

No. of Hours	TOPIC	Days	Expected date	Conducted date	Remark
1	<b>UNIT I</b> Introduction to biotechnology	THU	19-06-25		
2	Enzyme biotechnology- methods, immobilization, application	FRI	20-06-25		
3	Biosensors-working and applications	SAT	21-06-25		
4	Protein engineering	THU	26-06-25		
5	Production and uses of Enzymes- amylase, catalase, peroxidase, lipase, proteases, penicillinase	FRI	27-06-25		
6	Basic principles of genetic engg	SAT	28-06-25		
7	<b>UNIT II</b> Studyof cloning vectors- restriction endonuclease , DNA ligase	THU	03-07-25		
8	Recombinant DNA technology	FRI	04-07-25		
9	Applicationof genetic engineering in medicine	SAT	05-07-25		
10	Application of r – DNA technology	THU	10-07-25		
11	Application of genetic engineering in production	FRI	11-07-25		
12	Interferons	SAT	12-07-25		
13	Vaccines-hepatitis-B	THU	17-07-25		
14	Hormones	FRI	18-07-25		
15	Brief introduction to PCR	SAT	19-07-25		
16	<b>UNIT III</b> Types of Immunity	THU	24-07-25		
17	Structure of immunoglobins	FRI	25-07-25		
18	Structure and function of MHC	SAT	26-07-25		
19	Hypersensitivity reactions	THU	31-07-25		
20	Immune stimulation	FRI	01-08-25		
21	Immune Suppressions	SAT	02-08-25		
22	General method for preparation of vaccine	THU	07-08-25		
23	General method of toxoids	FRI	08-08-25		
24	viral vaccines	SAT	09-08-25		
25	Anti-toxin , serum-immune blood derivative	THU	21-08-25		

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26	Storage condition and stability of vaccines	FRI	22-08-25		
27	Storage condition and stability of vaccines	SAT	23-08-25		
28	Hybridoma technology	THU	28-08-25		
29	Production and purification	FRI	29-08-25		
30	Application of hybridoma	SAT	30-08-25		
31	Blood products and plasm substitutes	THU	04-09-25		
32	Blood products and plasm substitutes	SAT	06-09-25		
33	<b>UNIT IV</b> Immune blotting techniques	THU	11-09-25		
34	ELISA, western blotting technique	FRI	12-09-25		
35	Genetic organization of prokaryotes and eukaryotes	SAT	13-09-25		
36	Microbial genetics- transformation	THU	18-09-25		
37	Transduction, conjugation, plasmid and transposons	FRI	19-09-25		
38	Microbial biotransformation	SAT	20-09-25		
39	Mutation	FRI	26-09-25		
40	Types of mutants	SAT	27-09-25		
41	<b>UNIT V</b> Fermentation- General requirements, media	THU	02-10-25		
42	Equipment's, sterilization methods, aeration, stirring	FRI	03-10-25		
43	Largescale production- fermenter design, controls	SAT	04-10-25		
44	Production of penicillin	THU	09-10-25		
45	Vt B12, citric acid	FRI			
46	Griseofulvin	SAT			
47	Blood products- Collections, processing and storage				
48	Dried human plasma, plasma substitutes				