

**QP Code:101117**

**Reg.No.:.....**

**PG Degree Examinations in Radiotherapy (MD) - May 2013**

**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 the working, advantages and disadvantages of telecobalt machine when compared to a linear accelerator

**Short essays:**

**(10x8=80)**

2. Wedge filters
3. Portal Imaging
4. Syndromes due to acute radiation exposure
5. Various modes of cell death following radiotherapy
6. Brachy therapy sources and its clinical application
7. Mechanism of carcinogenesis
8. Cell survival curve
9. Tumor control probability

\*\*\*\*\*