

Yashwantrao Chavan College of Science, Karad.

B.Sc. Part III – Semester-VI

Paper- XVI (Insect vector and Histology)

Question Bank

Multiple choice questions

- Which of the following is the most common mosquito-borne disease?
a. Dengue b. Malaria c. Zika virus d. West Nile virus
- How can you protect yourself against mosquito-borne illnesses?
a. use mosquito repellent b. Wear long sleeved shirts
c. Stay in places that have air conditioning d. all of these
- Each of the following statements concerning malaria is correct except
a. The female anopheles mosquito is the vector
b. Early infection, sporozoites enter hepatocytes
c. Release of merozoites from red blood cells causes fever and chills
d. The principal site of gametocyte formation is the human gastrointestinal tract.
- Each of the following parasite is transmitted by mosquitoes except:
a. *Leishmania donovani*
b. *Wuchereria bancrofti*
c. *Plasmodium vivax*
d. *Plasmodium falciparum*
- Different from most biting Diptera, -----has a terrestrial development rather than aquatic.
a. Mosquito b. Sand fly c. House fly d. all of these
- What are halteres?
a. Small wings b. Small legs
c. The joins of the flies legs d. The name for the central eyes on a fly

7. The Filarial larva can be collected from the sample of
- biopsy of liver
 - smears of intestinal contents
 - smears of spleen
 - peripheral blood at midnight
8. The causative of Filariasis is
- Schistosome
 - Trichinella
 - Culex
 - Wuchereria
9. Which of the following organism responsible for malaria----
- Protozoa
 - fungus
 - Virus
 - Bacteria
10. Which of the following organism responsible for Dengue----
- Protozoa
 - fungus
 - Virus
 - Bacteria
11. Dengue is characterised by -----
- fever without rash
 - fever with rash
 - rash without fever
 - neither fever or rash
12. Bleeding in dengue occurs due to -----
- Decrease in platelet level
 - repeated falls
 - eating spicy foods
 - all of these
13. What is Encephalitis?
- An inflammation in brain.
 - It causes swelling or irritation in brain.
 - It is also known as Chamki Fever.
 - All the above
14. What are the symptoms of Encephalitis or Acute Encephalitis Syndrome?
- Lethargy
 - Sleepiness
 - headache
 - All the above
15. Chikungunya virus is transmitted to humans via mosquito bites. Which of the following are the major symptoms of this infection?
- Severe leg and arm joints pain
 - Influenza-like symptoms
 - Yellowing of the skin
 - Bleeding from the nose
16. Resting position of adult anopheles mosquito is ----
- parallel to resting surface
 - makes an angle of 45 degree to surface

- c. no specila resting position
 - d. makes an angle of 60 degree with surface
17. Aedes mosquito transmit ----- diseases/ses
- a. yellow fever b. dengue fever c. rift valley fever d. All of these
18. Which of the following responsible for spread of dengue-----
- a. Culex mosquito b. House fly
 - c. Aedes mosquito d. Anopheles mosquito
19. Chikungunya is spread by:
- a. Mosquito b. Chicken c. Man to man d. a and c
20. Which of these statements is not true with regard to Chikungunya disease?
- a. Is primarily found in urban areas
 - b. Is a contagious disease
 - c. It means “that which bends up”
 - d. Is characterised by joint pain
21. Which of these diseases is not spread by Aedes mosquito?
- a. Yellow fever b. Malaria c. Dengue d. None of the above
22. Which of the following is not a mosquito-borne illness?
- a. Lyme disease b. Dengue c. Malaria d. Chikangunya
23. You can prevent mosquitoes from breeding outside your home by removing which of the following from your yard?
- a. old tyres b. standing water like puddles & pools
 - c. buckets d. all of these
24. Which of the following is not the mosquito-borne viral disease?
- a. Dengue b. Malaria c. Chikangunya d. Japanese B encephalitis
25. Crypts of Lieberkuhn are found in -----
- a. Pancreas b. Liver c. Intestine d. Tongue
26. Islets of Langerhans are found in -----
- a. Pancreas b. Salivary glands c. Liver d. Tooth
27. Malphigian tubules are found in -----
- a. Cortex of Kidney b. Medulla of Kidney
 - c. Cortex of Ovary d. Medulla of Ovary

28. .----- is second large digestive gland.
- Liver
 - Pancreas
 - Salivary gland
 - Thyroid
29. Posterior portion of tongue is sensitive to ----- substances.
- Sweet
 - Sour
 - Bitter
 - Salty
30. Diagnosis of Chikungunya can be confirmed by:
- Sputum test
 - X-ray of joints
 - Serological test
 - All the above
31. The islets of Langerhans are found in
- Stomach
 - Alimentary canal
 - Pancreas
 - Liver
32. Which of the following is mixed gland-----
- Pancreas
 - Liver
 - Intestine
 - Salivary glands
33. Blood sugar is regulated by -----
- Pancreas
 - Liver
 - Intestine
 - Salivary glands
34. Pancreas produce-----
- Glucagon
 - Insulin
 - Amylase
 - All
35. .Malaria is spread by ?
- Inhaling bad air
 - Drinking unclear water
 - Eating roadside food
 - Bite of a mosquito
36. Symptoms of malaria are?
- Fever
 - Chill
 - Sweating
 - All of the above
37. Larvae of phlebotomous pass through ----- instars before pupation and adult emergence.
- 5
 - 4
 - 3
 - 2
38. Housefly have mouth parts_____?
- Sponging type
 - Siphoning type
 - Chewing g type
 - Piecing sucking type
39. The crown of tooth is covered by -----
- Chitin
 - Dentine
 - Cartilage
 - Enamel
40. Glisson's capsule is found in -----
- Liver
 - Bone
 - Kidney
 - Spinal cord

41. Kuffer cells which are phagocytic cells present in -----
a. Liver b. Intestine c. Kidney d. Stomach
42. Which of the following statement is not correct for Japanese Encephalitis (JE)?
a. Japanese Encephalitis is a bacteria-borne disease.
b. Japanese Encephalitis is a mosquito-borne flavivirus.
c. first case of Japanese Encephalitis was seen in Japan.
d. Japanese Encephalitis belongs to same genus as dengue, yellow fever and West Nile
43. . Which of the following is/are true-----
a. mosquito that spread dengue bites night and that which spread malaria bites at day
b. mosquito that spread dengue bites day time and that which spread malaria bites at night
c. both correct
d. Both are false
44. Which is the infective form of the malaria parasite?
a. Oocyst b. Sporozoite c. Bradyzoite d. Tachyzoite
45. Sand flies is/are the vector in the following disorder(s)
a. Onchocerciasis b. Visceral leishmaniasis
c. African trypanosomiasis d. Bancroftian filariasis
46. Mosquito responsible for malaria transmission ?
a. Aedes aegypti b. Aedes albopictus c. Anopheles d. Haemagogus
47. *Musca domestica* is name of ----- insect
a. House fly b. Sand fly c. Tumbu fly d. Anopheles
48. What are the three main parts of a housefly's body?
a. Head, gut and reproductive organs
b. Mesothorax, ovipositor and myelin sheath
c. Head, thorax and abdomen
d. Reactive tubing, metathorax and anal cerci
49. Filariasis is a result of the infection of
a. Fleas b. Bed bug c. Leech d. Nematode worm

50. . Which of the following is true regarding dengue fever---

- a. It is disease caused by virus
- b. It is transmitted by mosquito
- c. its symptoms appear 7-10 days after bite of vector
- d all of these

51. The infectious agent that causes malaria is known as which of the following ?

- a. Protozoan parasite b. Bacterial parasite c. Viral parasite d. Fungal parasite

Long answer question

1. Give a brief account on fleas as an important insect vector with suitable example.
2. Give a brief account on life history of tumbu fly.
3. Give a brief account on life history of sand fly.
4. Describe flea as an important insect vector? Add a note on plague.
5. With neat labelled diagram describe the histology of salivary gland
6. What are the control measures of mosquito? Write a note on Viral encephalitis
7. What are the control measures for fleas? Write a note on Typhus fever
8. What is Myiasis? What are symptoms of myiasis? Give a brief account on life history of tumbu fly.
9. With neat labelled diagram describe the histology of Liver
10. With neat labelled diagram describe the histology of tongue
11. Describe about transmission, symptoms and control measures of filariasis.
12. Give in detail about dipteran as an important insect vectors with suitable example
13. Give in detail about siphonoptera as disease vectors with suitable example
14. Describe transmission and control measures of malaria. Write a note on Ross cycle
15. Describe in detail transmission and preventive measures of any 2 mosquito borne disease.
16. Give a brief account on house fly as an important mechanical vector with suitable example.

Short answer questions

1. Dengue
2. Viral encephalitis
3. Life cycle of House fly
4. Write a brief note on histological structure of liver
5. Write a brief note on histological structure of Pancreas
6. T.S. of Ileum
7. T.S. of tongue
8. Types of lingual papillae
9. Life cycle of *Wuchereria bancrofti*
10. Life cycle of sand fly
11. T.S. of stomach
12. V.S. of tooth
13. Control measures of mosquito
14. Damage caused by house fly
15. Taste buds
16. Typhus fever
17. .Write a brief note on histological structure of Kidney
18. Control measures of fleas
19. Myiasis
20. Plague