



BRAINWARE UNIVERSITY

Term End Examination 2023-2024

Programme – B.Sc.(MRIT)-2022/B.Sc.(MRIT)-2023

Course Name – Human Anatomy & Physiology Part I

Course Code - BMRITC101

(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) Identify the condition- collection of air in pleural cavity
 - a) haemothorax
 - b) pneumothorax
 - c) Empyema
 - d) pleural effusion
 - (ii) Identify which part of the lung shows impression of mediastinal structure
 - a) Apex
 - b) base
 - c) costal surface
 - d) medial surface
 - (iii) The greater omentum connects the stomach to which structures
 - a) Transverse colon
 - b) spleen
 - c) liver
 - d) oesophagus
 - (iv) Identify the name of the structure which is associated with collection of lymphoid tissue in the submucosa of small intestine
 - a) waldeyers ring
 - b) inguinal lymph node
 - c) mesenteric group of lymph node
 - d) payers patches
 - (v) Recall the part of the urethra into which opens the ejaculatory duct
 - a) Prostatic urethra
 - b) spongy urethra
 - c) membranous urethra
 - d) bulbous urethra
 - (vi) Identify which structure is associated with hiatus muscularis
 - a) Stomach
 - b) Doudenum
 - c) Appendix
 - d) Urethra
 - (vii) Cholecystovenacal line is describe as a line connecting groove for IVC and fossa for
 - a) ligamentum teres
 - b) ligamentum veniosum
 - c) gall bladder
 - d) caudate lobe
 - (viii) Identify the name of the artery which supplies the part distal to left one third of transverse colon
 - a) Coeliac artery
 - b) superior mesentric artery
 - c) external iliac artery
 - d) inferior mesentric artyery

- (ix) State which of the following is a Sesamoid bone
a) Patella b) 2nd Metacarpal
c) Scaphoid d) Triquetral
- (x) Tell the name of nerve that supplies the Intrafusal fiber of skeletal muscle
a) type I sensory neuron b) type 2 sensory neuron
c) gamma motor neuron d) All of these
- (xi) State the name of the bone where the radial groove is present
a) radius b) ulna
c) humerus d) none of these
- (xii) select the correct example of sinarthosis
a) sutures b) pubic symphysis
c) intervertebral disc d) elbow joint
- (xiii) Identify the reason for the dicrotic notch on the aortic pressure curve:
a) contraction of aorta b) closure of the aortic valve
c) rapid filling of the left ventricle d) closure of the pulmonary valve
- (xiv) Choose from the following options where gaseous exchange takes place:
a) Pharynx b) Larynx
c) Alveoli d) Trachea
- (xv) Write the name of the linings that separate air in the alveoli from venous blood
a) Squamous epithelium & tunica media b) Squamous epithelium & endothelium
c) Transitional epithelium & tunica externa d) None of these

Group-B

(Short Answer Type Questions)

3 x 5=15

2. Discuss iron deficiency anemia with special reference to nutritional deficiency. (3)
3. Give examples (any three) of blood coagulation disorders (3)
4. Explain how pacemaker potential helps in the contraction of cardiac muscles (3)
5. Describe the function of the nucleus (3)
6. Classify the parts of large intestine and its function. (3)

OR

Classify the parts of liver and the functions of liver. (3)

Group-C

(Long Answer Type Questions)

5 x 6=30

7. Describe the problems that may arise from blood transfusion. (5)
8. Define the different planes that we study in anatomy. Also describe the significance of the plane? (5)
9. Write in details features of skeletal and cardiac muscles with connective tissue surrounding muscles along with proper diagram? Also describe how the cells of skeletal muscles are arranged? (5)
10. Draw and explain histology of liver? (5)
11. With suitable diagram express different static lung volume and capacities (5)
12. Explain the different types of cellular transport mechanism (5)

OR

Illustrate the process of phagocytosis With suitable diagram describe (5)
