

# **COURSE OUTCOMES OF BOTANY**

**(By University under graduate course 2020-21 | )**

Botany is important in the fields of genetic engineering and molecular biology that helps to improve the production of drugs, vaccines, insulin, treatment of infertility. It also helps to produce nutritious foods, disease and drought resistant plants in agricultural fields.

Core-I:-Introduction to microbial world,Nutrition,Growth and metabolism, Discovery,general characteristics,structure and economic importance of Bacteria and Algae,

C-II:-Types and significance of Biomolecules.

Structure and function of cell and cell organelles.

C-III:-General characteristics,Ecology,Thallus organization of fungi General Symptoms of plants disease, Preventions and control measures.

C-IV:-General characteristics,classification,morphology,

anatomy and reproduction of Bryophytes,Pteridophytes,Gymnosperms.

Study of Palaeobotany and Geological time scale

C-V:-Introduction and scope of plant anatomy , applications in systematics,forensics and pharmacognosy,

C-VI:-Description of Economically important plants belongs to cereals,legumes,sugars,spices,drug-yielding plants,essential oils,rubber & timber.

C-VII:-Mendelian Genetics, Extrachromosomal Inheritance, Linkage,

Crossing over, chromosomal aberrations & Evolutionary genetics.

C-VIII:-Molecular biology related with nucleic acid, DNA replication

Genetic code, Processing and modifications of RNA, Transcription and Translation.

C-IX:-Plant Ecology and Phytogeography related with living and non living components, Ecosystem, Principles of Phytogeography.

C-X:-Plant taxonomy and systematic, phylogeny of angiosperms.

C-XI:-Reproductive biology of angiosperms related with pollination, fertilization, development of embryo and seed.

C-XII:- Plant physiology related with plant water relation, phloem transport, mineral nutrition, nutrition uptake, Plant growth regulators, photoperiodism and role of phytochrome.

C-XIII:-Plant metabolism related with carbon assimilation, carbon oxidation, ATP-Synthesis, Lipid metabolism, Nitrogen metabolism.

C-XIV:-Plant biotechnology related with plant tissue culture, Recombinant DNA technology and its applications.