

22223

3 Hours / 80 Marks



0809

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:** **16**
 - a) Define Anatomy and Physiology.
 - b) Enlist the functions of mitochondria.
 - c) Classify the tissues.
 - d) Write any four functions of bones.
 - e) Define and classify joints.
 - f) Name the bones of lower limb.
 - g) Define Stroke Volume and Cardiac output.
 - h) Write the composition of urine.
 - i) Mention the composition of blood.
 - j) Explain the role of calcium in muscle contraction.
 - k) Draw the well labelled diagram of T.S. of Spinal cord.
 - l) Mention the normal values of R.B.C. and W.B.C.'s in male and female.

2. **Attempt any FOUR of the following:** **12**
 - a) Explain physiology of external respiration.
 - b) Enlist any six cranial nerves with their functions.
 - c) Draw well labelled diagram of sagittal section of the eye.
 - d) Explain the formation of urine.
 - e) Define the terms Digestion and mastication. Where do they occur?
 - f) Write the effect of sympathetic nervous system stimulation on...
 - i) Heart
 - ii) Bronchi
 - iii) Eye

3. **Attempt any FOUR of the following:** **12**
 - a) Write the functions of liver.
 - b) Define the term of Hormone. Enlist the endocrine glands.
 - c) Draw a well-labelled diagram of Lymphnode.
 - d) Enlist the functions of testes and ovaries.
 - e) Write the composition and functions of Gastric juice.
 - f) Explain terms:
 - i) Osteoporosis
 - ii) Dwarfism
 - iii) Medial

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4. **Attempt any FOUR of the following:** 12
- a) Explain process of erythropoiesis.
 - b) Draw a well labelled diagram of interior of the heart.
 - c) Enlist the hormones released from anterior pituitary gland with their functions.
 - d) Explain three functions of lymphatic system.
 - e) Explain menstrual cycle.
 - f) Define and give normal values of...
 - i) Blood pressure
 - ii) Vital capacity
 - iii) Cardiac cycle
5. **Attempt any FOUR of the following:** 12
- a) Enlist bones of Axial skeleton.
 - b) Explain ABO system of Blood grouping.
 - c) Explain functions of cerebellum.
 - d) Explain physiology of Hearing.
 - e) Give the functions of Haemoglobin and mitochondria.
 - f) Define the terms:
 - i) CHF
 - ii) Leucocytosis
6. **Attempt any FOUR of the following:** 16
- a) Explain physiology of neuromuscular junction.
 - b) What are auditory ossicles? Write their functions.
 - c) Describe the structure and functions of female reproductive system.
 - d) Explain mechanism blood clotting.
 - e) Explain structure and functions of simple epithelium.
 - f) Describe muscle tone and muscle fatigue.
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