

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

**Term-End Examination**

**June, 2012**

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

*Time : 3 Hours*

*Maximum Marks : 70*

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**PART - A**

Answer *any five* questions.

**8x5=40**

1. Describe the construction and functioning of rotating anode X-Ray Tube.
2. What is tomography ? Describe the principle of tomography.
3. Explain about H.T. generator for X-Ray machines and its advantages.
4. What is grid ? Explain stationary and moving grids.
5. Differentiate between fluorescence and phosphorescence. Explain their uses in radiology.

6. Explain picture archiving and communication system (PACS).
7. Describe the construction and functioning of image intensifier (I.I.).
8. How the heat is dissipated in the X-ray tube ?

**PART - B**

9. Write notes on *any five* :

**6x5=30**

- (a) Flat panel digital fluoroscopy.
  - (b) Mammography tube (X-Ray).
  - (c) Automatic exposure control devices.
  - (d) Light Beam Diaphragm (LBD).
  - (e) Digital Subtraction Techniques.
  - (f) Principle of Angio table (AOT).
  - (g) Dental X-Ray machine.
  - (h) Dry view camera.
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