

**VINAYAKA MISSION'S RESEARCH FOUNDATIONS, SALEM
(Deemed to be University)**

**B.Sc. (RADIOGRAPHY) DEGREE EXAMINATION
August 2019
Second Year**

**PHYSICS OF RADIOLOGY, RADIATION PHYSICS AND
MEDICAL PHYSICS**

Time: Three hours

Maximum: 75 marks

I. Write an essay on any ONE of the following: (1 x 20 = 20)

1. Explain the working of a rotating anode x-ray tube with diagram.
2. Explain about mammography equipment.

II. Write short essays on any TWO of the following: (2 x 10 = 20)

3. Autotransformer, types and transformer losses
4. Magnification radiography
5. Light and beam congruence test
6. Maintenance of mobile radiography unit

III. Write short answers on any SEVEN of the following: (7 x 5 = 35)

7. Radiation safety of radiographer in flurosocopy room
8. Fuses and circuit breakers
9. Grid controlled x-ray tube
10. Anode angle and tube rating
11. Grid ratio and grid lines
12. Flurosocopic table movements
13. Dental equipment
14. Beam restrictors
15. Added and inherent filtration
16. Half-wave and full-wave rectifiers
