1. Attempt any EIGHT of the following : 

(a) Define :
   (i) Anaemia     (ii) Reproduction
(b) Classify epithelial tissues.
(c) Draw a well labelled diagram showing a simple reflex arc.
(d) Enlist the muscles of neck & give their functions.
(e) Name different vertebrae of vertebral column.
(f) Why pituitary gland is called as master gland ?
(g) Define lymph. Mention different components of lymphatic system.
(h) What is Puberty ?
(i) Draw and label the structure of cell.
(j) Give the normal values of the following :
   (i) Pulse   (ii) Cardiac output
   (iii) Stroke volume   (iv) Heart rate

2. Attempt any FOUR of the following: 12

(a) Define Respiration. Explain the mechanism of respiration.

(b) Draw a well labelled diagram showing internal structure of Human Ear.

(c) Classify Muscular Tissue. Explain anatomy and physiology of different types of muscular tissue.

(d) Differentiate between male and female pelvis.

(e) Give composition and functions of blood plasma.

(f) What do you mean by:
   (i) Arthritis
   (ii) Menopause
   (iii) Polycythemia

3. Attempt any FOUR of the following: 12

(a) Define and classify joints with suitable examples.

(b) What is a neuromuscular junction? Explain physiology of neuromuscular transmission.

(c) Differentiate between CNS & ANS. What is effect of parasympathetic stimulation on
   (i) Lachrymal glands        (ii) Heart

(d) What is shock? Explain various types of shocks.

(e) Classify, give normal count and functions of blood corpuscles.

(f) What do you mean by
   (i) Renal calculi        (ii) Atherosclerosis
4. Attempt any FOUR of the following: 12

(a) Define:

(i) Hypertention
(ii) Oedema
(iii) Meningitis

(b) Draw a labelled diagram showing sagittal section of eye.

(c) Classify bones based on their microscopic structure. List important functions of bones.

(d) With the help of suitable diagram explain circulation of blood through heart.

(e) Give functions of uterus, fallopian tubes and ovaries.

(f) What do you mean by motor, sensory and mixed nerves? Give one example of each.

5. Attempt any FOUR of the following: 12

(a) Define blood pressure. Explain factors maintaining blood pressure.

(b) With the help of labelled diagram explain the microscopic structure of kidney.

(c) What are taste buds? Explain physiology of taste.

(d) Mention the parts of alimentary tract. Give one function of each part.

(e) Give functions of cerebrum and medulla oblongata.

(f) Mention the bones forming:

(i) Cranium
(ii) Thoracic cage

P.T.O.
6. Attempt any FOUR of the following:

(a) Define ‘blood clot’. Explain mechanism of blood clotting. Mention factors affecting same.

(b) Enlist and discuss different functions of kidney.

(c) Define hormones. Enlist any three endocrine glands and give their secretions.

(d) Define Digestion. Explain chemical digestion of food.

(e) Draw and describe microscopic structure of ovary.

(f) Give composition and function of:

   (i) CSF

   (ii) Semen