

SHIVAJI UNIVERSITY, KOLHAPUR
B.Sc. III Zoology Semester VI
Zoology Paper- XVI DSE-F32 (Insect Vectors and Histology)

Question Bank for practice

Q.1 Choose the correct alternative and rewrite the correct sentence

1. Which of the following is not a mosquito-borne illness?
a. Lyme disease b. Dengue c. Malaria d. Chikangunya

2. 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

3. Which of the following is the most common mosquito-borne disease?
a. Dengue b. Malaria c. Zika virus d. West Nile virus

4. 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

5. Mosquito larvae breathe out of _____.
a. structures on their back called trumpets
b. a structure near their tail called the siphon
c. structures along their abdomen called spicules

6. Which of the following is not the mosquito-borne viral disease?
a. Dengue b. Malaria c. Chikangunya d. Japanese B encephalitis

7. Name the vector via which encephalitis is transmitted to humans?
a. Ticks b. Sandflies c. Mosquitoes d. Rodents

8. Chikungunya virus is transmitted to humans via mosquito bites. Which of the following are the major symptoms of this infection?
a. Severe leg and arm joints pain b. Influenza-like symptoms
c. Yellowing of the skin d. Bleeding from the nose

9. Resting position of adult anopheles mosquito is ----
a. parallel to resting surface
b. makes an angle of 45 degree to surface

c. no specila resting position

d. makes an angle of 60 degree with surface

10. Aedes mosquito transmit ----- diseases/ses

a. yellow fever b. dengue fever c. rift valley fever d. All of these

11. Which of the following responsible for spread of dengue-----

a. Culex mosquito b. House fly c. Aedes mosquito d. Anopheles mosquito

12. 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

13. Which of the following organism responsible for malaria----

a. Protozoa b. fungus c. Virus d. Bacteria

14. Which of the following organism responsible for Dengue----

a. Protozoa b. fungus c. Virus d. Bacteria

15. Dengue is characterised by -----

a. fever without rash b. fever with rash c. rash without fever d. neither fever or rash

16. Bleeding in dengue occurs due to -----

a. Decrease in platelet level b. repeated falls c. eating spicy foods d. all

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

a. It is disease caused by virus

b. It is transmitted by tumbu fly

c. antibiotics are useful for treatment

d. all of these

18. 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

19. Which is the infective form of the malaria parasite?

- a. Oocyst b. Sporozoite c. Bradyzoite d. Tachyzoite

20. Sand flies is/are the vector in the following disorder(s)

- a. Onchocerciasis b. Visceral leishmaniasis c. African trypanosomiasis
- d. Bancroftian filariasis

21. Mosquito responsible for malaria transmission ?

- a. *Aedes aegypti* b. *Aedes albopictus* c. *Anopheles* d. *Haemagogus*

22. 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

23. Malaria is spread by ?

- a. Inhaling bad air b. Drinking unclear water c. Eating roadside food
- d. Bite of a mosquito

24. Symptoms of malaria are?

- a. Fever b. Chill c. Sweating d. All of the above

25. 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.

26. Each of the following parasite is transmitted by mosquitoes except:

- a. *Leishmania donovani*
- b. *Wuchereria bancrofti*
- c. *Plasmodium vivax*
- d. *Plasmodium falciparum*

27. Different from most biting Diptera, -----has a terrestrial development rather than aquatic.

- a. Mosquito b. Sand fly c. House fly d. all of these

28. Larvae of phlebotomous pass through ----- instars before pupation and adult emergence.

a. 5 b.4 c.3 d.2

29. Housefly have mouth parts_____?

a. Sponging type b. Siphoning type c. Chewing g type d. Piecing sucking type

30. *Musca domestica* is name of ----- insect

a. House fly b. Sand fly c. Tumbu fly d. Anopheles

31. 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

32. What are halteres?

- a. Small wings b.Small legs
- b. The joints of the flies legs d. The name for the central eyes on a fly

33. The Filarial larva can be collected from the sample of

- a. biopsy of liver
- b. smears of intestinal contents
- c. smears of spleen
- d. peripheral blood at midnight

34. The causative of Filariasis is

a. Schistosome b. Trichinella c. Culex d. Wuchereria

35. Filariasis is a result of the infection of

a. Fleas b. Bed bug c. Leech d. Nematode worm

36. 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 Viruses.

37. What is Encephalitis?

- a. An inflammation in brain.
- b. It causes swelling or irritation in brain.

- c. It is also known as Chamki Fever.
- d. All the above

38. What are the symptoms of Encephalitis or Acute Encephalitis Syndrome?

- a. Lethargy
- b. Sleepiness
- c. headache
- d. All the above

39. Chikungunya is spread by:

- a. Mosquito
- b. Chicken
- c. Man to man
- d. a and c

40. 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

41. Which of these diseases is not spread by Aedes mosquito?

- a. Yellow fever
- b. Malaria
- c. Dengue
- d. None of the above

42. Diagnosis of Chikungunya can be confirmed by:

- a. Sputum test
- b. X-ray of joints
- c. Serological test
- d. All the above

43. The islets of Langerhans are found in

- a. Stomach
- b. Alimentary canal
- c. Pancreas
- d. Liver

44. Which of the following is mixed gland-----

- a. Pancreas
- b. Liver
- c. Intestine
- d. Salivary glands

45. Blood sugar is regulated by -----

- a. Pancreas
- b. Liver
- c. Intestine
- d. Salivary glands

46. Pancreas produce-----

- a. Glucagon
- b. Insulin
- c. Amylase
- d. All

47.----- control metabolic rate

- a. Pancreas
- b. Thyroid
- c. Parathyroid
- d. Brain

48. Histologically the intestine is distinguished from stomach by the presence of -----

- a. Villi
- b. Serosa
- c. Digestive glands
- d. Sub-mucosa

49. The crown of tooth is covered by -----

- a. Chitin
- b. Dentine
- c. Cartilage
- d. Enamel

50. Glisson’s capsule is found in -----

- a. Liver
- b. Bone
- c. Kidney
- d. Spinal cord

51. Kuffer cells which are phagocytic cells present in -----
 a. Liver b. Intestine c. Kidney d. Stomach
52. Crypts of Lieberkuhn are found in -----
 a. Pancreas b. Liver c. Intestine d. Tongue
53. Islets of Langerhans are found in -----
 a. Pancreas b. Salivary glands c. Liver d. Tooth
54. Malphigian tubules are found in -----
 a. Cortex of Kidney b. Medulla of Kidney c. Cortex of Ovary d. Medulla of Ovary
- 55.----- is second large digestive gland.
 a. Liver b. Pancreas c. Salivary gland d. Thyroid
56. Posterior portion of tongue is sensitive to ----- substances.
 a. Sweet b. Sour c. Bitter d. Salty

Q.2 Descriptive type questions

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

14. Give a brief account on life history of sand fly.
15. Give in detail about dipteran as an important insect vectors with suitable example
16. Give in detail about siphonoptera as disease vectors with suitable example

Q.3 Write short note on

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

Answer key for MCQs:

Question	Ans.
1	a
2	d
3	a
4	d
5	b
6	b
7	c
8	a
9	a
10	d
11	c
12	d
13	a
14	c
15	b
16	a
17	a
18	b
19	b
20	b

Question	Ans.
21	c
22	a
23	d
24	d
25	d
26	a
27	d
28	b
29	a
30	a
31	c
32	a
33	d
34	c
35	d
36	a
37	d
38	d
39	a
40	b

Question	Ans.
41	b
42	c
43	c
44	a
45	a
46	d
47	b
48	a
49	d
50	a
51	a
52	c
53	a
54	a
55	b
56	c