Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Medical Imaging Technology Degree Examination – 28-Nov-2023

Time: Three Hours Max. Marks: 100 Marks

IMAGING PHYSICS AND DARK ROOM TECHNIQUES (RS-4) O.P. CODE: 3291

Your answers should be specific to the questions asked Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Second Question Choice)

 $2 \times 10 = 20 \text{ Marks}$

- Explain briefly about darkroom construction for a tertiary care centre
- Write in detail about film, construction care and maintenance 2.

Write in detail about automatic processors

SHORT ESSAYS (Question No 5 & 10 choice)

 $10 \times 5 = 50 \text{ Marks}$

- Explain the latent image formation
- 4. Intensifying screen and unharness
- 5. Draw a neat diagram of characteristic curve and explain the latitude

Explain the types of entry for the darkroom

- Explain the constituents in the fixer solution
- 7. Explain hatches and hangers
- Explain the types of cassette 8.
- Discuss the type of film used for mammography 9.
- 10. Differentiate in between screen and non-screen films

OR

Darkroom illuminations

- 11. What are the double emulsion films and explain the advantages and drawbacks?
- 12. Explain film artefacts

SHORT ANSWER

 $10 \times 3 = 30 \text{ Marks}$

- 13. Explain fog
- 14. Explain turn over system
- 15. Film storage in darkroom
- 16. Unsharpness
- 17. Care and maintenance of the cassette
- 18. Silver recovery from the scrap films
- 19. Film noise
- 20. SNR
- 21. Image contrast
- 22. Base density of a film
