FS – 30 / 15-16

Zoology

Paper – II

Time : 3 hours

Full Marks : 200

The figures in the right-hand margin indicate marks.

*Candidates should attempt Q. No. 1 from Section – A and Q. No. 5 from Section – B which are compulsory and any **three** of the remaining questions, selecting at least **one** from each Section.*

SECTION – A

1. Give an account on any **two** of the following : 20×2 = 40

   (a) Polymorphism in lysosomes

   (b) Hardy-Weinberg law

   (c) Cladistics

2. Explain Mendel's laws of inheritance with suitable examples. 40

3. Discuss the importance of nature selection and mutation in evolution. 40

4. Write notes on the following : 10×4 = 40

(a) Functions of Golgi bodies

(b) Genetic basis of human blood groups

(c) Evolutionary significance of fossils

(d) Zoological nomenclature

SECTION – B

5. Illustrate any **two** of the following : 20×2 = 40

(a) Krebs Cycle

(b) Primary structure of Immunoglobulin

(c) Placentation in mammals

6. Explain the mechanisms of contraction of skeletal muscles. 40

7. Describe various events in embryonic development of eye. 40

8. Write notes on the following : 10×4 = 40

(a) Types of enzymes

(b) Pheromones

(c) Action of peptide hormones

(d) Neoteny