



# BRAINWARE UNIVERSITY

**Term End Examination 2021 - 22**

**Programme – Bachelor of Science in Medical Lab Technology**

**Course Name – Human Anatomy and Physiology**

**Course Code - BMLT201**

**( 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) If movement away from the medial plane occurs frontally is called
 

a) Abduction	b) Adduction
c) Circumduction	d) Flexion
- (2) The term cell was given by
 

a) Robert Hooke	b) Schwann
c) De Bary	d) Tatum
- (3) Name the tissues that are involved in the formation of tissue membranes.
 

a) Epithelial tissue	b) Connective tissue
c) Nervous tissue	d) Muscular tissue
- (4) 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
- (5) Which of the following does not come under the category of loose connective tissue?
 

a) Areolar tissue	b) Reticular connective tissue
c) Elastic connective tissue	d) Adipose tissue
- (6) Which of the following is NOT the function of areolar connective tissues?
 

a) Strength	b) Support
c) deposition of fat	d) Elasticity
- (7) Vital stain is used to detect the following cell:
 

a) Reticular cell	b) Plasma cell
c) Macrophage cell	d) Mast cells
- (8) Which of the following structure is not covered by epithelial tissue :-
 

a) Skin	b) Digestive gland
c) Blood vessels	d) Cartilage
- (9) Which type of epithelium is present in the inner lining of large bronchi :-
 

a) Squamous epithelium	b) Pseudo - stratified epithelium
------------------------	-----------------------------------

- c) Cuboidal epithelium  
d) Columnar epithelium
- (10) Give examples of elastic bond  
a) Tendon  
b) Cartilage  
c) Adipose tissue  
d) Bone
- (11) Matrix of bone is composed of protein called  
a) Myosin  
b) Ossein  
c) Elastin  
d) Actin
- (12) Which of the following is NOT the salivary protein?  
a) Lysozyme  
b) Mucus  
c) Phosphatase  
d) Amylase
- (13) The pancreatic juice which aids digestion is secreted into?  
a) Liver  
b) Duodenum  
c) Jejunum  
d) Ileum
- (14) Fat absorption takes place in  
a) Liver  
b) Ileum  
c) Small Intestine  
d) Jejunum
- (15) Salivary Alpha Amylase breaks  
a) Hydrolyzes alpha 1:4 glycosydic linkage  
b) Beta 1:6 glycosydic linkage  
c) alpha 1:6 glycosydic linkage  
d) peptide bonds
- (16) Trypsin is activated by  
a) Cl  
b) HCl  
c) Enteropeptidase  
d) Pepsin
- (17) Elastase acts on  
a) carboxyl sides of aromatic amino acids  
b) carboxyl sides of aliphatic amino acids  
c) carboxyl sides of neutral amino acids  
d) carboxyl sides of basic amino acids
- (18) Carboxypeptidase B acts on  
a) cleaves bonds near the carboxy terminal sides of basic amino acids  
b) cleave peptide bonds adjacent to aromatic amino acids  
c) bonds mid portion of peptide  
d) carboxyl sides of neutral amino acids
- (19) Chymotrypsin breaks  
a) carboxyl sides of neutral amino acids  
b) cleave peptide bonds on carboxyl side of aromatic amino acids  
c) carboxyl sides of basic amino acids  
d) peptide bonds on carboxyl side of amino acids
- (20) Activator of colipase is  
a) Trypsin  
b) Cl  
c) HCl  
d) Pepsin
- (21) The epithelial tissues present on the inner surface of bronchioles are \_\_\_\_  
a) Squamous  
b) Cuboidal  
c) Ciliated  
d) Glandular
- (22) Pulmonary ventilation movements are due to  
a) Diaphragm  
b) Wall of lungs  
c) Costal muscles and diaphragm  
d) Costal muscles
- (23) 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>
- (24) The muscles take part in rapid breathing-  
a) Muscles of rib cage  
b) Muscles of neck region and abdominal region

- c) Thoracic and abdominal muscles  
d) Muscles of neck region and thoracic region.
- (25) This disease is due to allergens  
a) Emphysema  
b) Bronchitis  
c) Pneumonia  
d) Asthma
- (26) The outermost layer of the skin is called?  
a) Stratum lucidum  
b) Stratum corneum  
c) Stratum germinale  
d) Stratum spinosum
- (27) Hair are not present in following areas except:  
a) Palm  
b) Sole  
c) Dorsal surface of distal phalanges  
d) Dorsal surface of middle phalanges
- (28) Arrector pilorum is a  
a) Skeletal muscle  
b) Smooth muscle  
c) Cardiac muscle  
d) Mixture of skeletal and smooth muscle
- (29) The hormone which regulates the basal metabolism in our body is secreted from  
a) Adrenal cortex  
b) Pancreas  
c) Pituitary  
d) Thyroid
- (30) Which one of the following pair of organs includes only the endocrine glands?  
a) Thymus and testes  
b) Adrenal and ovary  
c) Pancreas and parathyroid  
d) Adrenal and parathyroid
- (31) Toxic agents present in food which interfere with thyroxine synthesis lead to the development of \_\_\_\_\_  
a) Toxic goitre  
b) Cretinism  
c) Simple goitre  
d) Thyrotoxicosis
- (32) All of the following are hormones of the anterior pituitary except:  
a) Human growth hormone (GH)  
b) Follicle-stimulating hormone (FSH)  
c) Parathyroid hormone (PTH)  
d) Thyroid-stimulating hormone (TSH)
- (33) The clusters of cells in the pancreas that produce hormones are the  
a) Nodules  
b) Islets of Langerhans  
c) Pancreatic medulla  
d) Pancreatic cortex
- (34) Which disease occurs due to less secretion of mineralocorticoids?  
a) Addison's disease  
b) Cretinism  
c) Myxedema  
d) Cushing diseases
- (35) Which hormone regulate 24-hr rhythm of our body?  
a) Somatotrophic  
b) LTH  
c) Melatonin  
d) T4 and T3
- (36) Mark the mismatch pair:  
a) Henle's loop – concentration of urine  
b) DCT – Absorption of glucose  
c) PCT – Absorption of sodium and potassium ions  
d) Bowman's capsule – Glomerular filtration
- (37) Yellow color of urine is due to  
a) Urochrome  
b) Urea  
c) Bilirubin  
d) Uric acid
- (38) When a person is dehydrated, hypotonic fluid will be found in the:  
a) glomerular filtrate  
b) proximal tubule  
c) loop of Henle  
d) distal convoluted tubule
- (39) About the proximal convoluted tubules, all are true except :  
a) reabsorb most of Na<sup>+</sup> ions in glomerular filtrate  
b) reabsorb most of Cl<sup>-</sup> ions in glomerular filtrate  
c) reabsorb most of K<sup>+</sup> ions in glomerular filtrate  
d) contains JGCs which secrete renin

- (40) The effect of antidiuretic hormone ( ADH ) on the kidney is to :
- a) increase the permeability of the distal nephron to water.
  - b) increase the excretion of Na<sup>+</sup>
  - c) increase the excretion of water
  - d) increase the diameter of the renal artery .
- (41) Filtration occurs in the \_\_\_\_, most reabsorption occurs in the \_\_\_\_, and urine is transported from the kidney to the bladder in the \_\_\_\_.
- a) Proximal tubule, distal tubule, urethra
  - b) glomerulus proximal tubule, ureter
  - c) Afferent arteriole, loop Henle, collecting tube
  - d) Distal tubule, proximal tubule, urethra
- (42) The normal value of GFR is-
- a) 180 ml/Day
  - b) 125 ml/min
  - c) 140 ml/min
  - d) 100 ml/min
- (43) The condition where urea accumulates in blood is
- a) Glycosuria
  - b) Uremia
  - c) Acidosis
  - d) Ketonuria
- (44) One of the following organs does not have sinusoids
- a) Parotid gland
  - b) Spleen
  - c) Liver
  - d) Bone marrow
- (45) Which is the thickest layer in the arteries?
- a) Tunica intima
  - b) Tunica media
  - c) Tunica adventitia
  - d) All layers of equal thickness
- (46) Process of formation of blood corpuscles is called
- a) Haemolysis
  - b) Homeostasis
  - c) Haemopoiesis
  - d) Hemostasis
- (47) Thymus has following features except:
- a) Lies in superior and anterior mediastinum
  - b) T- lymphocytes are cytotoxic, helper and memory cells.
  - c) Secretes thymosin
  - d) Filters blood to get rid of antigens.
- (48) QRS wave in ECG represents
- a) Auricular systole
  - b) End of ventricular systole
  - c) ventricular diastole
  - d) ventricular systole
- (49) Which cell Play an important role in allergic reaction by
- a) Neutrophils
  - b) Monocytes
  - c) Lymphocytes
  - d) Basophils
- (50) The first bone to start ossifying is
- a) Mandible
  - b) Femur
  - c) Clavicle
  - d) Humerus
- (51) Synovial membrane lines or encloses all structures except
- a) Articular cartilage
  - b) Inner aspect of the capsule
  - c) Intracapsular tendons
  - d) Intracapsular parts of the articulating bones
- (52) The following muscle is NOT responsible for hip flexion:
- a) iliopsoas
  - b) pectineus
  - c) sartorius
  - d) vastus lateralis
- (53) Joint of femur with pelvic girdle is
- a) Ball and socket
  - b) Pivot
  - c) Saddle
  - d) Hinge
- (54) Mention the name of the joint present between epiphysis and diaphysis
- a) fibrous
  - b) Primary cartilaginous

- c) Secondary cartilaginous  
d) Synovial
- (55) Human Cranium has \_\_\_\_\_ bones?  
a) 12  
b) 7  
c) 8  
d) 9
- (56) Name of the tongue bone is \_\_\_\_\_  
a) Frontal bone  
b) Zygomatic bone  
c) Hyoid bone  
d) Mandible
- (57) 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 Th12 L5 S5 Co1  
d) C7 Th13 L5 S5 Co4
- (58) Longest ligament around the hip joint is  
a) Iliofemoral  
b) Ischiofemoral  
c) Ligamentous teres  
d) Pubofemoral
- (59) Which is not a fibrous joint?  
a) sutures  
b) Gomphosis  
c) Xiphisternal  
d) Inferior tibiofibular
- (60) How many False pairs of ribs are found in human ?  
a) 2  
b) 3  
c) 4  
d) 9