



## BRAINWARE UNIVERSITY

Term End Examination 2022

Programme – B.Sc.(MRIT)-2020

Course Name – Cross Sectional Anatomy and Physiology

Course Code - BMRIT501

( Semester V )

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) Choose the right answer from the following- Female pelvis consist of \_\_\_\_\_
  - a) Bladder urethra rectum Ovaries Uterus
  - b) Bladder urethra rectum Uterus
  - c) Bladder urethra rectum Filopean Tube
  - d) Bladder urethra rectum ovaries
- (ii) Choose the right answer from the following--Peritoneum, liver, gallbladder, pancreas, spleen, stomach, intestines, kidneys, ureters and blood vessels are organs of the
  - a) Thorax
  - b) Abdomen
  - c) Brain
  - d) Mediastinum
- (iii) Select the Full Form for MIP in CT post Processing to view Cross Sectional anatomy
  - a) Maximum Intensity Projection
  - b) Minimum Intensity Projection
  - c) Mini Intensity Projection
  - d) Minus Intensity Projection
- (iv) Collect the right answer from following- The ankle joint is formed of
  - a) only Calcanium
  - b) Long Bones
  - c) Tarsal bones
  - d) Carpal bones
- (v) Which of the following option relates with the Inferior venecava
  - a) Vein
  - b) artery
  - c) Nerve
  - d) tendon
- (vi) Which of the following option relates with the anterior tebial artery
  - a) arm
  - b) Neck
  - c) leg
  - d) Foot
- (vii) Choose the correct answer that frontal sinus is located
  - a) frontal
  - b) Temporal
  - c) occipital
  - d) Parietal
- (viii) Which of the following option relates with straight sinus
  - a) Leg
  - b) brain
  - c) Neck
  - d) spine
- (ix) The Wrist joint is establish by
  - a) Tarsal bones
  - b) Carpal bones
  - c) Short Bones
  - d) long Bones
- (x) Select the right appearance of Hemorrhage in ct image
  - a) Bright (Hyperdense)
  - b) Grey
  - c) Dark (Hypodense)
  - d) shades of grey
- (xi) Select the right answer from the following options that arterial supply to the brain is often called
  - a) Carotid artery
  - b) Vessels of artery
  - c) Circle of willis
  - d) Brain artery
- (xii) Choose the right answer from the following options: Styloid Process are part of the
  - a) Skull bone
  - b) Spine
  - c) Knee
  - d) ankle
- (xiii) Select the plane of the body that divides it into dorsal and ventral regions?
  - a) Transverse
  - b) Axial
  - c) Coronal
  - d) Saggital
- (xiv) The directional term "superior" in anatomy means which of the following name is correct?
  - a) cephalic
  - b) ventral

- c) Caudal  
 (xv) Select the correct structure separates the thoracic cavity from the abdominal cavity?  
 a) The mediastinum  
 b) The diaphragm  
 c) The peritoneum  
 d) The pylorus

**Group-B**  
 (Short Answer Type Questions)

3 x 5=15

2. Write Hounsfield units of air, fat, pure water, CSF, white matter, gray matter and blood. (3)  
 3. Differentiate T1 and T2 axial brain MRI (3)  
 4. Explain Subdural hematoma and it's radiological appearance in NCCT brain (3)  
 5. Write about the arterial system of head and neck with proper diagram. (3)  
 6. Explain the Anatomy of thorax in any one axial plane image (3)

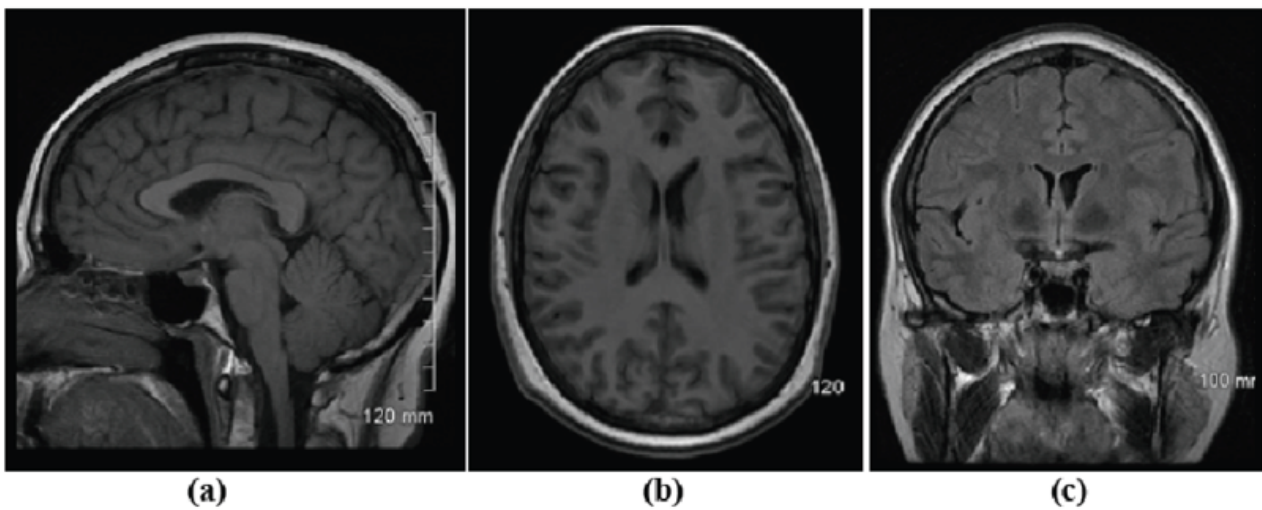
**OR**

- Explain subarachnoid hemorrhage and it's radiological appearance in NCCT brain (3)

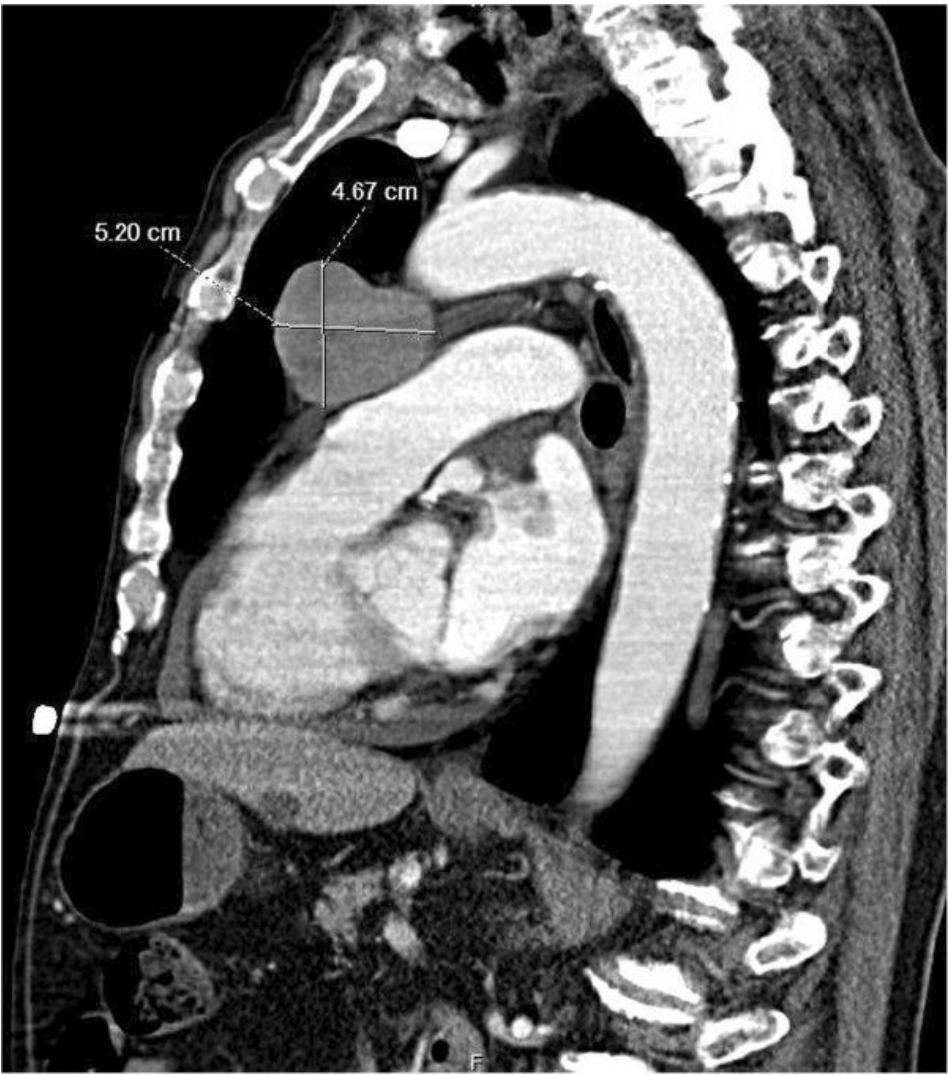
**Group-C**  
 (Long Answer Type Questions)

5 x 6=30

7. Identify three different radiological planes from the below mentioned images and explain about it. (5)



8. Identify the cross sectional anatomy from the bellow mentioned sagittal image and explain about it. (5)



- 9. Illustrate a axial image of CT thorax and identify different anatomical structure.
- 10. Explain stroke and explain the importance of diffusion imaging in brain MRI
- 11. Compare between male and female pelvis with proper diagram.
- 12. Explain anatomy of pneumothorax CT

(5)  
(5)  
(5)  
(5)

OR

Explain CT cross sectional anatomy of orbit

(5)

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