

# 17436

**21415**

**3 Hours / 100 Marks**

Seat No.

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- Instructions* – (1) All Questions are *Compulsory*.  
(2) Illustrate your answers with neat sketches wherever necessary.  
(3) Figures to the right indicate full marks.  
(4) 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) Write two functions of pituitary gland.
- b) Write two functions of joints.
- c) Write two functions of skeletal muscles.
- d) Write normal value of heart rate and pulse rate in adult.
- e) What is resting membrane potential?
- f) What is cardiac output?
- g) Write normal value of blood pressure in adult.
- h) Give two functions of skin.
- i) Write list of instruments used to detect abnormal functioning of heart.
- j) What is lung volume?
- k) Write list of instruments related to respiration.
- l) What is lung capacity?
- m) Name organs which are involved in digestive system.
- n) Write any two functions of kidney.

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- 2. Attempt any TWO of the following:** **16**
- a) Enlist different types of tissues and mention two functions of each.
  - b) Write composition and function of blood (mention six functions).
  - c) Describe cardiac muscle and its properties.
- 3. Attempt any FOUR of the following:** **16**
- a) Write classification of bone and give two functions of each.
  - b) Write anatomy of respiratory system with a neat labelled diagram.
  - c) Give the structure and functions of cell organelles.
  - d) Describe anatomy of heart with a neat labelled diagram.
  - e) Describe the mechanism of gaseous exchange in the lungs.
  - f) Describe the conduction system of heart.
- 4. Attempt any TWO of the following:** **16**
- a) Describe the anatomy of urinary system with a neat labelled diagram.
  - b) Describe the mechanism of formation of urine.
  - c) Describe the anatomy of female reproductive organs with a neat labelled diagram.

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

- a) Name the parts involved in respiratory system with one function of each.
- b) Describe the structure of skin.
- c) Mention the juices secreted by digestive organs and their functions.
- d) Enlist hormones secreted by male reproductive organs with function of each.
- e) Give the anatomy of eye and its function (any two).
- f) Describe the structure of pituitary gland.

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

- a) Write the functions of cerebrum and cerebellum (four functions each).
  - b) Describe in brief the structure of neuron.
  - c) Distinguish between CNS and ANS (write eight differences).
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