[LI 0216]

## FEBRUARY 2016

Sub. Code: 1402

## DIPLOMA IN RADIOLOGY IMAGING TECHNOLOGY FIRST YEAR PAPER II – GENERAL PHYSICS, RADIATION PHYSICS & PHYSICS OF DIAGNOSTIC RADIOLOGY

	Q.P. Code : 841402	
<b>Time : Three Hours</b>		Maximum : 100 Marks
	Answer All questions.	
I. Elaborate on:		$(3 \times 10 = 30)$

- 1. Compare the Properties of Alphs, Beta, Gamma, X-ray.
- 2. State Fleming's Lt. and Rt. Hand Rule.
- 3. Electromagnetic Loss.

## II. Write notes on:

- 1. Electromagnetic Spectrum.
- 2. SI unit of Temp, Radiation Absorption, Heat, Pressure.
- 3. Elimination of Heat in X-ray tube.
- 4. Rectification circuit.
- 5. TLD Badge.
- 6. Usage of Filters in X-ray.
- 7. Usage of Survey Meter.
- 8. Find the Intensity of radiation at 3mt, if it is 20R at 1mt.
- 9. Ionisation and Excitation.
- 10. Ohm's Law.

## **III. Short answers on:**

- 1. Unit for Magnetic Flux.
- 2. Atomic Elements.
- 3. Joule's Law.
- 4. TLD.
- 5. Electro Magnetic Induction.
- 6. Reason for Tungsten in Cathode X-ray tube.
- 7. Curie.
- 8. Solid State Rectifiers.
- 9. HVL.
- 10. 2 Radioactive Isotopes.

(10 x 2 = 20)

 $(10 \times 5 = 50)$