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

M.SC.(ECHOCARDIOGRAPHY/INTEGRATED CARDIAC TECHNOLOGY) DEGREE EXAMINATION – December 2021 Second Year/Fifth Year

EQUIPMENTS APPLICATIONS AND ERROR ANALYSIS

Time: Three hours

Answer ALL questions

I. Write an Long essay on :

- 1. Mitral and aortic regurgitation and its quantitation.
- 2. Describe the evaluation of cardiac resynchronization therapy.
- 3. What the common sources of equipment software breakdown and how they are to be addressed.

II. Write short notes on :

- 4. Modified Bernoulli equation and intravascular pressures.
- 5. Types of probes and their design.
- 6. Calculation of cardiac mass.
- 7. Cardiac output.

 $(3 \times 20 = 60)$

Maximum: 100 marks

 $(4 \times 10 = 40)$