Km. Mayawati Govt. Girls P.G. College, Badalpur, G.B. Nagar

Dept of Zoology: Forth Semester: Specializations-Cytology and cytogenetics

Assignments: M.Sc.-IVth (Batch-2019)

Instructions for assignments

- *Mark of Each Assignment: 5 (Deduction of Marks: 1 mark deducted for Late Submission and 1 for late personation.)*
- *All student presentation recorded online and uploaded on college YouTube account. Presentation mode (online/offline) will be update before presentation date depending upon COVID19 situations.*
- *Your presentation monitored, marked and recorded by Dr. Azad Alam Siddique or Dr. Azmi Naqvi or Mrs. Sumbul Zehra or Smt. Kamlesh Kaushal or as allotted by HOD*
- *Soft copy of all assignments emailed to zoologyhod.kmggpgc@gmail.com*
- Tentative date of First internal: Last week of April 2021.

Roll. NO.	NAME OF STUDENTS	Course XIII D : Advanced cell biology						Course XIV D : Chromosome and Genomic organization						Course XV D : Genomic analysis, Immuno-genetics						Course XVI D : Human and Microbial cytogenetics and Molecular biology						Total Marks	Signature
		Mrs. Sumbul Zehra						*Dr. Azad Alam Siddique*						*Dr. Azmi Naqvi / Smt. Kamlesh Kaushal*						*Dr. Dinesh C. Sharma*							
		Ist Assignment			*Vth Assignment*			*IInd Assignment*			*VIth Assignment*			*IIIrd Assignment*			*VIIth Assignment*			*IVth Assignment*			*VIIIth Assignment*			
		FIRST ASSIGNMENT	Submission Last date	Presentation Date	SECOND ASSIGNMENT	Submission Last date	Presentation Date	FIRST ASSIGNMENT	Submission Last date	Presentation Date	SECOND ASSIGNMENT	Submission Last date	Presentation Date	FIRST ASSIGNMENT	Submission Last date	Presentation Date	SECOND ASSIGNMENT	Submission Last date	Presentation Date	FIRST ASSIGNMENT	Submission Last date	Presentation Date	SECOND ASSIGNMENT	Submission Last date	Presentation Date		
1	**Alishba**	Circadian rhythms in cells, i.e. from human supra	**24-4-21**	**26-4-21**	Cloning	**16-5-21**	**17-5-21**	Chromosomes	**30-4-21**	**01-5-21**	Molecular basis of neoplasia (cancer)	**21-5-21**	**22-5-21**	C-value paradox	**05-5-21**	**07-5-21**	RFLP analysis	**27-5-21**	**28-5-21**	Molecular anatomy of eukaryotic chromosomes	**12-5-21**	**14-5-21**	Genetics of cell cycle	**30-5-21**	**31-5-21**		
2	**Himanshi**	Circadian rhythms in cells, peripheral oscillators and	**24-4-21**	**26-4-21**	DNA sequencing	**16-5-21**	**17-5-21**	Ultrastructure: Nucleosome	**30-4-21**	**01-5-21**	Oncogenes and tumour suppressor genes	**21-5-21**	**22-5-21**	detailed account of various models of prokaryotic genomes	**05-5-21**	**07-5-21**	RAPD analysis	**27-5-21**	**28-5-21**	Metaphase chromosome, centromere, kinetochor	**12-5-21**	**14-5-21**	cyclin independent kinases	**30-5-21**	**31-5-21**		
3	**Jaya**	Membrane transport	**24-4-21**	**26-4-21**	FISH	**16-5-21**	**17-5-21**	Ultrastructure: solenoid model nuclear scaffold	**30-4-21**	**01-5-21**	Conversion of proto-oncogenes into oncogenes	**21-5-21**	**22-5-21**	viral genome and eukaryotic genomes	**05-5-21**	**07-5-21**	AFLP analysis	**27-5-21**	**28-5-21**	Heterochromatin and Euchromatin	**12-5-21**	**14-5-21**	DNA synthesis	**30-5-21**	**31-5-21**		
4	**Kalpna shishodia**	Cell to cell communication and its importance	**24-4-21**	**26-4-21**	GISH	**16-5-21**	**17-5-21**	Molecular structure of telomeres	**30-4-21**	**01-5-21**	Genic balance theory of sex determination	**21-5-21**	**22-5-21**	Organization of genes in organelle genomes	**05-5-21**	**07-5-21**	Molecular markers linked to disease genes	**27-5-21**	**28-5-21**	Giant Chromosome	**12-5-21**	**14-5-21**	DNA replication in eukaryotic cell	**30-5-21**	**31-5-21**		

5	KM MINAKSHI KORI	Transmembrane proteins and receptors	24-4-21	26-4-21	RFLP	16-5-21	17-5-21	Kinetochore and centromere	30-4-21	01-5-21	X/A ratio, multiple numerator elements	21-5-21	22-5-21	Molecular analysis of genomic DNA in yeast	05-5-21	07-5-21	Applications of RFLP in forensics, disease diagnosis, genetic	27-5-21	28-5-21	Polytene & Lamp brush Chromosome	12-5-21	14-5-21	DNA replication in eukaryotic cell	30-5-21	31-5-21		
6	Km versha	Signal transduction pathways	24-4-21	26-4-21	RFLP in forencis	16-5-21	17-5-21	yeast centromere, alpha-satellite DNA, other	30-4-21	01-5-21	sex linked master control genes	21-5-21	22-5-21	Molecular analysis of genomic DNA in eukaryote	05-5-21	07-5-21	Applications of RFLP in germplasm maintenance and toxinomy	27-5-21	28-5-21	Somatic cell genetics	12-5-21	14-5-21	Genetic code	30-5-21	31-5-21		
7	Vinita	Cell adhesion	24-4-21	26-4-21	RFLP in disease diagnosis	16-5-21	17-5-21	Reassociation kinetics	30-4-21	01-5-21	autosomal regulatory genes	21-5-21	22-5-21	Transposable elements in prokaryotes and eukaryotes	05-5-21	07-5-21	Immunoglobulin gene structure	27-5-21	28-5-21	Heterokaryon	12-5-21	14-5-21	DNA damage and repair	30-5-21	31-5-21		
8	Mamta	cell functions	24-4-21	26-4-21	Circadian rhythms in cells, i.e. from human supra chiasmatic	16-5-21	17-5-21	"Cot" curves (chemical complexity and kinetic	30-4-21	01-5-21	Sex determination	21-5-21	22-5-21	Role of transposable elements in genetic regulation	05-5-21	07-5-21	Multigene organization of Ig genes	27-5-21	28-5-21	selecting hybrids and chromosome segregatio	12-5-21	14-5-21	Transcription in eukaryotic cell	30-5-21	31-5-21		
9	Mamta Rani	Ca++ independent cell-cell adhesion	24-4-21	26-4-21	Circadian rhythms in cells, peripheral oscillators and	16-5-21	17-5-21	Sat-DNA (including in-situ hybridization)	30-4-21	01-5-21	sex differentiation in mammals (including human)	21-5-21	22-5-21	Genome analysis	05-5-21	07-5-21	Mechanisms of DNA rearrangements	27-5-21	28-5-21	Techniques in human chromosome analysis	12-5-21	14-5-21	Transcription in prokaryotic cell	30-5-21	31-5-21		
10	Manisha	Cadherins	24-4-21	26-4-21	Membrane transport	16-5-21	17-5-21	Molecular structure of euchromatin and heterochr	30-4-21	01-5-21	Dosage compensation in organisms with heterogam	21-5-21	22-5-21	Microbial genomes	05-5-21	07-5-21	Generation of antibody diversity	27-5-21	28-5-21	molecular cytogenetics approach	12-5-21	14-5-21	RNA polymorphisms	30-5-21	31-5-21		
11	Manisha bhati	Hierarchy in organization of cells	24-4-21	26-4-21	Cell to cell communication and its importance	16-5-21	17-5-21	Molecular structure of an eukaryotic gene	30-4-21	01-5-21	Genetic imprinting	21-5-21	22-5-21	Genomes of *Drosophila*	05-5-21	07-5-21	DNA rearrangements	27-5-21	28-5-21	Numerical and structural abnormalities of human	12-5-21	14-5-21	DNA polymorphisms	30-5-21	31-5-21		
12	Megha Baisoya	Prokaryotic genome	24-4-21	27-4-21	Transmembrane proteins and receptors	16-5-21	18-5-21	Concept of totipotency vis-a-genome constancy	30-4-21	02-5-21	Chromosomes	21-5-21	23-5-21	Genomes of yeast.	05-5-21	08-5-21	expression of T-cell receptors	27-5-21	28-5-21	human chromosome – syndromes	12-5-21	15-5-21	Regulation of gene expression in prokaryotes	30-5-21	31-5-21		
13	Neha Chauhan	Eukaryotic genome	24-4-21	27-4-21	Signal transduction pathways	16-5-21	18-5-21	Amphibians: Serial nuclear transplants	30-4-21	02-5-21	Ultrastructure: Nucleosome	21-5-21	23-5-21	Automated Karyotping	05-5-21	08-5-21	Genetic screening, prenatal diagnosis and genetic counseling	27-5-21	29-5-21	Human genetics	12-5-21	15-5-21	Regulation of gene expression in eukaryotes	30-5-21	31-5-21		

14	**Priyanka Patel**	Regulation of gene expression	**24-4-21**	**27-4-21**	Cell adhesion	**16-5-21**	**18-5-21**	Developmental-significance of fluctuations in	**30-4-21**	**02-5-21**	Ultrastructure: solenoid model nuclear scaffold	**21-5-21**	**23-5-21**	Chromosome banding	**05-5-21**	**08-5-21**	Prenatal screening methods	**27-5-21**	**29-5-21**	Cytogenetics implications and consequences of	**12-5-21**	**15-5-21**	translation machinery in prokaryotes and eukaryotes	**30-5-21**	**31-5-21**		
15	**Shaily**	Flow cytometry	**24-4-21**	**27-4-21**	cell functions	**16-5-21**	**18-5-21**	rDNA amplification	**30-4-21**	**02-5-21**	Molecular structure of telomeres	**21-5-21**	**23-5-21**	Chromosome painting	**05-5-21**	**08-5-21**	foetal screening; new born screening	**27-5-21**	**29-5-21**	numerical alterations of chromosomes	**12-5-21**	**15-5-21**	Post transcriptional modification in polypeptide	**30-5-21**	**31-5-21**		
16	**Shalini Kumari**	Ageing in cells	**24-4-21**	**27-4-21**	DNA sequencing	**16-5-21**	**18-5-21**	Chromosomal organization of genes and non-	**30-4-21**	**02-5-21**	Kinetochore and centromere	**21-5-21**	**23-5-21**	Construction of a restriction map	**05-5-21**	**08-5-21**	carrier screening; pre-implantation screening	**27-5-21**	**29-5-21**	Bacterial transformation, transduction	**12-5-21**	**15-5-21**	Molecular anatomy of eukaryotic chromosomes	**30-5-21**	**31-5-21**		
17	**Shweeta bhati**	Necrosis and apoptosis	**24-4-21**	**27-4-21**	FISH	**16-5-21**	**18-5-21**	Mobile DNA	**30-4-21**	**02-5-21**	yeast centromere, alpha-satellite DNA, other	**21-5-21**	**23-5-21**	RFLPs	**05-5-21**	**08-5-21**	History and methods of genetic counseling	**27-5-21**	**29-5-21**	Bacterial conjugation	**12-5-21**	**15-5-21**	Metaphase chromosome, centromere, kinetochore, telomere and its	**30-5-21**	**31-5-21**		
18	**Sonam**	Tag polymerase production by *Thermus aquaticus*	**24-4-21**	**27-4-21**	GISH	**16-5-21**	**18-5-21**	Morphological and functional elements of eukaryoti	**30-4-21**	**02-5-21**	Reassociation kinetics	**21-5-21**	**23-5-21**	Choice of mapping population: Simple sequence repeat loci	**05-5-21**	**08-5-21**	need to seek genetic counseling	**27-5-21**	**29-5-21**	bacterial chromosome	**12-5-21**	**15-5-21**	Heterochromatin and Euchromatin	**30-5-21**	**31-5-21**		
19	**Sonika**	Cytology of flora and fauna of thermophilic area	**24-4-21**	**27-4-21**	RFLP	**16-5-21**	**18-5-21**	Genetic regulation of cell division in eukaryote	**30-4-21**	**02-5-21**	"Cot" curves (chemical complexity and kinetic complexity	**21-5-21**	**23-5-21**	Southern and fluorescence in situ hybridization for	**05-5-21**	**08-5-21**	ethical and legal aspects of genetic counseling	**27-5-21**	**29-5-21**	Bacteriophage: Types, structure and morpholog	**12-5-21**	**15-5-21**	Giant Chromosome	**30-5-21**	**31-5-21**		
20	**Tanu Sharma**	novel genes carrying forms living in cold deserts	**24-4-21**	**27-4-21**	Cloning	**16-5-21**	**18-5-21**	Molecular basis of cellular check points	**30-4-21**	**02-5-21**	Sat-DNA (including in-situ hybridization)	**21-5-21**	**23-5-21**	Molecular markers in genome analysis	**05-5-21**	**08-5-21**	Construction of a restriction map	**27-5-21**	**29-5-21**	Cytogenetic effects of ionizing and non-ionizing radiation	**12-5-21**	**15-5-21**	Polytene & Lamp brush Chromosome	**30-5-21**	**31-5-21**		

-Dr. Dinesh C. Sharma, HOD-Zoology