

00809

11718

3 Hours / 80 Marks

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

Marks

1. Attempt any EIGHT of the following :

8 × 2 = 16

- (a) Define the terms :
 - (i) Meninges
 - (ii) GFR (Glomerular Filtration Rate)
- (b) 'Mitochondria is called power house of cell' State reason.
- (c) Classify synovial joints with example.
- (d) State the composition of blood.
- (e) Define Suture. Name any two sutures and bones involved in it.
- (f) Draw and label reflex arc.
- (g) Write the changes occur in male at puberty.
- (h) Name the bones of upper limb.

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- (i) Define plasma and serum.
- (j) Enlist the muscles of mastication.
- (k) Explain terms : (i) Medial (ii) Lateral.
- (l) Write functions of Lymphatic system.

2. Attempt any FOUR of the following :

4 × 3 = 12

- (a) State the differences between smooth muscle and skeletal muscle.
- (b) Explain the mechanism of respiration.
- (c) Draw a well-labelled diagram of internal structure of heart showing blood flow.
- (d) Define Skeleton. State it's functions.
- (e) Explain in short :
 - (i) Rheumatoid arthritis
 - (ii) Gout
- (f) Explain formation and composition of Lymph.

3. Attempt any FOUR of the following :

4 × 3 = 12

- (a) Explain portal circulation. Give its importance.
- (b) State the functions of Liver.
- (c) Draw a well-labelled diagram of female reproductive system.
- (d) Write the effects of sympathetic and parasympathetic nerve stimulation on
 - (i) Heart (ii) Blood vessels and (iii) Pupil.
- (e) 'Pancreas is called as exo-endocrine gland.' State reason.
- (f) Define and explain neuromuscular junction.

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

- (a) Explain the three phases of menstrual cycle.
- (b) Draw a well-labelled diagram of sagittal section of an eye.
- (c) Mention the digested end products and enlist the enzymes involved in
 - (i) carbohydrate
 - (ii) protein digestion
- (d) Define hormone. Enlist the hormones secreted by anterior and posterior pituitary gland.
- (e) Explain the functions of skin.
- (f) Explain terms and write normal value :
 - (i) Vital capacity
 - (ii) Tidal volume

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

- (a) What is auditory Ossicle ? Name the bones involved in it. Explain its function.
- (b) Explain the process of urine formation.
- (c) Explain the process of micturition.
- (d) Draw labelled diagram of cerebrum showing functional areas.
- (e) State the composition and functions of gastric juice.
- (f) Name any six cranial nerves with function.

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

- (a) Classify primary tissues in detail.
- (b) Write anatomy and physiology of thyroid gland.

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- (c) Differential between arteries and veins.
 - (d) Write the mechanism of blood coagulation.
 - (e) Explain conducting system in heart.
 - (f) Define the terms :
 - (i) Myopia
 - (ii) Bronchitis
 - (iii) Menopause
 - (iv) Stenosis
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