M.Sc. MEDICAL PHYSICS - DEGREE EXAMINATION SECOND YEAR PAPER IV – RADIATION SAFETY

Q.P. Code: 284034

Time: Three hours Maximum: 100 marks

I. Elaborate on: $(2 \times 20 = 40)$

1. Write an essay about the principles of radiation protection.

2. Discuss the type of radiation emergencies that are likely to be encountered in a radiotherapy department consisting of telecobalt, medical linear accelerator and remote after loading brachytherapy unit.

II. Write notes on: $(10 \times 6 = 60)$

- 1. ALI & DAC.
- 2. Deterministic effects.
- 3. Use factor and occupancy factor.
- 4. Labeling of packages.
- 5. General methods of disposal of radioactive wastes.
- 6. TLD personnel monitoring.
- 7. Factors governing internal exposures.
- 8. Transport of radioactive materials.
- 9. Responsibilities of RSO in Diagnostic Radiology.
- 10. Radiation survey in telecobalt unit.
