

ACADEMIC CALENDER AND ACADEMIC PLAN

Department of BOTANY, NETAJI NAGAR COLLEGE FOR WOMEN

HONOURS COURSE

1st Semester Honours Course (July 2022 - Dec 2022) CCH 01 (Theory)

Name of the paper	Module	Topic	Name of the teacher	To be Completed during	No of PPT classes	Class Tests
CCH 01 (Theory)	PHYCOLOGY	General Account	BM	Jul-22	-	01
		Classification		Jul-22	01	
		Cyanobacteria		Aug-22	-	01
		Bacillariophyta		Aug-22	-	
		Life History		Sep-22	02	01
	MICROBIOLOGY	Virus	SR	July-22	-	01
		Bacteria		Aug-22	02	01
CCH 01 (Practical)	PHYCOLOGY	Work out of Algae	BM	July-22		
		Study from permanent slides		Aug-22		
	MICROBIOLOGY	Preparation of bacterial media	SR	Aug-22		
		Subculturing of bacterial culture		Aug-22		
		Gram staining from bacterial culture		Sept-22		
		Microscopic examination of bacteria from natural habitat (curd) by simple staining		Sept-22		

1st Semester Honours Course (July 2022 - Dec 2022) CCH 02

Name of the paper	Module	Topic	Name of the teacher	To be Completed during	No of PPT classes	Class Tests
CCH 02 (Theory)	MYCOLOGY	General Account, Classification	UG	Jul-22	01	01
		Life History		Jul-22	01	
		Mycorrhiza		Aug-22	01	01
		Lichen		Aug-22	01	
	PHYTO-PATHOLOGY	Terms and Definition		Sept-22	01	01
		Host-parasite Interaction		Nov-22	02	01
		Plant Disease Management		Nov-22	02	
		Symptoms, Causal Organisms, Disease Cycle, Control Measures		Dec-22	03	01
CCH 02 (Practical)	MYCOLOGY	Work out of the fungi with reproductive structures	UG	Jul-22		
		Study from permanent slides		Jul-22		
		Morphological study of Fungi		Aug-22		
	PHYTO-PATHOLOGY	Preparation of fungal media (PDA).		Sept-22		
		Sterilization process.		Nov-22		
		Isolation of pathogen from diseased leaf.		Nov-22		
		Inoculation of fruit and sub-culturing.		Dec-22		
		Identification		Dec-22		

2nd Semester Honours Course (Jan 2023 - June 2023) CCH 03

Name of the paper	Module	Topic	Name of the teacher	To be Completed during	No of PPT classes	Class Tests
CCH 03 (THEORY)	ANATOMY	Cell Wall	SR	Jan-23	01	01
		Stomata		Feb-23	-	01
		Stele		Feb-23	01	
		Primary Structure of Stem and Root		March-23	-	01
		Secondary Growth		March-23	01	
		Mechanical tissues		April-23	-	01
		Developmental Anatomy		May-23	-	
		Ecological Anatomy		May-23	-	01
		Scope of Plant Anatomy		May-23	-	
CCH 03 (PRACTICAL)	ANATOMY	Workout on Plant Anatomy	SR	Feb, March , April-23		
		Identification with reasons		May-23		

2nd Semester Honours Course (Jan 2023 - June 2023) CCH 04

Name of the paper	Module	Topic	Name of the teacher	To be Completed during	No of PPT classes	Class Tests
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CCH 04 (THEORY)	BRYOPHYTE	General Account	UG	Jan-23	01	01
		Life History		Feb-23	01	01
		Phylogeny		March-23	01	01
		Importance		April-23	01	01
	PTERIDOPHYTE	General Account	UG	Jan-23	01	01
		Life History		Feb-23	01	01
		Telome theory, Heterospory, Origin of seed habit		March-23	02	01
		Economic importance		April-23	01	01
	GYMNOSPERM	Classification	BM	Jan-23	01	01
		Progymnosperm		Feb-23	01	01
		Life History		March-23	-	01
		Economic importance		April-23	-	01
CCH 04 (PRACTICAL)	BRYOPHYTE	Morphological study of the plant body	UG	Jan-23		
		Study from permanent slides		Feb-23		
	PTERIDOPHYTE	Morphological study of the sporophytic plant body	UG	March-23		
		Workout of the reproductive structures		April-23		
		Study from permanent slides		May-23		

	GYMNOSPERM	Morphological study	BM	March-23		
		Study from permanent slides		April-23		

3rd Semester Honours Course (July 2022 - Dec 2022) CCH 05

Name of the paper	Module	Topic	Name of the teacher	To be Completed during	No of PPT classes	Class Tests
CCH 05 (THEORY)	PALAEOBOTANY & PALYNOLOGY	Geological time scale	UG	Jul-22	01	01
		Plant Fossils		Jul-22	01	
		Fossil Pteridophytes		Aug-22	02	01
		Fossil Gymnosperms		Aug-22	02	
		Indian Gondwana System		Sep-22	02	01
		Palynology		Nov-22	02	01
		Applied Palynology		Dec-22	01	01
CCH 05 (PRACTICAL)	PALAEOBOTANY & PALYNOLOGY	Morphological study	UG	July, August-22		
		Study from permanent slides		Sept-22		
		Study of Pollen types		Nov, Dec-22		

3rd Semester Honours Course (July 2022 - Dec 2022) CCH 06

Name of the paper	Module	Topic	Name of the teacher	To be Completed during	No of PPT classes	Class Tests
CCH 06 (THEORY)	REPRODUCTIVE BIOLOGY OF ANGIOSPERMS	Inflorescence types with examples	BM	Jul-22	01	01
		Induction of flowering, flower development		Jul-22	01	
		Fruits and seeds		Aug-22	01	01
		Pre-fertilization changes		Aug-22		
		Fertilization		Sep-22		01
		Post-fertilization changes		Nov-22		01
		Apomixis and Polyembryony		Dec-22	01	01
CCH 06 (PRACTICAL)	REPRODUCTIVE BIOLOGY OF ANGIOSPERMS	Study of Inflorescence types	SR	Jul-22		
		Study of flower types		Aug-22		
		Study of fruit types		Aug-22		
		Study of ovules		Sep-22		

3rd Semester Honours Course (July 2022 - Dec 2022) CCH 07

Name of the paper	Module	Topic	Name of the teacher	To be Completed during	No of PPT classes	Class Tests
CCH 07 (THEORY)	TAXONOMY OF ANGIOSPERMS	Introduction	SR	Jul-22		01
		Nomenclature		Jul-22		
		Systems of Classification		Aug-22	01	01
		Phenetics and Cladistics		Aug-22		
		Data Sources in Taxonomy		Sep-22		01
		Diagnostic feature, systematic position and economic importance of different families of Monocotyledons and Dicotyledons		Nov-22	02	01
CCH 07 (PRACTICAL)	TAXONOMY OF ANGIOSPERMS	Workout on Angiosperms	SR	Aug, Sept, Nov-22		
		Spot Identification		Dec-22		

3rd Semester Honours Course (July 2022 - Dec 2022) SEC-A

Name of the paper	Module	Topic	Name of the teacher	To be completed during	No of PPT classes	Class Tests
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SEC -A-3-1	APPLIED PHYCOLOGY, MYCOLOGY AND MICROBIOLOGY	Applied Phycology	BM	Aug-22		01
		Applied Mycology	UG	Sept-22	01	01
		Applied Microbiology	SR	Dec-22		01

4th Semester Honours Course (Jan 2023 - Jun 2023) CCH 08

Name of the paper	Module	Topic	Name of the teacher	To be Completed during	No of PPT classes	Class Tests
CCH 08 (THEORY)	PLANT GEOGRAPHY, ECOLOGY AND EVOLUTION	Phytogeographical regions	UG	Jan-23	01	01
		Endemism		Feb-23	01	01
		Preliminary Idea		March-23	01	01
		Community Ecology		March-23	01	
		Conservation of Biodiversity		April-23	02	01
		Evolution		May-23	03	01
CCH 08 (PRACTICAL)	PLANT GEOGRAPHY, ECOLOGY AND EVOLUTION	Field visit and Study of local flora	UG	Jan-23		
		Study of community structure by quadrat method		Feb-23		
		Comparative anatomical studies of leaves form polluted and less polluted area		March-23		
		Measurement of dissolved O ₂ by azide modification of Winkler's method		March-23		

		Comparison of free CO ₂ from different sources		April-23		
4th Semester Honours Course (Jan 2023 - Jun 2023) CCH 09						
Name of the paper	Module	Topic	Name of the teacher	To be Completed during	No of PPT classes	Class Tests
CCH 09 (THEORY)	ECONOMIC BOTANY	Origin of cultivated crops	BM	Jan-23	02	01
		Cereals		Feb-23	-	01
		Legumes		Feb-23	-	
		Sugar and starches		March-23	01	01
		Spices		March-23	-	
		Beverages		April-23	-	01
		Oil and fats:		April-23	01	
		Drug-yielding plants		May-23	01	01
		Timber; Fibers		May-23	-	
CCH 09 (PRACTICAL)	ECONOMIC BOTANY	Workout on Cereals, Legumes	BM	Jan-23		
		Source of sugars and starches		Feb-23		
		Tea- tea leaves, Microchemical tests for tannin		Feb-23		
		Mustard		March-23		
		Habit sketch of <i>Digitalis</i> , <i>Papaver</i> and <i>Cannabis</i>		March-23		
		Sal, Teak, Jute		April-23		

4th Semester Honours Course (Jan 2020 - Jun 2020) CCH 10

Name of the paper	Module	Topic	Name of the teacher	To be Completed during	No of PPT classes	Class Tests
CCH 10 (THEORY)	GENETICS	Introduction	SR	Jan-23		01
		Linkage, Crossing over, Gene Mapping and Molecular Mapping		Jan-23		
		Epistasis and Polygenic Inheritance in plants		Feb-23		01
		Aneuploidy and Polyploidy		Feb-23	01	
		Chromosomal Aberration		April-23	01	01
		Mutation		April-23	01	
		Structural Organization of Gene		May-23	01	01
CCH 10 (PRACTICAL)	GENETICS	Introduction to chromosome preparation	SR	Jan-23		
		Determination of mitotic index and frequency of different mitotic stages		Jan-23		
		Study of mitotic chromosome		Jan-23		
		Study of chromosomal aberrations		Feb-23		
		Study of meiotic chromosome		March, April-23		
		Identification from permanent slides		May-23		

4th Semester Honours Course (Jan 2023 - June 2023) SEC-B

Name of the paper	Module	Topic	Name of the teacher	To be Completed during	No of PPT classes	Class Tests
SEC-B-4-4	MUSHROOM CULTURE TECHNOLOGY	Introduction	UG	Jan-23	02	01
		Cultivation technology		Feb-23	02	01
		Storage and nutrition	BM	March-23	01	01
		Food preparation		April-23	01	01

5th Semester Honours Course (July 2022 - Dec 2022) CCH 11

Name of the paper	Module	Topic	Name of the teacher	To be Completed during	No of PPT classes	Class Tests
CCH 11 (THEORY)	CELL BIOLOGY	Origin and Evolution of Cells	SR	Jul-22		01
		Nucleus and Chromosome		Jul-22	01	
		Cell cycle and its regulation		Aug-22	01	01
		DNA Replication, Transcription and Translation (Prokaryotes & Eukaryotes)		Aug-22	01	
		Gene Regulation		Sep-22		01
		Genetic Code:		Nov-22		01

		Recombinant DNA Technology		Dec-22		01
CCH 11 (PRACTICAL)	CELL BIOLOGY	Study of plant cell structure	SR	Jul-22		
		Measurement of cell size by the technique of micrometry		Jul-22		
		Counting cells per unit volume with the help of haemocytometer		Aug-22		
		Cytochemical staining of DNA		Aug-22		
		Estimation of DNA content		Sep-22		
		Estimation of RNA		Nov-22		
		Study of nucleolus		Dec-22		
		Preparation of models/ charts		Dec-22		

5th Semester Honours Course (July 2022 - Dec 2022) CCH 12

Name of the paper	Module	Topic	Name of the teacher	To be Completed during	No of PPT classes	Class Tests
CCH 12 (THEORY)	BIOCHEMISTRY	Biochemical Foundations:	BM	Jul-22	02	01
		Molecules of life – DNA, RNA, Protein, Carbohydrate, Lipid		Aug-22	04	01
		Energy flow and enzymology		Sep-22	02	01
		Cell membrane		Oct-22	01	01
		Phosphorylation		Nov-22	02	01

CCH 12 (PRACTICAL)	BIOCHEMISTRY	Detection of organic acids	BM	Jul-22		
		Detection of protein from plant samples.		Jul-22		
		Detection of the nature of carbohydrate – glucose, fructose , sucrose and starch		Aug-22		
		Detection of Ca, Mg, Fe, S from plant ash		Aug-22		
		Preparation of solutions and buffers		Sep-22		
		Estimation of amino-nitrogen by formol titration method		Sept-22		
		Estimation of glucose by Benedicts quantitative reagent		Nov-22		
		Estimation of titratable acidity from lemon		Nov-22		
		Estimation of catalase activity in plant samples and effect of substrate, enzyme concentration and pH on enzyme activity		Nov-22		
		Estimation of urease activity in plant samples		Dec-22		
		Colorimetric estimation of protein by Folin phenol reagent		Dec-22		

5th Semester Honours Course (July 2022 - Dec 2022) DSE-A

Name of the paper	Module	Topic	Name of the teacher	To be Completed during	No of PPT classes	Class Tests
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DSE-A-1 (THEORY)	BIOSTATISTICS	Biostatistics	SR	Jul-22		01
		Biometry		Jul-22		
		Central tendency		Aug-22		01
		Test of significance		Aug-22		
		Probability		Sep-22		01
		Measurement of gene frequency		Nov-22		01
DSE-A-1 (PRACTICAL)	BIOSTATISTICS	Univariate analysis of statistical data	SR	Jul-22		
		Calculation of correlation coefficient values		Aug-22		
		Determination of goodness of fit in Mendellian and modified mono-and dihybrid ratios		Sept-22		
		Calculation of 'F' value and finding out the probability value		Nov-22		
		Basic idea of computer programme for statistical analysis		Dec-22		
5th Semester Honours Course (July 2022 - Dec 2022) DSE-B						
Name of the paper	Module	Topic	Name of the teacher	To be Completed during	No of PPT classes	Class Tests
DSE-B	PLANT BIOTECHNOLOGY	Plant tissue culture	UG	Jul-22	01	01
		Callus culture		Jul-22	01	

		Plant regeneration		Aug-22	01	01
		Haploid Culture		Sept-22	01	01
		Protoplast Culture		Nov-22	01	01
		Plant Genetic Engineering		Dec-22	02	01
DSE-B (PRAC TICAL	PLANT BIOTECHNOLOGY	Familiarization of basic equipments in plant tissue culture	UG	Aug-22		
		Study through photographs/ charts/ models of anther culture, somatic embryogenesis, endosperm and embryo culture, micropropagation		Sept-22		
		Preparation of basal media		Nov-22		
		Demonstration of any tissue culture technique during visit in a plant tissue culture lab		Dec-22		

6th Semester Honours Course (Jan 2023 - Jun 2023) CCH 13

Name of the paper	Module	Topic	Name of the teacher	To be Completed during	No of PPT classes	Class Tests
CCH 13 (THEORY)	PLANT PHYSIOLOGY	Plant-water relations	UG	Jan-23	02	01
		Mineral nutrition		Jan-23	02	
		Organic Translocation		Feb-23	01	01
		Plant Growth Regulators		Feb-23	03	

		Photomorphogenesis		March-23	03	01
		Seed dormancy		April-23	01	01
		Physiology of Senescence and Ageing		May-23	01	01
CCH 13 (PRACTICAL)	PLANT PHYSIOLOGY	Determination of loss of water per stoma per hour	UG	Jan-23		
		Relationship between transpiration and evaporation		Jan-23		
		Measurement of osmotic pressure of storage tissue		Feb-23		
		Measurement of osmotic pressure of <i>Rhoeo</i> leaf		Feb-23		
		Effect of temperature on absorption of water by storage tissue and determination of Q_{10}		March-23		
		Rate of imbibition of water by starchy, proteinaceous and fatty seeds and effect of seed coat		April-23		
		Study of phenomenon of seed germination		April-23		
		Study of the induction of amylase activity in germinating grains		May-23		
		study of the effect of different concentrations of IAA on <i>Avena</i> coleoptile elongation		May-23		
6th Semester Honours Course (Jan 2023 - Jun 2023) CCH 14						
Name of the paper	Module	Topic	Name of the teacher	To be Completed during	No of PPT classes	Class Tests

CCH 14 (THEORY)	PLANT METABOLISM	Concept of metabolism	BM	Jan-23		01
		Photosynthesis		Feb-23		01
		Respiration		March-23		01
		Nitrogen Metabolism		March-23		
		Lipid metabolism		April-23		01
		Mechanism of signal transduction		May-23		01
CCH 14 (PRACTICAL)	PLANT METABOLISM	A basic idea of chromatography	BM	Jan-23		
		Separation of plastidial pigments by solvent and paper chromatography		Jan-23		
		Estimation of total chlorophyll content from different chronologically aged leaves		Feb-23		
		Effect of HCO_3^- concentration on oxygen evolution during photosynthesis		Feb-23		
		Measurement of oxygen uptake by respiring tissue		March-23		
		Determination of the RQ of germinating seeds		April-23		
		Test of seed viability by TTC method		May-23		
6th Semester Honours Course (Jan 2023 - Jun 2023) DSE-A-3						
Name of the paper	Module	Topic	Name of the teacher	To be Completed during	No of PPT classes	Class Tests

DSE-A3 (THEORY)	MEDICINAL AND ETHNOBOTANY	Medicinal botany	SR	Jan-23		01
		Pharmacognosy		Feb-23		01
		Secondary metabolites		March-23		01
		Pharmacologically active constituents		April-23		01
		Ethnobotany and folk medicine		May-23		01
DSE-A3 (PRACTICAL)	MEDICINAL AND ETHNOBOTANY	Chemical tests for (a) Tannin (b) Alkaloid	SR	Jan-23		
		Powder microscopy		Feb-23		
		Histochemical tests OF Curcumin, Starch, Alkaloid		March-23		

6th Semester Honours Course (Jan 2021 - Jun 2021) DSE-B-8

Name of the paper	Module	Topic	Name of the teacher	To be Completed during	No of PPT classes	Class Tests
DSE-B8 (THEORY)	NATURAL RESOURCE MANAGEMENT	Natural resources	UG	Jan-23	02	01
		Sustainable utilization		Feb-23	02	01
		Land		March-23	01	01
		Water		March-23	01	
		Biological Resources		April-23	01	01
		Forests		April-23	01	

		Energy		April-23	01	
		Contemporary practices in resource management		May-23	02	01
		National and international efforts in resource management and conservation		May-23	02	
DSE-B8 (PRACTICAL)	NATURAL RESOURCE MANAGEMENT	Estimation of solid waste generated by a domestic system	UG	Jan-23		
		Estimation of foliar dust deposition		Feb-23		
		Determination of total solid in water		March-23		
		Determination of chemical properties of soil		April-23		
		Estimation of organic carbon percentage present in soil		May-23		
		Collection of data on forest cover of specific area	May-23			
GENERAL COURSE						
1st Semester General Course (July 2022 - Dec 2022) CCG 01						
Name of the paper	Module	Topic	Name of the teacher	To be Completed during	No of PPT classes	Class Tests

CCG-01 (THEORY)	PLANT DIVERSITY I (PHYCOLOGY, MYCOLOGY, PHYTOPATHOLOGY, BRYOPHYTES AND ANATOMY)	Introduction to different plant groups	BM	Jul-22	01	01
		Phycology		Aug-22	02	01
		Mycology	UG	Sept-22	02	01
		Phytopathology		Nov-22	02	01
		Bryophytes		Dec-22	02	01
		Anatomy	SR	Dec-22		01
CCG-01 (PRACTICAL)	PLANT DIVERSITY I (PHYCOLOGY, MYCOLOGY, PHYTOPATHOLOGY , BRYOPHYTES AND ANATOMY)	Work out on algae and Fungi	UG BM	Jul-22		
		Anatomical studies	SR	Aug-22		
		Identification with reasons	SR UG	Sept-22		
2nd Semester General Course (Jan 2023 - Jun 2023) CCG 02						
Name of the paper	Module	Topic	Name of the teacher	To be Completed during	No of PPT classes	Class Tests
CCG-02 (THEORY)	PLANT DIVERSITY II	Pteridophytes	UG	Jan-23	01	01
		Gymnosperms	BM	Feb-23	01	01

		Paleobotany & Palynology	UG	March-23	02	01
		Angiosperm Morphology	SR	April-23		01
		Taxonomy of Angiosperms		May-23		01
CCG 02 (PRACTICAL)	PLANT DIVERSITY II	Workout on Angiospermic Plant		Jan-23		
		Identification with reasons	UG SR BM	Feb, March- 23		
		Spot identification	SR	April-23		

3rd Semester General Course (July 2022 - Dec 2022) CCG 03

Name of the paper	Module	Topic	Name of the teacher	To be Completed during	No of PPT classes	Class Tests
CCG-03 (THEORY)	- CELL BIOLOGY GENETICS AND MICROBIOLOGY	Cell Biology and Genetics	SR	Jul-22		01
		Chromosomal aberrations		Jul-22		
		Central Dogma, Transcription and Translation		Aug-22		01
		Genetic Code- properties		Aug-22		
		Linkage group and Genetic map		Sep-22		01
		Mutation		Oct-22		01
		Brief concept of Split gene, Transposons		Nov-22		01

		Microbes		Dec-22		01
CCG 03 (PRACTICAL)	- CELL BIOLOGY, GENETICS AND MICROBIOLOGY	Staining and squash preparation of onion root tip, study of mitotic stages, Determination of mitotic index	SR	Sept-22		
		Workout on gram staining		Nov-22		
		Identification with reasons		Dec-22		

4th Semester General Course (Jan 2023 - Jun 2023) CCG 04

Name of the paper	Module	Topic	Name of the teacher	To be Completed during	No of PPT classes	Class Tests
CCG 04 (THEORY)	PLANT PHYSIOLOGY AND METABOLISM	Proteins	BM	Jan-23		01
		Transport in plants		Feb-23		01
		Transpiration		March-23		01
		Photosynthesis		March-23	02	
		Respiration		April-23	02	01
		Nitrogen metabolism		April-23	01	
		. Plant Growth regulators		May-23		01
		Photoperiodism		May-23		
		Senescence		May-23		

CCG 04 (PRACTICAL)	PLANT PHYSIOLOGY AND METABOLISM	Experiment on Plasmolysis	BM	Jan-23		
		Measurement of leaf area and determination of transpiration rate per unit area by weighing method		Feb-23		
		Imbibition of water by dry seeds - proteinaceous and fatty seeds		March-23		
		Imbibition of water by dry seeds - proteinaceous and fatty seeds		March-23		
		Evolution of CO ₂ during aerobic respiration and measurement of volume		April-23		

5th Semester General Course (July 2022 - Dec 2022) CCG – DSE A1

Name of the paper	Module	Topic	Name of the teacher	To be Completed during	No of PPT classes	Class Tests
CCG – DSE A1 (THEORY)	PHYTOCHEMISTRY AND MEDICINAL BOTANY	Medicinal botany	BM	July-22		01
		Pharmacognosy		Aug-22		01
		Organoleptic		Sept-22		01
		Pharmacologically active constituents		Nov-22		01
		Ethnobotany and folk medicine		Dec-22		01

CCG – DSE A1 (PRACTICAL)	PHYTOCHEMISTRY AND MEDICINAL BOTANY	Preparations of solution and buffers	BM	July-22		
		Acquaintance with laboratory instruments		Aug-22		
		Qualitative test for proteins and carbohydrates, reducing and non reducing sugar		Sept-22		
		Tests (chemical) for tannin and alkaloid		Nov-22		
		Identification of medicinal plants		Dec-22		

6th Semester General Course (Jan 2023 - July 2023) CCG – DSE B3

Name of the paper	Module	Topic	Name of the teacher	To be Completed during	No of PPT classes	Class Tests
CCG – DSE B3 (THEORY)	ECONOMIC BOTANY	Origin of cultivated plants	SR	Jan-23		01
		Rice- origin, morphology and uses		Feb-23		01
		Legumes: General account with special reference to <i>Vigna</i>		March-23		01
		Beverages: Tea- morphology, processing and uses		April-23		01
		Study of the various economically important plants		May-23		01
CCG – DSE B3 (PRACTICAL)	ECONOMIC BOTANY	Study of economically important plants through herbarium specimens and field study	SR	Jan-23		
		Study of cultivation practices in field		Feb-23		
		Study of local economically important plants		March-23		

NEP System

1st Semester Honours Course (July 2023 - Dec 2023) DSC/Core

Name of the paper	Module	Topic	Name of the teacher	To be Completed during	No of PPT classes	Class tests
Minor (Theory)	PLANT DIVERSITY	Introduction to plant kingdom	BM	Jul-23	02	01
		Algae	BM	Aug, Sep-23	03	02
		Fungi	UG	Jul-23	02	01
		Bryophytes		Aug-23	02	01
		Pteridophytes		Sep-23	02	01
		Gymnosperms	BM	Oct-23	02	01
		Angiosperms	SR	Jul, Aug-23	02	02
Minor (Practical)	PLANT DIVERSITY	Flower- dissection, drawing and study	SR	Jul, Aug-23		
		Study of ovules: types		Sep-23		
		Fruits : different types		Oct-23		
		Inflorescence types		Dec-23		
		Identification of Algae, Gymnosperm	BM	Aug, Sep-23		
		Identification of Fungi, Bryophyte, Pteridophyte	UG	Aug, Sep-23		

1st Semester Honours Course (July 2023 - Dec 2023) SEC

Name of the paper	Module	Topic	Name of the teacher	To be Completed during	No of PPT classes	Class tests
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SEC 1 (Theory)	MUSHROOM CULTIVATION TECHNOLOGY	Introduction, History of mushroom cultivation	UG	July-23	01	01
		Current overview of mushroom production in the world		July-23	01	
		Mushroom biology-classification of mushrooms, edible mushrooms in India, poisonous mushrooms,mushroom poisoning		Aug-23	02	01
		Infrastructure-structural design and layout of mushroom farm, substrates		Sep-23	01	01
		Appliances for mushroom cultivation		Sep-23	01	
		Cultivation technology		Oct-23	01	01
		Production of spawn		Dec-23	01	01
		Cultivation of medicinal mushroom		Dec-23	01	
		Mushroom diseases and management strategies		BM	July-23	--
		Post-harvest storage technology	July-23		01	
		Food preparations from mushrooms	Aug-23		01	01
		Uses of spent mushroom substrate	Aug-23		01	
		Strain improvements in cultivated mushroom	Sep-23		01	01
		Nutritional and medicinal value of edible mushrooms	Sep-23		--	
		Research centres, Cost-benefit ratio	Oct-23		01	01
		Mushroom based Industry	Nov-23		01	01

		Mushroom market in India and abroad		Dec-23	01	01
SEC 1 (Practical)	MUSHROOM CULTIVATION TECHNOLOGY	Macro and microscopic identification of some common edible mushrooms	UG	Aug-23		
		Media preparation		Sep-23		
		Fungal tissue culture		Sep-23		
		Sub-culturing for maintenance of culture		Oct-23		
		Spawn production		Dec-23		
		Cultivation of Pleurotus/Calocybe		Dec-23		

1st Semester Honours Course (July 2023 - Dec 2023) IDC

Name of the paper	Module	Topic	Name of the teacher	To be Completed during	No of PPT classes	Class tests
IDC (Theory)	PLANTS AROUND US	Introduction	SR	Jul-23		01
		Introduction to plant groups: Algae, Bryophytes, Pteridophytes, Gymnosperms, Angiosperm		Aug-23		02
		Fungi -general character		Aug-23		

		Contributions of Theophrastus, Charak, Sushruta, Linnaeus, Mendel and J.C. Bose.		Sep-23		01
		Plant cell and tissue		Sep-23		
		Morphology of root, stem, leaf, flower, fruit and seed		Oct-23		01
		Phytodiversity and conservation	UG	July-23	01	01
		Biodiversity hotspots of India		Aug-23	01	01
		Forest types in India		Sep-23	01	01
		Plant-based adaptations to climate change		Oct-23	01	01
		Concept of 'Carbon footprint		Nov-23	01	01
		Plants in day-to-day life	SR	Oct-23		01
		Important medicinal plants and their use		Nov-23		01
		Plant-derived medicinal compounds and uses		Dec-23		01
		IDC (Practical)	PLANTS AROUND US	Identification: Morphological study plant specimens	SR	Jul, Aug-23
Microscopic study of Algae, Fungi, Bryophyte, Pteridophyte, Gymnosperm and angiosperm	UG SR			Sep, Oct-23		

		Work out of flower	SR	Dec-23		
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