

GUJARAT TECHNOLOGICAL UNIVERSITY
B.Pharm – SEMESTER-III • EXAMINATION – SUMMER -2020

Subject Code: BP303TP**Date: 28-10-2020****Subject Name: BIOCHEMISTRY****Time: 2:30 PM TO 5:30 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 Carbohydrate. Discuss classification and biological role of Carbohydrates.	06
	(b) Write down biological significance of cholesterol.	05
	(c) Write a detail note on structure of protein.	05
Q.2	(a) Describe the hexose monophosphate shunt. Write about its significance.	06
	(b) Write down β -Oxidation of saturated fatty acid.	05
	(c) Write down catabolism of Tyrosine. Discuss its metabolic disorders.	05
Q.3	(a) Write down biosynthesis of purine and pyrimidine nucleotides in briefs.	06
	(b) Write about the process of replication of DNA.	05
	(c) Explain about hormonal regulation of blood glucose level in body.	05
Q.4	(a) Write down biological significances of ATP and cyclic AMP.	06
	(b) What are lipids? Classify lipids with example.	05
	(c) Write a note on Genetic Code.	05
Q.5	(a) Define following terms: 1. Enthalpy 2. Entropy 3. Redox Potential	06
	(b) Explain formation and utilization of ketone bodies.	05
	(c) Write a note on Protein synthesis.	05
Q. 6	(a) Write down electron transport chain (ETC) and its mechanism.	06
	(b) Write about structure of RNA.	05
	(c) Discuss structure and biochemical functions Coenzymes	05
Q.7	(a) Define enzymes. Discuss properties and classifications of enzymes.	06
	(b) Write about urea cycle and its disorder.	05
	(c) Discuss synthesis and significance of Dopamine.	05
