Sub. Code: 1832

B.Sc. RADIOLOGY IMAGING TECHNOLOGY

(New Syllabus 2014-2015)

SECOND YEAR

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

Q.P. Code: 801832

Time: Three Hours Maximum: 100 Marks

Answer all questions

I. Elaborate on: $(3 \times 10 = 30)$

- 1. Draw the cross section of Single Sided Emulsion Film and explain.
- 2. Describe various steps and methods of Manual Processing with illustrative diagram.
- 3. Explain in detail with appropriate diagrams, the construction of Intensifying Screens.

II. Write notes on: $(8 \times 5 = 40)$

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

III. Short answers on:

 $(10 \times 3 = 30)$

- 1. Dark room safe light.
- 2. Sodium thiosulphate.
- 3. Replenished.
- 4. Gelatin.
- 5. Fog.
- 6. Fluorescence.
- 7. Factors affecting focal spot size.
- 8. Maintenance of Cassette.
- 9. Intensification factor.
- 10. Cleaning of automatic Processor.