



BRAINWARE UNIVERSITY

Term End Examination 2024-2025

Programme – B.Sc.(MLT)-2022/B.Sc.(MLT)-2023/B.Sc.(MLT)-2024

Course Name – Human Anatomy

Course Code - BMLTC101

(Semester I)

Full Marks : 60

Time : 2:30 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Multiple Choice Type Question)

1 x 15=15

1. Choose the correct alternative from the following :

- (i) Label the part that controls the respiratory system.
 - a) Spinal cord
 - b) Medulla Oblongata
 - c) Neuron
 - d) kidney
- (ii) Identify the hardest bone in the body.
 - a) Maxilla
 - b) Mandible
 - c) Femur
 - d) Patella
- (iii) Select the correct sequence of vertebral column in human being.
 - a) C7 Th12 L5 S5 Co4
 - b) C7 Th12 L6 S4 Co8
 - c) C7 Th12 L5 S5 Co3
 - d) C7 Th12 L5 S4 Co5
- (iv) Select the term that can be used to refer to the "frontal plane".
 - a) Coronal plane
 - b) Transverse plane
 - c) Horizontal plane
 - d) Oblique plane
- (v) State what comprises the human nervous system:
 - a) the central nervous system and the peripheral nervous system
 - b) the central nervous system and the somatic nervous system
 - c) the sympathetic and the parasympathetic nervous systems
 - d) the autonomic and the somatic nervous systems
- (vi) Predict the reflex actions which involve brain:
 - a) Stimulus
 - b) Cerebral reflexes
 - c) Spinal reflexes
 - d) Reflex arc
- (vii) Select the correct option: Afferent neurons carry nerve impulses from-
 - a) CNS to muscles
 - b) CNS to receptors
 - c) receptors to CNS
 - d) effector organs to CNS
- (viii) Report which of the following parts of the brain controls the body temperature and urge of eating:

- a) thalamus
c) pons
- b) cerebellum
d) Hypothalamus
- (ix) The human neural system is associated to:
a) CNS
c) BOTH A AND B
b) PNS
d) MNS
- (x) The gap between two adjacent myelin sheath is named as:
a) Nodes of ranvier
c) Synaptic knob
b) Axon terminal
d) Schwan Cell
- (xi) Which gland is not endocrine in nature:
a) Adrenal
c) Pancreas
b) Pituitary
d) Lacrimal
- (xii) The difference between endocrine and exocrine glands is that:
a) endocrine glands are ductless, exocrine glands release secretions into ducts or at the surface of the body
c) endocrine glands are interconnected, exocrine glands are totally independent
b) endocrine glands are formed by epithelial tissue, exocrine glands are connective tissues primarily
d) endocrine glands release hormones, exocrine glands release waste
- (xiii) Predict the correct answer, maximum quantity of air one can expire after maximum inspiration:
a) residual air
c) total lung capacity
b) tidal volume
d) vital capacity
- (xiv) Choose the location of scapula:
a) Posteriorly over 3rd and 7th rib
c) Posteriorly over the level of 2nd to 7th ribs
b) Anterior to sternum
d) below thoracic 7 vertebrae
- (xv) Identify the process by which bone tissue is formed and developed during childhood and adolescence:
a) Osteogenesis
c) Resorption
b) Calcification
d) Ossification

Group-B
(Short Answer Type Questions)

3 x 5=15

2. Summarize the sutures present in human skull. (3)
3. Illustrate the forms of a bone depending on bone density. (3)
4. Explain the functions of the circulatory system. (3)
5. Discriminate between macroscopic and microscopic anatomy. (3)
6. Draw a neatly labelled diagram of a typical thoracic vertebra. (3)

OR

- Draw a neatly labelled diagram of a typical lumbar vertebra. (3)

Group-C
(Long Answer Type Questions)

5 x 6=30

7. Recall different body movements along with examples. (5)
8. Illustrate the subdivisions of anatomy. (5)
9. Explain the different germ layers and body structures developing from them. (5)
10. Discuss about the structure of a typical Nephron in detail. Support your answer with a neatly labeled diagram. (5)

11. Write a note on the circulatory system.

(5)

12. Analyze the anatomy of blood brain barrier and it's importance in diseases of brain.

(5)

OR

Analyze the arterial supply and venous drainage of heart.

(5)
