# RAJASTHAN PUBLIC SERVICE COMMISSION, AJMER SCHEME & SYLLABUS FOR THE POST OF HEADMASTER COMPETITIVE EXAM, 2018 SECONDARY EDUCATION DEPARTMENT

# **Syllabus of Examination**

#### **PAPER-I**

#### **GENERAL STUDIES:**

# 1. Rajasthan, Indian and world history with special emphasis on Rajasthan culture and Indian National Movement:

- Indus Valley Civilization of Vedic Civilization.
- Jainism & Buddhism.
- Mauryan & Gupta Dynasties & Harshawardhan.
- Literature, Architecture, Sculpture, Painting of Ancient India.
- Age of Rajputs.
- Sultanate Period Various Dynasties and Achievements of the sultans in the Political, Social, Economics, Cultural and Religious Aspects The Mughal Empire (1526-1707).
- Shivaji Chatrapati Achievements.
- Carnatic, Mysore and Maratha Wars.
- War of Independence (1857)
- Administration of Lord Curzon.
- Brahma Samaj, Arya Samaj, Vivekanand, Theosophical society.
- French Revolution.
- American war of Independence.
- Russian Revolution.
- First World War Causes and effects.
- Second World War.
- Prithviraj Chauhan III, Maharana Kumbha, Maharana Sanga, Maharana Pratap, Meera Bai, Dadu Dayal, Sawai Jai Singh, Veer Rathod Durga Das.
- Rajasthani Literature, Painting & Architecture.
- Prajamandal Movement.
- Integration of Rajput States.
- Tilak, Gokhle, Gandhi, Nehru, Subhash Chandra Bose, Dr. Rajendra Prasad, Jinnah Their contribution to National Movement.

### 2. <u>Indian Polity, Indian Economics with special emphasis on Rajasthan:</u>

### **Indian Polity:**

<u>Indian Constitution</u>: Preamble, salient features, Fundamental Rights, Duties, Directive Principles of State Policy. Important Amendments to the Indian Constitution.

Union Government of India - Legislature, Executive and Judiciary.

State Government, Legislature, Executive and judiciary: Local Self Government and Panchayati Raj system.

#### **Economics:**

Characteristics of Indian Economy, G.D.P., G.N.P., and per capital income in India since 2000. Indian Agriculture: Main crops, production and productivity. Land use, Main Irrigation facility in Rajasthan. Use of modern technology fertilizers and hybrid seeds. Industrial Policy and Industrial Development since 1990. Census 2011 India and Rajasthan. Human Development index, schemes of removal of unemployment and poverty: India and Rajasthan. Minerals in Rajasthan.

# 3. <u>Use of Computers and Information Technology in Teaching</u>:

Introduction of computer, Definition, characteristics, type of computer, Generation of Computer.

Number system - Decimal, Binary, Octal Code, Binary addition, subtraction.

Input devices, output devices, primary memory, secondary memory, Internet, Internet Protocols, Internet Service Providers, Internet Terminology (Like baudrate, duplex, Topology, browsers), Intranet, advantage and disadvantage of intranet and internet, Word Wide Web, Website, E-mail, Types of E-mail.

Computer Network - Bridge, Routers, Hub, LAN, WAN, MAN, Introduction to computer virus, E-commerce, Multimedia.

Computer Aided Learning (CAL), Computer Aided Instruction (CAI).

# 4. Rajasthan, India, Word Geography:

#### Rajasthan:

Location, extent, shape, size, physical features, climate, demographic characteristics, agriculture, mineral resources, industries & prospects.

#### India:

Location, extent, its importance in the eastern hemisphere, broad physical divisions, climate, dynamics of monsoon, agriculture, minerals, industries and trade.

#### World:

Continents and oceans, grographical characteristics of the continents and oceans, climatic zones, planetary wind system.

#### 5. <u>General Science</u>:

**Light :** Reflection and refraction of light, spherical mirrors, refractive index, refraction by spherical lenses, power of lens, Human eye, Defects of vision and their correction, refraction of light through a prism, Dispersion of white light by a glass prism. Atmospherical refraction.

**Electric current and circuit :** Electric potential and potential difference, Resistance of system of resistors, Resistors parallel and in series, heating effect of electric current, electric power, electric motors and generators.

**Magnetic field and field lines :** Magnetic field due to a current carrying conductor, Right hand thumb rule, electric magnetic induction.

**Heat and sound :** Temperature and its measurement, transfer of heat, seasons and clothes, production and propagation of sound, characteristics of sound, Noise and Music.

Laws and equations of motion: I, II, III laws of motion, I, II, III equations of motion.

**Acid bases and salts:** PH, Bleaching powder, washing soda, plaster of paris.

**Metals and non-metals:** Extraction of metals, enrichment of ores.

**Carbon and its compounds:** Allotropes of carbon, combustion, soaps and detergent.

**Chemical reaction and equations :** Types of chemical reactions, oxidation and reduction, corrosion, rancidity.

**Human body :** Basic parts of human body and their functions, Digestion and absorption, Body fluids, Locomotion and movement, Nervous system.

Structure and functions of cell: Bio-molecules, Cell cycle and cell division.

**Transport in plants :** Photosynthesis in higher plants, plant harmones, respiration in plants, plant growth and development.

**Heredity and evolution :** Mendel's contributions, evolution and classification, fossils.

**Environment :** Ecosystem, Green house effect, Depletion of ozone layer, Air and water pollution and methods to control them. Water harvesting.

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#### **Scheme of Examination:**

S. No.	SUBJECT	No. of Questions	Total Marks
1	Rajasthan, Indian and World history with special emphasis on Rajasthan culture and Indian National Movement.	40	80
2	Indian Polity, Indian Economics with special emphasis on Rajasthan.	40	80
3	Use of Computers and Information Technology in Teaching.	15	30
4	Rajasthan, India, World Geography.	30	60
5	General Science.	25	50
	Total	150	300

- **Note:** 1 All the question in the Paper shall be Multiple Choice Type Question.
  - 2 Negative marking shall be applicable in the evaluation of answers. For every wrong answer one-third of the marks prescribed for that
    - particular question shall be deducted.
    - Explanation: Wrong answer shall mean an incorrect answer or multiple answer.
  - 3 Duration of the paper shall be 3 Hours.

#### Paper 'II'

#### :GENERAL AWARENESS ABOUT EDUCATION AND EDUCATIONAL ADMINISTRATION:

#### 1. <u>Mental Ability Test</u>:

Analogy, Series completion, Coding-Decoding, Blood relations, Logical Venn Diagrams, Alphabet Test, Number Ranking and time sequence test, Mathematical operations, Arithmetical reasoning, Data interpretation, Data sufficiency, cubes and Dice, construction of squares and Triangles.

# 2. <u>Statistics (Secondary Level)</u>, <u>Mathematics (Secondary Level)</u>:

#### **Statistics:**

Collection and presentation of data, Graphical representation of data, Graphical representation of cumulative frequency distribution, Mean, Mode, Median, Measures of dispersion (Range, Quartile deviation, Mean Deviation, Standard deviation,) Probability (Theoretical and Experimental approach), Conditional probability.

#### **Mathematics:**

Number theory – Natural numbers, Integers, Rational numbers, Decimals, Real numbers, Basic properties and operations on numbers, Divisibility of numbers, Square and square roots, Cube and cube roots, Ratios and proportions, Percentage and discount, Simple and compound interest.

Pair of linear equations in two variables (Graphical and Algebraic methods of solution). Quadratic equations, Arithmetic progression.

Areas of triangles, Areas of parallelograms, Surface areas and volumes of Cube, Cuboid, Cylinder, Cone, Sphere and Hemisphere, Distance formula, Section formula, Circles (basic concepts, chord, arc etc.)

Trigonometric Ratios and angles. Trigonometric ratios of special angles. Trigonometric identities. Application of trigonometry – height and distance.

# 3. <u>Educational Psychology, Pedagogy, Educational Management at School level, Educational Scenario in Rajasthan</u>:

**Educational Psychology :** Need, scope and importance of Educational Psychology, Growth, development and maturation, Intelligence, Attitude, Interest and Aptitude,

Creativity, Motivation, Learning, Group dynamics, Personality and Adjustment, Mental Health, Identification and Education of Special Children.

**Pedagogy:** Communication process and skills, programmed Instruction, Computer Assisted Instruction, Methods of teaching, Approaches of teaching, Use of teaching aids, Lesson Plan, Unit plan, Models of teaching (concept attainment, Inquiry training and problems solving), System Approach, Remedial teaching.

**Educational management at School Level :** School management, scope and principals of school management, Time table, Institutional planning, Management and organization of Co-curricular Activities, Admission procedure, Maintenance of Scholar Register, Continuous and comprehensive evaluation, Supervision for quality improvement, Quality parameters in School Education.

Use of ICT at School Level.

Action Research.

<u>Educational Scenario in Rajasthan</u>: Organizational structure of Educational Administration at Elementary and Secondary Level.

<u>New Projects (Innovations at)</u> - Elementary Level : Rajasthan State Text Book Board, Education for All, Madarsa Board, SIERT Registrar - Education Departmental Examination.

<u>Janshala at Secondary Level</u> - Rajasthan Board of Secondary Education, Bharat Scout and Guide, Balika Shiksha Foundation, Rajasthan State Open School.

<u>Girls Education</u> - Gargi Puraskar, Grace Project, Establishment of model schools in each Backward Blocks. Cycle distribution, Transport voucher scheme, F.D.R. for girls.

Teacher Training Institutes - DIETs, CTEs, IASEs etc.

Teacher welfare programmer - Hitkari Nidhi.

Educational Publications.

Distance Learning

NCF 2009.

# 4. Right to children to Free and Compulsory Education Act, 2009, Rajasthan Service Rules, CCA Rules, GF&AR:

**Right to children to Free and Compulsory Education Act, 2009 :** Preliminary knowledge of the Act, Right of children to free and compulsory Education, Special provisions for children not admitted to or who have not completed elementary education. Right of transfer to other school, Duty of appropriate Government and Local authority to establish school.

**Rajasthan Service Rules, GF&AR:** Financial power of Head of institution, cash book, budgeting and its utilization, Audit objections, Pension Rules, T.A. Rules, Transfer and joining rules, Fixation of the pay, Promotion, Increment, Leave Sanction, Service book.

**CCA Rules :** Code of conduct, Disciplinary responsibilities, Preliminary Inquiry, C.C.A. - 17 & C.C.A. - 16 Suspension.

# 5. <u>Current Affairs</u>:

Major events at National & International Level in Current Times.

# 6. Language ability test: Hindi, English

#### सामान्य हिन्दी

- संधि और संधि विच्छेद।
- सामासिक पदों की रचना और समास–विग्रह।
- उपसर्ग।
- प्रत्यय
- पर्यायवाची शब्द।
- विपरीतार्थ (विलोम शब्द)।
- अनेकार्थक शब्द।
- शब्द युग्म।
- संज्ञा शब्दों से विशेषण बनाना।
- शब्द शुद्धि : अशुद्ध शब्दों का शुद्धीकरण और शब्दगत अशुद्धि का कारण।
- वाक्य शुद्धि : अशुद्ध वाक्यों का शुद्धीकरण और वाक्यगत अशुद्धि का कारण।
- वाच्य : कर्तुवाच्य, कर्मवाच्य और भाववाच्य प्रयोग।
- क्रिया : सकर्मक, अकर्मक और पूर्वकालिक क्रियाएँ।
- वाक्यांश के लिए एक सार्थक शब्द।
- मुहावरे और लोकोक्तियाँ।
- अंग्रेजी के पारिभाषिक (तकनीकी) शब्दों के समानार्थक हिन्दी शब्द।
- सरल, संयुक्त और मिश्र अंग्रेजी वाक्यों का हिन्दी में रूपान्तरण और हिन्दी वाक्यों का अंग्रेजी में रूपान्तरण।
- कार्यालयी पत्रों से सम्बन्धित ज्ञान।

#### **GENERAL ENGLISH**

- Tenses/Sequence of Tenses.
- Voice : Active and Passive.
- Narration: Direct and Indirect.
- Transformation of Sentences: Assertive to Negative, Interrogative, Exclamatory and vice-versa.
- Use of Articles and Determiners.
- Use of Prepositions.
- Translation of Simple (Ordinary/Common) Sentences from Hindi to English and viceversa.
- Correction of sentences including subject, Verb, Agreement, Degrees of Adjective, Connectives and words wrongly used.
- Glossary of official, Technical Terms (with their Hindi Versions)

- Synonyms.
- Antonyms
- One word substitution.
- Forming new words by using prefixes and suffixes.
- Confusable words.
- Comprehension of a given passage.
- Knowledge of writing letters : Official, Demi Official, Circulars and Notices, Tenders.

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# **Scheme of Examination:**

S.	SUBJECT	No. of Questions	Total Marks
No.			
1	Mental Ability Test.	24	48
2	Statistics (Secondary Level), Mathematics (Secondary Level).	24	48
3	Educational Psychology, Pedagogy, Educational Management at School level, Educational Scenario in Rajasthan.	30	60
4	Right to children to Free and Compulsory Education Act. 2009, Rajasthan Service Rules, CCA Rules, GF&AR.	24	48
5	Current Affairs.	24	48
6	Language ability test : Hindi, English	24	48
	Total	150	300

**Note:** 1 All the question in the Paper shall be Multiple Choice Type Question.

2 Negative marking shall be applicable in the evaluation of answers. For every wrong answer one-third of the marks prescribed for that

particular question shall be deducted.

Explanation: Wrong answer shall mean an incorrect answer or multiple answer.

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