GROUP-23

V.L.D.A. (Level- Matric+ Two years Dip in VLDA)

1) General awareness, Reasoning, Mathematics, Science, History including Haryana related history, current affairs, literature, Geography, Civics, Environment, Culture etc.- (**Weightage 20%)**

2) Computer terminology, Fundamentals, word software, excel software, Power point, internet, web browsing, Communication, emails, downloading and uploading data on websites etc**. -**

(Weightage 10%)

3) Subject related syllabus- **(Weightage 70%)**

INTRODUCTORY ANATOMY OF THE DOMESTIC ANIMALS

Introduction to arrangement of different bones of axial and appendicular skeleton of ox with comparison to that of horse (only identification). Classification of bones. Introduction to different organs of digestive, respiratory, urinary, male and female genital systems circulatory and central nervous systems of ox.

INTRODUCTORY PHYSIOLOGY OF DOMESTIC ANIMALS

Physiological functioning of digestive system, respiratory system, cardiovascular system, renal system and nervous system of domestic animals, functions of hormones secreted from major endocrine glands in domestic animals.

ELEMENTARY PRINCIPLES OF ANIMAL NUTRITION

Elementary description of nutrients and their requirements for maintenance, growth, reproduction, lactation, egg production, wool production and work production: General principles of feeding and common practices for different categories of live-stock: A brief 3 description of production of common fodder crops including pastures and knowledge about common grasses. a) Preparation, preservation and storage of hay and silage. b) Common feed and fodder, their classification and identification.

INTRODUCTION TO LIVE-STOCK & POULTRY MANAGEMENT

Important definitions related to animal management, care of animals (Cattle, Sheep, goat and Swine) during and after parturition, housing of animals: Routine management practices like grooming, washing, dipping, casting, shearing and exercising: Raising and feeding of farm animals: Signs of health in different animals: Care of sick animals: Milking management: Control of vices of animals: Introduction to feeding and management of horses and camels. Importance of Poultry farming: Elementary knowledge of incubation and hatchery management; Management of chicks, growers and layers: Poultry housing and feeding: Vaccination against poultry diseases.

INTRODUCTION TO ANIMAL BREEDING

1. General terms used in animal breeding. 2. Important breeds of live-stock (Cattle buffalo, sheep, goat and swine) and poultry, their origin distribution and breed characteristics. 3. Basis of selection. 4. Selection of a Breeding Bull and a Dairy Cow/Buffalo. 5. Methods of selection. 6. Economic utility characters of different species of live-stock and poultry. 7. Importance of live-stock record keeping and various types of records. 8. Elementary knowledge of breeding systems.

PHARMACY

Definitions of terms: Pharmacology, Pharmacy, Chemotherapy, Therapeutics, Toxicology, Posology, Metrology etc. Sources and nature of drugs; Routine Pharmaceutical processes; Various dosage forms with suitable examples; Principles of compounding and dispensing of drug preparations; Different methods for the administration of drugs; Prescription reading- parts of prescription and commonly used Latin abbreviations in prescription writing, Definition and general properties of various classes of drugs acting on digestive system, urinary system, cardiovascular system, respiratory system, reproductive system, skin and mucous membrane, Definition and general properties of various classes of drugs acting

as antimicrobials, anti-inflammatory, antipyretics and analgesics, Antiseptics and disinfectants, Concept of Ethnic veterinary practices, Ayurvedic and herbal drugs used in the treatment of animal diseases.

ELEMENTARY ANIMAL HUSBANDRY EXTENSION

1. Animal Husbandry Extension - Meaning, concept, levels, functions, philosophy and principles. 2. Communication - Definition, elements, models, barriers and factors affecting communication. 3. Adoption - Definition, stages of adoption, adopter's categories and factors affecting adoption of animal husbandry practices. 4. Audio-Visual Aids - Meaning importance in veterinary and animal husbandry extension, selection criteria of suitable A.V. aids and their limitation. 5. Extension Methods- Meaning, concept, classification and their relative merits and demerits. 6. Programme planning – Meaning, objectives, principles and steps in programme planning. 7. Extension programmes launched by State Department of Animal Husbandry and SAU/SVU for the development of animal husbandry sector. 8. Need assessment of livestock farmers and problems identification.9. Different type of meat animals and their meat characteristics (in brief), slaughtering technique of sheep, goat, pig and poultry, preservation of meat and eggs.

INTRODUCTION TO ANIMAL PRODUCTS TECHNOLOGY

Handling, storage and distribution of meat, poultry and eggs. Candling and grading of eggs (also to be demonstrated in theory classes). Milk definition and its composition; Factors affecting composition and quality of milk; Elementary knowledge about nutritive valve; Source of bacterial contamination of milk and clean milk production. Sampling; C.O.B. and alcohol tests; pH by indicator paper; Specific gravity test; Estimation of fat, S.N.F and T.S in milk (also to be demonstrated in theory classes). Milk collection; Legal standards of milk; Processing, packaging and distribution of milk.

ELEMENTARY MEDICINE

Preliminary knowledge about signs of diseases; Clinical methods of examination and detection of abnormalities ; Abnormal body discharge ; Body temperature, pulse and respiration ; Methods of injecting drugs, sera, vaccine etc ; Use of canula, passing stomach tube, probang, teat syphon and other instruments for treatment ; General agents responsible for causing diseases: Bacteria, Viruses, Fungi and Parasites ; General principles of prevention and control of diseases ; Utilization and disposal of carcasses ; Elementary clinical diagnostic methods, history and general examination. Non infectious diseases - symptoms and first aid of following diseases: Stomatitis, Choke, Upper respiratory tract infections, Tympany, Impaction, Constipation, Diarrhoea, Dysentery, Indigestion, Pneumonia, Haemoglobinuria, Milk fever, Ketosis, Pica in camels, Retentions of urine. Infectious diseases - Symptoms and first aid in the following diseases: Bacterial and Viral diseases: Johne's disease, Mastitis, Haemorrhagic septicaemia, Anthrax, Black Quarter, Tetanus, T.B., Enterotoxaemia, lumpy skin disease, bird flu, Rinderpest, Rabies, Swine Fever. Parasitic diseases: Babesiosis, Theileriosis, Trypanosomiasis, Coccidiosis, Ascariasis: Control of flies, lice, ticks and mites and mange. Poultry diseases: Ranikhet disease, Fowl pox, Salmonellosis. Common camel diseases Vaccination: Elementary Knowledge about vaccination of Domestic animals & Poultry

INTRODUCTION TO SURGICAL PROCEDURES

Introduction and common terms used in Surgery : Sterilization in surgical practice ; Introduction to superficial surgical ailments (Abscess, Fistula, Sinus, Wounds, Gangrene Cyst) ; Introduction to dental care ; Introduction to hoof management ; First aid management of fracture, bloat, haemorrhage ; Introduction to post operative management ; Application and uses of various antiseptics, lotions, ointments and tinctures in surgical practice. Introduction to inflammation, basics of pre, intra and post-operative considerations in animals, disinfection, sepsis, and antisepsis, preparation of surgical packs and general surgical instruments, suture materials and surgical needles, introduction of hematoma and tumours, care of hernia, sinus and fistula basic care of necrosis and gangrene, method of dehorning, docking and castration, elementary management practice of urinary system affections, introduction of affections of teat (laceration, hard milker, free milker, lactoliths), banging and splint application techniques, introduction to burn and its preliminary management.

INTRODUCTION TO REPRODUCTIVE DISORDERS

Introduction to reproductive patterns of live-stock; Transport of materials from abortions; Preparation of animals; Intrauterine medication; Assistance to parturient animals; Care of new born; Nomenclature

of gynaecological and obstetrical conditions, preliminary knowledge of male and female infertility and its management, assistance in handling obstetrical cases, preliminary knowledge of different obstetrical conditions and their first aids management.

INTRODUCTION TO REPRODUCTION, ARTIFICICAL INSEMINATION AND STORAGE OF SEMEN

Estrous cycles of domestic animals: Signs of heat in domestic animals: Gestation periods of domestic animals: Symptoms of parturition in cattle, buffaloes, sheep, goat and pigs; Advantages and limitations of the technique of Artificial Insemination, structure and function of male and female reproductive organs of bovines, horse, pig, sheep, goat and poultry, gametogenesis (spermatogenesis and Oogenesis), techniques of artificial insemination.

INTRODUCTION TO CLINICAL PROCEDURES & ANIMAL FARM PRACTICES

1. Clinical procedures:

Introduction to laboratory diagnosis of blood (Hb, TLC, DLC,TEC, PCV, ESR, MCH, MCHC), faeces (blood, sedimentation, flotation, parasitic), skin scrapping and urine (chemical, microscopic and physical), collection of clinical material for laboratory examination.

2. Animal Farm Practices

Animal Breeding: -

Cattle

1. Feeding, management & disease control in young calves. 2. Animal identification and performance recording. 3. General management & feeding.

Poultry

Brooding of chicks from 0-6 weeks, Demonstration of A.I.

Animal Nutrition

1. Different methods/procedures for efficient purchase of feed ingredients. 2. Types of storage structures form of storage, scientific requirements for safe storage and different methods to avoid storage losses of feeds & feed ingredients. 3. Processing of feed ingredients to improve their nutritive valve. 4. Ration formulation and preparation for livestock and poultry. 5. Complete feed block formulation and preparation. 6. Urea molasses mineral block formulation and preparation.

Live Stock & Poultry Management: -

Importance of identification and different methods of identification used in farm animals, disease prevention and control in a livestock farm i.e. Disinfection of animal house and pastures, disposal of carcasses i.e. burial of carcasses, burning of carcasses.

Buffalo

1. Identification of External body parts. 2. Handling and restraining of animals. 3. Selection, culling and judging of animals.

Important Note: The Weightage as mentioned against the syllabus is tentative & may vary.