

# HUMAN ANATOMY & PHYSIOLOGY – I (GUESS PAPER 2025-26)

**Subject Code: BP101T**

**Max Marks: 75 Time: 3 Hours**

## **SECTION A (10 × 2 = 20 marks)**

Attempt all questions in brief:

1. Define Homeostasis and its importance.
2. What is Erythropoiesis?
3. Write functions of Mitochondria and Ribosome.
4. Define Osteoblast and Osteoclast.
5. Write any two functions of Skin.
6. Name the bones present in the ear.
7. What is Cardiac Output?
8. Explain Catabolism and Anabolism.
9. Define Sagittal and Coronal plane.
10. Name the pigment present in rod and cone cells.

## **SECTION B (2 × 10 = 20 marks)**

Attempt any two:

1. Draw a well-labeled diagram of Heart and explain Cardiac Cycle.
2. Classify Skeletal System and discuss structure & function of Vertebral Column.
3. Define Blood Coagulation and explain different stages involved in it.
4. Describe Cell with a neat diagram and explain transport mechanisms across plasma membrane.

## **SECTION C (5 × 7 = 35 marks)**

Attempt any five:

1. Explain Structure and Functions of Plasma Membrane.
2. Write about Lymphatic System — structure, circulation & functions.
3. Describe the Structure of Long Bone with diagram.
4. Discuss Mechanism and Physiology of Hearing.
5. Explain Anatomy and Physiology of Eye (Vision).
6. Write a short note on Cell Division (Mitosis).
7. Explain ECG waves and their significance.
8. Describe Neuromuscular Junction with a labeled diagram.

### ***High-Repetition Topics (Most Likely to Come)***

Topic	Times Repeated (2019–25)
Plasma membrane (structure + transport)	6/6
Blood coagulation	5/6
Heart (diagram + cardiac cycle/ECG)	6/6
Skeletal system & long bone	5/6
Eye & Vision	5/6
Ear & Hearing	4/6

Cell organelles & functions	4/6
Homeostasis	4/6
Lymphatic system	4/6
Cell division (Mitosis/Meiosis)	4/6