

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

[AHS 0423]

APRIL 2023

Sub. Code: 1424

DIPLOMA IN RADIOGRAPHY AND IMAGING TECHNOLOGY

FIRST YEAR (Regulation 2018-2019 onwards)

PAPER IV – X-RAY FILM / IMAGE PROCESSING TECHNIQUES

Q. P. Code: 841424

Time: Three hours

Maximum : 100 Marks

Answer ALL Questions

I. Elaborate on:

(3 x 10 = 30)

1. Describe the characteristics of an X-ray film with diagrams.
2. Discuss in detail about Dry bench and Wet bench. Describe about Film storage.
3. Discuss in details about Automatic Film Processing.

II. Write notes on:

(10 x 5 = 50)

1. What is Image Quality? Describe factors affecting Image Quality.
2. What are Cassettes? Describe precautions in use of cassettes.
3. Describe functions of Accelerator and Preservative in a developer solution.
4. Film fixing.
5. Rare Earth Screen.
6. Latent Image Formation.
7. List the types of intensifying screens and give their advantages.
8. Artifacts during fixing of X-ray film.
9. Define Computed Radiography and describe the principle of CR system.
10. What is silver recovery? Describe any one methods of silver recovery.

III. Short answers on:

(10 x 2 = 20)

1. Define Gadolinium Oxysulfide.
2. Define Fluorescence.
3. Define Radiographic contrast.
4. What is Anti-Halo backing?
5. What is Buffer solution?
6. X-ray Phosphors.
7. What are Photosensitive materials?
8. What is Gelatin?
9. What is Activator?
10. Define Squeeze Roller.
