

**Syllabus for the post of Bsc.Agriculture (Officer level)**

**Exam type : Objective**

**Number of Question: 50\*2=100**



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

- History of agricultural research and development in Nepal
- Overview of Nepalese agriculture: Current status and scope
- Institutional arrangement of agricultural research, extension and education in Nepal
- Agriculture Perspective Plan (APP) and its impact in Nepalese agriculture
- Devolution of agriculture extension system and its impact in agricultural development

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

- Role of agriculture research in contemporary agriculture
- Nepal Agricultural Research Council (NARC) and its vision
- Agricultural education systems in Nepal
- Academic institutions such as AFU, PU, TU
- Non-academic institutions (CTEVT and its allied institutions)
- Major functions of agriculture research, extension and education in Nepal
- Linkage and coordination among research, extension and teaching in Nepal
- Public, private, NGOs, CBOs, agricultural co-operatives and farmer groups involvement in research, extension and education
- Participatory technology development, participatory planning, monitoring, evaluation and feedback



**3. Natural Resource, Environment Conservation, Climate Change and Disaster-Risk Management**

- Importance of natural resources conservation, utilization and management w. r. to food security, employment generation and livelihood improvement in Nepal
- Bio-diversity and agro-biodiversity: Conservation and utilization for sustainable agriculture development
- Use of fertilizers and pesticides in agriculture and their implications to environment
- Integrated pest, crop, and plant nutrient management systems (IPM, ICM, IPNM) and Good Agricultural Practices (GAP)
- Environmental issues and sustainability of Nepalese agriculture
- Organic agriculture, and organic products for export promotion and food safety
- General climatic conditions of Nepal
- Weather observation and instruments use in Nepal
- Climate change and its impact in agriculture sector
- Climate change adaptation and mitigation strategies of Nepal
- Disaster (landslide, drought, flood, cold spell, earthquake, pest outbreak) management in agriculture



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

#### 4. Legislations, Plan, Policies, Strategies, and Global Trade in Agriculture

- Agriculture sector in current constitution
- Concept, goals, target and strategies of current periodic plan
- Planning, implementation, monitoring and evaluation of agricultural projects
- Local governance and its role in agricultural development
- National Agriculture Policy, 2061 (2004)
- Agro-biodiversity Promotion Policy, 2063 (2007) (first amendment, 2071)
- Agri-business Promotion Policy, 2063 (2006)
- Agriculture Development Strategy (ADS), 2015-2035 AD: vision, mission, target, components and its salient features, implementation status of ADS, supporting projects and institutional arrangement
- National Seed Vision, 2013-2025 and its implementation status
- Nepal Trade Integration Strategy (NTIS), 2016 - Agricultural commodities
- Agricultural Extension Strategy, 2061 (2003)
- Seeds Act, 2045 (1988) and Seeds Rules, 2069 (2013)
- Plant Protection Act, 2064 (2007) and Plant Protection Rules, 2066 (2010)
- Pesticides Management Act, 2076 (2019) and Regulation
- Fertilizer Control Order, 2055
- Food Right and Food Sovereignty Act, 2076 (2019)
- Food Safety Policy, 2076 (2019)
- Agro Forestry Policy, 2076 (2019)
- World Trade Organization (WTO), Agreement on South Asian Free Trade Area. (SAFTA): their implication and impact in Nepalese agriculture
- Comparative advantage, agriculture commercialization and trading of Nepalese agricultural products.
- Implication of Sanitary and Phyto-sanitary (SPS) measures in Nepalese agricultural trade



#### 5. Agricultural Technology and Management

- Importance of technology generation, verification and dissemination in crop production and management
- Seed quality assurance: Seed production, laboratory testing, processing, handling, marketing and storage
- Variety release and registration system in Nepal
- Food and nutrition security: Concepts, status and dimensions
- Importance of pests and pesticides management
- Integrated Pest Management (IPM) concepts and strategies/practices
- Roles of pollinators in crop production
- Importance of microbial agents (fungus, bacteria, nematodes and virus) in plant protection

- Importance of crop diversification and commercialization in Nepal.
- Precision and protected agriculture: Concepts and technologies
- Agricultural crops for agro-forestry and environmental protection
- Strategies for commercialization of high value low volume commodities
- Concept of soil fertility and productivity
- Essential plant nutrients and their sources (manures and fertilizers)
- Soil reaction (pH) and soil reaction improvement
- Concept of Integrated Plant Nutrient Systems (IPNS) and its significance
- Contemporary agricultural extension practices in Nepal (plant clinic, mobile service, training and demonstration farm, farmer to farmer extension and pluralistic extension)
- Role of information and communication technology (ICT) in agriculture development
- Agricultural markets and marketing in Nepal
- Agricultural Management Information System (AMIS) in Nepal
- Agriculture Census, 2068
- Linkage of agro-industries with agriculture production and marketing
- Role of cooperatives in agriculture development in Nepal
- Research methodology in agriculture (basic concepts, common designs and their application)
- Trade liberalization and its implication in Nepalese agricultural product
- Value chain development: concepts and practices in agriculture
- Postharvest management of agricultural commodities
- Farming system and sustainable agriculture development
- Gender Equity and Social Inclusion (GESI) and women's role in Nepalese agriculture
- Conservation agriculture: concept, principles and practices

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