

**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) Draw suitable diagrams wherever necessary.

1. Give an account of classification of reptiles on the basis of temporal vacuities. 10

**OR**

Write notes on :—

(A) Migration in birds. 5  
 (B) General characters of Eutheria. 5  
 2. Give an account of genetic basis of evolution. 10

**OR**

Write notes on :—

(A) Negroid and Mongoloid races in Man. 5

3. Write an essay on development of chick upto primitive streak formation. 10

**OR**

Write notes on :—

(A) Functions of extra embryonic membranes. 5  
 (B) Structure of hen's egg. 5

4. Give an account on diurnal and rhythmic behavior in animals. 10

**OR**

Write notes on :—

(A) Role of pheromones in reproductive behaviour. 5  
 (B) Implantation in Mammals. 5  
 5. Write **four** or **five** lines on the followings (Any **Ten**) :—  
 (i) Poison gland  
 (ii) Ratitae  
 (iii) Duck billed platypus  
 (iv) Survival of fittest.

(v) Advantages of volant adaptations.

(vi) Natural selection.

(vii) Pulmonary trunk.

(viii) Hensen's node

(ix) Carotid artery.

(x) Zonary placenta

(xi) Stem cell

(xii) Haemochorionic placenta.

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