

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.

- 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**
