SL.No: M23304 Course Code: 2690101

VINAYAKA MISSION'S RESEARCH FOUNDATION, SALEM. (Deemed to be University)

M.SC.(RADIOLOGY AND IMAGING TECHNOLOGY) DEGREE EXAMINATION – January 2020 First Year

RADIOLOGICAL PHYSICS

Time: Three hours Maximum: 100 marks

Answer ALL questions

I. Write an Long essay on:

 $(3 \times 20 = 60)$

- 1. Explain in detail the biological effects of X-ray radiation.
- 2. Explain characteristic Radiation and Bremsstrahlung Radiation.
- 3. Write a detailed note on MR safety and RF safety.

II. Write short notes on:

 $(4 \times 10 = 40)$

- 4. Factors affecting spatial resolution
- 5. Contrast harmonic imaging
- 6. Spin-lattice and spin-spin relaxation
- 7. TLD badge
- 8. RIS and PACS.
