



# 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  
c) Dartos muscle of scrotum
- b) Muscle of iris  
d) Arrector pilorum
- (8) Which muscle has the longest muscle fibres?  
a) deltoid  
c) gluteus maximus
- b) soleus  
d) sartorius
- (9) Which of the following structure has maximum blood supply  
a) bones  
c) tendon
- b) cartilage  
d) ligaments
- (10) What type of contraction is characterized by a rapid, jerky response to a single stimulus?  
a) summation  
c) tonic
- b) treppe  
d) twitch
- (11) The smallest, functional unit of contraction is \_\_\_\_\_.  
a) fibers  
c) filaments
- b) myofibril  
d) sarcomere
- (12) Neuroglial cells are derived from neuroectoderm except  
a) astrocytes  
c) oligodendrocytes
- b) microglia  
d) glioblasts
- (13) Bipolar neurons are present in  
a) spiral ganglia  
c) Olfactory cells
- b) vestibular ganglia  
d) Neurons in posterior horn of spinal cord
- (14) The neurons arise from the embryonic cells is called  
a) neuroblast  
c) dendrocyte
- b) cytoblast  
d) erythroblast
- (15) Synaptic vesicles are most commonly located  
a) Within the axon hillock  
c) Within synaptic cleft
- b) Within presynaptic terminal  
d) myelin sheath
- (16) The first bone to start ossifying is  
a) mandible  
c) clavicle
- b) femur  
d) humerus
- (17) Which of the following is a hinge joint?  
a) radioulnar  
c) Metacarpophalangeal
- b) wrist  
d) Elbow
- (18) Mention the name of the joint present between epiphysis and diaphysis  
a) fibrous  
c) Secondary cartilaginous
- b) Primary cartilaginous  
d) Synovial
- (19) Which of the following is the largest segment of the movable part of the vertebral column?  
a) Coccygeal  
c) Lumbar vertebrae
- b) Cervical  
d) Thoracic
- (20) Choose the correct vertebral formula of vertebral column of human being.  
a) C7 Th13 L4 S5 Co4  
c) C7 Th13 L5 S5 Co4
- b) C7 Th12 L5 S5 Co4  
d) C7 Th12 L5 S5 Co1
- (21) Which is not a fibrous joint?

- a) suture  
c) xiphisternal
- b) gomphosis  
d) inferior tibiofibular
- (22) All the following are components of appendicular skeleton except  
a) clavicle  
c) pelvic bone
- b) femur  
d) vertebrae
- (23) Bones united by fibrous tissue, such as the sutures in the skull are  
a) synovial joint  
c) fibrous joint
- b) cartiliginous joint  
d) ball and socket joint
- (24) Shoulder joint is a type of  
a) hinge joint  
c) pivot joint
- b) ball and socket joint  
d) fibrous joint
- (25) A long bone has  
a) one epiphysis and one diaphysis  
c) one epiphysis and two diaphysis
- b) two epiphysis and two diaphysis  
d) two epiphysis and one diaphysis
- (26) Pulmonary ventilation movements are due to  
a) Diaphragm  
c) Costal muscles and diaphragm
- b) Wall of lungs  
d) Costal muscles
- (27) Hypoxia occurs due to  
a) Rise in level of CO<sub>2</sub>  
c) Rise in level of O<sub>2</sub>
- b) Fall in level of CO<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  
c) Glandular
- b) Ciliated  
d) Cuboidal
- (29) Lungs are covered by \_\_\_\_\_  
a) pleural membrane  
c) pericardium
- b) peritoneum  
d) muscles
- (30) Where does the arterial blood come from those supplies to visceral pleura?  
a) Bronchial veins  
c) Bronchial arteries
- b) Intercostal nerves  
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  
c) pleurisy
- b) pleura  
d) Pneumothorax
- (32) What does the pulmonary ligament contain?  
a) The inner surface of the thoracic wall  
c) A thin layer of areolar tissue with a few lymphatics
- b) Interpleural space/ Pleural cavity  
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  
c) trachea
- b) carina  
d) hilus
- (34) What part of parietal pleura covers the superior surface of the diaphragm?

- a) Mediastinal pleura  
c) Intercostal nerves
- b) Diaphragmatic pleura  
d) Pneumothorax
- (35) Which of the following does not belong to conducting portion of the respiratory system?  
a) nose  
c) alveoli
- b) pharynx  
d) bronchioles
- (36) \_\_\_\_\_ acts as air conditioners.  
a) Nasal chambers  
c) pharynx
- b) larynx  
d) lungs
- (37) Respiratory center controlled by pons is  
a) Gasping  
c) Inspiratory
- b) pneumotoxic  
d) Expiratory
- (38) Vital capacity in man (in Litre) is  
a) 4.2  
c) 6
- b) 4.8  
d) 6.8
- (39) CO<sub>2</sub> affects respiratory centre via  
a) Aortic bodies  
c) Inflation and deflation receptors
- b) Carotid bodies  
d) H<sup>+</sup> concentration
- (40) Carbon monoxide is released in lungs from  
a) Iron of heme molecule  
c) Transferin
- b) Plasma  
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  
c) Carbonic dehydrase
- b) Carbonic dehydrogenase  
d) Carbonic anhydrase
- (42) Bronchitis is  
a) bacterial infection  
c) Protozoan infection
- b) viral infection  
d) fungal infection
- (43) The following muscles made up the borders of the popliteal fossa EXCEPT:  
a) biceps femoris  
c) popliteus muscle
- b) gastrocnemius  
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  
c) Iliotibial tract
- b) Gastrocnemius  
d) Soleus
- (45) A muscle is known as Tailor muscle  
a) Iliacus  
c) Sartorius
- b) psoas major  
d) Pectineus
- (46) The sesamoid bone of the lower limb is:  
a) Pubis  
c) Illium
- b) Patella  
d) Calcaneum
- (47) Calf muscle is  
a) Tibialis anterior  
c) adductor magnus
- b) sartorius  
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 |