



BRAINWARE UNIVERSITY

Term End Examination 2022
Programme – B.Optomety-2022
Course Name – General Human Anatomy
Course Code - BOPTOC101
(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) Adduction describes which of the following?
- a) It moves the structure toward the body's midline reference point b) It moves the structure in a circular motion
- c) It moves the structure in a circular motion d) It rotates the structure around its long axis
- (ii) Which statement describes flexion?
- a) Movement that increases the angle between two structures or joints, causing the structures to straighten or move apart b) Movement that decreases the angle between two structures or joints, causing the structures to bend or move closer together
- c) Flexing a muscle d) Relaxing a muscle
- (iii) Which statement describes extension?
- a) Movement that increases the angle between two structures or joints, causing the structures to straighten or move apart b) Movement that decreases the angle between two structures or joints, causing the structures to bend or move closer together
- c) Flexing a muscle d) Relaxing a muscle
- (iv) Select the following is called "Master Gland"
- a) Thyroid gland b) Pituitary gland
- c) Hypothalamus gland d) None of these
- (v) Identify from the following is a moving skull bone?
- a) Femur b) Mandible
- c) Atlas d) Tibia
- (vi) Select the correct joints from the following is an example of a hinge joint?
- a) Between humerus and pectoral girdle b) Between knee joints
- c) Between carpals d) Between carpals and metacarpals
- (vii) Choose the Centre for heat, touch, cold & pressure are in-
- a) Frontal lobe b) Occipital lobe
- c) Parietal lobe d) Frontal as well as occipital lobe both

- (viii) Choose the part of the brain who controls the heart?
- a) Spinal cord
b) Medulla oblongata
c) Neuron
d) None of these
- (ix) Collect from the following is one of the parts of the hind brain?
- a) Hypothalamus
b) Cerebellum.
c) Corpus callosum
d) Spinal cord
- (x) Select the correct option: The endothelium is found in the _____.
- a) tunica intima
b) tunica media
c) tunica externa
d) lumen
- (xi) Select the right option:
- a) The longer the vessel, the lower the resistance and the greater the flow.
b) As blood volume decreases, blood pressure and blood flow also decrease.
c) Increased viscosity increases blood flow.
d) All of these are true.
- (xii) Choose the option which extends the entire length of a muscle fibre:
- a) Sarcomere
b) Myofibril
c) Myosin filament
d) Actin filament
- (xiii) Find error:
- a) Extensibility is a property of muscle.
b) Excitability is a property of muscle.
c) Degradability is a property of muscle.
d) Elasticity is a property of muscle.
- (xiv) Prepare a correct order of organization of skeletal muscle tissue (smallest to largest unit).
- a) fascicle, muscle, muscle fibre, myofibril
b) muscle, myofibril, muscle fibre, fascicle
c) muscle fibre, fascicle, muscle, myofibril
d) myofibril, muscle fibre, fascicle, muscle
- (xv) Write the name of the protein which blocks the myosin-binding site on actin in the relaxed muscle.
- a) titin
b) troponin
c) myoglobin
d) tropomyosin

Group-B

(Short Answer Type Questions)

3 x 5=15

2. Predict the locations where the non-striated muscles can be found. (3)
3. Write about the different types of cells/muscle fibers found in the heart. (3)
4. Write about the layers of the Meninges. (3)
5. Explain the responsibilities of Somatic Nervous system (3)
6. Analyze the change in the diameter of different blood vessels types. (3)

OR

Compound X can contract vascular smooth muscles. Infer the change in blood pressure if compound X is injected in the body? (3)

Group-C

(Long Answer Type Questions)

5 x 6=30

7. Explain about the Central Nervous System with suitable labelled diagram (5)
8. Explain about the human axial skeleton, with giving suitable labelled diagrams. (5)
9. Choose any two muscles in the upper limb and mention their function. (5)
10. Describe about Endocrine system, its major organs and functions briefly. (5)
11. Construct a labelled diagram of the structure of sarcomere and describe it briefly. (5)

OR

- Write the properties of cardiac muscle. (5)
12. Compare the lymphatic system and blood vasculature. (5)

OR

Differentiate between the different layers present in the blood vessels. (5)
