



XI-SCI : Biology
Skeleton and Movements,

DATE:

TIME: 1 hour 30
minutes

MARKS: 25

SEAT NO:

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Note:-

1. All Questions are compulsory.
2. Numbers on the right indicate full marks.

Section A

Q.1 Select and write the correct answer.

(4)

1. The hollow space in the middle of bones is filled with
A) Air B) blood
C) bone cells D) bone marrow
2. Functional unit of striated muscle is
A) Cross bridges B) Myofibril
C) Sarcomere D) Z-band
3. Human vertebral column shows _____curvatures.
A) 5 B) 4
C) 3 D) 7
4. Peristaltic movements are controlled by
A) Cardiac B) Smooth
C) Striated D) None of the above

Q.2 Answer the following.

(3)

1. Why are long bones slightly bent and not straight?
2. What are antagonistic muscles? Explain with example.
3. Which type of muscles is present in the diaphragm of the respiratory system?

Section B
Attempt any Four

- Q.3 What are joints? What are their types? **(2)**
- Q.4 Name the type of muscles which bring about running and speaking. **(2)**
- Q.5 Give the functions of human skeleton. **(2)**
- Q.6 Differentiate between (i) Flexor and extensor muscles (ii) Pronator and supinator **(2)**
- Q.7 Human beings can hold an object in a better manner than monkeys. Why? **(2)**
- Q.8 What do you understand by muscle twitch? **(2)**

Section C
Attempt any Two

- Q.9 Enlist the bones of cranium. **(3)**

Q.10 Give schematic plan of human skeleton. (3)

Q.11 Write a short note on Antagonistic muscles. (3)

Section D
Attempt any One

Q.12 Classify various types of joints found in human body. Present the information in the form of chart. Give examples of each type. (4)

Q.13 Write short notes on (i) Actin filament (ii) Myosin filament (iii) Role of calcium ions in contraction and relaxation of muscles. (4)