REV-01
BOP/15/20

2024/11

SET A

BACHELOR OF OPTOMETRY
FIRST SEMESTER
GENERAL ANATOMY
BOP-105

[USE OMR SHEET FOR OBJECTIVE PART]

Duration: 3 hrs. **Full Marks: 70**

Objective

Time: 30 mins. **Marks: 20**

Choose the correct answer from the following: ***1×20=20***

1. Which of the following is NOT a division of the autonomic nervous system?
   a. Sympathetic b. Parasympathetic
   c. Somatic d. Enteric
2. The Haversian system is typically found in:
   a. Spongy bone b. Cartilage
   c. Compact bone d. Periosteum
3. The optic nerve is primarily composed of axons of:
   a. Rods and cones b. Bipolar cells
   c. Ganglion cells d. Amacrine cells
4. What is the primary role of the parasympathetic nervous system?
   a. Fight-or-flight response b. Rest-and-digest response
   c. Regulating body temperature d. Controlling voluntary muscle movement
5. Osteocytes are located within:
   a. The Haversian canal b. The lamellae
   c. The lacunae d. The periosteum
6. The joint between the radius and ulna is a:
   a. Pivot joint b. Hinge joint
   c. Gliding joint d. Saddle joint
7. The part of a neuron that receives signals from other neurons is the:
   a. Axon b. Dendrite
   c. Soma d. Synapse
8. The optic chiasm is a point where:
   a. The optic nerves partially cross over b. The optic nerves join together
   c. The optic nerves terminate d. The optic nerves exit the skull
9. Which bone cells are responsible for bone formation?
   a. Osteoblasts b. Osteoclasts
   c. Osteocytes d. Chondrocytes
10. The branch of anatomy that deals with the structure of organs and organ systems is:
    a. Gross anatomy b. Microscopic anatomy
    c. Histology d. Embryology

11. Which type of joint allows for the greatest range of motion?
    a. Synarthrosis
    b. Amphiarthrosis
    c. Diarthrosis
    d. Fibrous joint

12. Which type of joint is found between the bodies of the vertebrae of the spine?
    a. Ball-and-socket joint
    b. Hinge joint
    c. Gliding joint
    d. Pivot joint

13. Bursae are typically found in areas of the body where:
    a. Bones meet
    b. Muscles attach to bones
    c. Tendons and ligaments slide over bones
    d. All of the above

14. A fracture of the surgical neck of the humerus can result in damage to the:
    a. Axillary nerve
    b. Radial nerve
    c. Median nerve
    d. Ulnar nerve

15. Elastic cartilage is found in:
    a. The trachea
    b. The external ear
    c. The intervertebral discs
    d. The meniscus of the knee

16. The sectional plane that divides the body into anterior and posterior portions is:
    a. Transverse plane
    b. Sagittal plane
    c. Coronal plane
    d. Oblique plane

17. All of the following bones are pneumatic bones except:
    a. Maxilla
    b. Mandible
    c. Frontal
    d. Sphenoid

18. In adults, the red bone marrow is found in all of the following sites except:
    a. Sternum
    b. Ribs
    c. Vertebrae
    d. Medullary cavity of long bones

19. All statements are true regarding hyaline cartilage except that it:
    a. Has a homogeneous bluish-stained matrix
    b. Has a clear glassy appearance
    c. Forms cartilaginous model of most of the long bones
    d. Forms menisci of knee joint

20. All of the following bones are examples of sesamoid bone except:
    a. Patella
    b. Fabella
    c. Pisiform
    d. Scaphoid

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Descriptive

Time : 2 hr. 30 mins. Marks : 50

[Answer question no.1 & any four (4) from the rest]

1. Discuss the ultra structure of a eukaryotic cell with a neat labeled diagram. Explain the role of each cell organelle. 10
2. What are the bony orbits? What structures does the bony orbit contain? How many Vertebrae are there in the human body and how do you differentiate between them? Enumerate the structure passing through foramen magnum. 10
3. With a neat diagram, name and draw the male reproductive system. Define what is spermatogenesis. Describe testes under the following headings: (a) Location (b) Gross anatomy (c) Function (d) Clinical anatomy 10
4. Name the accessory organs of digestive system. Enumerate the function of liver. What are the components of extrahepatic biliary apparatus? What are the differences between the small intestine and large intestine? 10
5. Describe the different types of connective tissues found in the human body. Highlight their structural features and functions. 10
6. Compare and contrast the three types of muscle tissue, focusing on their structure, location, and function. 10
7. Describe the different types of epithelial tissues found in the human body. Explain their structural features and functions. 10
8. Describe the lymphatic system in detail, focusing on its anatomical components and functions. 10

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