



# BRAINWARE UNIVERSITY

**Term End Examination 2021 - 22**

**Programme – Bachelor of Science in Medical Radiology & Imaging Technology**

**Course Name – Human Anatomy and Physiology Part-1**

**Course Code - BMRIT201**

**( Semester II )**

**Time allotted : 1 Hrs.15 Min.**

**Full Marks : 60**

[The figure in the margin indicates full marks.]

## Group-A

(Multiple Choice Type Question)

1 x 60=60

*Choose the correct alternative from the following :*

- (1) Anatomical position has following features except:
 

a) Person standing erect	b) Forearms are pronated
c) Feet together	d) Eyes looking forward
- (2) Define abduction:
 

a) Movement away from central axis	b) Movement towards central axis
c) Approximation of the dorsal surfaces.	d) Approximation of the ventral axis
- (3) What is lateral rotation?
 

a) posterior surface of a bone of limb is turned away from midline	b) anterior surface of a bone of limb is turned away from midline.
c) posterior surface of a bone of limb is turned away from lateral line	d) Movement will not occur
- (4) Group of cells, which is similar in structure and function are structured into
 

a) Muscles	b) bone
c) organ system	d) tissue
- (5) Which of the following does not belong to the class of covering and lining epithelium?
 

a) Simple squamous epithelium	b) Simple columnar
c) Glandular epithelium	d) Simple cuboidal
- (6) Which of the following is NOT the function of areolar connective tissues?
 

a) Strength	b) Support
c) Forms stroma of organs	d) Elasticity
- (7) All the following are non striated muscles except
 

a) Palmaris brevis	b) Muscle of iris
c) Dartos muscle of scrotum	d) Arrector pilorum
- (8) Which muscle has the longest muscle fibres?
 

a) deltoid	b) soleus
c) gluteus maximus	d) sartorius

- (9) Which of the following structure has maximum blood supply
- a) bones
  - b) cartilage
  - c) tendon
  - d) ligaments
- (10) What type of contraction is characterized by a rapid, jerky response to a single stimulus?
- a) summation
  - b) treppe
  - c) tonic
  - d) twitch
- (11) The smallest, functional unit of contraction is \_\_\_\_\_.
- a) fibers
  - b) myofibril
  - c) filaments
  - d) sarcomere
- (12) Neuroglial cells are derived from neuroectoderm except
- a) astrocytes
  - b) microglia
  - c) oligodendrocytes
  - d) glioblasts
- (13) Bipolar neurons are present in
- a) spiral ganglia
  - b) vestibular ganglia
  - c) Olfactory cells
  - d) Neurons in posterior horn of spinal cord
- (14) The neurons arise from the embryonic cells is called
- a) neuroblast
  - b) cytoblast
  - c) dendrocyte
  - d) erythroblast
- (15) Synaptic vesicles are most commonly located
- a) Within the axon hillock
  - b) Within presynaptic terminal
  - c) Within synaptic cleft
  - d) myelin sheath
- (16) The first bone to start ossifying is
- a) mandible
  - b) femur
  - c) clavicle
  - d) humerus
- (17) Which of the following is a hinge joint?
- a) radioulnar
  - b) wrist
  - c) Metacarpophalangeal
  - d) Elbow
- (18) Mention the name of the joint present between epiphysis and diaphysis
- a) fibrous
  - b) Primary cartilaginous
  - c) Secondary cartilaginous
  - d) Synovial
- (19) Which of the following is the largest segment of the movable part of the vertebral column?
- a) Coccygeal
  - b) Cervical
  - c) Lumbar vertebrae
  - d) Thoracic
- (20) Choose the correct vertebral formula of vertebral column of human being.
- a) C7 Th13 L4 S5 Co4
  - b) C7 Th12 L5 S5 Co4
  - c) C7 Th13 L5 S5 Co4
  - d) C7 Th12 L5 S5 Co1
- (21) Which is not a fibrous joint?
- a) suture
  - b) gomphosis
  - c) xiphisternal
  - d) inferior tibiofibular
- (22) All the following are components of appendicular skeleton except
- a) clavicle
  - b) femur
  - c) pelvic bone
  - d) vertebrae
- (23) Bones united by fibrous tissue, such as the sutures in the skull are
- a) synovial joint
  - b) cartiliginous joint
  - c) fibrous joint
  - d) ball and socket joint
- (24) Shoulder joint is a type of
- a) hinge joint
  - b) ball and socket joint

- c) pivot joint  
d) fibrous joint
- (25) A long bone has  
a) one epiphysis and one diaphysis  
b) two epiphysis and two diaphysis  
c) one epiphysis and two diaphysis  
d) two epiphysis and one diaphysis
- (26) Pulmonary ventilation movements are due to  
a) Diaphragm  
b) Wall of lungs  
c) Costal muscles and diaphragm  
d) Costal muscles
- (27) Hypoxia occurs due to  
a) Rise in level of CO<sub>2</sub>  
b) Fall in level of CO<sub>2</sub>  
c) Rise in level of O<sub>2</sub>  
d) Fall in level of O<sub>2</sub>
- (28) The epithelial tissues present on the inner surface of bronchioles and fallopian tubules are \_\_\_\_\_  
a) Squamous  
b) Ciliated  
c) Glandular  
d) Cuboidal
- (29) Lungs are covered by \_\_\_\_\_  
a) pleural membrane  
b) peritoneum  
c) pericardium  
d) muscles
- (30) Where does the arterial blood come from those supplies to visceral pleura?  
a) Bronchial veins  
b) Intercostal nerves  
c) Bronchial arteries  
d) The costodiaphragmatic recesses
- (31) What is the dry form of inflammation without a significant collection of fluid in the pleural cavity called?  
a) intercostal nerves  
b) pleura  
c) pleurisy  
d) Pneumothorax
- (32) What does the pulmonary ligament contain?  
a) The inner surface of the thoracic wall  
b) Interpleural space/ Pleural cavity  
c) A thin layer of areolar tissue with a few lymphatics  
d) The pulmonary veins to expand during the increased venous return, such as during exercise
- (33) Place where trachea bifurcates into right and left bronchus is \_\_\_\_\_  
a) bronchi  
b) carina  
c) trachea  
d) hilus
- (34) What part of parietal pleura covers the superior surface of the diaphragm?  
a) Mediastinal pleura  
b) Diaphragmatic pleura  
c) Intercostal nerves  
d) Pneumothorax
- (35) Which of the following does not belong to conducting portion of the respiratory system?  
a) nose  
b) pharynx  
c) alveoli  
d) bronchioles
- (36) \_\_\_\_\_ acts as air conditioners.  
a) Nasal chambers  
b) larynx  
c) pharynx  
d) lungs
- (37) Respiratory center controlled by pons is  
a) Gasping  
b) pneumotaxic  
c) Inspiratory  
d) Expiratory
- (38) Vital capacity in man (in Litre) is  
a) 4.2  
b) 4.8  
c) 6  
d) 6.8
- (39) CO<sub>2</sub> affects respiratory centre via

- a) Aortic bodies      b) Carotid bodies  
c) Inflation and deflation receptors      d) H<sup>+</sup> concentration
- (40) Carbon monoxide is released in lungs from  
a) Iron of heme molecule      b) Plasma  
c) Transferin      d) Serum
- (41) H<sub>2</sub>CO<sub>3</sub> is converted into CO<sub>2</sub> and H<sub>2</sub>O with the help of an enzyme known as  
a) Carboxylase      b) Carbonic dehydrogenase  
c) Carbonic anhydrase      d) Carbonic anhydrase
- (42) Bronchitis is  
a) bacterial infection      b) viral infection  
c) Protozoan infection      d) fungal infection
- (43) The following muscles made up the borders of the popliteal fossa EXCEPT:  
a) biceps femoris      b) gastrocnemius  
c) popliteus muscle      d) plantaris
- (44) The tendons that strengthen and stabilize the knee joint on the lateral side consist of all of the following except:  
a) Biceps femoris      b) Gastrocnemius  
c) Iliotibial tract      d) Soleus
- (45) A muscle is known as Tailor muscle  
a) Iliacus      b) psoas major  
c) Sartorius      d) Pectineus
- (46) The sesamoid bone of the lower limb is:  
a) Pubis      b) Patella  
c) Ilium      d) Calcaneum
- (47) Calf muscle is  
a) Tibialis anterior      b) sartorius  
c) adductor magnus      d) gastrocnemius
- (48) Hamstring muscle originates from  
a) Pubis      b) iliac crest  
c) ischial tuberosity      d) head of femur
- (49) Total Number of bones in Axial Skeleton  
a) 206      b) 80  
c) 120      d) 126
- (50) How many bones does human ankle has?  
a) 4      b) 5  
c) 6      d) 7
- (51) The cell is not applied for  
a) Fungi      b) Bacteria  
c) Algae      d) Virus
- (52) The function of the centrosome is  
a) Osmoregulation      b) Protein Synthesis  
c) Formation of Spindle fibres      d) Secretion
- (53) The \_\_\_\_\_ is connective tissue that surrounds the entire muscle.  
a) Endomysium      b) Perimysium  
c) Epimysium      d) Sarcolemma
- (54) A cord or strap of dense tissue that connects a muscle to bone is called  
a) Tendon      b) Ligament

- c) Arthritis  
d) Bursa
- (55) A motor unit is made up of \_\_\_\_\_.
- a) All the muscle fibers within a given muscle  
b) A motor neuron and the muscle fibers it innervates  
c) All the neurons going into an individual section of the body  
d) A fascicle & a nerve
- (56) Among the following which one is not the location of smooth muscle cells?
- a) Iris of the eye  
b) Heart wall  
c) Airways to the lungs  
d) Urinary bladder
- (57) The supporting and nutritive cells found in brains are
- a) Ependymal cells  
b) Microglia  
c) Astrocytes  
d) Oligodendrocytes
- (58) Which of the following connective tissue envelopes the bone?
- a) Periosteum  
b) Myocardium  
c) Marrow  
d) Pericardium
- (59) Which cell secretes the matrix for bone formation?
- a) Osteoclastoma  
b) Osteoclast  
c) Osteoblasts  
d) Mesoblasts
- (60) The joint between atlas and axis is \_\_\_\_\_
- a) Ball and socket joint  
b) Saddle joint  
c) Pivot joint  
d) Angular joint