

**B.Sc. IN RADIATION THERAPY TECHNOLOGY
(BRTT)**

Term-End Examination

June, 2014

**BAHI-034 : RADIOTHERAPY EQUIPMENT AND
PHYSICS**

Time : 3 hours

Maximum Marks : 70

PART - A

Attempt any five questions. Each question carries
8 marks.

1. How are X-rays produced ? What are the 4+4
properties of X-rays ?
2. What is TLD ? Discuss radiation monitoring of 2+6
staff working in a radiotherapy department.
3. Describe various Brachytherapy techniques. 8
4. Explain the principles of 3D image guided 8
Radiotherapy.
5. Explain the effects of radiation on human body. 8
6. What is stereostatic radiotherapy ? Explain its
principles and advantages. 2+3+3
7. Describe indications, techniques and
complications of electron beam therapy. 2+3+3

PART - B

8. Write short notes on **any five** of the following :

- (a) Shielding **6x5=30**
 - (b) I_r 192
 - (c) Radiation field analyzers
 - (d) Orthovoltage therapy machine
 - (e) Image guided Radiotherapy
 - (f) CT simulator
 - (g) Intra-operative Radiotherapy
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