

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

**[AHS 0423]**

**APRIL 2023**

**Sub. Code: 1847**

**B.Sc. RADIOGRAPHY & IMAGING TECHNOLOGY  
SECOND YEAR (Regulation 2018-2019 onwards)  
PAPER II – X-RAY FILM / IMAGE PROCESSING TECHNIQUES  
(INCLUDING DARK ROOM TECHNIQUES)  
*Q.P. Code: 801847***

**Time: Three hours**

**Answer ALL Questions**

**Maximum: 100 Marks**

**I. Elaborate on :**

**(3 x 10 = 30)**

1. Explain in detail about Intensifying Screens.
2. Describe Manual Film Processing in detail.
3. What are the Constituents of Fixer and Developer solution and explain each of them.

**II. Write notes on:**

**(8 x 5 = 40)**

1. Explain about the Speed of Screen Film Combination.
2. PACS.
3. How will you store unexposed X-ray Film?
4. What is Computed Radiography and explain Principle.
5. Rare Earth Screen.
6. Silver recovery.
7. Types of X-ray cassette.
8. Grid and Filters.

**III. Short answers on:**

**(10 x 3 = 30)**

1. Latent Image Formation.
2. What is PENUMBRA?
3. What is Film Latitude?
4. Define Hatch box.
5. Define Film Sharpness.
6. Define Gamma of characteristic curve.
7. Dichroic fog.
8. Safelight.
9. Dark Room Entrance.
10. Sodium thiosulphate.

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