



BRAINWARE UNIVERSITY

Term End Examination 2024-2025

Programme – B.Sc.(MRIT)-2023

Course Name – Clinical Radiography-Positioning Part II

Course Code - BMRITC401

(Semester IV)

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) Select Which of the following paired bone is present in the skull.
 - a) Frontal
 - b) occipital
 - c) petital
 - d) Sphenoid
- (ii) Choose to demonstrate positioning for towns in AP projection the central ray is directed towards.
 - a) 25-30 degree caudally
 - b) 30-45 degree caudally
 - c) 25-30 dergee cranially
 - d) 25-30 degree cranially
- (iii) Choose to demonstrate position for Caldwell in PA projection the central ray is directed.
 - a) 15 degree caudally
 - b) 25 degree caudally
 - c) 25 degree cranially
 - d) 30 degree cranially
- (iv) Choose in reverse towne's (PA) projection the central ray is at.
 - a) 30 degree cephalic
 - b) 30 degree cranially
 - c) Can give both (a) and (b) projections
 - d) 15 degree cephalic
- (v) tell in Macroradiography is often used for the examination of:
 - a) Bones
 - b) Microorganisms
 - c) Semiconductor material
 - d) Alloys
- (vi) Select in macroradiography, what does the term contrast refer to?
 - a) The sharpness of the image
 - b) The difference in density between different areas of the object
 - c) The brightness of the image
 - d) The ability to distinguish between different materials
- (vii) Select Which imaging modality is commonly used for performing a skeletal survey?
 - a) MRI (Magnetic Resonance Imaging)
 - b) CT (Computed Tomography)
 - c) PET (Positron Emission Tomography)
 - d) X-ray (Radiography)
- (viii) Select Which of the following structures should appear symmetrically on a neonatal chest radiograph?



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- a) Heart
c) Lungs
(ix) Choose What is the preferred imaging modality for evaluating suspected pneumothorax in a neonate?
a) Ultrasonography
c) Computed Tomography (CT)
(x) Select Which radiographic finding is indicative of respiratory distress syndrome (RDS) in a newborn?
a) Ground-glass opacities
c) Bilateral pulmonary infiltrates
(xi) Tell In skeletal radiography, what does the term Density refer to?
a) The thickness of bone
c) The amount of radiation absorbed by the bone
(xii) Select What is the purpose of using contrast agents in skeletal radiography?
a) To increase radiation exposure
c) To enhance visualization of blood vessels
(xiii) Choose Which imaging modality is preferred for assessing soft tissue injuries alongside skeletal trauma?
a) Skeletal radiography
c) Ultrasound
(xiv) Choose Which imaging technique is commonly used for intraoperative localization of tumours or lesions during surgery?
a) Ultrasound
c) CT scan
(xv) Tell Intraoperative MRI is often used in neurosurgical procedures to.
a) Monitor blood pressure changes
c) Obtain real-time imaging of brain structures
b) Ribs
d) All of these
b) Magnetic Resonance Imaging (MRI)
d) Fluoroscopy
b) Air bronchograms
d) Surfactant deficiency
b) The brightness of the image
d) The size of the bone
b) To highlight soft tissue structures
d) To improve visualization of bone fractures
b) MRI
d) CT scan
b) X-ray
d) PET scan
b) Detect bone fractures
d) Assist in suturing wounds

Group-B

(Short Answer Type Questions)

3 x 5=15

2. Explain What is the purpose of foreign body radiography? (3)
3. Describe What is an invertogram and how is it performed? (3)
4. Define What is the primary purpose of performing neonatal radiography? (3)
5. Write down the indication, centering for fronto-occipital projection? (3)
6. Elaborate common techniques used in foreign body radiography? (3)

OR

- Define What is an OPG and what is its primary application in dentistry? (3)

Group-C

(Long Answer Type Questions)

5 x 6=30

7. Explain in detail radiation protection and rapid processing technique ? (5)
8. Explain advanced trauma in details ? (5)
9. Write down the indication, patient positioning, centering and technical factors for occipitomenal view with anatomy ? (5)
10. Explain in detail the patient positioning and centering of lateral decubitus Xray with technical factors and anatomy ? (5)
11. Illustrate radiography of mandible x-ray ? (5)
12. Explain briefly OPG X-ray with a labelled diagram? (5)

OR

Elaborate the patient positioning and centering of KUB Xray with technical factors and anatomy ? (5)

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