

B.Sc. CARDIAC TECHNOLOGY**SECOND YEAR****Paper III – ECHOCARDIOGRAPHY***Q.P. Code : 801513***Time: Three Hours****Maximum: 100 Marks****Answer all questions****I. Elaborate on:****(3 x 10 = 30)**

1. Assessment and Grading of Diastolic dysfunction with diastolic filling pattern in Atrial Fibrillation and Sinus Tachycardia.
2. Techniques of Transoesophageal Echocardiography with illustrations of structures visualised at different levels.
3. Describe with neat diagrams the 17 segments model of Left Ventricle for Regional Wall Motion assessment.

II. Write Notes on:**(8 x 5 = 40)**

1. Various methods to assess Left Ventricular Systolic Function.
2. Principles of Doppler Effect.
3. Echocardiographic features of Left Atrial Myxoma.
4. Techniques and Usefulness of Contrast Echocardiogram.
5. Echocardiographic features of Tetralogy of Fallot.
6. Echocardiographic features of Ebstein's Anomaly.
7. Assessment of Pulmonary Arterial Hypertension in ECHO.
8. Proximal Isovelocity Surface Area.

III. Short Notes on:**(10 x 3 = 30)**

1. Difference between Pulse Wave and Continuous Wave Doppler.
2. Structures seen in Suprasternal View.
3. Isovolumetric Relaxation Time.
4. Patent Ductus Arteriosus.
5. Pulmonary Systemic Flow Ratio (Qp/Qs).
6. Contraindications of Transoesophageal Echocardiography.
7. ECHO features of Coarctation of Aorta.
8. Difference between True and Pseudo Aneurysm of Left Ventricle.
9. Determination of Situs by Echo.
10. Continuity Equation.
