

Rajiv Gandhi University of Health Sciences, Karnataka

II B.Sc. Medical Imaging Technology Degree Examination – 23-Dec-2022

Time: Three Hours

Max. Marks: 100 Marks

Radiation Physics: Medical Physics and Radiation Safety in Radio Diagnosis (RS-4)

Q.P. CODE: 3290

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 construction and working of rotating anode tube
2. Explain X-ray circuit in detail with a neat diagram and write a note on space charge compensation

OR

Explain about biological effects of radiation

SHORT ESSAYS (Question No 5 & 10 choice)

10 x 5 = 50 Marks

3. Anode heel effect
4. Filament circuit
5. Filters
6. Grids
7. Fluoroscopy
8. GM counter
9. Exposure timers
10. Characteristic X-ray

OR

Tube rating chart

11. Care and maintenance of X-ray tube
12. Six-phase circuit.

SHORT ANSWER

10 x 3 = 30 Marks

13. Single phase
14. Electromagnetic radiation
15. Define nuclides
16. Earthing
17. Grid ratio
18. Exposure and absorbed dose
19. ALARA
20. Angiography room
21. TLD
22. Cones and Cylinders
