

Lesson plan for the even semester (April, 2022 to July, 2022)

Name of the Teacher- Dr. Nadia Chowhan

Subject-Botany

Paper- I Biology and Diversity of Seed Plants-II

Class- B.Sc. II (Medical and Biotech)

April, 2022 2 nd Week 4-6, April	I was on a Refresher Course from April 02-18, 2022
10 April, 2022	Sunday Ram Navami
3 rd Week 11-13, April	I was on a Refresher Course
14 April, 2022	Dr. B.R. Ambedkar Jayanti / Mahavir Jayanti
17 April, 2022	Sunday
4 th Week 18-20, April	Taxonomy and Systematics Fundamental components of taxonomy (Identification, Classification, Description, Nomenclature and Phylogeny)
24 April, 2022	Sunday
5 th Week 25-27, April	Keys to identification of plants (Herbaria, Botanical Gardens, Indexes, Floras, manuals, Monographs, Journals, Glossaries) Role of Chemotaxonomy and Cytotaxonomy Taximetrics in relation to Taxonomy
01 st May	Sunday
May, 2022 1 st Week 02-04, May	Binomial Nomenclature; Principles and Rules Principle of priority, Type Concept, Taxonomic Ranks Flower and Types of Inflorescence
03 May, 2022	Id-ul-Fitr / Haryana War Heroes Martyrdom Day
08 May, 2022	Sunday
2 nd Week 09-11, May	Diversity of Flowering Plants: Diagnostic features and economic importance of the family: Malvaceae Diversity of Flowering Plants: Diagnostic features and economic importance of the family: Liliaceae Diversity of Flowering Plants: Diagnostic features and economic importance of the family: Solanaceae Diversity of Flowering Plants: Diagnostic features and economic importance of the family: Rutaceae
15 May, 2022	Sunday

3 rd Week 16-18,May	Diversity of Flowering Plants: Diagnostic features and economic importance of the family: Brassicaceae. Diversity of Flowering Plants: Diagnostic features and economic importance of the family: Leguminosae (Pappilionaceae) Diversity of Flowering Plants: Diagnostic features and economic importance of the family: Leguminosae (Caesalpinaceae and Mimosaceae)
22 May, 2022	Sunday
4 th Week 23-25,May	Diversity of Flowering Plants: Diagnostic features and economic importance of the family: Asteraceae Diversity of Flowering Plants: Diagnostic features and economic importance of the family: Ranunculaceae
29 May, 2022	Sunday
5 th Week 30-31, May 01 June	Diversity of Flowering Plants: Diagnostic features and economic importance of the family: Euphorbiaceae Diversity of Flowering Plants: Diagnostic features and economic importance of the family: Apiaceae
02 June, 2022	MaharanaPratap Jayanti
05 June, 2022	Sunday
June, 2022 1 st Week 06-08June	Diversity of Flowering Plants: Diagnostic features and economic importance of the family: Lamiaceae Diversity of Flowering Plants: Diagnostic features and economic importance of the family: Poaceae
12 June, 2022	Sunday

2 nd Week 13-15 June	Salient features of the systems of classification of angiosperms proposed by Bentham & Hooker
19 June, 2022	Sunday
3 rd Week 20-22, June	Sessional Exams
26 June, 2022	Sunday
4 th Week 27-29 June	Salient features of the systems of classification of angiosperms proposed by Engler & Prantl Diversity of Flowering Plants: Diagnostic features and economic importance of the family: Asclepiadaceae Practice of Floral Diagrams
03 July, 2022	Sunday
July, 2022 1 st Week 04-06 July	Revision of Syllabus and Class Tests
10 July, 2022	Sunday Id-ul-Zuha

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Name of the Teacher- Dr. Nadia Chowhan

Subject-Botany

Paper- II Plant Embryology

Class- B.Sc. II (Medical and Biotech)

April, 2022 2 nd Week 05, 07-09, April	I was on a Refresher Course from April 02-18, 2022
10 April, 2022	Sunday Ram Navami
3 rd Week 12, 14-16, April	I was on a Refresher Course
14 April, 2022	Dr. B.R. Ambedkar Jayanti / Mahavir Jayanti
17 April, 2022	Sunday
4 th Week 19, 21-23, April	Flower-a modified shoot; functions of various floral parts. Types of inflorescence Flower Variations
24 April, 2022	Sunday
5 th Week 26, 28-30, April	Microsporangium, its wall and dehiscence mechanism Microsporogenesis Pollen grains and its structure (pollen wall)
01 st May, 2022	Sunday
May, 2022 1 st Week 03, 05-07, May	Male Gametophyte: Development Microgametogenesis Structure of Megasporangium (ovule)
08 May, 2022	Sunday
2 nd Week 10, 12-14, May	Ovule Types Megasporesogenesis and Megagametogenesis Embryo sac structure and types
15 May, 2022	Sunday
3 rd Week 17, 19-21, May	Pollen-pistil interaction and Self incompatibility Pollination (types and agencies)
22 May, 2022	Sunday
4 th Week 24, 26-28, May	Double fertilization. Endosperm types and its biological importance Embryogenesis in Dicot

29 May, 2022	Sunday
02 June, 2022	MaharanaPratap Jayanti
June, 2022 1 st Week 31 May, 03-04June	Embryogenesis in Monocot Polyembryony Development of Fruits and Significance
05 June, 2022	Sunday
2nd Week 07, 09-11 June	General Structure of Fruit Types of fruits: Simple Dry Types of fruits: Simple Fleshy
12June, 2022	Sunday
3rd Week 14, 16-18, June	Types of fruits: Aggregate Types of fruits: Multiple Dispersal of fruits and seeds
19 June, 2022	Sunday
4th Week 21, 23-25 June	Seed: Development and Parts Structure of Dicot and Monocot Seed Sessional Exams
26 June, 2022	Sunday
July, 2022 1 st Week 28,30 June, 01-02 July	Seed Viability and Seed Dormancy Causes of seed dormancy and methods of breaking seed dormancy Seed Dormancy: Physiological Enigma, its importance
03 July, 2022	Sunday Id-ul-Zuha
2nd Week 05, 07-09 July	Revision of Syllabus and Class Tests
10 July, 2022	Sunday

Lesson plan for the even semester (April,2022 to June, 2022)

Name of the Teacher- Dr. Seema Sharma

Subject-Botany

Paper- I (Diversity of Archegoniates)

Class- B.Sc. I (Medical and Biotech)

April, 2022 2 nd Week 4-6, April	Bryophytes: General characters of Bryophytes
10 April, 2022	Sunday Ram Navami
3 rd Week 11-13, April	Classification of Bryophytes
14 April, 2022	Dr. B.R. Ambedkar Jayanti / Mahavir Jayanti
17 April,2022	Sunday
4 th Week 18-20, April	MARCHANTIA -Occurrence and vegetative structure and Reproduction in Marchantia
24 April, 2022	Sunday
5 th Week 25-27, April	ANTHOCEROS - Occurrence and vegetative structure and Reproduction in Anthoceros
01 st May	Sunday
May, 2022 1 st Week 02-04, May	Funaria - Occurrence and vegetative structure
03 May, 2022	Id-ul-Fitr / Haryana War Heroes Martyrdom Day
08 May, 2022	Sunday
2 nd Week 09-11,May	Reproduction in Funaria
15 May, 2022	Sunday
3 rd Week 16-18,May	Pteridophytes: General characters and Classification of Pteridophytes
22 May, 2022	Sunday
4 th Week 23-25,May	Rhynia - Occurrence, vegetative structure
29 May, 2022	Sunday

5 th Week 30-31, May 01 June	Selaginella -Occurrence and vegetative structure Reproduction in Selaginella, Heterospory and Seed Habit
02 June, 2022	Maharana Pratap Jayanti
05 June, 2022	Sunday
June, 2022 1 st Week 06-08 June	Equisetum - Occurrence and vegetative structure Reproduction in Equisetum
12 June, 2022	Sunday
2 nd Week 13-15 June	Pteris - Occurrence and vegetative structure Reproduction in Pteris
19 June, 2022	Sunday
3 rd Week 20-22, June	Sessional Exam
26 June, 2022	Sunday
4 th Week 27-29 June	Economic importance of Pteridophytes and Bryophytes
03 July, 2022	Sunday
July, 2022 1 st Week 04-06 July	Revision of Syllabus and Class Tests
10 July, 2022	Sunday Id-ul-Zuha

Lesson plan for the even semester (April, 2022 to June, 2022)

Name of the Teacher- Dr. Seema Sharma

Subject-Botany

Paper- II: Genetics

Class- B.Sc. I (Medical and Biotech)

April, 2022 2 nd Week 05,07-09, April	<u>Genetic Material:</u> DNA - The genetic material, Structure and Watson & Crick Model
10 April, 2022	Sunday Ram Navami
3 rd Week 12,15-16, April	Replication of DNA , and DNA-Protein interaction
14 April, 2022	Dr. B.R. Ambedkar Jayanti / Mahavir Jayanti
17 April, 2022	Sunday
4 th Week 19,21-23, April	Genetic Code , Satellite and Repetitive DNA
24 April, 2022	Sunday
5 th Week 26,28-30, April	<u>Genetic Inheritance:</u> Mendelism: General Introduction and Laws of Genetic Inheritance and Linkage
01 st May, 2022	Sunday
May, 2022 1 st Week 03,05-07, May	Gene Interaction : Allelic and Non-allelic interactions
08 May, 2022	Sunday
2 nd Week 10,12-14, May	Mutations- Spontaneous and Induced DNA- Damage and Repair
15 May, 2022	Sunday
3 rd Week 17, 19-21, May	<u>Gene Expression:</u> Modern concept of gene
22 May, 2022	Sunday
4 th Week 24,26-28, May	RNA and Ribosomes
29 May, 2022	Sunday
02 June, 2022	Maharana Pratap Jayanti

June, 2022 1 st Week 31 May,03-04June	Protein Synthesis
05 June, 2022	Sunday
2 nd Week 07,09-11 June	Regulation of Gene Expression
12June, 2022	Sunday
3 rd Week 14,16-18, June	Extra Nuclear Inheritance
19 June, 2022	Sunday
4 th Week 21,23-25 June	Sessional Exam
26 June, 2022	Sunday
28,30 June, 2022	Structure of Proteins
July, 2022 1 st Week 28 July, 01-02 July	Revision of Syllabus and Class Tests
03 July, 2022	Sunday Id-ul-Zuha
2 nd Week 05,07-09 July	Revision of Syllabus and Class Tests
10 July, 2022	Sunday

Lesson plan for the even semester (April, 2022 to June, 2022)

Name of the Teacher- Ms. Sushmita Kamboj

Subject-Botany

Paper- I (Biochemistry and Plant Biotechnology)

Class- B.Sc. IIIrd (Medical and Biotech)

April, 2022 2 nd Week 4-6, April 8 April	Introduction to Syllabus and Scheme of Exam Discovery and Nomenclature, Characteristics of enzymes; concept of holoenzyme, Apo-enzyme, coenzyme and co-factors
10 April, 2022	Sunday Ram Navami
3 rd Week 11-13, April 15 April	Regulation of enzyme activity and their mechanism of action Definitions of Growth and development and their different phase
14 April, 2022	Dr. B.R. Ambedkar Jayanti / Mahavir Jayanti
17 April, 2022	Sunday
4 th Week 18-20, April 22 April	Plant hormones- Auxin, Gibberellins, Cytokines, history of their discovery & mechanism of action
24 April, 2022	Sunday
5 th Week 25-27, April 29 April	Plant hormones- Absciscic acid & ethylene (history and their mode of action) Photo morphogenesis ; Phyto-chromes and their discovery , Physiological role and their mechanism of action
01 st May	Sunday
May, 2022 1 st Week 02-04, May 06 May	Lipid metabolism: structure and functions of lipids Biosynthesis of fatty acids β -oxidation of fatty acids
03 May, 2022	Id-ul-Fitr / Haryana War Heroes Martyrdom Day
08 May, 2022	Sunday
2 nd Week 09-11, May 13 May	Saturated & Unsaturated Fatty acids Storage & mobilization of fatty acids -Oral test of Regulation of enzyme activity and mechanism of action
15 May, 2022	Sunday
3 rd Week 16-18, May 20 May	Nitrogen Metabolism: Biology of nitrogen Fixation -Importance of nitrate reductase & its regulation
22 May, 2022	Sunday

4 th Week 23-25, May 27 May	Sessional Exam
29 May, 2022	Sunday
5 th Week 30-31, May 01, 03 June	Ammonium assimilation Phytochromes
02 June, 2022	Maharana Pratap Jayanti
05 June, 2022	Sunday
June, 2022 1 st Week 06-08 June 10 June	Tools & techniques of recombinant DNA technology Cloning vectors
12 June, 2022	Sunday
2 nd Week 13-15 June 17 June	Genomic & cDNA library Transposable elements
19 June, 2022	Sunday
3 rd Week 20-22, June 24 June	Cellular totipotency Differentiation & morphogenesis Vectors for gene delivery and marker gene
26 June, 2022	Sunday
4 th Week 27-29 June 01 July	Revision of Syllabus
03 July, 2022	Sunday
July, 2022 1 st Week 04-06 July 08 July	Revision of Syllabus and Class Tests

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Name of the Teacher- Ms. Sushmita Kamboj

Subject-Botany

Paper- II (Economic Botany)

Class- B.Sc. IIIrd (Medical and Biotech)

April, 2022 2 nd Week 7-9, April	Introduction to Syllabus and Scheme of Exam Food Plants- Cereals- Rice (Origin, Distribution, Botanical description, idea of cultivation and uses)
10 April, 2022	Sunday Ram Navami
3 rd Week 14-16, April	Cereal- Wheat (Origin, Distribution, Botanical description, idea of cultivation and uses)
14 April, 2022	Dr. B.R. Ambedkar Jayanti / Mahavir Jayanti
17 April, 2022	Sunday
4 th Week 21-23, April	Cereal- Maize (Origin, Distribution, Botanical description, idea of cultivation and uses)
24 April, 2022	Sunday
5 th Week 28-30, April	Pulses - Gram, Arhar, Pea
01 st May, 2022	Sunday
May, 2022 1 st Week 05-07, May	Vegetables - Tomato, Potato and Onion
08 May, 2022	Sunday
2 nd Week 12-14, May	Oils - Groundnut, Mustard and Coconut
15 May, 2022	Sunday
3 rd Week 19-21, May	Fibers - Cotton, Jute & Flax
22 May, 2022	Sunday
4 th Week 26-28, May	Sessional Exam
29 May, 2022	Sunday
02 June, 2022	Maharana Pratap Jayanti

June, 2022 1 st Week 03-04 June	Morphology of Plant part used, brief idea of cultivation and uses -Spices- Coriander, Ferula
05 June, 2022	Sunday
2 nd Week 09-11 June	Spices- Ginger , Turmeric & cloves
12 June, 2022	Sunday
3 rd Week 16-18, June	Medicinal Plants- <i>Cinchona, Rauwolfia, Atropa, Opium, Cannabis</i> , Neem
19 June, 2022	Sunday
4 th Week 23-25 June	Botanical description & Processing- Beverages- Tea& Coffee
26 June, 2022	Sunday
30 June, 2022	Test
July, 2022 1 st Week 01-02 July	Revision of Syllabus
03 July, 2022	Sunday Id-ul-Zuha
2 nd Week 07-09 July	Revision of Syllabus and Class Tests