

## Monthly Teaching Plan

Department: Microbiology

Class: B.Sc. Part – I

Month: January      Paper No. & Name: IV Microbial biochemistry

Date	Unit	Sub Unit	Teaching method	Teaching Aid/ICT Use
04/01/24		cholesterols	Lecture	PPT
05/01/24	Enzymes	Definitions	Lecture	
06/01/24		Structure and concept Apo enzymes	Lecture	PPT
11/01/24		Coenzymes	Lecture	
12/01/24		Cofactors	Lecture	
13/01/24		Active sites	Lecture	PPT
18/01/24		Types of enzymes	Lecture	PPT
19/01/14		Extracellular	Lecture	PPT
25/01/24		Intracellular	Lecture	Use of multimedia centre
27/12/24		Constitutive	Lecture	
31/01/24		inducible	Lecture	

## Monthly Teaching Plan

Department: Microbiology

Class: B.Sc. Part - II

Month: January

Paper No. & Name: IV Microbial genetics

Date	Unit	Sub Unit	Teaching method	Teaching Aid/ICT Use
04/01/24		Plasmid	Lecture	
05/01/24		Natural plasmid	Lecture	
06/01/24		Properties, types	Lecture	
11/01/24		Structure and application	Lecture	
12/01/24		Artificial- Pbr322	Lecture	
13/01/24		Structure and application	Lecture	
18/01/24		DNA repair	Lecture	
19/01/24		Photo reactivation	Lecture	
29/01/24		Dark repair mechanism	Lecture	
30/01/24		Base pair substitution	Lecture	
31/01/24		Frame shift mutation	Lecture	

## Monthly Teaching Plan

Department: Microbiology

Class: B.Sc. Part - III

Month: January and Feb

Paper No. & Name: XIV Microbial Biochemistry

Date	Unit	Sub Unit	Teaching method	Teaching Aid/ICT Use
1/1/2024	Unit I	Introduction Enzymes	Lecture	
2/1/2024		Lock and key hypothesis	Lecture	PPT
3/1/2024		Induced fit hypothesis	Lecture	PPT
4/1/2024		Enzymes of classification	Lecture	
6/1/2024		Allosteric enzymes- concert ,sequential model	Lecture	
8/1/2024		Patterns of feedback inhibition	Lecture	
9/1/2024		Extraction and purification of enzymes	Lecture	
10/1/2024		Methods of extracellular extraction	Lecture	
11/1/2024		Intracellular extraction	Lecture	
12/1/2024		Methods of homogenization	Lecture	
13/01/2024		Purification of enzymes- molecular size	Lecture	
16/1/2024		Assay of enzymes	Lecture	
18/1/2024		Substrate and product estimation	Lecture	
19/1/2024		Ribozymes	Lecture	
20/1/2024		Isozymes	Lecture	
22/1/2024		Immobilization of enzymes production	Lecture	
23/01/2024		Application	Lecture	
24/01/2024	Unit II	Factor affecting enzymes efficiency –Proximity and orientation	Lecture	

25/1/2024		Strain and distortion, acid base catalysis	Lecture	
27/1/2024		Covalent catalysis	Lecture	
29/01/2024		Derivation of MICHAELIS MENTEN equation	Lecture	
30/01/2024		Line weaver Burk plot	Lecture	
31/01/2024		Significance of $k_m$ and $V_{max}$	Lecture	
1/2/2024		PP pathway	Lecture	
02/02/2024		ED pathway	Lecture	
03/02/2024		PK pyruvate as key intermediate	Lecture	
05/02/2024		Assimilation of carbon ,nitrogen	Lecture	
06/02/2024		Sulphur and biosynthesis of RNA	Lecture	
07/02/2024		DNA	Lecture	
08/02/2024		Proteins	Lecture	
09/02/2024		Peptidoglycan	Lecture	
10/02/2024		Regulation of enzymes synthesis	Lecture	
12/02/2024		Positive control – Ara operon	Lecture	
13/02/2024		Negative control –lac operon	Lecture	
14/02/2024		Catabolite repression	Lecture	

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