

Attempt **SIX** Questions in all. **Section-A** is **Compulsory**. Attempt **FIVE** questions from **Section-B**.
All questions carry equal marks.

SECTION-A

1- Explain the following terms with diagrams (where required), each carry equal marks:

5x2=10

- i) Lipids and Fatty Acids
- ii) Peroxisomes
- iii) Aneuploidy and Euploidy
- iv) Restriction Enzymes
- v) Mendalism

SECTION-B

2- Explain Structure and Functions of Cytoplasmic Organelles.

5

3- What are dictyosomes? Provide their role in detail with diagrams.

5

4- What is Meiosis? Explain in detail Meiosis-I steps with diagram.

5

5- Provide detailed mechanism of Gene Transfer in plants and animals.

5

6- Illustrate the phenomenon of Linage and Crossing over with examples.

5

7- Explain Plant Improvement Techniques with examples.

5

8- Provide detailed steps of Polymerase Chain Reaction.

5

9- Define Evolution and its process in the light of Hardy Weinberg Law.

5

***B.A/B.Sc-II (18/A)(N) – xxvii ***