(CO)

Botany under CBCS Course Outcomes (Major Courses)

S.No	UG Semester	Course	Course Outcomes
1.	I	MJC-1 (Psychology and Microbiology)	CO1: classify the plant kingdom CO2: Describe the diversity structure and importance of viruses and bacteria CO3: describe the general account of mycoplasma CO4: explain in thallus organization, economic importance and the life cycle of various algae
2.	II	MJC-2 (Bio molecules and Cell Biology)	C01: describe the structure, properties and functions of bio molecules Co2: explain the classification properties and functions of enzymes Co3: describe cell wall, cell membrane and the structure and functions of cellular organelles Co4: explain the eukaryotic cell cycle, mitosis and meiosis
3.	III	MJC-3 (Mycology and Phytopathology)	Co1: develop an understanding about the thallus organization, nutrition, economic importance and life cycle of various fungi Co2: understand the terms, scope and importance of plant pathology Co3: describe the etiology, symptoms and control measures of plant diseases Co4: learn about various associations: Lichens and Mycorrhizae
4	III	MJC-4 (Archegoniate)	Co1: develop awareness about morphology, diversity and evolution of bryophytes, pteridophytes and gymnosperms Co2: compare the life cycle of various bryophytes, pteridophytes and gymnosperms Co3: understand the economic importance of the bryophytes and gymnosperms Co4: know the importance of studying fossils
5.	IV	MJC-5 (Morphology and Anatomy)	Co1: know the morphological characters of plants. Co2: understand the tissue system and the normal as well as anomalus secondary growth in plants Co3: learn about the structural adaptations in plants growing in different environmental conditions C04: describe the structure and function of periderm
6	IV	MJC-6 (Economic Botany)	CO1: Create awareness about plants of economic importance C02: know about their distribution patterns Co3: acquire skill in identification of medicinal plants Co4: learn about their cultivation and economic importance
7.	IV	MJC-7 ((Genetics)	Co1: understand Mendelian laws of inheritance and its variations Co2: know the details of mutations and their uses Co3: know about the sex determination and sex linked inheritance

8.	V	MJC-8 (Molecular Biology)	Co1: decipher the structures and chemical properties of DNA and RNA and their role Co2: understand various steps in transcription and translation in prokaryotes and eukaryotes Co3: know about gene regulation in prolaryotes and eukaryotes Co4: gain knowledge of modern biology techniques
9.	V	MJC-9 (Plant Ecology and Phytogegraphy)	Co1: knowledge of plant communities and ecological adaptations in plants Co2: understand about the soils on the basis of physical, chemical and biological components Co3: know about the types of pollution and their control measures Co4: get idea about the conservation of biodiversity, types and control of pollution phytogeographical regions of India and nonconventional energy
10.	VI	MJC-10 (Plant Systematics)	Co1: identify and classify the local flora Co2: know about the rules of ICBN Co3: awareness of different systems of plant classification Co4: preparation of herbarium and its importance
11.	VI	MJC-11 (Reproductive Biology of Angiosperms)	Co1: know about the sporogenesis and gametogenssis Co2: understand structure and functions of anther wall and pollen biology Co3: learn detailed study of double fertilization, endosperm and embryo Co4: comprehend the causes of polyembryony and apomixes
12.	VI	MJC-12 (Plant Physiology)	Co1: understand water relation of plants with respect to various physiological processes Co2: know about the mineral nutrition Co3: understand dormancy and germination in plants, learn about types and roles phytohormones
13.	VII	MJC-13 (Plant Metabolism)	Co1: understand the anabolic and catabolic pathways of metabolism Co2: recognize the importance of carbon assimilation in photorespiration Co3: understand ATP synthesis in respiration Co4: interpret the biological nitrogen fixation
14.	VII	MJC-14 (Research Methodology of Faculty of Science)	CO1: Develop the skill of contextualization of knowledge and critical thinking CO2: Choose appropriate methods of research aims and objectives CO3: Apply ethical principle in research work. CO4: Understand the philosophy of research integrity and publication ethics.
15.	VII	MJC-15 (Recombinant DNA technology and Plant Biotechnology)	Co1: have knowledge about the core enzymes involved in Recombinant DNA Technology Co2: have knowledge about the different steps of Recombinant DNA technology Co3: understand the principle and basic protocols for plant tissue culture and its application Co4: know about the role of DNA and Plant Biotechnology as well as biosafety concerns of GMO

16.	VIII	MJC-16 (Horticultural Practices and Post-harvest Technology)	Co1: understand the scope and importance of horticulture Co2: obtain knowledge of different fruits, vegetables and ornamental plants. Co3: know the basics of horticulture practices for fruits vegetables and ornamental plants Co4: understand the importance of post-harvest technology