

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

[AHS 0423]

APRIL 2023

Sub. Code: 1837

B.Sc. RADIOLOGY IMAGING TECHNOLOGY

THIRD YEAR (Regulation 2014-2015 onwards)

PAPER II – MODERN IMAGING TECHNIQUES AND RECENT TRENDS IN IMAGING

Q.P. Code: 801837

Time: Three Hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Explain about Radiation dose and recent advances in Mammography techniques, their advantages and limitations.
2. Discuss in detail principal and working of PET-CT Scanner.
3. Types of Contrast in imaging CT and MRI.

II. Write notes on:

(8 x 5 = 40)

1. Renal artery stenosis – doppler imaging.
2. Injection techniques in CT scan.
3. USG Transducers.
4. Dynamic Liver Imaging using MRI-Indications, protocol, preparation, procedure.
5. Pituitary adenoma – MRI protocol.
6. Instruction and positioning of a patient for TAS and TVS.
7. Nuclear Imaging in Myocardial perfusion.
8. MR Angiography – Circle of Willis.

III. Short answers on:

(10 x 3 = 30)

1. Image display in CT.
2. kV and mA.
3. TACE.
4. Aortic dissection.
5. Venography.
6. BOLD.
7. MRCP.
8. Stent.
9. Bolus tracking.
10. Components of Ultrasound Gel.
