

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.

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|-------------|--|-----------|
| 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 |
