प्रथम पत्र (Paper I): General Subject

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

General Awareness and Contemporary Issues of the 1.

- Physical, socio-cultural and economic geography and demography of Nepal
- 1.2 Major natural resources of Nepal
- Geographical diversity, climatic conditions, and livelihood & lifestyle of people 1.3
- 1.4 Notable events and personalities, social, cultural and economic conditions in modern history of Nepal
- Current periodical plan of Nepal 1.5
- Information on sustainable development, environment, pollution, climate change, 1.6 biodiversity, science and technology
- 1.7 Nepal's international affairs and general information on the UNO, SAARC & **BIMSTEC**
- The Constitution of Nepal (From Part 1 to 5 and Schedules) 1.8
- Governance system and Government (Federal, Provincial and Local) 1.9
- 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 Reasoning Test**

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

Logical Reasoning $(9 \times 1 \text{ Mark} = 9 \text{ Marks})$ 2.1

Verbal Ability, Alphanumeric Series, Reasoning Analogies, Classification, Coding-Decoding, Order & Ranking, Distance & Directions, Analytical and Logical Reasoning, Assertion and Reason, Statement and Conclusion, Input-Output, Venn-diagram

Numerical Reasoning (8×1 Mark = 8 Marks) 2.2

Arithmetic Series, Analogy, Classification, Arithmetical Reasoning, Fraction. Percentage, Ratio, Average, Profit & Loss, Time & Work, Date & Calender, Data Sufficiency, Data Interpretation & Data Verification

Spatial Reasoning $(8 \times 1 \text{ Mark} = 8 \text{ Marks})$ 2.3

> Figure Series, Figure Analogy, Figure Classification, Figure Matrix, Pattern Completion, Embedded Images, Image Formation & Analysis, Mirror and Water Images, Cubes and Dices, Paper Folding & Cutting

Part (B): - General Technical Subject (50 Marks)

1. History and Current Status of Agriculture Sector in Nepal (5)

(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

- 3,12 Rapid urbanization and change in land use pattern and their consequences in food security, environment conservation, employment generation and youth migration 3.13 Crop insurance in Nepal: Current policies and status
- Legislations, Plan, Policies, Strategies, and Global Trade in Agriculture of 10 marks) कामती प्रदेश केपाल
- Agriculture sector in current constitution 4.1
- Concept, goals, target and strategies of current periodic plan 4.2
- Planning, implementation, monitoring and evaluation of agricultural projects 4.3
- Local governance and its role in agricultural development 4.4
- National Agriculture Policy, 2061 (2004) 4.5
- Agro-biodiversity Promotion Policy, 2063 (2007) (first amendment, 2071) 4.6
- Agri-business Promotion Policy, 2063 (2006) 4.7
- Agriculture Development Strategy (ADS), 2015-2035 AD: vision, mission, target, 4.8 components and its salient features, implementation status of ADS, supporting projects and institutional arrangement
- National Seed Vision, 2013-2025 and its implementation status 4.9
- 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) Nepalese measures agricultural trade
- **Agricultural Technology and Management** 5.

(20 marks)

- Importance of technology generation, verification and dissemination 5.1 production and management
- Seed quality assurance: Seed production, laboratory testing, processing, handling, 5.2 marketing and storage
- Variety release and registration system in Nepal 5.3
- Food and nutrition security: Concepts, status and dimensions 5.4
- Importance of pests and pesticides management 5.5
- Integrated Pest Management (IPM) concepts and strategies/practices 5.6
- 5.7 Roles of pollinators in crop production

- Importance of microbial agents (fungus, bacteria, nematodes and virus) in plant 5.8 protection
- 5.9 Importance of crop diversification and commercialization in Nepal.
- 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 commodifies and strategies for commercialization of high value low volume commodifies and strategies for commercialization of high value low volume commodifies and strategies for commercialization of high value low volume commodifies and strategies for commercialization of high value low volume commodifies and strategies for commercialization of high value low volume commodifies and strategies for commercialization of high value low volume commodifies and strategies for commercialization of high value low volume commodifies and strategies for commercialization of high value low volume commodifies and strategies for commercialization of high value low volume commodifies and strategies for commercialization of high value low volume commodifies and strategies for commercialization of high value low volume commodifies and strategies for commercialization of high value low volume commodifies and strategies for commercialization of high value low volume commodifies and strategies for commercialization of high value low volume commodifies and strategies for commercialization of high value low volume commodifies and strategies for commercialization of high value low volume commercialization of high
- 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