

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B. Pharm. – SEMESTER – IV • EXAMINATION – SUMMER • 2015

Subject Code: 2240003

Date: 08-06-2015

Subject Name: Pharmaceutical Chemistry – V (Biochemistry – II)

Time: 10:30 am - 01:30 pm

Total Marks: 80

Instructions:

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

Q.1	(a) Explain metabolism of sulphur containing amino acid: Cysteine.	06
	(b) Discuss transamination of aminoacids.	05
	(c) Give classification of protein in detail.	05
Q.2	(a) Explain biosynthesis of Pyrimidine Ribonucleotides.	06
	(b) Discuss the Watson and Crick model of DNA structure.	05
	(c) Explain nucleotides.	05
Q.3	(a) Write a note on Jaundice.	06
	(b) Why replication is termed as semiconservative, semi-discontinuous and bidirectional?	05
	(c) Explain transcription.	05
Q.4	(a) Explain Polymerase chain reaction.	06
	(b) Discuss Genetic code with its characteristics.	05
	(c) Give diagrammatical explanation of initiation of protein synthesis.	05
Q.5	(a) Discuss spectrophotometric techniques utilized in biochemistry.	06
	(b) Give detail account on operon concept.	05
	(c) To which specialized products amino acids get converted? How?	05
Q. 6	(a) Explain with suitable example about different enzymes and coenzymes involved in biological oxidation and reduction reactions.	06
	(b) Explain ATP-ADP Cycle along with sources and utilization of ATP.	05
	(c) What is oxidative phosphorylation? Explain P: O ratio, sites of oxidative phosphorylation in ETC and energetic of oxidative phosphorylation.	05
Q.7	(a) Discuss components and reactions of the electron transport chain.	06
	(b) Discuss ampholytic properties of aminoacids.	05
	(c) Explain secondary structure of protein.	05
