

Sem IV th CELL BIOLOGY, GENETICS AND BIOCHEMISTRY

Unit I st	
1 Cell concept – Prokaryotic and Eukaryotic cell	https://youtu.be/mecpBvcBUUA
Cell wall –Structure and Functions	https://youtu.be/V-Y-FOexHXE
Plasma membrane –Structure (models) and Functions	https://youtu.be/JzIUeKcaQsw
Nucleus – Ultra structure (nuclear membrane, nuclear pore complex and nucleolus) and functions	https://youtu.be/4EG1F0FnNE8
Chloroplast- Structure and Functions	https://youtu.be/qY8uPIlrXNo
Unit II nd	
Endoplasmic Reticulum	https://youtu.be/70SInp-cidY
Golgi complex	https://youtu.be/by95o0c-t68
Vacuole	https://youtu.be/36zYixayNUw
Ribosome Perixysome	https://youtu.be/cAy21xgzWm4
Mitochondria	https://youtu.be/uMBeoYmzl0s
Cell cycle: Mitosis and Meiosis	https://youtu.be/HaqGn_pOK1U
Unit III rd	
Chromosome- Morphology, Types, Centromere & Telomere	https://youtu.be/OiZtgqThIkU
Structural aberrations: Deletion, Duplication, Inversion and Translocation	https://youtu.be/t6B222tJ9hk
Numerical aberrations: Euploidy and aneuploidy	https://youtu.be/qri2F510qsU
Unit IV th	
Mendellism: Mendel's law of Dominance, Segregations and Independent assortment, Incomplete dominance	https://youtu.be/zuTVnldGyjA
Interaction of genes- Complimentary, Supplementary and Epistasis	https://youtu.be/R0yifb1ooUs
Problems based on Mendelism and Interaction of Genes	https://youtu.be/DlnLPZ2Vybs
Unit V th	
Linkage – Concept, Types and theories	https://youtu.be/1yr_GsLldGs
Crossing over: Concept, Types and theories	https://youtu.be/jZ60_LffC30
Gene mutations- Spontaneous and Induced	https://youtu.be/jZ60_LffC30
Extra-nuclear Genome- Mitchondrial DNA and Chloroplast DNA	https://youtu.be/2FWPMC7oCDw
Unit VI th	
Nomenclature of Enzymes	https://youtu.be/L1QV1WDyq7M
Characteristics of Enzymes	https://youtu.be/OQf5VktK0U
Concept of holoenzymes, coenzymes and cofactors	https://youtu.be/OQf5VktK0U
Theories for Mechanism of action of Enzymes	https://youtu.be/QlpjccCNGes
Structure and functions Carbohydrates: Monosaccharides (Glucose), Disaccharides (Galactose) and Polysaccharides (Starch)	https://youtu.be/GRFNbmQU7fE
	https://youtu.be/p0soyMv8-Xo