

2025

(NEP—2020)

(2nd Semester)

ZOOLOGY (MAJOR/MINOR)

(Chordate Biology and Wildlife)

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. Which of the following is a characteristic feature of all chordates?

- (a) Ventral nerve cord ()
- (b) Exoskeleton ()
- (c) Notochord ()
- (d) Open circulatory system ()

2. The blastula of *Branchiostoma* is of which type?

- (a) Discoblastula ()
- (b) Coeloblastula ()
- (c) Stereoblastula ()
- (d) Morula ()

3. The larval stage of *Herdmania* is known as
- (a) ascidian tadpole ()
 - (b) tornaria larva ()
 - (c) trochophore larva ()
 - (d) bipinnaria larva ()
4. Which hormone influences neoteny in amphibians?
- (a) Growth hormone ()
 - (b) Adrenaline ()
 - (c) Insulin ()
 - (d) Thyroxine ()
5. Neoteny refers to
- (a) retention of larval features in the adult stage ()
 - (b) rapid development of reproductive organs in juveniles ()
 - (c) complete metamorphosis ()
 - (d) formation of a new species ()
6. Which type of feathers help in insulation by trapping air close to the body?
- (a) Flight feathers ()
 - (b) Down feathers ()
 - (c) Bristle feathers ()
 - (d) Filoplumes ()
7. What is the primary component of feathers?
- (a) Chitin ()
 - (b) Collagen ()
 - (c) Keratin ()
 - (d) Melanin ()

8. The type of uterus found in rabbits is called
- (a) simplex uterus ()
 - (b) bicornuate uterus ()
 - (c) bipartite uterus ()
 - (d) duplex uterus ()
9. The dodo (*Raphus cucullatus*) was native to which island?
- (a) Madagascar ()
 - (b) Mauritius ()
 - (c) Seychelles ()
 - (d) Sri Lanka ()
10. The Tasmanian tiger was declared officially extinct in
- (a) 1850 ()
 - (b) 1900 ()
 - (c) 1936 ()
 - (d) 2000 ()

(SECTION : B—SHORT ANSWERS)

(Marks : 15)

Write short notes on *five* of the following, taking at least *one* from each Unit :

3×5=15

UNIT—I

1. Salient feature of Protochordata
2. Retrogressive metamorphosis

UNIT—II

3. Snake venom
4. Types of scales in pisces

UNIT—III

5. Male reproductive system of rabbit
6. Structure of feathers in *Columba livia*

UNIT—IV

7. The roles of World Wide Fund for Nature
8. Threats to wildlife

(SECTION : C—DESCRIPTIVE)

(Marks : 50)

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

10×5=50

UNIT—I

1. Write the classification of Chordata up to classes with examples.
2. Explain the larval development in *Herdmania*.

UNIT—II

3. Define sense organs and give a detailed explanation of the sense organs in *Scoliodon*.
4. Describe the poison apparatus and biting mechanism of snake.

UNIT—III

5. Write a detailed note on the principle and modes of flight in birds.
6. Describe in detail the different patterns and types of bird migration.

UNIT—IV

7. What is extinction? Provide a detailed account of the recently extinct Great Auk.
8. What are Lazarus taxa? Write the roles of IUCN Red List for conservation of wildlife.

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