

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

[AHS 0922]

SEPTEMBER 2022

Sub. Code: 1424

(FEBRUARY 2022 & AUGUST 2022 EXAM SESSIONS)

**DIPLOMA IN RADIOGRAPHY AND IMAGING TECHNOLOGY
FIRST YEAR (Regulation from 2018-2019)
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. What is film sharpness? What are the factors affecting film sharpness?
2. What are the general defects noted in the Radiograph? Discuss in detail about its causes.
3. Draw and explain the cross sectional view of double side coated X-ray film.

II. Write notes on:

(10 x 5 = 50)

1. Film Developing.
2. What are the precautions used for storage of unexposed X-ray films?
3. What is direct exposure type of X-ray films? What are the advantages of direct exposure type of X-ray film?
4. List the advantages and disadvantages of day light system.
5. Explain about modern image processing rooms.
6. Handling of X-ray Film in Loading and Unloading.
7. How will you test for screen contact?
8. Name the various parts of Cassette and its use in production of radiographic image.
9. Construction of Laser imager and its advantages.
10. Discuss about the speed of intensifying screens and the factors increasing the speed of screen.

III. Short answers on:

(10 x 2 = 20)

1. What are the photosensitive materials?
2. What is Hardener? Where it is present?
3. Define pH scale.
4. What is Radiographic contrast?
5. Define pass box.
6. What is Latent Image?
7. What is panchromatic film?
8. Rare earth intensifying screens.
9. Film Storage of unexposed films.
10. Artifacts in automatic film processing.
