

**प्रदेश लोक सेवा आयोग, कर्णाली प्रदेश**  
**प्रदेश निजामती सेवा र स्थानीय सरकारी सेवाको कृषि सेवा, भेटरिनरी समुह, अधिकृतस्तर सातौं तह, पशु चिकित्सक पदको खुला प्रतियोगितात्मक लिखित परीक्षाको पाठ्यक्रम र परीक्षा योजना**

पाठ्यक्रमको रूपरेखा:- यस पाठ्यक्रम योजनालाई दुई चरणमा विभाजन गरिएको छ।

प्रथम चरण:- लिखित परीक्षा (Written Examination)	पूर्णाङ्क: २००
द्वितीय चरण:- (क) सामूहिक परीक्षण (Group Test)	पूर्णाङ्क: १०
(ख) अन्तर्वार्ता (Interview)	पूर्णाङ्क: ३०

**परीक्षा योजना (Examination Schedule)**

१. प्रथम चरण: लिखित परीक्षा (Written Examination) पूर्णाङ्क: २००

पत्र	विषय	खण्ड	पूर्णाङ्क	उत्तीर्णाङ्क	परीक्षा प्रणाली	प्रश्नसंख्या X अंक	समय
प्रथम	General Subject	Part I: General Knowledge and General Ability Test	१००	४०	वस्तुगत (Objective): बहुवैकल्पिक प्रश्न (Multiple Choice Questions)	५०X१=५०	१ घण्टा ३० मिनेट
		Part II: General Technical Subject				५०X१=५०	
द्वितीय	Technical Subject		१००	४०	विषयगत (Subjective)	८X५=४० ६X१०=६०	३ घण्टा

२. अन्तिम चरण: सामूहिक परीक्षण (Group Test) र अन्तर्वार्ता (Interview) पूर्णाङ्क: ४०

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

**दृष्टव्य:**

- यो पाठ्यक्रम रूपरेखा/योजनालाई लिखित परीक्षा र अन्तिम चरण )सामूहिक परीक्षण र अन्तर्वार्तागरी ( दुईखण्डमा विभाजन गरिएको छ ।
- खुला र समावेशी समूहको एउटै (Common) प्रश्नपत्रको माध्यमबाट परीक्षा सञ्चालन हुनेछ ।

३. लिखित परीक्षाको माध्यम भाषा नेपाली वा अंग्रेजी अथवा नेपाली र अंग्रेजी दुवै हुनेछ ।
४. 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 ।
५. बहुवैकल्पिक प्रश्नहरू हुने परीक्षामा कुनै प्रकारको क्याल्कुलेटर प्रयोग गर्न पाइने छैन ।
६. विषयगत प्रश्नहरूको हकमा तोकिएको अङ्कमा 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 सकिनेछ ।
७. परीक्षा हलमा मोबाइल वा यस्तै प्रकारका विद्युतीय उपकरण, पुस्तक, नोटबुक, झोलाजस्ता वस्तुहरू लैजान पाइने छैन ।
८. परीक्षामा सोधिने प्रश्नसंख्या, अङ्क र अङ्कभार यथासम्भव सम्बन्धित विषयमा दिईए अनुसार हुनेछ ।
९. विषयगत प्रश्न हुने पत्र/विषयका प्रत्येक भाग/खण्डका लागि छुट्टाछुट्टै उत्तरपुस्तिकाहरू हुनेछन् । परीक्षार्थीले प्रत्येक भाग/खण्डका प्रश्नहरूको उत्तर सोही भाग/खण्डको उत्तरपुस्तिकामा लेख्नुपर्नेछ ।
१०. यस पाठ्यक्रम योजना अन्तर्गतका पत्र/विषयका विषयवस्तुमा जुनसुकै 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 ।
११. प्रथम चरणको लिखित परीक्षाबाट छनौट भएका उम्मेदवारहरूलाई मात्र अन्तिम चरणको परीक्षामा सम्मिलित गराइनेछ ।
१२. लिखित परीक्षा र अन्तिम चरणको सामूहिक परीक्षण र अन्तर्वार्ताको कुल अङ्क योगका आधारमा अन्तिम परीक्षाफल प्रकाशित गरिनेछ ।
१३. पाठ्यक्रम लागू मिति: २०७९।०६।११

## **प्रथम पत्र (Paper I): General Subject**

### **Part (I) : - General Knowledge & General Ability Test (50 Marks)**

#### **1. General Knowledge and Contemporary Issues (25 ×1 Mark = 25 Marks)**

- 1.1 Physical, socio-cultural, economic geography and demography of Nepal with special focus on Karnali Province
- 1.2 Major natural resources of Nepal and Karnali province.
- 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 periodic plan of Karnali Province and Nepal
- 1.6 Information on sustainable development, environment, pollution, climate change, biodiversity, science and technology
- 1.7 General information on the UNO, FAO, SAARC & BIMSTEC
- 1.8 The Constitution of Nepal
- 1.9 Governance system and; Federal, Provincial and Local Governments
- 1.10 Provisions of civil service act and regulation relating to organizational structure, 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, staffing, 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 (25 ×1 Mark = 25 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 = 9 Marks)**

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)**

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

## **Part (II) : - General Technical Subject (50 Marks)**

### **1. Introduction (5 ×1 Mark = 5 Marks)**

- 1.1 History and current status of veterinary services delivery systems in Karnali Province and Nepal
- 1.2 Current status of livestock production and production systems of livestock and poultry in Karnali Province and Nepal
- 1.3 Indigenous and exotic breeds of livestock and poultry and their population in Karnali Province and Nepal
- 1.4 Recent livestock development related policies and plans of Government of Nepal and Karnali Province
- 1.5 Provisions made by APP, Livestock Master Plan, ADS, and Dairy Development Plan for Livestock sector development

### **2. Clinical subjects (20 ×1 Mark = 20 Marks)**

#### **2.1 Veterinary Medicine**

- 2.1.1 Distinguish between health and disease, General clinical examinations of animals, Normal physiological values like body temperature, rectal temperature, heart rates, respiratory rates, urinary volume and fecal output of different species of animals
- 2.1.2 Systemic disease: Etiology, diagnosis and treatment of: Disease of Blood, lymphatic and cardiovascular system, Disease of Digestive system, Common disease of eye and ear, Disease of Endocrine system, Disease of Nervous system, Disease of Reproductive and urinary system, Disease of Respiratory system, Disease of Skin
- 2.1.3 Metabolic and production diseases
- 2.1.4 Nutritional deficiencies disease
- 2.1.5 Trans-boundary animal disease (TADs): Definition, etiology, epidemiology, transmission, pathogenesis, symptoms, diagnosis, treatment, control and prevention of the following TADs: FMD; RP; PPR; CBPP; CCPP; Lumpy Skin Disease (LSD); Sheep pox and Goat pox; Blue tongue; Classical swine fever; African swine fever; Highly Pathogenic Avian Influenza; New castle disease.

- 2.1.6 Other Infectious disease: Definition, etiology, epidemiology, transmission, pathogenesis, symptoms, diagnosis, treatment, control of the following infectious disease: HS; BQ; Malignant edema; Tetanus; Anthrax; Tuberculosis; Paratuberculosis; Enterotoxaemia; Actinomycosis; Actinobacillosis; Brucellosis; Listeriosis; Leptospirosis; Mastitis; Strangles; Glanders; Degnala disease; Salmonellosis; Mycoplasmosis; Mad cow disease; Rabies; Scrapie; Canine distemper; Parvo Infection, Infectious Canine Hepatitis
- 2.1.7 Etiology, epidemiology, transmission, pathogenesis, symptoms, diagnosis, treatment, and control of the common disease caused by Chlamydia, Rickettsia and Fungi in different species of animals
- 2.1.8 Disease of Poultry: Definition, etiology, epidemiology, transmission, pathogenesis, symptoms, diagnosis, treatment, control of the following poultry disease: Fowl pox; Fowl Typhoid; Fowl Cholera; BWD; CRD; Infectious Coryza; Colibacillosis; Infectious Bursal Disease; Infectious Bronchitis; Marek's Disease; Avian Leucosis Complex; Egg Drop Syndrome; Leetchi heart disease; Brooder pneumonia; Mycotoxicosis
- 2.1.9 Parasitic disease: Etiology, epidemiology, transmission, pathogenesis, symptoms, diagnosis, treatment, control of the following parasitic disease: Trematode Infestation: LF; Paramphistomiasis; Nematode Infestation: Ascariasis; Nematodiasis; Schistosomiasis; Cestode Infestation: GID; Taeniasis; Echinococcosis. Major Trematodes, Nematodes and Cestodes of Livestock and Poultry. Ecto-parasites. Protozoan diseases: Anaplasmosis; Babesiosis; Theileriosis; Trypanosomiasis; Toxoplasmosis; and Coccidiosis
- 2.1.10 Diagnosis, treatment and management of different form of poisonings and snake bite
- 2.1.11 Prospects and constrains of animal and poultry vaccine production in Nepal, their uses and abuses

## **2.2 Veterinary Surgery**

- 2.2.1 Principles and procedures of general surgery
- 2.2.2 Pre and post operative considerations

- 2.2.3 Commonly used Antiseptics and disinfectants
- 2.2.4 Sterilizations of surgical materials and instruments.
- 2.2.5 Importance of sutures and suturing materials
- 2.2.6 Inflammations; Abscess; Tumors; Cysts; Haematoma; Hernia and their treatment
- 2.2.7 Different types of wounds and their treatment
- 2.2.8 Gangrene; Burns, Scald; Frost bite and their treatment
- 2.2.9 Fractures and dislocations, their diagnosis and treatment
- 2.2.10 Special surgery: Caesarian section; Rumenotomy; Ovario-hysterectomy/Spaying, Stringhalt;
- 2.2.11 Different types of local, regional and general anesthetics/procedures

### **2.3 Veterinary obstetrics and Gynecology**

- 2.3.1 Normal reproductive cycle of different farm animals and pets
- 2.3.2 Soundness examination of breeding bull
- 2.3.3 Detection of heat in farm animals
- 2.3.4 Artificial insemination
- 2.3.5 Pregnancy diagnosis
- 2.3.6 Heat synchronization and Embryo transfer technology
- 2.3.7 Concept of infertility and sterility
- 2.3.8 Diagnosis and treatment of Silent estrus, Anestrus, Repeat breeders, Abortion, Metritis, Pyometra, Mummification and maceration of fetus, Retained placenta
- 2.3.9 Dystokia and its correction
- 2.3.10 Prolapse of uterus, vagina and vulva
- 2.3.11 Use of hormones and prostaglandins

### **2.4 Epidemiology and Veterinary public health**

- 2.4.1 Definition, objectives and application of epidemiology
- 2.4.2 Epidemiological concept of disease control
- 2.4.3 Surveillance and monitoring of disease
- 2.4.4 Different types of epidemiological studies
- 2.4.5 Outbreak investigation
- 2.4.6 Prevalence rate, incidence rate and difference between them
- 2.4.7 Characteristics of host factor, agent factor and environmental factor
- 2.4.8 Different terminology used in epidemiology

- 2.4.9 Epidemiological reporting practices in Nepal
- 2.4.10 Cost analysis of the disease control programs
- 2.4.11 Risk analysis
- 2.4.12 Definition and objective of VPH (Veterinary Public Health)
- 2.4.13 Role of VPH in Animal production, food hygiene and environmental protection
- 2.4.14 Zoonotic diseases: Introduction, Classification, Diagnosis, surveillance and control
- 2.4.15 Meat inspection: anti-mortem, post-mortem and re-inspection
- 2.4.16 Different component and management of slaughter house
- 2.4.17 Milk hygiene
- 2.4.18 Concept of HACCP (Hazard analysis and critical control point)

## **2.5 Veterinary extension**

- 2.5.1 Definition, philosophy and principles of extension education
- 2.5.2 Classification of extension teaching/training methods
- 2.5.3 Public private partnership
- 2.5.4 Social mobilization awareness in veterinary services (CBOs, NGOs and INGOs)

## **2.6 Clinical pathology and parasitology**

- 2.6.1 Basic Laboratory Equipment, Tools and their sterilization techniques.
- 2.6.2 Materials to be dispatched to laboratory for different disease diagnosis
- 2.6.3 Hematological examinations (TC, DC, ESR, PCV, RBC count, Blood smears, hemoglobin estimation)
- 2.6.4 Blood chemistry (estimation of blood glucose, serum and calcium)
- 2.6.5 Liver and kidney functions tests
- 2.6.6 Urine analysis (Routine test, test for detection of protein, Glucose, Ketone bodies, blood, bile pigment)
- 2.6.7 Blood and urine culture and antibiotic sensitivity tests
- 2.6.8 California Mastitis Tests (CMT), Modified White Side Test
- 2.6.9 Important diagnostic tests: Different staining procedures, Tuberculin tests in animals, Test for pullorum disease (Rapid stained antigen), Brucellosis tests (RBPT and milk ring test) Test for rabies (Negri bodies test)
- 2.6.10 Post mortem examinations of Livestock and Poultry



- 2.6.11 Clinical parasitology (Examination of feces: direct smear method, concentration method and Floatation method), EPG count
- 2.6.12 Examination of skin scrapping and intestine scrapping
- 2.6.13 Bacterial, Viral and Fungal serological techniques
- 2.6.14 ELISA and PCR Test

### **3. Para-clinical subjects (10 ×1 Mark = 10 Marks)**

#### **3.1 Veterinary Microbiology**

- 3.1.1. General characteristics, properties, morphology, metabolism, growth and reproduction of bacteria, virus and fungus of various classes
- 3.1.2 Bacterial genetics, mutation and variations associated with virulence
- 3.1.3 Antigenicity, drug resistance
- 3.1.4 Principles of antiseptics, sterilization and disinfection
- 3.1.5 Resistance and immunity, antigen-antibody reaction and methods of detection Cell mediated and humoral immunity and immune mechanism. Immune system and its development. Antigen-antibody reactions
- 3.1.6 Immunization of animals
- 3.1.7 Hypersensitivity-allergy
- 3.1.8 Bacteriophage, their description and application
- 3.1.9 Laboratory techniques for bacterial, viral, fungal culture and identification
- 3.1.10 Important Diseases of domesticated animals caused by bacteria, viruses, rickettsia, chlamydia and fungi

#### **3.2 Veterinary Parasitology**

- 3.2.1 Parasites and Parasitism, Types of parasitism, host-parasite relationship
- 3.2.2 Importance of immunity against parasitic diseases
- 3.2.3 Classification and nomenclature of parasites and characteristics of different classes of parasites
- 3.2.4 Development of parasites in the host system
- 3.2.5 General description, classification, morphological characteristics and diseases caused by helminths, arthropods, insects and arachnida of domesticated animals and birds and

their epidemiology, effects and methods of controlling them

3.2.6 Protozoon parasites of domesticated animals and birds, their classification, morphology and the diseases caused by them with epidemiology, effects and control strategies

3.2.7 Identification of different parasites and the methods of their culture and laboratory growth

### **3.3 Veterinary Pathology**

3.3.1 Pathological responses of body to infection

3.3.2 Inflammation, classification and changes in inflammatory responses

3.3.3 Pathological disturbances and responses in circulatory system, cell metabolism, pigment metabolism

3.3.4 Disturbances in growth, Neoplasm and cancer

3.3.5 Healing, fever

3.3.6 Uroliths, choleliths, sialoliths, pancreoliths, enteroliths

3.3.7 Immune reactions. Hypersensitivity and auto immunity

3.3.8 Pathology of diseases of cardiovascular system, haemopoietic system, respiratory system, digestive system, urinary system, genital system, nervous system, endocrine system, sense organs and musculoskeletal system of domesticated animals and birds

3.3.9 Pathological changes in diseases caused by bacteria, viruses, fungus and parasites of domesticated animals and birds

### **3.4 Veterinary Pharmacology and Toxicology**

3.4.1 Principles of drug activity, pharmacokinetics and pharmacodynamics of the drugs

3.4.2. Routes of drug administration, Dose calculation, Labeling of drugs, Prescription

3.4.3 Anesthetics, hypnotics, sedatives, tranquilizers, analgesics, analeptics, antipyretics, anti-inflammatory drugs and antihistamines

3.4.4 Anaesthetics, Neuromuscular blocking agents, Peripheral and Central muscle relaxants

3.4.5 Drugs acting on autonomic nervous system, neurohumoral transmission, adrenergic antagonists, cholinergic antagonists

3.4.6 Drugs acting on cardiovascular system, digestive system, respiratory system, urogenital system, eye, ear, skin and mucus membrane

3.4.7 Endocrine pharmacology

- 3.4.8 Vitamins, Macro and micro-minerals, Feed additives
- 3.4.9 Antibacterial agents, antibiotics, antifungal agents, anthelmintics, antiprotozoal agents, antiviral and anticancer agents
- 3.4.10 Cytotoxic and immunosuppressive drugs
- 3.4.11 Hormones, prostaglandins, corticosteroids
- 3.4.12 Toxicity caused by metals and non metals, plants, commonly used drugs, agrochemicals, venomous bites and stings and environmental toxicity

#### **4. Pre- clinical subjects (8×1 Mark = 8 Marks)**

##### **4.1 Veterinary Anatomy**

- 4.1.1 Gross anatomy of skeletal system, muscular system, nervous system, digestive system, urogenital system, circulatory system, respiratory system, reproductive system, Endo/Exo-crine system and sense organs of domesticated animals and poultry
- 4.1.2 Introduction to cell structure, cell division and basic tissue of body. Histology of the organs of musculoskeletal, digestive, respiratory, urinary, reproductive, nervous, cardiovascular, endocrine, lymphoid, sense organs of domesticated animals and birds
- 4.1.3 General embryology, gametogenesis, fertilization, and development of fetus and body organs in domesticated animals and birds

##### **4.2 Veterinary Physiology**

- 4.2.1 General function and mechanism of action of various organs of circulatory, digestive, respiratory, urinary, reproductive, nervous, sensory system, endocrine system of domesticated animals and birds
- 4.2.2 Different tissue fluids-their composition and functions

##### **4.3 Biochemistry**

- 4.3.1 Biochemistry of respiration, renal function and acid base balance
- 4.3.2 Biochemistry of digestion and metabolism of carbohydrate, fat, protein, nucleic acid, minerals and trace elements
- 4.3.3 Basal and energy metabolism

- 4.3.4 Biochemistry of hormones and enzymes
- 4.3.5 Diagnostic biochemistry
- 4.3.6 Immunochemistry
- 4.3.7 Biochemistry of cellular and sub cellular components
- 4.3.8 Biochemistry of carbohydrate, lipids, proteins

#### **4.4 Animal Nutrition**

- 4.4.1 Animal feed classification, nutritional requirements, feeding system and feeding standards of farm animals and birds
- 4.4.2 Functions of various nutrients and process of digestion in ruminants, non ruminants and birds
- 4.4.3 Ration formulation for farm livestock and birds

#### **4.5 Livestock Production and Management**

- 4.5.1 Care and management of livestock and poultry during different production and growth stages
- 4.5.2 Housing system for livestock and poultry
- 4.5.2 Characteristics of different breeds of livestock and poultry
- 4.5.3 System of breeding and selection in livestock and poultry
- 4.5.4 Dairy and poultry production

### **5. Regulatory functions (7 ×1 Mark = 7 Marks)**

- 5.1 Provisions of the World Trade Organization (WTOs), Sanitary and Phytosanitary (SPS) measures
- 5.2 Technical Barrier to Trade (TBT), Trade related aspects of Intellectual Property Rights (IPRs) agreement
- 5.3 Introduction to OIE, its objectives, function, structure, Standard setting procedures and different standards as set in Terrestrial Animal health code, Aquatic animal health code
- 5.4 Different standards for Biological preparation and standard Diagnostic Tests for various diseases of farm animals
- 5.5 Role of Official Veterinary Services in International Trade of animals, products of animal origin, food safety, import risk analysis, import permit
- 5.6 International Veterinary certifications, quarantine inspections and procedures
- 5.7 Animal Health Related Acts & Regulations
  - 5.7.1 Animal Health and Livestock Service Act and Regulation

- 5.7.2 Slaughterhouse and Meat inspection Act and Regulation
- 5.7.3 Nepal Veterinary Council Act, 2055 and Regulation, 2057
- 5.7.4 Feed Act and Regulation
- 5.7.5 Drug Act, 2035
- 5.7.6 National Park and Wildlife Conservation Act
- 5.7.7 Nepal Standard (Certification Mark) Act
- 5.8 Legal Duties of a Veterinarian, Examinations of animals for soundness, injuries, and sudden death.
- 5.9 Animal welfare
- 5.10 Detection of Frauds, Malicious poisoning
- 5.11 Differentiation of different species of blood, serum, semen, hair, hide and bone

## **द्वितीयपत्र (Paper II) : Technical Subject**

### **Section A– 30 Marks**

#### **1. Introduction**

- 1.1 History and current status of veterinary services in Karnali Province and Nepal
- 1.2 Current status of livestock production and production systems of livestock and poultry in Karnali Province and Nepal
- 1.3 Status of Indigenous and exotic breeds of livestock and poultry in Karnali Province and Nepal
- 1.4 Recent livestock development related policies and plans of Government of Nepal and Karnali Province
- 1.5 Role of public and private sector in the promotion of veterinary services in Nepal
- 1.6 Provisions related to Livestock Insurance and Agricultural Loan

#### **2. Planning and management of veterinary laboratory services**

- 2.1 Management of veterinary investigation laboratory, Good Laboratory Practice
- 2.2 Planning and management of district veterinary services, livestock production services and livestock product marketing services
- 2.3 Herd health management and disease prevention
- 2.4 National disease control program
- 2.5 Planning and management of veterinary projects

### **Section B– 50 Marks**

#### **3. Animal Health management**

- 3.1 Etiology, diagnosis and treatment of systemic diseases of livestock, pets, equine and poultry
- 3.2 Definition, etiology, epidemiology, pathogenesis, symptoms, diagnosis, treatment and control of notifiable Trans-boundary animal disease
- 3.3 Definition, etiology, epidemiology, pathogenesis, symptoms, diagnosis, treatment and control of economically important infectious disease of farm livestock, pets, equine and poultry
- 3.4 Etiology, epidemiology, pathogenesis, symptoms, diagnosis, treatment and control of economically important parasitic disease, External and Internal parasites of livestock, pets, equine and poultry

- 3.5 Zoonotic disease of public health importance
- 3.6 General control measures against parasitic and infectious diseases of animals and birds.
- 3.7 Management of production and metabolic disease of farm livestock
- 3.8 Definition, etiology, diagnosis, treatment and management of sub-fertility, infertility, sterility and abortion in livestock under Nepalese condition
- 3.9 Importance of breeding management, A.I, and pregnancy diagnosis in farm animals
- 3.10 Reproductive disorders and their management in livestock
- 3.11 Current practices and importance of epidemiological reporting, and animal health information system
- 3.12 Outbreak investigation and epidemic control
- 3.13 Laboratory diagnosis of important disease of animals and poultry
- 3.14 Prospects and constrains of vaccine production and use in Nepal
- 3.15 Veterinary drugs administration, their uses and abuses

### **Section C– 20 Marks**

#### **4. International standard, quality and regulation**

- 4.1 Slaughter house management and meat inspection: principles and procedures
- 4.2 Provisions of the World Trade Organization (WTOs), Sanitary and Phytosanitary measures (SPS)
- 4.3 Introduction to OIE (World Animal Health Organization), its objectives, function, and its role in standard setting
- 4.4 Role of Official Veterinary Services in International Trade of animals, products of animal origin, food safety, import risk analysis, import permit, International Veterinary certifications, quarantine inspections and procedures
- 4.5 Animal health related Acts & Regulations:
  - 4.5.1 Animal Health and Livestock Service Act and regulations
  - 4.5.2 Slaughterhouse and Meat inspection Act and regulations
  - 4.5.3 Nepal Veterinary Council Act, 2055 and regulation, 2057
  - 4.5.4 Feed Act and regulations
  - 4.5.5 Drug Act
  - 4.5.6 National Park and Wildlife Conservation Act
  - 4.5.7 Nepal Standard (Certification Mark) Act

- 4.6 Legal Duties of a Veterinarian, Examinations of animals for soundness, injuries, and sudden death
- 4.7 Animal welfare
- 4.8 Detection of Frauds, Malicious poisoning
- 4.9 Differentiation of different species of blood, serum, semen, hair, hide and bones

द्वितीयपत्रको प्रश्न तालिका

खण्ड	A		B	C
एकई	1	2	3	4
छोटो प्रश्नसंख्या	2	-	4	2
लामो प्रश्नसंख्या	1	1	3	1



### सामूहिक परीक्षण

सामूहिक परीक्षण व्यक्तित्व परीक्षणको एक अंश हो । प्रदेश निजामती सेवाको क्षेत्र विस्तार तथा कार्य पद्धति परिवर्तन समेत भैरहेको सन्दर्भमा नेपाल सरकारका नीति, योजना, कार्यक्रम लगायत शासन व्यवस्था सम्बन्धी समसामयिक विषयमाथि विचारविमर्श – छलफल गरी तिनको अझै बढी प्रभावकारी तथा कार्यान्वयन योग्य समाधान पहिल्याउने सम्बन्धमा उम्मेदवारहरुको क्षमता पहिचान गर्नु यस परीक्षणको मूलमर्म हो । यसको लागि छलफल, विचारविमर्श गरी परिस्थिति बुझ्न सक्ने – निर्णय दिने, जनतालाई क्रियाशील बनाउने, चित्त बुझाउने, निर्धारित लक्ष्य अनुसार काम गर्ने/गराउने, जस्ता कामका लागि लेखन क्षमताका साथसाथै समस्यालाई यथार्थपरक ढंगले पहिचान गर्नसक्ने, वाकपटुता, शिष्टता, तर्कशक्तिको पनि आवश्यकता पर्दछ ।

त्यसैले यस परीक्षणमा उम्मेदवारहरुको बौद्धिक क्षमता, संचार सीप, समूह गतिशिलता, व्यवहार, व्यक्तित्व, मनोवृत्ति, क्रियाशीलता, निर्णयशक्ति, समस्या समाधान क्षमता, नेतृत्व क्षमता, समय व्यवस्थापन तथा व्यक्तित्वमा भएका अन्य गुणहरुको आँकलन अर्थात परीक्षण र मूल्याङ्कन गर्नको लागि उम्मेदवारहरुलाई कुनै समसामयिक विषय/सवाल/समस्यामा सामूहिक छलफल गरीसमस्या समाधान केन्द्रीत प्रभावकारी र कार्यान्वयन योग्य समाधान निकाल्न दिइन्छ ।

### सामूहिक छलफल

यस प्रयोजनको लागि गरिने परीक्षण १० पूर्णाङ्क र ३० मिनेट अवधिको हुनेछ जुन नेताविहिन सामूहिक छलफलको रूपमा अवलम्बन गरिनेछ । दिइएको प्रश्न वा Topic का विषयमा पालैपालोसँग निर्दिष्ट समयभित्र समूहबीच छलफल गर्दै प्रत्येक उम्मेदवारले व्यक्तिगत प्रस्तुति गर्नुपर्नेछ । यस परीक्षणमा मूल्याङ्कनको लागि देहाय अनुसारको ३ जना भन्दा बढीको समिति रहनेछ ।

आयोगका अध्यक्ष वा अध्यक्षले तोकेको सदस्य	– अध्यक्ष
आयोगका सदस्य	– सदस्य
मनोविज्ञानवेत्ता	– सदस्य
दक्ष/विज्ञ (१ जना)	– सदस्य

## नमुना प्रश्नहरू (Model Questions)

### A) बहुवैकल्पिक प्रश्न (MCQs)

१. कर्णाली प्रदेशमा पशु अस्पताल तथा पशु विकास कार्यालय कति जिल्लामा छ ?  
क) ८                      ख) ९                      ग) १०                      घ) ११
२. हाल नेपाल सरकारले पशुपन्छी विमामा प्रिमियमको कति प्रतिशत अनुदान दिने गरेको छ ?  
क) ७०                      ख) ७५                      ग) ८०                      घ) ८५
३. Which of the following disease is Zoonotic one?  
क) African Swine Fever                      ख) Lumpy Skin Disease  
ग) Mad Cow Disease                      घ) Tetanus
४. नेपालमा हाल प्रचलनमा रहेको सिमन स्ट्रुको मात्रा कति छ ?  
क) ०.२५ सि.सि.                      ख) ०.५ सि.सि.                      ग) ०.७५ सि.सि.                      घ) १ सि.सि.
५. The person assigned to inspect agrovet, farm, vaccines etc according to the Animal Health and Livestock Service Act is known as  
क) Meat Inspector                      ख) Quarantine Officer  
ग) Veterinary Officer                      घ) Veterinary Inspector

### B) विषयगत (Subjective)

१. कर्णाली प्रदेशमा रहेको स्थानीय जातका पशुपन्छीहरूको सूची तयार गरी यसको संरक्षणमा प्रदेश सरकारको भूमिका के छ ? छोटकरीमा लेख्नुहोस ।  
२+३=५
२. Describe briefly the status of Animal welfare in Nepal.  
5
३. List out the name of Trans-boundary Animal Diseases (TADs) important for Nepal. Briefly describe etiology, epidemiology, pathogenesis, symptoms, diagnosis, treatment and control of PPR.  
2+1+1+1+2+1+1+1=10
४. Define Basic Veterinary Laboratory (BVL). Enlist the equipment required for district level BVL. Briefly describe the methods of sterilization of laboratory equipment.  
1+4+5=10
५. Mention briefly about the major provisions in Animal Health and Livestock Service Act and Regulation of Nepal.  
10