# कृषि असिक्त

#### प्रदेश लोक सेवा आयोग प्रदेश नं.१, विराटगर

स्थानीय सरकारी सेवा अन्तर्गतका प्राविधिक तर्फ कृषि सेवा, प्लान्ट प्रोटेक्सन, एग्रोनोमी, हर्टिकल्चर, एगृ. एक्सटेन्सन, स्वायल साइन्स, एगृ.इको.एण्ड मार्केटिङ्ग समूह, छैटौँ तहका पदको खुला प्रतियोगितात्मक लिखित परीक्षाको पाठ्यक्रम

#### प्रथम पत्र (Paper I): General Subject

### 1. History and Current Status of Agriculture Sector in Nepal (10 marks)

- 1.1 History of agricultural research and development in Nepal
- 1.2 Overview of Nepalese agriculture: Current status and scope
- 1.3 Institutional arrangement of agricultural research, extension and education in Nepal
- 1.4 Agriculture Perspective Plan (APP) and its impact in Nepalese agriculture
- 1.5 Devolution of agriculture extension system and its impact in agricultural development
- 1.6 Structure of Agriculture Services at Federal, Provincial & Local levels

#### 2. Agriculture Research, Extension and Education

(10 marks)

- 2.1 Role of agriculture research in contemporary agriculture
- 2.2 Nepal Agricultural Research Council (NARC) and its vision & functions
- 2.3 Agricultural education systems in Nepal
- 2.4 Academic institutions such as AFU, PU, TU
- 2.5 Technical and Vocational Educational Institutions (CTEVT and its allied institutions)
- 2.6 Major functions of agriculture research, extension and education in Nepal
- 2.7 Linkage and coordination among research, extension and teaching in Nepal
- 2.8 Public, private, NGOs, CBOS, agricultural co-operatives and farmer groups involvement in research, extension and education
- 2.9 Participatory technology development, participatory planning, monitoring, evaluation and feedback

### 3. Natural Resource, Environment Conservation, Climate Change and Disaster-Risk Management (20 marks)

- 3.1 Importance of natural resources conservation, utilization and management with respect to food security, employment generation and livelihood improvement in Nepal
- 3.2 Bio-diversity and agro-biodiversity: Conservation and utilization for sustainable agriculture development
- 3.3 Use of fertilizers and pesticides in agriculture and their implications to environment

- 3.4 Integrated pest, crop and plant nutrient management systems (IPM, ICM, IPNM) and Good Agricultural Practices (GAP)
- 3.5 Environmental issues and sustainability of Nepalese agriculture
- 3.6 Organic agriculture and organic products for export promotion and food safety
- 3.7 General climatic conditions of Nepal, weather observation & instruments in use.
- 3.8 Agricultural Insurance Policies & programs in Nepal.; Implementation status of Crop insurance in Nepal
- 3.9 Climate change and its impact in agriculture sector
- 3.10 Climate change adaptation and mitigation strategies of Nepal
- 3.11 Disaster (landslide, drought, flood, cold spell, earthquake, pest outbreak) management in agriculture
- 3.12 Rapid urbanization and change in land use pattern and their consequences in food security, environment conservation, employment generation and youth migration
- 4. Legislations, Plan, Policies, Strategies and Global Trade in Agriculture (20 marks)
  - 4.1 Agriculture sector in current constitution
  - 4.2 Concept, goals, target and strategies of current periodic plan
  - 4.3 Planning, implementation, monitoring and evaluation of agricultural projects
  - 4.4 Local Government Operation Act, 2074 and its role in agricultural development
  - 4.5 National Agriculture Policy, 2061 (2004)
  - 4.6 Agro-biodiversity Promotion Policy, 2063 (2007) (first amendment, 2071)
  - 4.7 Agri-business Promotion Policy, 2063 (2006)
  - 4.8 Agriculture Development Strategy (ADS), 2015-2035 AD: vision, mission, target, components and its salient features, implementation status of ADS, supporting projects and institutional arrangement
  - 4.9 Prime Minister Agriculture Modernization Project (PMAMP) and other agriculture development projects
  - 4.10 National Seed Vision (2013-2025) and its implementation status
  - 4.11 Nepal Trade Integration Strategy (NTIS), 2016 Agricultural commodities
  - 4.12 Agricultural Extension Strategy, 2061 (2003)
  - 4.13 Seeds Act, 2045 (1988) and Seed Rules, 2069 (2013)
  - 4.14 Plant Protection Act, 2064 (2007) and Plant Protection Rules, 2066 (2010)
  - 4.15 Pesticides Management Act, 2076 (2019) and Regulation
  - 4.16 Fertilizer Control Order, 2055
  - 4.17 Right to Food and Food Sovereignty Act, 2076 (2019)

- 4.18 Food Safety Policy, 2076 (2019)
- 4.19 Agro Forestry Policy, 2076 (2019)
- 4.20 World Trade Organization (WTO), Sanitary and Phyto-sanitary (SPS), Technical Barriers to Trade (TBT) measures in Nepalese agricultural trade
- 4.21 Comparative advantage, agriculture commercialization and trading of Nepalese agricultural products.
- 4.22 Agreement on South Asian Free Trade Area (SAFTA): their implication and impact in Nepalese agriculture

## 5. Agricultural Technology and Management

(40 marks)

- Importance of technology generation, verification and dissemination in 5.1 crop production and management
- Variety release and registration system in Nepal, Seed quality assurance: Seed production, laboratory testing, processing, handling, marketing and 5.2 storage
- Food and nutrition security: Concepts, status and dimensions 5.3
- Importance of pests and pesticides management
- Integrated Pest Management (IPM) concepts and strategies/practices 5.4 5.5
- Roles of pollinators in crop production 5.6
- Importance of microbial agents (fungus, bacteria, nematodes and virus) in 5.7 plant protection
- Importance of crop diversification and commercialization in Nepal.
- 5.8 Precision and protected agriculture: Concepts and technologies 5.9
- Agricultural crops for agro-forestry and environmental protection 5.10
- Strategies for commercialization of high value low volume commodities 5.11
- Concept of soil fertility and productivity 5.12
- Essential plant nutrients and their sources (manures and fertilizers) 5.13
- Soil reaction (pH) and soil reaction improvement 5.14
- Concept of Integrated Plant Nutrient Systems (IPNS) and its significance 5.15
- Contemporary agricultural extension practices in Nepal (plant clinic, 5.16 mobile service, training and demonstration farm, farmer to farmer extension)
- Role of information and communication technology (ICT) in agriculture 5.17 development
- Agricultural markets and marketing in Nepal 5.18
- Agricultural Management Information System (AMIS) in Nepal 5.19
- Agriculture Census, 2068 5.20
- Linkage of agro-industries with agriculture production and marketing 5.21
- Role of cooperatives in agriculture development in Nepal 5.22
- Research methodology in agriculture (basic concepts, common designs) 5.23
- Trade liberalization and its implication in Nepalese agricultural product 5.24

Value chain development: concepts and practices in agriculture 5.25 Postharvest management of agricultural commodities 5.26 Farming system and sustainable agriculture development 5.27 Gender Equity and Social Inclusion(GESI) and women's role in Nepalese 5.28 agriculture Conservation agriculture: concept, principles and practices 5.29 नम्ना प्रश्न (Sample Questions) 1. Planned development in Nepal was started in the year (B) 1977 A.D. (A) 1956 A.D. (D) 1957 A.D.. (C) 1993 A.D. 2. Which one of the following is not stakeholder of agriculture development? (B) Irrigation Users group (A) Farmers Group (D) Road construction users group (C) Women groups 3. Drift is most influenced by (A) Pressure of the pump (B) Selectivity of the chemical (C) Droplet size and wind velocity (D) Inversion layer 4. Which Governmental body do not have the primary mandate to carry out agricultural extension service delivery as defined in the Annexes of Nepal's Constitution? (B) Agricultural Universities (A) Federal Government (D) Nepal Agriculture Research Council (C) Local Government 5. Which is not plantation crop? (B) Coffee (A) Rubber (D) Ginger (C) Tea