

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Medical Imaging Technology Degree Examination – 30-Oct-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 x 10 = 20 Marks

1. Explain in details the construction and types of radiographic films
2. Explain the factors affecting the radiographic image quality

OR

Write in details about manual photographic processing

SHORT ESSAYS (Question No 5 & 10 choice)

10 x 5 = 50 Marks

3. Discuss the steps involved in the manufacturing of "Film emulsion"
4. Sensitometry and its types
5. Differentiate between silver halide and metallic silver

OR

Difference between light sensitive and x-ray sensitive emulsion

6. Radiographic mottle
7. Safelight test
8. Write a short note on Film Artifacts
9. Discuss the factors affecting photographic performance
10. Darkroom design and construction

OR

Explain silver recovery by metallic replacement

11. Rare earth phosphors
12. Working of vacuum cassette

SHORT ANSWER

10 x 3 = 30 Marks

13. Explain Elongation and Foreshortening
14. Care and maintenance of automatic processor
15. Fog and its types
16. Solarization
17. Film hopper
18. Fluorescence and phosphorescence
19. Short note on film storage
20. Draw a neat labelled diagram of intensifying screen
21. Constituents of fixer replenisher
22. Penumbra
