

22347

23124

3 Hours / 70 Marks

Seat No.

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- Instructions* – (1) All Questions are *Compulsory*.
- (2) Illustrate your answer with neat sketches wherever necessary.
- (3) Figures to the right indicate full marks.
- (4) Assume suitable data, if necessary.
- (5) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1. **Attempt any FIVE of the following:** **10**
- a) State the function of nucleus and ribosomes.
- b) List any two diseases related to cardiovascular system.
- c) List any four respiratory parameters.
- d) Draw the sketch of urinary system and label it.
- e) Give the function of estrogen.
- f) Draw the structure of neuron and label it.
- g) Identify the following instruments related to digestive system.
- i) EEG machine
- ii) Endoscopy
- iii) Spirometer
- iv) Ultrasonography machine.

P.T.O.

- 2. Attempt any THREE of the following:** **12**
- a) Explain the conduction system of heart with a neat diagram.
 - b) Describe the mechanism of respiration.
 - c) Identify the use of following instruments –
 - i) Stethoscope
 - ii) ECG machine.
 - d) List any two hormones secreted by male reproductive system and give their function.
- 3. Attempt any THREE of the following:** **12**
- a) Blood group AB is the universal acceptor. Justify it and name the universal donor blood type.
 - b) Draw the sketch of female reproductive system and give the function of ovaries.
 - c) Describe the composition of blood and state the function of each.
 - d) List and explain any four properties of cardiac muscle.
- 4. Attempt any THREE of the following:** **12**
- a) Select the following instrument related to respiratory system and give its function –
 - i) Spirometer
 - ii) ECG machine
 - iii) Ventilator
 - iv) Sphygmomanometer
 - b) Identify the following disease related to digestive system. Give the function of large intestine –
 - i) Ulcers
 - ii) Cardiac arrest
 - iii) Chronic Diarrhea
 - iv) Gastroenteritis
 - v) Epilepsy
 - vi) Asthma

- c) Identify the location of the following glands –
 - i) Thyroid gland
 - ii) Adrenal gland
 - iii) Pineal gland
 - iv) Pancreas
- d) List any four functions of bone.
- e) Describe anatomy of eye and the process of image formation.

5. Attempt any TWO of the following: 12

- a) Explain the mechanism of formation of urine.
- b) Draw the sketch of ear with indicating different parts of it and give the function of auditory nerve.
- c) Describe with sketch the function of spinal cord.

6. Attempt any TWO of the following: 12

- a) Explain with sketch the structure of skin.
 - b) Draw the sketch of respiratory system and give the function of different part of it.
 - c) Compare CNS and ANS. (Any three points)
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