

DEPARTMENT OF BOTANY
Teaching Plan 2021-22 (ODD Semester)
Dr. M.Arunjit Singh

B.Sc. (Life-Science) 3rd Year, Sem V

Paper – CELL AND MOLECULAR BIOLOGY (PRACTICAL) (DSE)

Topics	Allocation of Lectures	Month wise schedule	Reading suggestions
Demonstration of dialysis of starch and simple sugar	4	August	Laboratory Manual of Cell Biology by Rina Majumdar And Rama Sisodia
Study of plasmolysis and deplasmolysis on Rhoeo leaf	4	August	
Study of the photomicrographs or cell organdies	4	August	
Study of mitosis and meiosis (temporary mounts and permanent slides).	4	August	
Study the effect of temperature on semi permeable membrane.	4	September	
Preparation of the karyotype and ideogram from given photograph of somatic	4	September	
Study DNA packaging by micrographs		September	
Study the effect of organic solvent on semi permeable membrane.	4	September	
To study the structure of animal cells by temporary mounts-squamous epithelial cell	4	September	
To prepare temporary stained preparation of mitochondria from striated muscle cells /cheek epithelial cells using vital stain Janus green		October	
Measure the cell size (either length or breadth/diameter) by micrometry	4	October	
To study the structure of plant cell through temporary mounts	4	October	
To study prokaryotic cells (bacteria), viruses, eukaryotic cells with the help of light and electron micrographs	4	November	
Study the structure of nuclear pore complex by photograph (from Gerald Karp)			
Study of special chromosomes polytene&lampbrush) either by slides or photographs			

