

(07/21-II)

5226

B. Sc. EXAMINATION

(For Batch 2011 & Onwards)

(Fourth Semester)

ZOOLOGY

First Paper

Life and Diversity of Chordates-II

Time : Three Hours

Maximum Marks : 40

Note : Attempt *Five* questions in all. Q. No. 1 is compulsory. Select *two* questions each from Section A and Section B. Support your answers with well labelled diagrams and suitable examples wherever necessary.

1. Explain the following :

(a) Aestivation

(b) Crus commune

- (c) Procoelous vertebra
- (d) Jacobson's organ
- (e) Icthyosaurs
- (f) Bastard wing
- (g) Preen gland
- (h) Altricial bird
- (i) Thecodont dentition
- (j) Meibomian glands.

1×10=10

Section A

2. (a) Define Portal System. Explain different types of Portal Systems along with their significance in Frog. 4½
- (b) Describe the structure of skin of Frog with the help of a well labelled diagram. 3
3. (a) Give a brief account of Excretory System of Frog. 4½
- (b) Give an account of Buccopharyngeal Respiration in Frog. 3

4. (a) Give an account of Brain of Hemidactylus. 5
 (b) Differentiate between Poisonous and Non-poisonous Snakes. 2½
5. (a) Enumerate any *five* unique features of class reptilia. 2½
 (b) Write any *four* differences between sub-order Lacertilia and Ophidia. 2
 (c) Give the Scientific name and Systematic Position of the following :
 (i) Flying Dragon 1½
 (ii) Monitor. 1½

Section B

6. Write short notes on the following :
 (a) Bird Migration 4½
 (b) Morphological Volant Adaptations in Birds. 3

7. (a) Describe the Arterial System of Pigeon. 5
 (b) Write a short note on Syrinx of Pigeon. 2½
8. (a) Give the name, origin, innervation and nature of I, IV and VI cranial nerves of Fat. 4½
 (b) Describe the structure of membranous Labyrinth of Rat. 3
9. Draw well labelled diagram of the following :
 (a) Male Urinogenital System of Rat 4½
 (b) V.S. Eye of Rat. 3