

**QP Code: 101188**

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

**P.G. Diploma Examinations in Medical Radiotherapy (DMRT)  
April 2018**

**Paper I – Radiation Physics**

**Time: 3 hrs**

**Max marks:100**

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

**Essay:**

**(20)**

1. Describe in detail the establishment of a radiotherapy department. Explain in detail the radiation safety and radiation protection aspect of establishing the tele therapy wing and brachytherapy wing adjacent to it and other essential components of radiotherapy department.

**Short essays:**

**(8x10=80)**

2. Tomo therapy
3. DVH – dose volume histogram
4. BNCT – boron neutron capture therapy
5. Percentage depth dose
6. Heavy particle radiotherapy
7. SRT – stereotactic radiotherapy
8. Radiation safety measures in HDR brachytherapy machine
9. Hyper fractionation in radiotherapy

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