

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM - SEMESTER- 3 EXAMINATION – SUMMER -2019

Subject Code: 2230003

Date: 28-05-2019

Subject Name: Pharmaceutical Chemistry-III (Biochemistry – I)

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) Define Carbohydrates. Classify it with example and structure.	06
	(b) Write a note on role of Hormones in maintenance of Blood sugar level.	05
	(c) Define Gluconeogenesis and write a note on Gluconeogenesis.	05
Q.2	(a) Explain the β -Oxidation of Fatty acids with energetics.	06
	(b) What is Glycolysis? Discuss the Anaerobic Glycolysis with reaction and energetics.	05
	(c) Discuss the transport mechanism across the cell membrane	05
Q.3	(a) What are Phospholipids? Classify it and give the function of Phospholipid	06
	(b) Define Co-enzyme and Discuss Vit-B ₁ as a Coenzyme	05
	(c) Write a note on Mineral Metabolism.	05
Q.4	(a) Explain TCA Cycle with reaction and energetics.	06
	(b) Write a note on Biosynthesis and Utilization of Ketone bodies	05
	(c) Discuss the Nomenclature and Enzyme Kinetics.	05
Q.5	(a) Discuss the HMP Shunt with its significance.	06
	(b) Write a note on Glyoxalic acid cycle.	05
	(c) Discuss the Bio-synthesis of Cholesterol.	05
Q. 6	(a) Explain the Bio-synthesis of Fatty acid.	06
	(b) Define the Isoenzyme and give its clinical significance.	05
	(c) Discuss the Amphibolic role of TCA Cycle	05
Q.7	(a) Discuss the Mechanism of Enzyme Inhibition.	06
	(b) Classify the Enzyme with example.	05
	(c) Discuss the metabolism of Galactose	05
