

The West Bengal University of Health Sciences
B.Sc. in Medical Microbiology 4th Semester September - October, 2026
Examination
Subject : Entomology

Time : 2 hrs.

Full Marks : 50

Attempt all questions

1. Tick the correct answer : 10 x 1
 - a) The vector of malaria is :
 - i) Anopheles. ii) Culex. iii) Aedes. iv) Mansonia.
 - b) Yellow fever is caused by :
 - i) Virus. ii) Protozoa. iii) Bacteria. iv) Nematode.
 - c) Kala-azar is transmitted by :
 - i) Sand fly. ii) House fly. iii) Flea. iv) Tick.
 - d) Plague is transmitted by :
 - i) Flea. ii) Mosquito. iii) House fly. iv) Lice.
 - e) The developmental stage of mosquito found in water is :
 - i) Larva. ii) Egg. iii) Pupa. iv) Adult.
 - f) Which of the following is not a mosquito-borne disease?
 - i) Dengue. ii) Filariasis. iii) Kala-azar. iv) Malaria.
 - g) Sand fly belongs to the genus :
 - i) Anopheles. ii) Culex. iii) Phlebotomus. iv) Glossina.
 - h) House fly transmits diseases mainly by :
 - i) Bite. ii) Contaminating food. iii) Laying egg. iv) Larvae.
 - i) The insecticide DDT was mainly used for :
 - i) Mosquito control. ii) Flea control. iii) Tick control. iv) Bedbug control.
 - j) The causative agent of filariasis is transmitted by :
 - i) Anopheles. ii) Culex. iii) Mansonia. iv) Aedes.
2. Answer **any four** of the following questions : 4 x 2
 - a) Comment on transovarian transmission.
 - b) What is an arbovirus? Give example.
 - c) What are caudal setae?
 - d) Write the name of two insecticides used to control house flies.
 - e) Name two insecticides used for mosquito control. *(chloroquine, pyrethrin)*
 - f) Write two features of Fleas.
3. Answer **any four** of the following questions : 4 x 4
 - a) Discuss the public health importance of house fly.
 - b) Describe the morphological features of sandflies. *1-6 mm*
 - c) Write the short notes on mode of transmission of filariasis.
 - d) Discuss in detail about wettable powders.
 - e) Write the names of causative agent and Cutaneous leishmaniasis.
 - f) Comment of the different health related disadvantages of insects.
4. Answer **any two** of the following questions : 2 x 8
 - a) Compare in detail the morphology, life cycle, and public health importance of *Anopheles* and *Culex*.
 - b) Discuss the type and symptoms of Dengue in details.
 - c) Elaborate the classification of arthropods of public health importance.