

22223

3 Hours / 80 Marks



20114

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.
  - (7) In case student has attempted sub-question of question no. 3 more than once, only first attempt should be considered for assessment.

**Marks**

- 1. Attempt any SIX of the following: 30**
- a) Describe the process of blood clotting.
  - b) Explain conducting system of the heart with neat diagram.
  - c) Write the composition and functions of gastric juice. Name the three phases of gastric juice secretion.
  - d) Explain the functions of cerebrum. Name the functional areas of cerebrum with diagram.
  - e) Describe the process of urine formation.
  - f) Write the functions of skin.
  - g) Classify bones. Explain anatomical features of synovial joint with diagram.
- 2. Attempt any TEN of the following: 30**
- a) Write anatomy and functions of the mitochondria.
  - b) Give an account of simple epithelium.
  - c) Describe the functions of lymphatic system.
  - d) Name the parts of respiratory system. Write applications of a peak flow meter.
  - e) Create a flow diagram that describes the sequence of events that causes contraction of ventricles and ejection of blood flow from heart.
  - f) Write physiology of carbohydrate digestion.
  - g) Differentiate between sympathetic and parasympathetic nervous system.
  - h) Name the three layers of eye. Draw a well labelled vertical section of an eye-ball.
  - i) Name the hormones secreted by pancreas. Explain physiological role of insulin.
  - j) Describe phases of menstrual cycle.
  - k) Enlist the endocrine glands with their location in the body.

P.T.O.

**3. Attempt ALL of the following:**

- a) State the meaning coronal plane.
  - b) Mention the tissue that lines blood vessels.
  - c) List the bones forming ankle joint.
  - d) Define cardiac output.
  - e) State meaning of myopathy.
  - f) Write two functions of CSF.
  - g) Classify tissues.
  - h) Define Tidal Volume.
  - i) List indications of blood transfusion.
  - j) Write normal values of RBC count.
  - k) Which statement is correct?
    - i) The knee is proximal to hip
    - ii) The hip is proximal to knee
    - iii) The shoulder is distal to elbow
    - iv) The knee is distal to ankle
  - l) Sperm maturation occurs in the :
    - i) Seminiferous tubule
    - ii) Epididymis
    - iii) Vas deference
    - iv) Urethra
  - m) The hormone responsible for puberty in females is :
    - i) Prolactin
    - ii) Follicle stimulating hormone
    - iii) Oxytocin
    - iv) All of the above
  - n) The largest bone in the body is :
    - i) Humerous
    - ii) Femur
    - iii) Tibia
    - iv) Sternum
  - o) Classify WBC into its two types.
  - p) The largest blood vessel of body is \_\_\_\_\_.
  - q) The part of respiratory system mostly affected by COVID-19 is :
    - i) Nasal cavity
    - ii) Alveoli
    - iii) Pharynx
    - iv) Trachea
  - r) What does liver do to help digestion?
  - s) Coughing and sneezing are controlled by which part of brain?
  - t) Name the functional unit of kidney.
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