

21415

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.

Marks**1. Attempt any FIVE of the following :****10**

- (a) What is systole and diastole of heart ?
- (b) Name the 1st and 2nd Vertebrae of vertebral column.
- (c) Name different types of blood groups.
- (d) Define tissue and name fundamental tissues of human body.
- (e) Write normal counts of RBCs and WBCs.
- (f) Draw a well labelled diagram of simple living cell.
- (g) What are abnormal constituents of urine ? Write composition of normal urine.

2. Attempt any FOUR of the following :**14**

- (a) Describe mechanism of blood clotting in short.
- (b) Define :
 - (i) Myopia
 - (ii) Infertility
 - (iii) Glaucoma
- (c) Define skeleton. Give functions of skeleton.
- (d) How circulation of blood takes place through heart ?

P.T.O.

- (e) Give composition and functions of intestinal juice.
- (f) Define and give normal value of : (Any **two**)
 - (i) Residual volume
 - (ii) Tidal volume
 - (iii) Vital capacity

3. Attempt any FOUR of the following :

14

- (a) Describe physiology of urine formation.
- (b) Draw and label structure of Ear.
- (c) Define :
 - (i) Cardiac output
 - (ii) Stroke volume
 - (iii) Heart rate
- (d) Give composition and functions of CSF.
- (e) Write different functions of skin.
- (f) Describe structure and function of golgi body.

4. Attempt any FOUR of the following :

14

- (a) Draw and describe well labelled diagram of Nephron.
- (b) What is spleen ? Describe its structure and functions.
- (c) Describe different types of epithelial tissue.
- (d) Name the hormones of anterior pituitary gland and state their role in the body.
- (e) Define Blood. Give composition of blood.
- (f) Define and give normal values of
 - (i) Blood pressure
 - (ii) Pulse

5. Attempt any FOUR of the following : 14

- (a) Explain with example feedback mechanism of secretion of hormones.
- (b) Draw a well labelled diagram of cerebrum showing functional areas of cerebrum.
- (c) Describe physiology of muscle contraction in short.
- (d) Draw a neat labelled diagram of Neuron and explain.
- (e) Mention the functions of Ovaries.
- (f) Define :
 - (i) Meningitis
 - (ii) Leukemia
 - (iii) Stenosis

6. Attempt any FOUR of the following : 14

- (a) What is puberty ? What physical and physiological changes occur in female at puberty ?
 - (b) Classify Leucocytes and describe their functions.
 - (c) List any seven cranial nerves and write their functions.
 - (d) Differentiate between sympathetic nervous system and parasympathetic nervous system.
 - (e) Define and explain the following terms :
 - (i) Haemolytic anaemia
 - (ii) Atherosclerosis
 - (iii) Nephritis
 - (f) Give composition and functions of salivary glands.
-

