

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
