

Govt. College, Safidon (Jind)-126112

Session: 2021-22 (Even Semester)

Lesson Plan

B.Sc. I (Semester II)

Name of the Teacher: Mrs. Jyoti Kanwal

Subject: Botany

Paper - II - Cell Biology & Genetics

Sr. No.	Months	Topic
1	April	Structure of DNA (as genetic material)
2		Replication of DNA, Interaction of DNA and
3	May	Protein, Nucleosome model,
4		Genetic code, Satellite & Repetitive
5		DNA, Genetic Inheritance:
6		Mendel's law of Segregation
7		and Independent assortment.
8		Linkage - Analysis, Allele concept.
9		Reversions and Class Tests - I
10	June	Allelic and non-Allelic Interactions
11		Genetic variation - Mutation, Spontaneous &
12		Transposable elements, DNA-Damage
13		Repair, Gene Expression - Gene concept,
14		RNA, Ribosome, Genetic Information
15	July	via
16		transcription and translation, Protein
17		Synthesis and its regulation in Prokaryotes
18		and Eukaryotes. Protein structure - 1D, 2D & 3D.
		Extra nuclear inheritance - mt. DNA
		Plasmid DNA, Plastid DNA. Reversion.

Signature



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Lesson Plan


B.Sc. - Ist. Semester IInd

Name of the Teacher: Mr. Jyotikanwal

Subject: Botany

paper-I - Diversity of Archaeogoniales

Sr. No.	Months	Topic
1	April	General characters of Bryophytes Alternation of generations, structure and reproduction
2		
3		of class - Hepaticopsida (type study Marchantia)
4	May	class Anthocerotopsida (type study Funaria)
5		general characters of class Bryopsida (Anthoceros)
6		. Revision Test and class Tests - I
7		General characters of Pteridophytes,
8		Classification upto class level of 4
9	June	Reproduction and lifecycle of Psilopsida
10		(type study Rhynia) Revision
11		Class tests - I, Class Lycopodiida (type
12		study Selaginella), class - Sphenopsida
13		type study of Equisetum and
14	July	Pteris. Revisions
15		Class Tests - II (daily test)
16		Revision and doubt solving
17		classes
18		

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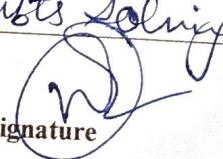
Name of the Teacher: Mrs. Jyoti Kanwal
 Paper name - BIOLOGY & DIVERSITY OF SEED PLANTS

B.Sc. IInd semester - IV

Subject: BOTANY

Sr. No.	Months	Topic
1	April	Taxonomy, SYSTEMATICS, Fundamentals of
2		Taxonomy - Identification, classification, Nomenclature
3		Phylogeny, chemotaxonomy, Taxometrics &
4	May	Cytotaxonomy, BOTANICAL NOMENCLATURE -
5		Rules and principle of Priority concept -
6		<u>TYPE</u> CONCEPT, TAXONOMIC RANKS,
7		PLANT IDENTIFICATION <u>KEYS</u> , FLOWER &
8		INFLORESCENCE TYPES.
9	June	REVISION AND <u>CLASS TEST - I</u> . CLASSIFICATION
10		SYSTEMS BY - BENTHAM & HOOKER, Engler &
11		Prantl. (merit & demerits also) PLANT family
12		descriptions - Ranunculaceae, Brassicaceae, Malvaceae,
13		Solanaceae, Euphorbiaceae, Rubiaceae,
14	July	Leguminosae, Apiaceae, Asclepiadaceae
15		Asteraceae, Liliaceae & Poaceae.
16		COMPARATIVE ANALYSIS OF TWO FAMILIES
17		AND FLOWER DISSECTION.
17		Revision & <u>CLASS TEST - II</u>
18		Revision and doubts solving

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Session: 2021-22 (Even Semester)

Lesson Plan

Name of the Teacher: Mrs. Jyoti Kanwal

B.Sc. - II Semester - IV

Paper name - PLANT EMBRYOLOGY

Subject: BOTANY

Sr. No.	Months	Topic
1	April	Description of flower as modified shoot, functions of various floral parts
2		Microsporangium, its wall & dehiscence, Microsporogenesis
3	May	Pollen grains & structure (Pollen wall), Pollen-Style interactions & Self Incompatibility
4		Pollination (Types & Agencies), Pollen germination
5		MICROGAMETOGENESIS & MALE GAMETOPHYTE - structure & development.
6		REVISION & CLASS TEST - I
7	June	MEGASPORANGIUM - structure of OVULE, Curvatures
8		Megasporogenesis & megagametogenesis.
9		Female gametophyte - mono, bi & tetrasporic
10		DOUBLE FERTILIZATION, TYPES OF ENDOSPERM,
11		IMPORTANCE OF ENDOSPERM, EMBRYOGENESIS
12		DICOT & MONOCOT - EMBRYONAL DEVELOPMENT
13	July	FRUIT - TYPES, MECHANISM OF DISPERSAL
14		Dehiscence of fruit & seed dispersal
15		REVISION & CLASS TEST - II
16		Revision and doubts solving
17		
18		


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Name of the Teacher: Mrs. Jyoti Karmwal

B.Sc. III (Semester VI)

Paper I - Biochemistry & Biotechnology

Subject: BOTANY

Sr. No.	Months	Topic
1	April	Basics of Enzymology - Enzymes, holoenzyme
2		Apoenzyme, coenzyme & cofactors, Enzyme
3	May	Regulation & Activity, mode of Enzyme action
4		Reversion of Respiration (Already done in 1 st sem)
5		Lipid metabolism, fatty acid Biosynthesis.
6	June	Oxidation, Saturated & unsaturated
7		fatty acids, Storage & mobilization of
8		fatty acids, NITROGEN METABOLISM -
9		Biology of nitrogen fixation, NITRATE RED.
10	July	Structure & Importance Regulation of
11		action, Ammonium assimilation
12	July	<u>CLASSTES-I</u> , Genetic Engineering -
13		Basics and TOOLS of RDT
14		CLONING, Vectors, genomic & cDNA libraries
15	July	Transposable elements, Plant tissue culture
16		aspects - TOTIPOTENCY, De differentiation
17	July	morphogenesis, Agrobacterium study of str. &
18		mechanism of working in RDT
		marker genes & Gene Delivery Vectors.
		Reversion class Test-II

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