5] FEBRUARY 2015 Sub Co B.Sc. RADIOLOGY IMAGING TECHNOLOGY SECOND YEAR Paper II – X-RAY FILM/IMAGE PROCESSING TECHNIQUES (INCLUDING DARK ROOM TECHNIQUES) *O.P. Code: 801812*

Time : Three Hours

Answer All questions.

(2 10 20)

Maximum: 100 Marks

- I. Elaborate on :
 - 1. What are the various types of films available? Explain in detail about double side coated X-ray film?
 - 2. Define radiographic contrast? Discuss various that affect contrast?
 - 3. What is an intensifying screening? Discuss in detail about construction and working of intensifying screen.

II. Write Notes on:

- 1. Artifacts in X-ray films.
- 2. Constituents of a developer.
- 3. Safe light.
- 4. Screen mottle.
- 5. Care of X-ray cassette.
- 6. Fluorescence.
- 7. Penumbra.
- 8. Characteristic curve.

III. Short Answers on:

- 1. Luminescence.
- 2. Laser camera.
- 3. Grid.
- 4. Curved cassette.
- 5. Latent image.
- 6. Processing faults.
- 7. X-ray phosphors.
- 8. Flexible cassette.
- 9. What is pH value?
- 10. Dichroic fog.

 $(10 \times 3 = 30)$

$(8 \times 5 = 40)$

ction and

$(3 \times 10 = 30)$