# DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES II B.E.(4YDC) (IPE)

#### HU 23504/23503: ENGINEERING ECONOMICS & FINANCIAL ANALYSIS

HOUR	R WEEK	CREDITS		MAXIMUM MARKS					
L	T	P	Th	Pr	THEORY		PRACTICAL		TOTAL MARKS
					CW	END SEM	SW	END SEM	
3	-	-	3	-	30	70	-	-	100

## PRE-REQUISITES: NIL COURSE OBJECTIVES:

- 1. To develop the optimizing skills of technology-use in engineering problems
- 2. To articulate economic analytical skills so as to contextualize the solutions of engineering problems.
- 3. To explore the potential of students for evaluation investment opportunities in production projects.
- 4. To make sense of understanding the financial reports of a business organization.

## **COURSE OUTCOMES:** After completion of course, the students will be able to:

- 1. Explain economic cyclic flow and estimate the demand and demand elasticity for a product.
- 2. Plan the production and analyze the production-cost-profit relation and select the suitable project for investment.
- 3. Estimate price and the equilibrium for a firm/organization in different competitive market situations.
- 4. Prepare and review the financial statements of an accounting entity.
- 5. Apply Financial ratio technique for financial analysis and to prepare Fund Flow Statement

#### **COURSE CONTENT:**

**UNIT 1** Nature and scope of economics, Economic cyclic flow, Central Economic problems, macro and microeconomics Laws of demand and supply, Demand curve and demand function, Cardinal and ordinal utility analysis of consumer equilibrium, price and income relations of consumer's equilibrium, Demand derivation, Elasticity of demand.

**UNIT 2** Production, Cost and Price: Equilibrium price, Production function, Laws of returns to variable proportions, Laws of returns to scale, Cost concepts, cost functions and their interrelations, Break even analysis. Time Value of money & capital budgeting through NPV and IRR methods.

**UNIT 3** Pricing and Market: Price determination and firm's equilibrium under perfect competition and monopoly, price discrimination under monopoly, imperfect competitions – monopolistic competition, collusive and non-collusive oligopoly.

**UNIT 4** Accountancy and Business Organization: Bookkeeping and Accountancy, Trading account, Profit and loss account and balance sheets, Business and Industrial organization Types, features, merits and demerits

**UNIT 5** Financial management and Analysis: Concept, Scope and functions and goals of financial management, financial analysis, Ratio analysis, Fund flow analysis,

**ASSESSMENT:** Through End-Sem. Theory Exam, Theory sessionals, Mid-Sem Tests, and Assignments.

### **TEXT BOOKS RECOMMENDED:**

- 1. Dwivedi and Dwivedi: Engineering Economics, Vikas Publishing House, New Delhi India
- 2. Truett and Truett, Managerial Economics, Wiley India, New Delhi, India
- 3. Ghose, B.N., Managerial Economics and Business decisions, Ane Books Pvt. Ltd, New Delhi, India
- 4. Pandey I. M., Financial Management, Vikas Publishing House, New Delhi, India