Department of Botany

Teaching Plan

Academic Year 2023-24

Semesters	Course	Paper & Unit	Name of Faculty	No. of Lectures	To be completed within
Semester I	**B.Sc Honours (Minor)**	**MI-1T & MI-1P (Plant Science-I)**			
		Unit 1: Introduction to microbial world, Virus, Bacteria, Algae, Fungi	Mrs. Sayanti Bagchi	15	10 Days
		Unit 2: Bryophytes, Pteridophytes	Mr. Sawmen Kr. Ghorai	15	10 Days
		Unit 3: Gymnosperms, Palaeobotany	Mr. Sawmen Kr. Ghorai	15	8 Days
Semester II	**B.Sc General (Multidisciplinary)**	**MI-2T & MI-2P (Plant Science-II)**			
		Unit 1: Plant morphology	Mrs. Sayanti Bagchi	03	2 Days
		Unit 2 & 3: Flower, Fruits and seed types	Mrs. Sayanti Bagchi	08	5 Days

		Unit 4: Structure and development of plant body	Mrs. Sayanti Bagchi	02	1 Day
		Unit 5: Significance of Plant systematics	Mr. Sawmen Kr. Ghorai	05	3 Days
		Unit 6: Plant systematics and taxonomic hierarchy.	Mr. Sawmen Kr. Ghorai	04	2 Days
		Unit 7: System of classification.	Mr. Sawmen Kr. Ghorai	04	2 Days
		Unit 8: General descriptions of the given families.	Mrs. Sayanti Bagchi	04	2 Days
Semester II	**B.Sc Honours (Minor)**	Unit 1: Plant morphology	Mrs. Sayanti Bagchi	03	2 Days
		Unit 2 & 3: Flower, Fruits and seed types	Mrs. Sayanti Bagchi	08	5 Days
		Unit 4: Structure and development of plant body	Mrs. Sayanti Bagchi	02	1 Day
		Unit 5: Significance of Plant systematics	Mr. Sawmen Kr. Ghorai	05	3 Days

		Unit 6: Taxonomic hierarchy	Mr. Sawmen Kr. Ghorai	04	2 Days
		Unit 7: System of classification.	Mr. Sawmen Kr. Ghorai	04	2 Days
		Unit 8: General descriptions of the given families.	Mrs. Sayanti Bagchi	04	2 Days

Semester III	B.Sc General	Paper & Unit	Name of theFaculty	No. of Lectures	To be completed within
		DSC-1C(CC-3) Unit 1: Meristematic and permanent tissues	Mrs. Sayanti Bagchi	**4**	8 Days
		U nit 2: Organs	Mrs. Sayanti Bagchi	**3**	6 Days
		Unit 3: Secondary Growth	Mrs. Sayanti Bagchi	**5**	10 days
		U nit 4: Adaptive and protective systems	Mrs. Sayanti Bagchi	**4**	8 days
		Unit 5: Structural organization of flower	Mrs. Sayanti Bagchi	**5**	10 days
		Unit 6: Pollination and fertilization	Sawmen Kr. Ghorai	**5**	10 days
		Unit 7: Embryo and endosperm	Sawmen Kr. Ghorai	**4**	8 days
		Unit 8: Apomixis and polyembryony	Sawmen Kr. Ghorai	**3**	6 days
Semester III	**B.Sc Honours**	**Paper & Unit**	**Name of the Faculty**	**No. of Lectures**	**To be completed within**

		GE 3T & GE 3P			
		Unit 1: Origin of Cultivated Plants	Sawmen Kr. Ghorai	**4**	8 days
		Unit 2: Cereals	Sawmen Kr. Ghorai	**3**	6 days
		U nit 3: Legumes	Sawmen Kr. Ghorai	**3**	6 days
		U nit 4: Spices	Sawmen Kr. Ghorai	**4**	8 days
		U nit 5: Beverages	Sawmen Kr. Ghorai	**2**	4 days
		U nit 6: Oils and Fats	Mrs. Sayanti Bagchi	**4**	8 days

		Unit 7: Fibre Yielding Plants	Mrs. Sayanti Bagchi	**4**	8 days
		Unit 8: Introduction to biotechnology	Mrs. Sayanti Bagchi	**3**	6 days
		U nit 9: Plant tissue culture	Mrs. Sayanti Bagchi	**4**	8 days
		Unit 10: Recombinant DNA Techniques	Mrs. Sayanti Bagchi	**4**	8 days
Semester IV	**B.Sc General**	**Paper & Unit**	**Name of the Faculty**	**No. of Lectures**	**To be completed within**
		DSC-1D(CC-4): Plant Physiology and Metabolism			
		Unit 1: Plant-water relations	Mrs. Sayanti Bagchi	**4**	8 days
		U nit 2: Mineral nutrition	Mrs. Sayanti Bagchi	**3**	6 days
		Unit 3: Translocation in phloem	Mrs. Sayanti Bagchi	**4**	8 days
		Unit 4: Photosynthesis	Mrs. Sayanti Bagchi	**4**	8 days
		Unit 5: Respiration	Mrs. Sayanti Bagchi	**4**	8 days
		Unit 6: Enzymes	Sawmen Kr. Ghorai	**5**	10 days
		Unit 7: Nitrogen metabolism	Sawmen Kr. Ghorai	**4**	8 days
		Unit 8: Plant growth regulators	Sawmen Kr. Ghorai	**4**	6 days
				4	8 days

		Unit 9: Plant response to light and temperature	Sawmen Kr. Ghorai		
Semester IV	**B.Sc Honours**	**Paper & Unit**	**Name of the Faculty**	**No. of Lectures**	**To be completed within**
		GE 4T & GE 4P Plant Anatomy and Embryology Unit 1: Meristematic and permanent tissues U nit 2: Organs Unit 3: Secondary Growth U nit 4: Adaptive and protective systems Unit 5: Structural organization of flower Unit 6: Pollination and fertilization Unit 7: Embryo and endosperm Unit 8: Apomixis and polyembryony	Mrs. Sayanti Bagchi Mrs. Sayanti Bagchi Mrs. Sayanti Bagchi Mrs. Sayanti Bagchi Sawmen Kr. Ghorai Sawmen Kr. Ghorai Sawmen Kr. Ghorai Sawmen Kr. Ghorai	**4** **3** **4** **4** **5** **3** **4** **3**	8 days 6 days 8 days 8 days 10 days 6 days 8 days 6 days
Semester V	**B.Sc General**	**Paper & Unit**	**Name of the Faculty**	**No. of Lectures**	**To be completed within**
		DSE-1: Cell and Molecular Biology		**4**	8 days

		Unit 1: Techniques in Biology Unit 2: Cell as a unit of Life Unit 3: Cell Organelles Unit 4: Cell Membrane and Cell Wall Unit 5: Cell Cycle Unit 6: Genetic material Unit 7: Transcription (Prokaryotes and Eukaryotes) Unit 8: Regulation of gene expression	Mrs. Sayanti Bagchi Mrs. Sayanti Bagchi Mrs. Sayanti Bagchi Mrs. Sayanti Bagchi Sawmen Kr. Ghorai Sawmen Kr. Ghorai Sawmen Kr. Ghorai Sawmen Kr. Ghorai	**3** **5** **4** **5** **5** **4** **3**	6 days 10 days 8 days 10 days 10 days 8 days 6 days
Semester VI	**B.Sc General**	**Paper & Unit**	**Name of the Faculty**	**No. of Lectures**	**To be completed within**
		DSE-2 & DSE2T: Genetics and Plant Breeding Unit 1: Heredity Unit 2: Sex-determination and Sex-linked Inheritance Unit 3: Linkage and Crossing over	Mrs. Sayanti Bagchi Mrs. Sayanti Bagchi Mrs. Sayanti Bagchi	4 4 4 5	8 days 8 days 8 days 10 days

		Unit 4: Mutations and Chromosomal Aberrations Unit 5: Plant Breeding Unit 6: Methods of crop improvement Unit 7: Quantitative inheritance Unit 8: Inbreeding depression and heterosis Unit 9: Crop improvement and breeding	Mrs. Sayanti Bagchi Sawmen Kr. Ghorai Sawmen Kr. Ghorai Sawmen Kr. Ghorai Sawmen Kr. Ghorai Sawmen Kr. Ghorai	3 4 3 3 4	6 days 8 days 3 days 6 days 8 days