Bachelor of Science (B.Sc.) (CBCS Pattern) Second Semester Microbiology : Paper-I (General Biochemistry)

P. Pages Time : T	s : 2 Three H	ours * 3 6 6 3 *	GUG/W/18/11588 Max. Marks : 50
1.	Des	scribe the types of bonds and their importance.	 10
		OR	
	a)	Describe the condition of cell in hypotonic and hypertonic solution.	21/2
	b)	Give the Lowrey-Bronsted concept of acid and base.	21/2
	c)	Give the concept of Atom.	21/2
	d)	Write about structural isomer.	21/2
2.	Wr	ite about the classification of proteins Add note on its biological signifi	cance. 10
		OR	
	a)	Explain the general structure of amino acids.	21/2
	b)	Draw the structure of acidic amino acids.	21/2
	c)	Describe alpha helix structure of protein.	21/2
	d)	Write about uncommon amino acid.	21/2
3.	Des	scribe the structure of homo and hetero polysaccharide.	10
		OR	
	a)	Give the classification of carbohydrate.	21/2
	b)	Describe the structure of raffinose.	21/2
	c)	Explain the structure of triglyceride.	21/2
	d)	Write about any one disaccharide.	21/2
4.	Des	scribe the Watson and Crick model of DNA.	10
		OR	
	a)	Explain the structure of purines.	21/2
	b)	Write about the structure of m-RNA.	21/2
	c)	Describe Nucleoside and Nucleotides.	21/2

Write any ten.

5.

What is toxicity?	1
What is solvent? Give examples.	1
What is redox potential?	1
What is amino acid.	1
Give the example of Sulphur containing amino acid.	1
What is alpha helix and Beta sheet.	1
What is tetrose sugar? Give example.	1
What is mutarotation?	1
What is raffinose?	1
What is the function of t-RNA.	1
What is the distance between two nucleotide in DNA.	1
Draw the structure of pentose sugar of DNA and RNA.	1
	What is toxicity? What is solvent? Give examples. What is redox potential? What is amino acid. Give the example of Sulphur containing amino acid. What is alpha helix and Beta sheet. What is alpha helix and Beta sheet. What is tetrose sugar? Give example. What is traffinose? What is raffinose? What is the function of t-RNA. What is the function of t-RNA. Draw the structure of pentose sugar of DNA and RNA.