I – Academic Planner

I. **Teaching Plan (Year: 2020-2021 Semester: Odd and Even)**

J. **Teacher's Name: Dr Vibha G. Checker Department: Botany**

S. No.	UPC	Paper Name	Core/AECC/GE/SEC	Topic/Unit	Start Date	End Date
ODD SEMESTER						
1	32161301	Anatomy of Angiosperms Theory	Core	Unit 6 Unit 7 Unit 8 Unit 9 Unit 10	14 Aug 4 Sept 9 Oct 20Oct 13Nov	1 Sept 29 Sept 13Oct 10 Nov 24 Nov
2	32167502	Biostatistics Theory	DSE	Unit 3 Unit 4 Unit 5	10 Aug 7 Sept 12 Oct	4 Sept 9 Oct 13 Nov
4	32165101	Biodiversity	GE I	Unit 1	17 Dec	2 March
5	32167502	Biostatistics Practical	DSE	1. Calculation of mean, median, mode, standard deviation and standard error 2. Calculation of correlation coefficient values and finding out the probability 3. Calculation of 'F' value and finding out the probability value for the F value.	12 Aug	25 Nov
6	42164301	Plant Anatomy and Embryology Practical	Core	1. Study of meristems through permanent slides and photographs. 2. Tissues (parenchyma, collenchyma and sclerenchyma); Macerated xylary elements, Phloem (Permanent slides, photographs) 3. Stem: Monocot: Zea mays; Dicot:	13 Aug	26 Nov

				Helianthus. 4. Root: Monocot: Zea mays; Dicot: Helianthus 5. Leaf: Dicot and Monocot (only Permanent slides). 6. Adaptive anatomy: Xerophyte (Nerium leaf); Hydrophyte (Hydrilla stem). 7. Structure of anther (young and mature). 8. Types of ovules: anatropous, orthotropous, circinotropous, amphitropous/ campylotropous 9. Female gametophyte: Polygonum (monosporic) type of Embryo sac (Permanent slides/photographs). 10. Pollination types and seed dispersal mechanisms (including appendages, aril,caruncle) Photographs/specimens). 11. Dissection of embryo/endosperm from developing seeds. 12. Calculation of percentage of germinated pollen in a given medium		
EVEN SEMESTER						
4	32161201	Molecular Biology Theory	Core	Unit 2 Unit 7 Unit 8	7 Jan 11 Feb 18 March	4 Feb 11 March 15 April
6	32167608	Bioinformatics Theory	DSE	Unit 3 Unit 4 Unit 5 Unit 6	4 Jan 20 Jan 24 Feb 24 March	18 Jan 22 Feb 24 March 12April
7		Plant Physiology And Metabolism	Core	Unit 4 Unit 5	2 Jan 6 March	27 Feb 27 March

8		EVS	AECC	Unit 6 Unit 3	30 Jan 6 March	20 Feb 13 March
9		Plant Physiology And Metabolism	Core	1. Determination of osmotic potential of plant cell sap by plasmolytic method. 2. To study the effect of the environmental factor light on transpiration by excised twig. 3. Calculation of stomatal index and stomatal frequency of a mesophyte and a xerophyte. 4. To Study Hill's reaction. 5. To study the activity of catalase and study the effect of pH and enzyme concentration. 6. To study the effect of light intensity on O2 evolution in photosynthesis. 7. Comparison of the rate of respiration in any two parts of a plant. 8. Bolting. 9. Effect of auxins on rooting. 10. Suction due to transpiration. 11. Hydroponics (using a photograph). 12. To demonstrate the delay of senescence by cytokinins. 13. To study the phenomenon of seed germination (effect of light and darkness)	7 Jan	8 April
10	32167608	Bioinformatics Practical	DSE	1. Nucleic acid and protein databases. 2. Sequence retrieval from databases. 3. Sequence alignment. 4. Sequence homology and Gene annotation. 5. Construction of phylogenetic tree.	6 Jan	7 April
11	32161601	Plant Metabolism Practical	Core	1. Chemical separation of photosynthetic pigments. 2. Experimental demonstration of Hill’s reaction. 3. To study the effect of light intensity on the rate of photosynthesis. 4. Effect of carbon dioxide on the rate of	4 Jan	12 April

				photosynthesis. 5. To compare the rate of respiration in different parts of a plant. 6. To demonstrate activity of Nitrate Reductase in germinationg leaves of different plant sources. 7. To study the activity of lipases in germinating oilseeds and demonstrate mobilization of lipids during germination. 8. Demonstration of fluorescence by isolated chlorophyll pigments. 9. Demonstration of absorption spectrum of photosynthetic pigments 10. Determination of RQ 11. To demonstrate activity of Lipase		

J. FDP/Seminar/Workshops/Lectures to be attended and/or to be conducted by Teachers

Event Topic		**Colours in Nature**			
Type / Nature (FDP/Webinar/Workshop etc.)		**Webinar**			
Organizing In-charge		**Dr. RenuKathpalia, Kirori Mal College**			
Details regarding invited Resource Person		**Dr Geeta (Retd Gargi College)**			
Nature of Participation (e.g. Invited Speaker, Participant etc.)		**Participant**			
Date/s	**22 August**	**Timing/s**	**3 to 5**	**Mode**	**Lecture**

Event Topic		**FLORICULTURE & TERRACE GARDENING**			
Type / Nature (FDP/Webinar/Workshop etc.)		**Webinar**			
Organizing In-charge		**Mahatma Gandhi Institute for Combating Climate Change, Bakoli, Delhi**			
Details regarding invited Resource Person		**Dr. S. S. Sindhu (Head of the Department Horticulture, Indian Agricultural Research Institute)**			
Nature of Participation (e.g. Invited Speaker, Participant etc.)		**Participant**			
Date/s	**7 August**	**Timing/s**	**11 – 12.30pm**	**Mode**	**Online Lecture**

Event Topic		**Visual Note Taking**			
Type / Nature (FDP/Webinar/Workshop etc.)		**Webinar**			
Organizing In-charge		**IQAC, Planning division, Dr BR Ambedkar University**			
Details regarding invited Resource Person		**Mr, Zaid Ali Ulsagoff**			
Nature of Participation (e.g. Invited Speaker, Participant etc.)		**Participant**			
Date/s	**22 Sept 2020**	**Timing/s**	**11 – 12.30pm**	**Mode**	**Online Lecture**

Event Topic	**Innovation in Scientific Research Methods**
Type / Nature (FDP/Webinar/Workshop etc.)	**FDP**
Organizing In-charge	**Dr. Anita K Verma**
Details regarding invited Resource Person	
Nature of Participation (e.g. Invited Speaker, Participant etc.)	**Participant**

Date/s	**14-18 Oct 2020**	**Timing/s**	**4- 6pm**	**Mode**	**Online Lectures**

Event Topic		**National Immunology day**			
Type / Nature (FDP/Webinar/Workshop etc.)		**Webinar**			
Organizing In-charge		**Department of Zoology, Kirori Mal College, University of Delhi.**			
Details regarding invited Resource Person		**Dr. Chauhan**			
Nature of Participation (e.g. Invited Speaker, Participant etc.)		**Participant**			
Date/s	**29 April 2021**	**Timing/s**	**4- 6 pm**	**Mode**	**Online Lectures**

Event Topic		**World Environment Day**			
Type / Nature (FDP/Webinar/Workshop etc.)		**Student activity**			
Organizing In-charge		**Department of Botany and Zoology, Kirori Mal College, University of Delhi.**			
Details regarding invited Resource Person					
Nature of Participation (e.g. Invited Speaker, Participant etc.)		**organizing team**			
Date/s	**5 JUNE 2021**	**Timing/s**	**11-2**	**Mode**	**Online Events**

Event Topic	**Environmental Audit**
Type / Nature (FDP/Webinar/Workshop etc.)	**FDP**

Organizing In-charge		**Sri Aurobindo College, University of Delhi in collaboration with Mahatma Hansraj Faculty Development Centre (MHRFDC), Hansraj College**			
Details regarding invited Resource Person					
Nature of Participation (e.g. Invited Speaker, Participant etc.)		**Participant**			
Date/s	**June 28 - July 2, 2021**	**Timing/s**	**2- 6 pm**	**Mode**	**Online Lectures**

Event Topic		**World Nature Conservation Day**			
Type / Nature (FDP/Webinar/Workshop etc.)		**Student activity**			
Organizing In-charge		**Department of Botany and Zoology, Kirori Mal College, University of Delhi.**			
Details regarding invited Resource Person					
Nature of Participation (e.g. Invited Speaker, Participant etc.)		**Organizing team**			
Date/s	**28 JULY 2021**	**Timing/s**	**11-2**	**Mode**	**Student activity**

Event Topic		**Applications of Genomics, Metagenomics and Bioinformatics in Biological System**			
Type / Nature (FDP/Webinar/Workshop etc.)		**FDP**			
Organizing In-charge		**Department of Botany and Zoology, Kirori Mal College, University of Delhi.**			
Details regarding invited Resource Person					
Nature of Participation (e.g. Invited Speaker, Participant etc.)		**Participant**			
Date/s	**16 - August 2021 to 20 August 2021**	**Timing/s**	**9- 6 pm**	**Mode**	**Online Lectures**

K. Internal Assessment: House Exam (Test/Presentation etc.)&Assignment*

Course Code	Course Name	Unique Paper Code	Topic Name	Day and Date	Date/s of Exhibiting the Assessment Sheet to students, Discussing the marks, Returning/Retaining
556	B.Sc.(H) Botany	3216301	Anatomy of Angiosperms	Test 9 October Assignment 11 September	Test 10 Nov Assignment 17 Nov
556	B.Sc.(H) Botany	32167502	Biostatistics	Test 12 October Assignment 14September	Test 2 November Assignment 23 November
	GE 1	23 Feb	Bacteria and Viruses	23 Feb	2 March
556	B.Sc.(H) Botany	32161201	Molecular Biology	Test 25 March	Test 8 April
583	B.Sc.(LS)		Plant Physiology and Metabolism	Test 2 March Assignment 13 January	Test 6 April Assignment 2 March
556	B.Sc.(H) Botany	32167608	Bioinformatics	Test 3 April	Test 10 April

***Marks of the Internal Assessment to be submitted to the College 15 days before the last working day of every semester**

Dr. Vibha G. Checker

Department of Botany