

Exam. Code : 103205

Subject Code : 1366

B.A./B.Sc. 5th Semester

ZOOLOGY ZOO-VB

(Genetics)

Time Allowed—3 Hours]

[Maximum Marks—35

Note :—(1) Section A is compulsory and has 7 short answer type questions (1 mark each).

(2) Section B has 8 questions including two from each section. Candidate is required to attempt 4 questions one from each unit. All questions have equal marks.

SECTION—A

1. Define the following :

- (a) Linkage
- (b) Pseudoallelism
- (c) Genetic code
- (d) Overlapping genes
- (e) Somatic mutations
- (f) Operon
- (g) Transformation.

1×1=7

SECTION—B

UNIT-I

2. What is multiple allelism ? Explain with respect to blood groups of man. 7
3. Describe the process of linkage and give its significance. 7

UNIT-II

4. Differentiate between the process of transcription in prokaryotes and eukaryotes. 7
5. Write a note on the process of protein synthesis in prokaryotes. 7

UNIT-III

6. Write an essay on the inborn errors of metabolism in man. 7
7. Explain the extranuclear inheritance with the help of a suitable example. 7

UNIT-IV

8. Define Hardy Weinberg Law and discuss its salient features. 7
9. Write a note on the DNA fingerprinting. 7