

Question Paper

Exam Date & Time: 07-Jun-2019 (02:00 PM - 04:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

SECOND SEMESTER B.Sc. MEDICAL IMAGING TECHNOLOGY DEGREE EXAMINATION - MAY/JUNE 2019
SUBJECT: BMIT 102 - RADIOGRAPHIC POSITIONING & TECHNIQUES - PART II
(2016 RV SCHEME)
Friday, June 07, 2019 (14.00 - 16.00)

Marks: 50

Duration: 120 mins.

Answer the following questions:

- 1) Explain briefly the anatomy of Gastro-Intestinal Tract. Write a note on Lateral Decubitus Projection. (10)
- 2) Discuss in detail about Paediatric Radiography. (10)
- 3) **Discuss the following:**
 - 3A) AP Lordotic projection for chest (5)
 - 3B) Judd method for cervical spine (5)
 - 3C) Anatomy of Urinary system (5)
- 4) **Write short notes on:**
 - 4A) Technical aspect for chest imaging (3)
 - 4B) Axio-lateral oblique projection for mandible (3)
 - 4C) Cervical spine weight bearing techniques (3)
 - 4D) Lumber Spine AP projection (3)
 - 4E) List the names of cranial and facial bones (3)

-----End-----

Question Paper

Exam Date & Time: 11-Jun-2019 (02:00 PM - 05:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

SECOND SEMESTER B.Sc. MEDICAL IMAGING TECHNOLOGY DEGREE EXAMINATION - MAY/JUNE 2019
SUBJECT: BMIT 104 - BASIC PHYSICS IN COMPUTED TOMOGRAPHY & ULTRASONOGRAPHY
(2016 RV SCHEME)

Tuesday, June 11, 2019 (14.00 - 17.00)

Answer all the questions.
Draw diagrams wherever required.

Marks: 100

Duration: 180 mins.

Answer all the questions.

- 1A) Define artefact. Write in detail names, causes and remedies for Computed Tomography artefacts. (20)
- 1B) Doppler principle and its significance in ultrasonography. Write briefly about Doppler instrumentation. (20)
- 2A) First four generations of Computed Tomography with diagrams. (10)
- 2B) Ideal features of ultrasound contrast media. Describe types of ultrasound contrast media. (10)

3) Write short notes on:

- 3A) Slip ring technology (5)
- 3B) Characteristics of ultrasound (5)
- 3C) CT collimators (5)
- 3D) Reverberation artefact (5)
- 3E) Xenon gas detectors (5)
- 3F) Ultrasound transducer diagram and components (5)

4) Answer the following questions:

- 4A) CT windowing (2)
- 4B) Piezoelectric effect (2)
- 4C) Advantages of CT (2)
- 4D) Applications of Doppler ultrasound (2)
- 4E) CT pixel and voxel (2)

-----End-----