

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B. Pharm. - SEMESTER- VI -- EXAMINATION – SUMMER -2018

Subject Code:260003

Date: 05/05/2018

Subject Name: Pharmaceutical Chemistry – VII (Biochemistry)

Time: 10:30 AM TO 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.

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|-------------|--|-----------|
| Q.1 | (a) What is genetic code? Explain the characteristics of genetic code. | 06 |
| | (b) Explain mechanism for DNA repair. | 05 |
| | (c) Write brief note on replication of DNA. | 05 |
| Q.2 | (a) Explain: oxidative phosphorylation. Discuss chemiosmotic hypothesis in detail. | 06 |
| | (b) Describe reactions of electron transport chain and its inhibitors. | 05 |
| | (c) Discuss enzymes involved in biological oxidation with examples. | 05 |
| Q.3 | (a) Write a note of centrifugation and chromatography in biochemistry | 06 |
| | (b) Give details about electrophoresis techniques. | 05 |
| | (c) Write a note on distribution of water and water balance in humans. | 05 |
| Q.4 | (a) What is PCR? Write a brief note on PCR with significance. | 06 |
| | (b) Write biosynthesis, transport and storage of sodium in human body | 05 |
| | (c) Explain Lac Operon concept. | 05 |
| Q.5 | (a) Write a note on Urea cycle. | 06 |
| | (b) Discuss transamination and deamination. | 05 |
| | (c) Write a brief account on biosynthesis of fatty acids. | 05 |
| Q. 6 | (a) Write a brief account on biosynthetic pathway of Porphyrin. | 06 |
| | (b) Explain metabolism of sulphur containing amino acids. | 05 |
| | (c) Explain biosynthesis of pyridine nucleotides. | 05 |
| Q.7 | (a) Discuss pathway for the metabolism of cholesterol. | 06 |
| | (b) Describe β - Oxidation of fatty acids. | 05 |
| | (c) What is ketouria? Write about ketogenesis and its utilization. | 05 |
