

**VINAYAKA MISSIONS RESEARCH FOUNDATION, SALEM**  
(Deemed to be University)  
**M.SC.(RADIOLOGY AND IMAGING TECHNOLOGY)**  
**DEGREE EXAMINATION – February 2020**  
**First Year**

**RADIATION SAFETY AND PROTECTION**

Time: Three hours

Maximum: 100 marks

Answer **ALL** questions

**I. Write a Long essay on:** **(2 x 20 = 40)**

1. AERB recommendations regarding occupational radiation exposure limits and dose limits to public.
2. AERB specifications for Digital mammography equipment installation.

**II. Write short notes on:** **(10 x 6 = 60)**

3. CTDI and DLP.
4. Biological effects of Ultrasound.
5. GM counter.
6. Ionization chamber.
7. Radiation protection to pediatric patients in CT and X- ray.
8. Radiation safety in Cath lab.
9. Write a note on TDS principle and ALARA.
10. PC PNDT guidelines.
11. Legal documentation in radiology as per NABH guidelines.
12. Pocket dosimeter and radiation survey meter.

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