Seat No.:	Enrolment No.
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GUJARAT TECHNOLOGICAL UNIVERSITY

DIPLOMA PHARMACY - SEMESTER-I • EXAMINATION-SUMMER • 2014

		Code: 410004 Date: 28-05-2014	
-	e: 10	Name: Bio-Chemistry and Clinical Pathology 0:30 am - 01:30 pm Total Marks: 80	
	1. 2.	Attempt any five questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	
Q.1	(a)	Define amino acid. Give its classification with example. Give brief account on properties of amino acids.	06
	(b) (c)	Define carbohydrates. Give detail classification of carbohydrates with example. Describe in brief biochemical functions of (1) proteins and (2) carbohydrates.	05 05
Q.2	(a) (b) (c)	Write a detail note on factors affecting enzyme action. Define enzyme. Give properties and applications of enzyme. Explain mechanism of enzyme action.	06 05 05
(b	(a) (b)	Define vitamin. Classify vitamins with example. Give properties of vitamins. Write in brief about chemistry, source, functions and deficiency of Vitamin A and Vitamin B_1	06 05
	(c)	What is coenzyme? Write in brief about the coenzymatic role of Vitamin B_1 & Vitamin B_2	05
Q.4	(a) (b)	Write a note on TCA cycle and its energetics. Outline the steps involved in Urea cycle along with associated metabolic disorders.	06 05
	(c)	β - Oxidation of fatty acids	05
Q.5	(a) (b) (c)	Write a note on Glycolysis. Describe qualitative color reactions for carbohydrates and proteins. What is Biochemistry? Describe its importance in Pharmacy.	06 05 05
Q. 6	(a)	Enlist various normal and abnormal constituents of urine and give its clinical significance.	06
	(b) (c)		05 05
Q.7	(a)	Define fatty acids. Give its classification. Describe biological importance of fatty acids.	06
	(b) (c)	Describe properties, physiological functions, and metabolism of water. Describe physiological functions and associated disease state for sodium, potassium and chloride.	05 05
