



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad - 500 043

COMPUTER SCIENCE AND ENGINEERING

COURSE DESCRIPTION FORM

Course Title	MANAGERIAL ECONOMICS AND FINANCIAL ANALYSIS			
Course Code	A60010			
Regulation	R15- JNTUH			
Course Structure	Lectures	Tutorials	Practicals	Credits
	4	-	-	4
Course Coordinator	Mr. M. RAMESH, Assistant Professor, MBA Department.			
Team of Instructors	Mr. M. RAMESH, Assistant Professor, MBA Department. Ms.K Mamatha, Assistant Professor, MBA Department. Ms.Azara Assistant Professor, MBA Department.			

I. COURSE OVERVIEW:

The present course is designed in such a way that it gives an overview of concepts of Economics. Managerial Economics enables students to understand micro environment in which markets operate how price determination is done under different kinds of competitions. Financial Analysis gives clear idea about concepts, conventions and accounting procedures along with introducing students to fundamentals of ratio analysis and interpretation of financial statements. Break Even Analysis is very helpful to the Business Concern for Decision Making, controlling and forward Strategic Planning. Ratio analysis gives an idea about financial forecasting, financial planning, controlling the business and decision making.

II. PREREQUISITE(S):

Level	Credits	Periods/ Week	Prerequisites
-	-	-	Economics

III. MARKS DISTRIBUTION:

Sessional Marks	University End Exam Marks	Total Marks
<p>Mid Semester Test There shall be 2 midterm examinations. Each midterm examination consists of subjective type and Objective type tests. The subjective test is for 10 marks, with duration of 1 hour. Subjective test of each midterm exam shall contain 4 questions. The student has to answer 2 questions, each carrying 5 marks.</p> <p>The objective type test is for 10 marks with duration of 20minutes. It consists of 10 Multiple choice and 10 objective type questions. The student has to answer all the questions and each carries half mark. First midterm examination shall be conducted for the first 2 ½ units of syllabus and second midterm examination shall be conducted for the remaining 2 ½ units.</p> <p>Five marks are earmarked for assignments. There shall be two assignments in every theory course. Marks shall be awarded considering the average of two assignments in each course reason whatsoever, will get zero marks(s).</p>	75	100

IV. EVALUATION SCHEME:

S. No	Component	Duration	Marks
1.	I Mid Examination	80 minutes	20
2.	I Assignment	-	5
3.	II Mid Examination	80 minutes	20
4.	II Assignment	-	5
5.	External Examination	3 hours	75

V. COURSE OBJECTIVES:

At the end of the course, the students will be able to:

- I. Understand the concepts of managerial economics and the market dynamics namely demand elasticity of demand and pricing in different market structures.
- II. Acquire the knowledge on the production theories and cost analysis while dealing with the production and factors of production.
- III. Analyze the various pricing methods which are adopted in attracting the potential customers for the different commodities.
- IV. Describe the significance of the project management, capital budgeting, estimation of the projects through capital budgeting methods for choosing the best and optimal projects.
- V. Provide the optimal decisions acquiring the knowledge on financial accounting and management accounting.

VI. COURSE OUTCOMES:

After completing this course the student must demonstrate the knowledge and ability to:

1. Describe the economic activities performed by the businessmen in the business for profit earning.
2. Understand the significance of demand, its analysis, measurement of demand and its forecasting
3. Write the production function through the Cobb Douglas Production Function.
4. Design and implement different structures of market covering how price is determined under different market structures.
5. Analyze different forms of business organizations existing in the modern business.
6. Describe the allocation of capital which plays a vital role in a business organization.
7. Demonstrate the concept of capital budgeting and allocations of the resources through capital budgeting methods
8. Apply the Principle of double entry to give an exposure to the maintenance of books of records and allocation of profits in an enterprise.
9. Explain the significance and objectives of trial balance and final accounts for knowing arithmetical accuracy of books of accounts, earning capacity and financial position of business enterprise.
10. Understand the Ratio analysis to give an idea about financial forecasting, financial planning, controlling the business and decision making.

VII. HOW PROGRAM OUTCOMES ARE ASSESSED:

Program Outcomes		Level	Proficiency assessed by
PO1	Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.(Fundamental Engineering Analysis Skills).	S	Assignments and Exercises.
PO2	Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences. (Engineering Problem Solving Skills).	S	Assignments and Exercises.
PO3	Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.(Social Awareness).	S	Assignments and Exercises.
PO4	Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions. (Creative Skills).	N	---
PO5	Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.(Software and Hardware Interface).	N	----
PO6	The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice. (Social Awareness).	S	Assignments and Exercises.
PO7	Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development (Social Awareness).	N	-----
PO8	Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice (Professional Integrity).	N	-----
PO9	Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings. (Team work)	H	Assignments and Presentations.
PO10	Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions. (Communication Skills).	N	-----
PO11	Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments. (Practical Engineering Analysis Skills).	H	Assignments and Presentations.

Program Outcomes		Level	Proficiency assessed by
PO12	Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change. (Continuing Education Awareness).	N	----

N – None

S – Supportive

H - Highly Related

VIII. HOW PROGRAM SPECIFIC OUTCOMES ARE ASSESSED:

Program Specific Outcomes		Level	Proficiency assessed by
PSO1	Professional Skills: An ability to understand the basic concepts in Electronics & Communication Engineering and to apply them to various areas, like Electronics, Communications, Signal processing, VLSI, Embedded systems etc., in the design and implementation of complex systems.	N	----
PSO2	Problem-solving skills: An ability to solve complex Electronics and communication Engineering problems, using latest hardware and software tools, along with analytical skills to arrive cost effective and appropriate solutions.	N	----
PSO3	Successful career and Entrepreneurship: An understanding of social-awareness & environmental-wisdom along with ethical responsibility to have a successful career and to sustain passion and zeal for real-world applications using optimal resources as an Entrepreneur.	H	Guest Lectures

N - None

S - Supportive

H- Highly Related

IX. SYLLABUS:

UNIT-I

Introduction & Demand Analysis:

Introduction to Managerial Economics: Definition, Nature and Scope of Managerial Economics – Demand Analysis: Demand Determinants, Law of Demand and its exceptions. Elasticity of Demand: Definition, Types, Measurement and Significance of Elasticity of Demand. Demand Forecasting, Factors governing demand forecasting, methods of demand forecasting

UNIT-II

Production & Cost Analysis:

Theory of Production and Cost Analysis: Production Function – Iso-quants and Iso-costs, MRTS, Least Cost Combination of Inputs, Cobb-Douglas Production function, Laws of Returns, Internal and External 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, Break-even analysis, Determination of Break – Even point (Simple Problems) , Managerial Significance of BEA.

UNIT-III

Markets& New Economic Environment:

Market structures: Types of competition, Features of perfect competition, Monopoly and monopolistic competition. Price determination& Price Statistics: Price Output determination in case of perfect competition and monopoly. Pricing objectives and policies of pricing, Methods of pricing. Business features and evaluation of different forms of Business organization: Sole proprietorship, partnership, Joint Stock Company, public enterprises and their types, New Economic Environment: changing business environment in post-liberalization scenario.

UNIT-IV

Capital Budgeting:

Capital and its significance, types of capital, estimation of fixed and working capital requirements, methods and sources of raising capital- Trading Forecast, Capital budget, Cash Budget. Features of capital budgeting proposals, methods of capital budgeting – payback method, Accounting rate of return (ARR), Net Present Value Method (simple problems).

UNIT-V

Introduction to Financial Accounting and Financial Analysis:

Accounting Concepts and Conventions, Introduction to IFRS– Double – Entry Book keeping, Journal, Ledger, Trial balance, Final accounts (Trading Account, Profit and Loss Account and Balance Sheet with simple adjustments.) Financial Analysis through Ratios: Significance, limitations of Ratio Analysis and Ratios Computation, Analysis and Interpretation of Liquidity Ratios (Current Ratio and quick ratio). Activity Ratios (Inventory turnover ratio and Debtor Turnover ratio), Capital structure Ratios (Debt-Equity ratio, Interest Coverage ratio) and profitability ratios (Gross profit Ratio, Net profit ratio, Operating Ratio, P/E Ratio and EPS), Du Pont Chart.

X. LIST OF TEXT BOOKS / REFERENCES:

TEXT BOOKS:

1. A.R. Aryasri, “Managerial Economics and Financial Analysis”, TMH Publications, 3rd Edition, 2007.

REFERENCE BOOKS:

1. D.N. Dwivedi, “Managerial Economics”, Vikas Publication House Pvt.Ltd, 2nd Edition, 2012.
2. S.N. Maheshwari & S.K.Maheshwari, “Financial Accounting”, Vikas Publication House Pvt.Ltd, 4th Edition, 2012.
3. R.Narayana Swamy, “Financial Accounting- A managerial Perspective”, Pearson publications, 1st Indian Reprint Edition, 2012.
4. J.V.Prabhakar Rao & P.V.Rao, “Managerial Economics & Financial Analysis”, Maruthi Publishers, 1st Revised Editon, 2011.
5. M.Kasi Reddy & Saraswathi, “Managerial Economics and Financial Analysis”, PHI Publications, New Delhi, 10th Revised Edition, 2012.
6. Varshney & Maheswari, “Managerial Economics”, Sulthan Chand Publishers, 1st Revised Edition, 2009.

IX. COURSE PLAN:

At the end of the course, the students are able to achieve the following course learning outcomes:

Lecture No.	Unit No	Course Learning Objective (CLOs)	Topics Covered	Text Book/ Reference
1-2	I	Explain about managerial economics according to the business	Introduction to Managerial Economics: Definition, Nature and Scope of Managerial Economics.	T1- 1.3-1.8
3-4		Describe about demand analysis, the Law of Demand and Demand Function.	Demand Analysis: Demand Determinants of Demand, Definitions, Assumptions and Exceptions of Law of Demand and Demand Function.	T1-2.2-2.11
5-8		Understand elasticity of the demand of the product,	Definitions, Significance of Elasticity of Demand, Types and Measurement	T1-3.3-3.20

Lecture No.	Unit No	Course Learning Objective (CLOs)	Topics Covered	Text Book/ Reference
		different types, Measurement of Elasticity of Demand and Factors influencing on Elasticity of Demand.	of Elasticity of Demand and Factors influencing Elasticity of Demand.	
9-11		State different methods of Demand Forecasting and the factors governing Demand Forecasting.	Methods of demand forecasting and Factors Governing Demand Forecasting.	T1-4.6-4.19
12-16	II	Demonstrate the Production function, features of Iso-Quants and Iso-Costs, different types of Internal Economies, External Economies and Law of Returns with appropriate examples	Production function, features of Iso-Quants, Iso-Costs, MRTS, Least Cost Combination of Inputs and Cobb-Douglas Production Function, Different types of Internal Economies, External Economies and Law of Returns.	T1- 5.3-5.18
17		Illustrate different types of costs	Cost concepts, fixed vs Variable costs, explicit vs implicit costs, out of pocket costs vs Imputed costs.	T1- 5.29-6.8
18		Explain the Significance and Limitations of Break-Even Analysis	Break-even Analysis (BEA). Managerial Significance of BEA.	T1- 7.13-7.14
19-21	II	Calculate Break-Even Point (Simple Problems)	Determination of Break-Even Point (Simple Problems)	T1- 7.1-7.12
22-26	III	Illustrate the features, price-output determination under Perfect Competition, Monopoly and Monopolistic competition Markets.	Market structures: Types of competition, Features of Perfect Competition, Monopoly and Monopolistic competition Markets and determination of price –output under Perfect Competition, Monopoly and Monopolistic competition markets.	T1- 8.4-8.16
27-30		Demonstrate the Objectives, Policies and Methods of Pricing Strategies and Price Methods.	Objectives and Policies of Pricing- Methods of Pricing: Cost Plus Pricing, Marginal Cost Pricing, Sealed Bid Pricing, Going Rate Pricing, Limit Pricing Market Skimming Pricing, Penetration Pricing, Two-Part Pricing, Block Pricing, Bundling Pricing, Peak Load Pricing, Cross Subsidization	T1- 8.21-8.25
31-35	III	Describe Features of business, Definitions of	Characteristic features of Business, Definitions, Features, Merits and	T1-9.3-9.15

Lecture No.	Unit No	Course Learning Objective (CLOs)	Topics Covered	Text Book/ Reference
		Various forms of Business Units.	Demerits of Sole Proprietorship, Partnership, Joint Stock Company.	
36-38	III	State the Merits & Demerits of Different types of Public Enterprises and Changing Business Environment to Post Liberalization Scenario.	Definitions, Features, Merits and Demerits of Public Enterprises and their types and Changing Business Environment in Post-liberalization scenario	T1- 9.26-10.23
39-41	IV	Explain the significance and classification of capital, Methods and Sources of Raising Finance.	Capital and its significance, Types of Capital, Working capital requirements, Methods and sources of rising finance, Trading Forecast, Capital Budget and Cash Budget.	T1- 11.3-11.15
42-45		Demonstrate the concept of capital budgeting and allocations of the resources through capital budgeting methods and compute simple problems.	Nature and Significance of capital budgeting, Methods of Capital Budgeting (PBP, ARR, IRR, NPV.PI) Simple Problems.	T1-12.1-12.26
46-49	V	Illustrate the Significance of Financial Accounting, Double Entry, Accounts, Accounting Concepts and Conventions	Significance of Financial Accounting and Accounting Terminology and Accounting Cycle.	T1-13.4-13.15
50-58		Explain the meaning, advantages and Limitations of the Journal, Ledger and Trial Balance and Final Accounts and Solve simple Problems.	Meaning, Advantages and Limitations of the Journal, Ledger and Trial Balance and Final Accounts and Simple Problems from Journal, Ledger, Trail Balance and Final Accounts with simple adjustments. (Problems)	T1-13.15-13.68.
59		Describe Meaning, Definitions and Limitations of Ratio Analysis	Meaning, Definitions and Limitations of Ratio Analysis.	T1-14.18
60-65		Compute different types of Financial Ratios (Problems)	Computation, Analysis and Interpretation of Liquidity Ratios, Activity Ratios, Leverage Ratios and Profitability Ratios. (Problems)	T1-14.4-14.18

XI. MAPPING COURSE OBJECTIVES LEADING TO THE ACHIEVEMENT OF PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES:

Course Objectives	Program Outcomes												Program Specific Outcomes		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
I	H	S				S			S		S				H
II	S		S			S			S		S				S
III		S							H		S				
IV	S		S			S			S						S
V		S				H					S				H

S – Supportive

H - Highly Related

XII. MAPPING COURSE OUTCOMES LEADING TO THE ACHIEVEMENT OF PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES:

Course Outcomes	Program Outcomes												Program Specific Outcomes		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
1		S	S			S					H				H
2	S		H						S		S				S
3	H	S				S					S				
4	S	H	S			H			S		H				S
5		S	S			S			H						H
6		S							S		S				
7	S		S			S			H						S
8		S				H			S		S				
9	S		S												S
10	S	S	S			S			S		S				H

S – Supportive

H - Highly Related

Prepared by: Mr. M. RAMESH, Assistant Professor, MBA Department.

HOD, CSE