DIPLOMA IN MEDICAL RADIO DIAGNOSIS (DMRD) EXAMINATION

MEDICAL RADIATION PHYSICS AS APPLIED TO RADIO DIAGNOSIS

Q.P.Code: 343019

Time: Three Hours Maximum: 100 Marks

I. Elaborate on: $(2 \times 15 = 30)$

1. Discuss the physics and principle of spiral CT, add a note on multi detector CT.

2. Write in detail about SPECT - Gamma Camera system.

II. Write notes on: $(10 \times 7 = 70)$

- 1. MR contrast agents.
- 2. CT artefacts.
- 3. Physics of Doppler effect.
- 4. X-ray Mammography Equipment.
- 5. Characteristic curve of X-rays.
- 6. Physics of PET imaging.
- 7. Non-stochastic effects of Radiation.
- 8. Radiation protective devices and their lead equivalents.
- 9. Physics of Intensify screens.
- 10. Dark Room Plan of a Radiology Dept.
