

upload\_1f7b6b8235cd8e569a50e4810d3faf69.doc

## Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Imaging Technology Degree Examination – Aug 2013

**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 WINCONSIN Test Cassette and Explain how is it used for the Quality Assurance of x-ray machines.
2. Compare conventional dark room fluoroscopy with modern CCTV (with memory) based fluoroscopy.

**SHORT ESSAYS (Answer any Three)****3 x 5 = 15 Marks**

3. Geiger counter.
4. Thermoluminescence and its application in radiation protection.
5. Early and late effects of radiation.
6. Capacitor discharge mobile x-ray equipment.

**SHORT ANSWERS (Answer any Five)****5 x 3 = 15 Marks**

7. Inherent filtration in x-ray tubes.
8. Radiolysis of water.
9. ALARA PRINCIPLE.
10. Position of mA metre in High tension circuit.
11. Shunt resistance connection in current measuring meters.
12. Target used in mammographic x-ray tube.

\*\*\*\*\*