

# Syllabus for Pedagogy & Evaluation (For all posts except PET)

### A. Learning Process / Pedagogy

- 1. Understanding the Learning Process
  - Learning as a process and an outcome
  - Approaches Humanistic (Karl Rogers)
  - Constructivist (Piaget and Vygotsky)
  - · Basic conditions of learning: Readiness, Maturation, Motivation, Task and Methods

### 2. Organizing Learning

- Teacher-Centric, Learner Centric, Learning-Centric
- Characteristics and Process

### 3. Addressing Classroom Diversity

- Using varieties of TLMs and AV Aids
- Using context of the learner
- · Using variety of activities while group learning, small group learning and self-learning
- · Learner in the context of Inclusive Education

### C. ASSESING THE LEARNER / PERFORMANCE (EVALUATION)

#### 1. Assessment and Evaluation

- Assessment and evaluation in constructive perspective
- Concept, Continuous and Comprehensive Evaluation, Formative, Summative and Diagnostic Assessment

#### 2. Assessment and Learning Assessment of Learning,

- Assessment for learning, Assessment as Learning
- Subject-based learning in a constructivist perspective
- Assessment tools and techniques –Projects, Assignments, Observation, Teacher made Tests
- Self-assessment, Peer-assessment

### 3. Test Construction

- Steps and Principles of Test Construction
- · Development of blueprint
- · Preparation of test items
- Standardized and Teacher made Test

#### (For the post of PET)

### Pedagogy, Planning & Evaluation

### 1. Pedagogy

- Teaching Techniques(Lecture method, Demonstration Method, Discussion method and Project method etc)
- Important devices and methods of teaching
- Teaching Procedure-Whole method, Part method, Whole and Part method
- Difference between teaching methods and Teaching Aids

#### 2. Programme Planning & Evaluation

- Programme planning, principles of programme planning in Physical Education
- Function of planning organization of school sports, coordination and conducting of Physical Education activities
- Evaluation of School Physical Education activities and School Health Education Programme

TGT Science: (PCM)

#### **PHYSICS**

### Unit-1 Motion

Newton's laws of motion, Kinematic Equations of motions with acceleration, Graphical representation of Kinematics Equations of motion, Relative velocity and relative acceleration, work energy and power, conservation of energy, collision problem and conservation of linear momentum, forces of nature, friction force.

Circular motion, Rotational Kinematics, Conservation of angular momentum, Moment of Inertia.

Motion under Gravity, project motion, Simple harmonic motion, and Kinematics of simple harmonic motion, simple pendulum.

### Unit-2 Gravitation

Kepler's law of planetary motion, Newton's law of gravitation, Acceleration due to gravity, Gravitational field andpotential, Escape velocity and satellite motion, Geo stationary Satellites.

# Unit-3 Properties of Matter

Inter- atomic and intermolecular force, Elasticity, Stress, Strain and Hook's law , Elastic module

Kinetic theory of gases, concept of heat, pressure and temperature, specific heat, law of equipartition of energy, Universal Gas laws, measurement of Pressure

Surface tension, surface energy, angle of contact, excess pressure, capillarity, viscosity, Poiseuille's law, Stokes's Law, Bernoulli's Equation of fluid motion. Hydrostatics, Buoyancy, Archimedes Principle, Laws of flotation.

### Unit-4 Sound

Waves, Progressive and stationary waves, mechanical waves, equation of a progressive wave, transverse vibration of a string, speed of sound waves, Newton's formula, Super-position of sound waves, Beats, Echo, Doppler's effect, Musical sound and its characteristics.

# Unit-5 Optics

Laws of reflection and refraction in transparent medium, total internal reflection, refraction through prisms, Dispersion, Reflection and image formation plan and spherical mirrors, equation for object and image distances for spherical mirrors, image formation in convex and concave

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Page 4

lenses, lens equation for convex and concave lenses, power of single and combination of two lenses. Image formation in the eye and defects of vision, microscope and astronomical telescope.

Wave optics, Huygens's principle, Coherent sources and interference, Young's double slit, Biprism, Newton's ring experiments, Diffraction of light through single slit and plane transmission grating.

#### Unit-6 **Electrostatics**

Coulomb's law and unit of charge, force on charge due to discrete and continuous charge distributions, lines of force and electric field, field due to a point charge and a dipole, electrostatic potential, potential due to a point charge and an electric dipole, electric potential energy of a group of point charges, electric flux, Gauss law and applications, Capacitor, capacitance of parallel plate and spherical capacitors, combinations of capacitors in series and parallel.

#### Uni-7 **Current Electricity**

Ohm's law, current and voltage measurements, resistance and Resistivity, combination of resistances in series an parallel, electromotive force, grouping of resistors and cells. Kirchhoff's laws and their applications.

Electric energy and power, heating effect of electric current, Faraday's law of electrolysis.

Magnetic field and magnetic induction, Biot-Savart law, magnetic field due to a straight conductor, a circular coil and a solenoid carrying current. Ampere's circuital law, Lorentz force on a charge particle in uniform electric and magnetic fields. Force between two parallel conductors' carrying current.

# **Unit-8 Electromagnetic induction**

Faraday's law of electromagnetic induction, Lenz's law, eddy current, self and mutual induction, emf induced in a rotating coil. Alternating current, average and RMS values of alternating currents, simple AC circuits (RC, RL and RLC), concept of admittance and impedance. Transformers and simple AC devices (motor, dynamo).

### CHEMISTRY

# **Unit-1 Basic Concepts**

Atomic, molecular and equivalent masses, mole concept, types of chemical reactions, calculations based on stoichiometry. Equivalent mass of acid, salt, oxidant and reductant.

# **Unit-2 States of Matter**

Gas laws- Boyle's law, Charles' law, combined gas equation, ideal gas equation, Graham's law of diffusion/ effusion, Dalton's law of partial pressure.

Characteristics of Liquids: Vapour pressure, viscosity and surface tension. Colligative properties of solutions (solute and solvent forming binary solution).

## Unit-3 Structure of Atom

Bohr's model and its limitations, concept of shells and sub-shells, dual nature of matter and light. De Broglie's relationship, Heisenberg uncertainty principles, concepts of orbital's, quantum numbers, shape of s,p and d orbital, rules of filling electrons in orbitals- Aufbau principle and Hund's rule, electronic configuration of atoms, stability of half filled and completely filled orbitals.

# Unit-4 Classification and elements and periodicity in properties

Modern periodic law and the present form of periodic table, periodic trends in properties of elements- atomic radii, ionic radii, ionization enthalpy, electron gain enthalpy, electro negativity, valency.

# Unit-5 Chemical bonding and molecular Structure

Ionic bond, covalent bond, polar character of covalent bond, covalent character of ionic bond, concept of hybridization, VSEPR Theory and shapes of some simple molecules, hydrogen bond and metallic bond.

# **Uni-6 Chemical reactions**

Types of chemical reactions, redox reaction, Oxidation number calculations, balancing of redox equations by oxidation number and ion electron methods, neutralization reactions and volumetric analysis.

# Unit-7 Chemical Equilibria and Ionic Equilibria

Equilibrium in physical and chemical processes, law of mass action, equilibrium constants (Kc, Kp, Kx) relation among them, the reaction quotient and its relation with equilibrium. Le-Chateliers principle and its applications.

Theories of acids and bases, ionization of weak acids and bases, ionic product of water pH and other logarithmic terms, commonion effect, solubility product and its application in salt analysis.

# Unit- 8. General Principles of extraction of metals

Occurrence of metals, ores and minerals, concentration, calcinations, roasting, smelting, reduction methods (carbon reduction, alumino-thermic process, electrolytic and self- reductions) and metal extraction, flux and slag refining of metal. Reactions involved in the Blast furnace for extraction of iron.

# Unit-9 Some basic principles of organic chemistry

- a) Classification and IUPAC nomenclature of organic compounds
- b) Electronic displacement in covalent bond: inductive effect, electronic effect, resonance and hyper conjugation
- c) Homolytic and heterolytic fission of a covalent bond: free radicals, carb-cations, carbanions, electrophiles and nucleophiles, types of organic reactions.

### **Unit-10 Hydrocarbons**

Classification of Hydrocarbons.

- Aliphatic Hydrocarbons: general methods of preparation, properties and uses of alkanes, alkenes and alkynes.
- Aromatic Hydrocarbons: benzene, resonance aromaticity, chemical properties, directive influence of functional group in mono-substituted benzene.

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### Section-III

### **MATHEMATICS**

1. Set Theory and its Application

· Union, intersection, difference, complement, power set, number of elements in union and inter-section of finite sets.

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# 2. Relations and Functions

· Reflexive, Symmetric, transitive and equivalence relations, injective, subjective and objective functions, inverse of a function.

# 3. Number System

· Natural numbers, integers, rational numbers, irrational number, real number, absolute values of numbers, triangle inequality.

# 4. Quadratic & Linear Equations

 Fundamental theorem of Algebra, roots, discriminates, nature the roots, relation between the roots and coefficients.

## 5. Calculus of One Variable

Limit, continuity, derivative, tangent, normal, increasing and decreasing functions.

# 6. Sequence and Series

 Arithmetic and Geometric progressions, monotonic sequence, exponential series, logarithmic series, Taylor's series, Maclaurin's series.

# 7. Coordinate geometry

· Distance formula, section formula, area of a triangle, locus and its equation, straight line, circle, conic section.

# 8. Analytical Solid Geometry

Plane, straight line, Sphere

### 9. Probability

Trial, Sample point, Sample Space, Event, Addition Theorem, Binomial Distribution.

#### 10. Statistics

Mean, Mode, Median, Mean Deviation, Standard Deviation, Variance

### 11. Trigonometry

 Angles associated with 90, 180, 270,360 compounded angle formula, sub-multiple angle formula, Trigonometry Equations, Inverse trigonometric functions, Height and

### 12.Mensuration

· Circumference of a circle, length of the arc of a circle, area of a circle, sector and segment, area of a circle annulus, area of a sectional region, area of segment, surface area and volume of a prism, right circular cylinder, cone and sphere.

# TGT Science: (CBZ) Section T

### Chemistry

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# (Same as in TGT PCM Syllabus)

### Section II BOTANY

# 1. Plant Diversity and Conservation

· Nomenclature and classification of plant kingdom, plant divisions- Thallophyta, Bryophyte, Pteridophyta, Gymnosperms and Angiosperms, their habitat and complexity in their structural organization. Endangered plant species and their conservation measure.

### 2. Tissue System

Meristematic and permanent tissues: their types, organization and functions.

• Tissue System: Epidermal, ground and vascular tissue system, internal structure of dicot and monocot stems and roots secondary growth in plants.

## 3. Photosynthesis

• Structure and photosynthetic pigments, Light reaction: light absorption, electron transport and photophosphorylation, Dark reaction- CO2 fixation by C3, C4 and CAM plants, photorespiration.

### 4. Growth in Plants

 Photoperiodism, Phototropism, Auxins, Gibberllins, Cytokinins, Ethylene and Abscissic acid, their role in plant growth regulation.

# 5. Reproduction in plants

- · Vegetative reproduction: Fission, budding and cutting(grafting) and propagation in
- · Asexual Reproduction: Sporulation, Conidia formation and other special structure
- · Sexual Reproduction: Isogamy, Anisogamy and Oogamy, double fertilization and triple fusion in angiosperms.
- Parthenogenesis: Tissue culture and micropropagation

## 6. Mendelism

- Mendelian factors, Monohybrid cross and principles of dominance and segregation.
- Dihybridcross: Laws of independent assortment.
- Deviations from Mendelian principles

# 7. Plant Diseases and Control Measures

 Causal Organisms, symptoms, life cycle and control measures of following diseases: Late blight of potato, powdery mildew, Rust and Smut of Wheat, Leaf Sport and blast disease of rice.

# Section III ZOOLOGY

1. Taxonomy

Five kingdom classification, Characteristics and Examples of each animal phylum (in case of phylum Chordate up to Classes)

2. Cytology

Cell structure and cell division (mitosis and meiosis), DNA and RNA

3. Genetics

 Linkage, Crossing over, Mutation, Chromosomal aberration and chromosomal mechanism of sex determination

4. Evolution

• Darwinism, Modern Synthetic theory of evolution ( variation, selection and isolation)

5. Ecology

 Eco-system, Food Chain and Food Web, Energy Flow, Ecological Pyramids, Renewable and Non-renewable energy resources, Biodiversity (meaning and conservation), Causes, Effects and Control of Air pollution.

6. Nutrition

Types of food and types of nutrition,

7. Respiration

Types of respiration (aerobic and anaerobic) Glycolysis and Krebs Cycle

8. Circulation

Blood (Composition and function) in man, structure and working of human heart

9. Excretion

Human Kidney (structural details), mechanism of urine formation

10. Control and Coordination

 Structure of neuron, synaptic transmission, structure of human brain and function of its different parts, names of endocrine glands and secreted hormones with their specific functions

11. Reproduction and Development

• Structure of Gonads (ovary and testes) and Gametes in man, Fertilization. Types of cleavage.

# TGT Arts

# Section- I HISTROY + POLITICAL SCEINCE

#### HISTORY

- 1. Great Rulers of Ancient India
  - Ashoka Conquests, administration and missionary activities
  - Kharavela Achievements as mentioned in Hatigumpha inscription
  - Samudragupta Conquests
  - Harshavardhana Conquests, administration and religious activities
- 2. Development of Art and Architecture during Maurya Age, Gupta Age and Kushana Age
- 3. Development of Literature and Science in Ancient India
- 4. Administration during Delhi Sultanate with special reference to Balban, AlauddinKhilji and Feroze Shah Tughlaq.
- 5. Mughal architecture and painting during the reign of Akbar, Jahangir and Shahjahan
- 6. Rise of British power in India from 1757 to 1856
  - Robert Clive and foundation of British Power
  - Administrative and judicial reforms of Warren Hastings
  - Revenue reforms of Lord Cornwallis
  - Subsidiary alliance
  - Reforms of Lord William Bentinck
  - Doctrine of Lapse
- 7. Growth of India Nationalism, 1857-1905
  - Revolt of 1857
  - Development of press and literature
  - Education
  - Formation of Political associations
- 8. Indian National Movement, 1905-1947
  - Swadeshi movement
  - Non-cooperation movement
  - Civil Disobedience movement
  - Quit India movement
  - Indian National Army
  - Partition and Independence
- 9. First World War and Russian Revolution
  - Causes and consequences of First World War
  - Causes Progress and Effects of Russian Revolution
- 10. Second World War- Causes and Consequences

### **POLITICAL SCIENCE**

- 1. Salient features of Indian Constitution
- 2. Preamble, Fundamental Rights, Directive Principles of State Policy, Fundamental Duties
- 3. Union Government President, Prime Minister, Council of Ministers, Parliament and

- 4. State Government Governor, Chief Minister, Council of Ministers, Legislative Assembly 5. Local Governance - Urban and Rural
- 6. Electoral Process and Election Commission
- 7. India's Foreign Policy and its relation with neighbours
- 8. United Nations General Assembly, Security Council Human Rights
- 9. Socialism, Liberalism, Democracy, Authoritarianism, Welfare State and Globalization
- 10. Kautilya, Raja Ram Mohan Roy, Bal GangadharTilak, Swami Vivekananda, Mahatma

### Section- II

# GEOGRAPHY + ECONOMICS

### GEOGRAPHY

- Physical Geography of India
  - Physiography
  - Drainage
  - Climate
- 2. Resources with Special Reference to India
  - Types and Classification, Land Resources; Biotic Resources
  - Mineral, Energy, Water Resources
  - Agriculture and Industrial Resources
- 3. Physical Geography
  - First, Second and third order land forms; Development of land forms work of rivers, wind and glaciers. Interior of the earth, rocks and their types
  - Structure and composition of the atmosphere, insolation and temperature; Pressure and Winds; Humidity and Rainfall
  - General relief of ocean floor: Salinity ad temperature of the ocean water. Oceanic circulation - waves, tides currents
- 4. Globe and Maps
  - Basic features; types of maps; map scale; contours of relief features
  - Concept of latitude and longitude; International dateline Time Zones; Local and

## **ECONOMICS**

- 1. Indian Economy
  - Features and broad demographic characteristics; Need and Policies for facing the
- 2. Current Challenges of Indian Economy
  - Poverty Measures of poverty; causes, consequences, policy and programmes adopted for poverty eradication; Remedies.
  - Unemployment Types and measures of unemployment; Causes, consequences and programmes adopted for reducing unemployment.
  - Inflation Meaning and types; Demand pull and cost push inflation; Causes and consequences and measures taken to control inflation.
- 3. Economic Development

- Meaning and Indicators National Income, Physical Quality of Life Index(PQLI), Human development Index (HDI); concept of and need for sustainable development.
- 4. Money and Banking
  - Meaning, types and functions of money; Banking: Commercial Banks Meaning, functions; Credit creation by commercial banks; Central Banking – Meaning and functions; Monetary Policy.

#### Section-III

### ENGLISH (

- 1. Comprehension:
  - a) An unseen passage in about 150words. Questions testing factual, understanding, inferential and interpretive aspects including vocabulary and usage.
  - b) A poem (neither very old nor very absurd but a simple one). Questions testing factual, understanding, referential, appreciative aspects including vocabulary in context)
- 2. Grammar and usage

Testing of grammar and usage in the following areas:

- a. Prepositions
- b. Direct and indirect speech
- c. Passives
- d. Tense
- e. Identification of error in a sentence
- f. Phrasal verbs
- g. Clause patterns
- h. Punctuations
- i. Types of sentences
- j. Spelling
- k. Agreement of verbs with subjects
- 3. Speaking (Commonly mis-pronounced words, common errors)
- 4. Teaching of English
  - a)Importance of Teaching English/learning English in the present context
  - b) Objectives of Teaching English/learning English with reference to Language Skills & Sub-skills
  - c) Strategies of Teaching/learning English with special reference to NCF 2005
  - d) Stages of planning for a Text (pre-reading, while reading and post-reading)
  - e) Assessment of language skills, :Tools and Techniques with reference to Continuous and Comprehensive Assessment

# Section- IV

ପ୍ରତ୍ୟେକ ପ୍ରଶ୍ନର ମୂଲ୍ୟ ୧ ନୟର । ନିମ୍ନ ପ୍ରଦର ବିଷୟମାନଙ୍କରୁ ପ୍ରଶ୍ନ ପ୍ରସ୍ତୁତ କରାଯିବ ।

- ୧. ଅବବୋଧ ପରାକ୍ଷଣ : ପ୍ରାୟ ୧୫୦ ଶହ ବିଶିଷ ଏକ ଗଦ୍ୟ ଅନୁદେହ ପ୍ରଦାନ ନରାଯାଇ ତା'ର ଆଧାରରେ ୫ଟି ପ୍ରଶ୍ନକରାଯିବ । ପ୍ରତିପ୍ରଶ୍ନର ୪(ୟରି)ଟି ଲେଖାଏଁ ସନ୍ତାବ୍ୟ ଉତ୍ତର ପ୍ରଦର ହୋଇଥିବ । ପରୀକ୍ଷାର୍ଥୀ ତା'ଭିତରୁ ସବୁଠାରୁ ଭଉରଟିକୁ ବାହିବାକୁ ହେବ । ପ୍ରତି ଉପସୂତ୍ର ଉତ୍ତର ପାଇଁ ୧ ନୟର ରହିବ ।
- ୨. କେଖା ଓ ଲେଖକ : ସାରଳା ବାସ, କଗନ୍ନାଥ ବାସ, ଉପେନ୍ଦ୍ର ଉଞ୍ଜ, ଜୀମଭୋଇ, ଫକୀରମୋହନ, ଗୋପାକ୍ଟନ୍ଦ୍ର ପ୍ରହରାଜ, ଗୋପୀନାଥ ମହାନ୍ତି – ୭ଜଣ ଲେଖକଙ୍କର ଗୋଟିଏ କୃତିର ନାମ ଉଲ୍ଲେଖ କରାଯାଇ ଲେଖକଙ୍କ ନାମ ପ୍ରଶ୍ନ କରାଯିବ କିୟା ଲେଖକଙ୍କ ନାମ ଦିଆଯାଇ ଭିନ୍ନ ଭିନ୍ନ ଇରିଟି ରଚନା ମଧ୍ୟରୁ ଠିକ୍ ଭଉଗଟି ବାହିବାକୁ କୁହାଯିବ ।
- ମା. ପଦନିର୍ଷୟ : ଗୋଟିଏ ନିର୍ଦ୍ଦିଷ ବାକ୍ୟ ଦିଆଯାଇ ତହିଁରୁ ଗୋଟିଏ ପଦକ୍ ରେଖାଙ୍କିତ କରି ସେହି ପଦଟିକ୍ ତିହ୍ନାଇବାକୁ ପ୍ରଶ୍ନ କରାଯିବ । ଏଥିପାଇଁ ୪ଟି ସମ୍ମାବ୍ୟ ଉତ୍ତର ଦିଆଯିବ । ପରୀକ୍ଷାର୍ଥୀ ଠିକ୍ ଉତ୍ତରଟିକୁ ବାହିବେ । ଏହିପାଇଁ ବିଶେଷ୍ୟ / ସର୍ବନାମ / ବିଶେଷଣ / ଅବ୍ୟୟ କ୍ରିୟାପଦ ଉତ୍ୟାଦି ୫ ପ୍ରକାର ମଧ୍ୟରୁ ୩(ଡିନି) ପ୍ରକାରର ୩ଟିକୁ ତିହ୍ନାଇବାକ୍ ହେବ । ଏଥିପାଇଁ ଭିନ୍ନ ଭିନ୍ନ ୩(ଡିନି)ଟି ବାକ୍ୟ ମାଧ୍ୟମରେ ୩ଟି ପ୍ରଶ୍ନ କରାଯିବ ।
- ୪. କୃଦନ୍ତ: ଦୁଇଟି କୃଦନ୍ତ ନିଷନ୍ ପଦର ଗଠନ କିଷା ପ୍ରତ୍ୟୟ ଚିହ୍ନାଇବାକୁ ପ୍ରଶ୍ନ କରାଯିବ । ପ୍ରତ୍ୟେକରୁ ୪ଟି ସମ୍ଭାବ୍ୟ ହଉର ଦିଆଯାଇ ଠିଲ୍ ଉଉରଟି ବାହିବାକୁ ନିର୍ଦ୍ଦେଶ ରହିବ ।
- ୫. ତବିତ: ଦୂଇଟି ତବିତ ନିଷନ ପଦ ତିଆଯାଇ ପ୍ରତ୍ୟେୟ ନିର୍ଣ୍ଣୟ କିମ୍ବା ୪ଟି ଭିନ୍ନଭିନ୍ନ ଶବ୍ଦ ମଧ୍ୟରୁ ତବିତ ନିଷନ ପଦ ଠିକ୍ ଶବ୍ଦଟିଏ ରଖ ତାକୁ ଚିହ୍ନାଇବାକୁ କୁହାଯିବ ।

- ୬. ବାକ୍ୟ ପରିଚିତି: ସରଳ, ଯୌଗିକ, ଢଟିକ ବାକ୍ୟ କିୟା ଦୁଇ ପ୍ରଜାର ବାକ୍ୟର ମିଶ୍ରରୂପ ଭିତରୁ ଯେକୌଣସି ବାକ୍ୟଟିଏ ପ୍ରଶ୍ରୁରେ ବେଇ ତା'ର ପ୍ରକାର ଚିହ୍ନାଇବାକୁ କୁହାଯିବ । ସମ୍ମାବନା ସ୍ୱରୂପ ୪ ପ୍ରକାର ଉତ୍ତର ବିଆଯିବ, ତା'ଭିତରୁ ପରୀକ୍ଷାର୍ଥୀ ଠିକ୍ ଉତ୍ତରଟିକୁ ବାହିବେ ।
- ୭. ସାଧାରଣ ଅଶୁଛି : ଶବ ଓ ବାଞ୍ଝା ପ୍ରତ୍ୟେକରୁ ୨ଟି ଲେଖାଏଁ ପ୍ରଶ୍ନ ଦିଆଯାଇ ସେଥରୁ ଠିକ୍ ଶବ୍ଦ କିୟା ବାକ୍ୟ ବାହିକାକୁ କୁହାଯିବ । ଏଥିରେ ୩ଟି ଅଶୁଦ୍ଧ ଶବ୍ଦ କିୟା ବାକ୍ୟ ଓ ଗୋଟିଏ ଶୁଦ୍ଧ ଶବ୍ଦ ବା ବାକ୍ୟ ଥିବ, ସେଥିରୁ ଶୃହ୍ଧଟିକୁ ବାହିବେ । ଶବ୍ଦ ଓ ବାକ୍ୟ ପାଇଁ ଅଲଗା ପ୍ରଶ୍ର ପଡ଼ିବ ।
- ୮. ସନ୍ଧି : ସ୍ୱରସନ୍ଧି, ବ୍ୟଞ୍ଜନ ସନ୍ଧି ଓ ବିସର୍ଗସନ୍ଧି ମଧ୍ୟରୁ ଯେକୌଣସି ଗୋଟିଏ ସନ୍ଧି ନିଷ୍ପନ୍ନ ପଦନେଇ ତା'ର ଠିକ୍ ବିଚ୍ଛେଦ ବାଛିବାକୁ ୪ (ଋରି)ଟି ସମ୍ମାବ୍ୟ ଉତ୍ତର ଦିଆଯିବ । ପରୀକ୍ଷାର୍ଥୀ ଠିକ୍କୁ ବାଛିଟେ ।
- ୯. କାରକ : ବାକ୍ୟଟିଏ ଦେଇ ଗୋଟିଏ ପଦକୁ ରେଖାଙ୍କିଡ କରି ତାହା କେଉଁ କାରକ ଚିହ୍ନାଇକାକୁ ୪ଟି ସମ୍ମାବ୍ୟ ଉତ୍ତର ମଧ୍ୟରୁ ଠିକ୍ ବାହିବାକୁ କୁହାସିବ ।
- ୧୦. ବିଉନ୍ତି: ବାକ୍ୟଟିଏ ଲେଖା ଦେଇ ଗୋଟିଏ ପଦକୁ ରେଖାଙ୍କିତ କରି ତାହା କେଉଁ ବିଭକ୍ତି, ଦିଆଯାଇଥିବା ୪ଟି ସମ୍ଭାବ୍ୟ ଉତ୍ତର ମଧ୍ୟରୁ ବାଛିବାକୁ କୁହାଯିବ । ଏହିପରି ଦୁଇଟି ଭିନ୍ନ ଭିନ୍ନ ପ୍ରଶ୍ନ ପ୍ରଦାନ କରାଯିବ ।
- ୧ ୧ . ସମାସ: ତତ୍ପୁରୁଷ, କର୍ମଧାରୟ, ବହୁବ୍ରୀହି, ଦିଗୁ, ବୃଦ୍, ଅଲୂକ, ଅବ୍ୟୟୀଭାବ-୭ଟି ସମାସ ମଧ୍ୟରୁ ଦୁଇଟି ପ୍ରଶ୍ନକରାଯାଇ ସମାସ ଚିହ୍ନାଇବାକୁ କିୟା ବ୍ୟାସବାକ୍ୟ ଦିଆଯାଇ ସମାସ ନିଷନ୍ ପଦ ନିର୍ବ୍ଧିୟ କରିବାକୁ ଦିଆଯିବ । ପ୍ରତିଟି ପାଇଁ ୪ଟି ସମ୍ଭାବ୍ୟ ଭରର ପ୍ରଦାନକରି ଠିକ୍ଟିକୁ ବାହିବାକୁ ହେବ ।
- ୧୨. ରୂଢ଼ି : ଗୋଟିଏ ରୃଢ଼ି ଦିଆଯାଇ ତା'ର ୪ଟି ସମ\$ଖା ଅର୍ଥ ମଧ୍ୟରୁ ଠିକ୍ ଅର୍ଥଟି ବାଛିବାକୁ କୁହାଯିବ ।
- ୧୩. ଛନ୍ଦ : ଛନ୍ଦ ପାଇଁ ଗୁଛରୀ, ନଟ ବାଣୀ, ବଙ୍ଗଳାସୀ, ତାଣିବୃତ୍ତ, ଷ୍ଟେଖ୍-୫ଟି ମଧ୍ୟରୁ ଗୋଟିଏ ଛନ୍ଦର ଉଦାହରଣ ଉଦ୍ଧାରକରି ଛନ୍ଦ ଚିହାଇବାକୁ କୁହାର୍ଯିବ । ଏଥିପାଇଁ ୪ଟି ସମ୍ଭାବ୍ୟ ଉତ୍ତର ଦିଆଯିବ ।
- ୧୪. ଅଳ<mark>ଙ୍କାର: ଅନୁପ୍ରାସ, ଉପମା, ରୂପକ, ବ୍ୟତିରେକ, ଉତ୍ପ୍ରେକ୍ଷା, ଅର୍ଥାନ୍ତରନ୍ୟାସ -</mark> ୬ଟି ମଧ୍ୟରୁ ଗୋଟିଏର ଉଦ୍ଧୃତି ଦେଇ ଅଳଙ୍କାର ଚିହ୍ନାଇବାକୁ କୁହାଯିବ । ଏଥିପାଇଁ ଋରିଟି ସମ୍ମାବ୍ୟ ଉତ୍ତର ଦିଆଯିବ ।
- ୧୫. ଏକ ପଦୀକରଣ : ବ୍ୟଞ୍ଜ୍ୟା ପ୍ରଦାନ କଦ୍ଧରାଯାଇ ଏହାକୁ ଏକପଦରେ ପ୍ରକାଶ କରିବାକୁ କୁହାଯିବ ଏବଂ ଏକପଦ ରୂପ ଦିଆଯାଇ ଏହା ଅର୍ଥ ବ୍ୟଞ୍ଜ୍ୟା ଚିହ୍ନାଇବାକୁ ପ୍ରଶ୍ନକରାଯିବ । ଏଥିପାଇଁ ଦୂଇଟି ଭିନ୍ନ ଭିନ୍ନ ପୁଶ୍ନ କରିବା ଓ ପ୍ରତିଟି ପାଇଁ ୪ଟି ଲେଖା ସୟାବ୍ୟ ଉତ୍ତର ଦିଆଯିବ; ସେଥିରୁ ଠିକ୍ଟିକୁ ବାହିବାକୁ ହେବ ।
- ୧୬. ଅବବୋଧ ପରୀକ୍ଷଣ: ଚାରି/ ପାଞ୍ଚ ପଦ ବିଶିଷ୍ଟ ଏକ କ୍ଷୁଦ୍ର କବିତା ଆଧାରରେ ୫ଟି ପ୍ରଶ୍ୱ କରାଯାଇ, ପ୍ରତି ପ୍ରଶ୍ୱର ୪ଟି ଲେଖାଏଁ ସମ୍ଭାବ୍ୟ ଭରର ପ୍ରଦଉ ହେବ ଏବଂ ପ୍ରତି ଭରର ପାଇଁ ୧ ନମ୍ବର ରହିବ ।

# For Hindi Teacher Post

# UNIT- । (हिन्दी गद्य साहित्य)

- (i) निबंध निम्नलिखित पाठ्य विषयों से प्रश्न किए जायेंगे ।
  - बालमुकुंद गुप्त बनाम लार्ड कर्जन
  - रामचन्द्र शुक्ल- क्रोध
  - हजारी प्रसाद द्विवेदी अशोक के फूल
  - हरिशंकर परसाई भोलाराम का जीव
- (ii) उपन्यास -
  - प्रेमचन्द कर्मभूमि
  - भगवती चरण वर्मा चित्रलेखा
  - मन् भण्डारी आपका बंटी
- (iii) कहानी -
  - प्रेमचन्द कफन, पूस की रात
  - प्रसाद पुरस्कार, आकाशदीप
  - अज्ञेय तत्सत्
  - भगवती चरण वर्मा प्रायश्चित्त
  - कमलेश्वर गर्मी के दिन
  - जैनेन्द्र कुमार पत्नी

- उषा पियम्बदा वापसी
- भीष्म साहनी चीक की दावत
- (iv) नाटक -
  - जय शंकर प्रसाद चन्द्रगुप्त
  - लक्ष्मीनारायण मिश्र सिंदूर की होली
  - मोहन राकेश आषाद का एक दिन
- (v) संस्मरण / रेखाचित्र
  - महादेवी वर्मा गौरा
  - रामवृक्ष बेनीपुरी रज़िया
  - विष्णु प्रभाकर अंष्टावक्र

UNIT- II (पद्य विभाग)

- (i) कवीर दास दोहे गुरु गोविन्द दोउ खड़े, पानी केरा बुद बुदा, माटी कहै कुम्भारसे, जलमें कुंभ, कस्त्री कुंडल बसै, माली आपन, कल करे सो आज कर, साधु ऐसा चाहिए...। पद - माया महा डॉमेनी ।
- (ii) सूरदास बाल वर्णन मैया मैं नहीं माखन, मैया मोहि राऊ बहुत खिझायौ, जसुमित हीरे पालने, मैया कबहुँ बढ़ेगी चोटी । भूमर गीत अंधो मन मानेकी बात, ऊधो मन जहिं दस बीस, निर्गुन कौन देसकौ, अधा मोहि ब्रज बिसरत नहिं।
- (॥) तुलसी दास केवट प्रसंग, भरत-महिमा
- (iv) बिहारी मेरी सब बाधा हरी, कनक कनक तैं, बतरस लालच, कहत नटत रीझत.. ।
- (v) मैथिलीशरण गुप्त यशोधरा
- (vi) दिनकर कुरुक्षेत्र (प्रथम तीन वर्ष)
- (vii) बच्चन पथकी पहचान, जुगन्
- (viii) सुभद्राकुमारी झाँसी की रानी

- (ix) प्रसाद भारतवर्ष, हिमाद्रि तुंग...
- (x) पंत प्रथम रश्मि, ताज
- (xi) निराला संध्यासुंदरी, तोड़ती पत्थर
- (xii) केदारनाथ सिंह अकाल में दूव
- (xiii) नागार्जुन बहुत दिनों के बाद

UNIT- III (प्रत्येक पाठ्य - बिन्दु से दो प्रश्न)

### भाषा अध्ययन :

- i) हिन्दी और ओड़िआ ध्वनियाँ (व्यतिरेकी ज्ञान)
- ii) शब्द निर्माण प्रचलित उपसर्ग और प्रत्यय
- iii) संधि तथा समास
- iv) विलोम और पर्यायवाची शब्द
- v) शब्दों की सही वर्तनी और उच्चारण
- vi) संज्ञा : लिंग, वचन
- vii) कारक विभक्ति और विशेषण के मुख्य प्रकार
- viii) क्रिया : (क) भेद (सकर्मक, अकर्मक, सरल, मिश्र, यौगिक, प्रेरणार्थक)
  - (ख) काल- तीन कालों का मुख्य भेद
- ix) वाक्य : मुख्य भेद और परिवर्तन
- x) अति प्रचलित मुहावरे और कहावर्ते

### UNIT- IV (भाषा प्रयोग)

 गद्य पाठ विधि - परिचयात्मक प्रश्न, बाचन, लेखन, बोध प्रश्न, ज्ञान, और चिंतामूलक प्रश्न ।

- ii) पद्य पाठ विधि सामान्य परिचयात्मक प्रश्न, व्याख्या की पद्धति, आत्मीकरण, काव्यानन्दका स्वाद ।
- iii) ब्याकरण पाठ विधि आगमन / निगमन प्रणाली
- iv) अनुवाद ओडिआ से हिंन्दी पाँच सरल वाक्य या वाक्यांश
- v) अपठित गद्य/पद्यांश (छोटे-छोटे दो अंश)

उसमें से बोध / ज्ञान मूलक प्रश्न होंगे

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Page 20



### For Sanskrit Teacher Post



# शिक्षादान पद्धतिः

UNIT- 1 : Learning Sanskrit संस्कृतशिक्षणम्

- संस्कृतशिक्षणस्य सामीन्यम् उत्देश्यं महत्वं च
- माध्यमिकस्तो संस्कृत शिक्षायाः महत्वम्
- संस्कृतशिक्षायाः मुगमं कौशलम्
- श्रवणम् पाठनम्, वाचनम्, पठनकौशलम् लेखनकौशलम्

UNIT- 2 भाषाप्रशिक्ष

- व्याकरणानुवाद पद्धति : (Formal Grammar, Functional Grammar)
- प्रत्यक्षपद्वतिः (Preparation, Presentation, Comparison, Assimatation, (Directmethod) Application)
- परोक्षपद्धि : (Indirect Method) अन्वय पद्धित Teaching Poetry,
- आरोह पद्धति : अस्या पद्धते: गुजा: दोषा: च

Indirective Method - From Example to approach the sutra method in grammar.

- अवरोह पद्धति : (deductive method) Interpretation of the sutra and justification through the examples.

UNIT- 3 : भाषासाहित्यशिक्षण पद्धति :

Method of assessment learning sanskrit language and literature.

गद्य-पद्य प्रशिक्षण परीक्षण योजना

Planning of assessment of teaching prose and poetry. परीक्षजस्य योजना साफल्यं च परीक्षणस्य अवान्तर साधनानि

श्रवणम्, भाषणम् पठनम्, वाचनम्, लेखनम् Group-B (CONTENT)

UNIT- 4: Elements of Sanskrit Language

संस्कृतभाषायाः मौतियं ज्ञानम्

(अदृष्ट सन्दर्भगिताः प्रश्वा: (Comprehensiment to unseen passage)
One Passage from Proso (within 150 words)
गद्यभागस्य एकः सन्दर्भः (१५० शब्दमध्ये)

पश्चतन्त्रतः हितोपदेशतः (From ⊃anchatantra and Hitopadesha)
One verse from Purvamegha or Abhijnuna sakuntalarn
Word meming, Sandhi, Karaka Vibhukti Samasa, Prakriti Pratyaya

UNIT- 5 : Language Item, भाषागता विषयाः

Parts of Speech - भाषा विभाग

शब्दरूपम्, धातुरूपम्, विशेषणम्, स्वनाम, संख्यावानक विशेषणम्

शब्दरूपम् - बालक, फल, लता, मुनि, पति, मति, वारि, नदी, भानु, धेन्, मधु,

वध्, पितृ, मातृ, गो, गुणिन् राजन्, गच्छत्

विशेषण सर्जनाम - सर्व, तद्, यद्, किम्, इदम्, अस्मद्, युष्मद

संख्यावाचक - एक, द्वित्रि, चतुर, पश्च, षड्

पूरणवाचव - प्रथम, द्वितीय इत्यादि

शब्द निर्माणम् - उपसर्गः, कृदन्तः स्त्रीप्रत्ययः

शब्दज्ञानम् - ज्याकरणगताः पारिभाविकाः शब्दाः

सिधः, णत्वविधिः, षत्वविधिः

शब्दरुपधातुरुपगतवर्गशुद्धिः

Unit - 6: Contributions of famous poet and authors to Sanskrit literature (Prose, Poetry, Drama and composition.

Bhasa, Kalidas, Bhababiti, Dandin: Banabhatta Bhartrihari - Jayadev Trivikrambhatta Sriharsa

### **Physical Education Teacher**

# PHYSICAL EDUCATION

## 1. Principle and History of Physical Education

- Meaning, Objectives, Aims of Physical Education
- Relationship of Physical Education to General Education, Health Education and Recreation
- Importance of Physical Exercise, Physical Training and Physical Culture
- Physical Education as a Socializing agencies
- Leadership and its importance, qualification and qualities of a Physical Education Teacher
- Contribution of Physical Education Teachers to General Education
- Scout and Guides, NCC, JRC, SGFI, NFC and its contributions
- Contribution of Yoga in modern civilization
- Olympics and Asian Games
- Teachers Training and Professional preparation in Physical Education

### 2. Sports Psychology

- Meaning and importance in Physical Education
- Mental Process Body, Mind, Relationship and Nero-muscular coordination
- Transfer of training, Theories of Play, Learning processes and play way in Education
- Individual differences as personality, mental hygiene and child quidance
- Discipline and behaviour: Nature and Development

# Organization, Administration and Recreation

Importance, objectives and guiding principles

Construction and care of gymnasium and swimming pools

Preparation of different playground

Need, purchase and maintenance of sports equipments and maintenance of different registers and records

Preparing time table and factor affecting time table in Physical

**Ecucation and Sports** 

Scheduling school sports, Problem in school sports, Interamural and extramura competitions

Preparation of Budget, accounting and auditing

Importance of Recreation in Human life

# 4. Anatomy Physiology and Health Education

- Joints structure, Types and Movements of the Joints, Importance of Good Posture and Remedies of Bad Posture
- Effect of regular activities on muscles, heart and respiratory system

Fatigue, its causes and remedies

Blocd pressure, oxygen debt, second wind

Importance of health education and the role of Physical Ecucation Teachers in School Health Programme

Medical Examination, effects of narcetics and drugs

Nutrition and importance of diet for players and athletes

Different ciseases and their symptoms, detection care and prevention of diseases like Cholera, Diarrhea, Chicken Pox, Measles, Tetanus, Diphtheria and Malaria

# 5. Methods of Physical Education

- Meaning, Scope and Importance of Methods in Physical
- Drill and Marching Commands, Teaching aids, various methods of teaching physical activities, Games, Sports and Indigenous activities.
- Various Tournaments and Competitions
- Test, Measurement and Evaluation in Physical Education, National Physical Efficiency Test
- Layout of the track and field events and different play grounds
- Demonstration and Exhibitions, Awards and Incentives
- Lesson Planning General and Specific

## 6. Officiating and Coaching

- The qualities of a good officials, relation of official with management, coaches, players and spectators
- Duties of the officials
- Promoting and maintaining different games, publicity, arrangement of training camps and schedules
- Conditioning of players and teams General, Fundamental, Workload
- Warming up Types and Values
- Various training methods Isometric and Isotonic exercises, Circuit training, Weight Training, Fartlek Training and Internal Training
- Play of various positions in Games
- Officiating of different games and track and field events its rules, signals and positional play
- Track and Field events, Major games like Kho-Kho, Kabaddi, Volleyball, Football, Basket ball, Soft ball, Cricket, Hockey and Badminton





#### **Urdu Teacher**

> Prose

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- > Poetry
- > Drama, Novel & Short story
- Grammar
- > Pedagogy
- Comprehension and contribution of Famous Urdu Writers

### Unit-1 (Prose):

- Hindustani Tahzib Ke Anasir (Syed Ehtesham Hosen)
- Qaumi Yakjehati (Prem Chand)
- Hamari Azadi (Abul Faiz Sahr) NCERT
- Odisha Men Urdu Zaban Ka Irtega (BSE, Odisha)

### Unit-2 (Poetry):

- Banjara (Nazir Akberabadi)
- Jalwa-e-Darbar-e-Delhi (Akbar Allahabadi)
- Ek Arzoo (Dr. Mohammed Iqbal)
- Einstein Ki Wafat Per (Dr. Karamat Ali Karamat)
- Makhi Choos (Falzi Sambalpur)
- Ghazaliyat (Meer, Dard, Ghalib, Hasrat)

### Unit-3 (Drama, Novel & Short Story):

- Khana Jangi (Prof. Mohammed Mujeeb)
- Umrao Jan e Ada (Mirza Hadi Ruswa)
- Urdu Ke Tera Afsane (Athar Parwez) (Kafan, Anandi)

# Unit-4 (Grammar) :

- · Ism, Fel, Harf
- Zameer
- Sifat
- Jumla Sazi
- Sabeqa-o-Laheqa
- Imla
- Mutashabih Aur Mutazad Alfaz
- Mohaware Aur Zarbulamsal
- Izafat
- Ghalat Jumle Aur Unka Istemal

# Unit-5 (Pedagogy):

- Urdu Parhne Ke Agraz O Maqasid
- Madri Zaban K€ Taleem Ki Ahmiyat
- Ifmall Aur Tafsill Motalia Per Maharat
- Tadris-e-Nasr-O-Nazm
- Qawald
- Dars-O-Tadris Men Zimni Motalia
- Isharaat-e-Sabaq
- Janch Ke Mukhtalif Tariqe
- · Tahriri Maharat

### <u>Unit-6</u> Question from Unseen Passage and contribution of Famous Urdu Writers:

- Altaf Hosen Hall
- Neyaz Fateh Puri
- All Sardar Jafri
- · Amir Khusroo
- · Majrooh Sutanpurl

بين - ا مند مثانی تبذيب كے عاصر (سيدا خشام حسين)

قوی تيجيتی (ريم چير)

ماري آزادی (ابوالنين سحر)

اذيثا شمى اردوز بان كاارتفاء (بورد أف سيندري ايجيشن)

د اذيثا شمى اردوز بان كاارتفاء (بورد أف سيندري ايجيشن)

د اذيثا شمى اردوز بان كاارتفاء (بورد أف سيندري ايجيشن)

بخارا (نظرا مرآبادی) وراما، ناول بخفرافیانی ورامانی ورامان

# يهندم قواعد

- اس الل الله مير منت جلسادي
- بايتدولاط الما تظرود متنادالناء للد جمل اوران كي اصلاح
  - اضافت مادر عادر ضرب الاختال
    - ين ديداكي
    - الدويز عن كافران ومقاصد
      - اول زان کتیم کاایت
      - اعالى اورتسيل ماالد برمادت
    - تدريمينزوعم
      - ورك وتدريس يش مخ مالا
        - اثاراتوش
        - 2/26/64 .
          - =4569 .
  - بنث الاغواعده مارت سعوال ادرمشوراد إمكافعات
    - افراعومارت عموال
      - مغيوراد بامك خدمت
  - الماف مين ماك، بادع بدى الى رواد بعرى المر وار بعرى المرور بعرور عمود المرود و المعاليا بدى