

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

SECOND YEAR

PAPER I – TUMOR PATHOLOGY AND RADIOTHERAPY APPLICATIONS

Q.P. Code: 801931

Time: Three Hours

Maximum : 100 Marks

Answer All Questions

I. Elaborate on:

(3 x 10 = 30)

1. What are the characteristics of tumor? Write in detail about the spread of tumors?
2. Beam directional devices.
3. Epidemiology of cancer. Write in detail about chronic premalignant and non-neoplastic conditions.

II. Write Notes on:

(8 x 5 = 40)

1. Grading and staging of cancer.
2. Classify neoplasm based on cell of origin?
3. Cancer susceptibility genes and associated syndromes.
4. Tumor cell markers.
5. Isocentric technique.
6. Lhermitte's sign.
7. Five R's of radiotherapy.
8. Predisposing factors of cancer.

III. Short Answers on:

(10 x 3 = 30)

1. Histological types of thyroid malignancy.
2. CIN/SIL.
3. Differences between normal cells and cancer cells?
4. Dog leg technique.
5. Cell cycle.
6. Side effects of chemotherapy.
7. 3D Conformal technique.
8. Hyperfractionation.
9. Grading of mucositis.
10. Effect of radiation on reproductive organs.