

**VINAYAKA MISSIONS RESEARCH FOUNDATION, SALEM
(Deemed to be University)**

**M.SC (ECHOCARDIOGRAPHY) DEGREE
EXAMINATION – February 2020
Second Year**

EQUIPMENTS, APPLICATIONS AND ERROR ANALYSIS

Time: Three hours

Maximum: 100 marks

Answer **ALL** questions

I. Write a Long essay on: (2 x 20 = 40)

1. Explain circuitary and detection of electrical malfunction in detail.
2. Explain Evaluation of cardiac Resynchronization therapy.

II. Write short notes on: (10 x 6 = 60)

3. Protocols for maintenance and upkeep of the equipment.
4. Calculation of Cardiac mass.
5. Generation of echo images.
6. Left Ventricular Thrombi.
7. Pulmonary – systemic flow ratio (shunt ratio).
8. Application of Gain settings and depth.
9. Modified Bernoulli Equation with diagram.
10. Storage and retrieval of echo images.
11. Protocols of Dobutamine stress Echo.
12. Explain mitral regurgitation & its quantization.
