

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

B. Pharm SEMESTER VI- • EXAMINATION – WINTER-2016

Subject Code: 260003

Date:21/10/2016

Subject Name: Pharmaceutical Chemistry-VII (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) Write about biosynthesis and utilization of ketone bodies. | 06 |
| | (b) Give detailed account on enzymes involved in biological oxidation | 05 |
| | (c) Explain Urea cycle with its metabolic disorders. | 05 |
| Q.2 | (a) Discuss purine biosynthesis. Explain inhibitors of purine synthesis | 06 |
| | (b) Write a note on replication of DNA in prokaryotes | 05 |
| | (c) Write a note on Genetic code | 05 |
| Q.3 | (a) Define protein synthesis. Write a note on inhibitors of protein synthesis | 06 |
| | (b) Write a note on chromatography | 05 |
| | (c) Discuss biosynthesis of Heme | 05 |
| Q.4 | (a) Discuss Transamination and Deamination reactions | 06 |
| | (b) Write a short note on RNA | 05 |
| | (c) Define bioenergetics and discuss concept of free energy | 05 |
| Q.5 | (a) What is PCR? Write a note on PCR & its significance | 06 |
| | (b) Give details about electrophoresis techniques. | 05 |
| | (c) Write a note on β -oxidation of fatty acids. | 05 |
| Q. 6 | (a) What is operon? Explain Lac operon | 06 |
| | (b) Explain in brief metabolism of sulphur containing amino acids. | 05 |
| | (c) Discuss in detail cholesterol biosynthesis. | 05 |
| Q.7 | (a) Discuss about Transcription process in prokaryotes | 06 |
| | (b) Discuss metabolism of water | 05 |
| | (c) Discuss biochemical role and deficiency symptoms of calcium. | 05 |
