ACADEMIC PLANNER 2023-24
NAME OF THE DEPARTMENT:GENETICS(HONS) DSCC
DISCIPLINE SPECIFIC CORE COURSE
V SEMESTER Paper -V SUBJECT TITLE: DSCC5GENT5:GENE REGULATION AND DNA REPAIR

Semester	**first**	**Paper**	**GENE REGULATION AND DNA REPAIR**
Week/Month & Date (Preferably)	**Day**	**Portions Planned for 1 hour**	**Teacher**
OCTOBER FIRST WEEK	1	DNA Repair: single and double strand	PRIYADARSHINI P.A
	2	Photo reactivation	PRIYADARSHINI P.A
	3	Regulation of gene expression	JALAJAKSHI.S
	4	Spatial and temporal gene expression	JALAJAKSHI.S
OCTOBER SECOND WEEK	1	06 methyl guanine and methyl transferase	PRIYADARSHINI P.A
	2	Base excision repair	PRIYADARSHINI P.A
	3	Transcriptional control RNA polymerase	JALAJAKSHI.S
	4	Cis element and transcription factor	JALAJAKSHI.S
OCTOBER THIRD WEEK	1	Nucleotide and mismatch	PRIYADARSHINI P.A
	2	SOS Repair and mitochondrial repair	PRIYADARSHINI P.A
	3	Post transcriptional control : RNA editing	JALAJAKSHI.S
	4	Adenosine to inosine	JALAJAKSHI.S
OCTOBER FOURTH WEEK	1	Gene defect	PRIYADARSHINI P.A
	2	Xeroderma pigmentosum	PRIYADARSHINI P.A
	3	Cytoplasmic control mRNA Stability	JALAJAKSHI.S
	4	Environmental impact of transcription	JALAJAKSHI.S
NOVEMBER FIRST WEEK	1	Ataxia and cocyane syndrome	PRIYADARSHINI P.A
	2	Epigenetic gene regulation: introduction	PRIYADARSHINI P.A
	3	RNA interference	JALAJAKSHI.S
	4	Mechansim and enzymology	JALAJAKSHI.S
NOVEMBER SECOND WEEK	1	Gene regulation and types	PRIYADARSHINI P.A
	2	DNA modification (CpG) and DNA methyl transferase	PRIYADARSHINI P.A
	3	RISC complex formation	JALAJAKSHI.S
	4	Regulation of gene expression	JALAJAKSHI.S
NOVEMBER THIRD WEEK	1	DNA methyl binding protein and genomic printing	PRIYADARSHINI P.A
	2	Histones and epigenetic Modification	PRIYADARSHINI P.A
	3	Antisense RNA technology	JALAJAKSHI.S
	4	RNA expression	JALAJAKSHI.S
NOVEMBER FOURTH WEEK	1	Nucleosome model	PRIYADARSHINI P.A
	2	Nucleosome remodelling	PRIYADARSHINI P.A
	3	DNA microarray	JALAJAKSHI.S
	4	RT-PCR	JALAJAKSHI.S
DECEMBER FIRST WEEK	1	RNA based epigenetic modification	PRIYADARSHINI P.A
	2	Mechanism of X chromosome inactivation	PRIYADARSHINI P.A
	3	Promotor anaylasis	JALAJAKSHI.S
	4	Expression of reporter gene	JALAJAKSHI.S
DECEMBER SECOND WEEK	1	Role of small non coding RNAs	PRIYADARSHINI P.A
	2	MiRNA	PRIYADARSHINI P.A
	3	Promotor fusion in post cells	JALAJAKSHI.S
	4	Protein expression anaylasis	JALAJAKSHI.S
DECEMBER THIRD WEEK	1	SiRNA	PRIYADARSHINI .P.A
	2	sno RNA	PRIYADARSHINI. P.A
	3	Western blotting	JALAJAKSHI.S
	4	2D- gel electrophoresis	JALAJAKSHI.S
DECEMBER FOURTH WEEK	1	Translation regulation	PRIYADARSHINI.P.A
	2	Role of long non coding RNA	PRIYADARSHINI.P.A
	3	Methylation sensitive restriction enzymes	JALAJAKSHI.S
	4	Fluroscences in situ hybridization	JALAJAKSHI.S
		ASSIGNMENTS CORRECTION AND DISCUSSION	
JANUARY FIRST	1	DNA methyl binding protein	PRIYADARSHINI P.A

ACADEMIC PLANNER 2023-24
NAME OF THE DEPARTMENT:GENETICS(HONS) DSCC
DISCIPLINE SPECIFIC CORE COURSE
V SEMESTER Paper -V SUBJECT TITLE: DSCC5GENT5:GENE REGULATION AND DNA REPAIR

WEEK	2	DNA methyl transferase	PRIYADARSHINI P.A
	3	Heat shock genes	JALAJAKSHI.S
	4	REVISION of UNIT 3	JALAJAKSHI.S
JANUARY SECOND WEEK	1	Process of Histone methylation	PRIYADARSHINI P.A
	2	Acetylation and phosphorylation	PRIYADARSHINI P.A
	3	Revision of unit 3	JALAJAKSHI.S
	4	Revision of unit 4	JALAJAKSHI.S
JANUARY THIRD WEEK	1	Fanconi anemia	PRIYADARSHINI P.A
	2	Translation regulation	PRIYADARSHINI P.A
	3	Revision of unit 4	JALAJAKSHI.S
	4	Test on unit 3	JALAJAKSHI.S
JANUARY FOURTH WEEK	1	REVISION of UNIT 1	PRIYADARSHINI P.A
	2	REVISION of UNIT 2	PRIYADARSHINI P.A
	3	Test on unit 4	JALAJAKSHI.S
	4	Paper discussion	JALAJAKSHI.S
		SCHEME OF EXAMINATION AND QUESTION PAPERS DISCUSSION	

ACADEMIC PLANNER 2023-24
NAME OF THE DEPARTMENT:GENETICS(HONS) DSCC
DISCIPLINE SPECIFIC CORE COURSE
V SEMESTER Paper-6 SUBJECT TITLE: DSCC5GENT6:PLANT CELL AND TISSUE CULTURE TECHNOLOGY

Semester	**first**	**Paper**	**PLANT CELL AND TISSUE CULTURE TECHNOLOGY**
Week/Month & Date (Preferably)	**Day**	**Portions Planned for 1 hour**	**Teacher**
OCTOBER FIRST WEEK	1	DNA Repair: single and double strand	PRIYADARSHINI P.A
	2	Photo reactivation	PRIYADARSHINI P.A
	3	Regulation of gene expression	JALAJAKSHI.S
	4	Spatial and temporal gene expression	JALAJAKSHI.S
OCTOBER SECOND WEEK	1	06 methyl guanine and methyl transferase	PRIYADARSHINI P.A
	2	Base excision repair	PRIYADARSHINI P.A
	3	Transcriptional control RNA polymerase	JALAJAKSHI.S
	4	Cis element and transcription factor	JALAJAKSHI.S
OCTOBER THIRD WEEK	1	Nucleotide and mismatch	PRIYADARSHINI P.A
	2	SOS Repair and mitochondrial repair	PRIYADARSHINI P.A
	3	Post transcriptional control : RNA editing	JALAJAKSHI.S
	4	Adenosine to inosine	JALAJAKSHI.S
OCTOBER FOURTH WEEK	1	Gene defect	PRIYADARSHINI P.A
	2	Xeroderma pigmentosum	PRIYADARSHINI P.A
	3	Cytoplasmic control mRNA Stability	JALAJAKSHI.S
	4	Environmental impact of transcription	JALAJAKSHI.S
NOVEMBER FIRST WEEK	1	Ataxia and cocyane syndrome	PRIYADARSHINI P.A
	2	Epigenetic gene regulation: introduction	PRIYADARSHINI P.A
	3	RNA interference	JALAJAKSHI.S
	4	Mechansim and enzymology	JALAJAKSHI.S
NOVEMBER SECOND WEEK	1	Gene regulation and types	PRIYADARSHINI P.A
	2	DNA modification (CpG) and DNA methyl transferase	PRIYADARSHINI P.A
	3	RISC complex formation	JALAJAKSHI.S
	4	Regulation of gene expression	JALAJAKSHI.S
NOVEMBER THIRD WEEK	1	DNA methyl binding protein and genomic printing	PRIYADARSHINI P.A
	2	Histones and epigenetic Modification	PRIYADARSHINI P.A
	3	Antisense RNA technology	JALAJAKSHI.S
	4	RNA expression	JALAJAKSHI.S
NOVEMBER FOURTH WEEK	1	Nucleosome model	PRIYADARSHINI P.A
	2	Nucleosome remodelling	PRIYADARSHINI P.A
	3	DNA microarray	JALAJAKSHI.S
	4	RT-PCR	JALAJAKSHI.S
DECEMBER FIRST WEEK	1	RNA based epigenetic modification	PRIYADARSHINI P.A
	2	Mechanism of X chromosome inactivation	PRIYADARSHINI P.A
	3	Promotor anaylasis	JALAJAKSHI.S
	4	Expression of reporter gene	JALAJAKSHI.S
DECEMBER SECOND WEEK	1	Role of small non coding RNAs	PRIYADARSHINI P.A
	2	MiRNA	PRIYADARSHINI P.A
	3	Promotor fusion in post cells	JALAJAKSHI.S
	4	Protein expression anaylasis	JALAJAKSHI.S
DECEMBER THIRD WEEK	1	SiRNA	PRIYADARSHINI .P.A
	2	sno RNA	PRIYADARSHINI. P.A
	3	Western blotting	JALAJAKSHI.S
	4	2D- gel electrophoresis	JALAJAKSHI.S
DECEMBER FOURTH WEEK	1	Translation regulation	PRIYADARSHINI.P.A
	2	Role of long non coding RNA	PRIYADARSHINI.P.A
	3	Methylation sensitive restriction enzymes	JALAJAKSHI.S
	4	Fluroscences in situ hybridization	JALAJAKSHI.S
		ASSIGNMENTS CORRECTION AND DISCUSSION	
JANUARY FIRST	1	DNA methyl binding protein	PRIYADARSHINI P.A

WEEK			
	2	DNA methyl transferase	PRIYADARSHINI P.A
	3	Heat shock genes	JALAJAKSHI.S
	4	REVISION of UNIT 3	JALAJAKSHI.S
JANUARY SECOND WEEK	1	Process of Histone methylation	PRIYADARSHINI P.A
	2	Acetylation and phosphorylation	PRIYADARSHINI P.A
	3	Revision of unit 3	JALAJAKSHI.S
	4	Revision of unit 4	JALAJAKSHI.S
JANUARY THIRD WEEK	1	Fanconi anemia	PRIYADARSHINI P.A
	2	Translation regulation	PRIYADARSHINI P.A
	3	Revision of unit 4	JALAJAKSHI.S
	4	Test on unit 3	JALAJAKSHI.S
JANUARY FOURTH WEEK	1	REVISION of UNIT 1	PRIYADARSHINI P.A
	2	REVISION of UNIT 2	PRIYADARSHINI P.A
	3	Test on unit 4	JALAJAKSHI.S
	4	Paper discussion	JALAJAKSHI.S
		SCHEME OF EXAMINATION AND QUESTION PAPERS DISCUSSION	