- 5. Write notes on any *two* of the following:
  - (a) Chromosomal proteins
  - (b) Centromere and telomeres
  - (c) Duplication a type of chromosomal alteration.
- 6. Give a detailed account of 'Polyploidy'.
- 7. Discuss in brief different theories proposed to describe structure of plasma membrane.
- 8. Give a detailed account of 'Structure and functions of plant cell wall'. Support your answer with suitable diagrams.

**Exam. Code : 103202 Subject Code : 1251** 

## B.A./B.Sc. 2<sup>nd</sup> Semester BOTANY Paper–II A (Cell Biology)

Time Allowed—2 Hours] [Maximum Marks—35

**Note:**—There are *eight* questions of equal marks.

Candidates are required to attempt any *four* questions.

- 1. With the help of diagrams, give a detailed account of structure and functions of nuclear pores.
- Give an account of morphological features, shapes and sizes and chemical composition of eukaryotic nucleus.
- Discuss in detail 'Inheritance pattern in yeast indicating role of mitochondrial DNA'.
- 4. What do you understand by "Plastid inheritance"? Discuss in detail. Support your answer with suitable examples.