3 (Sem-3/CBCS) ZOO HC 1

2023

ZOOLOGY

(Honours Core)

Paper: ZOO-HC-3016

(Diversity of Chordata)

Full Marks: 60

Time: Three hours

The figures in the margin indicate full marks for the questions.

- 1. Answer the following questions: $1 \times 7 = 7$
 - (i) Which is not a chordate character?
 - (a) Dorsal hollow tubular nerve cord
 - (b) Longitudinal supporting rod-like notochord
 - (c) A series of pharyngeal gill slits
 - (d) Diploblastic

- (ii) Balanoglossus is commonly known as
 - (a) Snake worm
 - (b) Acorn worm
 - (c) Corn worm
 - (d) Hemichordata
- (iii) The Dipleurula concept was first proposed by
 - (a) Darwin
 - (b) Bather
 - (c) Garstang
 - (d) None of the above
- (iv) The larva of Lamprey is
 - (a) Tornaria
 - (b) Trochophore
 - (c) Ammocoete
 - (d) Ascidia tadpole larva
- (v) The Ostracoderms are grouped into
 - (a) Pisces
 - (b) Agnatha
 - (c) Gnathostomata
 - (d) Tetrapoda
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- (vi) Which of the following is the connecting link between osteichthyes and Amphibian?
 - (a) Peripatus
 - (b) Neopilina
 - (c) Protopterus
 - (d) Ornithorhynchus
- (vii) Snakes are sensitive to
 - (a) noises made by birds
 - (b) earth borne vibrations
 - (c) thunder
 - (d) air borne vibrations
- 2. Answer the following: 2×4=8
 (i) Write short notes on parental care in Amphibia.
 - (ii) Describe the mechanism of osmoregulation in marine fish.
 - (iii) What is active flight or true flight?
 - State distinctive characters of class Reptilia.
- 3. Answer any three of the following questions: 5×3=15
 - (i) Distinguish between Lamprey and Hagfish.
 - (ii) Write a brief note on Archaeopteryx with suitable diagram.
 - (iii) Write about the anatomical pecularities of Sphenodon.

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Contd.

- (iv) Distinguish between Megachiroptera and Microchiroptera.
- (v) Write briefly on Wegener's continental drift theory.
- 4. Answer the following questions: $10\times3=30$
 - (a) Describe the retrogressive metamorphosis in Urochordata with suitable diagrams.

Or

- (b) What do you mean by parental care?

 Discuss about the various mechanism of parental care in Fishes. 2+8=10
- 5. (a) Write about the general characteristics of class Amphibia. Give an outline classification of Amphibia. 5+5=10

Or

- (b) Birds are 'glorified reptiles'. Justify the statement.
- 6. (a) Name two venomous snake of India.

 Describe the bitting mechanism of snake with suitable diagram. 2+8=10

Or

(b) What do you mean by Zoogeography? Give an account of different zoogeographical region with its faunal diversity and distribution. 2+8=10