

[LB 0212]

AUGUST 2012

Sub. Code: 1812

**B.Sc. RADIOLOGY IMAGING TECHNOLOGY
SECOND YEAR**

**PAPER II – X-RAY FILM/IMAGE PROCESSING TECHNIQUES
(INCLUDING DARK ROOM TECHNIQUES)**

Q.P. Code : 801812

Time : Three hours

Maximum : 100 marks

(180 Min) Answer ALL questions in the same order.

I. Elaborate on:

**Pages Time Marks
(Max.)(Max.)(Max.)**

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|--|---|----|----|
| 1. Discuss in detail about double coated X-ray film structure? | 7 | 20 | 10 |
| 2. Explain different steps in manual processing? | 7 | 20 | 10 |
| 3. Define contrast and various factors that affect contrast. | 7 | 20 | 10 |

II. Write notes on:

- | | | | |
|---|---|----|---|
| 1. Safe Light. | 4 | 10 | 5 |
| 2. Penumbra. | 4 | 10 | 5 |
| 3. Fluorescence. | 4 | 10 | 5 |
| 4. Rare earth screens. | 4 | 10 | 5 |
| 5. Artifacts in X-ray films. | 4 | 10 | 5 |
| 6. Constructions of automatic film processor. | 4 | 10 | 5 |
| 7. Uses of single coated X-ray film. | 4 | 10 | 5 |
| 8. Types of X-ray Cassettes. | 4 | 10 | 5 |

III. Short answers on:

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|---|---|---|---|
| 1. Mammography film. | 2 | 4 | 3 |
| 2. Cassette pass box. | 2 | 4 | 3 |
| 3. Base fog. | 2 | 4 | 3 |
| 4. Processing faults. | 2 | 4 | 3 |
| 5. Tests for light leakage in X-ray cassette. | 2 | 4 | 3 |
| 6. Film storage of unexposed films. | 2 | 4 | 3 |
| 7. Draw a characteristic curve of X-ray emulsion and label. | 2 | 4 | 3 |
| 8. Screen mottle. | 2 | 4 | 3 |
| 9. Luminescence. | 2 | 4 | 3 |
| 10. Laser camera. | 2 | 4 | 3 |
