

Name. _____		Printed Pages:01		
Student Admn. No.: _____				
School of Biomedical Sciences Summer Term Examination – July - August 2024 [Programme: B.Sc. Medical Biotechnology] [Semester: I] [Batch: 21-22]				
Course Title: Red Biotechnology		Max Marks: 100		
Course Code: BBBMBT4006		Time: 3 Hrs.		
Instructions:	1. All questions are compulsory. 2. Assume missing data suitably, if any.			
		K Level	COs	Marks
SECTION-A (15 Marks)		5 Marks each		
1.	Compare the BLI and SPR technology highlighting their individual importance in pharmaceutical industries.	K2	CO1	5
2.	How do we look for potential vaccines?	K2	CO3	5
3.	Compile various applications of microbial biotransformation.	K2	CO6	5
SECTION-B (40 Marks)		10 Marks each		
4.	Enlist various methods of Enzyme immobilization highlighting their importance. Out of these select the best method and explain its advantages and disadvantages above other methods.	K4	CO1	10
5.	Classify different kinds of restriction enzymes.	K3	CO2	10
6.	Dissect each step used to perform transformation in lab.	K4	CO4	10
7.	Explain in detail the large-scale production of Vit. B12.	K4	CO5	10
SECTION-C (45 Marks)		15 Marks each		
8.	Dissect each step of transcription in bacterial cells.	K5	CO4	15
9.	Analyze the importance of complement pathway in our immune system, describing its mechanism of activation.	K5	CO3	15
10	Explain in details how the transformation of steroids and non-steroids takes place.	K5	CO6	15

Course outcomes: Students will be able to		
COs	K level	
CO1		
CO2		
CO3		
CO4		

- Note: 1. Q1 to Q4 from K1/K2.**
2. Q5 to Q8 from K3/K4.
3. Q9 to Q10 from highest knowledge level.