

Rajiv Gandhi University of Health Sciences, Karnataka
Third Year B.Sc. Medical Imaging Technology Degree Examination – 12-Dec-2022

Time: Three Hours

Max. Marks: 100 Marks

Diagnostic Imaging Techniques and Modalities (RS-4)

Q.P. CODE: 3293

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. Describe in detail the MR principle
2. Discuss the different generations of CT, explain 'Slip ring technology'

OR

What is transducer? Draw neat diagram of transducer and functions of its constituents

SHORT ESSAYS (Question No 5 & 10 choice)

10 x 5 = 50 Marks

3. Radioactivity
4. CT contrast media
5. Pressure injector
6. Shim coils
7. CT artifacts
8. Gamma camera
9. MR spectroscopy
10. Explain MRI environment, zones and importance quenching in emergency situations

OR

Scintillation detectors in CT

11. Window width and window level in CT
12. MRI artifacts

SHORT ANSWER

10 x 3 = 30 Marks

13. Fast imaging sequence in MRI
14. CT number
15. Ring artifact in CT
16. USG, a, B, M-modes
17. K space
18. What is HIS, RIS and PACS?
19. Doppler principle
20. CT principle
21. Half life
22. Mammography instrumentation and different techniques
