

QP Code: 101188

Reg. No.:.....

**P.G. Diploma Examinations in Medical Radiotherapy (DMRT)
April 2019**

Paper I – Radiation Physics

Time: 3 hrs

Max marks: 100

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

Essay:

(20)

1. Enumerate the production of photons and electrons by a medical linear accelerator.
Discuss various techniques of image guided radiotherapy.

Short essays:

(8x10=80)

2. Permanent seed brachytherapy
3. Extreme hypo fractionation
4. Compton effect
5. Principles of intensity modulated radiotherapy
6. Beam modifying devices
7. Compare and comment on iridium and cobalt source used for high dose rate brachytherapy.
8. Penumbra
9. Integral dose
