

INDIRA UNIVERSITY, PUNE

SCHOOL OF PHARMACY- PHARM D

Term End Examination (2025 Pattern) April- May – 2026- First Year

Course Name: Human Anatomy and Physiology
Course Code: 1.1

Max. Marks: 70
Time: 3:00 Hrs.

Instructions

- All Questions are Compulsory. Write two sections on separate answer sheets.
 - Neat diagram must be drawn wherever necessary.
 - Figures to the right indicate full marks.
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Section : I

Q.1. Draw a neat, labelled diagram of interior of heart, explain cardiac cycle and add a note on ECG. **10 Marks**

OR

Q.1. Draw a neat, labelled diagram of different types of tissue and write their function in detail. **10 Marks**

Q.2. Solve any five (3 Marks each) **15 Marks**

- Write a note on nervous tissue.
- Write a note on erythropoiesis.
- Explain the mechanism of inspiration and expiration.
- Classify bones with suitable examples.
- Explain structure of artery and vein.
- Write a note on conduction system of heart.
- Explain morphology and functions of platelets.

Q.3. Write shorts on any two (5 Marks each) **10 Marks**

- Write a note on carrier mediated transport.
- Explain regulation of blood pressure and define hypertension.
- Explain blood groups and add a note on Hemolytic disease of newborns.
- Write a note on Nucleus and their functions.

Section : II

Q.4. Explain anatomy of pituitary gland and add note of hormones released by it. **10 Marks**
OR

Q.4. Describe in detail cranial nerves. **10 Marks**

Q.5. Solve any five (3 Marks each) **15 Marks**

- a) Explain structure of skeletal muscle.
- b) Write note on contraceptive devices.
- c) Explain reflex arc.
- d) Explain hormones of thyroid gland.
- e) Explain functions of liver.
- f) Add note on renal function and renal clearance.
- g) Explain functions of skin.

Q.6. Write shorts on any two (5 Marks each) **10 Marks**

- a) Explain structure and functions of medulla oblongata.
- b) Discuss process of spermatogenesis.
- c) Write the anatomy of pancreas. Discuss the endocrine and exocrine secretions of pancreas.
- d) Explain structure and functions of eye.
