

II Year- II Semester

COURSE OUTCOMES – MECHANICAL ENGINEERING

Dynamics of Machinery

CO 1:- Mastery of the knowledge in dynamics of planar mechanism

CO 2:- Analyze static and dynamic force analysis of mechanisms

CO 3:- Take notice of importance of the balancing and learn procedures of the basic balancing.

CO 4:- Ability to understand the implications of computed results in dynamics to improve the design of a mechanism

Fluid Mechanics and Hydraulics Machines

CO 1:- Able to explain the effect of fluid properties on a flow system

CO 2:- Able to identify type of fluid flow patterns and describe continuity equation.

CO 3:- To analyze a variety of practical fluid flow and measuring devices and utilize fluid Mechanics principles in design.

CO 4:- To select and analyze an appropriate turbine with reference to given situation in power plants.

CO 5:- To estimate performance parameters of a given Centrifugal and Reciprocating pump

CO 6:- Able to demonstrate boundary layer concepts

Machine Drawing

CO 1:- Preparation of engineering and working drawings with dimensions and bill of material during design and development. Developing assembly drawings using part drawings of machine components.

CO 2:- Conventional representation of materials, common machine elements and parts such as screws, nuts, bolts, keys, gears, webs, ribs.

CO 3:- Types of sections – selection of section planes and drawing of sections and auxiliary sectional views. Parts not usually sectioned.

CO 4:- Methods of dimensioning, general rules for sizes and placement of dimensions for holes, centers, curved and tapered features.

CO 5:- Title boxes, their size, location and details - common abbreviations and their liberal usage

Manufacturing Process

CO 1:- Understand the idea for selecting materials for patterns

CO 2:- analyze the components of moulds Types and allowances of patterns used in casting and

CO 3:- Develop process-maps for metal forming processes using plasticity principles

CO 4:- Identify the effect of process variables to manufacture defect free products.

Business Economics and Financial Analysis

CO 1:- Understand the market dynamics namely, demand and supply, demand forecasting, elasticity of demand supply, pricing methods and pricing in different market structures.

CO 2:- Gain an insight into how production function is carried out to achieve least cost combination of inputs and cost analysis.

CO 3:- Analyse how capital budgeting decisions are carried out.

CO 4:- Know how to analyse and interpret the financial statements through ratio analysis.

Kinematics and Dynamics Lab

CO 1:- Understand types of motion

CO 2:- Analyze forces and torques of components in linkages

CO 3:- Understand static and dynamic balance

CO 4:- Understand forward and inverse kinematics of open loop system

Fluid Mechanics and Hydraulics Machines lab

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Manufacturing Process lab

CO 1:- Understanding the properties of molding sands and pattern making

CO 2:- Fabricate joints using gas welding and arc welding. Evaluate the quality of welded joints

CO 3:- Basic idea of press working tools and performs molding studies on plastics.

Environmental Science and Technology

CO 1:- Appreciate the ethical, cross-cultural, and historical context of environmental issues and the links between human and natural systems.

CO 2:- Apply systems concepts and methodologies to analyze and understand interactions between social and environmental processes.

CO 3:- Reflect critically about their roles and identities as citizens, consumers and environmental actors in a complex interconnected world.

CO 4:- Demonstrate proficiency in quantitative methods, qualitative analysis, critical thinking, and written and oral communication needed to conduct high-level work as interdisciplinary scholars and/or practitioners.