



**NAV-5122**

Seat No. \_\_\_\_\_

**M. D. (Branch - XV) Examination**

**March / April - 2017**

**Radiotherapy : Paper - I**

*(Radio Physics & Applied Basic Sciences)*

Time : 3 Hours]

[Total Marks : 100

Instructions :

- (1) Write legibly, no marks are given for unreadable material.
- (2) Figures to the right indicate full marks.
- (3) Answer to the point.
- (4) All questions carry equal marks.

- 1 How X-rays are produced ? Discuss its therapeutic uses in medical science. 20
- 2 How photons interact with matter ? Explain with suitable examples. 20
- 3 Discuss Radio therapeutic uses of Sealed radioisotopes. 20
- 4 Attempt both (a) and (b) : 20
  - (a) Dose Response Curve
  - (b) Attenuation Coefficients.
- 5 Write short notes on any four : 20
  - (a) Isodose Curve
  - (b) Maximum Permissible Dose
  - (c) Beam shaping devices
  - (d) Specific activity
  - (e) Thermo luminescent Dosimeter.