

Enrollment No: _____

Exam Seat No: _____

C. U. SHAH UNIVERSITY

Winter Examination-2022

Subject Name: Chemical Structure and Macromolecules**Subject Code: 4SC01CSM2****Branch: B.Sc. (Microbiology)****Semester: 1****Date: 05/01/2023****Time: 11:00 To 01:00****Marks: 50**

Instructions:

- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
- (2) Instructions written on main answer book are strictly to be obeyed.
- (3) Draw neat diagrams and figures (if necessary) at right places.
- (4) Assume suitable data if needed.

Q-1	Attempt the following questions:	(10)
	a) Draw the shape of dz^2 orbital.	1
	b) Write electronic configuration of Si and Ne.	1
	c) The maximum number of electron in N shell is _____.	1
	d) In N_2 , Cl_2 and O_2 _____ bond is present.	1
	e) What is carbohydrates?	1
	f) Scleroproteins are found only in _____.	1
	g) Write the full form of DNA and RNA.	1
	h) Define: Enantiomers.	1
	i) What is Chargaff's rule of DNA?	1
	j) How many types of protein structure are there?	1

Attempt any four questions from Q-2 to Q-8

Q-2	Attempt all questions	(10)
	a) Write a short note on Quantum number.	05
	b) Discuss in details: Starch.	05
Q-3	Attempt all questions	(10)
	a) Discuss hydrogen bonding.	05
	b) Explain structure of proteins.	05
Q-4	Attempt all questions	(10)
	a) Give the following reaction for monosaccharides. (i)Reduction (ii) Tautomerization.	05
	b) Explain types of RNA and its functions.	05



