| (C | pages) |
|----|--------|
|----|--------|

Reg. No. :

Code No.: 7444

Sub. Code: ZZOM 12

M.Sc. (CBCS) DEGREE EXAMINATION, NOVEMBER 2023

First Semester

Zoology - Core

COMPARATIVE ANATOMY OF CHORDATES

(For those who joined in July 2021 - 2022 onwards)

Time: Three hours

Maximum: 75 marks

PART A - (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer:

- 1. Which part is present in all chordates
 - (a) Dorsal tubular nerve cord
 - (b) Umbilical cord
 - (c) Notocord
 - (d) Ventral tubular nerve cord

- 7. ____ is the example for single chambered heart.
 - (a) Dog fish
- (b) Amphibia
- (c) Birds
- (d) Branchiostoma
- 8 The brain is enclosed of
 - (a) Rib bone
- (b) Ligament
- (c) Vertebral column (d)
-) Bony cranium
- Oviduct of vertebrates are modified as
 - (a) Mullerian duct
- (b) Wolffuian duct
- (c) Inguinal canal
- (d) Urinary duct
- The dorsal surface of the tongue bears numerous elevations called
 - (a) Scales
- (b) Papillae
- (c) Tentacles
- (d) Cilia

PART B — $(5 \times 5 = 25 \text{ marks})$

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

Each answer should not exceed 250 words.

11. (a) Write briefly about hemichordata.

Or

(b) Distinguish about Agnatha and Pisces.

Page 3

Code No.: 7444

- 2. Tunicata comes under
 - (a) Urochordata
 - (b) Cephalochordata
 - (c) Hemichordata
 - (d) Invertebrata
- 3. Lipophores of skin denotes
 - (a) Red colour
- (b) Black colour
- (c) White colour
- (d) Green colour
- 4. Cursorial feet is favor for
 - (a) Swimming
- b) Running
- (c) Flying
- (d) Climbing
- In vertebral column the centum is concave at both end is
 - (a) Ophisthocoelous
- (b) Acoelous
- (c) Amphicoelous
- (d) Heterocoelous
- 6. The Rabbit palm of fore limb is supported by
 - (a) Toes
- (b) Pelvic bone
- (c) Metacarpals
- (d) Acetabulum

Page 2 Code No.: 7444

(a) Give short notes of placoid scales of shark.

Or

- (b) Briefly explain about derivatives of skin.
- (a) Give short notes on functions of endoskeleton.

Or

- (b) Briefly explain about hind limbs of chordates.
- 14. (a) Write about cranial nerves.

Or

- (b) Conclude about aortic arches of fishes.
- 15. (a) Write about metaneprous kidney.

Or

(b) Summarize about lateral line sense organs.

Page 4 Code No.: 7444

[P.T.O.]

PART C — $(5 \times 8 = 40 \text{ marks})$

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

Each answer should not exceed 600 words.

16. (a) Classify phylum chordate with suitable example.

Or

- (b) Discuss about cephalochordata with suitable example.
- 17. (a) Illustrate about types of scales in fishes.

Or

- (b) Explain detail on structure and functions of vertebrates integument.
- (a) Discuss in detail about axial skeleton of vertebrates.

Or

- (b) Illustrate about different types of tongues present in vertebrates.
- 19. (a) Justify about respiratory organs of fishes.

Or

(b) Discriminate about central nervous system of vertebrates.

Page 5 Code No.: 7444

20. (a) Write about different types of ears of vertebrates.

Or

(b) Evaluate about gonads and ducts of vertebrates.

Page 6 Code No.: 7444