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## AE429 INDUSTRIAL ECONOMICS & MANAGEMENT

***Course Description & Objectives:***

*To equip the student to make decisions in the industry considering the economic, managerial aspects.*

***Course Outcomes:***

*On completion of the course, the student would be able to:*

1. *understand various aspects other than technical like financial, marketing, and industrial safety*
2. *know the labour acts that play a critical role in the successful product delivery.*
3. *appreciate the economics of engineering management for optimum product delivery.*

**UNIT – I: Functions of Management:**

Definition of Management,Characteristics, Objectives, hierarchy,Importance, Forecasting.Organizing – Process &Principles,types. Human Resource management functions.DouglasMcGregor's Theory X and Theory Y, Maslow's hierarchy of human needs.

**UNIT – II: Engineering Economics:**

Introduction to basic economics terms such as demand and supply, Time value of money, cash flows, depreciation, Types of depreciation, reasons for depreciation, Methods of computing depreciation, sinking fund method, Declining balance method, Investment decisions for capital assets, evaluation criteria for Investment decisions, Payback period, average rate of return.

**UNIT – III: Financial Management:**

Sources of Finance, financial statements, Balance sheet and P & L Account, Break even Analysis and its applications, accounting ratios. Marketing: Marketing Concepts – Objective –Types of markets, Market Segmentation, Market strategy- 4 P's of market, Market Research, Advertising.

**UNIT – IV: Production Management:**

Selection of site, plant layout – objectives, principles, types, merits & demerits of different types of layout, PERT / CPM, Work Study, Method study, Work Management.

**UNIT – V: Materials Management:**

Scope, advantages, functions of materials management, Purchasing objectives, Functions of Purchase department, Purchasing cycle, Purchase procedure, Inventory Control - ABC
Analysis, EOQ.

**TEXT BOOKS:**

1. Gene Burton and Manab, Thakur, “Management, Today – Principles and Practice” 2nd ed., Tata McGraw Hill Publishing Company, New Delhi, 2000.
2. O.P. Khanna, “Industrial Engineering & Management”, 8th ed., DhanpatRai& Sons, New Khanna Publishers, New Delhi, 2006.

**REFERENCES:**

1. Keith Davis, “Human Behavior at Work Organizational Behavior”, 2nd ed., Tata McGraw Hill Publishing Company, New Delhi, 2000.
2. J.P.Bose, S. Talukdar, “Business Management”, 3rd ed., New Central Agencies (P) Ltd., 2007.
3. Philip Kotler, “Marketing Management”, 2nd ed., Prentice Hall of India New Delhi.
4. JawaharLal, “Costing & Cost Control”, 4th ed., Tata McGraw Hill, 2006.