नेपाल कृषि सेवाका एगृ एक्सटेन्सन, हर्टिकल्बर, एग्रोनोमी स्त्रान्त प्रोटेक्सन, एगृ. इको. एण्ड मार्केटिङ र स्वायल साइन्स समूहका राजपत्राङ्गित तृतीय श्रेणीका प्रदहरूको खुला प्रतिश्वीगृतात्मक परीक्षाको पाठ्यक्रम

### प्रथम पत्र (Raper h: General Subject

### Part (I): - General Awareness & General Ability Test (50 Marks)

- 1. General Awareness and Contemporary Issues (25 ×1 Mark = 25 Marks)
  - 1.1 Physical, socio-cultural and economic geography and demography of Nepal
  - 1.2 Major natural resources of Nepal
  - 1.3 Geographical diversity, climatic conditions, and livelihood & lifestyle of people
  - 1.4 Notable events and personalities, social, cultural and economic conditions in modern history of Nepal
  - 1.5 Current periodical plan of Nepal
  - 1.6 Information on sustainable development, environment, pollution, climate change, biodiversity, science and technology
  - 1.7 Nepal's international affairs and general information on the UNO, SAARC & BIMSTEC
  - 1.8 The Constitution of Nepal (From Part 1 to 5 and Schedules)
  - 1.9 Governance system and Government (Federal, Provincial and Local)
  - 1.10 Provisions of civil service act and regulation relating to constitution of civil service, organisational structure, posts of service, fulfillment of vacancy and code of conduct
  - 1.11 Functional scope of public services
  - 1.12 Public Service Charter
  - 1.13 Concept, objective and importance of public policy
  - 1.14 Fundamentals of management : planning, organizing, directing, controlling, coordinating, decision making, motivation and leadership
  - 1.15 Government planning, budgeting and accounting system
  - 1.16 Major events and current affairs of national and international importance
- 2. General Ability Test

 $(25 \times 1 \text{ Mark} = 25 \text{ Marks})$ 

- 2.1 Verbal Ability Test (8×1 Mark = 8 Marks)

  Jumble words, Series, Analogy, Classification, Coding-Decoding, Matrix,
  Ranking Order Test, Direction and Distance Sense Test, Common Sense Test,
  Logical Reasoning, Assertion and Reason, Statement and Conclusions
- 2.2 Numerical Ability Test (9×1 Mark = 9Marks)
  Series, Analogy, Classification, Coding, Arithmetical reasoning/operation,
  Percentage, Ratio, Average, Loss & Profit, Time & Work, Data interpretation &
  Data verification
- 2.3 Non-verbal/Abstract Ability Test (8×1 Mark = 8 Marks)
  Figure Series, Figure Analogy, Figure Classification, Figure Matrix, Pattern Completion/Finding, Analytical Reasoning Test, Figure Formation and Analysis, Rule Detection, Water images, Mirror images, Cubes and Dice &Venn-diagram

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# Part (B) : - General Fechnical Subject (50 Marks)

## 1. History and Current Status of Agriculture Sector in Nepal

(5 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

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

(5 marks)

- 2.1 Role of agriculture research in contemporary agriculture
- 2.2 Nepal Agricultural Research Council (NARC) and its vision
- 2.3 Agricultural education systems in Nepal
- 2.4 Academic institutions such as AFU, PU, TU
- 2.5 Non-academic 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 (10 marks)

- 3.1 Importance of natural resources conservation, utilization and management w. r. t. food security, employment generation and livelihoodimprovement 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
- 3.8 Weather observation and instruments use 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

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- 3.12 Rapid urbanization and change in tand use pattern and their consequences in food security, environment conservation temptoyment generation and youth migration
- 3.13 Crop insurance in Nepal: Current policies and status

#### 4. Legislations, Plan, Policies, Strategies, and Global Trade in Agriculture (10 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 governance 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 National Seed Vision, 2013-2025 and its implementation status
- 4.10 Nepal Trade Integration Strategy (NTIS), 2016 Agricultural commodities
- 4.11 Agricultural Extension Strategy, 2061 (2003)
- 4.12 Seeds Act, 2045 (1988) and Seeds Rules, 2069 (2013)
- 4.13 Plant Protection Act, 2064 (2007) and Plant Protection Rules, 2066 (2010)
- 4.14 Pesticides Management Act, 2076 (2019) and Regulation
- 4.15 Fertilizer Control Order, 2055
- 4.16 Food Right and Food Sovereignty Act, 2076 (2019)
- 4.17 Food Safety Policy, 2076 (2019)
- 4.18 Agro Forestry Policy, 2076 (2019)
- 4.19 World Trade Organization (WTO), Agreement on South Asian Free Trade Area (SAFTA): their implication and impact in Nepalese agriculture
- 4.20 Comparative advantage, agriculture commercialization and trading of Nepalese agricultural products.
- 4.21 Implication of Sanitaryand Phyto-sanitary(SPS) measures in Nepalese agricultural trade

#### 5. Agricultural Technology and Management

(20 marks)

- Importance of technology generation, verification and dissemination in crop production and management
- 5.2 Seed quality assurance: Seed production, laboratory testing, processing, handling, marketing and storage
- 5.3 Variety release and registration system in Nepal
- 5.4 Food and nutrition security: Concepts, status and dimensions
- 5.5 Importance of pests and pesticides management
- 5.6 Integrated Pest Management (IPM) concepts and strategies/practices
- 5.7 Roles of pollinators in crop production

'लोक सेवा आयोग्र नेपाल कृषि सेवाका एग् एक्सटेन्सन, हर्टिकल्चर, एग्रोनोमी, कान्य प्रोटक्सन, एग्. इको. एण्ड मार्केटिङ र स्वायल साइन्स समूहका

- राजपत्राहित तृतीय श्रेणीका पदहुरुके खुला प्रतिग्रेणितात्मक परीक्षाको पाठ्यक्रम Importance of microbial agents (मिल्लियाड) bacteria, nematodes and virus) in plant 5.8 protection
- Importance of crop diversification and commercialization in Nepal. 5.9
- 5.10 Precision and protected agriculture: Concepts and technologies
- 5.11 Agricultural crops for agro-forestry and environmental protection
- 5.12 Strategies for commercialization of high value low volume commodities
- 5.13 Concept of soil fertility and productivity
- 5.14 Essential plant nutrients and their sources (manures and fertilizers)
- 5.15 Soil reaction (pH) and soil reaction improvement
- 5.16 Concept of Integrated Plant Nutrient Systems (IPNS) and its significance
- 5.17 Contemporary agricultural extension practices in Nepal (plant clinic, mobile service, training and demonstration farm, farmer to farmer extension and pluralistic extension)
- 5.18 Role of information and communication technology(ICT) in agriculture development
- 5.19 Agricultural markets and marketing in Nepal
- 5.20 Agricultural Management Information System (AMIS) in Nepal
- 5.21 Agriculture Census, 2068
- 5.22 Linkage of agro-industries with agriculture production and marketing
- 5.23 Role of cooperatives in agriculture development in Nepal
- 5.24 Research methodology in agriculture (basic concepts, common designs and their application)
- 5.25 Trade liberalization and its implication in Nepalese agricultural product
- 5.26 Value chain development: concepts and practices in agriculture
- 5.27 Postharvest management of agricultural commodities
- 5.28 Farming system and sustainable agriculture development
- 5.29 Gender Equity and Social Inclusion(GESI) and women's role in Nepalese agriculture
- 5.30 Conservation agriculture: concept, principles and practices