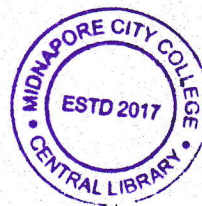


The West Bengal University of Health Sciences
B.Sc. in Medical Microbiology 4th Semester November, 2023

Examination

Subject : Entomology



Time : 2 hrs.

Full Marks : 50

Attempt all questions

1. Select the single most appropriate answer : 10 x 1
- a) Malaria is transmitted through :
 - i) Propagative transmission.
 - ii) Cyclo-developmental transmission.
 - iii) Cyclo-propagative transmission.
 - iv) Trans ovarian transmission.
 - b) Which of these animals are used as biocontrol agent?
 - i) Bata.
 - ii) Rohu.
 - iii) Gambusia.
 - iv) Catfish.
 - c) Cypermethrin is a :
 - i) Carbamate.
 - ii) Synthetic pyrethroid.
 - iii) Organophosphate.
 - iv) Organochlorine.
 - d) Which of the following is an arbovirus?
 - i) AIDS virus.
 - ii) West Nile virus.
 - iii) Polio virus.
 - iv) Pox virus.
 - e) Which of the following disease is a zoonotic disease?
 - i) Malaria.
 - ii) Plague.
 - iii) Filariasis.
 - iv) Dengue.
 - f) Egg rafts are found in :
 - i) Aedes.
 - ii) Anopheles.
 - iii) Culex.
 - iv) Mansonia.
 - g) The type of mouthparts found in housefly is :
 - i) Chewing type.
 - ii) Piercing and sucking type.
 - iii) Sponging type.
 - iv) Siphoning type.
 - h) Proventricular blocking is found in :
 - i) Brugia.
 - ii) Ticks.
 - iii) Fleas.
 - iv) Sandfly.
 - i) Which is the most efficient method in control of disease transmitting arthropod?
 - i) Mechanical control.
 - ii) Source reduction.
 - iii) Chemical control.
 - iv) Bio-control.
 - j) Which of the following ectoparasites is not an insect?
 - i) Mosquito.
 - ii) Head louse.
 - iii) Mites.
 - iv) Flea.
2. Answer **any four** of the following questions : 4 x 2
- a) What are caudal setae? In which disease transmitting insect is it found?
 - b) Define medical entomology.
 - c) What is pronotal comb and meral rod in fleas?
 - d) What is murine typhus?
 - e) Write the name of two insecticides used to control house flies.
 - f) What are insect growth regulators?
3. Write short notes on (**any four**) : 4 x 4
- a) Write a short note on medical importance of house flies.
 - b) Comment on the different health related disadvantages of insects.
 - c) Discuss about plague transmitted by fleas.
 - d) Classify schematically arthropods of medical importance with examples of each.
 - e) Discuss about the periodicity of *Wuchereria bancrofti* in filariasis.
 - f) Write down the control measures of sand flies.
4. Answer **any two** of the following questions :
- a) Describe the developmental stages of malaria pathogen in mosquitoes. What is float? 6+2
 - b) Categorize the control methods of arthropods causing diseases. What is dry bait? Give example. 6+2
 - c) Discuss briefly about the feeding and host specificity of fleas. Write the names of causative agent and vector of Cutaneous leishmaniasis. 5+3