

**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.

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