

Fourth Semester B. Sc. Examination

ZOOLOGY

Paper-I

(Life and Diversity of Animals — Chordates)

(Reptilia, Aves and Mammals)

Time : Three Hours ]

[ Max. Marks : 50

- N. B. : (1) All questions are compulsory.  
(2) All questions carry equal marks.  
(3) Illustrate your answers with suitable diagrams.

1. Write an essay on the Migration in birds. 10

OR

Write notes on :—

(A) Poison apparatus in snakes. 5

(B) General characters of Protothelia. 5

2. Give an account of aquatic and terrestrial adaptations in animals. 10

OR

Write notes on :—

(A) Darwinism. 5

(B) Mongoloid and Australoid races in man. 5

3. Describe the structure of hen's egg in detail. 10

Write notes on :—

- (A) Comparative account of heart in birds and mammals. 5
- (B) Development of yolk sac and its functions. 5
4. Give an account of classification of placenta based on morphological distribution of villi. 10

**OR**

Write notes on :—

- (A) Role of stem cells in human welfare. 5
- (B) Role of Pheromones in reproductive behaviours. 5
5. Write **four** or **five** lines on the following (any **ten**) :—
- (i) Anapsid skull.
  - (ii) Snake venom.
  - (iii) Metatheria.
  - (iv) Variation.
  - (v) Neo - Darwinism.
  - (vi) Cursorial adaptation.
  - (vii) Heart in Reptile.
  - (viii) Egg Shell.
  - (ix) Chalaza.
  - (x) Trophoblast.
  - (xi) Bidiscoidal placenta.
  - (xii) Types of stem cell.

10×1