SCB

DEPARTMENT OF -BOTANY--

TEACHING PLAN-2023-2024

PROGRAMME: BSc

SEMESTER: ODDCOURSE: BSc Botany-

Plant Anatomy, Reproductive Botany & Palynology

CLASS: I^{sem} UG

MONTH	MODULE COVERED	MODULE AS PER SYLLABUS	REMARKS (refresher/orientation programmes, examinations, additional hours handled etc.)
AUGUST	**BSc I Sem- Reproductive Botany**-1. Introduction to angiosperm embryology with special reference to Indian embryologists 2. Microsporogenesis: structure and function of wall layers, development of male gametophyte, dehiscence of anther. 3. Megasporogenesis: development of female gametophyte completed.	**BSc I Sem- Reproductive Botany-** 1.Introduction to angiosperm embryology with special reference to Indian embryologists 2. Microsporogenesis: structure and function of wall layers, development of male gametophyte, dehiscence of anther.	

		3. Megasporogenesis: development of female gametophyte, embryosac-development and types- monosporic: Polygonum type, bisporic: Allium type, tetrasporic: Adoxa type.	
SEPTEMBER	embryosac- development and types- monosporic: Polygonum type, bisporic: Allium type, tetrasporic: Adoxa type completed. 4. Pollination, fertilization, barriers of fertilization, germination of pollen grains, double fertilization. 5. Structure of embryo dicot (Cypsella), monocot (Sagittaria) and endosperm types completed.	4. Pollination, fertilization, barriers of fertilization, germination of pollen grains, double fertilization. 5. Structure of embryo dicot (Cypsella), monocot (Sagittaria) and endosperm types	
OCTOBER	6. **Palynology**: pollen morphology, structure of pollen wall, shape of pollen grains, apertural morphoforms, exine ornamentation; pollen allergy, economic and taxonomic importance completed.	6. **Palynology**: pollen morphology, structure of pollen wall, shape of pollen grains, apertural morphoforms, exine ornamentation; pollen allergy, economic and taxonomic importance	
NOVEMBER	**Angiosperm Anatomy-Module – III** 1. Vascular bundles - Origin and types - conjoint, collateral, bi-collateral, open closed, radial,	**Angiosperm Anatomy-** **Module – III** 1. Vascular bundles - Origin and types -	

	concentric - amphicribral and amphivasal. 2. Primary structure of root, stem & leaf (brief account only) completed. Practicals completed.	conjoint, collateral, bi-collateral, open closed, radial, concentric - amphicribral and amphivasal. 2. Primary structure of root, stem & leaf (brief account only)	

HOD:

Head of Department
Research & PG Dept. of Botany
MES Asmabi College
P. Vemballur, Thrissur Dt.
Kerala - 680 671

M.E.S ASMABI COLLEGE KODUNGALLUR P.VEMBALLUR

TEACHER: SHEMI C B

Principal in Charge
M.E.S Asmabi College
P.Vemballur

DEPARTMENT OF BOTANY

TEACHING PLAN-2023-2024

PROGRAMME:BSc **SEMESTER: EVEN**

COURSE:BSc Botany-Mycology, Microbiology, Lichenology & Plant Pathology

CLASS:II^{sem} UG

MONTH	MODULE COVERED	MODULE AS PER SYLLABUS	REMARKS (refresher/orientation programmes, examinations, additional hours handled etc.)
DECEMBER	**BSc-II-Sem-Microbiology-** 1. Introduction to Microbiology. 2.Bacteria–Classification based on morphology and staining, ultra-structure of bacteria; Bacterial growth, Nutrition, Reproduction. 3.Viruses– Classification, architecture and multiplication; Bacteriophages, TMV, Retroviruses, HIV, Viriods, Prions completed	**BSc- II Sem-Microbiology-** 1. Introduction to Microbiology. 2.Bacteria–Classification based on morphology and staining, ultra-structure of bacteria; Bacterial growth, Nutrition, Reproduction. 3.Viruses– Classification, architecture and multiplication; Bacteriophages, TMV, Retroviruses, HIV, Viriods, Prions.	

JANUARY	**BSc- II Sem-Microbiology-** 4. Microbial ecology – Rhizosphere and Phyllosphere. 5.Industrial microbiology–alcohol, acids, milk products single cell proteins 6.Economic importance of bacteria, Vaccines: importance, mechanism completed.	**BSc- II Sem-Microbiology-** 4. Microbial ecology – Rhizosphere and Phyllosphere. 5.Industrial microbiology–alcohol, acids, milk products single cell proteins 6.Economic importance of bacteria, Vaccines: importance, mechanism.	
FEBRUARY	**BSc-II Sem-Lichenology-** 1. Introduction: Type of Interaction between the components symbiosis – mutualism. 2. Classification, growth forms, structure, reproduction, economic importance. Type: Usnea completed.	**BSc-II Sem-Lichenology-** 1. Introduction: Type of Interaction between the components symbiosis – mutualism. 2. Classification, growth forms, structure, reproduction, economic importance. Type: Usnea .	
MARCH	3. Toxicology, Lichens as food, Bioremediation, Ecological indicators, Pollution indicators, Lichen in Soil formation and pioneers of Xerosere completed	3. Toxicology, Lichens as food, Bioremediation, Ecological indicators, Pollution indicators, Lichen in Soil formation and pioneers of Xerosere.	

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