

# Question Paper

Exam Date & Time: 27-May-2024 (10:00 AM - 01:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

**SECOND SEMESTER B.Sc. MIT DEGREE EXAMINATION - MAY/JUNE 2024**  
**SUBJECT: MIT1201 - RADIOGRAPHIC POSITIONING AND TECHNIQUES - II**  
**(2020 SCHEME)**

**Marks: 100**

**Duration: 180 mins.**

**Answer all the questions.**

- |     |  |      |
|-----|--|------|
| 1)  | Explain the projections taken to visualize maxillary sinus.  | (20) |
| 2)  | Explain in detail the anatomy of cervical spine with a labelled diagram. Explain the views taken for visualising C1 and C2 vertebrae.        | (20) |
| 3)  | Explain in detail about Pediatric radiography.   | (10) |
| 4)  | Explain the indications, positioning, centring, technical factors, structures seen and evaluation criteria for Frogs lateral view of pelvis. | (10) |
| 5A) | Describe the projection taken to visualise optic foramina.   | (5)  |
| 5B) | Illustrate the anatomy pelvis with a labelled diagram.   | (5)  |
| 5C) | Explain the positioning for pelvic outlet view.  | (5)  |
| 5D) | Explain the positioning, centring and evaluation criteria for Lumbar Spine lateral view.   | (5)  |
| 5E) | Explain the structures seen and evaluation criteria for submento vertical view.  | (5)  |
| 5F) | Compare the structures seen and evaluation criteria of Abdomen AP and KUB x-ray.   | (5)  |
| 6A) | State the technical factors for thoracic spine lateral view.   | (2)  |
| 6B) | Outline the anatomy of a typical cervical vertebra.  | (2)  |
| 6C) | Outline the indications and contraindications for sacroiliac joint AP projection.  | (2)  |
| 6D) | Recall the regions and quadrants of abdomen.   | (2)  |
| 6E) | List the patient preparation and radiation protection measures taken while performing radiographic examinations for a female patient.        | (2)  |

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# Question Paper

Exam Date & Time: 29-May-2024 (10:00 AM - 01:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

SECOND SEMESTER B.Sc. MIT DEGREE EXAMINATION - MAY/JUNE 2024  
SUBJECT: MIT1202 - DIGITAL IMAGING AND IMAGE PROCESSING METHODS IN RADIOGRAPHY  
(2020 SCHEME)

Marks: 100

Duration: 180 mins.

Answer all the questions.

- |     |  |      |
|-----|--|------|
| 1)  | Explain in detail about the construction of the Intensifying Screen. Add note on types of screens and care of the intensifying screen. | (20) |
| 2)  | Illustrate the components, workflow and image formation of DR.   | (20) |
| 3)  | Explain in detail about the Cassettes construction.  | (10) |
| 4)  | Summarize the workflow of the PACS.  | (10) |
| 5A) | Explain the steps involved in manual processing.   | (5)  |
| 5B) | Illustrate the construction of the film.   | (5)  |
| 5C) | Explain the types of Darkroom entrances.   | (5)  |
| 5D) | Explain steps involved in images formation in CR.  | (5)  |
| 5E) | Explain the characteristics of Latent Images.  | (5)  |
| 5F) | Explain the principle of Macroradiography.   | (5)  |
| 6A) | List the various artefacts seen in CR.   | (2)  |
| 6B) | Define crossover effect.   | (2)  |
| 6C) | Define Image contrast.   | (2)  |
| 6D) | List the constituents of the developer solution.   | (2)  |
| 6E) | Define sensitometry.   | (2)  |

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