

QP Code: 101188

Reg. No.:.....

P.G. Diploma Examinations in Medical Radiotherapy (DMRT) May 2017

Paper I – Radiation Physics

Time: 3 hrs

Max marks:100

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

Essay:

(20)

1. Describe the interactions of ionizing radiation with matter. Define the unit of absorbed dose and the methods of measuring absorbed dose in radiotherapy.

Short essays:

(8x10=80)

2. Thimble chamber.
3. Percentage depth dose and tissue air ratio.
4. Iridium
5. Electron beam.
6. Beam modifying devices.
7. Radiotherapy field setup in wedge pair technique.
8. Simulator in radiotherapy.
9. Radiation safety in HDR brachytherapy.
