

Roll No.

(04/17-I)

5226

B. Sc. EXAMINATION

(Fourth Semester)

ZOOLOGY

Paper First

Life and Diversity of Chordates-II

Time : Three Hours

Maximum Marks : 40

Note : Attempt *Five* questions in all, selecting *two* questions from each Section. Q. No. 1 is compulsory. Draw well labelled diagrams wherever you feel necessary.

(Compulsory Question)

1. Answer the following in about 20 words each :

- (a) Panniculous adiposus
- (b) Double accommodation

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P.T.O.

- (c) Conus papillaris
- (d) Bidder's canal
- (e) Diastemma
- (f) Synsacrum
- (g) Fangs
- (h) Arbor vitae
- (i) Vocal sacs
- (j) Brow spot.

Section I

2. (a) Draw a well labelled diagram of internal structure of heart of Hemidactylus.
- (b) How would you differentiate between the poisonous and non-poisonous snakes ?

4,3½

3. Explain different models of respiration in frog. Also describe their mechanism. 7½
4. Describe the structure of brain of Hemidactylus. 7½

5. (a) What is Parental Care ? Write in brief about parental care in amphibians.
(b) A short note on Scymauria as connecting link between amphibians and reptiles.
4½,3

Section II

6. (a) Draw a neat and well labelled diagram of V.S. Eye of Pigeon.
(b) A note on Morphological Adaptations of birds for flight. 4,3½
7. Give an account of various types of feathers in birds. 7½
8. (a) Explain the structure of Internal ear of Rat.
(b) Structure of Mammalian tooth. 4,3½
9. (a) Describe male urinogenital system of Rat.
(b) A note on adaptive radiations in metatherians. 4½,3