Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Medical Imaging Technology Degree Examination – 08-May-2025

Time: Three Hours Max. Marks: 100 Marks

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

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

LONG ESSAYS (Second Question Choice)

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

- 1. Explain briefly radiographic image quality in terms of density, noise, contrast, sharpness and resolution
- 2. Write in detail about automatic processor

OR

Write in detail about the silver recovery

SHORT ESSAYS (Question No 5 & 10 choice)

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

- 3. Magnification radiography
- 4. Film artefacts and types
- 5. Types of intensifying screen and explain the working differences between them \mathbf{OR}

Explain halation artefacts and the remedy

- 6. Explain the temperatures maintenance in the automatic processor
- 7. Explain safe light test
- 8. Discuss the factors affecting the radiographic image quality
- 9. Care and maintenance of x-ray cassette
- 10. Factors affecting the image quality

OR

Draw and explain the types of film dryers

- 11. What are the COSHH regulations?
- 12. Explain the functions of fixer and constituents of fixer

SHORT ANSWER

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

- 13. Explain FID
- 14. Non curl backing
- 15. Importance of pH in manual processing
- 16. Differential attenuation
- 17. White light in darkroom
- 18. Ventilation of darkroom
- 19. Fluorescence
- 20. Scatter radiation
- 21. Chemical film artefacts
- 22. Types of fog
