Sl.No: M21777 Course Code: 2690101

# **VINAYAKA MISSIONS UNIVERSITY, SALEM**

# M.SC.(RADIOLOGY AND IMAGING TECHNOLOGY) DEGREE EXAMINATION – August 2019 First Year

## RADIOLOGICAL PHYSICS

Time: Three hours Maximum: 100 marks

#### Answer **ALL** questions

## I. Write an essay on any TWO of the following:

 $(2 \times 20 = 40)$ 

- 1. Describe about production of X Ray.
- 2. Write detail about film badge and reader system.
- 3. Explain about interaction of x- ray and gamma ray.

#### II. Write short notes on any TEN of the following:

 $(10 \times 6 = 60)$ 

- 4. Draw x-ray generator
- 5. Explain about HVT
- 6. Write short notes on ultrasound procedures
- 7. Write short notes on T1 and T2 relaxation
- 8. Write short notes on properties of X-Ray film
- 9. Explain about interaction of ultrasound with matter
- 10. Write the image artifacts in computerized tomography
- 11.Describe about types of anode in x-ray machine.
- 12. Write about LET radiation
- 13.Explain about MRI procedures
- 14. Write the application of PACS
- 15.Describe about pocket dosimetry
- 16. Explain about helical CT

\*\*\*\*\*