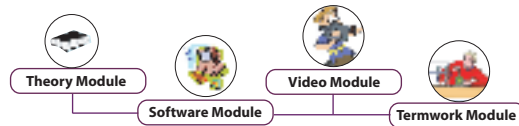


Elements of Mechanical Engineering

Introduces Global e-Learning System in Education & Training in the form of Learning Resources with Computer Aided Instructions



System Requirement:- IBM-PC Compatible with Window-OS, 128 MB RAM/Multimedia Kit

Theory module

Features : Theory, Figures, Photographs, Animations with controller, Highlighter tool, Note creation facility, Systematic page navigation, Printing facility, Access to Videos at appropriate locations.

List of Topics

Conventioanl and non-conventional energy source



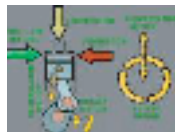
Types of fuels.
Calorific value of fuels.
Calculation of minimum air required for complete combustion of fuel.

Steam Generators

Definition, Classification, General study of Cochran, Babcock Wilcox, Lancashire and Locomotive boilers, Mounting and accessories. Draught classification. Calculation of chimney height.



Internal Combustion Engines



Definition, Classification, Components, Working of two stroke and four-stroke cycle engines, S .I. and C .I. Engines, Different systems of I.C. Engines like fuel system, Ignition System, Cooling System.

Layout of Different Types of Power Plants

Thermal power plant, Nuclear power plant, Hydro power plant, Gas turbine power plant.



Refrigeration and air-conditioning

Definition of refrigeration and air-conditioning, Vapour compression system, Domestic refrigerator, Iceplant, Window air- conditioner.



Machine Tools



Introduction to different types of machine tool such as lathe, Drilling machines. Shaper and milling machines, Various operations, Introduction to various manufacturing processes.