

- Instructions* –
- (1) All Questions are *Compulsory*.
 - (2) Answer each next main Question on a new page.
 - (3) Illustrate your answers with neat sketches wherever necessary.
 - (4) Figures to the right indicate full marks.
 - (5) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.
 - (6) In case student has attempted sub-question of Q. No. 3 more than once, only first attempt should be considered for assessment.

Marks

1. **Attempt any SIX of the following :** **30**
 - a) Define skeleton. Discuss the vertebral column.
 - b) Enlist the blood cells. Discuss white blood cells.
 - c) Explain the blood flow through the heart with the help of well labelled diagram of Heart.
 - d) Define digestion. Enlist the organs of digestive system. Explain anatomy and physiology of stomach.
 - e) Explain the structure of spinal cord. Give the composition and functions of CSF.
 - f) Enlist the layers of skin. Write the functions of skin.
 - g) Describe the process of urine formation.

2. **Attempt any TEN of the following :** **30**
 - a) Draw the well labelled diagram of cell. Locate following cell organelles –
 - i) Mitochondria
 - ii) Nucleus
 - iii) Lysosomes
 - iv) Golgi-bodies
 - b) Define and classify tissues.
 - c) State any six functions of blood.
 - d) Enlist the organs of lymphatic system. Give the functions of spleen.
 - e) Define the terms –
 - i) Hypertension
 - ii) Cardiac output
 - iii) Angina pectoris
 - f) Draw the well labelled diagram of Human Respiratory System.
 - g) Give the composition and functions of Saliva.
 - h) Name any six cranial nerves.
 - i) Why Pancreas is known as exo-endocrine gland ?
 - j) Enlist the hormones secreted by pituitary gland.
 - k) State the meaning of –
 - i) Puberty
 - ii) Menopause
 - iii) Spermatogenesis

3. Attempt ALL of the following :

- a) Define human anatomy ?
 - b) Which is correct statement ?
 - i) Ear is medial to eye.
 - ii) Chin is anterior to nose.
 - iii) Elbow is proximal to shoulder.
 - iv) Elbow is distal to shoulder.
 - c) Connective tissue that connects muscle to bone is called as ----
 - d) Define Arthritis.
 - e) The joints present between skull bones are called as _____
 - f) State the meaning of systole and diastole of heart.
 - g) Enlist the layers of heart.
 - h) In which part of respiratory system does the gaseous exchange takes place ?
 - i) Which of the following organ functions as an air conditioner ?
 - i) Larynx
 - ii) Pharynx
 - iii) Nasal chambers
 - iv) All of above
 - j) ----- is the first part of small intestine.
 - k) The membrane present around the muscle cell is -----
 - i) Sarcoplasm
 - ii) Sarcolemma
 - iii) Sarcomere
 - iv) None of above
 - l) State the types of muscles present in human body.
 - m) Define meninges.
 - n) Which part of brain is also called heart regulating center ?
 - o) Sclera is -----
 - i) White part of eye
 - ii) Cornea
 - iii) Red part of eye
 - iv) Brown part of eye
 - p) Name the outermost part of ear made of cartilage that connects to auditory tube.
 - q) Name the largest organ of the body.
 - r) Name the part of urinary system which carries urine from kidney to the urinary bladder.
 - s) Cell produced by fertilization is called as -----
 - t) Which of the following is not a part of male reproductive system ?
 - i) Penis
 - ii) Uterus
 - iii) Prostate gland
 - iv) Testis
-