

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

[AHS 0321]

MARCH 2021

Sub. Code: 2502

(OCTOBER 2020 EXAM SESSION)

M.Sc. RADIOGRAPHY AND IMAGING TECHNOLOGY

FIRST YEAR (From 2019-2020 onwards)

PAPER II – CONVENTIONAL RADIOLOGICAL AND IMAGING EQUIPMENT

Q.P. Code : 282502

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on:

(2 x 20 = 40)

1. X-ray Generators.
2. Image intensifier.

II. Write Short Notes on:

(10x6 = 60)

1. Characteristic spectrum of X-rays spectrum
2. Reed switch
3. Scattered radiation
4. Anode heat storage capacity chart
5. Cooling system of X-ray tubes
6. Silicon Rectifiers
7. Fluorescence. Role in Radiology
8. Beam limiting devices
9. Photo timers
10. Interlocking circuits

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

[AHS 0222]

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

Sub. Code: 2502

**M.Sc. RADIOGRAPHY AND IMAGING TECHNOLOGY
FIRST YEAR**

(Candidates admitted from 2019-2020 onwards – Paper II)

(Candidates admitted from 2020-2021 onwards – Paper III)

**PAPER II & III – CONVENTIONAL RADIOLOGICAL AND IMAGING
EQUIPMENT**

Q.P. Code : 282502

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on: (2 x 20 = 40)

1. Factors influencing Quality and intensity of X –rays.
2. Mammography unit.

II. Write Short Notes on: (10x6 = 60)

1. Space charge effect.
2. Focal spot size measurement.
3. Constant potential generator.
4. Anode heel effect.
5. Half value layer.
6. Kilovoltage circuit.
7. Anode rating chart.
8. Advantages of Image intensifier tube over fluoroscopic device.
9. Dental X-ray unit.
10. Various types of grid movements.
