

**THE CHARUTAR VIDYA MANDAL UNIVERSITY**  
**BACHELOR OF PHYSIOTHERAPY – SEMESTER 1**  
**APRIL 2026 (REGULAR) EXAMINATION**

**Course Title: Biochemistry**

**Course Code: BPT - 103**

**Total Printed Pages: 02**

**Date: 10/04/2026**

**Time: 10:00 AM To 11:30 AM**

**Maximum Marks: 40**

**Instructions:**

1. There are total 4 Questions given in this paper.
2. All the answer should be written in the answer book.
3. Marks on the right side suggest the total marks of that question.
4. Draw the figure where necessary.

**Q.1. Multiple Choice Questions: (MCQs)**

**(05 × 1 = 05)**

1. Which of the following is a functional unit of a body?
  - a) Mitochondria
  - b) Cytoplasm
  - c) Spleen
  - d) Cell
2. Which among the following is not polymeric?
  - a) Carbohydrates
  - b) Nucleic acids
  - c) Proteins
  - d) Lipids
3. \_\_\_\_\_ is not a classified form of conjugated proteins
  - a) Lipoproteins
  - b) Glycoproteins
  - c) Metalloproteins
  - d) Complete proteins
4. What is a bond between amino acids called?
  - a) Ionic bond
  - b) Acidic bond
  - c) Peptide bond
  - d) Hydrogen bond

5. Which of the following is known as the suicide bag of a cell?

- a) Mitochondria
- b) Golgi Complex
- c) Lysosome
- d) Nuclei

Q. 2. Short answers (5 out of 7) (Answer not exceeding 50 words) (5 × 2 = 10)

- a. Write down the function of ANF and ADH.
- b. Define second messenger. Give an example.
- c. Give two examples of Diagnostic Enzymology.
- d. Define Calorific value. Give the calorific value of proteins.
- e. Write down the cause of Lactose Intolerance.
- f. Mention the role of Methylcobalamin and Tetrahydrofolate (THF).
- g. Write down the function of each mRNA and tRNA.

Q. 3. Short Notes (3 out of 4) (Answer not exceeding 150 words) (3 × 5 = 15)

- a. Describe in brief about the Liver Function Tests.
- b. What are the types of pH Buffer systems? Explain Bicarbonate buffer system.
- c. Write down the actions of Calcium, Iron, Magnesium, Fluoride and Copper.
- d. Explain in detail about Pellagra and Scurvy.

Q. 4. Essay (1 out of 2)

(1 × 10 = 10)

- a. Explain glycolysis and its regulations.
- b. Describe beta-oxidation of fatty acids.