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

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

Assignments: M.Sc.-IVth Jan 23 to May 23

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.*
- *Everyone email your assignments to concerned teacher email – Prof. (Dr.) Dinseh C. Sharma (zoologyhod.kmggpgc@gmail.com) Dr. Surender Kumar (zoologyhod2.kmggpgc@gmail.com) Smt. Neetu Singh (zoologyhod1.kmggpgc@gmail.com)*
- *Submit your project title upto 30 September 2022 to Dr. Prof D.C. Sharma, He will allotted Project supervisor*
- *Submit your recorded presentation To Ms. Sumbul Zehra for upload on YouTube, Concerned teacher ensure this.*
- *Teacher will revert your evaluated assignments and internals by email, you can check and raise your point of view (if any) within one week, after that marks will be uploaded.*
- Tentative date of internals: last week of March 2023 and April 2023
- Presentation time will be informed by evaluator and it can be online offline

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					
		Dr. Neetu Singh *Miss Jyoti Sharma*						*Prof. Dinesh C. Sharma* *Miss. Sumbul Zehra*						*Prof. Surnedr Kumar* *Miss. Sumbul Zehra*						*Prof. Dinesh C. Sharma* *Miss Jyoti 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	ABHILASHA NAGAR	Circadian rhythms in cells, i.e. from human supra	**20-2-23**	**25-2-23**	Cloning	**20-3-23**	**25-3-23**	Chromosomes	**27-2-23**	**4-3-23**	Molecular basis of neoplasia (cancer)	**27-3-23**	**1-4-23**	C-value paradox	**6-3-23**	**11-3-23**	RFLP analysis	**3-4-23**	**8-4-23**	Molecular anatomy of eukaryotic chromosomes	**13-3-23**	**18-3-23**	Genetics of cell cycle	**10-4-23**	**15-4-23**
2	ADITI SHARMA	Circadian rhythms in cells, peripheral oscillators and	**20-2-23**	**25-2-23**	DNA sequencing	**20-3-23**	**25-3-23**	Ultrastructure: Nucleosome	**27-2-23**	**4-3-23**	Oncogenes and tumour suppressor genes	**27-3-23**	**1-4-23**	detailed account of various models of prokaryotic genomes	**6-3-23**	**11-3-23**	RAPD analysis	**3-4-23**	**8-4-23**	Metaphase chromosom, centromere, kinetochore, telomere and its maintenance	**13-3-23**	**18-3-23**	cyclin independent kinases	**10-4-23**	**15-4-23**
3	AKANSHA NAGAR	Membrane transport	**20-2-23**	**25-2-23**	FISH	**20-3-23**	**25-3-23**	Ultrastructure: solenoid model nuclear scaffold	**27-2-23**	**4-3-23**	Conversion of proto-oncogenes into oncogenes	**27-3-23**	**1-4-23**	viral genome and eukaryotic genomes	**6-3-23**	**11-3-23**	AFLP analysis	**3-4-23**	**8-4-23**	Heterochromatin and Euchromatin	**13-3-23**	**18-3-23**	DNA synthesis	**10-4-23**	**15-4-23**

4	AMAN BHATI	Cell to cell communication and its importance	20-2-23	25-2-23	GISH	20-3-23	25-3-23	Molecular structure of telomeres	27-2-23	4-3-23	Genic balance theory of sex determination	27-3-23	1-4-23	Organization of genes in organelle genomes	6-3-23	11-3-23	Molecular markers linked to disease genes	3-4-23	8-4-23	Giant Chromosome	13-3-23	18-3-23	DNA replication in eukaryotic cell	10-4-23	15-4-23
5	ANJALI	Transmembrane proteins and receptors	20-2-23	25-2-23	RFLP	20-3-23	25-3-23	Kinetochore and centromere	27-2-23	4-3-23	X/A ratio, multiple numerator elements	27-3-23	1-4-23	Molecular analysis of genomic DNA in yeast	6-3-23	11-3-23	Applications of RFLP in forensics, disease diagnosis, genetic	3-4-23	8-4-23	Polytene & Lamp brush Chromosome	13-3-23	18-3-23	DNA replication in eukaryotic cell	10-4-23	15-4-23
6	DEEKSHA SHARMA	Signal transduction pathways	20-2-23	25-2-23	RFLP in forencis	20-3-23	25-3-23	yeast centromere, alpha-satellite DNA, other centromere	27-2-23	4-3-23	sex linked master control genes	27-3-23	1-4-23	Molecular analysis of genomic DNA in eukaryote	6-3-23	11-3-23	Applications of RFLP in germplasm maintenance and toxinomy	3-4-23	8-4-23	Somatic cell genetics	13-3-23	18-3-23	Genetic code	10-4-23	15-4-23
7	JYOTI TOMAR	Cell adhesion	20-2-23	25-2-23	RFLP in disease diagnosis	20-3-23	25-3-23	Reassociation kinetics	27-2-23	4-3-23	autosomal regulatory genes	27-3-23	1-4-23	Transposable elements in prokaryotes and eukaryotes	6-3-23	11-3-23	Immunoglobulin gene structure	3-4-23	8-4-23	Heterokaryon	13-3-23	18-3-23	DNA damage and repair	10-4-23	15-4-23
8	KM JYOTI	cell functions	20-2-23	25-2-23	Circadian rhythms in cells, i.e. from human supra chiasmatic	20-3-23	25-3-23	"Cot" curves (chemical complexity and kinetic complexity)	27-2-23	4-3-23	Sex determination	27-3-23	1-4-23	Role of transposable elements in genetic regulation	6-3-23	11-3-23	Multigene organization of Ig genes	3-4-23	8-4-23	selecting hybrids and chromosome segregation	13-3-23	18-3-23	Transcription in eukaryotic cell	10-4-23	15-4-23
9	KM SONIYA	Ca++ independent cell-cell adhesion	20-2-23	25-2-23	Circadian rhythms in cells, peripheral oscillators and	20-3-23	25-3-23	Sat-DNA (including in-situ hybridization)	27-2-23	4-3-23	sex differentiation in mammals (including human)	27-3-23	1-4-23	Genome analysis	6-3-23	11-3-23	Mechanisms of DNA rearrangements	3-4-23	8-4-23	Techniques in human chromosome analysis	13-3-23	18-3-23	Transcription in prokaryotic cell	10-4-23	15-4-23
10	NISHA	Cadherins	20-2-23	25-2-23	Membrane transport	20-3-23	25-3-23	Molecular structure of euchromatin and heterochromatin	27-2-23	4-3-23	Dosage compensation in organisms with heterogametic males	27-3-23	1-4-23	Microbial genomes	6-3-23	11-3-23	Generation of antibody diversity	3-4-23	8-4-23	molecular cytogenetics approach	13-3-23	18-3-23	RNA polymorphisms	10-4-23	15-4-23
11	POONAM	Hierarchy in organization of cells	20-2-23	25-2-23	Cell to cell communication and its importance	20-3-23	25-3-23	Molecular structure of an eukaryotic gene	27-2-23	4-3-23	Genetic imprinting	27-3-23	1-4-23	Genomes of *Drosophila*	6-3-23	11-3-23	DNA rearrangements	3-4-23	8-4-23	Numerical and structural abnormalities of human chromosome	13-3-23	18-3-23	DNA polymorphisms	10-4-23	15-4-23
12	PRAGATI	Prokaryotic genome	20-2-23	25-2-23	Transmembrane proteins and receptors	20-3-23	25-3-23	Concept of totipotency vis-a-genome constancy	27-2-23	4-3-23	Chromosomes	27-3-23	1-4-23	Genomes of yeast.	6-3-23	11-3-23	expression of T-cell receptors	3-4-23	8-4-23	human chromosome – syndromes	13-3-23	18-3-23	Regulation of gene expression in prokaryotes	10-4-23	15-4-23

13	SAKSHI NAGAR	Eukaryotic genome	**20-2-23**	**25-2-23**	Signal transduction pathways	**20-3-23**	**25-3-23**	Amphibians : Serial nuclear transplants	**27-2-23**	**4-3-23**	Ultrastructure : Nucleosome	**27-3-23**	**1-4-23**	Automated Karyotping	**6-3-23**	**11-3-23**	Genetic screening, prenatal diagnosis and genetic counselling	**3-4-23**	**8-4-23**	Human genetics	**13-3-23**	**18-3-23**	Regulation of gene expression in eukaryotes	**10-4-23**	**15-4-23**
14	SHANAZ	Regulation of gene expression	**20-2-23**	**25-2-23**	Cell adhesion	**20-3-23**	**25-3-23**	Developmental-significance of fluctuations in genomic	**27-2-23**	**4-3-23**	Ultrastructure : solenoid model nuclear scaffold	**27-3-23**	**1-4-23**	Chromosome banding	**6-3-23**	**11-3-23**	Prenatal screening methods	**3-4-23**	**8-4-23**	Cytogenetics implications and consequences of structural changes	**13-3-23**	**18-3-23**	translation machinery in prokaryotes and eukaryotes	**10-4-23**	**15-4-23**
15	SHIKHA BAISLA	Flow cytometry	**20-2-23**	**25-2-23**	cell functions	**20-3-23**	**25-3-23**	rDNA amplification	**27-2-23**	**4-3-23**	Molecular structure of telomeres	**27-3-23**	**1-4-23**	Chromosome painting	**6-3-23**	**11-3-23**	foetal screening; new born screening	**3-4-23**	**8-4-23**	numerical alterations of chromosomes	**13-3-23**	**18-3-23**	Post transcriptional modification in polypeptide	**10-4-23**	**15-4-23**
16	SHIVANI	Ageing in cells	**20-2-23**	**25-2-23**	DNA sequencing	**20-3-23**	**25-3-23**	Chromosomal organization of genes and non-coding	**27-2-23**	**4-3-23**	Kinetochore and centromere	**27-3-23**	**1-4-23**	Construction of a restriction map	**6-3-23**	**11-3-23**	carrier screening; pre-implantation screening	**3-4-23**	**8-4-23**	Bacterial transformation, transduction	**13-3-23**	**18-3-23**	Molecular anatomy of eukaryotic chromosomes	**10-4-23**	**15-4-23**
17	SHRISHTI	Necrosis and apoptosis	**20-2-23**	**25-2-23**	FISH	**20-3-23**	**25-3-23**	Mobile DNA	**27-2-23**	**4-3-23**	yeast centromere, alpha-satellite DNA, other centromere sequences	**27-3-23**	**1-4-23**	RFLPs	**6-3-23**	**11-3-23**	History and methods of genetic counseling	**3-4-23**	**8-4-23**	Bacterial conjugation	**13-3-23**	**18-3-23**	Metaphase chromosome, centromere, kinetochore, telomere and its	**10-4-23**	**15-4-23**
18	SHRISHTI VATS	Tag polymerase production by *Thermus aquaticus*	**20-2-23**	**25-2-23**	GISH	**20-3-23**	**25-3-23**	Morphological and functional elements of eukaryotic chromosom	**27-2-23**	**4-3-23**	Reassociation kinetics	**27-3-23**	**1-4-23**	Choice of mapping population: Simple sequence repeat loci	**6-3-23**	**11-3-23**	need to seek genetic counseling	**3-4-23**	**8-4-23**	bacterial chromosome	**13-3-23**	**18-3-23**	Heterochromatin and Euchromatin	**10-4-23**	**15-4-23**
19	VINITA	Cytology of flora and fauna of thermophilic area	**20-2-23**	**25-2-23**	RFLP	**20-3-23**	**25-3-23**	Genetic regulation of cell division in eukaryotes	**27-2-23**	**4-3-23**	"Cot" curves (chemical complexity and kinetic complexity)	**27-3-23**	**1-4-23**	Southern and fluorescence in situ hybridization for	**6-3-23**	**11-3-23**	ethical and legal aspects of genetic counseling	**3-4-23**	**8-4-23**	Bacteriophage : Types, structure and morphology of T4phage, morphogenesi	**13-3-23**	**18-3-23**	Giant Chromosome	**10-4-23**	**15-4-23**

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