Rita A. Patel Institute of Physiotherapy

The Charutar Vidya Mandal (CVM) University

INTERNAL EXAMINATION
JANUARY– 2026
BACHELOR OF PHYSIOTHERAPY
FIRST SEMESTER

Course Name: Human Physiology-1

Course Code: BPT-102

DATE: 16/01/2026 **TIME: 11:00 am to 12:00 pm** **TOTAL MARKS: 30**

Instructions:

1. Examinees must bring their ID card every day.
2. Read the questions carefully.
3. You **must not** talk to, attempt to communicate with or disturb another candidate.
4. Possession of a mobile phone and any other material is prohibited.
5. Draw and label the diagram wherever necessary.

A. Multiple Choice Questions (All compulsory) (6x 1 = 6)

- **Write down the one correct answer for MCQ in supplementary.**

1. Universal recipient blood group is:
a. O
b. A
c. AB
d. B

2. Active transport requires:
a. Diffusion gradient
b. ATP
c. Osmosis
d. Filtration

3. Powerhouse of the cell is:
a. Ribosome
b. Mitochondria
c. Golgi apparatus
d. Lysosome

4. Resting membrane potential of neuron is:
a. –70 mV
b. –90 mV
c. –40 mV
d. +30 mV

5. Vitamin K is essential for synthesis of:
a. RBC
b. Hemoglobin
c. Clotting factors
d. Platelets

6. Structural unit of skeletal muscle is:

a. Myofibril
b. Actin
c. Myosin
d. Sarcomere

B. Write Short notes (Any Two) (2 x 2 = 4)

1. Name any two organelles involved in protein synthesis.

2. What is ESR? Mention a one clinical significance.

3. Name two properties of nerve fibers.

C. Write Short notes (Any Two) (5 x 2 = 10)

1. Describe classification and functions of WBCs.

2. Describe the structure and functions of the cell membrane.

3. Describe Rh blood group system and erythroblastosis fetalis.

D. Write Long notes (Any One) (10 x 1 = 10)

1. Describe RBCs in detail – count, variations, erythropoiesis, hemoglobin, and applied aspects of anemia.

2. Explain structure, classification, and functions of neurons, including nerve injury and regeneration.