

(6 pages)

Reg. No. :

Code No. : 10357 E Sub. Code : EMZO 21

B.Sc. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2025.

Second Semester

Zoology — Core

Major — CHORDATA

(For those who joined in July 2023 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. Which of the following structures is persistent throughout life in Amphioxus?
 - (a) Notochord
 - (b) Vertebral column
 - (c) Cartilaginous skeleton
 - (d) Exoskeleton

2. The labyrinth organ for aerial respiration is found in
 - (a) Catla
 - (b) Anabas
 - (c) Shark
 - (d) Torpedo
3. Amphibians are the first vertebrates to show
 - (a) Exoskeleton
 - (b) Double circulation
 - (c) Amniotic egg
 - (d) External gills
4. Which hormone plays the most important role in amphibian metamorphosis?
 - (a) Insulin
 - (b) Thyroxine
 - (c) Adrenaline
 - (d) Estrogen
5. The skin of reptiles is
 - (a) Moist and glandular
 - (b) Dry and covered with keratinized scales
 - (c) Covered with feathers
 - (d) Covered with hairs

6. The poison gland in snakes is a modification of
(a) Salivary gland (b) Sweat gland
(c) Lacrimal gland (d) Sebaceous gland
7. The synsacrum in pigeon is functionally important because it
(a) Supports wings during flight
(b) Provides rigid support for attachment of pelvic girdle
(c) Helps in respiration
(d) Aids in digestion
8. Which structure in birds reduces body weight and aids in flight?
(a) Heavy bones
(b) Pneumatic (hollow) bones
(c) Ossified scales
(d) Cartilage skeleton
9. Which part of the rabbit's alimentary canal harbors symbiotic bacteria for cellulose digestion?
(a) Stomach (b) Small intestine
(c) Caecum (d) Esophagus

10. The trachea of rabbit is supported by
(a) Bony rings (b) Cartilaginous rings
(c) Muscles only (d) Membranes

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Write down the salient features of Ammocoetus larva.
Or
(b) Write a short note on retrogressive metamorphosis in Ascidian.
12. (a) List down the general characteristics of Amphibians.
Or
(b) Explain paedogenesis in Amphibians.
13. (a) Mention the different types of poison and give one example for each.
Or
(b) Write about the first aid measures to be taken in case of a snake bite.

14. (a) Illustrate the different types of feathers in Aves with neat, labeled diagrams.

Or

- (b) Discuss the different types of flightless birds with a suitable example.

15. (a) Present the general characteristics of Mammals.

Or

- (b) Write a short note on dentition in mammals.

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Give the outline classification of Chordata up to classes with examples.

Or

- (b) Write an essay on accessory respiratory organs in fishes.

17. (a) Discuss metamorphosis in Amphibians.

Or

- (b) Give an account on parental care in Amphibians.

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18. (a) Describe the distinguishing features used in identifying poisonous and non-poisonous snakes with suitable examples.

Or

- (b) Explain the biting mechanism of snakes.

19. (a) Briefly describe the circulatory system of the pigeon, highlighting the structure of the heart and the pattern of blood circulation.

Or

- (b) Simplify the modifications of the feet and beak in birds.

20. (a) Conclude the structural features of integuments and their derivatives in mammals.

Or

- (b) Write an account on aquatic mammals and their adaptations.

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