

**IV Semester; Open Elective Paper:**

**VECTORS AND COMMUNICABLE DISEASES.**

**48 Hours.**

1. Introduction to vector borne diseases and vectors- World scenario; Indian scenario. Historical perspective- Epidemics, discoveries; Scientists and major events involved in the discovery of vectors and pathogens of communicable diseases 8 hrs.
2. Epidemiology, biology of vectors and pathogens, transmission cycles and symptoms- of malaria, filariasis, yellow fever, leishmaniasis and anthrax. 8hrs.
3. Epidemiology, biology of vectors and pathogens, transmission cycles and symptoms- of dengue, chikungunya, Japanese encephalitis, schistosomiasis and plague. 8 hrs.
4. Distribution, epidemiology and control of Yellow fever, African sleeping sickness, oncocerciasis and chagas disease. 8 hrs.
5. Mechanical vectors- House flies, cockroaches and bedbugs- Transmission of dysentery, diarrhea, typhoid, cholera, epidemic conjunctivitis and skin infections. 8 hrs.
6. Control of vector borne diseases; Vector control- Chemical, Biological, Genetic and Environmental. Insecticide resistance in vectors. Drug resistance in pathogens. Importance of education, awareness and Community participation. 8 hrs.

**TUTORIALS:**

**2 x 16= 32Hrs**

**REFERENCES**

1. Clements, A. N., 1992. The biology of Mosquitoes, Vol-I, Chapman and Hall, London.
2. Clements, A. N., 1999. The biology of Mosquitoes, Vol-II, Chapman and Hall, London.
3. Fenemore, P. G. and Alka Prakash., 1992. Applied Entomology, Wiiey Eastern Ltd., New Delhi.
4. Gullan, P. J. and Cranston. 1994. The Insects: An outline of Entomology, Chapman and Hall, London.
5. Kenneth, G. V. Smith, 1973. Insects and other arthropods of medical importance. Trustees of British Museum, London.
6. Manson- Bahr, P. E. C. and Bell, D. R., (Ed) 1987. Manson's tropical diseases. English Language Book Society, Barillien Tindall.
7. Metcalf, R. L. and W. B. Flint. 1962. Destructive and useful insects, their habits and control. McGraw Hill Publ. Co., N. Y.
8. Rao, T. R., 1984. The Anophelines of India. Publ. by Malaria Research Centre, Delhi.
9. Service, M. W., 1976. Mosquito ecology. Applied Science Publication Ltd., London.
10. Srivastava, K. P., 1988. A Textbook of Applied Entomology, Publ. Kalyani Publishers, New Delhi.

11. WHO (Geneva), 1989. Geographical distribution of arthropod borne diseases and their principal vectors. WHO. Geneva.