

## Chapter- 07

# STRUCTURAL ORGANISATION IN ANIMALS

### **VERY SHORT ANSWER QUESTIONS (1 mark)**

01. Define tissue and write how many types of tissues are present in animals?
02. Give an example of a simple and compound epithelium tissue.
03. Define Tergites and Sternites.
04. What do you mean by arthrodial membrane?
05. What is spermatheca?
06. What do you mean by paurometabolous?
07. Cockroaches are uricotelic. Justify.
08. Define Chondrocytes. What do they secrete?
09. Enlist the types of specialized connective tissue.
10. Define osteocytes. What do they secrete?
11. What are the types of simple epithelium? Explain each type along with an example.
12. What do you mean by glandular epithelium? Along with examples explain each type of it.
13. Give the location and function of the compound epithelium.
14. Define the terms (a) Elastin (b) Matrix (c) Fibroblast
15. Differentiate between areolar and adipose tissue.
16. Differentiate between bone and cartilage.
17. Enlist all the mouth parts of the cockroach and write the function of the hypopharynx and antennae.

## **SHORT ANSWER TYPE QUESTIONS (2 marks)**

18. Write notes upon (a) Tight junction (b) Adhering junction
19. What do you mean by dense connective tissue? Explain its categories along with examples.
20. Differentiate between three types of muscles.
21. Write note upon neural tissue with a well-labelled diagram of a neuron.
22. Diagrammatically represent the alimentary canal of a cockroach.
23. Write a note on the blood vascular system of cockroach.
24. How respiration is carried out in cockroach?

### **LONG ANSWER TYPE QUESTIONS (5 marks)**

**25.** Explain the structure of the male and female reproductive systems.

26. Give the scientific name of American Cockroach. What is the position of ovaries and brood pouch in cockroach? What do you mean by spermatophores and gonapophysis and where do we find them in cockroach? How do nymphs differ from adult cockroaches?
  
27. What do you mean by ciliated epithelium and where do you find them in the animal body? Draw a well-labelled diagram of all types of muscle tissue and areolar tissue and adipose tissue.

**HOTS/MODEL QUESTIONS:**

01. How does lymph maintain blood volume in our bodies?
02. What is brown fat? How is it different from white fat?
03. Write the composition of blood. Define ootheca and write its role.
04. Enlist the sense organs of cockroach. What do you mean by mosaic vision? Mention the role of ommatidia.
05. State the role of tegmina.
06. Differentiate between male and female cockroaches.
07. Write the structure of the gizzard and state its role in the digestion of cockroach.
08. What is hepatic caecae and where does it lie?
09. Name the excretory organ and its accessory organs and excretory product of cockroach.
10. What do you mean by haemocoel and haemolymph?
11. How can a cockroach survive for a week even after the head is cut off? Explain briefly.
12. Where do the nerves that supply the antennae and compound eyes of a cockroach arise from?
13. Why is mosaic vision also known as a nocturnal vision?
14. Differentiate between the abdomen of a male cockroach and that of a female cockroach.
15. What do you mean by haemopoiesis?
16. How is neuroglia different from neurons?
17. What are the cellular components of blood?
18. The intercalated discs function as boosters of contraction wave and helps the wave to transmit in cardiac muscle. Explain.
19. How is collagen fibre different from elastin fibre?
20. What are the various chitinous structure present in male phallomeres?

21. Describe the external characters of cockroaches. What is the importance of the exoskeleton of this cockroach?
22. What is the name of the appendages associated with the head and abdomen.
23. How gaseous exchange occurs in cockroach? Mention the process.