Seat No.:	Enrolment No.
Sear NO.	Enrolment No

GUJARAT TECHNOLOGICAL UNIVERSITY

B. Pharm. - SEMESTER - I • EXAMINATION - SUMMER • 2014

	•	ect Code: 2240003 Date: 27-05-2014 ect Name: Pharmaceutical Chemistry – V (Biochemistry – II)	
	Time	: 02:30 pm - 05:30 pm Total Marks: 80 actions: 1. Attempt any five questions. 2. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks.	
Q.1	(a) (b) (c)	Write a detail note on structure of protein. Explain properties of amino acids. Describe structure of DNA.	06 05 05
Q.2	(a) (b) (c)	Describe porphyrin biosynthesis and write a note on different types of hyperbilirubinemias. Discuss reactions of urea cycle. Write about utilization of methionine.	06 05 05
Q.3	(a) (b) (c)	Write in detail about the process of replication of DNA. Discuss about Transcription process. Write note on DNA repair mechanisms.	06 05 05
Q.4	(a) (b) (c)	Explain initiation process of protein synthesis. Add a note on various inhibitors for protein synthesis. Write a short note on Genetic code. Describe polymerase chain reaction.	06 05 05
Q.5	(a) (b) (c)	Define oxidative phosphorylation. Discuss chemiosmotic hypothesis in detail. Write in detail about enzymes involved in biological oxidation. Describe different enzymes and coenzymes involved in biological oxidation and reduction reactions.	06 05 05
Q. 6	(a) (b) (c)	Discuss in detail about purine biosynthesis. Write a short note on RNA. Discuss about respiratory chain with its role as energetic.	06 05 05
Q.7	(a) (b) (c)	Write a note on gene expression in eukaryotes. Define bioenergetics and discuss concept of free energy. Write in detail about different chromatographic techniques with their importance in biochemistry.	06 05 05
