

GUJARAT TECHNOLOGICAL UNIVERSITY

B.PHARM. - SEMESTER- V • EXAMINATION – SUMMER-2016

Subject Code: 250003

Date: 02/05/2016

Subject Name: Pharmaceutical Chemistry - V

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)	What are carbohydrates? Give functions and classification of carbohydrates with examples.	06
	(b)	Describe the structures and function of GAGs.	05
	(c)	Describe the secondary structure of protein.	05
Q.2	(a)	Define the proteins. Classify them with suitable examples	06
	(b)	Write a note on glycolipids.	05
	(c)	Discuss concept of standard free energy.	05
Q.3	(a)	Define bioenergetics. Discuss in detail about inhibitors of oxidative phosphorylation.	06
	(b)	Discuss Facilitated diffusion transport across the biological membranes.	05
	(c)	Write a note on neutral fats.	05
Q.4	(a)	Give an account on nomenclature and classification of enzymes on the basis of the type of reactions with examples.	06
	(b)	Describe the components of electron transport chain and add a note on oxidation of NADH.	05
	(c)	Write a note on glycogen storage disease.	05
Q.5	(a)	Write the synthesis of ATP and give their biological significance.	06
	(b)	Write a detailed note on Isoenzymes.	05
	(c)	Explain about regulation and amphibolic nature of citric acid cycle.	05
Q. 6	(a)	How is galactose and fructose metabolized in the body? Add a note on abnormal metabolic disorders related to them.	06
	(b)	Define neoglucogenesis. Explain the importance of Cori-cycle.	05
	(c)	Write a note on enzyme pattern in various diseases.	05
Q.7	(a)	Enumerate vitamins used as coenzymes. Discuss any two of them.	06
	(b)	Define following: (1) Anomer (2) Epimer (3) Lipoproteins (4) Reducing Sugar (5) Acetyl coenzyme A	05
	(c)	Describe the role of hormones in maintenance of blood sugar level.	05
