



INSTITUTE OF AERONAUTICAL ENGINEERING (AUTONOMOUS)

Dundigal, Hyderabad - 500 043

INFORMATION TECHNOLOGY

COURSE DESCRIPTION FORM

Course Title	MANAGERIAL ECONOMICS AND FINANCIAL ANALYSIS			
Course Code	A50010			
Regulation	R13 - JNTUH			
Course Structure	Lectures	Tutorials	Practicals	Credits
	4	-	-	4
Course Coordinator	Dr.J.S.V.GOPALASARMA, Professor, MBA Department.			
Team of Instructors	Dr.J.S.V.GOPALASARMA, Professor, MBA Department.			

I. COURSE OVERVIEW:

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
UG	4	4	Managerial Economics and Financial Analysis

III. MARKS DISTRIBUTION:

Sessional Marks	University End Exam marks	Total marks
<p>There shall be 2 midterm examinations. Each midterm examination consists of one objective paper, one subjective paper and one assignment. The objective paper is for 10 marks and subjective paper is for 10 marks, with duration of 1 hour 20 minutes (20 minutes for objective and 60 minutes for subjective paper). Objective paper is set for 20 bits of – multiple choice questions, fill-in the blanks, 10 marks. Subjective paper contains of 4 full questions (one from each unit) of which, the student has to answer 2 questions, each question carrying 5 marks.</p> <p>First midterm examination shall be conducted for 1-4 units of syllabus and second midterm examination shall be conducted for 5-8 units. 5 marks are allocated for Assignments (as specified by the concerned subject teacher) – first Assignment should be submitted before the conduct of the first mid, and the second Assignment should be submitted before the conduct of the second mid. The total marks secured by the student in each midterm examination are evaluated for 25 marks, and the average of the two midterm examinations shall be taken as the final marks secured by each candidate</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

I. COURSE OBJECTIVES:

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

- I. Understand the concepts of managerial economics and financial analysis for optimal decision making in business environment.
- II. Analyze the market dynamics namely demand, elasticity of demand and pricing in different market structures.
- III. Gain the knowledge on the production theories and cost analysis while dealing with the production and factors of production.
- IV. Introduce the concepts of cost and significance, limitation of Break even analysis.
- V. Study the various pricing methods which are adopted in attracting the potential customers for the different commodities.
- VI. Describe the significance of the project management, capital budgeting, estimation of the projects through capital budgeting methods for choosing the best and optimal projects.
- VII. Provide the optimal decisions acquiring the knowledge on financial accounting and management accounting.
- VIII. Acquire the basics of how to analyze and interpret the financial statements through ratio analysis.

II. 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.	H	Assignment, 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.	S	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.	S	Assignments
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.	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.	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.	S	Assignments
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.	H	Discussions
PO8	Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.	S	Seminars, Discussions
PO9	Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in	H	Group

	multidisciplinary settings.		discussions
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.	S	Seminars
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.	H	Exercises, Discussions
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.	S	Exams, Discussions

N= None

S=Supportive

H=highly related

VIII. HOW PROGRAM SPECIFIC OUTCOMES ARE ASSESSED:

Program Specific Outcomes		Level	Proficiency assessed by
PSO1	Professional Skills: The ability to research, understand and implement computer programs in the areas related to algorithms, system software, multimedia, web design, big data analytics, and networking for efficient analysis and design of computer-based systems of varying complexity.	H	Lectures, Assignments
PSO2	Software Engineering practices: The ability to apply standard practices and strategies in software service management using open-ended programming environments with agility to deliver a quality service for business success.	N	-----
PSO3	Successful Career and Entrepreneurship: The ability to employ modern computer languages, environments, and platforms in creating innovative career paths, to be an entrepreneur, and a zest for higher studies.	S	Guest Lectures

N - None

S - Supportive

H- Highly Related

III. 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.

IV. 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 Edition, 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	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, different types, Measurement of Elasticity of Demand and Factors influencing on Elasticity of Demand.	Definitions, Significance of Elasticity of Demand, Types and Measurement of Elasticity of Demand and Factors influencing Elasticity of Demand.	T1-3.3-3.20
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	T1- 8.4-8.16

Lecture No.	Unit No	Course Learning Objective	Topics Covered	Text Book/ Reference
			under Perfect Competition, Monopoly and Monopolistic competition markets.	
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 Various forms of Business Units.	Characteristic features of Business, Definitions, Features, Merits and Demerits of Sole Proprietorship, Partnership, Joint Stock Company.	T1-9.3-9.15
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	S	H	S			S	H	H	H	S	S		H		S
II															
III	S	H	S			S	S	S	S	S		S	H		S
IV		S				S		S		S					
V	S	H	S					S	H		S	S	H		S
VI													S		
VII	S	H	S			H			S	S	S				H
VIII	H	S	S			S			H	S	H	S	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	H	S			H	H	S				S	H		S
2		S								S					
3	S		S			S		H	S		S	S	S		S
4															
5	S	H	S			S	H	S		S		S	H		S
6															
7		S	S			S			S	S			S		H
8	S														H
9		H						H		S	S	S	S		S
10	H	S	S			S			H		S		H		H

S – Supportive

H - Highly Related