Graphic Era
HILL UNIVERSITY
Established by an Act of the State Legislature of Uttarakhand (Adhiniyam Sankhya 12 of 2011)
University under section 2(f) of UGC Act, 1956

Sessional I (Odd) Semester Examination, September 2025

Roll no.....

Name of the Course and semester: **B. Pharm (I Semester)**
Name of the Paper: **Human Anatomy and Physiology I**
Paper Code: **BP101T**
Time: 1.5-hour **Maximum Marks: 30**

Note:
(i) This question paper contains three sections.
(ii) All the questions are compulsory.

Section-A

Q1. Multiple Choice Questions – Attempt all questions **(10 X 1 = 10 Marks)**

1. The study of microscopic structures of tissues is called: **(CO1)**
   a) Anatomy
   b) Histology
   c) Physiology
   d) Pathology

2. The midsagittal plane divides the body into: **(CO1)**
   a) Unequal right and left portions
   b) Equal right and left portions
   c) Anterior and posterior portions
   d) Superior and inferior portions

3. Which cell organelle is double membraned and contains its own DNA? **(CO1)**
   a) Ribosome
   b) Mitochondria
   c) Lysosome
   d) Golgi complex

4. The nuclear membrane reappears during: **(CO1)**
   a) Prophase
   b) Anaphase
   c) Telophase
   d) Metaphase

5. Which type of cartilage is present at the ends of long bones? **(CO1)**
   a) Hyaline cartilage
   b) Elastic cartilage
   c) Fibrocartilage
   d) Reticular cartilage

6. The structural and functional unit of compact bone is: **(CO2)**
   a) Osteon
   b) Trabecula
   c) Chondrocyte
   d) Lacuna

7. The neurotransmitter released at the neuromuscular junction is: **(CO2)**
   a) Serotonin
   b) Dopamine
   c) Acetylcholine
   d) Norepinephrine

8. Movement of a limb away from the midline of the body is termed: **(CO2)**
   a) Adduction
   b) Abduction
   c) Flexion
   d) Extension

9. The appendicular skeleton includes: **(CO2)**
   a) Skull
   b) Vertebral column
   c) Upper and lower limb bones
   d) Sternum

10. Which layer of the skin contains melanocytes? **(CO2)**
   a) Epidermis – Stratum corneum
   b) Dermis – Reticular layer
   c) Epidermis – Stratum basale
   d) Hypodermis

Section B

Q. 2 Short Questions: (Attempt any two questions) **(2X 5 = 10 Marks)**

1. Describe the structural levels of organization in the human body. **(CO1)**
2. Outline different types of transport mechanisms across the cell membrane. **(CO1)**
3. Differentiate between the epidermis and dermis layer of the skin. **(CO2)**

Section C

Q. 3 Long questions: (Attempt any one question) **(1X10 = 10 Marks)**

1. Describe the structure, classification, and functions of Epithelial tissue. **(CO1)**
2. Give structural and functional classification of joints with examples. **(CO2)**