

## MACHINE VIBRATION

Characterization of Engineering vibration problems. Model study through single degree of freedom analysis. Two degrees and Multi degree of freedom system with application. Continuous medium, Vibration measuring instruments, computational techniques like matrix iterations, Transfer Matrix method and other methods, Lagrange's Mechanics, system simulation technique.

### Text Books

1. Mechanical Vibration: Theory and Applications - F.S. Tse, I.E. Morse and R.T. Hinkle. CBS Publishers, 2002.
2. Theory of Vibration with Application - W.T. Thomson, PHI, 1979.

### Reference Books

1. Principles of Vibration Control - A. K. Mallick, East-West Press, 1990.
2. Mechanical Vibrations - S. S. Rao. Pearson, 2004.
3. Advanced Theory of Vibration - J. S. Rao. New Age Publication.
4. Introductory course on Theory and Practice of Mechanical Vibration - J. S. Rao and K. Gupta. NewAge Publication, 2004.