

December 2025

HUMAN ANATOMY AND PHYSIOLOGY

Time Allowed: 3 Hours

Full Marks: 80

(Answer all questions as directed)

1. A) Fill in the blanks- (any ten)**1x10**

- i. Pituitary is known as _____ gland.
- ii. Full form of ACTH is _____.
- iii. The appearance of blood in urine is called _____.
- iv. The enzyme renin is secreted by _____.
- v. Universal blood group recipient is _____.
- vi. Normal value of tidal volume is _____.
- vii. The name of 1st cervical vertebra is _____.
- viii. Hydrochloric acid is secreted from _____ cell of stomach.
- ix. Basic unit of the nervous system is called _____.
- x. The hormone secreted by the testes is _____.
- xi. Bile is synthesized in _____.

B) Answer in one sentence (any ten)**1x10**

- i. What is erythropoiesis?
- ii. What is acromegaly?
- iii. What is synapse?
- iv. What are islets of Langerhans?
- v. Which is the voice box?
- vi. What is thrombocytopenia?
- vii. Glucagon is secreted by which organ?
- viii. What is leukaemia?
- ix. What is dendron?
- x. What is ectopic pregnancy?
- xi. What is menarche?

2. Short answer questions: (any ten)**3x10**

- a. Write the functions of trachea.
- b. Explain the conducting system of the heart.
- c. Name the four main types of tissue and explain adipose tissue.
- d. Give the functions of blood.
- e. Write a note on Liver.
- f. Differentiate between vein and artery.
- g. Describe reflex arc with diagram.
- h. Write down the function of spleen.

- i. Define vital capacity, expiratory reserve volume of lung and tidal volume of lung.
- j. Write in short, the process of formation of urine.
- k. Write the difference between endocrine and exocrine gland.
- l. Write the process of Spermatogenesis.

3. Long answer questions- (any six)

5x6

- a. Give an account on menstruation cycle giving correlation with female hormones.
 - b. Draw and label the different parts of human eye.
 - c. Explain the cycle of respiration.
 - d. Name the hormones secreted by the adrenal cortex and adrenal medulla. Write the function of glucagon.
 - e. What is lymph node? Draw the section of a lymph node and write the functions of lymphatic system.
 - f. Write the functions of cerebrospinal fluid.
 - g. Write the physiological importance of Rhesus system of blood.
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