

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.
