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MANIPAL ACADEMY OF HIGHER EDUCATION
THIRD SEMESTER M.Sc. M.I.T. DEGREE EXAMINATION – JANUARY 2018
SUBJECT: MIT 301: CARE OF PATIENTS IN DIAGNOSTIC RADIOLOGY
(2015 SCHEME)

Thursday, January 04, 2018

Time: 10:00 – 13:00 Hrs.

Maximum Marks: 80

✍ **Answer ALL the questions.**

✍ **Major question:**

1. Explain contrast media and special radiographic techniques.

(20 marks)

2. **Write short notes on:**

2A. Bed side Radiography

2B. Infection control procedures

2C. Patient care during cardiac arrest

2D. Mummy wrap technique

2E. Special catheters

2F. Isolation techniques

(10 marks × 6 = 60 marks)



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MANIPAL ACADEMY OF HIGHER EDUCATION

THIRD SEMESTER M.Sc. M.I.T. DEGREE EXAMINATION – JANUARY 2018

SUBJECT: MIT 302: RADIATION EVALUATION AND PROTECTION IN DIAGNOSTIC RADIOLOGY
(2015 SCHEME)

Saturday, January 06, 2018

Time: 10:00 – 13:00 Hrs.

Maximum Marks: 80

☞ Answer ALL the questions.

☞ Major question:

1. Discuss briefly radiation units and quantities. Add a note on BERT.

(20 marks)

2A. Discuss in detail the biological effect of radiation during pregnancy.

2B. Discuss briefly the radiation technical factors consideration during pediatric radiography.

2C. Discuss briefly the working principles of gas filled radiation survey dosimeters.

2D. Discuss briefly the principle of radiation protection.

2E. Explain in detail the X ray room designs and structural shielding.

2F. Discuss in detail the technical protective considerations taken during mobile radiography.

(10 marks × 6 = 60 marks)



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MANIPAL ACADEMY OF HIGHER EDUCATION

THIRD SEMESTER M.Sc. M.I.T. DEGREE EXAMINATION – JANUARY 2018

**SUBJECT: MIT 303: NUCLEAR MEDICINE IMAGING
(2015 SCHEME)**

Tuesday, January 09, 2018

Time: 10:00 – 13:00 Hrs.

Maximum Marks: 80

✍ **Answer ALL the questions.**

✍ **Major question:**

1. Discuss in detail with diagram Positron emission tomography. Add a note on the radiopharmaceutical used in Positron emission tomography.

(20 marks)

2A. Discuss in detail thyroid scan.

2B. Discuss briefly tracer kinetic modelling.

2C. Describe in detail accelerator produced radionuclides.

2D. Discuss briefly disposal of radioactive waste. Add a note on wipe test.

2E. Explain in detail the modes of radioactive decay.

2F. Discuss in detail factors affecting gamma camera image quality.

(10 marks × 6 = 60 marks)

