B.Sc. IN MEDICAL IMAGING TECHNOLOGY (BMIT)

Term-End Examination June, 2013

BAHI-051 : PHYSICS OF RADIOLOGICAL EQUIPMENT - I

Time: 3 Hours Maximum Marks: 70

PART - A

Answer any five questions.

8x5 = 40

- Draw a labelled diagram of metallic X Ray tube.
 How does it differs from conventional X Ray tube.
- 2. Describe the construction and types of grid.
- 3. Describe various types of Rectification with their advantages and disadvantages.
- 4. Enumerate various beam limiting devices, give detailed account of any one.
- 5. What are filters, enumerate their types and uses in radiography.

- **6.** Describe the principle of conventional tomography. Enlist various types of conventional tomography.
- 7. Explain PACS and enumerate its advantages.
- 8. What are flat panel detectors. Describe their utility in fluoroscopy.

PART - B

- 9. Write short notes on *any five* of the following. 6x5=30
 - (a) Photo Stimulable Plates (PSP)
 - (b) Mammography X Ray tube
 - (c) Image intensifier
 - (d) Factors affecting image resolution
 - (e) Principle of DSA
 - (f) PET CT
 - (g) Dental X Ray machine
 - (h) Laser camera