

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

Term-End Examination

June, 2014

**BAHI-039 : RADIOTHERAPY PROCESS AND
CONVENTIONAL TECHNIQUES**

Time : 3 hours

Maximum Marks : 70

PART-A

Write short notes on any six of the following. Each carries 5 marks. 5x6=30

1. Three dimensional conformal Radiotherapy.
2. Dynamic wedge.
3. Purpose of image fusion in Radiotherapy.
4. Electronic Portal Imaging Device.
5. Forward and Inverse Planning.
6. In-vivo dosimetry in Radiotherapy.
7. Informed consent and its legality.
8. Steps in film processing.
9. Gamma knife for treatment of intra cranial tumours.

PART - B

Answer any four questions. Each questions carries 10 marks.

10x4=40

1. Explain the treatment technique and immobilization methods for the treatment of cranio-spinal irradiation.
2. Explain the Image Guided Radiotherapy technique used for the treatment of lung cancer.
3. What are the signs and symptoms of cancer of cervix ? Describe the treatment technique for a ca-cervix stage III patient.
4. What are the advantages of using linear accelerator compared to that of a cobalt - 60 machine ? What necessary precaution need to be taken in case of source getting stuck in a cobalt - 60 machine ?
5. Explain the different stages involved in the treatment of IMRT technique.
6. Explain about the different immobilization methods and devices used in Radiotherapy.
7. Explain in detail how a Radiotherapy plan evaluation can be carried out. Briefly write about the use of DRR in Radiotherapy.