

[LE 0212]

FEBRUARY 2014
B.Sc. RADIOTHERAPY TECHNOLOGY
SECOND YEAR
PAPER II – PRINCIPLES OF RADIOTHERAPY
Q.P. Code: 801912

Sub.Code :1912

Time: Three hours

Maximum : 100 Marks

Answer All questions

I. Elaborate on:

3 x 10 = 30

1. Explain IGRT in relation to carcinoma prostate.
2. What is the role of brachytherapy in cervical cancer? Explain the technique in use at your institution.
3. Explain the radiotherapy planning and delivery for advanced oropharyngeal cancer?

II. Write notes on:

8 x 5 = 40

1. How do you differentiate a malignant growth from a benign growth?
2. What is Total Body Irradiation? Explain its role cancer treatment.
3. Explain the radiotherapy planning for palliation of painful vertebral metastasis.
4. What is radio iodine therapy?
5. Explain the concurrent chemotherapy in cervical cancer, its effects and side effects?
6. Explain the use of radiotherapy for hemostasis ?
7. How do you treat the posterior neck in conventional head and neck radiotherapy?
8. How do you take care of the skin during radiotherapy?

III. Short answers on:

10 x 3 = 30

1. Illustrate the cell survival curve according to LQ model?
2. What is the etiology of oral cancer?
3. What is a cancer vaccine? Provide an example
4. What are the stochastic effects of radiotherapy?
5. What is a MUPIT? What is it used for?
6. What is an Intravenous pyelogram? Mention its purpose in radiotherapy.
7. What are the organs at risk in head and neck cancer radiotherapy?
8. Mention 4 unsealed radio isotopes used for therapy
9. What are the possible sites of spread for breast cancer?
10. Why do we correct anemia in patients before radiotherapy is initiated?
