## T.E.(Mechanical Engineering)

## **COMPUTER AIDED ENGINEERING**

(2019Pattern) (Semester-VI)

- 1. Write short note on procedure to determine the stresses and strains for the truss element.
- 2. State and explain different types of nonlinearities.
- 3. Determine the stresses and strains for 2D CST element using any approach.
- 4. Differentiate between the Linear and Nonlinear analysis.
- 5. Determine the structural stresses and strains for 1D bar element using a direct and energy approach?
- 6. Write short note on different methods for handling geometric non-linear problems.
- 7. Write short note on
  - 1) Plane stress 2) Plain strain 3) Axisymmetric problem.
- 8. Differentiate between the static and dynamic analysis.
- 9. Explain Frequency domain analysis.
- 10. Write short note on Dynamic analysis.
- 11. Explain three dimensions of fluid dynamics.
- 12. Explain concept of NVH.