

**2024**

Time :As in Programme

Full Marks : 100

*The figures in the right-hand margin indicate marks.*

*Answer all questions.*

**PART-I**

1. Answer all the following Questions. 1x10
- The free swimming larva of hemichordate is called \_\_\_\_.
  - The excretory cell in the body of herdmania is called as \_\_\_\_.
  - The jaw less vertebrates are included under which group ?
  - Migration of fishes from marine to fresh water is called as \_\_\_\_.
  - \_\_\_\_ type parental care seen in elasmobranchs.
  - Sphenodon represented by \_\_\_\_ order.
  - \_\_\_\_ era is known as age of reptiles.
  - Which types of bones are found in birds ?
  - Which theory describe movement of continental plates?
  - Africa is included in \_\_\_\_ relam.

**PART-II**

2. Answer the following question in 50 words each. 2x9
- What are basic features of chordata ?
  - How chordates are advanced than protochordates ?
  - Define metamorphosis.
  - What are characters of Ascidian tadpole ?

(Turn Over)

- e. What are importance of Accessory respiratory organ ?
- f. What is direct parental care ?
- g. Define the process of Navigation in birds.
- h. What do you mean by Fangs ?
- i. Define zoogeography.

### PART-III

3. Answer any eight questions of the followings in 250 words each. 5x8
- a. Define origin of chordates ?
  - b. Discuss larval forms of Hemichordate and cephalochordate.
  - c. Discuss accessory respiratory organ in fishes.
  - d. Discuss origin of tetrapoda.
  - e. Discuss evolutionary significance of Dipnoi.
  - f. Describe poison apparatus of snakes ?
  - g. Justify Archaeopteryx as a connecting link.
  - h. Discuss adaptive radiation in mammals.
  - i. Describe continental drift ?
  - j. Explain morphological, anatomical adaptation of Birds for flight adaptation.

### PART-IV

Answer any four of the following question in 800 words each.

8x4

- 4. Describe Retrogressive metamorphosis in urochordates.
- 5. Describe parental care in Amphibia.
- 6. Describe affinities of sphenodon in detail.
- 7. What is migration ? Describe causes of migration in birds ?
- 8. Describe affinities of prototheria and add a note on its phylogenetic position.

