

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

B. Pharmacy Sem- Vth Examination December 2010

Subject code: 250003

Subject Name: Pharmaceutical Chemistry – V(Bio-Chemistry)

Date: 15 /12 /2010

Time: 02.30 pm – 05.30 pm

Instructions:

Total Marks: 80

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) Describe the secondary structure of protein. | 06 |
| | (b) Discuss the mechanism of enzyme inhibition. | 05 |
| | (c) Discuss the transport mechanism across cell membrane. | 05 |
| Q.2 | (a) What is glycolysis? Give their metabolic reaction with energetics. | 06 |
| | (b) Give the structure and function of phospholipids. | 05 |
| | (c) Describe the reaction of galactose metabolism. | 05 |
| Q.3 | (a) Write about the mechanism of enzyme action. | 06 |
| | (b) Write about the component and reaction of respiratory chain. | 05 |
| | (c) Discuss the edman's techniques for determination of sequence of amino acids. | 05 |
| Q.4 | (a) Define the vitamins. Write about the structure and coenzyme activity of riboflavin. | 06 |
| | (b) Write about the significance of enzymes in diagnosis of disease. | 05 |
| | (c) Define and classify carbohydrates with suitable examples. | 05 |
| Q.5 | (a) Write shot note on followings.
1. Essential fatty acid. 2. Lipoproteins | 06 |
| | (b) Discuss the importance of hormone in regulation of blood sugar level. | 05 |
| | (c) Write the synthesis of ATP and give their biological significance. | 05 |
| Q. 6 | (a) Write about the reaction and energetics of citric acid cycle. | 06 |
| | (b) Define the proteins. Classify them with suitable examples. | 05 |
| | (c) Explain the glycogenolysis with metabolic reaction. | 05 |
| Q.7 | (a) Differentiate between (i) epimers and anomers
(ii) saturated fatty acid and unsaturated fatty acid | 06 |
| | (b) Write about the significance of folic acid and pantoic acid as co enzyme. | 05 |
| | (c) Write about the metabolic reaction of pentose phosphate pathway. | 05 |
