HS 305: INDUSTRIAL ECONOMICS AND MANAGEMENT

Teaching Scheme			Credits	Credits Marks				
L	T	P/D	С	Sessional	End Semester	Total	End Semester	
					Exam		Examination	
3	0	0	3	40	60	100	3 hrs	

COURSE CONTENT:

UNIT	CONTENT	No. of			
I	Introduction to Engineering Economics - Technical efficiency, economic efficiency - cost concepts: elements of costs, opportunity cost, sunk cost, private and social cost, marginal cost, marginal revenue and profit maximization. Supply and Demand: Determinants of demand, law of demand, determinants of supply, law of supply, market equilibrium - elasticity of demand - types of elasticity, factors affecting the price elasticity of demand National Income Concepts: GDP and GNP, per capita income, methods of measuring national income. Inflation and deflation:				
п	Value Analysis - Time value of money - interest formulae and their applications: single-payment compound amount factor, single-payment present worth factor, equal-payment series compound amount factor, equal-payment series sinking fund factor, equal-payment series present worth factor, equal-payment series capital recovery factor, effective interest rate. Investment Analysis: Payback period—average annual rate of return, net present value; Internal rate of return criteria, price changes, risk and uncertainty.	8			
ш	Principles of Management: Evolution of management theory and functions of management organizational structure - principle and types - decision making - strategic, tactical & operational decisions, decision making under certainty, risk & uncertainty and multistage decisions & decision tree. Human Resource Management: Basic concepts of job analysis, job evaluation, merit rating, wages, incentives, recruitment, training and industrial relations.	8			
IV	Financial Management: Time value of money and comparison of alternative methods; costing – elements& components of cost, allocation of overheads, preparation of cost sheet, break even analysis - basics of accounting - principles of accounting, basic concepts of journal, ledger, trade, profit & loss account and balance sheet. Marketing Management: Basic concepts of marketing environment, marketing mix, advertising and sales promotion.	8			



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Project Management: Phases, organization, planning, estimating, planning using	
PERT & CPM.	

Text Books:

- 1. PanneerSelvam, R, "Engineering Economics", Prentice Hall of India Ltd, New Delhi.
- 2. Dwivedi, D.N., "Managerial Economics, 7/E", Vikas Publishing House.

Reference Books:

- Sullivan, W.G, Wicks, M.W., and Koelling. C.P., "Engg. Economy 15/E", Prentice Hall, New York, 2011.
- 2. Chan S. Park, "Contemporary Engineering Economics", Prentice Hall of India, 2002.
- 3. F. Mazda, Engg. Management, Addison Wesley, Longman Ltd., 1998.
- 4. O. P. Khanna, Industrial Engg. and Management, DhanpatRai and Sons, Delhi, 2003.
- P. Kotler, Marketing Management, Analysis, Planning, Implementation and Control, Prentice Hall, New Jersey, 2001.
- VenkataRatnam C.S & Srivastva B.K, Personnel Management and Human Resources, Tata McGraw Hill.
- 7. Prasanna Chandra, Financial Management: Theory and Practice, Tata McGraw Hill.
- 8. Bhattacharya A.K., Principles and Practice of Cost Accounting, Wheeler Publishing.
- Weist and Levy, A Management guide to PERT and CPM, Prantice Hall of India.
- 10. Koontz H.,O'Donnel C.,&Weihrich H, Essentials of Management, McGraw Hill.

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