## Problem Statements Mechanical Dept.

- 1. Behaviour of slender columns of wood filled steel tube.
- 2. Behaviour of slender columns of adhesively bonded wood filled steel tube.
- 3. Finite element analysis of wood filled steel tube.
- 4. Finite element analysis of adhesively bonded wood filled steel tube.
- 5. Fatigue behaviour of teak wood under rotary bending
- 6. Design and development of fatigue testing machine
- 7. Mobile app operated door lock system
- 8. Areaca leaf plate making machine.
- 9. Rice husk nano charcoal powder machine
- 10. Identification of cracks in beams using vibrational analysis
- 11. Vibration response-based crack diagnosis in beam-like structures using fuzzy inference system
- 12. Crack Detection in Cantilever Beam Using Vibration Response
- 13. Crack detection of cantilever beam by natural frequency tracking using experimental and finite element analysis
- 14. Vibration Analysis of Cracked Beams Using the Finite Element Method.
- 15. Fault Diagnosis of Crack on Gearbox Using Vibration-Based Approaches.
- The Detection of the Pipe Crack Utilizing the Operational Modal Strain Identified from Fiber Bragg Grating
- 17. Vibration analysis of a cracked beam
- 18. Crack detection and vibration behavior of cracked beams
- 19. A study on the crack detection in beams using linear and nonlinear normal modes Crack detection of the cantilever beam using new triple hybrid algorithms based on Particle Swarm Optimization
- 20. Experimental determination of stress intensity factors in patched cracked plates
- 21. Numerical estimation of stress intensity factors in patched cracked plates
- 22. Theoretical and Numerical Study on Stress Intensity Factors for FRP-Strengthened Steel Plates with Double-Edged Cracks
- 23. Stress intensity factors for cracked steel girders strengthened with CFRP sheets.
- 24. Mode I stress intensity factor with various crack types
- 25. Calculation of stress intensity factor in two-dimensional cracks by strain energy density factor procedure.
- 26. Determination of stress intensity factors in cracked plates by the finite element method
- 27. Estimation of a stress intensity factor of a central cracked plate