

17436

21819

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) Assume suitable data, if necessary.
- (6) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1. a) Attempt any SIX of the following :

12

- (i) Define:
 - 1) Polarization.
 - 2) Depolarization.
- (ii) List of instruments related to respiration.
- (iii) Draw the structure of Neuron.
- (iv) Explain Resting membrane potential.
- (v) Draw and label parts of heart.
- (vi) Define:
 - 1) Ureter
 - 2) Urethra
- (vii) State the function of prostate gland
- (viii) Enlist the internal organs of female reproductive system.

P.T.O.

- b) **Attempt any TWO of the following:** **8**
- (i) Draw and label a diagram of respiratory system and explain the mechanism of respiration.
 - (ii) Describe digestion of food in stomach.
 - (iii) Draw and label the diagram of an eye.
2. **Attempt any FOUR of the following :** **16**
- a) Describe the autonomic nervous system.
 - b) Describe the conduction system of the heart.
 - c) What are sperms and testis? State their function.
 - d) Describe the formation of urine.
 - e) Define cell. Describe cell structure.
 - f) Define:
 - (i) Bronchi
 - (ii) Larynx
 - (iii) Pharynx
 - (iv) Trachea
3. **Attempt any FOUR of the following :** **16**
- a) Classify joints with examples.
 - b) Describe composition of food.
 - c) Write the function of cardiac muscles.
 - d) Describe the structure of spinal cord.
 - e) Enlist the names of hormones secreted by anterior pituitary gland and state their function.
 - f) Enlist the digestive juices secreted by various digestive organs and state their function.

- 4. Attempt any FOUR of the following :** **16**
- a) Define muscles state types of muscles.
 - b) Name different types of tissues. State their function.
 - c) State the meaning of blood groups. Name different types of blood groups.
 - d) Describe the following terms :
 - (i) Cardiac output.
 - (ii) Heart rate.
 - e) Describe the function of kidney.
 - f) Define.
 - (i) Dermis and epidermis.
 - (ii) State the function of skin.
- 5. Attempt any FOUR of the following :** **16**
- a) Describe functions of blood.
 - b) Define Vital capacity, Tidal volume, FRC ,ERV.
 - c) Draw the diagram of digestive system and label it.
 - d) Describe male reproductive system.
 - e) Describe the central nervous system (CNS).
 - f)
 - (i) Write the functions of retina
 - (ii) Define action potential.
- 6. Attempt any FOUR of the following :** **16**
- a) List the instruments related to heart and describe importance of ECG.
 - b)
 - (i) List instruments related to nervous system.
 - (ii) List instruments related to digestive system.
 - c) Describe the physiology of hearing.
 - d) Compare ‘cerebrum’ and ‘cerebellum’.
 - e) Describe external and internal respiration.
 - f) Describe Menstrual cycle.
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