B.Sc. Botany (Minor) Semester I/II Syllabus

Unit-I

- Introduction to Botany, Definition, scope, and importance, Branches of botany
- Cell Biology: Cell structure and function, Cell division and differentiation
- Plant Anatomy :Root, stem, and leaf anatomy, Tissue organization
- Plant Morphology :Plant body organization, Leaf, stem, and root modifications

Unit-II

Algae: Classification and characteristics, Ecological importance

Unit-III

Bryophytes: Classification and characteristics, Life cycle

Unit-IV

Pteridophytes: Classification and characteristics, Ecological importance

Unit-V

Gymnosperms: Classification and characteristics, Life cycle

Unit-VI

Plant Physiology: Photosynthesis, Light-dependent reactions, Calvin cycle, Respiration, Aerobic and anaerobic respiration, Electron transport chain

Unit-VII

Plant Ecology: Ecological Principles, Ecosystem concept, Energy flow and nutrient cycling, Ecosystems, Terrestrial and aquatic ecosystems

Unit-VIII

Genetics and Evolution, Mendelian Genetics, Laws of inheritance, Genetic linkage and mapping

Molecular Genetics: DNA structure and replication

ABTULLAND (convenie) DR. M.Z.Beg (External)

Prof. M. Jaise Beg (P.G. Membu)

Dr. M. Aksan Beg (P.G. Member) Bri Rajnish Bharali (U. G. Member)

Gos Amil Kumar Pale