

GUJARAT TECHNOLOGICAL UNIVERSITY
B. Pharm – SEMESTER V • EXAMINATION – WINTER-2016

Subject Code: 250003**Date: 24/11/2016****Subject Name: PHARMACEUTICAL CHEMISTRY- V****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) What are carbohydrates? Give detail classification of carbohydrates with examples.	06
	(b) What are proteins? Classify the proteins in detail.	05
	(c) What are lipids? Classify the lipids in detail.	05
Q.2	(a) Briefly explain chemical tests for carbohydrates.	06
	(b) Write short notes different properties of proteins.	05
	(c) Describe in detail α -helical structure of proteins.	05
Q.3	(a) Discuss the transport mechanism across the cell membrane.	06
	(b) Write detail notes on different tests for lipids.	05
	(c) Explain in detail about ETC.	05
Q.4	(a) Discuss in detail factor affecting enzyme activity.	06
	(b) Write short notes on enzyme inhibition.	05
	(c) Explain diagnostic applications of enzymes.	05
Q.5	(a) Enumerate vitamins as co-enzymes. Discuss any two of them.	06
	(b) Briefly explain Metals as co-enzymes and their significances.	05
	(c) Write short notes on Glycogenesis	05
Q. 6	(a) Discuss in detail Gluconeogenesis.	06
	(b) Briefly explain pentose phosphate pathway.	05
	(c) Explain role of hormones in maintenance of blood sugar level.	05
Q.7	(a) Explain the following term: 1. Glycolysis 2. Prosthetic group 3. Glycogenolysis.	06
	(b) Write short notes on the Citric acid Cycle.	05
	(c) Briefly explain energetic of glycolysis and TCA cycle.	05
