B.Sc. RADIOTHERAPHY TECHNOLOGY SECOND YEAR PAPER III – RADIOTHERAPY THCHNIQUES

Q.P. Code: 801913

Time: Three Hours Maximum: 100 Marks

Answer All Questions

I. Elaborate on: $(3 \times 10 = 30)$

1. Discuss various immobilization devices.

- 2. Elaborate on the principles of radiotherapy techniques of craniospinal irradiation.
- 3. Explain the principles of interstitial brachytherapy.

II. Write notes on: $(8 \times 5 = 40)$

- 1. Monoisocentric technique in the treatment of carcinoma breast.
- 2. Explain techniques for treating carcinoma rectum.
- 3. Explain any two radionuclide investigations.
- 4. Preparing a patient on first day of teletherapy.
- 5. Treatment technique for treatment of malignant brain tumor.
- 6. Describe the steps in making a mould for a patient.
- 7. Gating in external beam therapy.
- 8. Radiotherapy techniques in carcinoma maxilla.

III. Short answers on:

 $(10 \times 3 = 30)$

- 1. Tissue compensators.
- 2. Intra luminal radiation.
- 3. Hypo fractionation.
- 4. IMRT.
- 5. Surface mould.
- 6. Define "Point A", "Point B" in brachytherapy for carcinoma cervix.
- 7. Define LDR, MDR and HDR in brachytherapy.
- 8. Lasers in patient positioning.
- 9. Stereotactic Radio Surgery.
- 10. Electron beam therapy.
