### RAJASTHAN PUBLIC SERVICE COMMISSION, AJMER

## SYLLABUS FOR SCREENING TEST FOR THE POST OF ASSISTANT AGRICULTURE OFFICER, AGRICULTURE DEPARTMENT

#### प्रश्न पत्र - प्रथम

#### Part - I

#### GENERAL HINDI

- 1 दिये गये शब्दों की संधि एवं शब्दों का संधि-विच्छेद ।
- 2 उपसर्ग एवं प्रत्यय—इनके संयोग से शब्द संरचना तथा शब्दों से उपसर्ग एवं प्रत्यय को पृथक् करना, इनकी पहचान ।
- 3 समस्त (सामासिक) पद्,की रचना करना, समस्त (सामासिक) पद का विग्रह करना ।
- 4 शब्द युग्मों का अर्थ भेद ।
- 5 पर्यायवाची शब्द और विलोम शब्द ।
- 6 शब्द शुद्धि दिये गये अशुद्ध शब्दों को शुद्ध लिखना ।
- 7 वाक्य शुद्धि वर्तनी संबंधी अशुद्धियों को छोड़कर वाक्य संबंधी अन्य व्याकरणिक अशुद्धियों का शुद्धीकरण।
- 8 वाक्यांश के लिये एक उपयुक्त शब्द ।
- 9 पारिभाषिक शब्दावली प्रशासन से सम्बन्धित अंग्रेजी शब्दों के समकक्ष हिन्दी शब्द ।
- 10 मुहावरे वाक्यों में केवल सार्थक प्रयोग अपेक्षित है ।
- 11 लोकोक्ति वाक्यों में केवल सार्थक प्रयोग अपेक्षित है ।

#### Part - II

## राजस्थान का सामान्य ज्ञान, इतिहास एवं संस्कृति

- 1 राजस्थान की भौगोलिक संरचना भौगोलिक विभाजन, जलवायु, प्रमुख पर्वत, निदयां, मरूस्थल एवं फसलें।
- 2 **राजस्थान का इतिहास** *सभ्यताएं* कालीबंगा एवं आहड़,

प्रमुख व्यक्तित्व — महाराणा कुंभा, महाराणा सांगा, महाराणा प्रताप, रावजोधा, राव मालदेव, महाराजा जसवंतसिंह, वीर दुर्गादास, जयपुर के महाराजा मानसिंह—प्रथम, सवाई जयसिंह, बीकानेर के महाराजा गंगासिंह

- 3 भारतीय स्वतंत्रता संग्राम में राजस्थान का योगदान एवं राजस्थान का एकीकरण ।
- 4 विभिन्न राजस्थानी बोलियाँ ।
- 5 कृषि, पशुपालन एवं व्यावसायिक शब्दावली ।
- 6 लोक देवी-देवता प्रमुख संत एवं सम्प्रदाय ।
- 7 प्रमुख लोक पर्व, त्यौहार, मेले पशुमेले ।
- 8 लोक कथा, लोक गीत एवं नृत्य, कहावतें, लोक नाट्य, लोक वाद्य एवं कठपुतली कला ।

- 9 विभिन्न जातियाँ जन जातियाँ।
- 10 स्त्री पुरूषों के वस्त्र एवं आभूषण ।
- 11 चित्रकारी एवं हस्तशिल्पकला चित्रकला की विभिन्न शैलियां, भित्ति चित्र, प्रस्तर शिल्प, काष्ठ कला, मृदमाण्ड (मिट्टी) कला, उस्ता कला, हस्त औजार, नमदे—गलीचे आदि ।
- 12 स्थापत्य दुर्ग, महल, हवेलियाँ, छतरियाँ, बावड़ियाँ, तालाब, मंदिर–मस्जिद आदि ।
- 13 संस्कार एवं रीति रिवाज ।
- 14 धार्मिक, ऐतिहासिक एवं पर्यटन स्थल ।

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## **Pattern of Question Papers:**

- 1 Objective Type Paper.
- 2 Maximum Marks: 360
- 3 Number of Questions: 120
- 4 Duration of Paper: Two Hours.
- 5 All Questions carry equal marks.
- 6 There will be **Negative Marking**.
- 7 60 questions each from Part I & II.

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# PAPER-II AGRICULTURE

Agro-climatology-elements and effect on plant growth, weather abnormalities and protective measures, Elements of crop production, classification of crops, farming systems. Tillage, Soil erosion, soil and water conservation. Soil productivity fertility and management of problematic soils, Soils organic matter, organic manures, fertilizers and their use efficiency. Irrigation - role of water responses, quality of water and water pollution, water requirements of crops, methods of irrigation, drainage. Concept, scope and problems of dry land agriculture, Problem of weeds and control measures. Seed quality and certification. Agronomy of important crops like cereals, pulses, oilseeds, fiber crops, forage crops, sugarcane, sugarbeet, potato, cumin, isabgol etc.

Objectives and methods of plant breeding, Mendel's laws of inheritance, heterosis mutations, gene concept, plant water relationship, seed testing, type of seeds, seed production, recommended varieties of important crops of Rajasthan.

Soil formation and profile development, basis ideas on soil survey and classification, soils of Rajasthan. Physical properties of soils, soil reaction, management of saline, alkaline and acid soils, fixation of phosphorus, potassium and ammonium in soils, essential plant nutrients and their functions, nutrient deficiency & toxicity symptoms, various tests to determine nutrient needs of plants, symbiotic and non-symbiotic nitrogen fixation, Organic manures and bio-fertilizers, chemical composition of FYM, night soil, oil cakes, bone meal, fish manure and common fertilizers.

Olericulture - Classification of vegetables, nursery, transplantation, seed testing and storage, cultivation practice of cauliflower, cabbage, tomato, chillies, brinjal, carrot, radish, onion, pea, okra, muskmelon, watermelon and sweet potato, ornamental gardening and indoor gardening-lay out care & maintenance, cultivation of Roses. Pomology-layout of orchards, propagation methods, cultivation of mango, citrus, banana, guava, pomegranate, grapes, papaya, ber, phalsa, aonla, datepalm, Principles of fruits and vegetable preservation, dehydration, bottling, canning.

Peculiarities of Indian agriculture, place of agriculture in national economy. Pattern of land utilization, size of holding, prices of agricultural commodities, agricultural marketing, marketing functions and institutions, marketing cost and price spread. Agricultural finance and credit, credit institutions, crop insurance, agricultural development and poverty alleviation programmes. Farm planning and budgeting.

Philosophy and principles of Extension Education Rural Social Institutions, Caste and Family, Rural Leadership, Teaching - learning Process, Audio-visual aids, teaching methods, programme planning and evaluation, Communication Process. Diffusion theory, history of Extension programmes in India. CD, IRDP, Panchayati Raj, HYVP, ATIC, IVLP, ATMA, NATP, NAIP, DRDA, NREGA, PMRY, KVK, JRY, SGSY, T&V System etc.

Place of animal husbandry in rural economy, Care and management of new born calf, breeding bull, a cow before & after parturition, heifers, raising calves from 0-6 months, Common infectious & contagious diseases of livestock their prevention & control, Computation of balanced ration, Important Indian & exotic breeds of cow, buffalo, sheep, goad & camel, Breeds of chicks, Housing of cattle and poultry, Forage production & its conservation.

Common Workshop tools, survey instruments, Bullock drawn implements, tools scope of farm mechanization in India, tools & implements for land leveling, measurement of irrigation water, water lifting devices.

Data collection, summarization and presentation, measures of central tendency, measures of dispersion, Karl Pearson's coefficient of correlation.

Major diseases (fungal, bacterial, nematode & viral) and insect pest of field, vegetable & fruit crops of Rajasthan and their control measures including biological methods & integrated pest management.

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