(LM 140) MAY 2018 **Sub. Code: 2035**

M.D. DEGREE EXAMINATION

BRANCH IX – RADIO THERAPY

PAPER I – MEDICAL RADIATION PHYSICS AS APPLIED TO RADIOTHERAPY AND RADIATION BIOLOGY

Q.P.Code: 202035

Time: Three Hours **Maximum: 100 Marks**

I. Elaborate on: **(2 x 15 = 30)**

1. Describe the beam modifying devices with suitable illustrations.
2. Describe in detail the applications of particle therapy.

II. Write notes on: **(10 x 7 = 70)**

1. Thermoluminiscence dosimeter.
2. Daily quality assurance in Telecobalt therapy.
3. Linear energy Transfer.
4. Iridium 192.
5. Repopulation in Radiobiology.
6. Immobilisation devices.
7. Compton Effect.
8. Describe the physical aspects of V-MAT technique.
9. LQ model.
10. Electron therapy.

****