



SYLLABUS

THEORY

General Histology: Structure of animal cell and basic tissues and their functional activity. Epithelia and their modifications. Connective tissue and its components including blood and bone. Muscular tissue types and their functional peculiarities. Neuron, nerve fibre and ganglion.

Systemic Histology: Study of Microscopic structure of the organs of digestive, respiratory, urinary, reproductive, nervous and cardiovascular systems, sense organs, endocrines and lymphoid organs of domestic animals and birds.

Embryology: Gametogenesis, fertilization, cleavage, gastrulation, and the development of foetal membranes in birds and mammals. Structure and types of mammalian placenta. Development of the organs of digestive, respiratory, urogenital, cardiovascular, nervous and locomotor system and organ is of special sense and endocrine glands. Fetal circulation.

PRACTICAL

Microscopy and micrometry. Comparison of light and electron microscopy. Histological techniques, processing of tissues for paraffin sectioning and haematoxylin and Eosin staining. Microscopic examination and identification of basic tissue and their components. Examination of histological sections of various organisms / systems of domestic animals and birds. Study of structure of mammalian ova and spermatozoa and egg of fowl. Study of the whole mount and serial sections of avian and mammalian embryo / foetus at different stages of development. Microscopic anatomy of fetal membranes and placenta of various domestic animals.