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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 : $1 \times 7 = 7$

(i) Notochord is confined to proboscis in

(a) Urochordata

(b) Hemichordata

(c) Cephalochordata

(d) Chordata

Contd.

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

- (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 —

- (a) one
- (b) two
- (c) three
- (d) four

(vii) Teeth in mammals are —

- (a) Thecodont, homodont, diphyodont
- ✓(b) Thecodont, heterodont, diphyodont
- (c) Acrodont, homodont, monophyodont
- (d) Acrodont, homodont, polyphyodont

2. Answer **any four** of the following : $2 \times 4 = 8$

- (i) Distinguish between Metatheria and Eutheria.
- (ii) Write on parental care in amphibia.
- (iii) Write the role of kidneys in osmoregulation of fishes.
- (iv) Write a short note on perching mechanism in birds.
- (v) Write about the muscles associated 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) Distinguish 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 aerodynamics of birds, flight. Write about the migration in birds.
- (iv) Write about the theories related to the distribution of animals in different geographical realms. Highlight on how different vertebrates are distributed in different geographical realms.
- (v) Give an account of distinguishing characters and outline classification of mammals.