

Class XII
Subject: Bio Technology
Syllabus

Month	Name of Book	Topics & Chapters	Theory Period	Revision Periods	Practical
April		Unit-5 Protein & Gene Manipulation Ch. I : Recombinant DNA Technology Introduction Tools of rDNA Technology, Making of Recombinant DNA. Introduction of Recombinant DNA into host cells, Identification of recombinants, Polymerase chain Reaction (PCR).	20	4	16
May		Unit- 5 Protein & Gene Manipulation Ch. I : Recombinant DNA Technology DNA Sequencing, DNA Probes.	20	4	16
June Summer Vacation					
July		Unit- 5 Protein & Gene manipulation Ch. II : Protein structure & Engineering Introduction of world of Protein, Structure-Function Relationship in Proteins, Characterization of Proteins, protein Based Products, Designing Proteins.	20	4	16
August		Ch. III : Genomics And Bioinformatics Gene prediction and counting Genome Similarity, SNPs and Comparative Genomics, Functional Genomics.	19	5	16
September		Unit- 5 Protein & Gene Manipulation Ch. III : Genomics & Bioinformatics information sources, Analysis using Bioinformatics tools Proteomics.	19	5	16
October		Unit- 6 : Cell Culture Technology Ch. I : Microbial Culture & Application: Introduction, Microbial culture Techniques, Measurement and kinetics of microbial growth, isolation of microbial products, Strain isolation and improvement	19	5	16
November		Unit-6 Cell Culture Technology Ch. I : App. Microbial culture &	19	5	16

		<p>Application : Application microbial culture technology, Bioethics in microbial Technology. Ch. II : Plant cell culture and Application Introduction, cell & tissue culture Techniques, Application cell and tissue culture</p>			
December		<p>Unit- 6 Cell culture Technology Ch. II : Plant cell culture & Application Plants with Beneficial Traits, Diagnostics in Agriculture and Molecular Breeding, Bioethics in Plants Genetic Engineering.</p>	15	3	12
Jan		<p>Unit- 6 Cell Culture Technology Ch. III : Animal cell Culture and Applications Introduction, Animal Cell Culture Techniques, Application of Animal cell culture, stem cell Technology Bioethics in Animal Genetic Engineering,</p>	18	6	16
February		Revision			
March		Exam			