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

## B.Sc. (RADIOGRAPHY) DEGREE EXAMINATION - March 2019 Third Year

## DIAGNOSTIC IMAGING TECHNIQUES

Time: Three hours Maximum: 75 marks I. Write an essay on any ONE of the following:  $(1 \times 20 = 20)$ 1. Explain the various types of interaction of Ultrasound with matter. 2. Explain MR instrumentation in detail. II. Write short essays on any TWO of the following:  $(2 \times 10 = 20)$ 3. Explain Ultrasound guided pleural aspiration. 4. Elaborate on MR contrast media. 5. Describe CT renal angiogram procedure. 6. Explain Digital Radiography principle. **III.** Write short answers on any SEVEN of the following:  $(7 \times 5 = 35)$ 7. Window width and window level. 8. Ultrasound KUB technique. 9. Resistive & Superconducting magnets. 10. MDCT principle. 11. Mammogram equipment specification. 12. Explain MRI knee joint protocol in detail. 13. T1 and T2 image weighting in MRI. 14. DMSA scan. 15. Time of flight angiography. 16. Acoustic impedance. \*\*\*\*\*