

Lesson Plan 2021-22

FGM Government College, Adampur

Month wise Lesson Plan for Even Semester 1 April -15 June 2021-2022

Department: BOTANY

Teacher: Dr. Asha

Class: ...BSc-III

Subject: (BOTANY) ECONOMIC BOTANY
(BOT 601L)

Section: ...2021-2022

Sr. No.	Description of Chapters/Topics	Expected Duration	Assignment/ Test
1	<ul style="list-style-type: none">• Origin of Cultivated Plants Concept of centres of origin, their importance with reference to Vavilov's work, Cereals: Wheat and Rice-Origin, morphology, uses• Legumes and Spices General account with special reference to Gram, pea, arhar and soybean;	April	
2	<ul style="list-style-type: none">• Spices: General account with special reference to clove, ginger, turmeric and black pepper (Botanical name, family, part used, morphology and uses)• Beverages and Oils Tea, coffee and cocoa (morphology, processing, and uses); Oils and Fats: General description with special reference to groundnut, mustard, coconut	May	Minor test in the 2 nd week of Month Assignment in 3 rd week of month
3	<ul style="list-style-type: none">• Fibre Yielding Plants General description with special reference to Cotton, Jute and Coir (Botanical name, family, part used, morphology and uses)	Up to 15 th June	



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Department: BOTANY

Teacher: Dr. Asha
Subject: (BOTANY) PLANT PHYSIOLOGY
(BOT 401L)

Class:...BSc-II
Section: ...2021-2022

Sr. No.	Description of Chapters/Topics	Expected Duration	Assignment/Test
1	<ul style="list-style-type: none">Plant-water relations Importance of water, Osmosis, Imbibition, Plasmolysis, Water potential and its components; Transpiration and its significance; Factors affecting transpiration; Root pressure and guttation.Unit 2: Mineral nutrition Essential elements, macro and micronutrients; Criteria of essentiality of elements; Role of essential elements; Transport of ions across cell membrane, active and passive transport, carriers, channels and pumps.	April	
2	<ul style="list-style-type: none">Translocation Composition of phloem sap, girdling experiment; Pressure flow model; Phloem loading and unloading, Factors affecting translocation.Plant growth regulators and Photoperiodism Discovery and physiological roles of auxins, gibberellins, cytokinins, ABA and ethylene.	May	Minor test in the 2 nd week of Month Assignment in 3 rd week of month
3	<ul style="list-style-type: none">Photoperiodism (SDP, LDP, Day Neutral Plants); Phytochrome (Discovery & Structure); Vernalization.	Up to 15 th June	

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Month wise Lesson Plan for Even Semester 1 April -15 June 2021-2022

Department: BOTANY

Teacher: Dr. Asha
Subject: (BOTANY) PLANT ECOLOGY
(BOT 201L)

Class:...BSc-I
Section: ...2021-2022

Sr. No.	Description of Chapters/Topics	Expected Duration	Assignment/ Test
1	<ul style="list-style-type: none">• Introduction to Ecology and Ecological factors Introduction to Ecology: Basic concepts, types and Scope of Ecology. Soil: Origin, formation, composition, soil profile. Water: States of water in the environment, precipitation types. Effect of light and temperature on plants. Morphological and anatomical adaptation of hydrophytes and xerophytes• Ecosystem Structure; energy flow trophic levels; Food chains and food webs,	April	
2	<ul style="list-style-type: none">• Ecological pyramids; Biogeochemical cycles; Hydrological, Carbon, Nitrogen and Phosphorous• Plant Communities and Phytogeography Qualitative and quantitative characters; Ecotone and edge effect; Succession; Process and types (Hydrosere and Xerosere). Phytogeographical regions of India, Endemism.	May	Minor test in the 2 nd week of Month Assignment in 3 rd week of month
3	<ul style="list-style-type: none">• Pollution and Environmental Laws Definition, Types, Sources, Control of Air, Water and Soil Pollution. A basic knowledge of Environment Protection Act, 1986.	Up to 15 th June	

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Department: BOTANY

Teacher: HOSHIAR SINGH TAK
Subject: (BOTANY) Plant Taxonomy (BOT 202 L)

Class: ...BSc-I
Section: ...2021-2022

Sr. No.	Description of Chapters/Topics	Expected Duration	Assignment/ Test
1	<ul style="list-style-type: none">❖ General Taxonomy and Systematics❖ Identification, Classification, description, nomenclature and phylogeny❖ Role of chemotaxonomy, cytotaxonomy and taxometrics❖ Botanical Nomenclature, principles and rules, priority, concept,	April	
2	<ul style="list-style-type: none">❖ Keys to identification of plants❖ Flower and types of inflorescence❖ Classification Bentham & Hooker and Engler & Prantle❖ Diagnostic features and economic importance of families Ranunculaceae, Brassicaceae, Malvaceae, Euphorbiaceae, Rutaceae	May	Minor test in the 2 nd week of Month
3	<ul style="list-style-type: none">❖ 1st June to 10th June University practical Examination❖ Leguminosae, Apiaceae, Asclepiadaceae, Lamiaceae, Solanaceae, Asteraceae, Liliaceae, and Poaceae	June	

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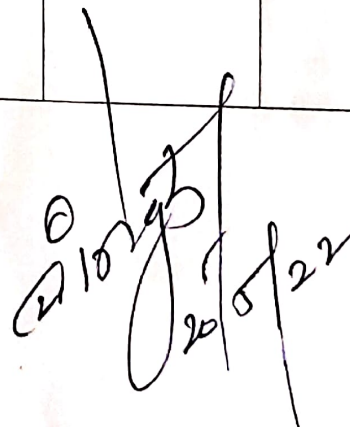
Month wise Lesson Plan for Even Semester 1 April -15 June 2021-2022

Department: BOTANY

Teacher: HOSHIAR SINGH TAK
Subject: (BOTANY)Plant Metabolism(BOT-402L)

Class:...BSc-II
Section: ...2021-2022

Sr. No.	Description of Chapters/Topics	Expected Duration	Assignment/ Test
1	❖ Photosynthesis ❖ Respiration	April	
2	❖ Enzymes ❖ Nitrogen Metabolism	May	Minor test in the 2 nd week of Month Assignment in 3 rd week of month
3	❖ 1 st June to 10 th June University practical Examination ❖ Lipid Metabolism	June	


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Month wise Lesson Plan for Even Semester 1 April -15 June 2021-2022

Department: BOTANY

Teacher: HOSHIAR SINGH TAK
Subject: (BOTANY) Biotechnology(BOT-603L)

Class:...BSc-III
Section: ...2021-2022

Sr. No.	Description of Chapters/Topics	Expected Duration	Assignment/ Test
1	<ul style="list-style-type: none">❖ Plant tissue Culture❖ Micropropagation❖ Embryo❖ Endosperm❖ Recombinant DNA Techniques❖ PCR❖ Blotting Techniques	April	
2	<ul style="list-style-type: none">❖ Molecular Markers❖ RAPD, RFLP, AFLP, ISSR, SNPs;❖ Hybridoma❖ Diagnostic Techniques❖ ELISA	May	Minor test in the 2 nd week of Month Assignment in 3 rd week of month
3	<ul style="list-style-type: none">❖ 1st June to 10th June University practical Examination	June	

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