

M.Sc.(IInd Year)

Programme: Master of Science Botany

Year / Semester: 2nd Year

Paper Code: BOT-551

Paper Name: Cell Biology, Genetics, Biostatistics and Ecology

BLOCK – I : CELLBIOLOGY

- Unit –1 : Principles and Application of Light, Phase Control, Fluorescence and Electron Microscopy
- Unit –2 : Ultra Structure and Function of Plant Cell and Organelles
- Unit –3 : Chromosome
- Unit –4 : Special Types of Chromosome
- Unit –5 : Cell Cycle and Apoptosis

BLOCK – II: GENETICS

- Unit –6 : DNA
- Unit –7 : Genetic Code
- Unit –8 : Brief Overview of Mendelian Inheritance
- Unit –9 : Chromosomal Aberrations
- Unit –10 : Mutations

BLOCK – III: BIOSTATISTICS

- Unit –11 : Mean Variance
- Unit –12 : Application of Computers in Biology

BLOCK – IV: PLANT ECOLOGY – I

- Unit –13 : Principles, Concepts and Levels of Ecology
- Unit –14 : Community Characteristics
- Unit –15 : Biodiversity
- Unit –16 : Ecosystem

BLOCK – V PLANT ECOLOGY – II

- Unit –17 : Global Biogeochemical Cycles of C, N₂ and S
- Unit –18 : Climate, Soil, Vegetation Pattern of India
- Unit –19 : Climate Change and Green House Gases
- Unit –20 : Environmental Pollution