

INTERNATIONAL CENTRE FOR APPLIED SCIENCES (Manipal University) III SEMESTER B.S. DEGREE EXAMINATION – OCT. / NOV. 2017 SUBJECT: BIOCHEMISTRY (BT 233) (BRANCH: INDUSTRIAL BIOTECHNOLOGY)

Wednesday, 8 November 2017

Reg.No.

Time: 3 Hours	Max. Marks: 100
 ✓ Answer ANY FIVE full Questions. ✓ Missing data, if any, may be suitably assumed 	
1A. Explain the reactions of urea cycle. 1B. Explain the reactions of glycolytic pathway.	
1C. Explain the structure, function and biomedical importance of disacchari	des. (6+6+8)
2A. Explain the Watson - Crick Model of DNA and conformations of basep 2B. What are TGs? Explain their utility in biological systems.	air.
2C. Explain the metadonsm of odd chain fatty acids in the cell.	(6+6+8)
3A.Write the biomedical importance of lipids.	
3C. Explain the chemical and physical properties of amino acids.	(6 + 6 + 8)
4A. What are torsion angles? Explain the Ramachandran plot. 4B. Describe the functions of proteins.	(0+0+8)
4C. Explain the enzyme inhibition and the mechanism involved in it.	(6+6+8)
5A. Explain the structure of monosaccharide and its properties.	
5C. Give an account of post transcriptional modification done to the tRNA.	(6+6+8)
6A. Describe the composition of normal urine.	
6C. Explain the reactions of citric acid cycle.	(6 + 6 + 8)
7A. Explain the role of high energy compounds. 7B. Explain the steps involved in the preparatory reactions of Krebs cycle	(0+0+8)
7C. Give the details of ATP synthesis.	(6+6+8)
8A. Explain the omega oxidation. 8B. Describe the uses of genetic engineering.	(0.0.0)
8C. Explain the structure of alpha helix, beta pleated sheets and turns.	(6+6+8)

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