

00809

21718

3 Hours / 80 Marks

Seat No.

6	5	6	1	6	2		
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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) 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) Draw 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 differs 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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