

**Q.P.CODE:164-NR**

DR NTR UNIVERSITY OF HEALTH SCIENCES:: VIJAYAWADA  
**M.D. DEGREE EXAMINATION – APRIL, 2018**  
**RADIOTHERAPY**

**PAPER-I : BASIC SCIENCES**

Time: 3 Hours

Max. Marks:100

Note: Answer all questions  
All questions carry equal marks  
Draw neat diagrams wherever necessary

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**WRITE SHORT ESSAYS ON THE FOLLOWING:**

- 1) Reoxygenation
- 2) RBE (Relative Biological Effectiveness)
- 3) Population based cancer registry
- 4) Oncogenes
- 5) Pathology of Hodgkin's disease
- 6) What is the difference between Photoelectric effect and Compton Effect and its clinical significance?
- 7) Beam modifying devices
- 8) Californium as a brachytherapy source
- 9) Cell survival curve for sparsely and densely ionizing radiations
- 10) Discuss the current status of MRI in Breast cancer.

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