

(LC 1514)

APRIL 2013

Sub. Code: 3019

**DIPLOMA IN MEDICAL RADIODIAGNOSIS (DMRD)
EXAMINATION**

MEDICAL RADIATION PHYSICS AS APPLIED TO RADIODIAGNOSIS
Q.P. Code : 343019

Time: Three Hours

Maximum: 100 marks

I. Elaborate on:

(2X15=30)

1. Define scatter radiation. Comment briefly on the factors controlling scatter radiation.
2. Define roentgen. Mention various recommendations on Maximum permissible dose for patients and staff members in radiology department.

II. Write notes on:

(10X7=70)

1. Adverse reactions of MR contrast media.
2. Doppler artefacts.
3. Gradient echo sequences.
4. Principles, types of bone densitometry.
5. Describe the basics of BOLD imaging.
6. Principles of ultrasound elastography.
7. Factors which affect the radiographic quality of image.
8. Beam hardening artefacts.
9. Stationary and moving X – rays grids.
10. Primary and secondary radiation.
