

लोक सेवा आयोग, बागमती प्रदेश
स्थानीय तह कृषि सेवा, लाइभस्टक, पोल्ट्री एण्ड डेरी समूह, अधिकृत छैटौं तह पशु विकास अधिकृत पदको
पाठ्यक्रम

पाठ्यक्रमको रूपरेखालाई निम्न अनुसार विभाजन गरिएको छ

लिखित परीक्षा (Written Examination) :- प्रथम चरण

पूर्णाङ्क :- २००

चरण द्वितीय चरण:-

(क) सामूहिक परीक्षण (Group Test)

पूर्णाङ्क :- १०

(ख) अन्तर्वार्ता (Interview)

पूर्णाङ्क :- ३०

परीक्षा योजना (Examination Scheme)

१. लिखित परीक्षा:- प्रथम चरण(First Phase)

पूर्णाङ्क:- २००

पत्र	विषय	खण्ड	पूर्णाङ्क	उत्तीर्णाङ्क	परीक्षा प्रणाली		प्रश्नसंख्या × अङ्क	समय
प्रथम	General Subject	Part I: General Awareness & General Ability Test	१००	४०	वस्तुगत (Objective)	बहुवैकल्पिक प्रश्न (MCQs)	५० प्रश्न × १ अङ्क	१ घण्टा ३० मिनेट
		Part II: General Technical Subject					५० प्रश्न × १ अङ्क	
द्वितीय	Technical Subject		१००	४०	विषयगत (Subjective)	छोटो उत्तर लामो उत्तर	४ प्रश्न × ५ अङ्क ८ प्रश्न × १० अङ्क	३ घण्टा

द्वितीय चरण : सामूहिक परीक्षण (Group Test) र अन्तर्वार्ता (Interview)

पूर्णाङ्क :- ४०

पत्र / विषय	पूर्णाङ्क	उत्तीर्णाङ्क	परीक्षा प्रणाली	समय
सामूहिक परीक्षण (Group Test)	१०		सामूहिक छलफल (Group Discussion)	३० मिनेट
अन्तर्वार्ता (Interview)	३०		बोर्ड अन्तर्वार्ता (Board Interview)	-

द्रष्टव्य

- लिखित परीक्षाको माध्यम भाषा नेपाली वा अंग्रेजी अथवा नेपाली र अङ्ग्रेजी दुवै हुनेछ ।
- प्रथमपत्र र द्वितीय पत्रको लिखित परीक्षा छुट्टाछुट्टै हुनेछ ।
- वस्तुगत बहुवैकल्पिक (Multiple choice) प्रश्नहरूको गलत उत्तर दिएमा प्रत्येक गलत उत्तर बापत २० प्रतिशत अङ्क कट्टा गरिनेछ । तर उत्तर नदिएमा त्यस बापत अङ्क दिइने छैन र अङ्क कट्टा पनि गरिने छैन ।
- बहुवैकल्पिक प्रश्नहरू हुने परीक्षामा कुनै प्रकारको क्याल्कुलेटर (calculator) प्रयोग गर्न पाइने छैन ।
- विषयगत प्रश्नहरूको हकमा तोकिएको अंकको एउटा लामो प्रश्न वा एउटै प्रश्नका दुई वा दुई भन्दा बढी भाग (Two or more parts of a single question) वा एउटा प्रश्न अन्तर्गत दुई वा बढी टिप्पणीहरू (Short notes) सोध्न सकिने छ ।
- द्वितीय पत्रमा (विषयगत प्रश्न हुनेका हकमा) प्रत्येक खण्डका लागि छुट्टाछुट्टै उत्तरपुस्तिकाहरू हुनेछन् । परिक्षार्थीले प्रत्येक खण्डका प्रश्नहरूको उत्तर सोही खण्डको उत्तरपुस्तिकामा लेख्नुपर्नेछ ।
- यस पाठ्यक्रम योजना अन्तर्गतका पत्र/विषयका विषयवस्तुमा जसुकै लेखिएको भए तापनि पाठ्यक्रममा परेका कानून, ऐन, नियम तथा नीतिहरू परीक्षाको मिति भन्दा ३ महिना अगाडि (संशोधन भएका वा संशोधन भई हटाईएका वा थप गरी संशोधन भई) कायम रहेकालाई यस पाठ्यक्रममा परेको सम्झनु पर्दछ ।
- प्रथम चरणको परीक्षाबाट छनौट भएका उम्मेदवारहरूलाई मात्र द्वितीयचरणको परीक्षामा सम्मिलित गराइनेछ ।
- पाठ्यक्रम लागू मिति: २०७७।१०।०७

प्रथम पत्र (Paper I): General Subject

Part (1) : - General Awareness & General Ability Test (50 Marks)

- 1. General Awareness and Contemporary Issues (21 ×1 Mark = 21 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, organizational 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 (21×1 Mark = 21 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)**
 - 2.4**

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

3. भाषा- नेपाली र अङ्ग्रेजी

3.1 नेपाली शुद्धाशुद्धि सम्बन्धी

(4 marks)

सरकारी कामकाजको नेपाली भाषाको लेखाइ विशेष गरी टिप्पणी र आदेश, पत्राचार, परिपत्र, निर्देशन, आदेश, विज्ञप्ति, सूचना, विज्ञापन, राजपत्र, प्रतिवेदन, वार्षिक प्रतिवेदन, ऐन-नियमावली तथा कार्यविधि, बैठकको माइन्ट तथा निर्णय, प्रशंसा पत्र, निमन्त्रणा पत्र, करारनामा, सम्झौता, कबुलियतनामा, बयान, वेवसाइट लेख लगायत सबै प्रकारका मस्यौदा वा अन्तिम लिखत तयारी गर्दा शुद्धाशुद्धि लेखाइको परीक्षण (विशेष गरी वर्णविन्यास, पदसङ्गति, नाम, सर्वनाम, विशेषण, क्रिया, अव्यय [नामयोगी, क्रियायोगी (क्रियाविशेषण), संयोजक, विस्मयादिबोधक, निपात], काल, वाच्य, पदवर्ग, अनुकरणात्मक शब्द, कारक र विभक्ति, लिङ्ग, वचन, पुरुष, उल्टो अर्थ आउने शब्द, पर्यायवाची शब्द, मौलिक शब्द: तत्सम शब्द, तद्भव शब्द, स्वदेशी आगन्तुक शब्द, विदेशी आगन्तुक शब्द, उपसर्ग लागेर निर्मित शब्द, प्रत्यय लागेर निर्मित शब्द, समास भएर निर्मित शब्द, द्वित्व भएर निर्मित शब्द, ह्रस्व दीर्घ, श, ष, स तथा ब र व, शिरबिन्दु र चन्द्रबिन्दुको प्रयोग गर्ने क्षमताको परीक्षण)।

११. English proficiency-

(4 marks)

- 2.1 Comprehension: questions will be asked on the passage given. The questions will try to accommodate the following areas: Fact finding, Inferential, core theme, true/false identification, issues raised, and language based.
- 2.2 Vocabulary: Questions will be asked to assess their grasp on the English language vocabulary. The questions will be of the following nature, -Meaning of the words (literal/figurative/contextual), single word for expressions, Synonyms/antonyms, Derivatives and Homonyms/ homophones.
- 2.3 Syntactic ability: Questions will be asked to assess the syntactic ability of the candidates. The questions will be based on the following categories: Agreement, tense, parallel structures, clauses, modifier, conditionals, phrasal expressions, shifts (tense, number, person), transformations, varieties, prepositions/conjunctions, and parts of speech.

Note: this above English Language Competence Test syllabus is devised for assessing the proficiency of the English language of candidates. With the view to assess the candidates' language competence, the syllabus aims:

- To test the understanding of their language through reading comprehension,
- To map the range of their vocabulary,
- To examine their syntactic ability.

The nature and standard of questions in English Language Competence Test will be such that an educated class XII level person will be able to answer them without any specialized study.

Part (2) : - General Technical Subject (50 Marks)

- 1. LIVESTOCK DEVELOPMENT RELATED PLANS, POLICIES AND ACTS 6%**
 - 1.1 Livestock sector in Agricultural Perspective Plan (APP) and current five- year plan
 - 1.2 Animal health and livestock services Act and Regulation
 - 1.3 Animal slaughterhouse and Meat Inspection Act and Regulation
 - 1.4 Livestock development approaches
- 2. ANIMAL NUTRITION 14%**
 - 2.1 Functions of water, proteins, fats, carbohydrates, minerals and vitamins in animal body and their requirements for different species of livestock and poultry - their sources and deficiency syndromes
 - 2.2 Intake, digestion, utilization and metabolism of various nutrients by ruminants and non-ruminants
 - 2.3 Factors affecting nutritive value of feed stuffs
 - 2.4 Feed additives – antioxidants, antibiotics, probiotics, antifungal, coccidiostat and growth promoters
 - 2.5 Utilization of crop and industrial by-products in poultry and livestock
 - 2.6 Feeds and feeding standards for each livestock and poultry species at different stages
- 3. PASTURE AND FODDER 26%**
 - 3.1 Morphology of pasture and fodder crops
 - 3.2 Classification of different types of pasture and fodder species
 - 3.3 Agronomical management of tropical, sub-tropical and temperate species of grasses and legumes such as stylo, berseem, oat, rye grass, soybean, sorghum, Para grass, broom grass, Centro, Napier, desmodium, vetch, clover, teosente, molasses, cowpea, velvet bean and kudzu etc.
 - 3.4 Nursery management of fodder tree species
 - 3.5 Agronomical management of fodder trees such as Badahar, Kutmiro, Tanki, Leucaena, Khannyo, Kimbu, Kabro, Pakhuri, Dabdabe, Bakaino etc.
 - 3.6 Different methods of forage conservation- hay, silage and their nutritive values
 - 3.7 Agro-forestry / Silvi-pasture in community and leasehold forestry, fruit orchard
 - 3.8 Principles and practices of forage seed production
 - 3.9 Seed (foundation and certified) production of different pasture and fodder species including fodder trees in different eco-zones
 - 3.10 Quality management of seed and methods of estimation
- 4. ANIMAL BREEDING AND REPRODUCTION 20%**
 - 4.1 The cell and cell division
 - 4.2 Segregation and recombination of genes
 - 4.3 Expression of genes – additive and non-additive gene action, causes of variation in gene expression
 - 4.4 Heritability and repeatability estimates
 - 4.5 Breeding values, measure of genetic and phenotypic relationships

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- 4.6 Principles of selection: Selection differential, selection response, selection intensity, generation interval, phenotypic, genetic and environmental correlation and genetic progress
- 4.7 Indigenous and exotic breeds of livestock and poultry and their characteristics
- 4.8 Types of breeding: inbreeding, line breeding, outcrossing, outbreeding, crossbreeding
- 4.9 Anatomy of male and female reproductive organs of different species of livestock and poultry
- 4.10 Hormones of reproduction and their functions – estrous cycle, ovulation, fertilization, gestation and parturition; induction and synchronization of ovulation
- 4.11 Reproductive disorders and their corrective measures- Infertility, Repeat Breeders, Cystic Ovary, Sterility and Anestrus etc.

5. LIVESTOCK AND POULTRY MANAGEMENT 24%

5.1 Husbandry

- 5.1.1 Housing and space requirement of different livestock and poultry
- 5.1.2 Different types of record maintenance of farm animals and poultry
- 5.1.3 Management of different stages of animal (young, pregnant, lactating, dry etc.)
- 5.1.4 Management of livestock and poultry breeding stocks
- 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

5.2 Animal Health

- 5.2.1 Sanitation and prophylactic measures
- 5.2.2 External and internal parasites - their control measures
- 5.2.3 Symptoms, prevention and control measures of common livestock and poultry diseases – calf scour, mastitis, H.S., FMD, Calf pneumonia, bloat, PPR, black quarter, enterotoxaemia, foot rot, pox, swine fever, Ranikhet, Gumboro, Marecks, CRD, etc.
- 5.2.4 Zoonotic diseases and their importance to public health

6. DAIRY 10%

- 6.1 Milk secretion phenomenon
- 6.2 Composition of milk of different livestock species
- 6.3 Factor affecting the composition of milk and milk quality
- 6.4 Nutritive value of milk with respect to different milk constituents
- 6.5 Physical and chemical properties of milk
- 6.6 Pasteurization and homogenization of milk
- 6.7 Legal standard of different dairy product in Nepal

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, soybean, sorghum, 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, 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 and synchronization of ovulation;
 - 3.5 Reproductive disorders and their corrective measures- Infertility, Repeat Breeders, Cystic Ovary, Sterility and Anestrus etc

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- 3.6 Collection, processing, evaluation and storage of warm and frozen semen
- 3.7 Artificial insemination technique, heat synchronization and pregnancy diagnosis
- 3.8 Embryo-transfer technology in livestock development
- 3.9 Formulation of breeding plan for livestock and poultry species

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

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
- 5.2 **Animal Health**
 - 5.2.1 Sanitation and prophylactic measures
 - 5.2.2 External and internal parasites - their control measures
 - 5.2.3 Symptoms, prevention and control measures of common livestock and poultry diseases – Calf scour, mastitis, H.S., FMD, Calf pneumonia, bloat, PPR, black quarter, enterotoxemia, foot rot, pox, swine fever, Ranikhet, Gamboro, Marex, CRD
 - 5.2.4 Zoonotic diseases and their importance to public health
- 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

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प्रथम चरणको लिखित परीक्षाबाट छनौट भएका उम्मेदवारहरूलाई मात्र लिइने सामूहिक परीक्षण

(Group Test) को लागि

सामूहिक छलफल (Group Discussion)

यस प्रयोजनको लागि गरिने परीक्षण १० पूर्णाङ्क र ३० मिनेट अवधिको हुनेछ जुन नेताविहिन 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 प्रस्तुति (**Individual Presentation**) गर्नु पर्नेछ । यस परीक्षणमा मूल्याङ्कनको लागि देहाय अनुसारको ३ जना भन्दा बढीको समिति रहनेछ ।

आयोगका अध्यक्ष/सदस्य	—	अध्यक्ष
मनोविज्ञ	—	सदस्य
दक्ष/विज्ञ (१ जना)	—	सदस्य

सामूहिक छलफलमा दिइने नमुना प्रश्न वा Topic

उदाहरणको लागि — दिगो विकास, सडक दुर्घटना, रोजगारी जस्ता Topics मध्ये कुनै एक Topic मात्र दिइनेछ ।