

Name. _____		Printed Pages:01		
Student Admn. No.: _____				
School of Basic and Applied Sciences Backlog Examination, June 2023 [Programme: B.Sc. Medical Biotechnology] [Semester: IV] [Batch: 2020-23]				
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.	Enlist the applications of protein engineering.			5
2.	Explain the role of restriction endonuclease with examples.			5
3.	Identify the characteristics of antigen-antibody interaction.			5
SECTION-B (40 Marks)		10 Marks each		
4.	Explain the process of batch culture and identify two merits and demerits of batch and fed-batch culture.			10
5.	Discuss the role of microbes in the pharmaceutical industry with examples.			10
6.	Discuss the process and challenges of hybridoma technology.			10
7.	Elaborate the process of biotransformation.			10
SECTION-C (45 Marks)		15 Marks each		
8.	Discuss the design of a bioprocess vessel with a diagram.			15
9.	Explain and compare variants of ELISA.			15
10	Distinguish between the activation mechanisms of three pathways of the complement system. <p style="text-align: center;">OR</p> Compare the three modes of complement system activation and its regulation.			15