Course Name – MEDICAL ENTOMOLOGY

Course Code –

Learning Objectives: To study about different insect vectors and to know different medically important insects. To understand the transmission pattern of different parasites and to study about different diseases caused by the parasites. Vector borne disease – their control and management.

Learning Outcome: After completion of the course, students will be able to have knowledge about different insect vectors, their transmission pattern as well integrated vector management.

UNIT - I

Introduction-Vector biology, medical importance and management of the medically important insects (fleas, lice, bugs, mosquitoes, and flies).

UNIT- II

Modes of transmission of arthropod-borne communicable diseases; Epidemiology of Vector-Borne diseases through Parasites and Pathogens of public health importance- Occurrence, causative agents, transmission and control of protozoan, bacterial, and viral diseases (Malaria, Leishmaniasis, Sleeping sickness, Filariasis, Plague, Japanese Encephalitis, Yellow fever, Dengue, Chikungunya

UNIT - III

Ectoparasites of skin, blood (Head louse, body louse, and pubic louse), Study of ectoparasite borne diseases (Typhus fever, Relapsing fever, Vagabond disease), Internal Insect Parasites (myiasis causing insects).

UNIT - IV

Hemipterans as disease vectors, Blood sucking bugs; Chagas disease, Bed bugs as mechanical vectors, Control and prevention measures.

UNIT- V

Control of insect vectors of public health importance, Management of Vector-Borne Diseases by Integrated Vector Management.

REFERENCES:

1. Mullen and Durden: Medical and Veterinary Entomology, Academic Press, 2002

2. Marquardt et al.: Biology of Disease Vectors (2nd ed.), Elsevier Academic Press, 2005

3. Pedigo: Entomology and Pest Management (4th ed.), Prentice Hall, 2002

4. Srivastava & Dhaliwal: A Text Book of Applied Entomology (Vol. I & II.) Kalyani Publ.,2010

5. Thacker: An introduction to arthropod pest control. Cambridge University Press, 2002