

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

Term-End Examination

December, 2017

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

00101

Time : 3 hours

Maximum Marks : 70

Note : There are Eight questions. Attempt any six questions. Question number 8 (Eight) is Compulsory.

1. Discuss the radiation safety measures in an X-Ray room. **8**
2. Explain the measures you will take for the radiation safety of pediatric patients. **8**
3. Discuss in detail about the Cardinal Principles of Radiation Protection. **8**
4. Explain the terms AERB, ICRP and RSO along with role played by them in Radiology. **1+1+1+5=8**
5. Enlist various test tools contained in Quality assurance kit. Describe one of them. **4+4=8**
6. Describe the structure of step wedge. Explain its use for various QA tests in Radiology. **3+5=8**

7. Describe the radiation injuries in diagnostic radiology along with steps to avoid them. 8
8. Write short notes on any five of the following : 5x6=30
- (a) TLD badge.
 - (b) Lead aprons.
 - (c) Multimeter.
 - (d) Densitometer.
 - (e) Warming up procedure for CT.
 - (f) Periodical maintenance.
 - (g) Maximum permissible dose for radiation Workers and Public.
 - (h) Stochastic and Deterministic effects with examples.
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