STRUCTURAL HEALTH MONITORING LAB
(Lab Elective– I)

Course Code: 19CE2255	L	P	C
	0	3	1.5

Course Outcomes:
At the end of the Course, the student will be able to:
CO1 :Find the natural frequencies for a given beam
CO2 :Assess the existence of damage in a given beam
CO3: Determine the dynamic parameters for a given structures

LIST OF EXPERIMENTS:

1. Determine the natural frequency of simply supported steel beam using FFT analyzer.
2. Determine the natural frequency of a cantilever steel beam using FFT analyzer.
3. Damage assessment of a cracked simply supported steel beam.
4. Determine the natural frequency for 3-storey shear building model.
5. Determine the natural frequency for 2 DOF system with springs in parallel.
6. Determine the natural frequency for 2 DOF system with springs in series.
7. Damage evaluation in a truss structure.
8. Determine the dynamic parameters in a building model.
9. Determine the natural frequency of a cantilever steel beam using FFT analyzer.
10. Damage assessment of a cracked simply supported steel beam.

References :
1. AchintyaHaldar, -Health assessment of Engineered structures, bridges, building and other infrastructures, — World scientific \ publishing co., pvt.Ltd., 2013.

2. Helmut Wenzel and Dieter Pichier –Ambient Vibration Monitoring‖ John Wiley and sons Ltd., 2005.