

Question Paper

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



MANIPAL ACADEMY OF HIGHER EDUCATION

FIRST SEMESTER B.Sc. MEDICAL IMAGING TECHNOLOGY DEGREE EXAMINATION - MARCH 2019
SUBJECT: BMIT 101 - RADIATION PHYSICS
(2016 RV SCHEME)
Tuesday, March 05, 2019 (14.00 - 17.00)

Answer all the questions.
Draw diagrams wherever required.

Marks: 100

Duration: 180 mins.

- 1) Discuss the principles of image intensification in detail with labeled diagram. (20)
- 2) Discuss Characteristic curve in detail with labeled diagram? (20)
- 3) Discuss Modern X ray tube in detail with diagram. (10)
- 4) Discuss the purpose and principle of an autotransformer. (10)

5. Short note on:

- 5A) Characteristic radiation. (5)
- 5B) Collimation. (5)
- 5C) Image intensifier. (5)
- 5D) Factors influencing quality of X ray. (5)
- 5E) Definition and types of grid. (5)
- 5F) Photoelectric effect. (5)

6. Write note on:

- 6A) Alpha decay. (2)
- 6B) Circuit breakers. (2)
- 6C) Anode heel effect. (2)
- 6D) Half value layer. (2)
- 6E) Atom. (2)

-----End-----

Question Paper

Exam Date & Time: 06-Mar-2019 (02:00 PM - 04:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

FIRST SEMESTER B.Sc. MEDICAL IMAGING TECHNOLOGY DEGREE EXAMINATION - MARCH 2019
SUBJECT: BMIT 103T - RADIOGRAPHIC POSITIONING AND TECHNIQUES (PART 1)
(2016 RV SCHEME)

Wednesday, March 06, 2019 (14.00 - 16.00)

Answer all the questions.

Draw diagrams wherever required.

Marks: 50

Duration: 120 mins.

- 1) Draw a labelled diagram of scapula. Describe in detail standard projections of scapula. (10)
- 2) Discuss in details the radiographic image quality. (10)

3. Discuss the following:

- 3A) Planto-dorsal view for calcaneum. (5)
- 3B) Skyline view. (5)
- 3C) Folio method. (5)

4. Write short notes on:

- 4A) Apendicular skeleton. (3)
- 4B) Skeletal system. (3)
- 4C) Anterior Posterior of hip joint. (3)
- 4D) Ankle stress view. (3)
- 4E) Milliampere per second. (3)

-----End-----