

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

[AHS 1123]

NOVEMBER 2023

Sub. Code: 1933

B.Sc. RADIOTHERAPY TECHNOLOGY
SECOND YEAR (Regulations 2014-2015 & 2018-2019 onwards)
PAPER III – RADIOTHERAPY TECHNIQUES
Q.P. Code: 801933

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on: **(3 x 10 = 30)**

1. Explain about the Staging of Carcinoma Cervix and discuss about the role of Radiation Therapy in its Management.
2. Types of Beam Modifying Devices and its Importance.
3. Discuss about the Importance of Immobilization in Radiotherapy and write in detail about the commonly used Immobilization devices.

II. Write Notes on: **(8 x 5 = 40)**

1. Intraoperative Brachytherapy.
2. TSET.
3. Electron Beam Therapy.
4. Symmetric and Asymmetric Jaws.
5. Commonly encountered Emergencies in Radiation Therapy.
6. Bolus and its Application.
7. ICRU 62.
8. Role of CT in Radiation Therapy planning.

III. Short Answers on: **(10 x 3 = 30)**

1. Intraluminal Brachytherapy.
2. SSD and SAD treatment.
3. Multileaf Collimator.
4. Dose Volume Histogram.
5. Instructions to patients with Head and Neck tumors undergoing Radiation Therapy.
6. Dwell position and dwell time.
7. Types of setup errors.
8. Name any three commonly used Brachytherapy sources with their half life.
9. Indications for Palliative Radiation Therapy.
10. Electronic Portal Imaging Device.
