- **Objective** -- Student will learn about the various modes and functions of echocardiography
- UNIT 1 M- Mode and 2D transthoracic echocardiography, Views used in transthoracic echocardiography, Doppler echocardiography: pulsed, continuous wave and color, Measurement of cardiac dimensions, Evaluation of systolic and diastolic left ventricular function.
- UNIT 2 Regional wall motion abnormalities, Stroke volume and cardiac output assessment, Transvalvular gradients, Orifice area, Continuity equation, Echocardiography in Valvular heart disease: Mitral stenosis, Mitral regurgitation, Mitral valve prolapsed.
- UNIT -3 Aortic stenosis, Aortic regurgitation, Infective endocarditis Prosthetic valve, assessment, Echocardiography in Cardiomyopathies: Dilated, Hypertrophic, Restrictive Constrictive Pericarditis.
- UNIT -4 pericardial effusion and cardiac tamponade, Echocardiographic detection of congenital heart disease- Atrial septal defect, Ventricular, septal defect, Patent ductus arteriosus, Pulmonary stenosis, Tetralogy of Fallot, Coarctation of, aorta, left atrial thrombus, Left aortal myxoma, Transesophageal echocardiography.

Recommended Books:

- Feigenbaum's Echocardiography- Latest edition
- The Echo Manual- From the Mayo clinic- Latest edition
- Leo Schamroth- An Introduction to Electrocardiography
- Marriott's practical Electrocardiography
- Gross man & Baims cardiac catheterization, Angiography and Intervention
- Braunwald's Heart Disease: A text book of cardiovascular medicine- Latest edition