



BRAINWARE UNIVERSITY

Term End Examination 2023-2024
Programme – B.Sc.(MLT)-2022/B.Sc.(MLT)-2023
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) Choose the correct option from, the following the purpose of having valves in the cardiovascular system is to
- a) provide sounds so that heart health can be monitored
 - b) ensure that blood flows in one direction.
 - c) prevent blood from flowing too quickly.
 - d) regulate blood pressure
- (ii) Interpret total number of alveoli present in the human lungs is estimated to be around
- a) 1 billion
 - b) 800 million
 - c) 500million
 - d) 1500 million
- (iii) During open-heart surgery, which major vessel in the mediastinum is often temporarily clamped to stop blood flow?
- a) Aorta
 - b) Pulmonary artery
 - c) Superior vena cava
 - d) Inferior vena cava
- (iv) When performing an intramuscular injection, which muscle is commonly used in the upper arm?
- a) Quadriceps
 - b) Deltoid
 - c) Gluteus maximus
 - d) Gastrocnemius
- (v) Which part of the lung is responsible for the exchange of oxygen and carbon dioxide with the bloodstream?
- a) Bronchi
 - b) Alveoli
 - c) Trachea
 - d) Bronchioles
- (vi) What is the main muscle responsible for breathing and separating the thoracic and abdominal cavities?
- a) Pectoralis major
 - b) Diaphragm
 - c) Rectus abdominis
 - d) Trapezius
- (vii) Label the part that controls the heart?
- a) Spinal cord
 - b) Medulla Oblongata

- c) Neuron
(viii) Which is the hardest bone in the body
a) femur
c) wrist
(ix) Tell the bones of the shoulder
a) humerus
c) scapula and clavicle both
(x) Interpret that the system of the body which coordinates and controls its activity is known as
a) Organ system
c) Nervous tissue
(xi) Select the hormone which is secreted by the kidney
a) Oestrogen
c) Erythropoietin
(xii) Reflex actions which involve brain are called:
a) Stimulus
c) Spinal reflexes
(xiii) The gap between two adjacent myelin sheath
a) Nodes of ranvier
c) Synaptic knob
(xiv) Name the cells responsible for breaking down and resorbing bone tissue during bone remodeling:
a) Osteoblast
c) Osteoid
(xv) Choose the cell of pancreas which secretes insulin
a) α Cell
c) γ Cell
- d) Cerebrum
b) Jaw bone
d) skull bone
b) humerus, scapula both
d) scapula
b) Muscular system
d) Nervous system
b) TSH
d) Vasopressin
b) Cerebral reflexes
d) Reflex arc
b) axon terminal
d) Schwan Cell
b) Osteoclast
d) Osteocyte
b) β Cell
d) None of these

Group-B

(Short Answer Type Questions)

3 x 5=15

2. Illustrate the forms of a bone depending on bone density (3)
3. State the following defects related to bone: Fracture, Osteoporosis, Acromegaly, Ricket (3)
4. Describe the Recesses of Pleura. (3)
5. Establish the role of cerebellum. (3)
6. Analyze the importance of lumbar puncture at between the third and fourth lumbar vertebrae. (3)

OR

Analyze the significance of portal vein

(3)

Group-C

(Long Answer Type Questions)

5 x 6=30

7. Contrast between osteogenesis & ossification (5)
8. Apply anatomical knowledge of the appendix for diagnosis of acute appendicitis. (5)
9. Examine the formation and circulation of CSF. (5)
10. Identify the bones of appendicular skeleton (5)
11. Write about osteoarthritis (5)
12. Analyze the anatomy of the pleura and its recesses for drainage of pleural fluid (5)

OR

Analyze the importance of different quadrants of the abdomen for the diagnosis of abdominal diseases.

(5)