

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

01178

**Term-End Examination
December, 2010**

BAHI-032 : RADIOGRAPHIC IMAGING

Time : 3 hours

Maximum Marks : 70

PART - A

1. Fill in the Blanks : 1x10=10
- (a) _____ is used as photosensitive material in X - ray films.
 - (b) Rare-earth intensifying screens are _____ than non-rare-earth intensifying screens.
 - (c) In routine radiographic cassette _____ intensifying screen is mounted first.
 - (d) The safe light should be mounted _____ high above the dry bench in dark room.
 - (e) With respect to developer PQ stands for _____ and Quinol.
 - (f) Nail marks are actually _____ artifacts.
 - (g) The temperature of developer in automatic processor should be _____.

- (h) _____ is used as active material to record image on CR plate.
- (i) Cesium Iodide is used in _____ type of flat detectors.
- (j) _____ is used to check film screen contact in radiographic cassette.

2. Write short notes on the following : 2x5=10

- (a) H and D curve
- (b) Transverse section of double side coated film.
- (c) Care of PSR
- (d) Hardener and fixer.
- (e) Fluorescence.

PART - B

Attempt *any four* questions :

5x4=20

3. Describe essential conditions for storage of X - ray films.
4. Explain the construction of manual processing tank with a suitable diagram.
5. Describe the structure of direct type flat panel detectors.
6. Describe the various methods of replenishment in automatic processors.
7. Explain CR image formation and the viewing process.

PART - C

Attempt *any three* questions :

10x3=30

8. Describe the layout plan of dark room.

 9. Describe in detail the constituents of developer in automatic processors along with the function of each.

 10. Describe the historical developments and advancements in fluoroscopy systems.

 11. Explain the formation and development of latent image.
-