

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

[AHS 0424]

APRIL 2024

Sub. Code: 1843

**B.Sc. RADIOGRAPHY & IMAGING TECHNOLOGY
FIRST YEAR (Regulation 2018-2019 onwards)
PAPER III – RADIOGRAPHY EQUIPMENTS, MAINTENANCE AND
QUALITY CONTROL RELATED TO X-RAY ONLY
*Q.P. Code: 801843***

Time: Three Hours

Answer All questions

Maximum : 100 Marks

I. Elaborate on :

(3 X 10 = 30)

1. Explain construction and working of Digital Radiography.
2. Explain modern X-ray (rotating anode) tube with neat diagram.
3. What is Fluoroscopy? Explain its types with neat diagram.

II. Write notes on:

(8 x 5 = 40)

1. What is Grid? Explain its types.
2. Explain construction and working of Image Intensifier.
3. Explain the principle and working of Mammography.
4. Explain the generation of CT.
5. Digital subtraction angiography.
6. Explain about the Image processing and storage in CT.
7. Explain about Heat dissipation methods in X-ray machine.
8. Automatic brightness control in fluoroscopy.

III. Short answers on:

(10 x 3 = 30)

1. Molybednum target.
2. DICOM.
3. Type of equipment used in Dental Radiography.
4. Advantages of flat panel fluoroscopy.
5. Motion artifact and ring artifact.
6. Space charge effect.
7. What are the advantages of CR?
8. Pixel and Voxel.
9. Inherent filtration.
10. Safety steps in Fluoroscopy.
