

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM - SEMESTER- 4 EXAMINATION – WINTER -2019

Subject Code: 2240003**Date: 20-12-2019****Subject Name: Pharmaceutical Chemistry – V (Biochemistry – II)****Time: 02:30 PM TO 05:30 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 Amino acid. Classify amino acid on the basis of structure. | 06 |
| | (b) Discuss the Secondary Structure of Protein. | 05 |
| | (c) Write a note on Structure of RNA. | 05 |
| Q.2 | (a) Discuss the Initiation, Elongation and Termination of Protein Biosynthesis. | 06 |
| | (b) Write a note on Denaturation of Protein. | 05 |
| | (c) Define Porphyrin and Give the Biosynthesis of Heme. | 05 |
| Q.3 | (a) Write a note on ETC. | 06 |
| | (b) Discuss the Enzyme involve in Biological oxidation. | 05 |
| | (c) Write a note on Inhibitors of Oxidative Phosphorylation. | 05 |
| Q.4 | (a) Write a note on Oxidative Phosphorylation. | 06 |
| | (b) Discuss the Concept of Free energy. | 05 |
| | (c) Discuss the DNA repair mechanism. | 05 |
| Q.5 | (a) Discuss the Transamination and Deamination in detail. | 06 |
| | (b) Discuss the synthesis of RNA from DNA template. | 05 |
| | (c) Write a note on Genetics Code. | 05 |
| Q. 6 | (a) Give the Reaction of Urea Cycle and discuss the metabolic disorder of Urea Cycle. | 06 |
| | (b) Give the reaction of Pyrimidine biosynthesis. | 05 |
| | (c) Discuss the Lac Operon Concept. | 05 |
| Q.7 | (a) Give the reaction of Purine nucleotides. | 06 |
| | (b) Write a note on DNA Replication. | 05 |
| | (c) Discuss the Southern Blotting technique as an analytical tool for identification of nucleic acid. | 05 |
