

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 0423]

APRIL 2023

Sub. Code: 1931

**B.Sc. RADIOTHERAPY TECHNOLOGY
SECOND YEAR (Regulations 2014-2015 & 2018-2019 onwards)
PAPER I – TUMOR PATHOLOGY AND RADIOTHERAPY APPLICATIONS
Q.P. Code: 801931**

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. What are the characteristics of Benign and Malignant neoplasm? Elaborate about various pathways of spread.
2. Describe in detail about the anatomy, clinical features, investigation and TNM staging of Carcinoma Anal Canal. Elaborate about Radiotherapy treatment portals and volumes.
3. Mention in brief about the major morphological consequences of Radiation injury in individual organs.

II. Write Notes on:

(8 x 5 = 40)

1. Prophylactic cranial irradiation - Indications and Techniques.
2. Tumor Angiogenesis.
3. Cell Survival Curve.
4. Iridium – 192.
5. Precancerous lesions in the oral cavity.
6. Indications for Emergency Radiotherapy. Elaborate any two.
7. Total Skin electron beam therapy.
8. Tumor Cell markers.

III. Short Answers on:

(10 x 3 = 30)

1. Involved field Radiotherapy.
2. Therapeutic ratio.
3. Mention any five Chemotherapy drugs used in Head and Neck cancers.
4. What are the IHC markers evaluated in Carcinoma breast?
5. Mention any five HIV related Malignancies.
6. Intraluminal Brachytherapy.
7. Bone scan.
8. Hyperfractionation.
9. CIN/SIL.
10. Cancer Vaccines.
