# Chapter 02

### Structural Organisation in Animals





#### Practice Section-01



- Q.1 Animal tissues are broadly classified into four types as
  - (1) Squamous, columnar, cuboidal and ciliated
  - (2) Simple, compound, special and glandular
  - (3) Epithelial, connective, neural and skeletal
  - (4) Neural, connective, epithelial and muscular
- Q.2 Epithelium present in ducts of glands and tubular parts of nephrons
  - (1) Columnar
- (2) Stratified
- (3) Cuboidal
- (4) Squamous
- **Q.3** The cloaca is
  - a small, median chamber that is used to pass faecal matter, urine and sperms to the exterior.
  - (2) a very small, median chamber that is used to pass faecal matter and urine.
  - (3) a small, median chamber that is used to pass faecal matter and sperms to the exterior.
  - (4) a large, median chamber that is used to pass faecal matter, urine and sperms to the exterior.
- **Q.4** Which characteristics describe the circulatory system of frogs?
  - (1) Closed circulatory system with double circulation and nucleated red blood cells.
  - (2) Open circulatory system with double circulation and non-nucleated red blood cells.
  - (3) Closed circulatory system with double circulation and non-nucleated red blood cells.
  - (4) Open circulatory system with single circulation and nucleated red blood cells.

- Q.5 Fertilisation in frogs usually take place in?
  - (1) Internal (within genital pouch)
  - (2) External (in a cocoon)
  - (3) External (in water)
  - (4) not well define
- Q.6 The abdomen in male and females consists of
  - (1) 10 and 11 segments, respectively
  - (2) 9 and 10 segments, respectively
  - (3) 10 and 10 segments, respectively
  - (4) 10 and 9 segments, respectively
- Q.7 Malpighian tubule are present at the junction of
  - (1) Foregut and midgut, and help in the secretion of digestive enzymes.
  - (2) Midgut and hindgut, and hclp in the grinding the food particles.
  - (3) Foregut and midgut, and hclp in the removal of excretory products from hacmolymph.
  - (4) Midgut and hindgut, and help in the removal of excretory products from haemolymph.
- **Q.8** Which of the following statement is incorrect regarding cockroach?
  - (1) The compound eyes are situated at the ventral surface of the head.
  - (2) Thorax consists of three parts prothorax, mesothorax and metathorax.
  - (3) Hepatic caeca secrete digestive enzyme and is present at the junction of foregut and midgut.
  - (4) body wall 3-layered (i.e. cuticle, hypodermis and basement membrane).





## Practice Section-02



- **Q.1** Cartilage is present
  - A. In the tip of nose and outer ear joints
  - B. Between adjacent bones of vertebral column
  - C. Between adjacent bones of limbs and hands in adults
  - (1) A, B and C
- (2) A and B
- (3) B and C
- (4) A and C
- **Q.2** Which of the following are specialised connective tissue?
  - (1) Cartilage
- (2) Bone
- (3) Blood
- (4) All
- **Q.3** Read the following statements about cockroach
  - I. The compound eyes are situated at the dorsal surface of the head
  - II. Females bear a pair of short, thread like anal styles which are absent in males.
  - III. Hepatic caeca secrete digestive enzyme and is present at the junction of foregut and midgut
  - IV. Thorax consists of prothorax, mesothorax and metathorax.

How many statements are correct?

- (1) One
- (2) Two
- (3) Three
- (4) Four
- Q.4 Which of the following statement is incorrect regarding cockroach?
  - (1) A pair of thread like antennae arise from membranous sockets lying in front of eyes.
  - (2) In cockroach, labium, labrum and hypopharynx are commonly called Lower lip, upper lip and tongue, respectively.

- (3) Externally segmented into head, thorax and abdomen.
- (4) In cockroach walking legs arise from Prothorax and mesothorax and are two pairs.
- Q.5 The front portion of the vaginal pouch in female cockroaches contains
  - (1) Gonopore
  - (2) Spermathecal pores
  - (3) Collateral glands
  - (4) All of these
- **Q.6** Which of the following is not a defence mechanism in frogs?
  - (1) Camouflage
  - (2) Poisonous skin
  - (3) Loud vocalizations
  - (4) Playing dead
- **Q.7** Metamorphosis is the process of?
  - (1) transformation from tadpoles to adults in frogs
  - (2) formation nictitating membrane is a translucent third eyelid
  - (3) formation of tympanic membrane
  - (4) none of the above
- Q.8 What is the mode of communication adapted by frogs?
  - (1) Vocalizations
  - (2) Visual signals
  - (3) Chemical signals
  - (4) All of the above

## **ANSWER KEY**

#### **PRACTICE SECTION-01**

Que.	1	2	3	4	5	6	7	8
Ans:	4	3	1	1	3	3	4	1

#### **PRACTICE SECTION-02**

Que.	1	2	3	4	5	6	7	8
Ans:	1	4	3	4	4	3	1	4



