

Part (B) : - General Technical 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

- 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
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 Sanitary and Phyto-sanitary (SPS) measures in Nepalese agricultural trade
5. **Agricultural Technology and Management (20 marks)**
- 5.1 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 आयोग

नेपाल कृषि सेवाका एगू एक्सटेन्सन, हर्टिकल्चर, एग्रोनोमी, प्लान्ट प्रोटेक्सन, एगू. इको. एण्ड मार्केटिङ्ग र स्वायल साइन्स समूहका राजपत्राङ्कित तृतीय श्रेणीका पदहरूको खुला प्रतियोगितात्मक परीक्षाको पाठ्यक्रम

- 5.8 Importance of microbial agents (fungus, bacteria, nematodes and virus) in plant 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 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
