

**B.Sc. RADIOLOGY IMAGING TECHNOLOGY /
RADIO DIAGNOSIS TECHNOLOGY
FIRST YEAR**

**PAPER II – GENERAL PHYSICS, RADIATION PHYSICS AND
PHYSICS OF DIAGNOSTIC RADIOLOGY**

Q.P. Code: 801802

Time : Three Hours

Maximum : 100 Marks

Answer All questions.

I. Elaborate on:

(3 x 10 = 30)

1. Explain in detail the different interactions of x-rays with matter.
2. Write a note on the rotating anode xray tube.
3. Explain about the electromagnetic spectrum. Discuss about various radioisotopes used in medicine.

II. Write notes on:

(8 x 5 = 40)

1. Effect of scattered radiation.
2. Potter bucky.
3. Write a note on 3 phase 6 rectifier circuit.
4. Film screen contact test.
5. Filters used in Radiology.
6. Quality and quantity of xrays.
7. Nuclear fusion.
8. Intensifying screen.

III. Short answers on:

(10 x 3 = 30)

1. Linear attenuation coefficient.
2. Mutual induction.
3. Thermionic effect.
4. Fluorescence.
5. Optical density.
6. Differential absorption.
7. LET.
8. Inverse square law.
9. Eddy current loss.
10. Rare earth screens.
