

**EC-106****ECONOMICS FOR ENGINEERS****L T P C**  
**4 - - 3****COURSE OBJECTIVES:**

1. To provides the students with knowledge of basic economic problems and the relationship between engineering technology and economics.
2. To alerts the students to understand the demand determinants and the methods of demand forecasting of a product.
3. To give knowledge to the students about various costs for determining the manufacturing of a product.
4. To guide the students for accounting the depreciation and providing the funds for replacement of necessary and depreciated machinery and equipment.
5. To sensitize the students to the changing environment of banking scenario and to understand the functions of RBI.

**COURSE OUTCOMES:****After successful completion of the course, the students are able to**

1. illustrate the decision making objective of a firm.
2. describe the overall functions of Demand, Supply, Price, Income of the firms.
3. describe various cost concepts and maintenance of break even scenario for a business.
4. demonstrate time value of money and Accounting concepts in the changing society.
5. Explain Liberalization, Privatization and Globalization and the impact of them on economy.

**UNIT I***Text Book - 1,2 (10)*

**ENGINEERING ECONOMICS - AN OVERVIEW** : Economics definition, Functions & Scope of Engineering economics, Basic economic problem, Relationship between Science, Engineering, Technology and Economics.

**FIRMS OBJECTIVE:** Theories of Maximization - Profit Maximization, Growth Maximization, Sales Revenue Maximization, Utility Maximization and Wealth Maximization.

**UNIT II***Text Book - 2,3 (8)*

**THEORY OF DEMAND - AN OVERVIEW** : Demand schedule, Nature and characteristics of demand, Law of demand, Limitations to the law of demand, Elasticities of Demand: Price, Income and Cross elasticity, Demand Forecasting definition, factors determining demand forecasting, methods of demand forecasting.

**UNIT III***Text Book - 4 (12)*

**COST CONCEPTS - AN OVERVIEW** : Introduction, Types of costs: Fixed cost, Variable cost, Average cost, Marginal cost, Real cost, Opportunity cost, Accounting and Economic cost, Cost - Volume profit analysis, Break - Even analysis, Operating leverage.

**UNIT IV***Text Book - 4 (12)*

**ACCOUNTING CONCEPTS - AN OVERVIEW** : Accounting concepts, Double Entry system, Journal, Ledger, Trial balance, Final Accounts Book Keeping system, Depreciation - Definition, functions, methods of depreciation - Straight line, Declining balance Sum of years digits method and Problems.

**UNIT V***Text Book - 3,5 (8)*

**INDIAN ECONOMY - AN OVERVIEW** : Nature and characteristics of Indian economy, Banking - Meaning and functions of Commercial banks, Functions of RBI. Globalization, Privatization - Meaning , merits and de - merits, Elementary concepts like WTO, GATT, TRIPS, Monetary Policy and Fiscal Policy.

**LEARNING RESOURCES:****TEXT BOOK(s):**

1. Riggs, Bedworth and Randhwa, Engineering Economics, McGrawhill Education India.
2. S.C.Sharma and T.R.Banga, Industrial Organisation and Engineering Economics, Khanna Publishers.
3. S.K.Misra and V.K.Puri, Economic Environment of Business, Himalaya Publishing House,2003.
4. K.Rajeswara Rao and G.Prasad, Accounting and Finance, Jai Bharat Publishers , 2014
5. Francis Cherunilam, Business Environment Text and Cases, Himalaya Publishing House, 2014

**REFERENCE BOOK(s):**

1. Singh A and Sadh A.N., Industrial Economics , Himalaya Publishing House , Bombay
2. H.L.Ahuja, Managerial Economics,S.Chand Publishing ,2007 Ediction
3. Datt & Sundharam, Indian Economy , S.Chand Publishing, 2014 Edition

**WEB RESOURCES:**

1. [www.managementstudyguide.com](http://www.managementstudyguide.com) : Describes about the amalgamation of economic theory with business practices.
2. [www.tutorialspoint.com](http://www.tutorialspoint.com) : Provides a platform to learn various courses disscussed in the syllabus.