

DISCIPLINE SPECIFIC CORE COURSES
BZO:C702 APPLIED ZOOLOGY
(Credits: Theory-4, Practicals-2)

SEMESTER – VII

Lectures: 60

Unit 1

Introduction to Host-parasite Relationship and Epidemiology of Diseases:
Host, Definitive host, Intermediate host, Parasitism, Symbiosis, Commensalism, Reservoir, Zoonosis, Transmission, Prevention and control of diseases: Tuberculosis, swine flu, typhoid, Rickettsiae and Spirochaetes, Brief account of *Rickettsia prowazekii*, *Borrelia recurrentis* and *Treponema pallidum*

Unit 2

Parasitic Protozoa and Helminthes:
Life history and pathogenicity of *Entamoeba histolytica*, *Plasmodium vivax* and *Trypanosoma gambiense*, Life history and pathogenicity of *Schistosoma haematobium*, *Ancylostoma duodenale* and, *Wuchereria bancrofti*

Unit 3

Insects of Economic and Medical Importance:
Biology, Control and damage caused by *Helicoverpa armigera*, *Pyrilla perpusilla* and *Papilio demoleus*, *Callosobruchus chinensis*, *Sitophilus oryzae* and *Tribolium castaneum*; Safe storage of stored grains, Life cycle, medical importance and control of *Pediculus humanus corporis*, *Anopheles*, *Culex*, *Aedes*, *Xenopsylla cheopis*, *Phlebotomus argentipes*

Unit 4

Animal Husbandry and Poultry Farming:
Preservation and artificial insemination in cattle; Induction of early puberty and synchronization of estrus in cattle, Principles of poultry breeding, Management of breeding stock and broilers, Processing and, preservation of eggs

Unit 5

Fish Technology:
Genetic improvements in aquaculture industry; Induced breeding and transportation of fish Seed.