

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

**Term-End Examination
December, 2015**

**BAHI-51 : PHYSICS OF RADIOLOGICAL
EQUIPMENT - I**

Time : 3 hours

Maximum Marks : 70

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- Note :** (i) *Attempt any five questions from Part A. Each question carries 8 marks.*
- (ii) *Part B consists of one question which is compulsory. It carries 30 marks.*
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PART - A

Answer **any five** questions. Each question carries **Eight** marks.

1. With the help of a labelled diagram describe the construction and functioning of rotating anode X-Ray Tube. 4+4=8
2. Explain the various beam limiting devices used in diagnostic radiology. 8
3. Describe the principal and construction of PET - CT. 4+4=8

4. Describe the principal of Tomosynthesis, how it differs from conventional tomography ? 6+2=8
5. Describe various types of grids, their construction and uses. 4+4=8
6. Give detailed account of flat panel digital fluoroscopy. 8
7. What is RIS ? Describe its advantages and disadvantages. 4+4=8
8. Describe the construction and functioning of Dry View Camera. 4+4=8

PART - B

9. Write notes on **any five** of the following. Each carries **Six** marks. 6x5=30
 - (a) Mammography X-Ray tube.
 - (b) Ion chamber.
 - (c) Image noise.
 - (d) Dental X-Ray (IOPA) machine.
 - (e) Dual energy subtraction.
 - (f) Photo Stimulable Phosphor Plate (PSP).
 - (g) Rectification.
 - (h) Automatic film processor.
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