21718

3 Hours / 80 Marks　　Seat No. ☐☐☐☐☐☐☐

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)　Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1.　**Solve any EIGHT of the following :**　　　　　**8 × 2 = 16**

(a)　Give the functions of hypothalamus.

(b)　Name the bones of lower limb.

(c)　Define Anatomy & Physiology.

(d)　Give the functions of tongue.

(e)　Name different organs of respiratory system.

(f)　Daw a well labelled diagram of a simple living cell.

(g)　Name the bones forming shoulder joint.

(h)　Mention disease caused by hyposecretion and hypersecretion of growth hormones.

(i)　Give the composition of intestinal juice.

(j)　Mention muscles of facial expressions.

(k)　How male urethra differes from female urethra ?

(l)　Give the components of lymphatic system.

2. **Solve any FOUR of the following :** **4 × 3 = 12**

   (a) Explain digestion of proteins.

   (b) Draw and label L.S. of skin.

   (c) Explain, how urine is formed.

   (d) Name the bones forming thoracic cage & cranium.

   (e) Give the role of oestrogen and progesterone in body.

   (f) What will be the effect of parasympathetic nervous system stimulation on :

      (i) Salivary gland ?

      (ii) Heart ?

      (iii) Respiratory system ?

3. **Solve any FOUR of the following :** **4 × 3 = 12**

   (a) Give composition and functions of cerebrospinal fluid.

   (b) Give the functions of stomach.

   (c) Name the arteries supplying blood to liver, kidney and intestine.

   (d) Draw a well labelled diagram of internal ear.

   (e) Explain, how kidneys help to maintain water balance of body.

   (f) What do you mean by

      (i) Muscle contraction ?

      (ii) Muscle fatigue ?

4. Solve any FOUR of the following : 4 × 3 = 12

(a) Draw and label the diagram of L.S. of kidney.

(b) Give classification and functions of leukocytes.

(c) Explain the role of anterior pituitary hormones in the body.

(d) Mention the different cranial nerves.

(e) Name the different parts of male reproductive system with their functions.

(f) Define and give normal values of (any two) :

(i) Tidal volume

(ii) Vital capacity

(iii) Residual volume

5. Solve any FOUR of the following : 4 × 3 = 12

(a) Explain physiology of respiration.

(b) Describe with a neat diagram how circulation of blood takes place through heart.

(c) Enlist different types of blood cells with their normal values.

(d) Describe cardiac muscle in detail.

(e) Explain physiology of hearing.

(f) Define the terms :

(i) Glaucoma

(ii) Night blindness

6. **Solve any FOUR of the following :** 4 × 4 = 16

    (a) Describe the structure and functions of uterus.

    (b) Give the composition of blood and explain, how blood clot is formed.

    (c) Draw a well labelled diagram of cerebrum showing all the lobes.

    (d) Give composition and functions of pancreatic juice.

    (e) Define shock. Explain different types of shock.

    (f) What is neuromuscular junction ? Explain physiology of neuromuscular junction.

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