

**B.Sc. IN MEDICAL IMAGING TECHNOLOGY  
(BMIT)**

**Term-End Examination  
December, 2012**

**BAHI-057 : QUALITY ASSURANCE AND  
RADIATION PROTECTION IN RADIOLOGY**

*Time : 3 hours*

*Maximum Marks : 70*

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**PART-A**

Answer *any five* questions. Each question carries  
*8 marks.* **5x8=40**

1. Draw a diagram of room layout for installing a conventional X - ray machine and describe the specifications laid by AERB as a part of regulation.
2. Describe the methods of performing reject analysis in a film based Conventional Radiology department.
3. Describe in detail, how to perform acceptance testing for a CT machine.
4. Describe in detail how to perform quality assurance for LASER printer.

5. Describe in detail five basic methods to be performed as a part of routine QA for conventional radiography machine.
6. Discuss about a few dose reduction strategies to be followed in fluoroscopy.
7. Describe in detail routine QA required in a dark room for processing films.
8. How do you maintain log and record book in a secondary care hospital ?

## PART - B

Write short notes on *any five* of the following.

Each carries 6 marks.

5x6=30

1. Spinning top
  2. kVp meter
  3. Survey meter
  4. Exposure meter
  5. Step wedge
  6. Diagnostic reference levels
  7. Stochastic effects
  8. CT Dose Index
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