III Year II Semester   **L   T   P   C**

17ME612   **0   0   3   2**

FEA LAB

1. Force and stress analysis using link elements in Trusses, cables etc.
2. Stress and deflection analysis in beams with different support conditions.
3. Stress analysis of flat plates and simple shells.
4. Stress analysis of axis-symmetric components.
5. Thermal stress and heat transfer analysis of plate.
6. Thermal stress analysis of cylindrical shells.
7. Vibration analysis of spring-mass systems.
8. Model analysis of beams.
9. Harmonic, transient and spectrum analysis of simple systems
10. MAT LAB basics, dealing with matrices, Graphing-functions of one variable and two variables
11. Use of MATLAB to solve simple problems in vibration
12. Mechanism Simulation using multi body dynamic software