

# PAPER –II CELL BIOLOGY

Max. Marks - 40+10

Time- 3 Hrs.

**Note:** Attempt five questions in all, selecting two questions from each unit.

**Question No. 1 is compulsory (short answer type).**

**Nine questions are to be set spread over the entire syllabus. All questions carry equal marks.**

## UNIT-I

**The Cell Envelopes:** Structure and functions of Cell Wall and Plasma Membrane.

Ultrastructure and function of nucleus, Golgi Apparatus, Endoplasmic Reticulum, Chloroplast, Mitochondria, Lysosomes, Peroxisomes and Vacuoles.

## UNIT-II

**Cell Division:** Mitosis and Meiosis.

**Chromosome:** Morphology, organization, ultrastructure of Centromere and Telomere; Chromosomal alterations- deletions, duplications, translocations, inversions; Variations in chromosome number-aneuploidy, polyploidy; sex chromosomes and sex determination.