Sanjay Ghodawat University, Kolhapur

2020-21

Established as State Private University under Govt. of Maharashtra. Act No XL, 2017

EXM/P/09/00

Year and Program: 2020-21, T.Y.B.Sc	**School of Science**	**Department: Chemistry**
Course Code: CHS312	**Course Title: Molecules of life**	**Semester : VI**
Day and Date: Monday,31.05.2021	**End Semester Examination**	**Time : 2 Hrs.** **Max Marks : 50**

Instructions: 1) All Questions are compulsory.

			Marks	Bloom's Level	CO
Q.1		**Answer/Solve the following (any Two)**			
	a)	Illustrate the evidences to show that fructose is ketohexose.	8	4	CO1
	b)	Explain the Merrifield solid phase peptide synthesis.	8	2	CO1
	c)	Explain the following a) Isoelectric point b) Zwitterion structure of amino acid	8	2	CO1
Q.2		**Answer/Solve the following (any two)**			
	a)	Explain the factors affecting enzyme activity.	8	2	CO3
	b)	Design the diagram showing competitive inhibition and non-competitive. Write the two differentiation points between them.	8	5	CO3
	c)	a) Write any four properties of enzyme.	4	1	CO3
		b) Explain enzyme specificity and steriospecificity.	4	2	CO3
Q.3		**Answer/Solve the following (any two)**			
	a)	What constitute the backbone of nucleic acid? How are the constituents attached in double helix structure of DNA and RNA?	9	3	CO2
	b)	i) Define lipid giving example. Write the four functions of lipid.	5	1	CO4
		ii) What are purines and pyrimidines? Name and draw the structure of two purines and pyrimidines.	4	3	CO2
	c)	i) Define drying of oil. Distinguish between drying oil and Non-drying oil.	5	2	CO4
		ii) What are the full form of following abbreviation dADP, UTP, dGTP, CDP.	4	3	CO2

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