

**Rajiv Gandhi University of Health Sciences, Karnataka**  
**II Year B.Sc. Medical Imaging Technology Degree Examination – 07-May-2026**

**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 briefly about latent image formation
  2. Write in detail about steps involved in manual processing
- OR**
- Write in detail about steps involved in automatic processing

**SHORT ESSAYS (Question No 5 & 10 choice)**

**10 x 5 = 50 Marks**

3. Silver recovery
  4. Film artifacts
  5. Macro-radiography with examples
- OR**
- COSHH regulations
6. Geometric and motion unsharpness
  7. Explain secondary radiation grids in detail
  8. Explain with a diagram characteristic curve and sensitometry
  9. Care and maintenance of intensifying screens
  10. Factors affecting image quality
- OR**
- Darkroom illumination
11. Care of cassettes
  12. Explain magnification and distortion

**SHORT ANSWER**

**10 x 3 = 30 Marks**

13. Explain image contrast
14. Explain SNR
15. Explain FFD
16. Luminescence
17. Hangers
18. Grid cassette
19. Importance of Ph in film processing
20. Phosphorescence
21. Wet bench dry bench
22. Crossover effect

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