

## **Botany (Hons.) Paper-V**

*Answer five questions selecting at least one from each Group, while Q.No. 1 is compulsory.*

1. Write, in short, on any four of the following :
  - (a) Cytokinesis
  - (b) Significance of meiosis
  - (c) Linkage
  - (d) Translocation Heterozygote
  - (e) Hybridization

### **Group-A**

2. Give an account of structure and functions of nucleus.
3. Describe the structure and function of ribosomes.
4. Give an account of the structure and function of endoplasmic reticulum.
5. Describe the structure and function of chloroplast in plants.

**Group-B**

6. What are Mendelian Laws of Inheritance? Explain the Laws on the basis of mono-hybrid and dihybrid crosses.
7. Define chromosomal aberrations. Mention the process of inversion heterozygote with suitable diagrams.
8. Define polyploidy. Mention its types and induction by artificial means.
9. Describe breeding methods in cross-pollinated crops.
10. Write short notes on any two of the following :
  - (a) ABO Blood group in human being
  - (b) Complementary factor
  - (c) Trisomy
  - (d) Transition and Transversion