

# TEACHERS' RECRUITMENT BOARD, TRIPURA (TRBT)

EDUCATION (SCHOOL) DEPARTMENT, GOVERNMENT OF TRIPURA

# **SYLLABUS**

TRIPURA TEACHERS' ELIGIBILITY TEST (T-TET)

**PAPER - II** 

**ELEMENTARY STAGE (CLASSES VI - VIII)** 

2015

#### I. CHILD DEVELOPMENT AND PEDAGOGY: (30 MCQs)

# (A). CHILD DEVELOPMENT (ELEMENTARY SCHOOL CHILD):

- Concept of development and its relation with learning.
- Growth and development, stages of development, infancy, childhood and adolescence.
- Principles of development of children.
- Influence of heredity and environment on the development of child, role of the teacher.
- Socialization process, social world and children, role of parents, peers and teachers in the process of socialization.
- Piaget, Kohlberg, Vygotsky, constructs and critical perspectives, cognitive development theory
  of Piaget, moral development, theory of Kohlberg, social constructivism, theory of Vygotsky and
  their educational implications.
- Concept of child-centred and progressive education, methods of teaching and learning, concept of progressive education, role of the teacher.
- Critical perspective of the construct of intelligence, multidimensional intelligence, Sternberg's information processing theory, concept of I Q, intelligence tests.
- Language and thought, different stages of language development, role of teacher in the process of language development.
- Gender as a social construct, gender roles, gender-bias and educational practices, gender equality, teacher's role.
- Individual differences among learners, understanding differences based on diversity of language, caste, gender, community and religion.
- Distinction between assessment for learning and assessment of learning, school based assessment, continuous and comprehensive evaluation, perspective and practices.
- Formulating appropriate questions for assessing readiness levels of learners for enhancing learning and critical thinking in the classroom and for assessing learner's achievement.

#### (B). CONCEPT OF INCLUSIVE EDUCATION AND UNDERSTANDING CHILDREN WITH SPECIAL NEEDS:

- Addressing learners from diverse back grounds, including disadvantaged and deprived, educational implications.
- Addressing the needs of children with learning difficulties, mentally retarded, physically challenged, socially and culturally deprived, identification and remedial measures.
- Addressing the needs of exceptional children, gifted, creative, specially abled children.

#### (C). LEARNING AND PEDAGOGY:

- Process of teaching and learning, creating learning situations, criteria of learning experiences, different modes of learning, social learning, co-operative and collaborative learning, group discussion, role of teacher.
- Motivation and learning, factors affecting learning, theories of learning: Pavlov, Thorndike, Skinner, Piaget and Vygotsky.
- Motivation: Concept, types and importance to learning, theories of motivation.
- Cognitive processes: Perception, concept formation, thinking, imagination, reasoning, inductive and deductive, problem solving and memory,
- Emotion: Characteristics, emotional maturity, emotional intelligence, emotional quotient (EQ).
- Personality and adjustment: Concept, approaches, type and trait, measurement of personality, projective and non projective techniques and adjustment mechanisms.

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II. LANGUAGE-I: ENGLISH: (30 MCQs)

#### A. LANGUAGE COMPREHENSION:

- (i) Two passages, one from prose/drama and the other from poetry, will be given with questions on comprehension, inference, grammar and test of vocabulary. (Prose passage may be literary, scientific, narrative or discursive).
- (ii) Test of grammatical knowledge on the following items:
  - Concord
  - Question tags
  - Prepositions
  - Tense and time
  - Determiners
  - Phrasal verbs
  - Gerunds
  - Error identification
  - Modals
  - Degree of comparison
  - Transformation of sentences

#### (iii) Vocabulary Test:

 Word formation from jumbled letters, antonyms and synonyms, affixes, one word substitution, idioms and phrases.

### B. PEDAGOGY FOR LANGUAGE DEVELOPMENT:

- Language acquisition and learning.
- Principles of language teaching.
- Language skills strategies to develop them.
- Critical perspective on the role of grammar in learning a language for communicating ideas in oral and written form.
- Challenges of teaching language in diverse classrooms- language difficulties, errors and disorders.
- Introduction to English Phonology stress, intonation, IPA, transcription and prosody.
- Teaching-learning materials: textbooks, multimedia materials, ICT, multilingual resources of the classroom.
- Assessment- self, peer and teacher.
- Strategies for teaching children with special needs (CWSN).
- Remedial teaching.

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#### III. LANGUAGE-II: BENGALI: (30 MCQs)

- ১। অপঠিত গদ্যাংশ এবং অপঠিত পদ্যাংশ থেকে অববোধ (Comprehension) মূলক প্রশ্নে অববোধ (Comprehension),ব্যাকরণ ও ভাষামূলক দক্ষতা যাচাই করণ।
- ২। (ক) ভাষা সম্পর্কে ধারণা।
  - (খ) বাংলা ভাষার উদ্ভব ও উপভাষা সম্পর্কে সাধারণ ধারণা।
  - (গ) ধুনি পরিবর্তনের কারণ ও বিভিন্ন ধারা।
- ৩। সাহিত্য ও সংস্কৃতির জগতে বিখ্যাত কয়েকজন সম্পর্কে সাধারণ ধারণা:
  - (ক) অনুবাদ সাহিত্য: কৃত্তিবাস ওঝা, কাশীরাম দাস।
- (খ) কাব্য ও সাহিত্য: ঈশ্বর গুপ্ত, ঈশ্বরচন্দ্র বিদ্যাসাগর, মধুসূদন দত্ত, বঙ্কিমচন্দ্র চট্টোপাধ্যায়, রবীন্দ্রনাথ ঠাকুর, শরৎচন্দ্র চট্টোপাধ্যায়, দ্বিজেন্দ্রলাল রায়, অন্নদাশস্কর রায়, সুকুমার রায়, সুনির্মল বসু, নজরুল ইসলাম, জীবনানন্দ দাশ, বলাইচাঁদ মুখোপাধ্যায়, তারাশস্কর বন্দ্যোপাধ্যায়, বিভূতিভূষণ বন্দ্যোপাধ্যায়, মানিক বন্দ্যোপাধ্যায়, রাজশেখর বসু, আশাপূর্ণা দেবী, লীলা মজুমদার, সুকান্ত ভট্টাচার্য।
- ৪। বাংলা ভাষার ব্যাকরণের সম্যক ধারণা:
  - (क) বর্ণ, অক্ষর, শব্দ, পদ, বাক্য, বিভক্তি, উপসর্গ ও অনুসর্গ।
  - (খ) বাংলা শব্দভান্ডার: তৎসম শব্দ, তদ্ভব শব্দ, দেশি ও বিদেশি শব্দ।
  - (গ) বচন ও লিঙ্গ।
  - (ঘ) সন্ধি ও সমাস।
  - (ঙ) পদ পরিবর্তন।
  - (চ) বাচ্য ও বাচ্য পরিবর্তন।
  - (ছ) কারক ও বিভক্তি।
  - (জ) সমার্থক ও বিপরীতার্থক শব্দ।
  - (ঝ) অশুদ্ধি সংশোধন
- ৫। (ক) বাংলা শিখন ও শিক্ষণ বিধি।
  - (খ) শ্রবণ, কথন, পঠন ও লিখন এই চারটি ভাষা-কৌশলের প্রায়োগিক ধারণা।
  - (গ) উত্তম শিক্ষক ও উত্তম শিক্ষণের বৈশিষ্ট্য।
  - (ঘ) পাঠ্যক্রম ও সহগামী প্রক্রিয়া (ভাষা শিখন ও শিক্ষণের নিরিখে)।
  - (ঙ) ভাষা শিখন ও শিক্ষণের প্রণালী।
  - (চ) মূল্যায়নের ধারণা: নিরবচ্ছিন্ন ও সামগ্রিক মূল্যায়ন।
  - (ছ) আদর্শ প্রশ্নপত্রের নির্মাণ কৌশল।

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IV-A: MATHEMATICS AND SCIENCE: (60 MCQs)

(IV-A: 1). MATHEMATICS: (30 MCQs)

- Number System: Knowing our numbers, whole numbers, positive and negative integers, rational numbers-their properties, fractions and decimals, playing with numbers
- Algebra: Formation of algebraic expressions, idea about monomials, binomials and Polynomials, addition, subtraction, multiplication and division of algebraic expressions, some identities as  $(a+b)^2 = a^2 + 2ab + b^2$ ,  $(a-b)^2 = a^2 2ab + b^2$ ,  $a^2 b^2 = (a+b)$  (a-b) and their applications, formation and solution of linear equation for one unknown variable, factorization using identities, factorisation in (x+a) (x+b) form exponents and powers.
- Arithmetic: Square and square root, cube and cube root, ratio and proportion, inverse proportion as proportionality with the reciprocal, percentage, profit and loss, simple and compound interest.
- Geometry: Lines and angles, triangles and its properties, congruency of triangles, classification of quadrilaterals as rectangle, square, rhombus, parallelogram, trapezium, and their various characterization, idea of various polygons, practical geometry (triangle and quadrilateral), symmetry.
- Mensuration: Perimeter and area of rectangle, square, parallelogram, rhombus, trapezium, triangle and circle, the idea about cuboid, cube, cylinder and their surface area and volume.
- Data handling: Graphical representation, representing numerical data, as pictographs, bar graphs, double bar graph and pie chart; tabular representation, representing numerical data as frequency table, mean, median and mode and their applications.

#### PEDAGOGICAL ISSUES IN MATHEMATICS:

- Nature of mathematics, understanding children's thinking and reasoning, language of mathematics, community mathematics, place of mathematics in curriculum aims and objectives of learning mathematics in primary classes, values of mathematics learning, correlation with other subjects, lower primary and upper primary mathematics curriculum.
- Mathematics, trends and developments, historical development of mathematics, history of great mathematicians and their contributions.
- Approach to mathematics learning, proper learning experiences keeping in mind the characteristics of children, natural learning capacity and the learning process of the child, theoretical base of learning mathematics
- Different teaching learning methods, inductive and deductive method, analytic and synthetic method, project method, laboratory method, planning of a lesson
- Learning materials in mathematics, textbook and handbooks, mathematics collection, collection of mathematical puzzles, riddles, etc.
- Mathematics learning evaluation: Concept of continuous and comprehensive evaluation, evaluation activities, grading the performance and recording the results, diagnosis, remedial teaching and error analysis.

# (IV-A: 2). SCIENCE: (30 MCQs)

- Food and Nutrition: Definition, sources of food, components of food, type of food, balanced food, ideal food, nutrition and its importance, human digestive system and digestion process, food adulteration, plant nutrition (autotroph, heterotroph, parasite, insectivorous, plants, symbiosis, interrelationship between plants and animals (coexistence).
- Micro Organism and Activities: Definition, types microorganisms with examples, beneficial organisms and their role, diseases caused by different micro-organisms, their mode of transmission, symptoms and preventive measures.
- Circulation and Conduction: Definition, blood & its composition, heart structure, arteries, vein and capillaries, circulation pattern in animals, conduction in plants.
- Ecosystem and Natural Resources: Ecosystem and its components, food chain, its types with examples, food web, food pyramid, energy flow in ecosystem, biosphere, biodiversity and conservation, renewable and non-renewable resources, reserve forest, sanctuaries, national parks.
- Agriculture and Tools: Crops, types, harvest and management, agricultural tools, fertilisers, manures and pesticides, irrigation and technique, crop protection, plant diseases and control, taxonomy, systematise, classification, binomial nomenclature.
- Pollution: Definition, types of pollution and pollutants, green house effect, global warming, acid rain, impacts of different types of pollutants upon animal lives and control measures, biodegradable, nonbiodegradable pollutants.
- Motion, Force and Pressure: Rest and motion, graphical presentation of straight line motion, Newton laws of motion and their application, different types of force, concept of thrust and pressure, atmospheric, barometer.
- Thermal Physics: Heat and temperature, thermal conductivity, radiation, application of thermal insulators, thermometer.
- Sound: Characteristic of sound, application of sound, intensity of sound, sound pollution.
- Electrostatics, Current Electricity and Magnetism: Frictional electricity, electroscope, earthling, lightning, electric cell, heating, chemical and magnetic effects of current, properties of magnet, applications, earth's magnetism.
- Optics: Reflection in plane and spherical mirrors, image in lenses.
- Solar System: Sun, planets, satellite, comets, galaxy.
- Metal and Non-metal: Acid, base, chemical properties of metal and non-metal physical and chemical changes of materials.

#### PEDAGOGICAL ISSUES IN SCEINCE

Nature and structure of sciences, natural science-aims and objective, understanding and appreciating science, methods of science-observation, experiment, discover, innovation, questions approaches to the science curriculum, criticism of contemporary science education, aims and objectives of science education, science literacy, approaches of science education, taxonomy of science education, knowledge domain problem solving skills, creativity domain, attitudinal domain, application domain, scientific inquiry, pedagogic strategies, activity based collaborative and cooperative learning, significance of the history of science, significance of laboratory evaluation, continuous and comprehensive evaluation (CCE), assessment of performance scientific attitude, role of science teacher, teaching and learning aids, psychological basis of science learning, problems and remedial teaching.

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IV-B: SOCIAL STUDIES: (60 MCQs)

#### 1. GEOGRAPHY: (15 MCQs)

- The Solar System.
- Globe, Latitudes and Longitudes.
- Interior of the Earth.
- Rocks: Types and Characteristics.
- Major Landforms of the Earth: Processes and Types.
- Atmosphere: Composition, Structure, Temperature, Pressure, Wind System and Precipitation.
- Water: Ocean Currents and Tides.
- Our Changing Earth: Weathering and Erosion, Works of River, Glacier, Wind and Sea Waves.
- Human Environment Relation: Settlement, Transport and Communication.
- India: Relief, Drainage, Climate, Natural Vegetation and Wildlife.
- Resources: Concept, Classification, Mineral and Power Resources, Resource Conservation, Human Resource.
- Agriculture: Types of Farming and Major Crops.
- Industry: Classification, Locational Factors of Industries, Iron and Steel Industry, Cotton Textile Industry, Information Technology (IT) Industry.
- Disaster: Natural and Man-made.

# 2. HISTORY: (15 MCQs)

- Civilization: Egypt, Mesopotamia, Harappa and Aryan Civilization, Buddhism and Jainism.
- Sixteen Mahajanapada and the First Empire: Asoka the Great, Science and Literature in Gupta Age, Art and Architecture of Pallavas in South India.
- Sultans of Delhi 1<sup>st</sup> and 2<sup>nd</sup> Battle of Tarain, Foudation and Consolidation of Delhi Sultaniate, The Slave Dynasty – Iltutmish.
- Khalji Dynasty Allauddin. Invasion of Taimurlong,
- The Bhakti and Sufi Movements.
- Babur: Beginning of the Mughal Rule 1<sup>st</sup> and 2<sup>nd</sup> Battle of Panipath, Battle of Khanuar, Battle of Chousa, Akbar the Great, Mughal Art and Architecture.
- The Establishment of Company Power in India, Battle of Palashi, Battle of Buxar, Grant of Diwani, Agrarian Revolts, Munda, Santal, Indigo (Nil) Revolt, The Revolt of 1857-1858, Social and Cultural Reform Movements of India in 19<sup>th</sup> Century.
- The National Movement Gandhian Era, Role of Netaji Subhas Chandra Bose.
- Tribal Society and Festival in Tripura.

#### 3. SOCIAL AND POLITICAL LIFE: (15 MCQs)

- Diversity in Indian Society: Society and Institutions, Gender Issues, Inequality and Social Justice, Issues of the Marginalized, Human Rights, Understanding Media.
- Government, Democracy, Legislative, Executive, Judiciary, Election Process in India, the Constitution of India, Central and State Government, Local Self-Government in Tripura.

# 4. PEDAGOGICAL ISSUES IN SOCIAL STUDIES: (15 MCQs)

Nature, Scope and Significance of Social Science Curriculum: Trends, Principles and Organizations, Techniques and Planning of Instruction, Types of Learners and Requirements (Academic and Environmental) for Learning, Problems of Teaching Social Science, Co-Curricular Activities, Purpose and Modern Trends of Evaluation.

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