

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

**Term-End Examination**

**June, 2014**

**BAHI-032 : RADIOGRAPHIC IMAGING**

*Time : 3 hours*

*Maximum Marks : 70*

**PART - A**

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

1. Describe principles of radiation detection, various radiation detectors and their advantages and disadvantages.
2. Write about filters in Radiography and why they are used.
3. Write in detail about X - ray generators and different types of generators available.
4. What is radioactivity ? Describe in detail natural radioactivity.
5. Describe discovery of X - rays, their production and clinical use in medical field.

6. Describe interaction of radiation with matter.
7. Describe interaction of charged particles and neutrons with matter.
8. Write about transformers and their use in the radiology department.

### **PART - B**

Write short notes on **any five** of following. Each carries **six** marks.

**5x6=30**

1. Mass attenuation coefficient and its significance.
2. Bremsstrahlung radiation
3. Cyclotron
4. Grids and their role in radiography
5. Laws of electromagnetic induction
6. Stationary and rotating anode
7. Decay constant
8. Heel effect