

**VINAYAKA MISSION'S RESEARCH FOUNDATIONS, SALEM
(Deemed to be University)**

**DIPLOMA IN RADIOLOGY AND IMAGING TECHNOLOGY
EXAMINATION – March 2019
First Year**

**GENERAL PHYSICS, RADIATION PHYSICS AND PHYSICS OF
DIAGNOSTIC RADIOLOGY**

Time: Three hours

Maximum: 75 marks

I. Write an essay on any ONE of the following: (1 x 20 = 20)

1. Discuss in detail the various electromagnetic waves and their properties.
2. Explain in detail of Interaction of photons with matter.

II. Write short notes on any TWO of the following: (2 x 10 = 20)

3. Film badge
4. X-ray circuits.
5. Structure and parts of atom.
6. Electromagnetic induction.

III. Write short answers on any SEVEN of the following: (7 x 5 = 35)

7. Pocket dosimeter.
8. Molecule.
9. Define and explain work and power.
10. Ionizing Radiation .
11. Radioactivity.
12. X-ray in health care.
13. Heel effect.
14. Kirchoff's law.
15. Hazards of X-ray.
16. Cathode and anode.
