

**B.Sc. RADIOTHERAPY TECHNOLOGY**  
(New Syllabus 2014-2015)

**SECOND YEAR**

**PAPER III – RADIOTHERAPY TECHNIQUES**

*Q.P. Code: 801933*

**Time: Three Hours**

**Maximum: 100 Marks**

**Answer all questions**

**I. Elaborate on:**

**(3 x 10 = 30)**

1. Immobilisation devices and its role in radiotherapy.
2. Describe indication, technique dose and complications of radiotherapy in carcinoma anorectum.
3. Enumerate indications of craniospinal irradiation and describe its techniques with illustration.

**II. Write notes on:**

**(8 x 5 = 40)**

1. ICRU 62.
2. Prophylactic cranial irradiation.
3. Interstitial brachytherapy.
4. Indications for emergency radiotherapy and describe any two in detail.
5. Adaptive radiotherapy.
6. Total skin electron beam therapy.
7. Radioimmunotherapy.
8. CT/MRI in tumour localisation.

**III. Short answers on:**

**(10 x 3 = 30)**

1. Integral dose.
2. What are radioprotectors and mention any three?
3. Short course preoperative radiotherapy in carcinoma rectum.
4. Properties and clinical uses of electrons.
5. What are beam flattening filters?
6. Cerrobend blocks and its composition and properties.
7. Sentinel lymph node biopsy.
8. Field borders for chest wall radiotherapy in carcinoma breast.
9. Dmax.
10. PET-CT.