

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B. Pharm. – SEMESTER – VI • EXAMINATION – WINTER 2013

Subject Code: 260003

Date: 02-12-2013

Subject Name: Pharmaceutical Chemistry-VII (Biochemistry)

Time: 02.30 pm To 05.30 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) Discuss in detail β – oxidation	06
	(b) Explain in detail biosynthesis of cholesterol.	05
	(c) Write a short note on ketogenesis.	05
Q.2	(a) Explain in detail structural organization of respiratory chain	06
	(b) Discuss in detail inhibitors of electron transport chain	05
	(c) Write a note on enzymes involved in biological oxidation	05
Q.3	(a) Discuss reactions of urea cycle.	06
	(b) Describe metabolism of any one sulphur containing amino acid. Add a note on metabolic disorder of urea cycle.	05
	(c) Discuss conversion of tyrosine to its specialized products	05
Q.4	(a) Discuss in detail the de novo pathway for the synthesis of nucleotides	06
	(b) Why is DNA replication said to be semi conservative? Discuss the experiment which provided proof of semi conservative replication	05
	(c) Enlist and Discuss any two of the different DNA repair systems of E.Coli	05
Q.5	(a) What is Translation? Discuss the different steps involved in it.	06
	(b) Discuss in detail the first model of gene regulation studied on E. Coli	05
	(c) Write Short Notes: (i) t-RNA (ii) Polymerase Chain Reaction	05
Q. 6	(a) Give a detailed account of metabolism of iron	06
	(b) Discuss the factors affecting electrophoretic separation	05
	(c) Write a note on detection of sample after electrophoresis.	05
Q.7	(a) Discuss in detail biosynthesis of fatty acids.	06
	(b) Describe metabolism of α – amino butyrate	05
	(c) Write an explanatory note on catabolism of amino acids.	05
