

Roll No. ....

Total Pages : 2

**GSM/M-20**

**1627**

**Life and Diversity of Chordates-II**

Paper - I

*Time allowed : 3 Hours*

*Maximum Marks : 40*

**Note:** Attempt five questions in all, selecting two questions from each Section-A and B. Question No. 1 is compulsory. Support your answer with neat and well labelled diagram(s) wherever necessary.

**Compulsory Question**

1. Answer the following in about 20 words each: 10×1
- (i) Amplexusory pad
  - (ii) Spiral valve
  - (iii) Gizzard
  - (iv) Jacobson's organs
  - (v) Pecten
  - (vi) Carnassial teeth
  - (vii) Seminal vesicles
  - (viii) Bastard wing
  - (ix) Diastema
  - (x) Thecodont dentition

**SECTION-A**

2. (a) Describe the male reproductive system of frog. 4  
(b) Write a note on laryngo-tracheal chamber of frog. 3.5

3. Write short notes on the following :
- (i) Eye of Hemidactylus 4.5
  - (ii) Ventricle of Hemidactylus 3
4. (i) Describe parental care in amphibians 4.5
- (ii) Differentiate between poisonous and non-poisonous snakes 3
5. Write short notes on the following :
- (i) Membranous labyrinth of frog 4.5
  - (ii) Pterosaurs 1.5
  - (iii) Therapsides 1.5

### **SECTION-B**

6. Explain the internal structure and working of heart of Rat. 7.5
7. What are feathers. Explain different types of feathers in Pigeon. 7.5
8. Write short note on the following :
- (i) Internal ear of Rat 4.5
  - (ii) Air sacs of Pigeon 3
9. Write short note on the following :
- (i) Volant adaptations 5
  - (ii) Adaptive radiations in eutherians 2.5