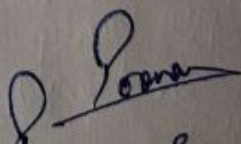


B.Sc Botany 2nd Semester
LESSON PLAN BOTANY DEPARTMENT

2021-2022

Paper 1 & 2 (21 & 22)

- APRIL → Bryophyta - General characters, Classification upto Classes, alternation of Generation, Evolution of Sporophytes and Economic Importance
Structure and Reproduction of *Marchantia*, *Anthoceros* *Funaria*, General characters of *Psidium*. Alternation of generation.
- MAY → Heterospory, Apospory, Apogamy & Economic Importance, Stellar Evolution,
Psidium → Structure & Reproduction of *Rhynia*, *Selaginella*, *Equisetum* & *Heteris*, DNA Structure, Replication, DNA-protein interaction, Nucleosome model, Genetic Code, Satellite & Repetitive DNA, Mendel's all three laws, Linkage Analysis
- JUNE → Allelic & Non-Allelic Interaction, Extrachromosomal Inheritance Mutation, DNA Damage & Repair, Gene Concept, Transcription, Translation, Protein Structure, Regulation of gene expression in Prokaryotes & Eukaryotes.

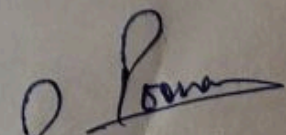

Pooram Sharma
Assistant Professor Botany
G.L Badli

BSc Botany 4th Semester
LESSON PLAN BOTANY DEPARTMENT

2021-2022

Paper - 4.1 & 4.2

- April → Taxonomy & Systematics, fundamental component of taxonomy
Role of Chemotaxonomy, Cytotaxonomy, Taxometrics, Botanical
Nomenclature; Principles and Rules, Principle of Priority
Key to Identification of Plants, Type Concept, Taxonomic
Ranks, Bentham & Hooker, Engler & Prantl Classification
floral terms & Type of Prothecence.
Diagnostic features & Economic Importance of Rosaceaceae,
Brassicaceae, Malvaceae
- May → Euphorbiaceae, Rutaceae, Fabaceae, Cucurbitaceae, Apiaceae
Asclepiadaceae, Lamiaceae, Solanaceae, Asteraceae, Liliaceae
& Poaceae,
flower - a modified shoot, Microsporangium, Microsporangies, Pollen
grain, Microgametogenesis, Male gametophyte, Pollen - Pistil
interaction, Self Incompatibility, Pollination
- June → Megasporangium, Megasporogenesis, Megagametogenesis
female gametophyte, Double fertilization, Endosperm type
& Biological Importance, Embryogenesis in Dicot & Monocot
Polyembryony, Structure of Dicot & Monocot seed, fruit types
Dispersal Mechanisms in fruits & seeds


Joonam Sharma
Assistant Professor Botany
G.C., Badli

BSc Botany 6th Semester

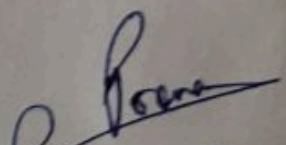
LESSON PLAN BOTANY DEPARTMENT

2021-2022
Paper 6.1 & 6.2

April → Basic of Enzymology, Discovery, Nomenclature, characteristic
Holoenzyme, Apoenzyme, Coenzyme, Co-factors, Regulation &
Mechanism of Action; Respiration - Aerobic & Anaerobic
Krebs cycle, ETC, Redox-potential, oxidative Phosphorylation
Pentose Phosphate pathway,
Lipid Metabolism - structure, function, Biosynthesis
& β -oxidation, Saturated & unsaturated fatty acid, Storage
& Mobilization of fatty acid.

May - Nitrogen Metabolism, Genetic Engineering & Biotechnology
Hauitov - Center of origin of crop plants, origin-distribution
Botanical Description, Idea of Cultivation, Economic uses of
Cereals, Pulses, vegetables, fibres, oils

June - Morphological description, idea of Cultivation, Economic
uses of Spices, Medicinal plants, Beverages, Rubber
Sugar Cane & Biofuels


Binam Sharma
Assistant Professor Botany
G. C. Badli