22347

11920

3 Hours / 70 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) Assume suitable data, if necessary.
 - (6) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1. Attempt any FIVE of the following:

10

- a) List any two functions of joints.
- b) Define heart rate and mention its normal value.
- c) Name the instruments that can be helpful to doctor to examine the respiratory tract.
- d) Give two functions of skin.
- e) List endocrine glands.
- Draw the structure of Neuron. f)
- g) Name the organs involved in digestive system.

d) Explain classification of bones with examples.

Differentiate between CNS and ANS. (any four points)

2.

3.

4.

| | | viarks |
|----|--|--------|
| | Attempt any THREE of the following: | 12 |
| a) | Explain anatomy of Heart with a neat labeled diagram. | |
| b) | Name any four parts involved in respiratory system with one function of each. | |
| c) | Calculate cardiac output, if a person has resting heart rate of 74 beats/min and stroke volume of 70 ml/beat. Judge whether person will need medication on the basis of provided data. | |
| d) | Name any two hormones with its functions secreted by thyroid gland. | |
| | Attempt any THREE of the following: | 12 |
| a) | A patient with blood group B requires immediate blood transfusion, suggest type of blood that can be given to him. Also justify the reason behind it. | |
| b) | Draw and explain female reproductive system. | |
| c) | Draw a labeled structure of cell showing various organelles. | |
| d) | Define blood pressure and give its normal value in adults. Also name the instrument used to measure blood pressure. | |
| | Attempt any THREE of the following: | 12 |
| a) | Normally a person breath air in and he bring oxygen into lungs, show the pathway of air inside the body with suitable diagram and explain it. | |
| b) | Describe function of nephron with a labeled diagram. | |
| c) | Identify the type of endocrine gland to be treated for the following symptoms found in children and explain that gland. | owing |
| | (i) Poor growth | |
| | (ii) Vision problem. | |

22347 [3]

| 5. | | Attempt any <u>TWO</u> of the following: | 12 |
|----|----|---|----|
| | a) | Describe mechanism of formation of urine. | |
| | b) | Describe anatomy of eye with suitable diagram. | |
| | c) | Explain mechanism of hearing with a neat labeled diagram. | |
| 6. | | Attempt any <u>TWO</u> of the following: | 12 |
| | a) | Explain anatomy of digestive system with a labeled diagram. | |
| | b) | Explain respiratory system with a suitable diagram. | |
| | c) | Describe central nervous system with a neat diagram. | |

Marks