

QP Code:101117

Reg.No.:.....

**PG Degree Supplementary Examinations in Radiotherapy (MD) -
November 2014**

Paper I – Radiation Physics, Radiobiology & Other Basic Sciences

Time: 3 hrs

Max marks:100

- *Answer all questions*
- *Draw diagrams wherever necessary*

Essays: (20)

1. Explain about the various principles of radiation protection and describe the various personnel monitoring devices

Short essays: (10x8=80)

2. Particle therapy
3. Discuss cell cycle and its relevance to radiotherapy
4. Beam flattening devices
5. Integral dose
6. Isotopes used in brachy therapy
7. Describe the cellular injury by ionizing radiation and the different factors which modify the injury
8. Describe the importance of immobilization in modern radiotherapy. Mention the different immobilization and alignment techniques
9. Simulator
