



PRACTICE SET
End Semester Examination, May 2026

Program: BMRIT

Semester: II

Subject: Clinical Radiography Positioning - I

Subject Code: 42BBMRIT013

Course Outcome:

On the completion of the Course, the students will be able to:

Course Outcomes	Description
CO1	Understand the basic patient positioning during radiographic investigation.
CO2	Apply special positioning skills for different pathological and physical conditions.
CO3	Application of equipment while working in radiology departments.
CO4	Choose proper position during radiography.
CO5	Explain relative positions of x-ray tube and patient relevant exposure factors during radiography.
CO6	Explain the use of accessories.
CO7	Explain the anatomic and physiological basis of the procedure to be undertaken.

UNIT I

Section A (10 marks)

1. Define the standard radiographic terms: Supine, Prone, and Lateral. [CO1, Remember, LOT]
2. Identify the various "Decubitus" positions and their clinical significance. [CO1, Remember, LOT]
3. Evaluate the practical methods used in a radiology department to reduce the radiation dose to a pediatric patient. [CO1, Evaluate, HOT]
4. Explain the importance of radiation protection and the use of gonad shields in clinical practice. [CO5, Understand, LOT]
5. Analyze how the relative position of the X-ray tube and the patient affect image magnification and distortion. [CO5, Analyze, HOT]
6. Describe the functions and applications of radiographic cones and grids. [CO6, Understand, LOT]

Section B (20 marks)

7. Create a comprehensive guide for modifying radiographic techniques for patients with physical disabilities or different body habitus. [CO2, Create, HOT]
8. Evaluate the preparation required for a radiography room, including the necessary apparatus and instruments for emergency trauma cases. [CO3, Evaluate, HOT]

UNIT II

Section A (10 marks)

9. Describe the positioning and centering points for a routine AP projection of the humerus. [CO1, Understand, LOT]
10. Analyze the specific positioning difficulties and solutions for a patient with a suspected supracondylar fracture. [CO2, Analyze, HOT]
11. Differentiate between the clinical indications for the Carpal Tunnel projection and the routine wrist projections. [CO2, Analyze, HOT]
12. State the routine projections for the fingers and the whole hand. [CO4, Remember, LOT]
13. Illustrate the positioning required for the routine projections of the elbow joint. [CO4, Apply, LOT]
14. Explain the routine projections for the wrist joint and forearm. [CO4, Understand, LOT]

Section B (20 marks)

15. Evaluate the significance of supplementary projections for the Scaphoid bone and why four different angles are often required. [CO2, Evaluate, HOT]
16. Analyze the "Ball Catchers" (Norgaard method) projection, focusing on its role in diagnosing early rheumatoid arthritis. [CO2, Analyze, HOT]

UNIT III

Section A (10 marks)

17. Explain the positioning for the routine AP and Lateral views of the leg (Tibia/Fibula). [CO1, Understand, LOT]
18. Analyze the radiographic appearance of "Flat Feet" and "Club Feet" using weight-bearing projections. [CO2, Analyze, HOT]
19. Describe the routine projections for the foot and toes. [CO4, Understand, LOT]
20. List the projections required for a routine investigation of the calcaneum. [CO4, Remember, LOT]

21. State the routine projections used for the femur and the knee joint. **[CO4, Remember, LOT]**
22. Differentiate between the standard knee projection and the axial projection for the Patella (Skyline view). **[CO4, Analyze, HOT]**

Section B (20 marks)

23. Analyze the importance of "Forced Projections" (Stress views) in the assessment of torn ligaments in the ankle joint. **[CO2, Analyze, HOT]**
24. Design a positioning strategy for a patient with suspected "loose bodies" in the knee joint using intercondylar projections. **[CO4, Create, HOT]**

UNIT IV

Section A (10 marks)

25. Define the positioning for the Acromio-Clavicular joint and the Clavicle. **[CO1, Remember, LOT]**
26. Identify the centering point and patient position for the Sternoclavicular joint. **[CO1, Remember, LOT]**
27. Analyze the clinical necessity of the axial projection of the Clavicle compared to the routine AP view. **[CO2, Analyze, HOT]**
28. Describe the routine projections for the shoulder joint and Scapula. **[CO4, Understand, LOT]**
29. Explain the procedure for routine radiography of the Sternum and Ribs. **[CO4, Understand, LOT]**
30. Compare the radiographic requirements for imaging the upper ribs versus the lower ribs. **[CO4, Analyze, HOT]**

Section B (20 marks)

31. Design a radiographic workflow for a trauma patient with multiple rib fractures and a suspected pneumothorax. **[CO4, Create, HOT]**
32. Evaluate the anatomic basis for using oblique positions to visualize the Sternoclavicular joints effectively. **[CO7, Evaluate, HOT]**

UNIT V

Section A (10 marks)

33. Describe the positioning for routine AP and Lateral views of the Lumbar Spine. **[CO1, Understand, LOT]**
34. State the centering points for the Atlanto-Occipital joint and the Lumbo-Sacral region. **[CO1, Remember, LOT]**
35. Analyze the importance of Flexion and Extension views in assessing the stability of the Cervical Spine. **[CO2, Analyze, HOT]**
36. Differentiate between the radiographic appearances of the Spine in cases of Scoliosis and Kyphosis. **[CO2, Analyze, HOT]**
37. List the routine projections for the Cervical Spine and Thoracic Spine. **[CO4, Remember, LOT]**
38. Explain the procedure for imaging the Sacrum and Coccyx. **[CO4, Understand, LOT]**

Section B (20 marks)

39. Analyze the technical challenges of the Cervico-thoracic Junction (Swimmer's view) and when it is clinically indicated. **[CO2, Analyze, HOT]**
40. Create a specialized positioning protocol for the Sacro-Iliac joints to minimize bowel gas interference. **[CO2, Create, HOT]**

UNIT VI
Section A (10 marks)

41. Explain the routine positioning for the Mandible and Temporomandibular joints. [**CO1, Understand, LOT**]
42. Analyze the importance of the horizontal beam (cross-table) lateral projection in skull trauma. [**CO2, Analyze, HOT**]
43. Describe the routine projections for the cranium (Skull) and facial bones. [**CO4, Understand, LOT**]
44. State the techniques used for imaging the Frontal and Maxillary Sinuses. [**CO4, Remember, LOT**]
45. List the projections required for the Orbits and Nasal bones. [**CO4, Remember, LOT**]
46. Compare the "Towne's Method" with standard projections for visualizing the occipital bone. [**CO4, Analyze, HOT**]

Section B (20 marks)

47. Evaluate the specialized radiographic techniques for the Sella Turcica, Optic Foramina, and Jugular Foramina. [**CO2, Evaluate, HOT**]
48. Analyze the diagnostic significance of erect versus horizontal projections for demonstrating fluid levels in the Paranasal Sinuses. [**CO2, Analyze, HOT**]

UNIT VII
Section A (10 marks)

49. Explain the routine positioning for the Neck of Femur. [**CO1, Understand, LOT**]
50. State the centering point for the Sacro-Iliac joints and the Symphysis Pubis. [**CO1, Remember, LOT**]
51. List the supplementary projections for the greater and lesser trochanters of the Femur. [**CO2, Remember, LOT**]
52. Analyze the clinical utility of the "Frog Leg" projection in pediatric hip assessments. [**CO2, Analyze, HOT**]
53. Describe the routine projections for the whole pelvis and the hip joint. [**CO4, Understand, LOT**]
54. Differentiate between the radiographic techniques for the Ischium, Ilium, and Acetabulum. [**CO4, Analyze, HOT**]

Section B (20 marks)

55. Evaluate the radiographic positioning required for diagnosing Congenital Dislocation of the Hip (CDH) and Arthrodesis. [**CO2, Evaluate, HOT**]
56. Analyze the components and clinical significance of a "Skeletal Survey" for metabolic bone disease and metastases. [**CO2, Analyze, HOT**]

Summary Sheet

CO Wise

CO	Q. No	Marks
CO1	1,2,3,9,17,25,26,33,34,41,49,50	120
CO2	7,10,11,15,16,18,23,27,35,36,39,40,42,47,48,51,52,55,56	280
CO3	8	20
CO4	12,13,14,19,20,21,22,24,28,29,30,31,37,38,43,44,45,46,53,54	230
CO5	4,5	20
CO6	6	10
CO7	32	20
Total		700

Unit Wise

Unit	Q. No	Marks
Unit 1	1,2,3,4,5,6,7,8	100
Unit 2	9,10,11,12,13,14,15,16	100
Unit 3	17,18,19,20,21,22,23,24	100
Unit 4	25,26,27,28,29,30,31,32	100
Unit 5	33,34,35,36,37,38,39,40	100
Unit 6	41,42,43,44,45,46,47,48	100
Unit 7	49,50,51,52,53,54,55,56	100
Total		700

Blooms Taxonomy Level (BTL) Wise

BTL	Q. No	Marks
LOT	1,2,4,6,9,12,13,14,17,19,20,21,25,26,28,29,33,34,37,38,41,43,44,45,49,50,51,53	280
HOT	3,5,7,8,10,11,15,16,18,22,23,24,27,30,31,32,35,36,39,40,42,46,47,48,52,54,55,56	420
Total		700

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Disclaimer: -This is a Practice set. The Question in End term examination will differ from the Practice set. This Practice set is meant for practice only.