

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

Term-End Examination

December, 2011

BAHI-032 : RADIOGRAPHIC IMAGING

Time : 3 hours

Maximum Marks : 70

PART - 'A'

Answer *any five* questions. Each question carries
8 marks. **8x5=40**

1. Describe the radiation hazards and safety measures taken in diagnostic radiology.
2. Explain the principle of Transformer. Describe in brief step-up and step-down Transformers.
3. What are high frequency generators? Enlist their advantages.
4. Draw and label a rotating anode X-ray tube and explain how X-rays are produced?

5. What is Thermionic Emission ? Describe the role of thermionic emission in production of X-rays.
6. Explain the methods of heat dissipation used in an X-ray tube.
7. Draw a diagram of TLD Bodge and explain its use in Radiation protection.
8. Define Electromagnetic Radiation and explain the process of production.

PART - B

9. Write notes on *any five* of following. Each note carries 6 marks. **6x5=30**

- (a) Rotating anode.
 - (b) Compton and photo electric attenuation
 - (c) Maximum permissible dose limit
 - (d) Portable X-ray Machine.
 - (e) Attenuation Coefficient.
 - (f) Half value layer
 - (g) Rectification
 - (h) Cathode filament.
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