VETERINARY CLINICAL MEDICINE, ETHICS AND JURISPRUDENCE

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VCM 601: RUMINANT CLINICAL MEDICINE – I  

Objective: Study of diseases of various body systems of bovine, sheep and goats.

Theory
UNIT I
General systemic states.

UNIT II
Diseases of alimentary system, liver and urinary system.

UNIT III
Diseases of respiratory and nervous system.

Suggested Readings

VCM 602: RUMINANT CLINICAL MEDICINE – II  

Objective: Study of diseases of various body systems of bovine, sheep and goats.

Theory
UNIT I
Diseases of cardiovascular system, blood and blood forming organs.

UNIT II
Diseases of musculoskeletal system and skin

UNIT III
Diseases of eyes, ears, nose

Suggested Readings
VCM 603: EQUINE CLINICAL MEDICINE 2+0

Objective: Study of diseases of various body systems of horses, donkeys and mules.

Theory
UNIT I
General systemic states and diseases of alimentary system and liver.

UNIT II
Diseases of respiratory, cardiovascular sytem, blood and blood forming organs

UNIT III
Diseases of urinary and nervous systems

UNIT IV
Diseases of musculoskeletal system and skin.

Suggested Books

VCM 604: CANINE AND FELINE CLINICAL MEDICINE 2+0

Objective: Study of diseases of various body systems of dogs and cats.

Theory
UNIT I
Specific needs of canine and felines, Pet psychology; pet behavior and adaptation needs; General systemic states. And

UNIT II
Diseases of digestive system, liver and pancreas, cardiovascular system, blood and blood-forming organs,

UNIT III
Diseases of respiratory system, urogenital and nervous systems.

UNIT IV
Diseases of musculoskeletal system and skin.

UNIT V
Diseases of endocrine system, diseases of new borne animals.

Suggested Books

VCM 605: SWINE CLINICAL MEDICINE 1+0

Objective: Study of diseases of various body systems in swine.

Theory
UNIT I
General systemic states and diseases of digestive system

UNIT II
Diseases of cardiovascular and respiratory system.

UNIT III
Diseases of urogenital and nervous system and skin.

UNIT IV
Diseases of endocrine system and of newborn animals.

Suggested Readings

VCM 606: AVIAN MEDICINE 1+0

Objective: Study of non-infectious diseases of avian species.

Theory
UNIT I
Diseases due to deficiency of vitamins (vitamins A, B complex, C, D, K); minerals (calcium, phosphorus, manganese, zinc) and sodium chloride.

UNIT II
Miscellaneous diseases/conditions/ vices (cage layer fatigue, blue comb disease, beak necrosis, round heart disease, kerato- conjunctivitis, ascites, urolithiasis, fatty liver, kidney hemorrhagic syndrome, heat stroke, cannibalism, vent picking).
Suggested Readings

VCM 607: ZOO, WILD AND LABORATORY ANIMAL MEDICINE 2+0

Objective: Study of diseases and health management of zoo, wild and laboratory animals

Theory
UNIT I
Etiology, symptoms, diagnosis and management of various diseases of zoo, wild and laboratory animals. Diseases of urinary system.

UNIT II
Diseases, restraint, feeding and health management of exotic animals kept as pets

Suggested Readings

VCM 608: CLINICAL DISEASES OF ANIMAL SPECIES OF REGIONAL IMPORTANCE 1+0

Objective: Study of non-infectious diseases of important regional animal species.

Theory
The animal species, to be studied/taught is to be decided by the individual institution. For Veterinary College at CCS HAU Hisar, camel diseases will be covered.

UNIT I
Non-infectious/miscellaneous diseases of camels (satyriasis, kumri, allotriophagia, diseases of various body systems, nutritional deficiency disorders).

UNIT II
Diagnostic tests related to various non-infectious diseases of camels.

Suggested Readings

VCM 609: PRODUCTION DISEASES 2+0

Objective: Study of metabolic, production and deficiency diseases of domestic animals.

Theory
UNIT I
General aspects, production diseases (parturient paresis, downer cow syndrome, ketosis, post-parturient haemoglobinuria, hypomagnesemic tetany, pregnancy toxaemia).

UNIT II
Lactation tetany of mares, eclampsia of bitches, osteodystrophia fibrosa, azoturia of equines, rheumatism-like syndrome in buffaloes, hypothyroidism, diabetes mellitus and diabetes insipidus in dogs.

UNIT III

UNIT IV
Deficiency diseases (iron, copper, cobalt, zinc, manganese, iodine, vitamin E and selenium).

Suggested Readings

VCM 610: DISEASES OF ANIMALS CAUSED BY TOXICANTS 1+0

Objective: Study of diseases caused by various toxicants in domestic animals.

Theory
UNIT I
Diseases caused by physical agents and poisoning of organic and inorganic compounds.
UNIT II
Diseases caused by farm chemicals and phytotoxins

UNIT III
Diseases caused by mycotoxins and zootoxins

UNIT IV
Diseases caused by poisonous plants, snake and insect bites.

Suggested Readings

VCM 611: VETERINARY FORENSIC MEDICINE

Objective: To familiarize students with various aspects of veterinary forensic medicine.

Theory
UNIT I
Veterolegal aspects of ante mortem and post mortem examination.

UNIT II
Examination of wounds, blood, offenses, frauds in animals and their products, animal cruelty and welfare. DNA analysis of clinical samples

UNIT III
Study of common laws related to veterolegal aspects.

Practical
Ante mortem and post mortem examination, examination of wounds, blood, offenses, frauds in animals and their products, collection, dispatch and examination of veterolegal samples.

Suggested Readings

VCM 612: CLINICAL DIAGNOSTIC TECHNIQUES

Objective: Study the diagnostic protocols and procedures for various diseases of farm and companion animals.

Practical
UNIT I
Clinical tests and their interpretation related to diseases of alimentary tract, liver, cardio vascular system, blood and blood-forming organs of various species of animals.

UNIT II
Clinical tests and their interpretation related to respiratory, urinary, nervous, endocrine, musculoskeletal and integumentary systems of various species of animals.

Suggested Readings

VCM 613: VETERINARY EMERGENCY MEDICINE

Objective: Diagnosis and therapeutic management of various medical emergencies in farm and companion animals.

Practical
UNIT I
Diagnosis and therapeutic management of various emergencies of cardiovascular, respiratory, gastrointestinal, urinary and nervous systems.

UNIT II
Diagnosis and therapeutic management of various emergencies of toxicities, sting bites and burns of farm and companion animals. Monitoring critical ill patient, application of emergency care procedures for resuscitation of critically ill patient

Suggested Reading

VCM 614: CLINICAL PRACTICE – I

Objective: Application of the theoretical concepts in practice

Practical
Diagnostic and therapeutic protocol application, specimen collection, examination and management of sick farm and companion animals. Note: This course shall be conducted in TVCSC (College Clinics), where students shall participate in diagnosis and treatment of diseased animals).
VCM 615: CLINICAL PRACTICE – II 0+3

Objective: Application of the theoretical concepts in practice

Practical
Diagnostic and therapeutic protocol application, specimen collection, examination and management of sick farm and companion animals. Note: This course shall be conducted in TVCSC (College Clinics), where students shall participate in diagnosis and treatment of diseased animals.

VCM 701: ADVANCES IN GASTROENTEROLOGY 2+1

Objective: Study of contemporary advancements in gastro-enterology

Theory
UNIT I
Advances in diagnosis, therapy and control of diseases of gastrointestinal system and associated organs of farm animals.

UNIT II
Advances in diagnosis, therapy and control of diseases of gastrointestinal system and associated organs of companion animals.

Practical
Advanced clinical procedures for the diagnosis of diseases of gastrointestinal system and associated organs of farm and companion animals

Suggested Readings
Selected articles from journals.

VCM 702: ADVANCES IN CARDIOPULMONARY MEDICINE 2+0

Objective: Study of recent advances in the field of cardiopulmonary medicine

Theory
UNIT I
Advances in diagnosis and therapeutic management of diseases of circulatory system
Advances in diagnosis and therapeutic management of diseases of respiratory system

UNIT III
Advances in diagnosis and therapeutic management of diseases of blood and blood forming organs in animals

Suggested Readings
Selected articles from journals.

VCM 703: ADVANCES IN NEUROLOGICAL AND UROLOGICAL DISORDERS 2+0

Objective: Study of recent advances in the field of neurological and urological disorders.

Theory
UNIT I
Advances in diagnosis, therapy and control of diseases of nervous system

UNIT II
Advances in diagnosis, therapy and control of diseases of urogenital system

UNIT III
Advances in diagnosis, therapy and control of diseases of locomotor system

Suggested Readings
Selected articles from journals.

VCM 704: ADVANCES IN ENDOCRINE AND DERMATOLOGICAL DISORDERS 2+0

Objective: Study of recent advances in endocrine and dermatological disorders.

Theory
UNIT I
Advances in diagnosis, therapy and control of diseases of skin and integumentary system

UNIT II
Advances in diagnosis, therapy and control of diseases of endocrine system.

Suggested Readings
Selected articles from journals.
VCM 705: ADVANCES IN PRODUCTION DISEASES  

Objective: Study of recent advances in production diseases.

Theory
UNIT I
Latest advances in diagnosis, therapy and prophylaxis of metabolic diseases of farm and companion animals.

UNIT II
Latest advances in diagnosis, therapy and prophylaxis of nutritional diseases of farm and companion animals.

UNIT II
Latest advances in diagnosis and treatment of various poisonings and toxicities

Suggested Readings
Selected articles from journals.

VCM 706: ADVANCES IN PAEDIATRICS AND GERIATRICS

Objective: Study of recent advances in paediatrics and geriatrics

Theory
UNIT I
Recent advances in diagnosis, therapy and control of management diseases and of emergencies of neonates

UNIT II
Recent advances in diagnosis, therapy and control of management of emergencies of diseases and geriatric animals

Suggested Readings
Selected articles from journals.

VCM 707: ADVANCES IN VETERINARY DIAGNOSTICS

Objective: Study of recent advances in diagnostics

Theory
UNIT I
Blood and serum biochemical and hematological analyses.

UNIT II
Imaging techniques for the diagnosis of animal diseases (x-ray, contrast radiography, CT, MRI, Scintigraphy, Echocardiogram etc).

UNIT III
Electrocardiography, ophthalmoscopy, ultrasonography, EEG, CVP, GFR assessment, pulse-oxymetry etc.

Practical
Assignments on advanced diagnostic techniques for various diseases of domestic animals. Use of above mentioned advanced diagnostic techniques where ever possible. Collection of CSF, Gastric / rumen / intestinal fluid, absorption and digestion tests, water withheld, low and high dose dexamithasone test, ACTH stimulation, Hormone profile, enzyme profile.

Suggested Readings
Selected articles from journals.

VCM 708: ADVANCES IN VETERINARY THERAPEUTICS

Objective: Study of recent advances in Veterinary Therapeutics.

Theory
UNIT I
Fluid and electrolyte imbalance and therapy.

UNIT II
Antimicrobial, antineoplastic and hormonal therapy.

UNIT III
Blood transfusion and Emergency critical care, Peritoneal dialysis / hemodialysis, Gastric lavage, fluid therapy, parenteral total nutrition, nebulization, oxygen therapy, paracentesis, thoracentesis.

Practical
Assignments on advanced therapeutic approaches in various diseases of domestic animals.

Suggested Readings
Selected articles from journals.
VCM 709: ADVANCED CLINICAL PRACTICE - I

Objective: Application of the theoretical concepts in practice

Practical
Diagnostic and therapeutic protocol application, specimen collection, examination and management of sick farm and companion animals. Note: This course shall be conducted in TVCSC (College Clinics), where students shall participate in diagnosis and treatment of diseased animals.

VCM 710: ADVANCED CLINICAL PRACTICE - II

Objective: Application of the theoretical concepts in practice

Practical
Diagnostic and therapeutic protocol application, specimen collection, examination and management of sick farm and companion animals. Note: This course shall be conducted in TVCSC (College Clinics), where students shall participate in diagnosis and treatment of diseased animals.

VCM 711: ADVANCED CLINICAL PRACTICE - III

Objective: Application of the theoretical concepts in practice.

Practical
Diagnostic and therapeutic protocol application, specimen collection, examination and management of sick farm and companion animals. Note: This course shall be conducted in TVCSC (College Clinics), where students shall participate in diagnosis and treatment of diseased animals.

VCM 790: SPECIAL PROBLEM

Objective: A short-term project work on some aspect of etiological diagnosis and therapy of diseases of domestic animals.

VETERINARY CLINICAL MEDICINE, ETHICS AND JURISPRUDENCE

List of Journals
* Indian Journal of Poultry Science
* Indian Journal of Veterinary Medicine
* Indian Journal of Veterinary Research
* Indian Veterinary Journal
* Journal of American Veterinary Medical Association
* Research in Veterinary Science
* Veterinary Medicine
* Veterinary Medicine and Small Animal Clinician
* Veterinary Record
* Veterinary Research Communications

e-Resources
* www.uni.sz.bg/bjvm/bjvm.htm (Bulgarian Journal of Veterinary Medicine)
* isrvma.org/journal.htm (Israel Journal of Veterinary Medicine)
* www.medwellonline.net/java/fp.html (Journal of Animal & Veterinary Advances)
* www.jstage.jst.go.jp/browse/jes (Journal of Equine Science)
* www.stage.jst.go.jp/browse/jpsa (Journal of Poultry science)
* www-vesci.org (Journals of Veterinary Science)
* journals.tubitak.gov.tr/veterinary/index.php (Journal of Veterinary and Animal Sciences)
* vetmed.vri.cz (Veterinary Medicine)

Suggested Broad Topics for Master’s and Doctoral Research
* Clinico-therapeutic aspects of bovine mastitis
* Hepatic, respiratory and skin disorders in animals
* Metabolic/nutritional deficiency disorders in animals with emphasis on hypophosphatemia, hypocupremia and hypomagnesemia