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

# Term-End Examination June, 2014

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

Time: 3 hours Maximum Marks: 70

#### PART-A

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

- 1. Describe in details about Personnel Monitoring Services for workers in X-ray department.
- 2. What do you know about AERB safety code for X-ray equipment installation?
- 3. Describe the various directives to be followed in the cases of excess of exposures.
- **4.** Define the shielding continuity in details.
- 5. Name the radiation safety devices and their specific uses.
- Describe in detail how to perform quality assurance for radiological equipment of your choice.

- 7. Describe all the measures you will look for safe operation of equipment.
- 8. Name the various regulations, as prescribed for radiation safety and duties of radiation safety officer.

### PART-B

Write short notes on any five of the following questions. Each question carries 6 marks. 6x5=30

- 1. Shielding of X-ray room walls, doors and control room.
- **2.** Acceptance Testing for a CT Machine.
- 3. Radiation Safety Survey report in short.
- **4.** Radiation protection for female child.
- 5. Uses of Diagnostic reference levels.
- 6. Gradient field strength and procedure to detect the error in it.
- Draw a layout of a typical X-ray room as per safety regulation and code prescribed by AERB.
- 8. Entrance Skin Exposure.
- 9. Acceptance criteria for a diagnostic skiagrams.