

GUJARAT TECHNOLOGICAL UNIVERSITY
B.Pharm - SEMESTER-V - EXAMINATION – WINTER-2017

Subject Code: 250003

Date: 07-11-2017

Subject Name: Pharmaceutical Chemistry V

Time: 10:30 am to 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) Define and classify carbohydrates with example. Write a note on functions of carbohydrates.	06
	(b) Describe mechanism of enzyme action.	05
	(c) Describe synthesis of glucose from non-carbohydrate sources.	05
Q.2	(a) Describe enzyme inhibition.	06
	(b) Write a note on structure and functions of phospholipids.	05
	(c) Describe hexose monophosphate shunt with its significance.	05
Q.3	(a) Write a note on metabolism of Glucose-6-phosphate.	06
	(b) Write a note on ATP synthesis and its biological importance.	05
	(c) Write a short note on: i) Essential amino acids ii) alpha-Helix	05
Q.4	(a) Describe citric acid cycle with its energetics.	06
	(b) Write a note on the importance of serum enzymes in the diagnosis of disease.	05
	(c) Write a note on structural configuration of monosaccharides, with special reference to glucose.	05
Q.5	(a) Define and classify lipids with example. Write a note on functions of lipids.	06
	(b) Describe role of insulin in maintenance of blood sugar level.	05
	(c) Write a note on metabolism of galactose.	05
Q. 6	(a) Write a note on properties of proteins.	06
	(b) Describe defects in fructose metabolism.	05
	(c) Write a note on metabolism of glycogen.	05
Q.7	(a) Write a short note on: i) Inversion of Sucrose ii) Deoxysugars	06
	(b) Write a note on role of metals in enzyme action.	05
	(c) Discuss transport process across the cell membrane.	05
