BOTANY

Course Outcome

📓 Semester I

Course: MJC-I (T): Phycology and Microbiology
Course Outcomes:

1. Classify the plant kingdom
2. Describe the diversity, structure and importance of viruses and bacteria
3. Describe the general account of mycoplasma
4. Explain the thallus organization, economic importance and the life cycle of various algae

📓 Semester II

Course: MJC-2 (T): Biomolecules and Cell Biology
Course Outcomes:

1. Describe the structure, properties and functions of biomolecules
2. Explain the classification, properties and functions of enzymes
3. Describe cell wall, cell membrane, and the structure and functions of cellular organelles
4. Explain the eukaryotic cell cycle, mitosis, and meiosis

📓 Semester III

Course 1: MJC-3 (T): Mycology and Phytopathology
Course Outcomes:

1. Understand thallus organization, nutrition, economic importance, and life cycle of fungi
2. Understand terms, scope, and importance of plant pathology
3. Describe etiology, symptoms, and control measures of plant diseases
4. Understand associations such as lichens and mycorrhizae

Course 2: MJC-4 (T): Archegoniate
Course Outcomes:

1. Understand morphology, diversity, and evolution of bryophytes, pteridophytes, and gymnosperms
2. Compare life cycles of these plant groups
3. Understand their economic importance
4. Appreciate the importance of studying fossils

📓 Semester IV

Course 1: MJC-5 (T): Morphology and Anatomy
Course Outcomes:

1. Know morphological characters of plants
2. Understand tissue systems and normal/anomalous secondary growth
3. Learn structural adaptations in different environments
4. Describe the structure and function of periderm

Course 2: MJC-6 (T): Economic Botany
Course Outcomes:

1. Identify economically important plants
2. Understand their distribution patterns
3. Acquire skill in medicinal plant identification
4. Learn about cultivation and uses

Course 3: MJC-7 (T): Genetics
Course Outcomes:

1. Understand Mendelian laws and their variations
2. Understand chromosomal abnormalities and genetic disorders
3. Understand mutations and their significance
4. Understand sex determination and inheritance

Semester V

Course 1: MJC-8 (T): Molecular Biology
Course Outcomes:

1. Understand structure and role of DNA and RNA
2. Learn transcription and translation mechanisms
3. Understand gene regulation
4. Understand modern biological techniques

Course 2: MJC-9 (T): Plant Ecology and Phytogeography
Course Outcomes:

1. Understand plant communities and adaptations
2. Learn about soil properties and pollution
3. Understand biodiversity conservation
4. Understand phytogeography and ecological concerns

Semester VI

Course 1: MJC-10 (T): Plant Systematics
Course Outcomes: C*lassification, taxonomy, and identification skills*

Course 2: MJC-11 (T): Reproductive Biology of Angiosperms
Course Outcomes: *(Not explicitly listed; typically includes floral biology, pollination mechanisms, etc.)*

Course 3: MJC-12 (T): Plant Physiology
Course Outcomes: *(Not explicitly listed; typically includes physiological processes like photosynthesis, respiration, etc.)*

📓 Semester VII

Course: MJC-13 to MJC-15
Courses include: Plant Metabolism, Research Methodology, Recombinant DNA Technology & Plant Biotechnology
Course Outcomes:

- Advanced understanding of metabolism and molecular biology
- Research design and scientific writing
- Techniques in biotechnology and genetic engineering

📓 Semester VIII

Course: MJC-16 & Research Project
Course Outcomes:

- Gain practical and theoretical knowledge in **Horticultural Practices and Post-Harvest Management**
- Ability to conduct and present **independent research**