

HUMAN ANATOMY AND PHYSIOLOGY

August 2023

PH-DAC(24)

FM 80

1x5=5

1x15=15

3X10=30

5 X 6 = 30

1. Answer the following:

A. Choose the correct alternative (five) :-

- i. Normal value of Tidal volume is a) 200, b) 300, c) 500 and d) 700ml
- ii. Which blood group is called universal donor? a) A, b) AB, c) O and d) B
- iii. T3 and T4 hormones are secreted by a) Pituitary, b) Adrenal, c) Pancreas and d) Thyroid gland.
- iv. Ptyalin is an enzyme found in a) Pancreatic juice, b) Gastric juice, c) Intestinal juice and d) Saliva.
- v. Which organ has both endocrine and exocrine functions? a) Pancreas, b) Liver, c) Stomach and d) kidney.

B. Fill in the blanks (fifteen)

- i. Normal clotting time of blood is _____
- ii. Mitral valve is also known as _____
- iii. The midbrain lies between the thalamus & _____
- iv. The hormone secreted by the testes is _____
- v. Right lung has _____ lobe(s).
- vi. Functional unit of the kidney is called _____
- vii. Increase of RBC count is known as _____
- viii. The appearance of blood in urine is called _____
- ix. Bone is a _____ tissue.
- x. The lungs are covered by a membrane called _____
- xi. Longest bone of the body is _____
- xii. Bile is stored in _____
- xiii. _____ secreted by pancreas regulates the entry of glucose into the cell.
- xiv. Hydrochloric acid is secreted from _____ cell of stomach
- xv. Food does not enter trachea due to the presence of _____

2. Answer the following question (any ten)

- a) Why mitochondria are called as power house of cell?
- b) Write the difference between endocrine and exocrine glands.
- c) Write the composition of blood.
- d) Classify nervous system
- e) What are the functions of Medulla Oblongata?
- f) Define Cardiac output & discuss the factors affecting it.
- g) Write short notes on Rod & Cone cells.
- h) Define vital capacity, expiratory reserve volume of lung, tidal volume of lung.
- i) Write the mechanism of blood coagulation.
- j) Draw and label the different parts of human eye.
- k) What are the changes involved in male during puberty?
- l) Write a net diagram of nephron of a kidney

3. Answer any 6 questions

- a) Define tissue. Enlist its types.
- b) Discuss in details conducting system of the heart.
- c) Write about the process of digestion in the stomach and small intestine.
- d) Define joint or articulation. Explain various types of joints.
- e) Explain mechanism of hearing.
- f) Explain the different stages of urine formation.
- g) Give an account on menstruation cycle giving correlation with female hormones.