

**B.Sc. RADIOLOGY IMAGING 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. With neat diagram explain about the high tension generator circuit for xray production.
2. Discuss about various types of grids. Discuss about the types of grid cut-off.
3. Discuss about capacitor discharge and battery operated xray machine.

II. Write notes on:

(8 x 5 = 40)

1. Automatic exposure control.
2. Radiographic film.
3. Interaction of gamma rays with matter.
4. Half wave rectifier.
5. Photoelectric effect.
6. Collimator.
7. Nuclear Fission.
8. Discuss in detail the function of Semiconductors.

III. Short answers on:

(10 x 3 = 30)

1. Radioisotope.
2. Electromagnetic spectrum.
3. Galvanometer.
4. Faraday's law.
5. HVL.
6. Cathode ray oscilloscope.
7. Joules law.
8. Transformer.
9. Capacitor.
10. Hysteresis loss.
