## 3 (Sem-3/CBCS) ZOO HC 1

2021 (Held in 2022)

## ZOOLOGY

(Honours)

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: 1×7=7
  - (i) Notochord is confined to proboscis in
    - (a) Urochordata
    - (b) Hemichordata
    - (c) Cephalochordata
    - (d) Chordata

- (ii) Which of the following is a chordate but not a vertebrate?

  1 2H 00S (a) Catla
  - (b) Hippocampus
  - (c) Hemidactylus
  - (d) Amphioxus
  - (iii) Enteropneusta belong to
    - (a) Hemichordata
    - (b) Cephalochordata
    - (c) Urochordata
    - (d) Echinodermata
  - (iv) Which of the following is a lungfish?
    - (a) Diplopterax
      - (b) Hippocampus
      - (c) Lepidosiren
      - (d) None of the above
  - (v) Tailless amphibians are -
    - (a) Anura
    - (b) Gymnophiona
    - (c) Caudata
    - (d) None of the above

- (vi) The number of condyle(s) in the skull of reptiles is/are —
- 10 endu (a) one
  - (b) two
  - three some chargement had (c)
  - (d) four
  - (vii) Teeth in mammals are
    - (a) Thecodont, homodont, diphyodont
    - (b) Thecodont, heterodont, diphyodont
    - (c) Acrodont. homodont, monophyodont
    - (d) Acrodont, homodont, polyphyodont
- Answer any four of the following: 2×4=8
  - (i) Distinguish between Metatheria and Eutheria.
  - (ii) Write on parental care in amphibia.
  - Write the role of kidneys in (iii) osmoregulation of fishes.
  - Write a short note on perching (iv) mechanism in birds.
  - Write about the muscles associated (v) with Biting mechanism of snakes.
- 3. Briefly describe the following: (any three)  $5 \times 3 = 15$ 
  - (i) Give a brief account of the general characteristics of birds.

- (ii) Differentiate between poisonous and non-poisonous snakes.
- (iii) Give a brief account on the affinities of Prototheria.
- (iv) Distingusih among hemichordata, urochordata and cephalochordata.
- (v) Write on the general characteristics of Agnatha.
- 4. Answer **any three** of the following: 10×3=30
  - (i) Write about the general characteristics of fishes. Give an outline classification of fishes.
  - (ii) Describe the retrogressive metamorphosis in urochordata with suitable diagrams.
  - (iii) Describe the principles and acrodynamics of birds, flight. Write about the migration in birds.
  - (iv) Write about the theories related to the distribution of animals in different geographical realms. Highligth on how different vertebrates are distributed in different geographical realms.
  - (v) Give an account of distinguishing characters and outline classification of mammals.