

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

[AHS 1122]

NOVEMBER 2022

Sub. Code: 1802

**B.Sc. RADIOLOGY IMAGING TECHNOLOGY
FIRST YEAR (Regulations 2010-2011 & 2014-2015)
PAPER II - GENERAL PHYSICS, RADIATION PHYSICS & PHYSICS OF
DIAGNOSTIC RADIOLOGY**

Q.P. Code: 801802

Time: Three Hours

Maximum : 100 Marks

Answer All questions

I. Elaborate on : **(3X10=30)**

1. Explain in detail about Interaction of radiation with matter.
2. Discuss the various types of cassette.
3. Types of radioactivity.

II. Write Notes on : **(8X5=40)**

1. Farady's law of electromagnetic induction.
2. Einstein's formula.
3. Grids and their types.
4. Total attenuation variation.
5. Characteristics of X-ray spectrum.
6. Line focus principle.
7. Electro Magnetic induction.
8. kV circuit.

III. Short Answers on : **(10X3=30)**

1. Half life.
2. Isotope.
3. Define Mass number.
4. Intensification factor.
5. Rectifier.
6. Tube current.
7. Focal spot.
8. Grid.
9. Nucleon.
10. Explain ionization and excitation.
