

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 0423]

APRIL 2023

Sub. Code: 1533

B.Sc. CARDIAC TECHNOLOGY
SECOND YEAR (Regulations 2014-2015, 2018-2019 & 2020-2021 onwards)
PAPER III – ECHOCARDIOGRAPHY
Q.P. Code : 801533

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Discuss Echo criteria to diagnose severity of Mitral Regurgitation. Explain Proximal Isovelocity surface area method for estimating Mitral Regurgitation.
2. Echocardiography features of Constrictive Pericarditis Vs Restrictive Cardiomyopathy.
3. Explain in detail about Dilated Cardiomyopathy.

II. Write notes on:

(8 x 5 = 40)

1. Echo assessment of Atrial Septal Defect.
2. Echo features of LA Myxoma.
3. Echo assessment of Ventricular Septal Defect.
4. Assessment of Mitral Valve Prolapse in Echo.
5. Different methods for calculating Ejection Fraction in Echo.
6. Indications and contraindications of Transoesophageal Echo.
7. Mention the indications of Bubble Contrast Echo. Write in short about the technique of Bubble Contrast Echo.
8. Transvalvular Gradient.

III. Short answers on:

(10 x 3 = 30)

1. Bernoulli's Equation.
2. Echo features of Tetralogy of Fallot.
3. Features of Pulmonary Thrombo-Embolism.
4. Grading of Mitral Stenosis using mean gradient.
5. Pulmonary Artery acceleration time.
6. Difference between LV thrombus and artifact.
7. Draw and explain Parasternal short axis at aortic level.
8. What is B-Mode?
9. Estimation of AVA by continuity equation.
10. Complications of Infective Endocarditis.
