

[LC 0212]

FEBRUARY 2013

Sub. Code: 1404

**DIPLOMA IN RADIOLOGY IMAGING TECHNOLOGY**

**FIRST YEAR**

**PAPER IV – X- RAY FILM / IMAGE PROCESSING TECHNIQUES**

*Q.P. Code : 841404*

**Time : Three hours**

**Maximum : 100 marks**

**Answer ALL questions.**

**I. Elaborate on:**

**(3X10=30)**

1. What is film sharpness? What are the factors affecting film sharpness?
2. Draw cross sections of double coated and single coated X-ray films. What are the advantages and disadvantages of double coated X-ray film?
3. What are the intensifying screens? What are the factors affecting the speed of screen?

**II. Write notes on:**

**(10X5=50)**

1. What are the advantages and disadvantages of automatic film processors?
2. What is image quality? Describe factors affecting image quality.
3. What are the precautions used for storage of unexposed x-ray films?
4. What is dark room illumination and safe light?
5. Describe the characteristic curve of an x-ray film.
6. Describe functions of accelerator and preservative in a developer solution.
7. What are cassettes? Describe precautions in use of cassettes.
8. What is direct exposure type of x-ray films? What are the advantages of direct exposure type of x-ray film?
9. What are the various methods of film printing?
10. Write short note on film fixing.

**III. Short Answers on:**

**(10X2=20)**

1. What is a screen type x-ray film?
2. What are rare earth metals?
3. Describe dental film.
4. What is the composition of a developer solution?
5. What is latent image?
6. What are the basic constituents of a fixer solution?
7. What is importance of pH in processing?
8. What is phosphorescence?
9. What are panchromatic films?
10. What are various types of film hangers.

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