

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Imaging Technology Degree Examination – AUG/SEP 2016

Time: 3 Hours

Max. Marks: 40 Marks

Radiation Physics and Medical Physics

Q.P. Code: 1354

Your answers should be specific to the questions asked.

Draw neat, labeled diagrams wherever necessary

(Note: Both QP Codes 1353 and 1354 are to be answered within total duration of 3 hours)

LONG ESSAYS (Answer any One)

1 x 10 = 10 Marks

1. Describe in detail about the components in X-ray generator with neat diagram.
2. Explain the theory of Gas-Filled Detectors.

SHORT ESSAYS (Answer any Three)

3 x 5 = 15 Marks

3. Radiolysis of water
4. Principle of radiation protection and exposure control
5. X-ray tube housing
6. Scintillation detector

SHORT ANSWERS (Answer any Five)

5 x 3 = 15 Marks

7. Characteristic X-ray spectrum
8. Anodes
9. Beam Centering Devices
10. Annual Dose Equivalents
11. Chromosome Aberrations
12. Roentgen and Rad
