

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**B. Pharm. – SEMESTER – V • EXAMINATION – WINTER 2013**

**Subject Code: 250003****Date: 02-12-2013****Subject Name: Pharmaceutical chemistry-V (Bio-chemistry)****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.**

<b>Q.1</b>	(a) Write a note on determination of primary structure of proteins	<b>06</b>
	(b) Write a note on functional and nutritional classification of proteins	<b>05</b>
	(c) Write a note on transport mechanism across cell membrane	<b>05</b>
<b>Q.2</b>	(a) Define and classify carbohydrates with suitable examples. Discuss functions of carbohydrates	<b>06</b>
	(b) Define triacylglycerols with its structure. Discuss its properties	<b>05</b>
	(c) Write a note on Phospholipids	<b>05</b>
<b>Q.3</b>	(a) Define co-enzymes. Add a note on role of vitamin derived co-enzymes in enzyme action	<b>06</b>
	(b) Write a note on competitive enzyme inhibition	<b>05</b>
	(c) Write a note on mechanisms of enzyme action	<b>05</b>
<b>Q.4</b>	(a) Write a note on significance of serum enzymes in diagnosis of disease	<b>06</b>
	(b) Discuss reactions of Galactose metabolism	<b>05</b>
	(c) Discuss citric acid cycle in detail	<b>05</b>
<b>Q.5</b>	(a) Write a note on Gluconeogenesis	<b>06</b>
	(b) Discuss importance of Cori's cycle	<b>05</b>
	(c) Write a note on Glycogen storage disorders	<b>05</b>
<b>Q.6</b>	(a) Discuss reactions of Pantose Phosphate Pathway	<b>06</b>
	(b) Write a detail note on Polysaccharides	<b>05</b>
	(c) Write a note on role of hormone in maintenance of Blood sugar level	<b>05</b>
<b>Q.7</b>	(a) Discuss Glycolysis with its energetic	<b>06</b>
	(b) Discuss ATP synthesis and its biological importance	<b>05</b>
	(c) Define and give various classifications of fatty acid with suitable examples	<b>05</b>

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