

TEACHER RECRUITMENT TEST (TRT) - 2023
SCHEME OF EXAMINATION AND SYLLABUS FOR THE
POSTS OF SCHOOLASSISTANT (NON-LANGUAGES i.e.
MATHEMATICS, PHYSICAL SCIENCE, BIOLOGICAL SCIENCE &
SOCIAL STUDIES)

Duration: 2 Hours & 30 Minutes

Part	Subject	Syllabus	No. of Questions	No. of Marks
I.	General Knowledge & Current Affairs	-	20	10
II.	Perspectives in Education	Syllabus as notified	20	10
III.	Content	Telangana State syllabus from classes VI to X in School subject concerned with difficulty standard as well as linkages upto Intermediate level	88	44
IV.	Teaching Methodology	B.Ed- Methodology of School subject concerned based on syllabus of T.S Universities	32	16
	Total		160	80

**Syllabus of Written Test for Recruitment of School Assistant
Mathematics**

Part – I

General Knowledge and Current Affairs (Marks: 10)

Part - II

Perspectives In Education (Marks: 10)

I. Historical Development of Education in India

1. Development of Education from Pre-Vedic to Pre-Independent Period
2. Recommendations of various Educational Committees, Education Commissions, Educational Policies during pre & post independent period and their implications

II. Philosophical Dimensions of Education

1. Aims, Objectives, Functions; Processes of Education - Unipolar, Bipolar and Tripolar; Types of Education – Formal, Informal and Non-formal and their significance
2. Educational thinkers and their contributions – Swami Vivekananda, Mahathma Gandhi, B.R. Ambedkar, Jiddu Krishnamurthy, Gijubhai Badheka, Plato, Aristotle, Rousseau, Froebel, Dewey and Montessori
3. Professional code of conduct for teachers, Professional Ethics – commitment to profession, learner and society
4. Critical Understanding of the difference between knowledge and skill, knowledge and information, teaching and training, reason and belief
5. Theory of knowledge – problems of knowledge, truth, ways of knowing, notions of truth, validation of knowledge – pramanas from eastern connotation - pratyaksha, anumana, upamana, sabda and western connotation – perception, inference, comparison, testimony

III. Sociological Dimensions of Education

1. Social agencies of Education – Home, Peer group, School, Community
2. Democracy and Education- Equity, Equality of Educational Opportunities in diversified society, Role of Education in promoting democracy
3. Economics of Education – Education as Human Capital, Education and Human Resource Development
4. Gender: Social construction of gender, gender discrimination, Equity and Empowerment of Women, working towards gender equality in the classroom - the role of teacher
5. Community Development – Education as an instrument for Social Change and Transformation of Society

IV. Child – Development and Learning

1. Methods of Child Study – Observation, Introspection, Experimental Method and Case Study
2. Principles of Development and their Educational implications
3. Stages and Dimensions of Development – Growth and development across various stages from pre-natal to adolescence – Physical, Cognitive, Language, Emotional, Social and Moral (contribution of Piaget, Erikson, Chomsky, Rogers and Kohlberg), Developmental tasks and their implications, Child Rearing Practices and development
4. Understanding Learner – Individual differences (Intra & Inter) – aptitude, interest, intelligence, thinking (divergent and convergent), attitude, personality
5. Understanding Learning – Concept, Factors effecting Learning – Personal, Environmental and Material; Role of Motivation in Learning; Memory and Forgetting; Learning Theories – Behavioristic, Insight, Cognitive, Social and Constructivist

V. Professional Development of Teachers

1. Teaching as a Profession
2. Phases of Professional Development – Pre-service and In-service,

3. Approaches to Professional Development –Conventional (face to face), Distance, Online, School based, Action Research, Professional Learning Communities, Self - Initiated Learning, Continuous Professional Development (CPD)
4. NCF-2005, NCFTE-2009, NCFSE-2023
5. Teacher Autonomy & Accountability
6. Institutions relating to Teachers and Teacher Education - NCERT, NCTE, RCI, SCERT, IASE, CTE, DIET

VI. Educational Concerns in Contemporary India

1. Environmental Education – Meaning, Scope, Concept of Sustainable Development, Role of Teacher, School and NGOs in protection of environment
2. Population Education – Significance, Population Situation, Consequences of population growth, Approaches and Themes of Population Education, Family Life Education
3. Adolescence Education – Significance, Challenges, Coping Skills and Life Skills
4. Inclusive Education – Concept, addressing diversified needs, Importance of Early Identification, Methods & Strategies of Classroom Management, Creation of awareness among Students, Parents and Society, Role of Education in creating positive attitude towards diversity
5. Education in the context of LPG (Liberalization, Privatization, Globalization) – Privatization of Education – Issues of Equal opportunities, Urbanization and Migration
6. Value Education – Importance of Value Education in Primary and Secondary Stages of Education, role of school and teacher in developing appropriate values among children and creation of an egalitarian society
7. Health & Wellbeing - Physical, Mental, Social and Emotional Health, Stress Management, Yoga Education
8. Educational Technology, Information and Communication Technology (ICT) and Education – pedagogical implications, exploration of ICT resources for teaching and learning, open educational resources

9. Constitutional Provisions relevant to Education – Fundamental Rights and Duties of Citizens, Right of Children to Free and Compulsory Education Act, 2009, Child Rights, Human Rights, PWD Act, 2016 and other Provisions pertaining to Education

Part - III

Mathematics Content (Marks: 44)

- 1. Number System:** Natural Numbers, Whole Numbers, Integers, Rational Numbers, Real Numbers, Fundamental operations and their properties, Representation of numbers on number line, Prime and composite numbers, types of primes (coprime, twin prime, relative prime), Even and odd numbers; HCF and LCM, relation between HCF and LCM, prime factorization and division method; Fractions and Decimals; divisibility tests; Representation of decimal numbers (terminating, non-terminating, non-terminating but recurring) in rational form; Squares and Square roots, Cubes and Cube roots; Pythagorean triplets; Surds, Rationalization of a monomial, binomial surds of second order; Euclid division lemma; Fundamental Theorem of Arithmetic; Introduction of logarithms, Characteristic and Mantissa, Conversion of a number in exponential form to a logarithmic form, Properties and laws of logarithms; Sets and their representations, Types of sets, Cardinality of sets, Venn diagrams, Operations on sets, Complement of a set, Properties of operations on sets
- 2. Arithmetic:** Ratio and Proportion - Unitary method - Direct and indirect proportion; Compound ratio; Percentage - Converting fractions and decimals into percentage and vice-versa; Profit and Loss – Discount – Simple interest – Compound interest - Partnership; Time & work; Time & Distance; Clocks and calendars.
- 3. Algebra:** Exponents and powers - Laws; Algebraic Expressions - fundamental operations - Identities - Factorization; Simple equations-Solving linear equations ; Polynomials - Constant, linear, quadratic, cubic polynomials; monomials, binomials, trinomials - Zero of a polynomial - Multiplication and Division of polynomials - Remainder Theorem - Factor Theorem - division algorithm and problems ; Linear Equations in Two Variables – Solutions – Graphs ; Pair of Linear Equations in Two Variables – Solutions; Quadratic Equations – Finding the roots - Relationship between discriminant and nature of roots - Relationship between roots and coefficients - Finding the quadratic equation whose roots are given ; Progressions – Arithmetic Progression - n^{th} term and sum of first “n” terms – Geometric Progression - n^{th} term and sum of first “n” terms- Sum of infinity terms.
- 4. Geometry:** Basic geometrical concepts; 3D, 2D shapes – Nets – drawing - representing; Polygons – Angles of a polygons and their related theorems; Triangles – types – properties, Criteria of congruence – Criteria of similar triangles - constructions - related theorems, Concurrent lines in triangles - Centroid, Orthocenter, Circumcenter and Incenter, Inequalities in a triangle and their theorems; Quadrilaterals - Types of

Quadrilaterals and their properties – constructions – related theorems; Circle and its components – related theorems; Lines and Angles - Perpendicular bisector and angular bisector - Pairs of angles - Properties of parallel lines with transversal - related Theorems; Symmetry - lines of symmetry - rotational and reflective symmetry - Point of symmetry – Dilations - Tessellations; Euclid’s Geometry – axioms – postulates; Tangents and secants to a circle – constructions - related theorems.

5. **Coordinate geometry:** Cartesian system; graphs of linear equations; Distance between two points; Collinearity; Section formula; Trisectional points of a line; Area of a triangle on coordinate plane; Equation of a straight line - different forms and their conversions; Slope of a line joining two points.
6. **Trigonometry:** Trigonometry -Basic concepts; Trigonometric ratios- Trigonometric ratios of compound angles, multiple and sub- multiple angles - Complementary angles; Trigonometric Identities; Conversions of Trigonometric ratios; Trigonometric transformations; Applications of trigonometry - Angle of elevation and angle of depression - Heights and distances.
7. **Mensuration** - Area and Perimeter–Triangle - Quadrilaterals; Area of rectangular paths; Area of the circle - circular paths (Ring) and area of sector, Circumference of Circle; Curved Surface Area & Total Surface Area of cube, cuboid, right circular cylinder, cone, sphere, hemisphere, right pyramid, right prism; Volume of cube, cuboid, right circular cylinder, cone, sphere, hemisphere; Volume and capacity; Relationship between surface areas of any two comparable solids; Relationship between volumes of any two comparable solids; surface areas and volumes of combinations of any of the following: cubes, cuboids, spheres, hemispheres , right circular cylinders and cones; Problems involving converting one type of metallic solid into another and other mixed problems.
8. **Statistics and Probability** – Data handling-Data- Collection and organisation of data; Pictograph and Bar graphs: Simple pie charts; Measures of central tendency-Mean, Median and Mode of ungrouped and grouped data - Specific usages – Empirical relation of mean, median and mode ; Frequency distribution for ungrouped and grouped data-Preparation of frequency distribution table; Frequency graphs (histogram for equal and unequal class intervals, frequency polygon, frequency curve, cumulative frequency curves) and related problems; Usage of different values and central tendencies through Ogives; Probability- Basic Concepts and definition of Probability; Outcomes and chances; Events-Mutually exclusive, possible and impossible, Complementary; Applications of Probability.

Part V – Methodology (Marks:16)

1. **Nature and Scope of Mathematics:** Meaning and Definition - Nature of Mathematics - Mathematics Structure, Order, Pattern and Sequence - Scope of Mathematics - Use of Mathematics in daily life - Correlation with other subjects/ disciplines
2. **History of Mathematics and Contributions of Mathematicians:** Pythagoras, Euclid, Baudhayana, Aryabhatta, Brahmagupta, Bhaskaracharya-II, Srinivasa Ramanujan,

P.C.Mahalanobis, Hypatia.

3. **Aims and Objectives of Learning Mathematics:** Aims of Learning Mathematics - Relating Mathematics Education to Nature, Society, Social Environment and Technology - Mathematics for Inclusion - Imbibing the Values through Mathematics Teaching - Meaning of Learning Objectives - Characteristics of Learning Objectives - Learning Objectives for Upper Primary, Secondary and Higher Secondary Stages - Blooms Taxonomy - Anderson and Krathwohl's Taxonomy - Academic Standards – Learning Outcomes in Mathematics
4. **Mathematics Teacher:** Characteristics, Role, Professional Development, Vision
5. **How children learn mathematics:** Psychological implications of learning mathematics - Jean Piaget, Jerome Bruner, Lev Vygotsky, Ausubel – Evolving strategies for identification of Individual differences and Catering their needs
6. **Pedagogical Shift in Mathematics:** Process of Constructing Mathematical Knowledge - Nature of Mathematics – Approaches - Learner, Learning and Teacher – Assessment - Planning of Teaching Learning Experiences, Teaching Learning before shift and after shift; Mathematics Curriculum, Diversity in Classroom, Information and Communication Technology (ICT) - Democratizing Mathematics Learning: Critical Pedagogy and Role of Teachers – Content Cum Methodology (CCM): Meaning, Concept & Nature and Steps, Steps in Pedagogical Analysis, Content and Teaching Skills
7. **School Curriculum in Mathematics:** Curriculum Framework, Curriculum and Syllabus from Subject Centred to Behaviourist to Constructivist Approach - Mathematics Curriculum Development and Organisation - Principles and Approaches: Content centred, Behaviourist, Constructivist - Logical and Psychological, Topical, Concentric, Spiral - Recommendations of NCF 2005 and APSCF 2011 on Mathematics Curriculum - National Focus Group Position Paper on Mathematics and State Position Paper (2011) on Mathematics - Recommendations of NCF 2023 on Mathematics Education - Designing of Teaching Learning Materials - Print Resources - Textbooks, Popular Mathematics Book, Journals and Magazines - Dale's Cone of Experience - Teacher as Curriculum Developer - Localized Curriculum, Place for Artisans - Knowledge Systems in Curriculum, Local Innovators and Innovative practices in Mathematics.
8. **Approaches, Strategies, Methods and Techniques of Teaching and Learning Mathematics:** Different Approaches and Strategies of Learning, Selecting appropriate Approaches and Strategies - Constructivist Approach of Teaching Mathematics and Strategies - 5 E Learning Model - Collaborative Learning Approach (CLA) - Problem Solving Approach (PSA) & Teacher's role - Concept Mapping - Experiential Learning - Techniques of Teaching Mathematics – Oral work, Written work, Drilling, Assignment, Speed and Accuracy - Methods of Teaching mathematics: Activity based, Inductive and Deductive, Analytic and Synthetic, Project, Heuristic, Project, Laboratory, Problem Solving

9. **Learning Resources:** Learning Resources from Immediate Environment and various sources including digital - Mathematics Kits - Mathematics Club - Mathematics Lab - Mathematics Library - Mathematics Corner - Mathematics Modelling
10. **Planning for Teaching Learning Mathematics:** Need of Planning for Teaching Learning - Annual/ Year Plan - Elements of Unit Plan, Lesson Plan /Period plan – Planning and Organizing Activities in Mathematics - ICT Applications in Teaching Learning Mathematics - Steps in the Lesson Plan /Period plan – Herbartian Steps – SCERT Model
11. **Tools and Techniques of Assessment for Learning Mathematics:** Test, Examination, Measurement, Assessment and Evaluation – Types of Evaluation: Prognostic, Diagnostic, Formative, Summative - Continuous and Comprehensive Evaluation (CCE) – Formative and Summative Assessment - Teacher centred Assessment and Learner centred Assessment - Assessment Framework - Learning Indicators (LI) - Assessment of Activity - Assessment of Presentation - Assessment of Group Work - Assessment of Collaborative Learning - Tools and Techniques of Assessment: Written test, Project Work, Field Trips and Field Diary, Laboratory Work, Interview/Oral Test, Journal Writing, Concept Mapping - Scholastic Achievement Test - Weightage Tables and Blueprint - Types of Test Items: Essay, Short Answer, Very Short Answer, Objective types - Characteristics of good Test - Recording and Reporting – Measures of Students' Achievement – Marks - Grading System - Measurement of Process Skills and Attitudes – Maintenance of Portfolio – It's role in evaluating students' performance.

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3. Professional code of conduct for teachers, Professional Ethics – commitment to profession, learner and society
4. Critical Understanding of the difference between knowledge and skill, knowledge and information, teaching and training, reason and belief
5. Theory of knowledge – problems of knowledge, truth, ways of knowing, notions of truth, validation of knowledge – pramanas from eastern connotation - pratyaksha, anumana, upamana, sabda and western connotation – perception, inference, comparison, testimony

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Part - III

Physical Science Content (Marks: 44)

1. **Measurement:** Measurement of lengths, Units of Measurements, Measurement of thickness of a coin, Measurement of the length of a curved path, Measurement of Area, Measurement of the area of a regular and irregular surface, Measurement of volume, measurement of volume of liquids, Measurement of volume of irregular solids using a measuring cylinder
2. **Natural Resources:**
 - i. **Air and Water:** Composition of air, Hot air and Cool air, Effects of moving air, Cyclone, Measurement of Atmospheric Pressure, Air Pollution, Sources water on earth, Forms of water, evaporation of water, condensation of water, water cycle, Water and its uses, Measurement of the volume of water, Water pollution, Process of waste water treatment, safe drinking water stages, Diseases caused by untreated water, other ways of disposing sewage, Types of drainage systems, Draughts, Floods, Conservation of water.
 - ii. **Weather and Climate:** Measuring components of weather, measurement of temperature of a place, Measurement of rainfall, direction of wind, Humidity, Climate and life style.
 - iii. **Coal and Petroleum:** Sources of materials, Exhaustible and Inexhaustible materials, **Coal** - formation, Uses of Coal - Coal, coke and Coal tar, Col gas, **Petroleum** - formation, refining of petroleum, uses of petroleum, use of natural gases, Petrochemical products, conservation of coal and petroleum, Misuse of energy resources and consequences, harmful effects caused during use of fuels.

iv. Combustion, Fuels and flame: Combustible and non-combustible materials, Process of combustion, Ignition temperature, Types of combustion, Fuels, calorific value, Fire control, Flame, structure of flame

3. **Natural Phenomena**

i. **Light:** Sources of light, Shadows, Reflection, Laws of Reflection, Periscope, Kaleidoscope, Pin hole camera, Reflection of light by plane surfaces- Formation of image by a pinhole camera, Fermat principle, Plane mirror, Reflection of light by plane mirror, Plane of reflection, Formation of an image by plane mirror and its characteristics, uses of plane mirrors, Reflection of light at curved surfaces (Spherical Mirrors), Finding the normal to a curved surface, Pole, Principal axis, Centre and Radius of curvature, Ray diagrams for concave and convex mirrors, Sign convention, Magnification, Characteristics of the images formed by spherical mirrors, Refraction- Refraction of light at plane surfaces- Refractive index, Relative refractive index, Snell's law, Total Internal Reflection, Mirages, Applications of total internal reflection, Refraction through glass slab, lateral shift and vertical shift, Refraction of Light at curved surfaces- Image formation, Types of lenses (converging and diverging) , Focal length, Rules to draw ray diagrams for image formation by lenses, Characteristics of the images formed by lenses, Lens formula, Magnification, Lens maker formula, Human eye, Least distance of distinct vision, Structure of human eye, Vision defects-Myopia, Hypermetropia and Presbyopia, Power of lens, Prism, Refractive index of Prism, Dispersion and Scattering of Light.

ii. **Sound:** Identifying different sounds, Sound is a form of energy, Production of sound, Propagation of sound in different media, Types of waves, Sound waves- Longitudinal, Characteristics of the sound Wave-Loudness, feebleness, Wave length, Amplitude, Time period and frequency, Speed of sound wave, Noise and Music, Musical instruments, Characteristics of a musical Sound-Pitch, Loudness, Quality, Audible range, Sound pollution, Measure to control sound pollution. Reflection of sound, Echo, Reverberation, Uses of multiple reflection of sound, Range of hearing, applications of ultrasound, SONAR.

iii. **Heat:** Sources of Heat, Heat is a form of an Energy, Heat, Temperature and Units, Measurement of Temperature, Fahrenheit and Centigrade scales, Different types of thermometers, Thermal equilibrium, Temperature and kinetic energy, Specific heat, Applications of specific heat capacity, Method and Principles of mixtures, Determination of specific heat of a solid, Evaporation, Condensation, Humidity, Dew and Fog, Boiling, Latent heat of vaporization, Melting, Freezing.

iv. **Some natural phenomena:** Types of charges and their interaction, Presence of charge of a body, transfer of charge, Lightning, Lightning safety, Lightning conductors, Earthquakes, Tsunami, protection against Earthquakes, Earthquakes in Telangana.

v. **Stars and solar system**- Length of a shadow, North-south movement of the Sun. Sun dial, Moon, Phases of Moon, Solar and Lunar eclipses, Constellations, Pole star, Solar System, The planets, Stars, Meteors, Asteroids and Comets, Artificial Satellites.

4. **Kinematics and Dynamics**

i. Motion- Motion and rest, Types of motions- Translatory motion, Rotatory motion, Oscillatory motion, Distance and Displacement, Scalars and Vectors, Speed, Velocity, Average speed and Average velocity, direction of motion of a body, Uniform motion, Non-uniform motion, Acceleration, Deceleration, Equations of uniform accelerated motion, time-distance graphs, Difference between graph and map, Graphs of objects moving at different uniform speeds, Relation between speed and the slope of a graph, Graphs of stationary objects, Graphs of non-uniform motion, Newton's laws of Motion-First law of motion, Inertia and mass, Second law of motion, Linear momentum, Atwood machine, Third law of motion, Conservation of momentum, Impulse,

ii. Gravitation- Uniform circular motion, Universal law of Gravitation, Freefall, Direction of 'g', Weight, Weight of a free-fall body, Changes during the free-fall of a body, Centre of Gravity, Stability

iii. Work and Energy-Work, Idea of Energy, Energy transfer and work, Understanding the increase and decrease in energy of an object, Kinetic energy, Potential Energy, Observing the energy in-stretched rubber band and in an object at some height, Mechanical energy, Conservation of Energy-Conservation of mechanical energy, Calculation of the total energy of freefall at different heights, Power, Sources of Energy, Fuels, Renewable sources of Energy.

iv. Force: Types of forces- Contact forces and field forces, Net force, Effects of net force acting on a table, Effect of stretched rubber bands on fingers, calculation of net force from free body diagrams, Effect of force on change the state of motion and its direction, Effects of net force on direction of moving object, other effects of force, Pressure.

v. Friction: Types of friction, Factors affecting friction, friction produces heat, Increasing and decreasing of friction, principle of ball bearings, Fluid friction, factors influencing the fluid friction.

vi. Floating bodies- Density and relative density, Relative density of liquids, Lactometer, Upward force in liquids, Pressure of air, Measurement of atmospheric pressure, Buoyancy and measurement of the force of Buoyancy, Archimedes' Principle, Pascal's Law.

vii. Time: Estimating time, Units of time, Time Measuring instruments.

5. **Magnetism**: Story of magnet, Magnets of different shapes, materials attracted by Magnet, Poles of a Bar magnet, Directions of a Bar magnet, Magnetic compass, attraction and

repulsion between two magnets, Earth as a Magnet, Magnetic and non-magnetic substances, Making of a magnet and magnetic compass, Magnetic induction.

6. **Electricity** -Electric cell-Dry cell, Bulb, Switch, Torch light, Electric symbols and their uses, Simple electric circuits, Connecting Electric cells and bulbs in Series and Parallel, Heating effect of electric current, Tube lights, Compact Florescent lamps, Miniature circuit breaker(MCB), Electric fuses, Testing conductivity of materials- conductors, insulators, Electric conductivity of liquids, Electric conductivity of electrolyte, Chemical effect of electric current, Electrolytic cell, Electroplating and its uses,

Electric current: Potential difference, Electromotive force(emf), Ohm's law, Electric shock, Factors affecting the resistance of the Material-Temperature, Nature of material, Length of the conductor, cross section area. Electric Circuits-Series and parallel connections of resistors, Kirchhoff's Laws-Junction law and Loop law, Electric power.

7. **Electromagnetism**- Oersted's Experiment, Magnetic field, Lines of magnetic field, Magnetic flux and flux density, Magnetic field due to currents-Magnetic field due to straight wire carrying current, Magnetic field due to circular coil, Magnetic field due to solenoid, Magnetic force on moving charge and current carrying wire- Right hand rule, Electric Motor, Electromagnetic Induction, Faraday's Law, Lenz law, Applications of Faraday's law of electromagnetic induction, Electric Generator, Alternating & Direct Currents.

8. **States of Mater** – Matter around us- Properties of Materials-Transparent, Opaque, translucent, States of matter, Changes in Matter (Physical change and Chemical Change, Slow and fast changes, temporary and permanent changes), Properties of solids, liquids and gases. Compressibility, Diffusion- diffusions in liquids, diffusion of solids in liquids, Diffusion of two gases, Matter- Changing its states.

9. **Atomic Structure and Atoms, molecules:**

i. **Atoms, molecules**- Law of conservation of mass, Laws of constant proportions, Dalton's atomic theory, Atoms and molecules, Symbol of elements, Atomicity, Molecules of compounds, Chemical formulae of compounds, Formula unit mass, Mole concept, Molar mass.

ii. **Atomic Structure**- Sub atomic particles, Electron, Proton and Neutron, Structure of Atom, Atomic Models – Thomson's model of Atom, Rutherford's alpha particles scattering experiment, Rutherford's model of atom and its limitations, Bohr's model of atom. Distribution of electrons in different Orbits (Shells), Valency, Atomic number, Atomic mass number, Writing symbols of atoms, Isotopes. Applications of Isotopes. Spectrum, Characteristics of electromagnetic wave, Electromagnetic spectrum, Bohr's model of hydrogen atom and its limitations, Bohr-Sommerfield model of atom, Quantum mechanical

model of atom, Quantum numbers, Electronic configuration, The Pauli Exclusion principle, Aufbau principle, Hund's Rule.

10. **Classification of Elements-Periodic Table:** Need for the arrangement of elements in an organised manner, Dobereiner's law of Triads, Mendeleeff's periodic table, The periodic law, Salient features and achievements of the Mendeleeff's periodic table, Limitations, Modern periodic table, Positions of elements in the Modern periodic table, Groups and Periods. Metals and Non-metals. Periodic properties of elements in the modern periodic table, Properties of elements and their trends in Groups and Periods- Valance, Atomic radius, Ionisation energy, Electron Affinity-Electron gain enthalpy, Electronegativity, Metallic and non-Metallic properties

11. **Materials**

i. Acids, Bases and Salts: Natural indicators, Chemical indicators to test Acids and Bases, Acid rains, Manures, Salts, Chemical properties of Acids and Bases, Reaction of Acids and Bases with Metals, metal hydrogen carbonates and metal oxides, non-metal oxides. Neutralization reaction, General properties of Acids and Bases, Strength of acid or base, Concept of pH, Importance of pH in everyday life, Family of Salts, pH of salts, Chemicals from common salt, Common salt-A raw material for chemicals, Sodium hydroxide from common salt, bleaching powder, Baking soda, washing soda, Removing water of crystallisation, Plaster of Paris.

ii. Natural Fibres, Synthetic Fibres and plastics: Types of fibres, Natural fibres-Cotton, Jute, Silk, Wool, Yarn to fabric, identifying fibres - burning test, Synthetic fibres- Nylon, Rayon, Acrylic, Polyesters, Plastics-Resin identification codes, Plastics, Types of plastics - Thermo plastics, Thermosetting plastics, plastics and environment, Bio degradable and non-biodegradables, 4R principle, Recycling codes.

iii. Metals and Non-metals: Physical properties of Metals-Appearance, Sonority, Malleability, Ductility, Electric and Thermal conductivity. Chemical properties of metals- Reaction with oxygen, rusting of metals, Reaction with water, Reaction with Acids, Reactivity of metals, Uses of metals and non-metals.

12. **Chemical Bonding and Molecular Structure**

Lewis dot structures, Electronic theory of valence by Lewis and Kossel, Ionic Bond, Formation of Ionic bond, Cation formation, Anion formation, The arrangement of Ions in ionic compounds, Factors affecting the formation of cation and anion, Covalent bond, Formation of O₂, N₂, Methane, Ammonia, water molecules, The bond lengths and Bond energies of covalent bonds, Draw backs of electronic theory of valance, Valance shell electron pair repulsion (VSEPR) theory, Valence bond theory, Hybridization.

13. **Chemical Equations and Reactions:** Chemical equations, writing a chemical equation, balancing of chemical equations, making chemical equations more informative, Interpreting a balanced chemical equation, Types of Chemical reactions - Chemical combination, Chemical decomposition, Chemical displacement, Chemical Double decomposition,

14. **Solutions and Separation of Substances**

i. Solutions: Mixtures, Types of mixtures, Solutions, properties of solution, Concentration of solutions, Saturated and unsaturated solutions, Factors affecting the rate of dissolving. Mass percentage, Volume percentage and Mass by volume percentage. Suspensions and colloidal solutions. Tyndall effect.

ii. Separation: Separating the components of a mixture, Hand picking, Sedimentation and decantation, sieving and filtration, Crystallization, Sublimation, Evaporation, Paper chromatography, Separation of immiscible and miscible liquids, Distillation, fractional distillation, Types of pure substances.

15. **Chemistry of Carbon and its Compounds**

Hybridization, Allotropic forms of Carbon, Versatile nature of Carbon, Hydro carbons, Functional groups in carbon compounds, Isomerism, Homologous series, Nomenclature of organic compounds, Chemical properties of carbon compounds- Combustion, oxidation reactions, addition reactions, substitution reactions, Some important carbon Compounds- Ethanol, Ethanoic acid. Esterification, Soaps- Saponification and Micelles.

16. **Principles of Metallurgy**

Occurrence of the metals in nature, Extraction of the metals from the Ores, Concentration or dressing of the Ore, Extraction of crude metal from the Ore, Reduction of purified Ore to the metal, Purification methods of the crude metal, Corrosion, Prevention of Corrosion, few importance processes used in Metallurgy-Smelting, Roasting, Calcination, Furnace.

Part V- Pedagogy (Marks: 16)

1. Nature of Physical Sciences

- i. What is science? Nature of Science- Science as a particular way of looking at nature, a rapidly expanding body of knowledge, an interdisciplinary area of learning, always tentative, an approach to investigation and as a Process of constructing knowledge.
- ii. Scientific Method: Observation, inquiry, hypothesis, experimentation, data collection, generalization.
- iii. How Science Works, how children learn science?

2. Science and Society – Historical Development

- i. Physical science for environment, health, peace, equity (Gender & Science) and Inclusion.
- ii. Need and Significance of History of science in teaching science – Historical development perspective of Science.
- iii. Contributions of Scientists– Isaac Newton, John Dalton, J.C. Bose, Albert Einstein, Niels Bohr, C.V. Raman, Louis Victor de Broglie, Bimla Buti, Venkataraman Ramakrishnan, APJ Abdul Kalam, Marie Curie.

3. Aims of Learning Physical Science

- i. Aims of Learning Science
- ii. Knowledge and Understanding through Science
- iii. Nurturing Process Skills of Science, Curiosity, Creativity and Aesthetic Sense
- iv. Development of Scientific Attitude and Scientific Temper- Respect for evidence, Open-mindedness, Truthfulness in reporting observations, Critical thinking, Logical thinking, Skepticism, Objectivity, Perseverance – Notion of Popular Science – Its importance and involvement of science teacher.
- v. Relating Physical Science Education to Natural and Social Environment, Technology, Society and Environment.
- vi. Imbibing the Values Through Science Teaching – Feynman’s Perspective of Science values
- vii. Development of Problem Solving Skills

4. Learning objectives of physical science

- i. Meaning of Learning Objectives
- ii. Developing Learning Objectives, Features of well-developed learning objectives.
- iii. Bloom’s Taxonomy, Anderson and Krathwohl’s Taxonomy
- iv. Writing Learning Objectives, Remembering, Understanding, Applying, Analysing, Evaluating, Creating
- v. Learning Objectives for Upper Primary, Secondary and Higher Secondary Stages
- vi. Learning Objectives in the Constructivist Perspective
- vii. Academic Standards in Physical Science

5. Pedagogical Shift in Physical Science

- i. Pedagogical Shift:

- a. Science as Fixed Body of Knowledge to the Process of Constructing
 - b. Knowledge
 - c. Nature of Science
 - d. Learners, learning and teacher
 - e. Physical Science curriculum, Diversity in class, Approaches
 - f. Planning Teaching-Learning Experiences
 - g. Assessment
 - h. Inclusion- Information and Communication Technology (ICT)
 - i. Professional development
- ii. Democratising Science Learning: Critical Pedagogy- Critical pedagogy and role of Teachers.
 - iii. Content-cum-methodology: Meaning, Concept & Nature
 - iv. Steps to Content-cum-methodology
 - v. Steps to Pedagogical Analysis
 - vi. Content and Teaching Skills

6. School Curriculum in Physical Science

- i. History of Development of Curriculum Framework
- ii. Curriculum Framework, Curriculum and Syllabus
- iii. Curriculum Development; From Subject-centred to Behaviourist to Constructivist Approach,
- iv. Recommendations of NCF-2005 and APSCF-2011 on Science Curriculum-National Focus Group position paper on Science and State position paper (2011) on Science
- v. Print Resources- Textbooks, Popular science books, Journals and magazines
- vi. Dale's Cone of Experience- Using the Cone of Experience
- vii. Teacher as Curriculum Developer – Localized curriculum, place for Artisans knowledge systems in curriculum, local Innovators and Innovative Practices of science.

7. Approaches and Strategies for Learning Physical Science

- i. Approaches and Strategies for Learning Physical Science, Difference between approach and strategy.
- ii. Different approaches and strategies of learning
 - a. Scenario from 1950–1980

- b. Post 1980 Scenario
 - c. Selecting appropriate approach and strategy
- iii. Essential components of all approaches and strategies
- iv. Constructivist Approach – Science teaching strategies – State developed model.
- v. 5E Learning Model
- vi. Collaborative Learning Approach (CLA)
 - a. Steps of collaborative approach
 - b. Ensuring meaningful learning through CLA
 - c. Ways of applying collaborative learning approach
 - d. Limitation of collaborative learning approach
- vii. Problem Solving Approach (PSA)
 - a. Steps in problem solving approach,
 - b. Teacher’s role in problem solving approach,
 - c. Problem solving approach: an example
- viii. Concept Mapping- Phases of the concept mapping, Uses of concept maps
- ix. Experiential Learning- Abilities of an experiential learner

8. Learning Resources – Community, ICT and Laboratory

- i. Using Community Resources- Bringing community to the class, Taking class to the community: Field visit
- ii. Pooling of Learning Resources
 - a. Learning Resources from Immediate Environment (Natural pH indicators, Soaps and detergents, Baking soda, Washing soda, Common salt, Fruits, Fibre, Pulleys, Projectiles, Lenses and Mirrors, Inter-conversion of one form of energy to other, Propagation of waves in Solid, Liquid and Gas)
 - b. Improvisation of Apparatus
 - c. Inexpensive Sources of Chemicals
- iii. Science Kits
- iv. Laboratory as a Learning Resource- Approaches to laboratory work, Planning and organising laboratory work, Working in group in the laboratory

- v. Handling Hurdles in Utilization of Resources – Addressing underutilization of resources.
- vi. ICT resources – e-Text books, Journals, Websites, Magazines, Different forms of ICT and its applications in science education- Audio-aids, Video-aids, Audio-Video aids, educational T.V., Use of computer for simulations, internet and Open Educational Resources

9. Planning for Teaching-Learning of Physical Sciences

- i. Planning - Annual Plan, Unit Plan and Period plan
- ii. Identification and Organisation of Concepts for teaching -learning of Science / Physics and Chemistry (Up to Secondary level)
- iii. Elements of a Physical Science Lesson- Learning objectives and key concepts, Pre-existing knowledge, Teaching-learning materials and involving learners in arranging them, Introduction, Presentation/ Development, Assessment:

Acceptable evidences that show learners understand (i) Determining learning evidences (ii) Planning of the acceptable evidences of learning for assessment Extended learning/assignment.

- iv. Making Groups-Why group learning? Facilitating formation of groups
- v. Planning and Organising Activities in Physical Science
- vi. Planning Laboratory Work – State commitments in organizing experiments Text-book orientation.
- vii. Planning ICT Applications - Integrating ICT in teaching and learning process

10. Physical Science Teacher

- i. Characteristics and role Science Teacher
- ii. Professional Development
- iii. Reflective Practices
- iv. Science Teacher as a Researcher

11. Tools and Techniques of Assessment

- i. Test, Examination, Measurement, Assessment and Evaluation.
- ii. Continuous and Comprehensive Evaluation (CCE)- Educational assessment and

educational evaluation, Performance-based assessment: A flexible way of school based assessment.

- iii. Assessment Framework,
 - a. Purpose of assessment
 - b. Learning Indicators (LI);
 - Types of indicators
 - Illustrations of Learning Indicators
 - Assessment of activity
 - Assessment of presentation
 - Assessment of group work
 - Assessment of collaborative learning
 - c. Tools and Techniques of Assessment
 - Written test
 - Project Work
 - Field trips and field diary
 - Laboratory work
 - Interview/Oral test
 - Journal writing
 - d. Recording and Reporting
 - Measurement of students' achievements
 - Grading system
 - Measurement of process skills
 - Measurement of attitudes
 - Portfolios
 - e. Reflecting Process; Assessment as a reflecting process
- iv. Assessment of Learning of Students with Special Needs.

Syllabus of Written Test for Recruitment of School Assistant – Biological Science

Part – I

General Knowledge and Current Affairs (Marks: 10)

Part - II

Perspectives In Education (Marks: 10)

I. Historical Development of Education in India

1. Development of Education from Pre-Vedic to Pre-Independent Period
2. Recommendations of various Educational Committees, Education Commissions, Educational Policies during pre & post independent period and their implications

II. Philosophical Dimensions of Education

1. Aims, Objectives, Functions; Processes of Education - Unipolar, Bipolar and Tripolar; Types of Education – Formal, Informal and Non-formal and their significance
2. Educational thinkers and their contributions – Swami Vivekananda, Mahathma Gandhi, B.R. Ambedkar, Jiddu Krishnamurthy, Gijubhai Badheka, Plato, Aristotle, Rousseau, Froebel, Dewey and Montessori
3. Professional code of conduct for teachers, Professional Ethics – commitment to profession, learner and society
4. Critical Understanding of the difference between knowledge and skill, knowledge and information, teaching and training, reason and belief
5. Theory of knowledge – problems of knowledge, truth, ways of knowing, notions of truth, validation of knowledge – pramanas from eastern connotation - pratyaksha, anumana, upamana, sabda and western connotation – perception, inference, comparison, testimony

III. Sociological Dimensions of Education

1. Social agencies of Education – Home, Peer group, School, Community
2. Democracy and Education- Equity, Equality of Educational Opportunities in diversified society, Role of Education in promoting democracy
3. Economics of Education – Education as Human Capital, Education and Human Resource Development
4. Gender: Social construction of gender, gender discrimination, Equity and Empowerment of Women, working towards gender equality in the classroom - the role of teacher
5. Community Development – Education as an instrument for Social Change and Transformation of Society

IV. Child – Development and Learning

1. Methods of Child Study – Observation, Introspection, Experimental Method and Case Study
2. Principles of Development and their Educational implications
3. Stages and Dimensions of Development – Growth and development across various stages from pre-natal to adolescence – Physical, Cognitive, Language, Emotional, Social and Moral (contribution of Piaget, Erikson, Chomsky, Rogers and Kohlberg), Developmental tasks and their implications, Child Rearing Practices and development
4. Understanding Learner – Individual differences (Intra & Inter) – aptitude, interest, intelligence, thinking (divergent and convergent), attitude, personality
5. Understanding Learning – Concept, Factors effecting Learning – Personal, Environmental and Material; Role of Motivation in Learning; Memory and Forgetting; Learning Theories – Behavioristic, Insight, Cognitive, Social and Constructivist

V. Professional Development of Teachers

1. Teaching as a Profession

2. Phases of Professional Development – Pre-service and In-service,
3. Approaches to Professional Development –Conventional (face to face), Distance, Online, School based, Action Research, Professional Learning Communities, Self - Initiated Learning, Continuous Professional Development (CPD)
4. NCF-2005, NCFTE-2009, NCFSE-2023
5. Teacher Autonomy & Accountability
6. Institutions relating to Teachers and Teacher Education - NCERT, NCTE, RCI, SCERT, IASE, CTE, DIET

VI. Educational Concerns in Contemporary India

1. Environmental Education – Meaning, Scope, Concept of Sustainable Development, Role of Teacher, School and NGOs in protection of environment
2. Population Education – Significance, Population Situation, Consequences of population growth, Approaches and Themes of Population Education, Family Life Education
3. Adolescence Education – Significance, Challenges, Coping Skills and Life Skills
4. Inclusive Education – Concept, addressing diversified needs, Importance of Early Identification, Methods & Strategies of Classroom Management, Creation of awareness among Students, Parents and Society, Role of Education in creating positive attitude towards diversity
5. Education in the context of LPG (Liberalization, Privatization, Globalization) – Privatization of Education – Issues of Equal opportunities, Urbanization and Migration
6. Value Education – Importance of Value Education in Primary and Secondary Stages of Education, role of school and teacher in developing appropriate values among children and creation of an egalitarian society
7. Health & Wellbeing - Physical, Mental, Social and Emotional Health, Stress Management, Yoga Education

8. Educational Technology, Information and Communication Technology (ICT) and Education – pedagogical implications, exploration of ICT resources for teaching and learning, open educational resources
9. Constitutional Provisions relevant to Education – Fundamental Rights and Duties of Citizens, Right of Children to Free and Compulsory Education Act, 2009, Child Rights, Human Rights, PWD Act, 2016 and other Provisions pertaining to Education

Part - III

Biological Science Content (Marks: 44)

1. **Biological Sciences:** Its importance and human welfare, Branches of Biology, Biologists, Reputed Biological Institutions in India
2. **Living World:** Life and its Characteristics, Classification of Living Organisms
3. **Microbial World:** Virus, Bacteria, Algae, Fungi and Protozoan, Useful and Harmful Micro-organisms, Diseases – causes, infectious and non-infectious diseases, Acute and Chronic diseases, Means of Spread, Antibiotics and Vaccines
4. **Cell & Tissues:** Discovery of cell, Diversity in cells, Cell - Structural and Functional unit of life. Prokaryotic and Eukaryotic Cells, Ultrastructure of Eukaryotic Cell, Cell Organelles – Structure and functions, Differences between Plant Cell and Animal Cell, Cell cycle stages- Cell Division types — Mitosis and Meiosis, Plant and Animal Tissues –Types, Structure and Functions.
5. **Plant World :** Morphology of a typical Flowering Plant — Root, Stem, Leaf, Flower, Inflorescence, Fruit and seed - their Structure, Types and Functions, Parts of a Flower, Modifications of Root, Stem and Leaf, Photosynthesis, Transpiration, Transportation (Ascent of Sap), Root pressure, Transpiration pull, Respiration – cellular respiration, Excretion- Primary and Secondary Metabolites, and Reproduction in Plants – Asexual and Sexual, Plant Hormones, Economic importance of Plants, Agricultural Operations, Production of food from plants, Seasonal crops, Crop diseases and Control measures, Improvement in Crop yield, Storage and Preservation
6. **Animal World:** Movement in animals, Animal behavior, Reproduction in animals, Oviparous and viviparous animals, The age of Adolescence, Organs and Organ Systems in animals including human – their Structure and Functions of Digestive system, Respiratory system, Circulatory system, Excretory system, Nervous system, Control and Coordination, Sense Organs: Structure and Functions of Eye, Ear, Nose, Tongue and Skin and Reproductive system –Reproductive health, prevention of HIV-AIDS, Birth control- methods of contraception, Nutrition in man — Nutrients and their functions, Balanced Diet, Deficiency diseases, Tropical diseases, Skin diseases,

Blindness in man - Causes, Prevention and Control, Health agencies, Economic Importance of Animals, Animal Husbandry –Breeding of Cows and Buffaloes,

7. **Genetics:** Heredity and Evolution, Mendel's laws of inheritance, Reasons for selecting Pea plant, Blood groups and Rh- factor, Thalassaemia, Sex determination in Human beings, Theories of Evolution – Lamarckism, Darwinism, Evidences of Evolution – Homologous, Analogous and Vestigial organs, Evidences from Embryology and Fossils, Human Evolution
8. **Our Environment:** Water in our life, Abiotic and Biotic factors and Ecosystems, Food chain, food web, Natural Resources Classification, Judicial use of Renewable, Non-renewable and Alternative Resources, Adaptations to different ecosystems, Wild Life - Conservation, Sanctuaries, National Parks in India, Biogeochemical Cycles, Pollution causes and its effects, Types – Air, Water, Soil and Sound pollution, Global Environmental issues – Global Warming (Green House Effect), Acid Rains and Depletion of Ozone layer. Energy relations in Ecosystems, Bio-mass and Bio-fuels, Non-Conventional Energy sources
9. **Applied Biology:** Recent Trends in Biology, Tissue Culture, Pisciculture, Sericulture, Apiculture, Poultry and its management, Hybridization,

Part – IV

Teaching Methodology (Marks:16)

1. **The Nature & Scope of Science:** Nature and scope of Science, History and development of Science, Contributions of eminent Biologists –William Harvey, Lamarck, Charles Darwin, J. C. Bose, M. S. Swaminathan, Birbal Sahni, Elizabeth Blackburn, Rosalind Franklin, Recent advancement in Biological Science, Biological Science in Everyday Life, Substantive and Syntactic Structure of Science.
2. **Aims and Values of Teaching Biological Sciences:** Aims of teaching Biological Sciences, Values of teaching Biological Sciences. Knowledge and understanding through Science, Nurturing Process, Skills of Science, Development of Scientific Attitude and scientific temper, Respect for evidences, Open mindedness, Truthfulness in Reporting observations, Critical thinking, Logical thinking, Skepticism, Objectivity, Perseverance, Role of Science teacher, Relating Biological Science Education to Physical science and Social Environment, Technology, Society and Environment.
3. **Learning objectives of Biological Science:** Meaning and importance of Learning objectives, developing learning objectives and features of well-developed learning objectives, Bloom's Taxonomy of Educational Objectives and limitations, specific/behavioral/ instructional objectives, Anderson and Krathwohl's Taxonomy, Academic standards in Biological Science.
4. **Biological Science Curriculum:** Historical development of Curriculum Framework, Curriculum Framework – Curriculum and syllabus, Principles of Curriculum Construction in Biological Science, organization of subject matter – different

approaches- correlated, integrated, topical, concentric, unit and chronological. Recommendations of NCF-2005 and TSCF-2011 on Science Curriculum National Focus Group Position paper on Science and State position paper [2011] on Science, Constructivist Approach in Biological Science, Trends of Science Curriculum / Syllabus, Moving from text book to Teaching-Learning Materials [TLM] going beyond the text book, Print Resources, Textbooks, Popular Science Books, Journals and Magazines, Edger Dale's Cone of Experience, Teacher as Curriculum Developer. Correlation of Biological Sciences with other School Subjects, Qualities of a good Biological Science Text-book.

- 5. Pedagogical Shift in Biological Science:** Science as a body of knowledge to the process of Constructing knowledge, learners, learning and teachers, Scientific method to Science as inquiry, inclusion – Science Curriculum, Diversity in class approaches, Information and Communication Technology [ICT], Continuous Professional Development [CPD], Role of reflective practices in professional development of Biological teachers, Content- cum- methodology, Meaning, concept & nature
- 6. Approaches and Methods of Teaching Biological Sciences:** Inductive Approach and Deductive Approaches, Methods of Teaching 1. Lecture Method, 2. Lecture cum Demonstration Method, 3. Historical method, 4. Heuristic Method, 5. Project Method, 6. Problem solving method, 7. Scientific method. 8.. Experimental Method, 9. Laboratory Method, Microteaching, Team teaching, Constructivist Approach, 5-E Learning Model, Collaborative Learning Approach [CLA], Problem Solving Approach [PSA], Concept Mapping, Experiential Learning, Multimedia Approach in teaching learning process and programmed Learning, Computer Assisted Instruction [CAI] and Computer Aided Learning [CAL]
- 7. Planning for effective Instruction in Biological Sciences:** Year Plan, Unit Plan, Lesson Plan, Period plan Learning experiences – Characteristics, Classification, Sources and Relevance, Teaching Learning Material [TLM] Characteristics and Importance, Principles to be followed in preparation and usage, Classification, types, Hardware and Software in TLM, Planning ICT Applications.
- 8. Community and Learning Resources:** Using community resources – Bringing community to the class, taking class to the community, Field visit, pooling of Learning Resources, Teaching Learning Material [TLM] and Improvisation of Apparatus, Science kits, Different forms of ICT and its application in Biological Science Education – Audio Aids, Video Aids, Educational T.V., Use of Computer for simulation, Internet and Open Learning Resources.
- 9. Science Laboratory as a Learning Resource:** Importance of Practical work in Biological Sciences, Approaches to Laboratory work, Planning and organization of Science Laboratory, working in group in the laboratory, Motivating students to maintain the regular record of laboratory work, Procurement, Care and Maintenance of Laboratory Equipment, Safety and First aid, Development of Improvised Apparatus,

Handling hurdles in utilization of Resources- Addressing underutilization of resources.

10. Assessment and Evaluation in Biological Science: Concept and process of Test, Examination, Assessment and Evaluation, Continuous Comprehensive Evaluation (CCE), Formative, Summative Evaluation, Performance Based Assessment, Assessment Framework – Purpose of Assessment, Learning Indicators, Tools and techniques of Assessment- Written tests, Project works, Field trips and field diary, Laboratory work, Interview/ oral test, Journal writing, Concept mapping, Use of Rubrics, Recording and Reporting of the project work, Technical and Academic guidance, Measurement of process skills, Portfolio, Its role in evaluating students' performance, Assessment as reflecting process, Assessment of Learning of students with special needs Tools of Evaluation, Preparation of Scholastic Achievement Test(SAT),

**Syllabus of Written Test for Recruitment of School Assistant
Social Studies**

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3. Professional code of conduct for teachers, Professional Ethics – commitment to profession, learner and society
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Part - III

Social Studies Content (Marks: 44)

GEOGRAPHY

1. Maps: reading analysis, different kinds of Maps and making of maps- Globe as the model of earth.
2. The Solar System and the Earth: Origin and Evolution of the Solar System —Galaxy — The Earth as member of the Solar System, Solar Energy from the Sun, Origin of the Earth, Rotation and Revolution of the Earth and its effects, Latitudes and Longitudes – Standard Time and International Date Line.
3. The Earth: Interior of the Earth — Structure, Temperature, Pressure and Density of the Earth's interior, Major Rock types and their characteristics (Igneous Rocks, Sedimentary Rocks and Metamorphic Rocks).
4. Major Landforms: Mountains, Plateaus and Plains, Formation, Classification and distribution of Major Landforms of the World, Geomorphic process: Types of Rocks, Rock Weathering, Mass wasting, Erosion and deposition, Origin and distribution of Plateaus in the World, Classification of Plains, Formation and types of Soils and its distribution in the World.
5. Polar Regions – Seasons, the people of Tundra Regions.
6. Climatology (Weather and Climate): Atmosphere – Composition and Structure, Insolation – Factors influencing Insolation, Temperature – Factors Controlling Temperature, Distribution of Temperature and Inversion of Temperature, Pressure – Global Pressure Belts, Winds – Planetary, Seasonal, Local, Humidity and Precipitation – Rain: Types and Distribution of Rainfall, Weather Reports.
7. Volcanoes: Types and Distribution of Volcanoes in the World.
8. Earthquakes: Causes and Effects of Earthquakes, Distribution of Earthquakes.
9. Natural Realms of the Earth: Lithosphere, Hydrosphere, Atmosphere and Biosphere.
10. Ground water: Tanks, building of tanks — decline of tanks and fishing in tanks.- ground water level or water table — rocks and ground water in Telangana- recharging of ground water — quality of ground water and use of ground water.
11. Forests, Minerals and Mining - description and distribution- status of forests in Telangana- tribal use of forests-forest products- economic importance and trade- deforestation- forest conservation- (social forestry) –forest rights Act.
12. Major Natural Regions of the World: The Equatorial Region, The Tropical Hot Deserts Region, The Savannas or the Tropical Grasslands Region, The Temperate Grasslands

Region (Steppes), The Monsoon Lands, The Mediterranean Region, The Taiga Region and The Tundra Region.

13. Continents: Asia, Africa, Europe, North America, South America, Australia and Antarctica — with reference to Location and Extent, Physical features, Climate, Natural Vegetation and Wild life, Population, Agriculture, Minerals and Industries, Transportation and Trade.
14. World Population: Population Growth and Density, Factors influencing the distribution of World Population, Population distribution patterns, Population problems in developing and developed countries.
15. Geography of India and Telangana: Location and Extent, Physical features - Relief and Drainage, Climate, Natural Vegetation, Soils, Irrigation, Power, Population, Minerals and Industries, Transportation and Communication, Sea Ports and Towns, International Trade, Places of Interest.
16. Natural Hazards: Floods, Drought, Cyclones, Tsunamis, Volcanoes, Earthquakes, Landslides.

HISTORY

1. Study of the Past: Pre-historic Age, Proto-historic Age, Historic Age.
2. Bronze Age Civilization.
3. Early Iron Age Societies: Impact of Iron Age and the Growth of Civilization, Early Iron Civilization in India, The Ancient Chinese Civilization, Persian Civilization, Greek Civilization, Roman Civilization, Judaism and Christianity, The Early African Civilizations and the Early American Civilizations.
4. The Medieval World: Main Features of Medieval Europe, Political Developments - Feudalism, The Holy Roman Empire, The Rise of Islam and the spread of Islam, India in Medieval Ages, Asia in the Medieval times – China and Japan.
5. Ancient Indian Civilization: Indus Valley Civilization (Harappan Culture), Aryan Civilization – Early Vedic and Later Vedic Civilization.
6. Political and Religious Developments of 6th century B.C.
7. India: The Mahajanapadas, The Mauryas, Andhra Satavahanas, The Persian and Greek Invasions, Magadha, Sangam age, Kushans.
8. India from 300 A.D. to 800 A.D: The Gupta Empire, The Pushyabhuti Dynasty (Harshavardhana).
9. Deccan and South Indian Kingdoms: The Chalukyas, the Pallavas, the Cholas, the Rashtrakutas, the Yadavas.
10. The Muslim Invasions in India: The Condition of India on the Eve of Arab Invasions, Turkish Invasions, Ghaznavids Raids and its results, Effects of Muslim Invasions.

11. Delhi Sultanate: The Slaves, The Khiljis, The Tughlaqs, The Sayyids and the Lodis, Downfall of Delhi Sultanate, Sufi Movement and Bhakthi Movement and Influence of Islam on Indian Culture.
12. The South Indian Kingdoms: The Kakatiyas, The Vijayanagara Empire, The Bahmani Kingdom, Golconda Kingdom – Qutubshahis and Asafjahis.
13. Mughal Empire: Conditions of India on the eve of Babur's Invasion, Babur, Humayun, Shershah, Akbar, Jahangir, Shahjahan, Aurangajeb, The reasons for the downfall of Mughal Empire, The rise of Marathas, History of the Sikhs.
14. Advent of Europeans: Portuguese, Dutch, French, English, Anglo-French Rivalry - Carnatic Wars, Establishment of British Empire in India, The first war of Indian Independence, The Governor Generals and the Viceroy, The Socio-Religious Movements of the 19th Century - Brahma Samaj, Arya Samaj, Rama Krishna Mission, Theosophical Society, Aligarh Movement, Satya Sodhak Samaj (a) Movements among Muslims for Social Reforms.
15. Cultural Heritage of India and Intellectual Awakening: Growth and Development of Early Cultures and Racial synthesis, Characteristic features of Indian History, Art and Architecture, Development of Education and Philosophy, Cultural Unity and Bhakthi Movement, Development of National Consciousness, Impact of Alien Cultures in India, Conquest of India by British and Impact of British Rule, impact of colonialism in India, Impact of English Education, Impact of Revolt of 1857 A.D.
16. India between 1858 — 1947: Political, Economic and Social Policies in India, British Policy towards Indian Princess, British Policies towards neighbouring countries.
17. Changes in Economic and Social sectors during the British period: Agriculture, Famines in India between 1858 – 1947, Rise of New Classes in Indian Society.
18. Rise of Nationalism — Freedom Movement: Causes for the Rise of Nationalism, The Birth of Indian National Congress, The Age of Moderates and the Age of Extremists, Vandemataram Movement (Swadeshi Movement 1905-11), India during the First World war, Home Rule Movement, Mahatma Gandhi and Indian National Movement, Different stages of Freedom Movement, Quit India Movement, Mountbatten Plan, Integration of Princely States, Liberation of French and Portuguese Colonial possessions in India.
19. Independent India — the first thirty years 1947 — 1977- First General Elections- Election Procedure- One party domination in political system- Demand for State Reorganization- State Re Organization Act, 1956- SRC- State re organization commission- social and Economic change- Foreign policy and Wars- anti- Hindi agitation- Green Revolution- Regional Parties and Regional Movements- Bangladesh war- Emergency.
20. Emerging Political Trends (1977-2007)- Return of Democracy after emergency- Elections — 1977- End of Emergency- some important parties of 1970s BLD, Congress, CPI(M), DMK, Jan Sangh, SAD- Regional party- Telangana- Assam movement- the Punjab Agitation- The new

initiatives of Rajiv Gandhi Era- Rise of Communalism and Corruption in High places- the Era of coalition politics- Mandal, Mandir, Market.

21. Post — War World and India- After world war-II- UNO- Cold war (1945-1991)- Proxy war- Military alliances- Arms and space race- NAM- West Asian Conflicts- Growth of Nationalism in middle east- Peace movements- Collapse of the USSR.

22. Social Movements in our times: Civil rights and other movements of 1960s- Human Rights Movements in the USSR- Anti-nuclear and Anti- war movements- Globalization, marginalized people and environmental movements- Greenpeace Movement in Europe- Bhopal Gas Disaster related movements- Silent Valley Movement 1973-85- Movement against dams- Narmada river- Movement of women for social Justice- Aadavallu Ekamaite- Social mobilization on human rights- Meria paibi Movement.

23. Land lords and tenants under the British and Nizams- Freedom movement in Hyderabad State.

24. The Movement for the Formation of Telangana State: The merger of Hyderabad with India- The Gentlemen's Agreement- Mulki rules- 1969 Agitation- Movements in 1990s- In the process of achieving Telangana- Withdrawal of announcement- Telangana achieved –Prof. Jaya Shanker.

25. The Modern World: Beginning of Modern Age, Renaissance, Development in Science, The Reformation Movement, Rise of Nation States, Struggle against Absolute Monarchies.

26. Changing Cultural Traditions in Europe 1300-1800: The Ancient and Medieval World in Europe- Medieval Asia- Beginning of Modern era- Humanism- Artists and Realism- Architecture- The Printing Press- A New Concept of Human Beings- The Aspirations of Women- Reformation- Beginning of Modern Science- Exploration of Sea Routes- Renaissance in India

27. Democratic and Nationalist Revolutions 17th and 18th 19th Centuries: England-The Civil War and the Glorious Revolution- American War of Independence 1774-1789-French Revolution-Growing Middle Class- The Outbreak of the Revolution- France- Constitutional Monarchy- The Reign of Terror- Directory of Rule –Nepolean -Unification of Germany- Unification of Italy.

28. Capitalism and Industrial Revolution –Social Change.

29. The Revolutionary Movements: The Glorious Revolution, The American war of Independence, The French Revolution of 1789.

30. Nationalist Movements: Rise and fall of Napoleon, French Revolution of 1830 and the 1848 Revolt, Unification of Germany and Italy, Socialist Movements —Rise of Working class, Paris Commune of 1871.

31. Imperialism: Factors in the rise of Imperialism, Forms and Methods of Imperialism, Scramble for Africa and Asia, Colonialism in America.

32. Contemporary World: The First World war, League of Nations, The Russian Revolution of 1905 and 1917- Expansion of Democracy- in World.

33. The World upto World War II: Rise of Fascism and Nazism, Militarism in Japan, U.S.A. and U.S.S.R. after World War I, Turkey after World War I, Failure of League of Nations, Spanish Civil war, World war II, The Nationalist Movements in Asia and Africa, Emergence of Latin America.

34. The World after World War II: Formation of Military Blocks, Role of independent Nations of Asia and Africa in the World Affairs, Non-Alignment Movement, Role of UNO in preserving World Peace, Problems of Disarmament and Nuclear Weapons, Prominent Personalities of the World.

35. Developments in China 1911 to 1949 – Nationalist Revolution of 1911 and Communist Revolution of 1948.

CIVICS:

1. Family/Social Institutions: Family, Marriage, Religion, Education, Economic and Political.

2. Community and Groups: Types of Community and Groups, Community Development, Civic life, Social evil in our Society, Evolution of Society, Culture and Society.

3. State: Essential elements of State, Nation and State — Nation, Nationality, Nationalism.

4. Our Government: Local Self Government – Rural and Urban, Decentralization of powers, District Administration, Role of Public Services, Govt. at Centre, State with reference to • Executive – Executive Council in the Union Government and State, Government.

- Legislative – Indian Parliament, State Legislative Assembly, Legislation and

- Judiciary and interpretation of Laws — Independent Judiciary, Judiciary system in the Country and State, Courts as watch dogs of Citizens Rights, Lok Adalats.

5. Citizenship Administration – Citizen Charter, Central Vigilance Commission, Lok Ayukta, Human Rights Commission, Good Governance — Right to Information Act, Information Technology Act, e-Governance, People's participation in Governance, Indian Constitution: Historical background, Constituent Assembly, Drafting Committee, Sources of Indian Constitution, Classification of Constitution, India as a Nation, Preamble, Salient features of Indian Constitution, Fundamental Rights and Directive Principles, Fundamental Duties, Rights and Duties — Meaning, kinds of Rights and Duties, India as a Federation and Unitary State, Unity in Diversity, National Integration.

6. Indian Democracy: Meaning, Nature, Types of Democracy, Elections and Election process, Major Political parties, Role of Political parties in Democracy, Presidential and Parliamentary Democracy, Future of Democracy, Public opinion — Agencies of Public opinion, Press, Media, Political parties, pressure groups. Democracy in village level, Local Self Governments in urban areas.

7. Socialism: Meaning, Definition, Characteristics of Socialism, Social barriers in India, Socialism in practice — Challenges facing in our Country — Illiteracy, Regionalism, Communalism, Child Rights, Law, Society and individual, Anti-Social Practices, Socialism and Constitutional Provisions.

8. Secularism: Need and Importance, India — Religious tolerance, Promotion of Secularism in India.

9. Social Organization and inequities.

10. World Peace and Role of India: India in the International Era, Foreign Policy, Non-Alignment Movement (NAM) Policy, India and Common Wealth, India's relations with super powers, India and neighbours, India and SAARC, India's leading role in the World.

11. U.N.O. and contemporary World problems: UNO — Organs and specialized Agencies, functions, achievements, India's Role in UN, Contemporary World problems, New international Economic Order, Environmental Protection, Human Rights.

12. Traffic Education / Road Safety Education.

13. Women Protection Acts and Child Rights.

14. Culture and Communication- Handicrafts and handlooms in Telangana Structural Monuments- performing arts- and artists, Film and print media and sports: Nationalism and Commerce.

ECONOMICS:

1. Economics — Meaning, Definitions, Scope, Importance, Classification of Economics (micro and macro) — Concepts of Economics — different types of goods, wealth, income, utility, value, price, wants and welfare Basic Elements of Economics — Types of Utility, Consumption, Production, Distribution, Scarcity, Economic agents. Factors of Production — Land, Labour, Capital and Organization — Forms of Business Organization.

2. Consumption: Cardinal and Ordinal Utility, The Law of diminishing Marginal Utility — Limitations and Importance, Law of Equi-Marginal Utility Consumers Equilibrium, Importance of the Law.

3. a) Theory of Demand: Meaning, Determinants of Demand, Demand Schedule – Individual and Market Demand Schedule, the Law of Demand, Demand Curve, Demand function, Elasticity of Demand.

b) Supply: Theory of Production, Production function, factors of Production, Supply schedule, Determinants of Supply, Supply function, Law of Supply, Supply Curve. Cost Curves – Fixed and variable costs, money costs and real costs, total cost, average cost and marginal cost – opportunity cost. Revenue – total, average and marginal revenue.

c) Theory of Value - Classification of Markets, Perfect Competition – features, Price determination - Types of Imperfect competition – Monopoly, Oligopoly, Duopoly.

4. Theory of Distribution: Distribution of Income – determination of factor prices – rent, wage, interest and profit, Types of Economics, Capitalistic, socialistic and Mixed economy.

5. National Income: Definitions of National Income – Concepts – Gross National Product – Net National Product – National Income at factor cost – Personal income – Disposable income – Per capita income – Gross Domestic Product – Net Domestic Product – Nominal and Real Gross National Product, Components of National income – Consumption – Investment – Government expenditure – Exports minus Imports ($Y=C+I+G+X-M$), National Income and Distribution – Standard of living, Human Development Index, Economic inequalities and Poverty Line.

6. Revenue and Expenditure: Types of Revenue, Taxation – Direct and Indirect Taxes, Types of Taxes, System of Taxation – Progressive, regressive, Proportionate, Cannons of Taxation, Effects of Taxes, Public Expenditure.

7. Budget: Meaning, Definition, Central and Stage Budgets, Types of Budget - Surplus, Balanced and Deficit, Classification of Revenue & Expenditure in Budget, Types of Deficits.

8. Money: Definition, Functions of Money, Classification of Money, supply of Money.

9. Banking: Commercial Banks – functions, Central Bank – origin, functions, Reserve Bank of India, Co-operative Rural Banks, Regional Rural Banks.

10. Inflation: Meaning – Definition, Types of Inflation – Effects of Inflation, Measures to control Inflation – Monetary and Physical Policies.

11. Economic Growth & Development: Economic Growth, Economic Development – Concept, Indicators, Factors influencing Economic Development, Economic development in India.

12. a) Indian Economy: Characteristics of Indian Economy before Independence, Indian Economy since Independence – Organized and Unorganized Sectors.

b) Population – World Population, Population in India and Telangana – Birth and Death rate – Occupational distribution of Population in India and Telangana.

c) Human Resource Development: Meaning of Human Resource Development – Role of Education and Health in Economic Development, Human Development Index.

d) Agriculture sector in India: Importance, Characteristics of Indian agriculture, Causes of Low Productivity, Measures to increase Agriculture Productivity in India, Land reforms in India, Green Revolution, Agriculture Marketing, Agricultural Finance, Role of Banks in Agriculture Development(Commercial Banks, NABARD, Co-operative Banks, Regional and Rural Banks).

e) Industrial Sector: Role of Industrial Sector in Indian Economy, Classification of Industries, Industrial Growth, Industrial Policy Resolution – 1948, 1956 and 1991 New Economic Policy.

f) Tertiary Sector (Service Sector) – importance.

g) Problems of Indian Economy: Poverty, Unemployment, Regional Disparities, Inflation, Income Inequalities – Lorenge Curve.

h) Planning: Meaning and Definition, Planning Commission, Five Year Plans in India – A brief review, General and specific objectives of Indian Five Year Plans, Achievements and failures of Five Year Plans.

13. Natural Calamities and Disaster Management- Sustainable Development.

14. Technology and Livelihood.

Part IV (Marks - 16)

1. The nature and scope of social sciences and its historical development including the contributions of social scientists and thinkers, significance of social sciences in school curriculum, relation with social sciences and other school subjects.
2. Values, Aims and Objectives of teaching social sciences, academic standards/learning outcomes in social sciences and instructional objectives in view of constructivist approach.
3. Social Sciences Curriculum: Construction, organisation and development of syllabus and textbooks, NPE-1986, NCF-2005, NCFTE-2009, SCF-2011 and RTE Act-2009; Constructivistic approach in social sciences
4. Instructional Strategies in Social Sciences: Approaches, methods, techniques, devices and maxims of teaching social sciences with special reference to the topics in the social sciences school curriculum, 5E-learning model, concept mapping.
5. Teaching – Learning of Geography, Economics, History and Political Science.
6. Planning for effective instruction in Social Sciences: Different, plans including micro-teaching and designing learning experiences.

7. Social Science Teacher: Qualities of a good social science teacher, roles and responsibilities
8. Learning resources, Community resources and designing instructional material in Social Sciences, Social Science, Laboratory, Library, Clubs and Museum, TLM, Edgardale's Cone of experiences, application of ICT in social science.
9. Evaluation in Social Sciences: Concept, purpose of evaluation, types of evaluation, tools and techniques of evaluation, CCE, Scholastic – achievement test, grading, remedial teaching for exceptional/ disabled children (CWSN).
10. Social Sciences in Everyday Life: Non – Formal Social Sciences education – Contemporary Social issues and Sustainable development.

SCHEME OF EXAMINATION AND SYLLABUS TO THE POST OF SCHOOLASSISTANT (LANGUAGES i.e. TELUGU, HINDI, ENGLISH, URDU, TAMIL, KANNADA)

Duration: 2 Hours & 30 Minutes

Sl. No	Subject	Syllabus level	No.of Questions	No.of Marks
1.	General Knowledge & Current Affairs	-	20	10
2.	Perspectives in Education	Syllabus as notified	20	10
3.	Content	The syllabus for Language concerned shall be based on proficiency in the language, communication & comprehension abilities - standard upto Senior Secondary Level (Intermediate level)	88	44
4.	Teaching Methodology	B.Ed Methodology of Language concerned of T.S. Universities	32	16
	Total		160	80

**Syllabus of Written Test for Recruitment of School Assistant
Telugu**

Part – I

General Knowledge and Current Affairs (Marks: 10)

Part - II

Perspectives In Education (Marks: 10)

I. Historical Development of Education in India

1. Development of Education from Pre-Vedic to Pre-Independent Period
2. Recommendations of various Educational Committees, Education Commissions, Educational Policies during pre & post independent period and their implications

II. Philosophical Dimensions of Education

1. Aims, Objectives, Functions; Processes of Education - Unipolar, Bipolar and Tripolar; Types of Education – Formal, Informal and Non-formal and their significance
2. Educational thinkers and their contributions – Swami Vivekananda, Mahathma Gandhi, B.R. Ambedkar, Jiddu Krishnamurthy, Gijubhai Badheka, Plato, Aristotle, Rousseau, Froebel, Dewey and Montessori
3. Professional code of conduct for teachers, Professional Ethics – commitment to profession, learner and society
4. Critical Understanding of the difference between knowledge and skill, knowledge and information, teaching and training, reason and belief
5. Theory of knowledge – problems of knowledge, truth, ways of knowing, notions of truth, validation of knowledge – pramanas from eastern connotation - pratyaksha, anumana, upamana, sabda and western connotation – perception, inference, comparison, testimony

III. Sociological Dimensions of Education

1. Social agencies of Education – Home, Peer group, School, Community
2. Democracy and Education- Equity, Equality of Educational Opportunities in diversified society, Role of Education in promoting democracy
3. Economics of Education – Education as Human Capital, Education and Human Resource Development
4. Gender: Social construction of gender, gender discrimination, Equity and Empowerment of Women, working towards gender equality in the classroom - the role of teacher
5. Community Development – Education as an instrument for Social Change and Transformation of Society

IV. Child – Development and Learning

1. Methods of Child Study – Observation, Introspection, Experimental Method and Case Study
2. Principles of Development and their Educational implications
3. Stages and Dimensions of Development – Growth and development across various stages from pre-natal to adolescence – Physical, Cognitive, Language, Emotional, Social and Moral (contribution of Piaget, Erikson, Chomsky, Rogers and Kohlberg), Developmental tasks and their implications, Child Rearing Practices and development
4. Understanding Learner – Individual differences (Intra & Inter) – aptitude, interest, intelligence, thinking (divergent and convergent), attitude, personality
5. Understanding Learning – Concept, Factors effecting Learning – Personal, Environmental and Material; Role of Motivation in Learning; Memory and Forgetting; Learning Theories – Behavioristic, Insight, Cognitive, Social and Constructivist

V. Professional Development of Teachers

1. Teaching as a Profession
2. Phases of Professional Development – Pre-service and In-service,
3. Approaches to Professional Development –Conventional (face to face), Distance, Online, School based, Action Research, Professional Learning Communities, Self - Initiated Learning, Continuous Professional Development (CPD)
4. NCF-2005, NCFTE-2009, NCFSE-2023
5. Teacher Autonomy & Accountability
6. Institutions relating to Teachers and Teacher Education - NCERT, NCTE, RCI, SCERT, IASE, CTE, DIET

VI. Educational Concerns in Contemporary India

1. Environmental Education – Meaning, Scope, Concept of Sustainable Development, Role of Teacher, School and NGOs in protection of environment
2. Population Education – Significance, Population Situation, Consequences of population growth, Approaches and Themes of Population Education, Family Life Education
3. Adolescence Education – Significance, Challenges, Coping Skills and Life Skills
4. Inclusive Education – Concept, addressing diversified needs, Importance of Early Identification, Methods & Strategies of Classroom Management, Creation of

awareness among Students, Parents and Society, Role of Education in creating positive attitude towards diversity

5. Education in the context of LPG (Liberalization, Privatization, Globalization) – Privatization of Education – Issues of Equal opportunities, Urbanization and Migration
6. Value Education – Importance of Value Education in Primary and Secondary Stages of Education, role of school and teacher in developing appropriate values among children and creation of an egalitarian society
7. Health & Wellbeing - Physical, Mental, Social and Emotional Health, Stress Management, Yoga Education
8. Educational Technology, Information and Communication Technology (ICT) and Education – pedagogical implications, exploration of ICT resources for teaching and learning, open educational resources
9. Constitutional Provisions relevant to Education – Fundamental Rights and Duties of Citizens, Right of Children to Free and Compulsory Education Act, 2009, Child Rights, Human Rights, PWD Act, 2016 and other Provisions pertaining to Education

Part - III
Telugu Content (Marks: 44)

1. ప్రాచీన, ఆధునిక కవులు - రచయితలు - విశేషాలు
కావ్యాలు - రచనలు - బిరుదులు - పురస్కారాలు - రచనా శైలి - పాత్రలు - ఇతి వృత్తాలు - నేపథ్యం
2. వివిధ సాహిత్య ప్రక్రియలు - లక్షణాలు - వివరణలు
ఇతిహాసం - పురాణం - ప్రబంధం - శతకం - కథాకావ్యం - వ్యాసం - రుబాయి - కథ - కథానిక - నవల - స్వీయ చరిత్ర - జీవిత చరిత్ర - యాత్రా చరిత్ర - గజల్ - పీఠిక - సంపాదకీయం - నాటిక - వచన కవిత - గేయం - అనువాద రచన
3. సాహిత్య విమర్శ
కవి; కావ్యం - నిర్వచనాలు - కావ్య ఉత్పత్తి హేతువులు - కావ్య ప్రయోజనాలు - కావ్యాత్మ - రస సిద్ధాంతం - ధ్వని సిద్ధాంతం
4. ఆధునిక సాహిత్యం - ఉద్యమాలు - ధోరణులు
భావకవిత్వం - జాతీయోద్యమ కవిత్వం - అభ్యుదయ కవిత్వం - విప్లవ కవిత్వం - స్త్రీ వాద కవిత్వం - దిగంబర కవిత్వం - దళితవాద కవిత్వం - మైనార్టీవాద కవిత్వం - తెలంగాణ అస్తిత్వవాద కవిత్వం - అనుభూతివాద కవిత్వం
5. జానపద సాహిత్యం
జానపద గేయాలు - జానపద కథలు - స్వరూప స్వభావాలు - జానపద కళలు - వస్తు సంస్కృతి - జానపద కళాకారులు - ఆచార వ్యవహారాలు - విశ్వాసాలు - సామెతలు - పొడుపుకథలు
6. భాష - వివిధ రూపాలు
శాసన భాష - గ్రాంథిక భాష - వ్యావహారిక భాష - మాండలిక భాష - ప్రసార మాధ్యమాల భాష - తెలుగు భాష ప్రాచీనత - భాషా పరిరక్షణ అభివృద్ధి సంస్థలు

7. భాష – పరిచయం

భాషా నిర్వచనాలు – ధ్వనులు – ఉత్పత్తి స్థానాలు – పదం, ప్రాతిపదిక – ధ్వని పరిణామం – అర్థ పరిణామం – తత్వం – తద్భవం – దేశ్యము – అన్యదేశ్యం – తెలుగు వాక్యం

8. పదజాలం – వ్యాకరణాంశాలు

A) పదజాలం : అర్థాలు – పర్యాయ పదాలు – నానార్థాలు – ప్రకృతి-వికృతులు – వ్యుత్పత్త్యర్థాలు – జాతీయాలు – సామెతలు

B) వ్యాకరణాంశాలు: సంధులు – సమాసాలు – ఛందస్సు – అలంకారాలు – వాక్యాలు-రకాలు – వ్యాకరణ పారిభాషిక పదాలు

9. పఠనావగాహన (Reading comprehension)

Part V – Methodology (Marks: 16)

1. భాష – ఆవశ్యకత, నిర్వచనం – భాషోత్పత్తి వాదాలు, భాషా ప్రయోజనాలు

2. భాషాబోధన మరియు అభ్యసనం – ఉద్దేశాలు, లక్ష్యాలు, అభ్యసన ప్రమాణాలు (సామర్థ్యాలు), అభ్యసన ఫలితాలు, విలువలు

3. భాషా విద్యా ప్రణాళిక, విషయ ప్రణాళిక – నిర్మాణం, వ్యవస్థీకరణం, అభివృద్ధి, పాఠ్య పుస్తకాలు

4. భాషా నైపుణ్యాలు మరియు బోధన నైపుణ్యాలు

5. భాషా బోధన, పద్ధతులు, వ్యూహాలు – వివిధ ప్రక్రియల బోధన

6. బోధన మరియు అభ్యసన వనరులు (విద్యా సాంకేతిక శాస్త్రం, సహ పాఠ్య కార్యక్రమాలు)

7. ప్రణాళికలు – వార్షిక, పాఠ్య (యునిట్), కాలాంశ (పీరియడ్) ప్రణాళికలు

8. అభ్యసన వైకల్యాలు – ప్రత్యేక అవసరాలు గల పిల్లల భాషాభ్యసనం

9. నిత్య జీవితంలో భాషా వినియోగం – భాషా సమస్యలు, భాషా విధానాలు మరియు జాతీయ, రాష్ట్ర స్థాయి విద్యా ప్రణాళికా చట్టాలు, R.T.E, 2009 చట్టం

10. మూల్యాంకనం – పరీక్షలు

Syllabus of Written Test for Recruitment of School Assistant

Urdu

Part – I

General Knowledge and Current Affairs (Marks: 10)

Part - II

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I. Historical Development of Education in India

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3. Professional code of conduct for teachers, Professional Ethics – commitment to profession, learner and society
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5. Theory of knowledge – problems of knowledge, truth, ways of knowing, notions of truth, validation of knowledge – pramanas from eastern connotation - pratyaksha, anumana, upamana, sabda and western connotation – perception, inference, comparison, testimony

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IV. Child – Development and Learning

1. Methods of Child Study – Observation, Introspection, Experimental Method and Case Study
2. Principles of Development and their Educational implications
3. Stages and Dimensions of Development – Growth and development across various stages from pre-natal to adolescence – Physical, Cognitive, Language, Emotional, Social and Moral (contribution of Piaget, Erikson, Chomsky, Rogers and Kohlberg), Developmental tasks and their implications, Child Rearing Practices and development
4. Understanding Learner – Individual differences (Intra & Inter) – aptitude, interest, intelligence, thinking (divergent and convergent), attitude, personality
5. Understanding Learning – Concept, Factors effecting Learning – Personal, Environmental and Material; Role of Motivation in Learning; Memory and Forgetting; Learning Theories – Behavioristic, Insight, Cognitive, Social and Constructivist

V. Professional Development of Teachers

1. Teaching as a Profession
2. Phases of Professional Development – Pre-service and In-service,
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5. Teacher Autonomy & Accountability
6. Institutions relating to Teachers and Teacher Education - NCERT, NCTE, RCI, SCERT, IASE, CTE, DIET

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1. Environmental Education – Meaning, Scope, Concept of Sustainable Development, Role of Teacher, School and NGOs in protection of environment
2. Population Education – Significance, Population Situation, Consequences of population growth, Approaches and Themes of Population Education, Family Life Education
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Part - III

Content (Marks 44)

S.A. URDU

- I ادیبوں اور شاعروں کی سوانح حیات، ادبی کارنامے اور ان کے کرداروں کا جائزہ
- II اصناف ادب کا تفصیلی مطالعہ، نثر، نظم
- III اردو زبان و ادب کی ترقی کے مختلف ادوار
- IV زبان کی مختلف شکلیں
- (a) مادری زبان (b) دوسری زبان (c) سرکاری زبان (d) قومی زبان (e) رابطہ کی زبان، اشاروں کی زبان، تحریری زبان، علامتوں کی زبان
- V اردو زبان پر دیگر زبانوں کے اثرات
(پنجابی، ہندی، فارسی، عربی، انگریزی وغیرہ)
- VI اردو کے اسالیب بیان
اردو کے دبستان
- VII اردو زبان کے عناصر، علم ہجاء، علم عروض، علم الاعداد، علم صرف، نحو، کلمہ، مستقل کلمہ، مستقل کلمہ اور ان کے اقسام جملہ، جملے کے اقسام، الفاظ مفرد و مرکب الفاظ، سابقے، لاحقے، واحد، جمع، مونث و مذکر، مجاورے، ضرب المثل، رموز و اوقاف، صنائع و بدائع، تلفظ، مخارج، اعراب
- VIII ان دیکھا متن (Comprehension) نثر/نظم

Part - IV
Teaching Methodology (Marks 16)
S.A. URDU

- I - اردو زبان - ابتدا و ارتقاء
ہندوستان میں اردو کا موقف
- (a) ہندوستانی دستور اور متلگانہ میں اردو کا مقام و موقف
(b) سرائی فارمولہ کے تحت ثانوی مدارس میں اردو کی تدریس
زبان کی مہارتیں، سننا، بولنا، پڑھنا لکھنا، اور سمجھنے کے طریقے
- II - اردو کے تدریسی مقاصد
- (a) اردو کے تدریسی مقاصد یہ حیثیت زبان اول اور زبان زائد
(b) بلوم کی تعلیمی مقاصد کی تقسیم
(c) تدریسی مقاصد اور تشریحات
(d) جزوی (Micro) تدریس اور مختلف مہارتیں
- III - معلم اردو اور تدریس
- (a) اردو معلم کی خصوصیات اور تدریسی وسائل
(b) اردو زبان کے تدریس کے طریقے (نثر، نظم، قواعد)
- IV - تدریس اور اسباق کی منصوبہ بندی
- (a) سالانہ منصوبہ بندی، اکائی منصوبہ بندی، سبق کی منصوبہ بندی (نثر، نظم، قواعد، سرسری مطالعہ)
- V - نصابی اور ہر نصابی مشاغل
- (a) اردو نصاب کی تدوین کے اصول
(b) درسی کتاب اور خصوصیات اور تنقیدی جائزہ
(c) ہر نصابی وزائد نصابی مشاغل کا انتخاب
(d) تدریسی آلات، اقسام، اہمیت و تیاری
(e) اردو زبان کی لیے باہری

VII - اردو کے فروغ میں معاون ادارے

- (a) قومی کونسل برائے فروغ اردو، نئی دہلی
(b) دارالترجمہ، مٹھانیہ پونچھ، جھڑا پاد۔
(c) ادارہ اویلیات اردو
(d) مولانا آزاد اور نیشنل ریسرچ انسٹیٹیوٹ، جھڑا پاد۔
(e) اردو کاؤنٹی متلگانہ

VIII - امتاز و قدر

- (a) امتحان کی اہمیت و ضرورت
(b) موجودہ امتحان کے نقائص
(c) مسلسل جامع جائی (CCE)
(d) جائی آلات و تکنیک
(e) تعلیمی حلی آزماں SAT کی تیاری

**Syllabus of Written Test for Recruitment of School Assistant
Hindi**

Part – I

General Knowledge and Current Affairs (Marks: 10)

Part - II

Perspectives In Education (Marks: 10)

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1. Development of Education from Pre-Vedic to Pre-Independent Period
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1. Aims, Objectives, Functions; Processes of Education - Unipolar, Bipolar and Tripolar; Types of Education – Formal, Informal and Non-formal and their significance
2. Educational thinkers and their contributions – Swami Vivekananda, Mahathma Gandhi, B.R. Ambedkar, Jiddu Krishnamurthy, Gijubhai Badheka, Plato, Aristotle, Rousseau, Froebel, Dewey and Montessori
3. Professional code of conduct for teachers, Professional Ethics – commitment to profession, learner and society
4. Critical Understanding of the difference between knowledge and skill, knowledge and information, teaching and training, reason and belief
5. Theory of knowledge – problems of knowledge, truth, ways of knowing, notions of truth, validation of knowledge – pramanas from eastern connotation - pratyaksha, anumana, upamana, sabda and western connotation – perception, inference, comparison, testimony

III. Sociological Dimensions of Education

1. Social agencies of Education – Home, Peer group, School, Community
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3. Stages and Dimensions of Development – Growth and development across various stages from pre-natal to adolescence – Physical, Cognitive, Language, Emotional, Social and Moral (contribution of Piaget, Erikson, Chomsky, Rogers and Kohlberg), Developmental tasks and their implications, Child Rearing Practices and development
4. Understanding Learner – Individual differences (Intra & Inter) – aptitude, interest, intelligence, thinking (divergent and convergent), attitude, personality
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Part III – Hindi Content (Marks: 44)

I. कवि/लेखक - रचनाएँ, विषयवस्तु, पृष्ठभूमि, चरित्र-चित्रण - भाषा - शैली, पुरस्कार आदि।

II. साहित्यिक विधाएँ और उनकी विशेषताएँ

III. प्राचीन, मध्य, आधुनिक साहित्य - विभिन्न प्रवृत्तियाँ और वाद

IV. हिंदी भाषा पर अन्य साहित्य /भाषाओं का प्रभाव

V. हिंदी भाषा - उपभाषाएँ और बोलियाँ

VI. हिंदी भाषा साहित्य में भारतीय काव्य शास्त्र : अर्थ, परिभाषा, प्रयोजन और लक्षण

VII. भाषा तत्व और व्याकरण:

- शब्द विचार : उपसर्ग - प्रत्यय
- शब्द भेद
- लिंग, वचन, कारक, काल
- शब्द रूपांतर
- शब्द-अर्थ, भिन्न - भिन्न अर्थ, पर्यायवाची शब्द और विलोम शब्द
- शब्द परिचय : तत्सम, तद्भव, देशज और विदेशी
- वाक्य संरचना, वाक्य भेद
- घटना क्रम, वाक्य क्रम
- वाच्य
- संधि, समास
- मुहावरे, लोकोक्तियाँ, कहावते
- वर्तनी

- विशिष्ट प्रयोग (जैसे - चाहिए, अपना)
- व्याकरण - परिभाषाएँ, उदाहरण, प्रयोजन

VIII. अनुवाद - आवश्यकता - प्रकार

IX. बोधक - गद्यांश, बोधक पद्यांश

Part IV - Hindi – Methodology

I. भाषा - अर्थ, परिभाषा, महत्व

- प्रकृति और स्वरूप

- हिन्दी भाषा

- प्रथम भाषा के रूप में
- द्वितीय भाषा के रूप में
- सरकारी भाषा के रूप में
- त्रिभाषा सूत्र
- भारतीय संविधान में हिंदी का स्थान
- विभिन्न व्यवसायों से जुड़ी भाषा
- भाषा संबंधी मुद्दे एवं नीतियाँ, विद्यालयीन राष्ट्रीय एवं राज्य पाठ्यचर्या की रूपरेखाएँ

II हिंदी भाषा शिक्षण - प्राथमिक, माध्यमिक और उच्च माध्यमिक स्तर पर

- हिंदी भाषा - शिक्षण के उद्देश्य
- अच्छे शिक्षण की विशेषताएँ
- भाषा - शिक्षण के सामान्य सिद्धांत
- भाषा - शिक्षण के सूत्र
- भाषा - शिक्षण की प्रणालियाँ
- भाषा - शिक्षण की पद्धतियाँ
- सफल शिक्षक की विशेषताएँ

III शिक्षण में भाषा - कौशलों का महत्व

- सुनना: ध्वनि की उत्पत्ति, ध्वनि - श्रवण और पारस्परिक संबंध
- बोलना: शब्दोच्चारण, वाक् यंत्र, शुद्धोच्चारण का अभ्यास, मौखिक अभिव्यक्ति, पाठशाला में वार्तालाप का अभ्यास
- पढ़ना: वाचन की विशेषताएँ, वाचन के प्रकार, वाचन संबंधी दोष और उपचार
- लिखना: महत्व, नियम, विधियाँ, प्रकार, अक्षर-विन्यास
- भाषा कौशलों का विकास

IV शिक्षण उद्देश्यों का वर्गीकरण

- पाठ - योजना (गद्य, पद्य, व्याकरण, रचना, पत्र - लेखन)
- इकाई योजना
- सूक्ष्म शिक्षण - पाठ योजना
- शिक्षण - उपकरण

V पाठ्य पुस्तक

- पुस्तकालय
- पाठ्यक्रम
- पाठ - सहगामी क्रियाएँ
- भाषा - प्रयोगशाला
- अधिगम में सूचना एवं संचार प्रौद्योगिकी

VI बालक का विकास: भाषा शिक्षण और अधिगम का मनोविज्ञान, भाषा विचारधारा और रचनात्मकता

- अधिगम अक्षमता : असाधारण / अक्षम बच्चों (children with disability) के लिए भाषा की शिक्षा एवं कठिनाइयाँ

VII मूल्यांकन की धारणा

- निरंतर समग्र मूल्यांकन
- उद्देश्य आधारित मूल्यांकन
- उत्तम परीक्षा की विशेषताएँ
- उपलब्धि परीक्षा, प्रश्न पत्र निर्माण
- निदानात्मक और उपचारात्मक शिक्षण

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Part III – English Content (Marks: 44)

Grammar and Vocabulary:

1) Parts of Speech; 2) Subject and predicate; 3) Types of sentences – Transformations; 4) Conjunctions (Linkers; connectors; cohesive devices); 5) Verbs (Regular and Irregular) and modals; 6) Tense and Time; 7) Prepositions; 8) Adverbs 9) Adjectives including Degrees of Comparison and also Quantifiers; 10) Articles – Determiners. 11) Clauses; (Noun Clauses – Adjective clauses; adverbial clauses); 12) Voice; 13) Direct and Indirect Speech; 14) Infinitives; gerunds; participles ; 15) Phrasal verbs ; Idioms ; prepositional phrases ; (Noun phrases; verb phrases; adverbial phrases); 16) Forming Questions and Question Tags.; 17) Correction of Sentences.; 18) Figures of Speech; 19) Antonyms; 20) Synonyms; 21) Homophones; 22) Homonyms ; 23) Affixation; 24) Spelling; 25) Vocabulary in context; 26) Proverbs ; 27) One word substitutes; 28) Composition: Paragraph, essay, expansion, précis, Letter writing, message, notice, article and report writing. 29) Punctuation

Aspects of pronunciation:

1. Vowel and consonant Sounds and phonemes 2. Stress: word stress and sentence stress. 3.

Intonation: Four basic patterns of intonation.

English Literature

- Comprehension of a Literary passage and a poem
- Study of Literary Forms

Poetry : Sonnet, Ode, Elegy, Ballad, Lyric and Dramatic Monologue, Figures of speech, Metrical patterns, Imagery, Genre, etc.

Drama : Structure, characters, dialogues, soliloquy, tragedy, comedy and tragi-comedy, point of view

Fiction : Point of view, setting atmosphere; style; Technique of Narration.

Essay : Components of a good essay

Poetry

	Name of the Poet	Title
1	Sarojini Naidu	In The Bazaars of Hyderabad, Palanquin Bearers
2	Rabindranath Tagore	Where the Mind is without Fear, Leave this chanting
3	Nissim Ezekiel	Night of the Scorpion, Midmonsoon Madness
4	Harindranath Chattopadhyay	The Earthen Goblet
5	William Wordsworth	Daffodils , Immortality Ode
6	P.B. Shelly	Ozymandias , The Cloud
7	William Blake	The School Boy
8	Robert Frost	The Road not Taken, Birches
9	W.B.Yeats	The Lake Isle of Innisfree, Among School Children
10	John Keats	Ode to Nightingale

Prose

	Name of the writer	Title
1.	Oscar Wilde	The Selfish Giant
2.	Stephen Leacock	The Conjuror's Revenge
3.	R.K. Narayan	Swami and Friends
4.	George Orwell	Animal Farm
5.	Jonathan Swift	The Gulliver Travels
6.	O. Henry	After Twenty Years
7.	E.V. Lucas	The Face on the Wall
8.	APJ Kalam	Wings of Fire

Drama/Play

	Name of the writer	Title
1	William Shakespeare	The Tempest
2	G.B. Shaw	Saint Joan
3	William Stanley Houghton	The Dear Departed
4	Cedric Mount	The Never Never Nest

The Candidates are expected to have a thorough knowledge of the above mentioned poets, essayists, novelists and dramatists and their respective works mentioned at the level that is expected of a student of literature.

Part IV - English – Methodology

- English language – History, Nature, Importance – English as Second Language- English language teaching in India
- Linguistic, social and academic demands of English language
- Language acquisition and learning
- Factors affecting English language learning – physical, psychological and social factors
- Problems of teaching / learning English
- Aims and objectives of teaching English
- Child Development: Psychology of teaching and learning language – Language thinking and creativity
- English Language Curriculum: Construction, organization and development
- Academic Standards/ Learning outcomes: competencies and discourses- features of discourses

- Approaches, Methods and Techniques of teaching English with special reference to school content and context: prose/poetry/ fiction/ drama/ essay etc.,
- Language skills
 - a) Listening skills: Listening process, factors conducive to listening, sub-skills of listening, listening comprehension, tasks for developing listening skills
 - b) Speaking skills: Features of good speaking abilities, sub-skills of speaking, suprasegmental features, tasks for developing speaking skills
 - c) Reading skills: Types of reading, sub-skills of reading, levels of comprehension, tasks for developing reading skills
 - d) Writing skills: Mechanics of writing, types and sub – skills of writing, creative writing and tasks for developing writing skills
- Special focus on study skills i.e., Note –making and Note – taking, information transfer, Mind – mapping etc.,
- Communicative skills: Imparting values through communication
- Reference skills : Use of Dictionary, Thesaurus and Encyclopaedia
- Teaching and learning resources and designing instructional material for English language
- Multilingualism
- Continuous Professional Development
- Using ICT in Teaching English language.
- Evaluation in English Language -Continuous Comprehensive Evaluation (CCE), tools and techniques for evaluation: types of tests and features of a good test
- Learning disabilities and inclusive practices in teaching - learning English
- National and State curriculum frameworks
- Teaching language items, grammar and vocabulary in context: prescriptive grammar, descriptive grammar and pedagogical grammar.

**Syllabus of Written Test for Recruitment of School Assistant
Kannada**

Part – I

General Knowledge and Current Affairs (Marks: 10)

Part - II

Perspectives In Education (Marks: 10)

I. Historical Development of Education in India

1. Development of Education from Pre-Vedic to Pre-Independent Period
2. Recommendations of various Educational Committees, Education Commissions, Educational Policies during pre & post independent period and their implications

II. Philosophical Dimensions of Education

1. Aims, Objectives, Functions; Processes of Education - Unipolar, Bipolar and Tripolar; Types of Education – Formal, Informal and Non-formal and their significance
2. Educational thinkers and their contributions – Swami Vivekananda, Mahathma Gandhi, B.R. Ambedkar, Jiddu Krishnamurthy, Gijubhai Badheka, Plato, Aristotle, Rousseau, Froebel, Dewey and Montessori
3. Professional code of conduct for teachers, Professional Ethics – commitment to profession, learner and society
4. Critical Understanding of the difference between knowledge and skill, knowledge and information, teaching and training, reason and belief
5. Theory of knowledge – problems of knowledge, truth, ways of knowing, notions of truth, validation of knowledge – pramanas from eastern connotation - pratyaksha, anumana, upamana, sabda and western connotation – perception, inference, comparison, testimony

III. Sociological Dimensions of Education

1. Social agencies of Education – Home, Peer group, School, Community
2. Democracy and Education- Equity, Equality of Educational Opportunities in diversified society, Role of Education in promoting democracy
3. Economics of Education – Education as Human Capital, Education and Human Resource Development
4. Gender: Social construction of gender, gender discrimination, Equity and Empowerment of Women, working towards gender equality in the classroom - the role of teacher
5. Community Development – Education as an instrument for Social Change and Transformation of Society

IV. Child – Development and Learning

1. Methods of Child Study – Observation, Introspection, Experimental Method and Case Study
2. Principles of Development and their Educational implications
3. Stages and Dimensions of Development – Growth and development across various stages from pre-natal to adolescence – Physical, Cognitive, Language, Emotional, Social and Moral (contribution of Piaget, Erikson, Chomsky, Rogers and Kohlberg), Developmental tasks and their implications, Child Rearing Practices and development
4. Understanding Learner – Individual differences (Intra & Inter) – aptitude, interest, intelligence, thinking (divergent and convergent), attitude, personality
5. Understanding Learning – Concept, Factors effecting Learning – Personal, Environmental and Material; Role of Motivation in Learning; Memory and Forgetting; Learning Theories – Behavioristic, Insight, Cognitive, Social and Constructivist

V. Professional Development of Teachers

1. Teaching as a Profession
2. Phases of Professional Development – Pre-service and In-service,
3. Approaches to Professional Development –Conventional (face to face), Distance, Online, School based, Action Research, Professional Learning Communities, Self - Initiated Learning, Continuous Professional Development (CPD)
4. NCF-2005, NCFTE-2009, NCFSE-2023
5. Teacher Autonomy & Accountability
6. Institutions relating to Teachers and Teacher Education - NCERT, NCTE, RCI, SCERT, IASE, CTE, DIET

VI. Educational Concerns in Contemporary India

1. Environmental Education – Meaning, Scope, Concept of Sustainable Development, Role of Teacher, School and NGOs in protection of environment
2. Population Education – Significance, Population Situation, Consequences of population growth, Approaches and Themes of Population Education, Family Life Education
3. Adolescence Education – Significance, Challenges, Coping Skills and Life Skills
4. Inclusive Education – Concept, addressing diversified needs, Importance of Early Identification, Methods & Strategies of Classroom Management, Creation of awareness among Students, Parents and Society, Role of Education in creating positive attitude towards diversity
5. Education in the context of LPG (Liberalization, Privatization, Globalization) – Privatization of Education – Issues of Equal opportunities, Urbanization and Migration

6. Value Education – Importance of Value Education in Primary and Secondary Stages of Education, role of school and teacher in developing appropriate values among children and creation of an egalitarian society
7. Health & Wellbeing - Physical, Mental, Social and Emotional Health, Stress Management, Yoga Education
8. Educational Technology, Information and Communication Technology (ICT) and Education – pedagogical implications, exploration of ICT resources for teaching and learning, open educational resources
9. Constitutional Provisions relevant to Education – Fundamental Rights and Duties of Citizens, Right of Children to Free and Compulsory Education Act, 2009, Child Rights, Human Rights, PWD Act, 2016 and other Provisions pertaining to Education

Part III – Kannada Content (Marks : 44)

1. ಪ್ರಾಚೀನ ಮತ್ತು ಆಧುನಿಕ ಕವಿಗಳು - ಬರಹಗಾರರು – ವೈಶಿಷ್ಟ್ಯಗಳು
ಕವನಗಳು - ಬರಹಗಳು - ಶೀರ್ಷಿಕೆಗಳು - ಪ್ರಶಸ್ತಿಗಳು - ಬರವಣಿಗೆಯ ಶೈಲಿ - ಪಾತ್ರಗಳು -
ವಲಯಗಳು – ಹಿನ್ನೆಲೆ
2. ವಿವಿಧ ಸಾಹಿತ್ಯ ಪ್ರಕಾರಗಳು - ಗುಣಲಕ್ಷಣಗಳು – ವಿವರಣೆಗಳು
ಮಹಾಕಾವ್ಯ - ಪುರಾಣ - ಗ್ರಂಥ - ಶತಮಾನ - ಕಥನ ಕವಿತೆ - ಪ್ರಬಂಧ - ರುಬಾಯಿ - ಕಥೆ -
ನಿರೂಪಣೆ - ಕಾದಂಬರಿ - ಆತ್ಮಚರಿತ್ರೆ - ಜೀವನಚರಿತ್ರೆ - ಪ್ರವಾಸ ಇತಿಹಾಸ - ಗಜಲ್ - ಮುನ್ನುಡಿ -
ಸಂಪಾದಕೀಯ - ನಾಟಕ - ಪಠ್ಯ ಕವಿತೆ - ಕವಿತೆ - ಅನುವಾದ ಕೃತಿ
3. ಸಾಹಿತ್ಯ ವಿಮರ್ಶೆಯ
ಕವಿ; ಕಾವ್ಯ – ವ್ಯಾಖ್ಯಾನಗಳು – ಕಾವ್ಯ ಉತ್ಪಾದನೆಗೆ ಕಾರಣಗಳು – ಕಾವ್ಯದ ಪ್ರಯೋಜನಗಳು –
ಕಾವ್ಯಾತ್ಮ – ರಸದ ಸಿದ್ಧಾಂತ – ಧ್ವನಿಯ ಸಿದ್ಧಾಂತ
4. ಆಧುನಿಕ ಸಾಹಿತ್ಯ – ಚಳುವಳಿಗಳು – ಪ್ರವೃತ್ತಿಗಳು
ಭಾವಾತಿರೇಕದ ಕಾವ್ಯ – ರಾಷ್ಟ್ರವಾದಿ ಕಾವ್ಯ – ಪ್ರಗತಿಶೀಲ ಕಾವ್ಯ – ಕ್ರಾಂತಿಕಾರಿ ಕಾವ್ಯ –
ಸ್ತ್ರೀವಾದಿ ಕಾವ್ಯ – ದಿಗಂಬರ ಕಾವ್ಯ – ದಲಿತವಾದಿ ಕಾವ್ಯ – ಅಲ್ಪಸಂಖ್ಯಾತರ ಕಾವ್ಯ –
ತೆಲಂಗಾಣ ಅಸ್ತಿತ್ವವಾದಿ ಕಾವ್ಯ – ಭಾವುಕ ಕಾವ್ಯ
5. ಜನಪದ ಸಾಹಿತ್ಯ
ಜನಪದ ಗೀತೆಗಳು – ಜನಪದ ಕಥೆಗಳು – ರೂಪವಿಜ್ಞಾನ – ಜಾನಪದ ಕಲೆಗಳು – ವಸ್ತು ಸಂಸ್ಕೃತಿ
– ಜನಪದ ಕಲಾವಿದರು – ಆಚರಣೆಗಳು – ನಂಬಿಕೆಗಳು – ಗಾದೆಗಳು – ಕಥೆಗಳು
6. ಭಾಷೆ – ವಿವಿಧ ರೂಪಗಳು
ಕಾನೂನು ಭಾಷೆ – ಸಾಹಿತ್ಯ ಭಾಷೆ – ಆಡುಮಾತಿನ ಭಾಷೆ – ಆಡುಭಾಷೆ – ಕನ್ನಡ ಮಾಧ್ಯಮ
ಭಾಷೆಯ ಭಾಷೆ - ಭಾಷಾ ಸಂರಕ್ಷಣೆ ಮತ್ತು ಅಭಿವೃದ್ಧಿ ಸಂಸ್ಥೆಗಳು
7. ಭಾಷೆ – ಪೀಠಿಕೆ
ಭಾಷಾ ವ್ಯಾಖ್ಯಾನಗಳು – ಶಬ್ದಗಳು – ಉತ್ಪಾದನಾ ಸ್ಥಳಗಳು – ಪದ, ಆಧಾರ – ಧ್ವನಿ ವಿಕಾಸ
– ಅರ್ಥ ವಿಕಾಸ – ಸಾಮ್ಯ – ಸೂಚ್ಯತೆ – ದೇಶ – ವಿದೇಶಿ – ಕನ್ನಡ ವಾಕ್ಯ
8. ಶಬ್ದಕೋಶ – ವ್ಯಾಕರಣ)

A) ಶಬ್ದಕೋಶ : ಅರ್ಥಗಳು – ಸಮಾನಾರ್ಥಕ ಪದಗಳು – ವಿರೋಧಾಭಾಸಗಳು – ಪ್ರಕೃತಿ – ಪ್ರಕೃತಿ – ರಾಷ್ಟ್ರೀಯತೆಗಳು – ಗಾದೆಗಳು

B) ವ್ಯಾಕರಣ ವಿಷಯಗಳು:ಸಂಧುಗಳು – ಸಮಾಸಗಳು – ಛಂದಸ್ಸು – ಆಭರಣಗಳು – ವಾಕ್ಯ-ವಿಧಗಳು – ವ್ಯಾಕರಣ ಶಬ್ದಕೋಶ

9. ಓದುವಿಕೆ ಗ್ರಹಿಕೆ

Part V – Methodology (Marks: 16)

1. ಭಾಷೆ - ಅಗತ್ಯ, ವ್ಯಾಖ್ಯಾನ - ಭಾಷಾ ವಾದಗಳು, ಭಾಷಾ ಪ್ರಯೋಜನಗಳು
2. ಭಾಷಾ ಬೋಧನೆ ಮತ್ತು ಕಲಿಕೆ - ಗುರಿಗಳು, ಉದ್ದೇಶಗಳು, ಕಲಿಕೆಯ ಮಾನದಂಡಗಳು (ಸಾಮರ್ಥ್ಯಗಳು), ಕಲಿಕೆಯ ಫಲಿತಾಂಶಗಳು, ಮೌಲ್ಯಗಳು
3. ಭಾಷಾ ಪಠ್ಯಕ್ರಮ, ವಿಷಯ ಯೋಜನೆ - ರಚನೆ, ಸಂಘಟನೆ, ಅಭಿವೃದ್ಧಿ, ಪಠ್ಯಪುಸ್ತಕಗಳು
4. ಭಾಷಾ ಕೌಶಲ್ಯಗಳು ಮತ್ತು ಬೋಧನಾ ಕೌಶಲ್ಯಗಳು
5. ಭಾಷಾ ಬೋಧನೆ, ವಿಧಾನಗಳು, ತಂತ್ರಗಳು - ಬೋಧನೆಯ ವಿವಿಧ ಪ್ರಕ್ರಿಯೆಗಳು
6. ಬೋಧನೆ ಮತ್ತು ಕಲಿಕೆಯ ಸಂಪನ್ಮೂಲಗಳು (ಶೈಕ್ಷಣಿಕ ತಂತ್ರಜ್ಞಾನ, ಸಹಪಠ್ಯ ಕಾರ್ಯಕ್ರಮಗಳು)
7. ಯೋಜನೆಗಳು - ವಾರ್ಷಿಕ, ಪಾಠ (ಘಟಕ), ಅವಧಿ ಯೋಜನೆಗಳು
8. ಕಲಿಕೆಯಲ್ಲಿ ಅಸಮರ್ಥತೆ - ವಿಶೇಷ ಅಗತ್ಯವಿರುವ ಮಕ್ಕಳ ಭಾಷಾ ಕಲಿಕೆ
9. ದೈನಂದಿನ ಜೀವನದಲ್ಲಿ ಭಾಷಾ ಬಳಕೆ - ಭಾಷಾ ಸಮಸ್ಯೆಗಳು, ಭಾಷೆ ವಿಧಾನಗಳು ಮತ್ತು ರಾಷ್ಟ್ರೀಯ ಮತ್ತು ರಾಜ್ಯ ಮಟ್ಟದ ಶಿಕ್ಷಣ ಯೋಜನೆ ಚೌಕಟ್ಟುಗಳು, R.T.E, 2009 ACT
10. ಮೌಲ್ಯಮಾಪನ – ಪರೀಕ್ಷೆಗಳು

**Syllabus of Written Test for Recruitment of School Assistant
Marati**

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Part III – Marathi Content (Marks: 44)

1. प्राचीन आणि आधुनिक कवी - लेखक - वैशिष्ट्ये
कविता - कार्य - शीर्षक - पुरस्कार - लेखन शैली - पात्रे - इति वृत्त - पार्श्वभूमी
2. विविध साहित्य प्रकार - वैशिष्ट्ये - वर्णने
महाकाव्य - मिथक - प्रबंध - शतक - कथा कविता - निबंध - रुबाई - काथा - कथा - कादंबरी - आत्मचरित्र - चरित्र - प्रवास इतिहास - गझल - प्रस्तावना - संपादकीय - नाटक - मजकूर कविता - कविता - अनुवाद कार्य
3. साहित्यिक समीक्षा
कवी; काव्य - व्याख्या - काव्य निर्मितीची कारणे - काव्याचे फायदे - काव्यत्मा - रसाचा सिद्धांत - ध्वनी सिद्धांत
4. आधुनिक साहित्य - चळवळी
ट्रेंडसेन्टिमेंटल कविता - राष्ट्रीय चळवळीची कविता - प्रगतीशील कविता - क्रांतिकारक कविता - स्त्रीवादी कविता - दिगंबरा कविता - दलितवादी कविता - अल्पसंख्याक कविता - तेलंगणा अस्तित्वातील कविता - भावनावादी कविता - भावनिक कविता
5. फॉल्क लिटरेचर
गाणी - लोक कथा - लोक कला - भौतिक संस्कृती - लोककलाकार - विधी - श्रद्धा - नीतिसूत्रे - लोककथा
6. भाषा - भाषेचे विविध प्रकार -
शास्त्रवचनीय भाषा - बोलचाल भाषा - बोलीभाषा - माध्यम भाषा - मराठी भाषेची पुरातनता - भाषा संवर्धन आणि विकास संस्था
7. भाषा - परिचय
भाषा व्याख्या - ध्वनी - निर्मितीची ठिकाणे - शब्द, आधार - ध्वनी उत्क्रांती - अर्थ उत्क्रांती - समानता - तात्पर्य - देश - परदेशी - मराठी वाक्य
8. शब्दसंग्रह - व्याकरण
A) शब्दसंग्रह : अर्थ - समानार्थी - प्रतिशब्द - राष्ट्रीय शब्द - शब्दसंग्रह - सुविचार
B) व्याकरण विषय: संधू - समास - प्रॉसोडी - अलंकार - वाक्य-प्रकार - व्याकरणात्मक मुहावरे
9. वाचन आकलन (Reading Comprehension)

Part IV – Methodology (Marks: 16)

1. भाषा – गरज, व्याख्या – भाषिक युक्तिवाद, भाषेचे फायदे
2. भाषा शिकवणे आणि शिकणे – उद्दिष्टे, उद्दिष्टे, शिकण्याचे मानक (योग्यता), शिकण्याचे परिणाम, मूल्ये
3. भाषा अभ्यासक्रम, सामग्री नियोजन – रचना, संस्था, विकास, पाठ्यपुस्तके
4. भाषा कौशल्ये आणि अध्यापन कौशल्ये
5. भाषा शिकवणे, पद्धती, धोरणे – अध्यापनाच्या विविध प्रक्रिया
6. शिकवणे आणि शिकण्याची संसाधने (शैक्षणिक तंत्रज्ञान, सह-अभ्यासक्रम कार्यक्रम)
7. योजना – वार्षिक, धडे (युनिट), कालावधी योजना
8. शिकण्याची अक्षमता – विशेष गरजा असलेल्या मुलांचे भाषा शिकणे
9. दैनंदिन जीवनात भाषेचा वापर – भाषा समस्या, भाषा दृष्टिकोन आणि राष्ट्रीय आणि राज्यस्तरीय शैक्षणिक नियोजन फ्रेमवर्क, R.T.E, 2009 कायदा
10. मूल्यमापन - परीक्षा

**Syllabus of Written Test for Recruitment of School Assistant
Sanskrit**

Part – I

General Knowledge and Current Affairs (Marks: 10)

Part - II

Perspectives In Education (Marks: 10)

I. Historical Development of Education in India

1. Development of Education from Pre-Vedic to Pre-Independent Period
2. Recommendations of various Educational Committees, Education Commissions, Educational Policies during pre & post independent period and their implications

II. Philosophical Dimensions of Education

1. Aims, Objectives, Functions; Processes of Education - Unipolar, Bipolar and Tripolar; Types of Education – Formal, Informal and Non-formal and their significance
2. Educational thinkers and their contributions – Swami Vivekananda, Mahathma Gandhi, B.R. Ambedkar, Jiddu Krishnamurthy, Gijubhai Badheka, Plato, Aristotle, Rousseau, Froebel, Dewey and Montessori
3. Professional code of conduct for teachers, Professional Ethics – commitment to profession, learner and society
4. Critical Understanding of the difference between knowledge and skill, knowledge and information, teaching and training, reason and belief
5. Theory of knowledge – problems of knowledge, truth, ways of knowing, notions of truth, validation of knowledge – pramanas from eastern connotation - pratyaksha, anumana, upamana, sabda and western connotation – perception, inference, comparison, testimony

III. Sociological Dimensions of Education

1. Social agencies of Education – Home, Peer group, School, Community
2. Democracy and Education- Equity, Equality of Educational Opportunities in diversified society, Role of Education in promoting democracy
3. Economics of Education – Education as Human Capital, Education and Human Resource Development
4. Gender: Social construction of gender, gender discrimination, Equity and Empowerment of Women, working towards gender equality in the classroom - the role of teacher
5. Community Development – Education as an instrument for Social Change and Transformation of Society

IV. Child – Development and Learning

1. Methods of Child Study – Observation, Introspection, Experimental Method and Case Study
2. Principles of Development and their Educational implications
3. Stages and Dimensions of Development – Growth and development across various stages from pre-natal to adolescence – Physical, Cognitive, Language, Emotional, Social and Moral (contribution of Piaget, Erikson, Chomsky, Rogers and Kohlberg), Developmental tasks and their implications, Child Rearing Practices and development
4. Understanding Learner – Individual differences (Intra & Inter) – aptitude, interest, intelligence, thinking (divergent and convergent), attitude, personality
5. Understanding Learning – Concept, Factors effecting Learning – Personal, Environmental and Material; Role of Motivation in Learning; Memory and Forgetting; Learning Theories – Behavioristic, Insight, Cognitive, Social and Constructivist

V. Professional Development of Teachers

1. Teaching as a Profession
2. Phases of Professional Development – Pre-service and In-service,
3. Approaches to Professional Development –Conventional (face to face), Distance, Online, School based, Action Research, Professional Learning Communities, Self - Initiated Learning, Continuous Professional Development (CPD)
4. NCF-2005, NCFTE-2009, NCFSE-2023
5. Teacher Autonomy & Accountability
6. Institutions relating to Teachers and Teacher Education - NCERT, NCTE, RCI, SCERT, IASE, CTE, DIET

VI. Educational Concerns in Contemporary India

1. Environmental Education – Meaning, Scope, Concept of Sustainable Development, Role of Teacher, School and NGOs in protection of environment
2. Population Education – Significance, Population Situation, Consequences of population growth, Approaches and Themes of Population Education, Family Life Education
3. Adolescence Education – Significance, Challenges, Coping Skills and Life Skills
4. Inclusive Education – Concept, addressing diversified needs, Importance of Early Identification, Methods & Strategies of Classroom Management, Creation of awareness among Students, Parents and Society, Role of Education in creating positive attitude towards diversity
5. Education in the context of LPG (Liberalization, Privatization, Globalization) – Privatization of Education – Issues of Equal opportunities, Urbanization and Migration

6. Value Education – Importance of Value Education in Primary and Secondary Stages of Education, role of school and teacher in developing appropriate values among children and creation of an egalitarian society
7. Health & Wellbeing - Physical, Mental, Social and Emotional Health, Stress Management, Yoga Education
8. Educational Technology, Information and Communication Technology (ICT) and Education – pedagogical implications, exploration of ICT resources for teaching and learning, open educational resources
9. Constitutional Provisions relevant to Education – Fundamental Rights and Duties of Citizens, Right of Children to Free and Compulsory Education Act, 2009, Child Rights, Human Rights, PWD Act, 2016 and other Provisions pertaining to Education

Part-III : Sanskrit Content (44 marks)

1. प्राचीन एवं आधुनिक कवि - लेखक - विशेषताएँ
कविता – कृति – शीर्षक – पुरस्कार – लेखन शैली – पात्र – वृत्त – पृष्ठभूमि
2. विभिन्नाः साहित्यिकविधाः – लक्षणम् – वर्णनम्
महाकाव्य – किंवदंती – ग्रंथ – शताब्दी – कथ्य कविता – निबंध – रुबाई – कथा – कथ्य – उपन्यास – आत्मकथा – जीवनी – यात्रा इतिहास – गजल – भूमिका – सम्पादकीय – नाटक – पाठ कविता – कविता – अनुवाद कार्य
3. साहित्यसमालोचना
कविः, काव्य – परिभाषा – काव्य उत्पादन के कारण – काव्य के लाभ – काव्यात्म – रस के सिद्धान्त – ध्वनि सिद्धान्त
4. आधुनिकसाहित्यम् – आन्दोलनानि – प्रवृत्तिः
भावात्मक काव्य – राष्ट्रवादी काव्य – प्रगतिशील काव्य – क्रान्तिकारी काव्य – नारीवादी काव्य – दिगम्बर काव्य – दलित काव्य – अल्पसंख्यक काव्य – तेलंगाना अस्तित्ववादी काव्य – भाववादी काव्य
5. लोकसाहित्य
लोकगीतानि – लोककथाः – रूपाणि – लोककला – भौतिकसंस्कृतिः – लोककलाकाराः – संस्काराः – मान्यताः – सुभाषितानि – दंतकथा
6. भाषा – भिन्नरूपाः
कानूनी भाषा – साहित्यिक भाषा – बोलचाल भाषा – बोली भाषा – मीडिया भाषा – संस्कृत भाषा की प्राचीनता – भाषा संरक्षण एवं विकास संगठन
7. भाषा – परिचयः
भाषाई परिभाषा – ध्वनि – उत्पादन स्थान – शब्द, आधार – ध्वनि का विकास – अर्थ का विकास – उपमा – अर्थ – देश – विदेशी – संस्कृत वाक्य
8. शब्दावली - व्याकरणम्
A) शब्दावली : अर्थ – समानार्थी शब्द – विलोम शब्द – असामान्यताएँ – व्युत्पत्ति – व्युत्पत्ति – सुभाषित
B) व्याकरणस्य तत्त्वानि : संदुः – समासाः – गद्यम् – अलङ्काराः – वाक्य-प्रकाराः – व्याकरणिक-शब्दकोशः
9. पठन बोध (Reading Comprehension)

Part-IV: Sanskrit Methodology (16 marks)

1. भाषा – आवश्यकता, परिभाषा – भाषाई तर्क, भाषाई लाभ
2. भाषाशिक्षणं शिक्षणं च – उद्देश्यं, उद्देश्यं, शिक्षणमानकाः (दक्षताः), शिक्षणपरिणामाः, मूल्यानि
3. भाषापाठ्यक्रमः, विषयनियोजनम् – संरचना, संगठनम्, विकासः, पाठ्यपुस्तकानि
4. भाषाकौशलं शिक्षणकौशलं च
5. भाषाशिक्षणम्, पद्धतयः, रणनीतयः – शिक्षणस्य भिन्नाः प्रक्रियाः
6. शिक्षण-अध्ययन-संसाधनम् (शैक्षिक-प्रौद्योगिकी, सहपाठ्यक्रम-कार्यक्रमाः)
7. योजना – वार्षिक, पाठ (एकक), अवधि योजना
8. शिक्षणविकलाङ्गता – विशेषावाश्यकबालानां भाषाशिक्षणम्
9. दैनन्दिनजीवने भाषाप्रयोगः – भाषाविषयाणि, भाषानीतयः तथा राष्ट्रिय-राज्यस्तरीयशिक्षानियोजनरूपरेखाः, R.T.E, 2009 अधिनियमः
10. मूल्याङ्कनम् – परीक्षाः

**SCHEME OF EXAMINATION AND SYLLABUS TO THE POST OF
SCHOOLASSISTANT (PHYSICAL EDUCATION)**

Duration: 3 Hours

PART NO.	SUBJECT	SYLLABUS LEVEL	NO. OF MARKS	NO. OF QUESTIONS	
I	GENERAL KNOWLEDGE AND CURRENT AFFAIRS		10	20	
II	GENERAL ENGLISH	The syllabus for English shall be based on proficiency in the language, elements of language, elements of comprehension abilities standard up to Secondary Level (X Class)	10	20	
CONTENT					
III	HISTORY, PRINCIPLES AND FOUNDATIONS OF PHYSICAL EDUCATION	B.P.Ed syllabus of the Telangana State.	06	12	
IV	ANATOMY AND PHYSIOLOGY		06	12	
V	EDUCATIONAL TECHNOLOGY AND METHODS OF TEACHING IN PHYSICAL EDUCATION:		05	10	
VI	OLYMPIC MOVEMENT		04	08	
VII	KINESIOLOGY AND BIOMECHANICS		04	08	
VIII	HEALTH EDUCATION AND ENVIRONMENTAL STUDIES		05	10	
IX	MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION		04	08	
X	RECREATION AND LEISURE MANAGEMENT		03	06	
XI	SPORTS TRAINING		05	10	
XII	CONCEPTS OF WELLNESS MANAGEMENT		04	08	
XIII	SPORTS PSYCHOLOGY AND SOCIOLOGY		04	08	
XIV	SPORTS MEDICINE, PHYSIOTHERAPY AND REHABILITATION		05	10	
XV	SPORTS MANAGEMENT		04	08	
XVI	CONCEPTS OF YOGA		05	10	
XVII	OFFICIATING AND COACHING		12	24	
XVIII	RESEARCH AND STATISTICS IN PHYSICAL EDUCATION		04	08	
Total			100	200	

**Syllabus of Written Test for Recruitment of School Assistant
Physical Education**

Part – I

General Knowledge and Current Affairs (Marks: 10)

Part - II

General English (Marks: 10)

Part-III to XVIII

III. HISTORY, PRINCIPLES AND FOUNDATIONS OF PHYSICAL EDUCATION

- i. Introduction: Meaning, Definition and Scope of Physical Education, Aims and Objectives of Physical Education, Importance of Physical Education in present era, Concepts and misconceptions about Physical Education, Relationship of Physical Education with General Education, Physical Education as Arts and Science.
- ii. **Historical Development of Physical Education:** Historical Development of Physical Education Indus Valley Civilization Period. Vedic Period Early Hindu Period and Later Hindu Period, Medieval Period, British Period, Physical Education in India (After 1947), Physical Education in Greece, Germany, Sweden Contribution of Akhadas and Vyayamsalas, H.V.P.Mandals, Institutions / Sports Bodies: YMCA, LNIPE, NSNIS, IOA, AIU, SAI,SAF, SGF, PYKKA, RGKA, SAAP, Physical Education & Sports Universities.
- iii. **Policies, Schemes, Awards:** Bharata Ratna, Padmasri, Padmabhushan, Padmavibhushan, Arjuna, Dronacharya, Rajiv Khel Ratna, Ekalvya, Jhansi Laxmibhai, Abhimanyu,. Trophies/Cups in Physical Education and Sports at State/National Level.
- iv. **Foundations of Physical Education:** Foundations of Physical Education Philosophical foundation: Idealism, Pragmatism, Naturalism, Realism, Humanism, Existentialism and Indian Philosophy and Culture. Fitness and wellness movement in the contemporary perspectives, Sports for all and its role in the maintenance and promotion of fitness.
- v. **Principles of Physical Education:** Principles of Physical Education Biological: Growth and development, Gender Difference: Physical, Physiological & Anthropometric (Sheldon and Kretchmer). Psychological: Types of Learning, learning curve, Laws and principles of learning, Attitude, interest, cognition, emotions and sentiments. Sociological: Society and culture, Social acceptance and recognition, Leadership, Social integration and cohesiveness.

IV. ANATOMY AND PHYSIOLOGY

- i. Meaning and Definition of Anatomy, Physiology and their importance in Physical Education. Structure, function and division of cell. **Tissues:** Functions and types. **Skeletal System:** Axial and Appendicular Skeletal system, Types of Bones and Joints. Posture: Meaning, Types and Importance of good posture.
- ii. **Blood and circulatory system** Constituents of blood and their functions, Blood groups, structure of the heart, circulation of blood: Pulmonary, Systemic and General circulation. Blood pressure. **Respiratory system:** Structure of respiratory system – Mechanism of Respiration (Internal and External). **Digestive system:** structure and functions of the digestive system, Process of Digestion. **Nervous system:** Organs of Nervous System, Structure and functions of Brain and Spinal cord.
- iii. Structure, properties and functions of skeletal muscles. Role of Oxygen in Physical Training, Oxygen Debt, Second wind, Lung capacity, Vital capacity, Tidal Volume, Residual volume. **Endocrine system:** Functions of glands, Pituitary, Thyroid, Parathyroid, Adrenal and Pancreas.

- iv. Effects of training on cardiovascular system, Effects of training on respiratory system, Effects of training on muscular system, Fatigue and performance in sports.

V. EDUCATIONAL TECHNOLOGY AND METHODS OF TEACHING IN PHYSICAL EDUCATION

- i. Meaning and Definition of Education, Technology and Educational Technology, Objectives of Educational Technology and importance of Educational technology. Types of Education:- Formal, Informal and Non-Formal education, Educative Process, Devices and their importance in Teaching.
- ii. **Teaching Techniques and teaching aids:** Teaching Technique, Lecture method, Command method, Demonstration method, Imitation method, part method, whole method and whole part - whole method. Presentation Technique: Personal and technical preparation. Command: Meaning of command, types of command: Rhythmic and response command, uses of command in different situations. Teaching Aids : Meaning and Importance of teaching aids. Types of Teaching aids:- Audio, Visual, Audio - visual aids, Chalk board, Digital boards, Pin boards, Charts, Model, Slide projector, Motion picture. Team Teaching: Meaning, Principles and advantage of team teaching.
- iii. **Tournaments:** Meaning of tournament and types of tournaments – Knock-out (Elimination), League (Round Robin), Knock-out cum league, League cum knock-out, Double league, Double knockout, Challenge. Method of drawing Fixtures: Seeding, Special Seeding. Rotation Method, Stair case method. Intramural and Extramural and their importance, Sports Day/ Play Day
- iv. **Lesson Planning:** Meaning, Type, principles and lesson plan. General, particular / specific and coaching lesson plan. Micro Teaching: Meaning, Types and steps of micro teaching. Simulation Teaching: Meaning, Types and steps of simulation teaching.

VI. OLYMPIC MOVEMENT

- i. **Origin of Olympic Movement** Aims of Olympic movement, The early history of the Olympic movement, The significant stages in the development of the modern Olympic movement, Educational and cultural values of Olympic movement.
- ii. **Modern Olympic Games** Significance of Olympic Ideals, Olympic Rings, Olympic Flag, Olympic Protocol for member countries, Olympic Code of Ethics, Olympism in action, Sports for all.
- iii. **Different Olympic Games** Para Olympic Games, Summer Olympics, Winter Olympics, Youth Olympic Games.
- iv. **Committees of Olympic Games** International Olympic Committee - Structure and Functions, National Olympic committees and their role in Olympic movement, Olympic commission and their functions, Olympic medal winners of India till to date.

VII. KINESIOLOGY AND BIOMECHANICS

- i. **Introduction:** Meaning and Definition of Kinesiology and Sports Biomechanics, Importance of Kinesiology and Sports Biomechanics in Physical Education and Sports, , Terminology of Fundamental Movements, Planes and Axes , Gravity, Base, Centre of Gravity, Equilibrium, Line of Gravity
Fundamental concepts: Angle of Pull, All or None Law, Reciprocal Innervations.
- ii. **Mechanical Concepts** Force: Meaning, definition, types and its application in sports. Lever: Meaning, definition, types and its application in sports. Newton's Laws of Motion and their application in sports. Projectile: Factors influencing projectile trajectory.
- iii. **Kinematics and Kinetics of Human Movement** Linear Kinematics: Distance and Displacement, speed and velocity, Acceleration. **Angular kinematics:** Angular Distance and Displacement, Angular Speed and velocity, Angular

Acceleration. **Linear Kinetics:** Inertia, Mass, Momentum, Friction. **Angular Kinetics:** Moment of Inertia, Couple, Stability.

VIII. HEALTH EDUCATION AND ENVIRONMENTAL STUDIES

- i. **Health Education:** Definition of Health, Health Education. Aims, objectives and Principles of Health Education. Concepts of health: Biomedical, ecological and holistic concepts. Dimensions of Health: physical, mental and social dimensions. Factors affecting Health, School Health Programme: Health Instructions, Health Supervision, Health Service. Balanced diet, constituents of balanced diet.
- ii. **Health Problems in India:** Communicable diseases: Chickenpox, Measles, Mumps, Influenza, Whooping cough, Typhoid, Malaria, Aids. Non-Communicable Diseases: Obesity, Hypertension, Stroke, Diabetes. Malnutrition. Other problems: Explosive Population, Personal and Environmental Hygiene for schools, Nutritional service, Health appraisal, Health record, Healthful school environment, first-aid and emergency care.
- iii. **Environmental Science:** Definition, Scope, Need and Importance of environmental studies, Concept of environmental education, Historical background of environmental education, Celebration of various days in relation with environment, Pollution of Plastic bags / covers, Role of school in environmental conservation and sustainable development. Types of Pollutions: Air Pollution, Water Pollution, Soil Pollution, Noise Pollution, Thermal Pollution.

IX. MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION

- i. **Introduction:** Meaning of Test, Measurement & Evaluation in Physical Education, Need & Importance of Test, Measurement & Evaluation in Physical Education, Principles of Evaluation, Criteria of good Test.
- ii. **Classification and Administration of test** Classification of Tests, Administration of test: Pre, During and post test, Methods of Scoring test.
- iii. **Physical Fitness Tests:** AAHPER youth fitness test, JCR test, Cooper's 12 minute run/ walk test, Harvard Step test, Indiana Motor Fitness Test, Barrow motor ability test.
- iv. **Sports Skill Tests:** Lockhart and McPherson badminton test, Johnson basketball test, McDonald soccer test, Russell - Lange Volleyball test, Schmithals French Field Hockey test

X. RECREATION AND LEISURE MANAGEMENT

- i. **Introduction:** Meaning, Definition of Recreation and Leisure Management, Importance, Values of Recreation, Principles of Recreation. Fundamental modes of Recreation, qualities and qualifications of Leaders of Recreation.
- ii. **Recreation and Play** Theories of Recreation, Theories of Play, Therapeutic Recreation, Therapeutic use of activity, Recreation for the life, Role of recreation and leisure on the human development.
- iii. **Types of recreational activities:** Indoor, Outdoor games, Music, Dance, Picnics and Excursions.
- iv. **Recreational Agencies:** Organisation and Administration of Recreational agencies, Individual and Home agencies, Government Agencies, Voluntary Agencies, Private Agencies, Commercial Agencies, Modern trends in recreation and Leisure Management, Issues related to Recreation and Leisure Management.

XI. SPORTS TRAINING

- i. **Introduction:** Meaning and Definition of Sports Training, Aims and Objective of Sports Training, Principles of Sports Training. **Methods of Sports Training:** Continuous training, Interval training, Repetition training, Fartlek training, Resistance training, Circuit training, Plyometric training. Warm-up and warm-down, Athletic diet: Pre competition, during competition and post competition.
- ii. **Training Components** Strength: Meaning and Definition, Methods of Strength Development. Speed: Meaning and Definition, Methods of Speed Development. Endurance: Meaning and Definition, Methods of Endurance Development.

Coordination: Meaning and Definition, Methods of coordination Development.
Flexibility: Meaning and Definition, Methods of Flexibility Development.

- iii. **Training Process:** Load: Definition and Types of Load. Principles of Intensity and Volume of stimulus. Technical Training: Meaning and Methods of Technical Training. Tactical Training: Meaning and Methods of Tactical Training
- iv. **Training program and planning:** Periodization: Meaning and types of Periodization. Aims and Content of Periods: Preparatory, Competition, Transitional. Planning: Training session, Talent Identification and Development

XII. CONCEPTS OF WELLNESS MANAGEMENT

- i. **WELLNESS** Definition and scope of wellness- Wellness continuum and health - Dimensions of wellness - Physical Wellness - Emotional Wellness - Social Wellness - Spiritual wellness - Intellectual wellness and Environmental wellness.
- ii. **EXERCISE AND WELLNESS:** Physical wellness, exercise and functional physical health of different systems of human body, lifestyle diseases in relation to inactivity, Nutrition and exercise to physical wellness.
- iii. **STRESS MANAGEMENT:** Stress : Definition of Stress, Stress and Emotional health, Stress and physical health- Mechanism of stress and related degenerative diseases- Inter dependence of Spiritual wellness, Social wellness and Emotional wellness- Stress management techniques.
- iv. **FITNESS AND BODY COMPOSITION:** **Health** fitness components, body composition, muscular endurance, strength, Cardio vascular fitness and flexibility, importance of cardio respiratory endurance .Obesity and health risk factors, childhood obesity and problems. Body composition indicators and measurements.

XIII. SPORTS PSYCHOLOGY AND SOCIOLOGY

- i. Introduction: Meaning, Definition, Importance and scope of Sports Psychology. Characteristics of Various Stages of growth and development. Individual differences. Heredity and environment. Dynamics of Human behaviour, Play and theories of Play.
- ii. **Learning, Personality, Motivation:** Learning: Theories of learning, Transfer of Learning. Personality: Meaning and definition of personality, characteristics of personality, Dimension of personality, Personality and Sports performance. Motivation: Meaning, Definition and importance of Motivation. Types of Motivation: Intrinsic & Extrinsic, Motivation techniques and their impact on sports performance. Aggression, Anxiety and their effects on Sports performance. Mental Preparation Strategies: Attention, focus, Self- talk, Relaxation, Imaginary.
- iii. **Relation between Social Sciences & Physical Education:** Meaning, Definition and Importance of Sociology, Orthodoxy, customs, Tradition, Festivals and Physical Education, Socialization through Physical Education, Social group, Primary group and Remote group.
- iv. **Culture:** Meaning and Importance of culture, features of culture, effects of culture on people life style. Different methods of studying : Observation / Inspection method, Questionnaire method and Interview method

XIV. SPORTS MEDICINE, PHYSIOTHERAPY AND REHABILITATION

- i. **Sports Medicine** Meaning, Definition, and Importance of Sports Medicine. Role of Physical Education Teachers and Coaches in Athletes Care and Rehabilitation. Common sports injuries and their prevention. **First Aid:** Definition of First Aid, **DRAB** formula (Danger, Response, Airways, Breathing and Circulation), **Artificial respiration technique:** Mouth to mouth, Mouth to nose respiration, CPR (Cardio Pulmonary Resuscitation). **Treatments:** Laceration, Blisters, Contusion, Strain, Sprain, Fracture, Dislocation and Cramps. **Bandages:** Types of Bandages, Taping and supports.
- ii. **Physiotherapy:** Definition: Guiding principles of physiotherapy, Importance of physiotherapy. **Treatment Modalities:** Electrotherapy, infrared rays, Ultraviolet rays, short wave diathermy, ultra sound.

- iii. **Hydrotherapy and Massage:** Hydrotherapy: Meaning and Methods, Cryotherapy, Thermo therapy, Contrast Bath, Whirlpool Bath, Steam Bath, Sauna Bath, Hot Water Fomentation. **Massage:** Meaning and importance of massage, Indications and contraindications of massage. Types of Manipulation, Physiological effects of Massage.
- iv. **Therapeutic Exercise** Definition, Principles and Importance of Therapeutic Exercises. **Classification of Therapeutic exercise:** Passive Movements (Relaxed, Forced and passive stretching). Active movements (concentric, Eccentric and static). Free Mobility Exercise for Shoulder, Wrist, Fingers, Hip, Ankle, Foot joints and Neck exercises.

XV. SPORTS MANAGEMENT

- i. **Concept of management:** Meaning, Definition, Scope, concept and importance of Sports Management. **Functions of management:** Planning, organising, staffing, directing and controlling.
- ii. **Leadership:** Meaning, Definition & Elements of Good leadership. Leadership styles, methods. **Forms of Leadership:** Autocratic, Laissez-faire, Democratic, Benevolent and Dictator. Qualities of administrative leader, Preparation of administrative leader & Effects of Good Leadership on Organizational performance.
- iii. **Financial Management:** Financial management in Physical Education & sports in schools, Colleges and Universities. Criteria of good budget, Steps of Budget making. Model budget for a school. Procedures for purchases and constructions. Records and Registers.
- iv. **Sports Management:** Sports Management in Schools, colleges and Universities. Planning, Directing and Controlling school, college and university sports programmes. Factors effecting the planning. Developing performance standards, Establishing a reporting system, Evaluation, rewards and punishment system. **Event management:** Organisation of major sports event.

XVI. CONCEPTS OF YOGA

- i. **Introduction:** Meaning, Definition & Scope of Yoga, Aims, Objectives and functions of Yoga, Yoga practices in Upanishads and yoga sutra, Modern Trends in Yoga, Place and importance of Yoga in Physical Education and Sports.
- ii. **Early yoga practices:** Astanga Yoga: Yama, Niyama, Asana, Pranayama, Pratyahara, Dharana, Dhyana and Samadhi. Streams of Yoga Practices: Hatha Yoga, Karma Yoga, Bhakti Yoga, Raja Yoga, Jnana Yoga.
- iii. **Basic Yogic Methods** Asana: Classification of Asanas, Sitting, Standing, Lying, Inverted asanas. Benefits of Asanas :Effects of Asanas on general health. Pranayama: Importance & impact on Muscular, Cardio Respiratory and Nervous System. Relaxation and meditation: Importance & impact on body at work and body at rest.. Bandhas: Jalandhara, Mula, Udyana. Mudras: Chin, Yoga, Aswini, Anjali, Brahma Mudra. Kriyas: Neti ,Nauli, Kapalabhati, Trataka, Dhauthi, Bhastrika.
- iv. **Yoga Education** Yoga Education for Youth Empowerment and human resource development. Difference between yogic practices and physical exercises, Yoga education centers in India and abroad, Competitions in Yoga asanas.

XVII. OFFICIATING AND COACHING

- i. **Introduction of officiating and coaching:** Definition of officiating and coaching, Importance and principles of officiating, Relationship of official and coach with management, players and spectators, Measures of improving the standards of officiating and coaching.
- ii. **Coach as a Mentor** Duties of coach in general, pre, during and post game. Philosophy of coaching, responsibilities of a coach on and off the field, Psychology of coach in competition and coaching.

- iii. **Duties of Official** Duties of official in general, pre, during and post game in (Hockey, Football, Handball, Volleyball, Basketball, Table Tennis, Kabaddi, Kho-Kho, Throw ball, Tennis, Badminton, Ball Badminton, Cricket, Softball and Tennikoit). Philosophy of officiating, Mechanism of officiating, position, Signals and movement, Ethics of officiating.
- iv. **Qualities and Qualifications of Coach and Official** Qualities and qualifications of good coach and good official, Layout of courts / fields and Rules of games, Layout of standard Track & Field and Rules, Eligibility rules of intercollegiate and inter-university tournaments.

XVIII. RESEARCH AND STATISTICS IN PHYSICAL EDUCATION

- i. **Introduction to Research:** Definition of Research, Need and importance of Research in Physical Education and Sports. Classification of Research, Meaning of Research Problem, Location and criteria of Selection of Problem, Formulation of a Research Problem, Limitations and Delimitations.
- ii. Various methods of Research, Need for surveying related literature, Literature Sources, Research Proposal.
- iii. **Basics in Statistics:** Meaning, Definition, Nature, Importance and its Types. Raw Score: Grouped Data, Un Grouped Data. Grouped Data: Discrete and Continuous Series. Construction of frequency Table: Class Intervals, Class Distribution. Normal Probability curve, Skewness and kurtosis. Graphical Presentation: Histogram, Bar Diagram, Frequency Polygon, O'give curve, Pie Diagram.
- iv. **Statistical Methods in Physical Education and Sports: Measures of Central Tendency:** Mean Median and Mode-Meaning, Definition, Importance, Advantages, Disadvantages and Calculation from Group and Ungrouped data. **Measures of Variability:** Meaning, importance. Computing Range, Mean Deviation, Quartile Deviation, Deciles, Percentile and Standard Deviation. **Co-relation:** Computing Karl Pearson Product Moment Co-relation and Karl Spearman Rank Order co-relation