



**GANDHI INSTITUTE OF ENGINEERING AND TECHNOLOGY, ODISHA, GUNUPUR  
(GIET UNIVERSITY)**

B. Pharm. (First Semester - Regular) Examinations, February - 2026

**BP101T – Human Anatomy and Physiology**

Time: 3 hrs

Maximum: 75 Marks

**Answer ALL questions**

**(The figures in the right hand margin indicate marks)**

**PART – A**

**(10 x 2 = 20 Marks)**

Q.1. Answer **ALL** the questions

- a. Write two functions of mitochondria.
- b. Mention two differences between skeletal and smooth muscle.
- c. What is anaemia? Mention any two causes.
- d. What are the common disorders of joints?
- e. What is the Rh factor?
- f. What is haemoglobin? State its normal value in adults.
- g. List out the spinal nerves and their functions.
- h. What is haemopoiesis? Where does it occur in adults?
- i. Mention two differences between artery and vein.
- j. What is an electrocardiogram (ECG)?

**PART – B**

**(2 x 10 = 20 Marks)**

Q.No. 2. Answer **ANY TWO** questions (Long Answer Question)

- a. Explain the classification, structure, location, and functions of epithelial tissues.
- b. Draw a neat labeled diagram of the ear and explain the physiology of hearing.
- c. Write in detail about the divisions of the skeletal system, types of bones, and functions of the appendicular skeletal system.

**PART – C**

**(7 x 5 = 35 Marks)**

Q. No.3. Answer **ANY SEVEN** questions (Short Answer Question)

- a. Describe the general principles of cell communication.
- b. Write a detailed note on connective tissue.
- c. Classify joints with examples. Discuss the synovial joint in detail.
- d. Describe the structure and functions of the skin.
- e. Define blood coagulation. Write in detail about the factors involved in the blood coagulation process.
- f. What is lymph? Describe the structure and functions of lymph nodes.
- g. Write a note on the cranial nerves.
- h. Write a brief note on the ABO system of blood grouping.
- i. Describe the conduction system of the heart.

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