



SYLLABUS

THEORY

Introduction and scope of Veterinary Pathology, Brief outline of major intrinsic and extrinsic causes of disease. Pathology of hyperaemia, congestion, haemorrhage, edema, thrombosis, embolism, infraction and shock. Acute cellular swelling and its variants. Glycogen overload and fatty change. Heat shock proteins and lysosomal storage diseases. Causes and mechanism of reversible and irreversible cell injury, necrosis and its types, apoptosis differences between post-mortem autolysis and necrosis. Gangrene. Major exogenous and endogenous pigments. Metastatic and dystrophic calcification. Jaundice in animals. Photosensitizational dermatitis. Aplasia, hypoplasia, atrophy, hypertrophy, hyperplasia, metaplasia and dysplasia. Inflammation definitions, classification, various cell types and their functions, mediators, cardinal signs and systemic effects. Cell cycle and cyclins, soluble and insoluble mediators (including growth factors). Wound healing by primary and secondary intention. Pathology of autoimmune diseases and amyloidosis. Definitions, general characteristics and classification of neoplasms. Differences between benign and malignant tumours. Etiology and spread of neoplasms, immunity and neoplasia, effects and diagnosis of neoplasia, stages and grades of neoplasms.

PRACTICAL

Study of gross pathological specimens and recognition of pathological lesions. Post-mortem (P.M) techniques collection of morbid materials for pathological diagnosis. Techniques for preservation and despatch of materials. Section cutting, staining and identification of microscopic lesions. Examination slides depicting changes in cells and tissues. Study of histopathological slides showing haemorrhage congestion, oedema, infraction, hyperplasia, metaplasia, hypertrophy, necrosis, cloudy swelling, amyala degeneration, fatty changes, calcification, infiltration etc. Examination and interpretation of oncological tissue slides.