

M.Sc II Semester 2018-19

Value Added Course

PARASITOLOGY

32 hrs

CO1	Understand the fundamental concepts of parasitism the origin and evolution of parasitic organisms.
CO2	Analyze the structure, life cycle, mode of transmission, pathogenicity, and control measures of protozoan parasites
CO3	Evaluate the habitat, life cycle, pathogenicity, and preventive strategies for ectoparasites
CO4	Explore the types and ecobiology of parasitoids, along with chemical cues, and examine bacterial infections

Unit I	Introduction: Concepts of Parasitism, Classification, Distribution and types of parasites. Origin and evolution of parasites.	08 hrs
Unit II	Parasitic diseases of human importance: Structure, Life cycle, mode of transmission, pathogenicity and control of; Protozoan parasites: Trichomonas, Leishmania, Trypanosoma, Plasmodium, Toxoplasma. Nematoda: Ascaris, Ancylostoma, Strongyloides, Trichuris, Enterobius, Waucheraria	08 hrs
Unit III	Ectoparasites : Habitat, Life cycle, Pathogenicity and Prevention of : (a) Fleas, (b) Mites, (c) Ticks, (d) Lice. (e) Mosquitoes, (f) Houseflies. Host- Parasitic Relationship: Cellular, Physiological, Immunological, Molecular, Social, Behavioural aspects, Larval migrants	08 hrs
Unit IV	Parasitoids: Types, ecobiology, Chemical cues with suitable examples. Bacterial Infection: Cholera, Tuberculosis. Diphtheria, anthrax, Typhoid, Tetanus, Leprosy. Viral Infection: Rabies	08 hrs

References:

1. Smyth, J.D 2000. Animal Parasitology, Cambridge low Edition.U.K.
2. Arira, D.R. And Arora,B. 2001. Medical parasitology. 1st Edition. Satish kumar jain for CBS Publisher ad Distributors, New Delhi.
3. Chatterjee, K.D. 2001. Parasitology (Protozoology and Helminthology). 12th Edition. Chatterjee Medical Publishers, Calcutta.
4. Thomas C. Cheng. 1999. General Parasitology. 2nd Edition. Academic Press, California.
5. Sobti,R.C.1999. Medical Zoology. Shoban Lal Nagin Chand & Co. Jalandhar. India.