

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

[AHS 0122]

**JANUARY 2022
(OCTOBER 2021 EXAM SESSION)**

Sub. Code: 2412

**M.Sc. RADIOTHERAPY TECHNOLOGY
SECOND YEAR (From 2019-2020 onwards)
PAPER II-MANAGEMENT OF MOTION, PATIENT CARE AND DATA IN
RADIOTHERAPY
*Q.P. Code : 282412***

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Respiratory motion management techniques in Radiotherapy.
2. Scheduling Patient Appointment based on Conformal, IMRT, VMAT and gating treatment techniques.

II. Write notes on:

(10 x 6 = 60)

1. Managing reports in scheduling.
2. Cloud services in Radiotherapy data management.
3. Data transfer QA.
4. DICOM RT.
5. Errors encountered in daily use of Record and verification system.
6. 4DCT Imaging.
7. Mechanics of breathing.
8. KVCBCT and its use in patient set-up.
9. Limitations in radiotherapy due to tumor motion.
10. Effect of tumor motion on dose distribution.
