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

[AHS 1123] NOVEMBER 2023 Sub. Code: 1832

B.Sc. RADIOLOGY IMAGING TECHNOLOGY SECOND YEAR (Regulation 2010-2011 & 2014-2015 onwards) PAPER II – X-RAY FILM / IMAGE PROCESSING TECHNIQUES (INCLUDING DARK ROOM TECHNIQUES)

Q.P. Code: 801832

Time: Three hours Answer ALL Questions Maximum: 100 Marks

I. Elaborate on : $(3 \times 10 = 30)$

1. Describe about the Automatic Processing Equipments with diagram.

- 2. Explain about the type of Dark Room Entrance with diagram.
- 3. What is HD Curve? Describe about the difference densities measured in Characteristic Curve.

II. Write notes on: $(8 \times 5 = 40)$

- 1. What are the Light Sensitive Materials and its uses?
- 2. Described about the types of X-ray films.
- 3. What is Safe light? Describe about the types of Safe light.
- 4. Describe about the Picture archiving and Communication system.
- 5. Explain about the Modular day light handling system.
- 6. Explain about the formation of latent image.
- 7. How will you give care and maintenance of Automatic Process Equipment?
- 8. What are the different types of Film Artifacts?

III. Short answers on: $(10 \times 3 = 30)$

- 1. What is Acid Stop bath?
- 2. Define Quantum Mottle Artifact.
- 3. What is X-ray Film Hopper?
- 4. Define Dental X-ray film.
- 5. What is the preservative and its function?
- 6. Define Radiographic contrast.
- 7. What is Tele Radiography System?
- 8. Draw a diagram of Dark Room Loading Bench and Master Tank Structure.
- 9. Define Optical Disc System.
- 10. What is Lobby light?
