತನ, ಭ್ರಷ್ಟಾಚಾರ, ಕಳ್ಳಸಾಗಾಣಿಕೆ, ಜನಸಂಖ್ಯಾ ಹೆಚ್ಚಳ – ಇವುಗಳಿಗೆ ಕಾರಣಗಳು ಮತ್ತು ಪರಿಹಾರಕ್ರಮಗಳು

13. India's relations with other countries / India and its neighbouring countries

- India-Pakistan
ಭಾರತ-ಪಾಕಿಸ್ತಾನ
- India-China
ಭಾರತ-ಚೀನಾ
- India-Bangladesh
ಭಾರತ-ಬಾಂಗ್ಲಾದೇಶ
- India-Bhutan
ಭಾರತ-ಭೂತಾನ್
- India-Nepal
ಭಾರತ-ನೇಪಾಳ
- India-Bhutan (printed a second time)
ಭಾರತ-ಭೂತಾನ್
- India-Sri Lanka
ಭಾರತ-ಶ್ರೀಲಂಕಾ
- India-America
ಭಾರತ-ಅಮೇರಿಕಾ
- India-Russia – their relations
ಭಾರತ-ರಷ್ಯಾ – ಇವುಗಳ ಸಂಬಂಧಗಳು

14. Global challenges and India's role

- Denial of human rights
ಮಾನವ ಹಕ್ಕುಗಳ ನಿರಾಕರಣೆ
- Arms race
ಶಸ್ತ್ರಾಸ್ತ್ರಗಳ ಪೈಪೋಟಿ
- Economic inequality
ಆರ್ಥಿಕ ಅಸಮಾನತೆ
- Terrorism
ಭಯೋತ್ಪಾದನೆ

15. Global organisations / United Nations

- United Nations – structure, objectives and organs
ವಿಶ್ವಸಂಸ್ಥೆ – ರಚನೆ, ಉದ್ದೇಶಗಳು ಮತ್ತು ಅಂಗ ಸಂಸ್ಥೆಗಳು
- Agencies under the aegis of the UN and their contributions
ವಿಶ್ವಸಂಸ್ಥೆಯ ಆಶ್ರಯದ ಸಂಘಸಂಸ್ಥೆಗಳು ಮತ್ತು ಅವುಗಳ ಕೊಡುಗೆಗಳು
- Regional cooperation organisations: Commonwealth of Nations, SAARC, European Union, ASEAN, African Union – India and the United Nations

ಪ್ರಾದೇಶಿಕ ಸಹಕಾರ ಸಂಸ್ಥೆಗಳು : ಕಾಮನ್‌ವೆಲ್ತ್ ರಾಷ್ಟ್ರಸಂಘ, ಸಾರ್ಕ್, ಯುರೋಪಿಯನ್ ಯೂನಿಯನ್, ಆಸಿಯಾನ್, ಆಫ್ರಿಕನ್ ಒಕ್ಕೂಟ
-ಭಾರತ ಮತ್ತು ವಿಶ್ವಸಂಸ್ಥೆ

Sociology

1. Man and society

- Man is a social animal
ಮಾನವ ಸಂಘಜೀವಿ
- Early sociologists and their contributions
ಆರಂಭಿಕ ಸಮಾಜಶಾಸ್ತ್ರಜ್ಞರು ಮತ್ತು ಕೊಡುಗೆಗಳು
- Meaning and significance of socialisation
ಸಾಮಾಜಿಕರಣ ಅರ್ಥ ಮತ್ತು ಮಹತ್ವ

2. Man and culture

- Meaning and significance of culture
ಸಂಸ್ಕೃತಿಯ ಅರ್ಥ, ಮಹತ್ವ
- Features of culture
ಸಂಸ್ಕೃತಿಯ ಲಕ್ಷಣಗಳು
- Cultural diversity
ಸಾಂಸ್ಕೃತಿಕ ವೈವಿಧ್ಯ
- Customs and beliefs (practices and thoughts)
ಆಚಾರ ವಿಚಾರಗಳು

3. Sociology in everyday life

- Sociology in daily life
ದೈನಂದಿನ ಜೀವನದಲ್ಲಿ ಸಮಾಜಶಾಸ್ತ್ರ
- A person's body language and conversation
ವ್ಯಕ್ತಿಯ ಆಂಗಿಕ ಭಾಷೆ ಮತ್ತು ಸಂಭಾಷಣೆ
- Role awareness
ಪಾತ್ರಪ್ರಜ್ಞೆ

4. Types of society

- Hunting and food-gathering societies
ಬೇಟೆಯಾಡುವ ಮತ್ತು ಆಹಾರ ಸಂಗ್ರಹಿಸುವ ಸಮಾಜಗಳು
- Pastoral society
ಪಶುಪಾಲನ ಸಮಾಜ
- Agricultural society
ಕೃಷಿ ಸಮಾಜ
- Industrial society
ಕೈಗಾರಿಕಾ ಸಮಾಜ

5. Family

- Meaning and features of the family
ಕುಟುಂಬದ ಅರ್ಥ, ಲಕ್ಷಣಗಳು
- Types of family
ಕುಟುಂಬದ ಪ್ರಕಾರಗಳು
- Features of the nuclear family
ಕೇಂದ್ರ ಕುಟುಂಬದ ಲಕ್ಷಣಗಳು
- Joint family
ಅವಿಭಕ್ತ ಕುಟುಂಬ

6. Socialisation and family relationships

- Meaning and significance of socialisation
ಸಾಮಾಜಿಕರಣದ ಅರ್ಥ ಮತ್ತು ಮಹತ್ವ
- Agents of socialisation
ಸಾಮಾಜಿಕರಣದ ನಿಯೋಗಿಗಳು
- Gender and socialisation
ಲಿಂಗ ಹಾಗೂ ಸಾಮಾಜಿಕರಣ

7. Community

- Meaning and features of community
ಸಮುದಾಯದ ಅರ್ಥ ಮತ್ತು ಲಕ್ಷಣಗಳು
- Urban community
ನಗರ ಸಮುದಾಯ
- Village community
ಗ್ರಾಮ ಸಮುದಾಯ
- Tribal community
ಬುಡಕಟ್ಟು ಸಮುದಾಯ

8. Social stratification

- Meaning and features of social stratification
ಸಾಮಾಜಿಕ ಸ್ತರ ವಿನ್ಯಾಸದ ಅರ್ಥ ಮತ್ತು ಲಕ್ಷಣ
- Meaning and nature of prejudice
ಪೂರ್ವಗ್ರಹದ ಅರ್ಥ ಮತ್ತು ಸ್ವರೂಪ
- Untouchability – a social evil
ಅಸ್ಪೃಶ್ಯತೆ ಒಂದು ಸಾಮಾಜಿಕ ಪಿಡುಗು
- Measures for eradication of untouchability
ಅಸ್ಪೃಶ್ಯತಾ ನಿವಾರಣಾ ಕ್ರಮಗಳು

9. Work and economic life

- Division of labour and classes
ಶ್ರಮ ವಿಭಜನೆ ಮತ್ತು ವರ್ಗಗಳು
- Disparity in work
ದುಡಿಮೆಯಲ್ಲಿನ ತಾರತಮ್ಯ
- Paid and unpaid work
ಕೂಲಿ ಸಹಿತ ಮತ್ತು ಕೂಲಿ ರಹಿತ ದುಡಿಮೆ
- Unemployment: meaning, causes and remedies
ನಿರುದ್ಯೋಗ: ಅರ್ಥ, ಕಾರಣಗಳು ಮತ್ತು ಪರಿಹಾರೋಪಾಯಗಳು
- Organised and unorganised workers
ಸಂಘಟಿತ ಮತ್ತು ಅಸಂಘಟಿತ ಕೆಲಸಗಾರರು

10. Collective behaviour and protests

- Meaning and nature of crowd, methods of control
ಜನಮಂದೆಯ ಅರ್ಥ ಮತ್ತು ಸ್ವರೂಪ, ನಿಯಂತ್ರಣ ಕ್ರಮ
- Meaning and nature of mob and methods of control
ದೊಂಬಿಯ ಅರ್ಥ, ಸ್ವರೂಪ ಮತ್ತು ನಿಯಂತ್ರಣ ಕ್ರಮ
- Environmental movements
ಪರಿಸರ ಚಳವಳಿಗಳು
- Women's self-help groups
ಮಹಿಳೆಯರ ಸ್ವ ಸಹಾಯ ಸಮೂಹಗಳು

11. Social challenges

- Child labour
ಬಾಲಕಾರ್ಮಿಕತೆ
- Child marriage
ಬಾಲ್ಯವಿವಾಹ
- Violence against women – causes and remedial measures (the sub-line '–ಕಾರಣಗಳು ಮತ್ತು ಪರಿಹಾರ ಕ್ರಮಗಳು' is printed under this bullet; it may apply to all three)
ಸ್ತ್ರೀಯರ ಮೇಲಿನ ಹಿಂಸಾಚಾರ –ಕಾರಣಗಳು ಮತ್ತು ಪರಿಹಾರ ಕ್ರಮಗಳು

Economics

1 (number obscured by a punch hole; inferred). Meaning and importance of Economics

- Meaning of Economics
ಅರ್ಥಶಾಸ್ತ್ರದ ಅರ್ಥ
- Importance of studying Economics
ಅರ್ಥಶಾಸ್ತ್ರ ಅಧ್ಯಯನದ ಮಹತ್ವ
- Economic activities
ಆರ್ಥಿಕತೆ ಚಟುವಟಿಕೆಗಳು

2. Basic concepts of Economics

- Demand
ಬೇಡಿಕೆ
- Supply
ಪೂರೈಕೆ
- Production
ಉತ್ಪಾದನೆ
- Distribution
ವಿತರಣೆ
- Consumption
ಅನುಭೋಗ
- Utility
ಉಪಯುಕ್ತತೆ
- Price
ಬೆಲೆ
- Profit
ಲಾಭ
- Cooperation
ಸಹಕಾರ
- National income and per capita income
ರಾಷ್ಟ್ರೀಯ ವರಮಾನ ಮತ್ತು ತಲಾವರಮಾನ
- Importance of labour
ಶ್ರಮದ ಮಹತ್ವ

3. Economic structure

- Structural change
ರಚನಾತ್ಮಕ ಬದಲಾವಣೆ
- Sources of income
ಆದಾಯದ ಮೂಲಗಳು
- Sources of employment
ಉದ್ಯೋಗದ ಮೂಲಗಳು

- Static and dynamic economics
ಸ್ಥಿರಾತ್ಮಕ ಮತ್ತು ಚಲನಾತ್ಮಕ ಅರ್ಥಶಾಸ್ತ್ರ

4. Money and credit

- Evolution of money
ಹಣದ ವಿಕಾಸ
- Functions of money
ಹಣದ ಕಾರ್ಯಗಳು
- Types of credit
ಸಾಲದ ವಿಧಗಳು
- Importance and types of banks
ಬ್ಯಾಂಕುಗಳ ಮಹತ್ವ ಮತ್ತು ವಿಧಗಳು
- Reserve Bank of India
ಭಾರತೀಯ ರಿಸರ್ವ್ ಬ್ಯಾಂಕ್

5. Labour and employment

- Meaning and features of labour
ಶ್ರಮದ ಅರ್ಥ ಮತ್ತು ಲಕ್ಷಣಗಳು
- Division of labour
ಶ್ರಮ ವಿಭಜನೆ
- Gender dimension of labour
ಶ್ರಮದ ಲಿಂಗ ಪರಿಮಾಣ
- Employment and unemployment
ಉದ್ಯೋಗ ಮತ್ತು ನಿರುದ್ಯೋಗ

6. Sectors of the Indian economy

- Primary sector
ಪ್ರಾಥಮಿಕ ವಲಯ
- Secondary sector
ದ್ವಿತೀಯ ವಲಯ
- Tertiary sector – their importance
ತೃತೀಯ ವಲಯ – ಇವುಗಳ ಮಹತ್ವ
- Economy in Karnataka
ಕರ್ನಾಟಕದಲ್ಲಿ ಅರ್ಥವ್ಯವಸ್ಥೆ

7. Economy and government

- Relationship between the economy and the government
ಅರ್ಥವ್ಯವಸ್ಥೆ ಮತ್ತು ಸರ್ಕಾರದ ನಡುವಿನ ಸಂಬಂಧ
- Planning in India
ಭಾರತದಲ್ಲಿ ಯೋಜನೆ
- Five-Year Plans
ಪಂಚವರ್ಷೀಯ ಯೋಜನೆಗಳು
- Planning Commission
ಯೋಜನಾ ಆಯೋಗ
- Green Revolution
ಹಸಿರುಕ್ರಾಂತಿ
- NITI Aayog
ನೀತಿ ಆಯೋಗ

8. Rural development

- Meaning and importance of rural development

ಗ್ರಾಮೀಣಾಭಿವೃದ್ಧಿಯ ಅರ್ಥ ಮತ್ತು ಮಹತ್ವ

- Panchayat Raj system and rural development
ಪಂಚಾಯತ್‌ರಾಜ್‌ವ್ಯವಸ್ಥೆ ಮತ್ತು ಗ್ರಾಮೀಣಾಭಿವೃದ್ಧಿ
- Decentralisation of power
ಅಧಿಕಾರದ ವಿಕೇಂದ್ರೀಕರಣ
- Role of women in rural development
ಗ್ರಾಮೀಣಾಭಿವೃದ್ಧಿಯಲ್ಲಿ ಮಹಿಳೆಯರ ಪಾತ್ರ

9. Public finance and budget

- Private and public finance
ವೈಯಕ್ತಿಕ ಮತ್ತು ಸಾರ್ವಜನಿಕ ಹಣಕಾಸು
- Public expenditure
ಸಾರ್ವಜನಿಕ ವೆಚ್ಚಗಳು
- Public revenue
ಸಾರ್ವಜನಿಕ ಆದಾಯ
- Budget
ಆಯವ್ಯಯ
- Deficit financing
ಕೊರತೆಯ ಹಣಕಾಸು

Business Studies

1. Business – meaning and importance

- Meaning and importance of business
ವ್ಯವಹಾರದ ಅರ್ಥ ಮತ್ತು ಪ್ರಾಮುಖ್ಯತೆ
- Social and economic objectives of business
ವ್ಯವಹಾರದ ಸಾಮಾಜಿಕ ಮತ್ತು ಆರ್ಥಿಕ ಉದ್ದೇಶಗಳು
- Trade, industry and services
ವ್ಯಾಪಾರ, ಕೈಗಾರಿಕೆ ಮತ್ತು ಸೇವೆಗಳು
- Ethical principles of business
ವ್ಯವಹಾರದ ನೀತಿ ತತ್ವಗಳು

2. Origin of various business organisations

- Types of business organisations
ವ್ಯವಹಾರ ಸಂಘಟನೆಗಳ ವಿಧಗಳು
- Sole proprietorship concerns
ಏಕವ್ಯಕ್ತಿಮಾಲಿಕತ್ವ ಸಂಸ್ಥೆಗಳು
- Partnership firms
ಪಾಲುದಾರಿಕೆ ಸಂಸ್ಥೆಗಳು
- Hindu Undivided Family business concerns
ಹಿಂದೂ ಅವಿಭಕ್ತ ಕುಟುಂಬ ವ್ಯವಹಾರ ಸಂಸ್ಥೆಗಳು

3. Large-scale business organisations

- Cooperative societies
ಸಹಕಾರಿ ಸಂಘಗಳು
- Joint-stock companies
ಕೂಡು ಬಂಡವಾಳ ಸಂಸ್ಥೆಗಳು
- Multinational companies
ಬಹುರಾಷ್ಟ್ರೀಯ ಸಂಸ್ಥೆಗಳು
- Government enterprises, joint-sector undertakings, public utility service organisations
ಸರ್ಕಾರಿ ಉದ್ಯಮಗಳು, ಜಂಟಿರಂಗದ ಸಂಸ್ಥೆಗಳು, ಲೋಕೋಪಯೋಗಿ ಸೇವಾಸಂಸ್ಥೆಗಳು

- Share market
ಷೇರು ಮಾರುಕಟ್ಟೆ

4. Business management

- Meaning and importance of management
ನಿರ್ವಹಣೆಯ ಅರ್ಥ ಮತ್ತು ಮಹತ್ವ
- Principles of management
ನಿರ್ವಹಣೆಯ ತತ್ವಗಳು
- Decisions in the organisation's field of operation
ಸಂಘಟನೆಯ ಕಾರ್ಯಕ್ಷೇತ್ರದಲ್ಲಿ ನಿರ್ಧಾರಗಳು
- Scope of management
ನಿರ್ವಹಣೆಯ ಕ್ಷೇತ್ರವ್ಯಾಪ್ತಿ

5. Marketing management

- Meaning of marketing management
ಮಾರುಕಟ್ಟೆ ನಿರ್ವಹಣೆಯ ಅರ್ಥ
- Types of markets
ಮಾರುಕಟ್ಟೆಯ ವಿಧಗಳು
- Market system
ಮಾರುಕಟ್ಟೆಯ ವ್ಯವಸ್ಥೆ
- Functions of the market system
ಮಾರುಕಟ್ಟೆ ವ್ಯವಸ್ಥೆಯ ಕಾರ್ಯಗಳು
- Importance of marketing
ಮಾರುಕಟ್ಟೆಯ ಪ್ರಾಮುಖ್ಯತೆ
- Marketing mix, its elements
ಮಾರುಕಟ್ಟೆಯ ಮಿಶ್ರಣ , ಮೂಲಾಂಶಗಳು
- Role of intermediaries in the distribution of goods and services
ಸರಕು ಸೇವೆಗಳ ವಿತರಣೆಯಲ್ಲಿ ಮಧ್ಯವರ್ತಿಗಳ ಪಾತ್ರ
- Consumer rights
ಗ್ರಾಹಕ ಹಕ್ಕುಗಳು
- Consumer dispute redressal bodies or agencies
ಗ್ರಾಹಕ ವಿವಾದ ಪರಿಹಾರ ಸಂಸ್ಥೆಗಳು ಅಥವಾ ಕಾರ್ಯಬಾರಿಗಳು

6. Bank transactions

- Meaning and features of a bank
ಬ್ಯಾಂಕ್‌ನ ಅರ್ಥ ಮತ್ತು ಲಕ್ಷಣಗಳು
- Functions of a bank
ಬ್ಯಾಂಕಿನ ಕಾರ್ಯಗಳು
- Services of a bank
ಬ್ಯಾಂಕಿನ ಸೇವೆಗಳು
- Banking transactions
ಬ್ಯಾಂಕಿಂಗ್ ವ್ಯವಹಾರಗಳು
- Various accounts of a bank
ಬ್ಯಾಂಕಿನ ವಿವಿಧ ಖಾತೆಗಳು
- Types of banks
ಬ್ಯಾಂಕುಗಳ ವಿಧಗಳು
- Procedure for opening a bank account
ಬ್ಯಾಂಕ್ ಖಾತೆ ತೆಗೆಯುವ ವಿಧಾನಗಳು
- Banking transactions of post offices
ಅಂಚೆ ಕಛೇರಿಗಳ ಬ್ಯಾಂಕಿಂಗ್ ವ್ಯವಹಾರಗಳು

7. Entrepreneurship

- Meaning of entrepreneurship
ಉದ್ಯಮಶೀಲತೆಯ ಅರ್ಥ
- Characteristics of entrepreneurship
ಉದ್ಯಮಶೀಲತೆಯ ಲಕ್ಷಣಗಳು
- Functions and importance of an entrepreneur
ಉದ್ಯಮಿಯ ಕಾರ್ಯಗಳು ಮತ್ತು ಪ್ರಾಮುಖ್ಯತೆ
- Self-employment opportunities for entrepreneurs
ಉದ್ಯಮಿಗಳಿಗೆ ಸ್ವಂತ ಉದ್ಯೋಗಾವಕಾಶಗಳು
- Self-employment schemes
ಸ್ವಯಂ ಉದ್ಯೋಗದ ಯೋಜನೆಗಳು
- Entrepreneur-promoting institutions
ಉದ್ಯಮಿಗಳ ಪ್ರವರ್ತಕ ಸಂಸ್ಥೆಗಳು
- District Industries Centres
ಜಿಲ್ಲಾ ಕೈಗಾರಿಕಾ ಕೇಂದ್ರಗಳು

8. Consumer education and protection

- Consumer and supplier
ಬಳಕೆದಾರ ಮತ್ತು ಪೂರೈಕೆದಾರ
- Causes of exploitation of consumers
ಬಳಕೆದಾರರ ಶೋಷಣೆಗೆ ಕಾರಣಗಳು
- World Consumer Day
ವಿಶ್ವಗ್ರಾಹಕರ ದಿನಾಚರಣೆ
- Consumer protection
ಗ್ರಾಹಕರ ಸಂರಕ್ಷಣೆ
- Consumer rights
ಗ್ರಾಹಕರ ಹಕ್ಕುಗಳು
- Commissions/forums for consumer protection
ಗ್ರಾಹಕರ ಸಂರಕ್ಷಣೆಗೆ ಇರುವ ಆಯೋಗ/ವೇದಿಕೆಗಳು
- Consumer court
ಗ್ರಾಹಕ ನ್ಯಾಯಾಲಯ

Official documents

This page is transcribed from the official documents below. If anything differs, the official document is correct.

- [KARTET-2025 Notification \(Kannada\), No. DPI-CPIOCAC\(KTET\)/4/2025-CAC, dated 18/10/2025, Central Admission Cell, Commissionerate of School Education](#)
- [KARTET-2025 Syllabus \(linked as '2. Syllabus' beside the notification on schooleducation.karnataka.gov.in\)](#)
- [KARTET-2025 Corrigendum \(ತಿದ್ದುಪಡಿ ಅಧಿಸೂಚನೆ\), No. DPI.CPID.CAC \(KTET\)/4/2025, dated 30/10/2025](#)
- [KARTET portal \(application / results / certificates\)](#)

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