TEACHING VETERINARY CLINICAL COMPLEX (TVCC)

A. VETERINARY CLINICAL PRACTICE

VCP-411(Semester-VII) Credit Hour- 0+5=5

VCP-421(Semester-VIII) Credit Hour- 0+5=5

VCP-511 (Semester-IX) Credit Hour- 0+5=5

Total: 15

The students shall be Imparted the trainings on rotation basis in the following sections of Teaching Veterinary Clinical Complex (TVCC):

1. **Ambulatory Section:**

Handling, examination, diagnosis and treatment of sick animals under field conditions under the supervision of faculty designated for Ambulatory Clinical activity. Ambulatory Clinics shall be operated by small groups of students and faculty through an equipped mobile unit in which the departments of Veterinary Medicine, Veterinary Gynaecology and Obstetrics and Veterinary Surgery and Radiology shall be involved.

2. Diagnostic Laboratory Section:

The Clinical Diagnosis Laboratory will form an important component of Teaching Veterinary Clinical Complex. The Diagnostic Laboratory will impart training to groups of students for laboratory evaluation and interpretation of clinical samples leading to diagnosis/comparative diagnosis of diseases. This activity will involve training in examining clinical samples (biochemical, toxicological, pathological, parasitological and bacteriological) at the clinical complex, analyzing and correlating with clinical findings and interpreting the results.
Note: The Laboratory shad be run in collaboration with the Department of Pathology.

3. Medicine Section:

Orientation to Veterinary Clinics including hospital set up, administration and functioning. Methods of record keeping. Retrieval, processing, analysis and interpretation of data. Hospital management involving out patient department (OPD), Indoor patient, Critical care/intensive care unit, sanitation, up keeping, practice management etc. Doctor client interaction: Orientation to local language/dialect/ local terminology of the diseases.
Registration, filling up registration cards, history taking. Relating generic and trade names of drugs along with their doses, indications and contraindications to prescribed treatment regimens. Familiarization and practice of first aid procedures and emergency medicine. Practice of collection, labeling, packaging and evaluation of laboratory samples.
Clinical practice comprising of clinical examination of the patient, with emphasis on history taking, examination techniques- palpation, percussion and auscultation, systematic examination of various systems, recording of clinical observations viz. temperature, respiration, pulse, cardiac sounds, cardiac
function, pulmonary function, functional motility of digestive system, routes and techniques of administration of medicaments. Diagnosis and treatment of common clinical cases like pharyngitis, laryngitis, stomatitis, indigestion, ruminal impaction, tympany, enteritis, traumatic reticulo-peritonitis, traumatic pericarditis, pneumonia, haemoglobinurea. haematuria. milk fever, ketosis, rickets, osteomalacia, common poisoning, and others.
Collection of materials like urine, faeces, skin scraping, blood, milk and other body fluids for laboratory tests. Preparation of case records; follow-up records etc. Treatment of causalities and other emergencies. Screening of livestock/poulty through tests, mass diagnostic campaigns. Vaccination and other disease prevention and control programmes in the field.
Practice of feeding of sick animals. Acts and regulations pertaining to generation and disposal of biomedical wastes in veterinary institutions. Biomedical waste generation, handling, storage, sorting, coding, transportation and disposal. Hazards of biomedical waste, and impact of biomedical waste on the environment.

4. Gynecology & Obstetrics Section:

Practice of pregnancy diagnosis, examination of cases of anoestrus, silent oestrus and conception failure. Treatment of cases of metritis, cervicitis and vaginits. Handling of case of retention of placenta. Management of Ante and post partum prolapse of vagina. Examination and preliminary handling of dystocia cases, faetotomy, caesarian . operation Castration of male carves. Breeding soundness evaluation of bulls. Collection of cervical and vaginal mucus for cytology. Rectal examination of genitalia, vaginal examination. Familiarization

with common drugs & hormones used in reproductive disorders, epidural and local anaesthesia for gynaecological cases. Filling of clinical case records and their maintenance.

5. **Surgery & Radiology Section:**

Familiarization with equipments used in different sections of the Hospital. Restraining and positioning of different species of animals for examinations, diagnosis and surgical treatment Prescription of common drugs, their doses and uses in clinical surgical practice. Filling of clinical case records and their maintenance. Preparation of surgical packs, sterilization procedures for surgical instruments, drapes, operation theaters. Passing oi' stomach tube and gastric tube. Catheterization and urine collection.

Techniques of examination of neuromuscular and skeletal functions, Familiarisation with antiseptic dressing techniques, bandaging, abdomino-centesis, thoracocentesis. Topography anatomy of Cattle, Horse and Dog. Radiographic positioning and terminology.

Treatment and Management of inflammation, wounds, abscess, cysts, tumors, hernia, haematoma hemorrhage, sinus, fistula, necrosis, gangrene, bum, sprain and tendinits. First aid in fractures and dislocations and other affections of joints, facial paralysis, Eye worm & other minor affections of Eye. irregular teeth and their rasping, tail amputation, knuckling, upward fixation of patella (medical patellar desmotomy) etc.

Familiarisation with the landmarks for the approach to various visceral organs, thoraco-centesis, abdominocentesis. Laparotomy, palpation and visualisation of viscera. Urethrotomy, castration, vasectomy, caudectomy, ovaiio-hysterectomy, thoracotomy, cystotomy, cystorraphy and spleenectomy. Examination of horse for soundness and preparation of certificate for soundness. Tenotomies, suturing of tendon, shortening of tendon.

Note: The skills required for the Comprehensive Examination of Core Competence to be held for the purpose of assessment/evaluation of Internship shall be imparted under these courses.

SEMESTER- VII

VETERINARY CLINICAL BIOCHEMSITRY AND LABORATORY DIAGNOSIS –I

B. 1. VLD-411 **Credit Hours 0+1 = 1**

Training in examining clinical samples (biochemical, pathological, parasitological and bacteriological). Analysing and correlating with clinical findings and interpreting the results. Collection, labeling, transportation, and preservation of body fluid samples. Writing results and report Interpretation of date in relation to specific diseases.

Clinical significance and interpretation of serum glucose, lipids, proteins, blood urea nitrogen, creatinine, uric acid, ketone bodies, bilirubin & electrolytes from samples. Clinical significance and interpretation of examination of urine samples.

Clinical evaluation of blood (Haemoglobin, packed cell volume, total erythrocytic count erythrocytic sedimentation rate, total leukocytic count and differential leococytjc count) from clinical samples. Laboratory evaluation and diagnosis of samples for parasitic diseases (routine faecal examinations- direct smear method, simple sedimentation and floatation methods, Quantitative faecal examination, pastoral larval counts). Examination of skin scrapings, examination of blood smear/blood for diagnosis of blood protozoan diseases.

SEMESTER VIII

VETERINARY CLINICAL BIOCHEMISTRY AND LABORATORY DIAGNOSIS-II

B. 2. VLD-421 Credit Hours 0+1=1

Evaluation of acid-base balance and interpretation. Biochemical aspects of digestive disorders, endocrine functions. Liver, kidney and pancreatic function tests. Role of enzymes for detection of tissue / organ affections.

Preparation of microscopic slides from tissue collected for diagnosis and its' histopathological interpretation. Examination of biopsy and morbid material for laboratory diagnosis, Orientation to a clinical Microbiology laboratory, Collection, transport and processing of specimens from clinical cases for diagnosis of important bacterial, fungal and viral diseases. Isolation of bacteria from clinical samples, Identification of bacteria by Grams staining and cultoral/btochemical characteristics. Drug sensitivity and rationale for therapy. Diagnosis of diseases by employing tests like Agar Gel precipitation Test Enzyme linked immunosorbent assay. Dot immunoassay, tube agglutination test, slide agglutination tests etc.

Practice for separation of toxic materials from samples. Detection of arsenic, lead, antimony, mercury, copper, zinc, fluorides. Nitrates/nitrites cyanides and tannins in body fluids/tissues of animals. Evaluation of samples of toxic residues. Appreciation and differentiation of symptoms caused by various types of toxic materials including agrochemicals plants and drugs.

SEMESTER- VIII

VETERINARIAN IN SOCIETY

C. TVC-421 Non-Credit Course: 1 +0=1

Man-Animal and Society. Social - ecological Interactions in animal rearing. Client oriented approach to physical examination of animals. Concepts in interaction with animal owner/clients. Bio-medical ethics and clinical evaluation. Communication skills. Anima/owner information management Human-animal bonds. Hearth maintenance in individual animals and population. Veterinary public health as component of society. Professional development Societal responsibilities of veterinarians. Societal responsibilities with respect to Private and Public Hospital and practice management Social conduct and personality profiles in management of clinical practice. Veterinary professional interactions with Health Authorities, Drug and Food Regulatory Authorities, Zoo/Animal Welfare organisations and Civil Administration. Role of Veterinarian in Natural Calamities and Disaster Management.