



SRM
INSTITUTE OF SCIENCE AND TECHNOLOGY
K. J. Somaiya Institute of Engineering and Information Technology

COLLEGE OF ENGINEERING AND TECHNOLOGY

SCHOOL OF BIOENGINEERING, DEPARTMENT OF BIOTECHNOLOGY

ACADEMIC YEAR 2021-22 - EVEN SEMESTER; CONTINUOUS LEARNING ASSESSMENT TEST II

Reg. No.	R	A	2	0	1	1	0	0	4	0	1	0	3	6	6
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Course Code: 18BTB101T	Course Title: Biology	Duration: 90 Minutes	Max. Marks: 50
Sem & Year: IV&II	Date: 30/05/2022		

	Course Outcomes (COs)	Program Outcomes (POs)												PSOs		
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
CO 1	Describe the cell growth, metabolism and reproduction.	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CO 2	Explain the concepts and experiments in biochemistry	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CO 3	Consolidate the significance of photosynthesis	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CO 4	Determine enzyme catalytic functions in different metabolic reaction	3	3	3	-	-	-	-	-	-	-	-	-	-	-	-
CO 5	Analyze the role of biosensors and its applications	3	3	2	-	-	-	-	-	-	-	-	-	-	-	-
CO 6	Compile the concepts of nervous system disorder and the diseases associated with it	3	-	3	-	-	-	-	-	-	-	-	-	-	-	-

Part A Answer the Following

10x1 Marks = 10 Marks

S. No.	Questions	Marks	CO	BL	Marks Scored
1.	Which of the following are the properties of molecules in hydrophobic interactions? A. non polar; B. polar; C. Positively charged; D. Negatively charged	1	2	1	1
2.	_____ have anticodons that are complementary to mRNA codons. A. Ribosomes; B. Ribosomal RNA; C. Transfer RNA; D. Small Unit of Ribosome	1	2	2	1
3.	Which one is NOT a stop codon? A. UAA; B. UAG; C. UGA; D. GGA	1	2	2	1
4.	The bond formed between amino acids to form a polymer is A. Hydrogen bond; B. Ionic Bond; C. Peptide bond; D. C-C bond	1	2	2	0
5.	Which of the following is NOT a carbohydrate A. Glycine; B. Glucose; C. Sucrose; D. Glycogen	1	2	2	1
6.	The monosaccharide units are linked by 1 → 4 glycosidic linkage in A. Maltose; B. Sucrose; C. Cellulose; D. Cellobiose;	1	2	2	0
7.	When bonding involves sharing of valance electrons between two atoms is called A. Hydrogen bond; B. Covalent bond; C. Ionic bond; D. Van der Waals forces	1	2	2	1
8.	The two essential catalytic groups in the active site of Carboxypeptidase are furnished by A. Arg and Glu; B. Ala and Gly; C. Val and Leu; D. Met and Pro	1	4	2	1
9.	Enzymes work by weakening bonds which _____ the activation energy. A. Increases; B. Activates; C. Decreases; D Stops	1	4	2	0
10.	Many enzymes are inhibited by heavy metal ions. Among these, which one is not considered an inhibitors of the enzyme? A. Hg ²⁺ ; B. Cu ²⁺ ; C. Ca ²⁺ ; D. Ag ⁺	1	4	2	1

Part B Answer the Following (Any four)

4 x 10 Marks = 40 Marks

Q. No.	Questions	Marks	CO	BL	Marks Scored
11	Draw the structure of tRNA and explain its components	10	2	2	10
12	Differentiate replication and transcription	10	2	3	10
13	What are all the components of cell membrane? Explain its features	10	2	2	4
14.	How do we get energy for muscle contraction? Explain the mechanism	10	4	2	
15	Explain the enzyme catalysis of NMP kinase?	10	4	4	
16	Discuss the application of recombinant technology?	10	4	4	0

Attainment

	Quality	Max Marks	Marks Scored	% of Marks	Attainment
CO2	5				
CO3					
CO4	2				
PO1					
PO2					
PO3					