

**B.Sc- BOTANY SYLLABUS UNDER CBCS
CORE PAPER..V SEMSTER-V
CELL BIOLOGY AND GENETICS**

BLOCK-I CELL BIOLOGY

Unit-1: Plant cell Wall

Unit-2: Nucleus

Unit-3: Nucleic Acids

BLOCK-II CHROMOSOMES AND CELL DIVISION

Unit-4: Chromosomes

Unit-5: Extra nuclear genome

Unit-6: Cell division

BLOCK-III GENETICS - LINKAGE & CROSSING OVER

Unit-7: Mendel principles

Unit-8: Linkage and crossing over

Unit-9: Genetic code and Protein synthesis

**BLOCK-IV MUTATIONS, GENE ORGANIZATION, AND EXPRESSION AND BIO
INFORMATICS**

Unit-10: Mutations

Unit-11: Gene organization

Unit-12: Genetic Engineering

**B.SC PRACTICAL- V
CELL BIOLOGY AND GENETICS**

BLOCK:I CYTOLOGY

Unit-1: Mitosis

Unit-2: Meiosis

Unit-3: Cell organelles

Unit-4: Types of chromosomes

BLOCK-II: GENETICS

Unit-5: Monohybrid cross,

Unit-6: Dihybrid cross

Unit-7: Incomplete dominance and Interaction of genes

Unit-8: Construction of linkage maps