

**B.Sc. RADIOTHERAPY TECHNOLOGY  
SECOND YEAR  
PAPER III – RADIOTHERAPY TECHNIQUES**

*Q.P. Code: 801913*

**Time: Three Hours**

**Maximum: 100 Marks**

**Answer all questions**

**I. Elaborate on:**

**(3 x 10 = 30)**

1. Describe the techniques, dose and complications of radiotherapy following breast conservation surgery in carcinoma breast T2 N0 M0.
2. Describe staging of carcinoma of cervix and management of a patient with stage III b disease.
3. Describe staging of carcinoma of anterior 2/3<sup>rd</sup> tongue and management of a patient with stage T3 N1 M0 disease.

**II. Write notes on:**

**(8 x 5 = 40)**

1. Post operative radiotherapy techniques in carcinoma of buccal mucosa T3 N2 M0.
2. Role of imaging in radiotherapy planning.
3. Brief note on craniospinal radiotherapy.
4. Radiotherapy in Acute Lymphoblastic Leukemia.
5. Radiotherapy in carcinoma hypopharynx.
6. Write a note on compensators and its clinical use.
7. Interstitial brachytherapy.
8. Techniques of radiotherapy in the treatment of lower third esophagus.

**III. Short answers on:**

**(10 x 3 = 30)**

1. Post operative radiotherapy in sarcomas of the extremity.
2. 2 dimensional Vs 3 Dimensional radiotherapy treatment.
3. Imaging for tumours of the pelvis.
4. Lasers in radiotherapy.
5. Properties of an ideal brachytherapy source.
6. Indications and details of radiotherapy in secondaries brain.
7. Image guided radiotherapy.
8. Radiotherapy techniques in pituitary adenoma.
9. Mammogram.
10. Dose Volume Histograms (DVH).