PG Degree Examinations in Radiotherapy (MD) April 2018

Paper I – Radiation Physics, Radiobiology & Other Basic Sciences

Time: 3 hrs

- Answer all questions
- Draw diagrams wherever necessary

Essay:

1. Describe in detail, the evolution of brachytherapy techniques of cervical cancer with neat labelled diagram. Explain briefly the dose and volume specification for reporting intracavitory therapy using ICRU 38 system. Define all the reference points as per ICRU 38. What all the radiobiological advantages and disadvantages of various dose rate systems.

Short essays:

- 2. TARGIT
- 3. Hyperthermia
- 4. Wedges
- 5. Respiratory gating
- 6. Radio sensitivity of tumours
- 7. Informed consent
- 8. IGRT
- 9. Stranquist curve

Max marks:100

(20)

(8x10=80)