**Advanced Echocardiography Techniques BVOCCT-503**

UNIT I

Left ventricular inflow tract:

Mitral valve: normal valve, anatomy, normal leaflet motion-

Abnormal mitral valve Echo: Rheumatic mitral stenosis; severity estimation, Mitral insufficiency:- diagnosis, severity assessment

Mitral valve prolapse - Flail mitral leaflet Mitral valve vegetation

Left Atrium: Left atrial function, dimension atrial dilatation and compression, LA tumours, LA thrombus.

UNIT II

Left ventricular out flow tract:

Aortic valve; normal anatomy, trans valvar flow patterns

Abnormal aortic valve echo, congenital aortic valve abnormalities, bicuspid aortic valve

Aortic leaflet thickening without stenosis

Valvular aortic stenosis, severity estimation of AS,

Aortic Insufficiency:-Ascending aorta, arch, Co-arctation of Aorta, Aortic aneurysms,

The sub valvular LV-Outflow tract:-subaortic stenosis,

UNIT III

Left ventricle;-

Examining planes, parasternal long axis, SAX, Apical view, subcostal view, LV volume-Simpson method, normal and abnormal values, LV mass, LVH, stroke volume EF, FS, valvular disease and LV,LV in hypertension, Hypokinesia, akinesia, dyskinesia, pseudo/true aneurysm.

Left ventricle; Coronary artery disease;

Acute myocardial infarction; segmental hypokinesia; Inferior infarct, anterior infarct, apical infarct, chronic ischemic heart disease, LV Thrombi.

UNIT IV

Stress Echocardiography;

Assessment of global ventricular function, types of response, bulls eye method of analysis, complications of pharmacological stress- Echo

UNIT V

Echocardiographic assessment of cardiomyopathies:-

Hypertrophic cardiomyopathy, Dilated Cardiomyopathy, Restrictive Cardiomyopathy