

G.C. Safidom (2025-2026)

Class - B.Sc. Ist

Lesson Plan (odd Sem)

Paper Name - Diversity of microbes, Algae, Fungi & Archaeonutes

Months -



August

Bacteria, Virus - structure reproduction, Economic Importance. Algae - general characters, Volvox, Norior and Vaucheria, Polythrophic Ectocarpus.

September

Fungi - Penicillium and Aspergillus, Phytophthora, Colletotrichum. Lichens - General account of Economic Imp.

October

Pteridophytes - Gen. characters and Economic Imp. (Classification by Smith in 2006) Str. & reproduction of Rhynia

November

Selaginella, Equisetum, Pteris, Gymnosperms - Classification, Case study - Cycas and Pinus.

Submitted by:- Mrs. Jyoti Kanwal

Extension Lect. in
B.Tay

G.C. Safidom.
(Jind)

G.C. Safidom (Jind)
Lesson Plan - Session 2025-2026
B.Sc - IInd Year (IIIrd Semester)
Paper name - Plant Physiology

Months ↓

August Plant water relations, absorption, water potential, transpiration, micro and macro nutrients - Role, Photosynthesis.

September Respiration, mechanism of action & uses of auxin gibberellin, cytokinin, ABA, ethylene, lipid metabolism & Nitrogen metabolism

October Str., function of Phytochromes - stomatal movement, photoperiodism & Biological clocks (mechanism) of flowering

November Plant growth concept - factors affecting germination & dormancy of seeds, senescence & abscission

Submitted by :-
Mrs. Jyoti Kanwal
Ex. Lect in Botany
G.C. Safidom.

G.C. Safidion (2025-2026)

Lesson Plan (odd Sem)
B.Sc. Semester - IVth Year Third

Month ↓

Paper name - Economic Botany and Plant Biotechnology

August

Food Plants - cereals & millets, origin & distribution
Botanical description of Rice, Wheat, Maize, Pulses,
Gram, Arhar Pea, Potato, Tomato, Onion

September

Oil yielding crops - Groundnut, Mustard, Coconut
Spices and condiments, Medicinal Plants, Beverages - Tea and
coffee - processing, rubber & sugar, Timber

October

Plant Tissue Culture - Concept, History, Scope and Applications
Totipotency, organogenesis, cryopreservation, Types of culture -
Seed, Embryo, callus, suspension, organs, cell protoplast culture
Haploids, Androgenic methods, Antherculture,
Cybrids & Soma clonal variation

November

Introduction & Applications, Direct DNA transfer / physical
methods of gene transfer in plants - microprojectile
Bombardment, Electroporation, Vectors, Agrobacteria
as vector.

Submitted by -
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Extension lecturer
Botany
G.C. Safidion (Jind)

G.C. Safidors (2025-2026)
Lect on Pm (odd sem)

B.A.D.-M.B.C. Sem- II

Paper name - Ornamental Plants and Propagation

August Botanical Gardens and History of Botanical Gardens

September Significance of shrubs, trees, palms, ferns,
Cycads, Cactii & Succulents, climbers,
Bonsai plants as ornamental plants.

October Flower and seed Production, Lectured
Cultivation of ornamentals - Principles
Vegetative Propagation

November Scope of floriculture of plants - Budding,
Cutting, grafting, layering & propagation
by specialized stem and roots.

Submitted by:-

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Extension lecturer
Botany

G.C. Safidors (Jind)