

GUJARAT TECHNOLOGICAL UNIVERSITY
B. PHARM (SEMESTER-5) (Old Syllabus) SUMMER-2015

Subject code: 250003

Date: 02/05/2015

Subject Name Pharmaceutical chemistry-V (Biochemistry)

Time: 2:30 pm to 5:30 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)	Define carbohydrates. Classify with examples. Give the name of identification test for carbohydrates	06
	(b)	Define proteins. Classify with examples.	05
	(c)	Define lipids. Classify with examples.	05
Q.2	(a)	Write about the reaction and energetic of citric acid cycle.	06
	(b)	Write about the reaction of pentose phosphate pathway.	05
	(c)	Explain role of hormones in carbohydrates metabolism.	05
Q.3	(a)	Explain enzymes with suitable examples.	06
	(b)	Write about factors affecting enzyme activity.	05
	(c)	Explain diagnostic application of enzyme.	05
Q.4	(a)	Define bioenergetics and discuss concept of free energy.	06
	(b)	Write a note on enzyme inhibition mechanism.	05
	(c)	Discuss the process of active transport across cell membrane.	05
Q.5	(a)	Write a note on glycolysis cycle with significance and energetic.	06
	(b)	Explain electron transport chain.	05
	(c)	Write a note on glucagone.	05
Q. 6	(a)	What are phospholipids? Write about functions of phospholipids.	06
	(b)	Explain chemical tests of fats and oils.	05
	(c)	Explain secondary structure and function of proteins.	05
Q.7	(a)	Explain vitamins as coenzymes. Discuss any one in a detail.	06
	(b)	Write about Iso- enzymes.	05
	(c)	Write a note on triglycerides.	05
