

2025

(NEP—2020)

(3rd Semester)

ZOOLOGY (MAJOR/MINOR)

(**Anatomy**)

Full Marks : 75

Time : 3 hours

The figures in the margin indicate full marks for the questions

(**SECTION : A—OBJECTIVE**)

(Marks : 10)

Tick (✓) the correct answer in the brackets provided :

1×10=10

1. 6–8 pairs of finger-like folds found in buccal cavity of *Branchiostoma* are called

- (a) rostrum ()
- (b) Müller's organ ()
- (c) oral cirri ()
- (d) gill slits ()

2. The space between pericardium and heart is filled with

- (a) atrial fluid ()
- (b) blood ()
- (c) lymph ()
- (d) pericardial fluid ()

3. How many interclavicular air sacs are found in pigeon?

- (a) One ()
- (b) Two ()
- (c) Three ()
- (d) Four ()

4. Finger-like projections found in dermis are

- (a) stratum corneum ()
- (b) dermal papillae ()
- (c) corium ()
- (d) fibroblasts ()

5. Nociceptors are receptors that perceive

- (a) temperature ()
- (b) moisture ()
- (c) hunger ()
- (d) pain ()

6. Specialized cells found in cartilage are called

- (a) osteocytes ()
- (b) chondrocytes ()
- (c) cardiocytes ()
- (d) retinocytes ()

7. Vitreous humour is found in the

- (a) eyes ()
- (b) heart ()
- (c) air sacs ()
- (d) muscles ()

8. Which teeth are absent in rabbit?

- (a) Incisors ()
- (b) Canines ()
- (c) Premolars ()
- (d) Molars ()

9. The type of teeth found in mammals that have roots embedded in sockets is

- (a) bunodont ()
- (b) acrodont ()
- (c) pleurodont ()
- (d) thecodont ()

10. What structure separates the left and right atria?

- (a) Intraatrial septum ()
- (b) Interatrial septum ()
- (c) Intraventricular septum ()
- (d) Interventricular septum ()

(SECTION : B—SHORT ANSWERS)

(Marks : 15)

Write notes on *five* of the following, taking at least *one* from each Unit : 3×5=15

UNIT—I

- 1. Circulation in *Herdmania*
- 2. Syrinx of pigeon

UNIT—II

- 3. Layers of epidermis
- 4. Ligament

UNIT—III

- 5. Nictitating membrane
- 6. Digestive glands of rabbit

UNIT—IV

- 7. Deciduous teeth
- 8. Sinoatrial node

(SECTION : C—DESCRIPTIVE)

(Marks : 50)

Answer *five* questions, taking at least *one* from each Unit :

10×5=50

UNIT—I

1. Elaborate on the digestive system of *Branchiostoma*.
2. With the help of a well-labelled diagram, describe the internal ear of *Scoliodon*.

UNIT—II

3. Write a note on the different receptor organs found in vertebrates.
4. Describe the structure of a typical long bone.

UNIT—III

5. Elaborate in detail on the structure of a rabbit brain.
6. Write an account on the ultrastructure of a skeletal muscle.

UNIT—IV

7. What is dental formula? Illustrate the structure of a typical mammalian tooth.
8. Give an account of the modifications of heart in vertebrates.
