

13046

11819

**3 Hours / 100 Marks**

Seat No.

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- 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.

**Marks**

**1. Attempt any TEN of the following:**

**20**

- a) Define cell division.
- b) Define Mitochondria.
- c) Name elbow and knee joint.
- d) Name different types of teeth.
- e) Name the respiratory organs of the body.
- f) Different types of blood group.
- g) Enlist sensory organs.
- h) Define lymph and lymphatic system.
- i) Enlist the endocrine glands of the body.
- j) Enlist the male reproductive hormone.
- k) Name the parts of the neurons system.
- l) Count and name of vertebral column.
- m) Enlist types of tissues.
- n) Mention the normal temperature of human body.

P.T.O.

- 2. Attempt any FOUR of the following: 16**
- a) Enlist parts of digestive system and explain digestion briefly.
  - b) Draw well labelled diagram of heart and explain the circulation of the blood.
  - c) Enlist the cranial nerves and their function.
  - d) Describe the hormones and phases of menstrual cycle.
  - e) Which are the hormones of pituitary gland? How they are regulated?
  - f) Explain the chemical activities within the cell.
- 3. Attempt any FOUR of the following: 16**
- a) Write types of salivary glands and their secretion.
  - b) Name the joints of upper and lower limb.
  - c) Write the mechanism of hearing.
  - d) Write functions and composition of blood.
  - e) Describe female reproductive organ.
  - f) Write about temperature regulation.
- 4. Attempt any FOUR of the following: 16**
- a) Draw neat labelled diagram of T.S. of skin and explain it briefly.
  - b) Draw pancreas and write its endocrine and exocrine functions.
  - c) Write structure and characteristics of nerves and neurons
  - d) Define tidal volume and explain mechanism of respiration.
  - e) Briefly explain mechanism of coagulation.
  - f) Define epithelial tissue and classify it.

**5. Attempt any TWO of the following:****16**

- a) Write a note on membranes.
- b) Define cell and add a note on its organells.
- c) Describe liver with well labelled diagram.

**6. Attempt any FOUR of the following:****16**

- a) Explain Dyspnoea.
  - b) Explain pineal gland.
  - c) Write the characteristics of reflex action.
  - d) Write a note on Rhesus factor.
  - e) Explain sex gland.
  - f) Describe skin with well labelled diagram.
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