

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

**DIPLOMA IN RADIOLOGY AND IMAGING TECHNOLOGY
EXAMINATION – February 2020
Second Year**

**EQUIPMENTS, BASIC TECHNIQUES OF MODERN
IMAGING MODALITIES**

Time: Three hours

Maximum: 75 marks

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

1. Describe third and fourth generation CT scanner.
2. Explain in detail the various display modes in Ultrasound.

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

3. Post processing techniques in CT.
4. Factors influencing Signal to Noise ratio in MRI.
5. MRI contrast media.
6. Digital Radiography principle.

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

7. CT Window width and window level.
8. MDCT principle.
9. Mammogram principle.
10. Truncation artifact.
11. T2 FLAIR sequence in MRI.
12. CCD technology in Digital Radiography.
13. Ultrasound abdomen.
14. CR cassette.
15. Ultrasound guided pleural aspiration.
16. Mirror image artifact in ultrasound.