

**B.Sc. IN MEDICAL IMAGING TECHNOLOGY
(BMIT)**

Term-End Examination

June, 2012

BAHI-032 : RADIOGRAPHIC IMAGING

Time : 3 hours

Maximum Marks : 70

PART - A

Fill in the blanks :

10x1=10

1. (a) The photosensitive material in x-ray film is _____ .
- (b) _____ is used in combination with metal or phenidone as developing agent.
- (c) The added filters rem are _____ x-rays and reduce the patient dose.
- (d) The Image Intensifier input phosphor makes use of _____ crystal.
- (e) The reciprocal of the exposure of the x-ray film is also known as _____ .
- (f) Base of medical x-ray film is made up of _____ .
- (g) _____ fog is caused by the failure of developing agents during film processing.

- (h) Crow's feet marks are due to _____ artifacts.
- (i) The fast film has _____ size grains compared to slow films.
- (j) The working distance between the safe light to the film should not be less than _____ .

2. Write *short notes* on the following : 5x2=10

- (a) Optical density.
- (b) Speed of the film.
- (c) Fluorescence and phosphorescence .
- (d) Super coat in film.
- (e) Film fog.

PART -B

Attempt any four questions :

4x5=20

3. Describe in brief about the construction of an intensifying screen.
4. Enlist the different methods of replenishment in automatic processing.
5. What are the different artifacts in conventional radiography (manual processing) and how they can be avoided ?
6. Explain the image formation in digital Radiography. (DR System)
7. Enlist the precautions to be taken while planning for dark room illumination

PART-C

Attempt **any three** questions :

10x3=30

8. What is a characteristic curve ? Explain in detail about the different regions in the curve .
 9. Why film processing is required ? Explain the different steps in obtaining the final radiographic image.
 10. Enlist the different constituents. of a developer in automatic processors and write about their functions.
 11. Describe in detail about the construction, care and storage of a radiographic film.
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