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

B.Sc. (RADIOGRAPHY) DEGREE EXAMINATION
February 2020
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. Discuss in detail Electromagnetic waves and their properties.

   2. Explain working of rotating a mode X-ray tube with diagram.

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

   3. Radioactive decay.

   4. Insulators and semiconductors.

   5. Radiation protection.

   6. Fluoroscopy.

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

   7. Mobile X – ray Unit.

   8. Added and inherent filtration.

   9. Anode angle and tube rating.

   10. Line and band spectra.

   11. Properties of Alpha rays.

   12. Grid controlled X –ray tube.

   13. Shode proofing.

   14. Methods of Cooling.

   15. G – Valve.

   16. Block diagrams.

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