

B. Sc. (Sem. II) (CBCS) (W.E.F. 2019) Examination July - 2022 Basics of Biochemistry & Microbial Control: MB-201 Time : $2\frac{1}{2}$ Hours] [Total Marks: 70 1 04 (A) Answer the following: (One mark) Oxidation + reduction is redox reaction. True/False. In NaCl, Na is positive, Cl is negative and the **(2)** bond is _____ [ionic or hydrogen] The toluene is soluble in full soluble water. (3)True/False. Write chemical name of KMnO4. **(4)** 1 (B) Answer the following: (Two mark) (Any one) 02 Define: covalent bond. Write examples of substances that shows acidic pH (2) in pH meter. 1 (C) Answer the following: (Three mark) (Any one) 03 (1) Write a note on Acid - Base reaction. (2) Short note: ionic bond with example. 1 (D) Answer the following: (Five mark) (Any one) 05 Explain: Redox biological reaction & redox potential. (2) Explain about Importance & properties of water. 04 2 Answer the following: (One mark) (1) D-Glucose is mostly available in nature. True/False. Write name of sugar that having 4 carbon. The starch shows _____ bond between two (3) glucose. (4) Phospholipid having fatty acid+glycerol+____ 1 [Contd.. **DBZ-16**]

DBZ-16

Seat No.

2	(B)	Ans	wer the following: (Two mark) (Any one)	02
		(1)	What is complex lipid ?	
		(2)	Write functions of t-RNA.	
2	(C)	Ans	wer the following: (Three mark) (Any one)	03
		(1)	Short note: Function of carbohydrates.	
		(2)	Short note: Classification of protein on the basis of function.	
2	(D)	Ans	wer the following: (Five mark) (Any one)	05
		(1)	Explain: Structure of DNA.	
		(2)	Explain: Structure of protein.	
3	(A)	Ans	wer the following : (One mark)	04
		(1)	Write examples of cofactors.	
		(2)	Hg (Mercury) is irreversible inhibitor for some enzyme. True/False.	
		(3)	Ligases are group of enzyme that catalyse hydrolysis reaction. True/False.	
		(4)	What is active site?	
3	(B)	Ans	wer the following: (Two mark) (Any one)	02
		(1)	Enlist classes of enzyme according to EC.	
		(2)	Define: Enzyme activity.	
3	(C)	Ans	wer the following: (Three mark) (Any one)	03
		(1)	Write a note on Irreversible enzyme inhibition.	
		(2)	Short note: nomenclature of enzyme.	
3	(D)	Ans	wer the following: (Five mark) (Any one)	05
		(1)	Explain: Classifications of enzymes.	
		(2)	Explain: types of reversible enzyme inhibition.	
4	(A)	Ans	wer the following: (One mark)	04
		(1)	Desiccation is a physical method for microbial control. True/False.	
		(2)	Write examples of chemical agents of microbial control.	
		(3)	UV rays kill microbes by mutating (DNA or protein)	
		(4)	Enlist examples of dye that are antiseptic.	

4	(B)	Answer the following: (Two mark) (Any one)		
		(1)	Define: Osmotic pressure.	
		(2)	What is disinfectant?	
4	(C)	Answer the following: (Three mark) (Any one)		
		(1)	Short note: Phenol coefficient method.	
		(2)	Short note: temperature as a microbial controlling agent.	
4	(D)	Answer the following: (Five mark) (Any one)		
		(1)	Explain: Principle & types of sterilization.	
		(2)	Write a note on chemical agent used in microbial control. (Any three)	
5	(A)	Answer the following: (One mark)		04
		(1)	Write examples of Antibiotics.	
		(2)	The first antibiotic discovered by and it was	
		(3)	Enlist antifungal antibiotic.	
		(4)	Write name of antiviral antibiotic.	
5	(B)	Answer the following: (Two mark) (Any one)		
		(1)	What is chemotherapy.	
		(2)	What is antibiotic?	
5	(C)	Answer the following: (Three mark) (Any one)		03
		(1)	Short note: non medicinal use of Antibiotic.	
		(2)	Write about inhibition of protein synthesis mode of action of antibiotic.	
5	(D)	Ans	swer the following: (Five mark) (Any one)	05
		(1)	Explain: Mode of action of cell wall synthesis inhibition with example.	
		(2)	Explain in brief about antifungal & antiviral antibiotic.	