

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM - SEMESTER- 3 EXAMINATION – SUMMER -2019**Subject Code: BP303TP****Date: 01-06-2019****Subject Name: Biochemistry****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.

- Q.1** (a) Enlist unsaturated fatty acids and discuss oxidation of omega-3 fatty acid **06**
(b) Discuss amphibolic nature of citric acid cycle. **05**
(c) Explain β -oxidation of fatty acid **05**
- Q.2** (a) Explain the properties and identification tests of carbohydrate **06**
(b) Define: Iodine number, Saponification number, Acid number, Rancidity, Mutarotation **05**
(c) Write a note on TCA cycle **05**
- Q.3** (a) Discuss importance of Cori's cycle **06**
(b) Discuss the Synthesis of Glucose from Non-Carbohydrate sources **05**
(c) Write a note on regulation of enzyme activities **05**
- Q.4** (a) Write a note on galactose and fructose **06**
(b) Write a note on cholesterol biosynthesis **05**
(c) Discuss the transport mechanism across cell membrane **05**
- Q.5** (a) Describe the structures and function of mucopolysaccharides **06**
(b) Describe the Watson and Crick Model of DNA Structure **05**
(c) Discuss enzyme kinetics in brief and its mechanism of action **05**
- Q. 6** (a) Explain Metals and Vitamins as Co-enzyme and their Significance **06**
(b) Write a note on protein synthesis and inhibitors. **05**
(c) Write a note on Lipid Storage Diseases **05**
- Q.7** (a) Explain the genetic code with its characteristics **06**
(b) Explain in detail the process of RNA synthesis. **05**
(c) Describe significance of melatonin and dopamine. **05**
