

प्रदेश लोक सेवा आयोग, मधेश प्रदेश
कृषि सेवा, लाइभस्टक, पोल्ट्री एण्ड डेरी डेभलपमेन्ट समूह, अधिकृत सातौं तहको खुला
तथा अन्तर सेवा प्रतियोगितात्मक परीक्षाको पाठ्यक्रम

द्वितीय पत्र : Technical Subject

Section A– 20 Marks

1. ANIMAL NUTRITION

20%

- 1.1 Conventional and non-conventional feeds
- 1.2 Nutritional contents of different species of pasture, fodder, fodder trees including indigenous species, agricultural and industrial by-products
- 1.3 Anti-nutritional factors in feeds and fodders
- 1.4 Different methods of nutritional analysis of livestock feeds and fodder
- 1.5 Computation and evaluation of ration for different livestock and poultry species
- 1.6 Utilization of wastes in animal feeding

Section B– 20 Marks

2. PASTURE AND FODDER

20%

- 2.1 Soil fertility evaluation- soil testing, plant analysis, deficiency symptoms and biological test in relation to pasture and fodder species
- 2.2 Soil organic matter and organic manure in relation to pasture and fodder species
- 2.3 Agronomical management of tropical, sub-tropical and temperate species of grasses and legumes such as stylo, lucern, berseem, oat, rye grass, soybeansorghum, paragrass, broomgrass, centro, napier, desmodium, vetch, clover, teosente, molasses, cowpea, velvet bean and kudzu etc.
- 2.4 Agronomical management of fodder trees such as Badahar, Kutmiro, Tanki, Epil epil, Khannyo, Kimbu, Kabro, Pakhuri, Dabdabe, Bakaino etc.
- 2.5 Pasture and rangeland management practices in different eco-zones
- 2.6 Different methods of forage conservation- hay, haylage, silage and their nutritive values
- 2.7 Utilization of crop residues – improvement of nutritive values
- 2.8 Agro-forestry / Silvi-pasture in community and leasehold forestry, fruit orchard
- 2.9 Principles and practices of forage seed production
- 2.10 Seed (foundation and certified) production of different pasture and fodder species including fodder trees in different eco-zones
- 2.11 Quality management of seed and methods of estimation

Section C– 30 Marks

3. ANIMAL BREEDING AND REPRODUCTION

20%

- 3.1 Concept of genetic resistance to diseases and parasites
- 3.2 Indigenous and exotic breeds of livestock and poultry and their characteristics
- 3.3 Methods of selection- independent culling, tandem, and selection index
- 3.4 Hormones of reproduction and their functions – estrous cycle, ovulation, fertilization, gestation and parturition; induction of heat and synchronization of ovulation
- 3.5 Reproductive disorders and their corrective measures
- 3.6 Collection, processing, evaluation and storage of warm and frozen semen
- 3.7 Sexed semen significance and usage

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- 3.8 Artificial insemination technique and pregnancy diagnosis
- 3.9 Embryo-transfer technology in livestock development
- 3.10 present status, problem and strategies for improvement of livestock breeding system in provincial and national level
- 3.11 Formulation of breeding plan for livestock and poultry species
- 3.12 Conservation and utilization of animal genetic resources

4. DAIRY

10%

- 4.1 Pasteurization and homogenization of milk
- 4.2 Standardization of milk, cream and other milk products
- 4.3 Methods of preparation, types, nutritive value of yoghurt, butter, ghee, cheese, paneer, khuwa, ice cream and chhurpi
- 4.4 Milk borne diseases in brief
- 4.5 Packaging and storing of milk and milk products
- 4.6 Development and project planning of mini dairy plant
- 4.7 Costing of different dairy products
- 4.8 Schedule for maintenance of mini dairy plants
- 4.9 Good hygienic practices in dairy

Section D– 30 Marks

5. LIVESTOCK AND POULTRY MANAGEMENT

30%

5.1 Husbandry

- 5.1.1 Functions and tools of farm management
- 5.1.2 Management of different stages of animal (young, pregnant, lactating, dry etc)
- 5.1.3 Management of livestock and poultry breeding stocks
- 5.1.4 Handling and utilization of livestock and poultry farm wastes
- 5.1.5 Hatchery management- factors influencing hatching results
- 5.1.6 Management of chicks, growers and layers including broilers
- 5.1.7 Hygienic milk production
- 5.1.8 Good husbandry practices
- 5.1.9 Climate SMART Livestock Management Practices

5.2 Animal Health

- 5.2.1 Sanitation and prophylactic measures focusing on vaccination
- 5.2.2 External and internal parasites - their control measures
- 5.2.3 Symptoms, prevention and control measures of common livestock and poultry diseases - scour, mastitis, H.S., FMD, Calf pneumonia, bloat, PPR, black quarter, enterotoxemia, foot rot, pox, swine fever, Ranikhet, Gamboro, Marex, CRD, lumpy skin disease, Bird flu
- 5.2.4 Metabolic disease
- 5.2.5 Zoonotic diseases and their importance to public health
- 5.2.6 Concept and strategies of one health

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5.3 Livestock Marketing

- 5.3.1 Relationship between livestock production and marketing
- 5.3.2 Types of markets for livestock and livestock products
- 5.3.3 Factors affecting the livestock markets
- 5.3.4 Livestock market promotion and sustainable management
- 5.3.5 Economics of poultry (layers and broilers) farming
- 5.3.6 Economics of livestock (cattle, buffalo, goat, sheep, pig, and rabbit) farming
- 5.3.7 Livestock value chain

प्रथम चरणको लिखित परीक्षाबाट छनौट भएका उम्मेदवारहरूलाई मात्र

लिइने सामूहिक परीक्षा (group test) को लागि

सामूहिक छलफल (Group Discussion)

यस प्रयोजनको लागि गरिने परीक्षण १० पूर्णङ्क र ३० मिनेट अवधिको हुनेछ जुन नेताविहीन सामूहिक छलफल (leaderless Group Discussion) को रूपमा अवलम्बन गरिने छ। दिइएको प्रश्न वा topic का विषयमा पालैपालोसँग निर्दिष्ट समयभित्र समूहबीच छलफल गर्दै प्रत्येक उम्मेदवारले व्यक्तिगत प्रस्तुती (Individual Presentation) गर्नु पर्नेछ। यस परीक्षणमा मूल्याङ्कनको लागि देहाय अनुसारको ३ जनाको समिति रहनेछ।

आयोगका अध्यक्ष वा सदस्य	-	अध्यक्ष
मनोविज्ञ	-	सदस्य
दक्ष / विज्ञ (१ जना)	-	सदस्य

सामूहिक छलफलमा दिइने नमूना प्रश्न वा Topic

उदाहरणको लागि – उर्जा संकट, गरीबी निवारण, स्वास्थ्य बीमा, खाद्य सुरक्षा, प्रतिभा पलायन जस्ता Topics मध्ये कुनै एक Topic मात्र दिइनेछ।