Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

Pharm D – 1st Year • EXAMINATION – SUMMER • 2015

Subject Code: 818803 Date: 25-05-2015

Subject Name: Medicinal Biochemistry

Time: 10.30 am – 01.30 pm Total Marks: 70

Instructions:

1.	Attempt	any	five	questions

- 2. Make suitable assumptions wherever necessary.
- 3. Figures to the right indicate full marks.

Q.1	(a)	Discuss the reactions involved in TCA Cycle. Explain amphibolic role of the cycle in detail.				
	(c)	Write note on principle and applications of Radioimmuno assay (RIA). What is replication? Explain the role of DNA polymerase, DNA ligase and DNA helicase in the replication of prokaryotes.	04 04			
Q.2	(a) (b) (c)	Write a short note on (Any Two) 1. Facilitated diffusion 2. High energy compounds 3. Hypercholesterolemiea Write note on Lipoproteins. Write a note on importance of water and water balance in human body.	06 04 04			
Q.3	(a) (b) (c)	Write about reaction and energetic of Krebs-Henseleit cycle. Write note on ketogenesis along with its regulations. Define Enzyme inhibition. Explain reversible and irreversible inhibition of Enzyme	06 04 04			
Q.4	(a) (b) (c)	Write a note on β oxidation of fatty acids along with its energetics. Write a note on glycogen storage diseases. Describe in detail factors affecting enzyme action	06 04 04			
Q.5	(a) (b) (c)	Discuss components and reactions of the electron transport chain in detail. Describe in detail transamination and deamination reactions for amino acids metabolism. Write brief note on liver function tests.				
Q. 6	(a) (b) (c)	Discuss in detail reactions involved in HMP shunt. Write brief note on its significance. Write note on DNA repair mechanisms. Discuss in detail inhibitors of oxidative phosphorylation.	04 06 04 04			
Q.7	(a) (b)	Describe de novo synthesis of purine nucleus and conversion of IMP to AMP and GMP. Describe in detail about role of hormones in maintenance of blood glucose	Q6			
	(c)	level. Write briefly on the different laboratory investigations employed to assess kidney functions	04			