THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 1022] OCTOBER 2022 Sub. Code: 2505

M.Sc. RADIOGRAPHY AND IMAGING TECHNOLOGY FIRST YEAR

(Candidates admitted from 2019-2020 onwards – Paper V) (Candidates admitted from 2020-2021 onwards – Paper VI) PAPER V & VI – MODERN RADIOLOGICAL AND IMAGING EQUIPMENT

Q.P. Code: 282505

Time: Three hours Answer ALL Questions Maximum: 100 Marks

I. Elaborate notes on:

 $(2 \times 20 = 40)$

- 1. Discuss principle, equipment, procedure and recent advances in gamma camera and spect imaging.
- 2. a) Discuss various non-contrast angiography.
 - b) Discuss in detail about various types of MRI PERFUSION sequences, techniques and application.

II. Write Short Notes on:

(10x6 = 60)

- 1. MRI Artifacts and remedies.
- 2. Explain MPR, MIP and MINIP.
- 3. Patient preparation and procedure and post processing techniques in pulmonary angiogram.
- 4. Types of modern X-Ray tubes.
- 5. MR spectroscopy principle.
- 6. CT Cisternogram.
- 7. Contrast Media.
- 8. Techniques of Ultrasound Elastography and its applications.
- 9. Technetium generator.
- 10. Ultrasound artifacts.
