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. a) Enumerate Types of digital radiography. Describe each one briefly.

- b) Advantages and limitations of DR compared with conventional film screen radiography.
- 2. Define basic units of radiation exposure. Describe biological effects of radiation.

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

- 1. Mammography X-ray tube.
- 2. Digital tomosynthesis.
- 3. Photoelectric effect and its applications in diagnostic radiology.
- 4. Film contrast.
- 5. TLD badge.
- 6. Recent advances in USG transducer technology.
- 7. Grids.
- 8. Ultrasound artifacts.
- 9. Rotating anode.
- 10. Image intensifier.
