

<b>ME3T6</b>	<b>II YEAR I Semester</b> <b>ENGINEERING ECONOMICS</b>	<b>Credits: 3</b>
<b>Lecture: 3 periods/week</b>		<b>Internal assessment: 30marks</b>
<b>Tutorial: - 1 period/week</b>		<b>Semester End examination: 70 marks</b>

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**Course Objectives:**

- Acquire basic knowledge about managerial economics, forecasting, market structures and industrial organization.
- Justify cost/revenue data and carry out make economic analyses in the decision making process to justify or reject alternatives/projects on an economic basis

**Course Outcomes:**

Upon completion of this course the student will be able to:

- Use the theory of managerial economics, demand analysis and forecasting theories to model business organization.
- Analyze production functions and cost-price functions to manage production, markets and Break-even point.
- Theorize about characteristics features and types of industrial organization, concept of changing business environment in post-liberalization scenario.
- Justify about types and functions of financial management.
- Evaluate the best alternative from various capital budgeting options and calculate.

**UNIT I**

**INTRODUCTION TO MANAGERIAL ECONOMICS:**

Introduction to Managerial Economics & Demand Analysis: Definition of Managerial Economics, Characteristics and Scope – Managerial Economics and its relation with other subjects- Basic economic tools in Managerial Economics.

Demand Analysis: Meaning- Demand distinctions- Demand determinants- Law of Demand and its exceptions.

**ELASTICITY OF DEMAND & DEMAND FORECASTING:**

Definition -Types of Elasticity of demand - Measurement of price elasticity of demand: Total outlay method, Point method and Arc method- Significance of Elasticity of Demand. Demand Forecasting: Meaning - Factors governing demand forecasting - Methods of demand forecasting (survey of buyers' Intentions, Delphi method, Collective opinion, Analysis of Time series and Trend projections, Economic Indicators, Controlled experiments and Judgmental approach) - Forecasting demand for new products- Criteria of a good forecasting method.

**UNIT-II**

**THEORY OF PRODUCTION AND COST ANALYSIS- INTRODUCTION TO MARKETS-PRICING POLICIES & E-COMMERCE:**

Production Function- Isoquants and Isocosts, MRTS, Law of variable proportions- Law of returns to scale- Least Cost Combination of Inputs, Cobb-Douglas Production function-Economies of Scale.

**COST ANALYSIS:** Cost concepts, Opportunity cost, Fixed Vs Variable costs, Explicit costs Vs. Implicit costs, Out of pocket costs vs. Imputed costs.-Determination of Break-Even Point (Simple problems) - Managerial Significance and limitations of BEP.

**Market structures:** Types of competition, Features of Perfect Competition, Monopoly and Monopolistic Competition.

Internet Pricing Models: Flat rate pricing, Usage sensitive pricing, Transaction based pricing, Priority pricing, charging on the basis of social cost, Precedence model, Smart market mechanism model.

Introduction to e-commerce-types of e-commerce; M-commerce.

### **UNIT III**

#### **TYPES OF INDUSTRIAL ORGANIZATION & INTRODUCTION TO BUSINESS**

##### **CYCLES:**

Characteristic features of Industrial organization, Features and evaluation of Sole Proprietorship, Partnership, Joint Stock Company, State/Public Enterprises and their types. Changing business environment in post-liberalization scenario.

### **UNIT IV**

#### **FINANCIAL MANAGEMENT AND INTRODUCTION TO FINANCIAL ACCOUNTING :**

Functions of financial management, simple and compound interest, Methods of evaluating alternatives- Present Worth method. Future worth Method, Annual equivalent method.

Introduction to Double-entry system;

### **UNIT V**

**DEPRECIATION:** Introduction, common methods of depreciation: straight line method, Declining balance method, sum of year's digits method.

**CAPITAL AND CAPITAL BUDGETING:** Meaning of capital budgeting, Need for capital budgeting – Capital budgeting decisions (Examples of capital budgeting) - Methods of Capital Budgeting: Payback Method, Accounting Rate of Return (ARR), IRR and Net Present Value Method (simple problems)

### **Learning Resources**

#### **Text Books:**

1. ENGINEERING ECONOMICS, R. Panneerselvam, 2<sup>nd</sup> Edition, PHI Learning Pvt. Ltd., 2013
2. Managerial Economics and Financial Analysis, by J.V.Prabhakar Rao, Maruthi Publications, 2011

#### **Reference Books:**

1. Managerial Economics and Financial Analysis, by A R Aryasri, TMH 2011
2. Management-Aglobal Entrepreneurial Perspective, Wehrich, Cannice, Koontz, 13<sup>th</sup> Edition, Tata McGraw Hill. 2012.
3. Financial Accounting, SN Maheswari, SK Maheswari, Vikas Publishing House Pvt Ltd., New Delhi, 4<sup>th</sup> Edition, 2006.
4. Managerial Economics by Suma damodaran, Oxford 2011
5. Managerial Economics and Financial Analysis by S.A. Siddiqui & A.S. Siddiqui, New Age International Publishers, 2011.
6. Engineering economy- Theusen & Theusen, 8th edition, 1993, Prentice Hall.

**Web references:**

1. [www.tectime.com](http://www.tectime.com)
2. [www.exinfm.com](http://www.exinfm.com)
3. [www.economywatch.com](http://www.economywatch.com)