



**NEERAJ®**

# **M.C.O.-21**

## **Managerial Economics**

**Chapter Wise Reference Book  
Including Many Solved Sample Papers**

*Based on*

---

# **I.G.N.O.U.**

**& Various Central, State & Other Open Universities**

---

*By: Gaurav Sahni*



**NEERAJ  
PUBLICATIONS**

*(Publishers of Educational Books)*

---

Mob.: 8510009872, 8510009878    E-mail: [info@neerajbooks.com](mailto:info@neerajbooks.com)

Website: [www.neerajbooks.com](http://www.neerajbooks.com)

---

**MRP ₹ 300/-**

Content

# **MANAGERIAL ECONOMICS**

Question Paper—June-2024 (Solved) .....	1
Question Paper—December-2023 (Solved) .....	1
Question Paper—June-2023 (Solved) .....	1-2
Question Paper—December-2022 (Solved) .....	1-2
Sample Question Paper—1 (Solved) .....	1

---

<i>S.No.</i>	<i>Chapterwise Reference Book</i>	<i>Page</i>
--------------	-----------------------------------	-------------

---

## **BLOCK-1: INTRODUCTION TO MANAGERIAL ECONOMICS**

1. Scope of Managerial Economics .....	1
2. The Firm: Stakeholders, Objectives and Decision Issues .....	16
3. Basic Concepts and Techniques .....	26

## **BLOCK-2 : DEMAND AND REVENUE ANALYSIS**

4. Demand Concepts and Analysis .....	42
5. Demand Elasticity .....	53
6. Demand Estimation and Forecasting .....	65

---

<i>S.No.</i>	<i>Chapterwise Reference Book</i>	<i>Page</i>
--------------	-----------------------------------	-------------

---

**BLOCK-3 : PRODUCTION AND COST ANALYSIS**

7. Production Function .....	80
8. Short Run Cost Analysis .....	92
9. Long Run Cost Analysis .....	110

**BLOCK-4 : PRICING DECISIONS**

10. Market Structure and Barriers to Entry .....	131
11. Pricing Under Perfect Competition and Pure Monopoly .....	140
12. Pricing Under Monopolistic and Oligopolistic Competition .....	150
13. Pricing Strategies .....	165



**Sample Preview  
of the  
Solved  
Sample Question  
Papers**

*Published by:*



**NEERAJ  
PUBLICATIONS**

[www.neerajbooks.com](http://www.neerajbooks.com)

# QUESTION PAPER

June – 2024

(Solved)

## MANAGERIAL ECONOMICS

M.C.O.-21

Time: 3 Hours ]

[ Maximum Marks: 100

Weightage: 70%

Note: Answer any five questions. All questions carry equal marks.

**Q. 1. Explain the characteristics of a firm in monopoly market. Discuss equilibrium output and price under monopoly.**

**Ans. Ref.:** See Chapter-11, Page No. 144, Q. No. 3 and Page No. 142, 'Profit Maximizing Output of a Monopoly Firm' and Chapter-12, Page No. 150, 'Introduction'.

**Q. 2. Explain the determinants of cost function. Also explain the econometric method of estimating cost function.**

**Ans. Ref.:** See Chapter-9, Page No. 111, 'Cost Function and Its Determinants' and Page No. 123, Q. No. 3.

**Q. 3. Explain production function with two variable inputs.**

**Ans. Ref.:** See Chapter-7, Page No. 80, 'Production Function' and Page No. 81, 'Production Function With Two Variable Inputs'.

**Q. 4. (a) Describe the determinants of price elasticity of demand.**

**Ans. Ref.:** See Chapter-5, Page No. 54, 'Determinants of Price Elasticity'.

**(b) Explain income elasticity of demand with the help of an example.**

**Ans. Ref.:** See Chapter-5, Page No. 53, 'Introduction' and Page No. 55, 'Income Elasticity of Demand' and 'Cross-Price Elasticity'.

**Q. 5. What causes a movement along the demand curve and shift in demand curve? Explain with the help of diagrams.**

**Ans. Ref.:** See Chapter-4, Page No. 46, Q. No. 2.

**Q. 6. Discuss with examples how managerial economics is an integral part of business activity.**

**Ans. Ref.:** See Chapter-1, Page No. 2, 'Scope of Managerial Economics'.

**Q. 7. Describe variables and constants with the help of various equations and graphs.**

**Ans. Ref.:** See Chapter-3, Page No. 27, 'Variables and Constants' and Chapter-4, Page No. 46, Q. No. 2.

**Q. 8. Write short notes on the following:**

**(a) Equi-marginal principle**

**Ans. Ref.:** See Chapter-2, Page No. 17, 'The Equi-Marginal Principle'.

**(b) Fundamental nature of managerial economics**

**Ans. Ref.:** See Chapter-1, Page No. 1, 'Fundamental Nature of Managerial Economics'.

**(c) Kinked demand curve**

**Ans.** The Kinked-Demand curve theory is an economic theory that relates to oligopoly and monopolistic competition. This theory was developed to explain why prices in these markets tend to stay the same. Both the traditional demand curve and the kinked demand curve slope downward, but the kinked demand curve has a bend, or "kink," that causes a discontinuity. This discontinuity leads to an undefined point in the first derivative and creates a jump discontinuity in the marginal revenue curve. According to classical economic theory, a producer aiming to maximize profit in a market with some degree of market power (whether it's due to oligopoly or monopolistic competition) will set their marginal costs equal to their marginal revenue. Graphically, this can be seen as the point where the upward-sloping marginal cost curve intersects with the downward-sloping marginal revenue curve. In classical theory, any changes in the marginal cost or revenue structures will immediately result in a new price and/or quantity of the item sold. However, this doesn't happen when there's a "kink." Because of the jump discontinuity in the marginal revenue curve, marginal costs could change without necessarily affecting the price or quantity.

**(d) Oligopolistic competition**

**Ans. Ref.:** See Chapter-12, Page No. 151, 'Oligopolistic Competition'. ■ ■

# QUESTION PAPER

December – 2023

(Solved)

## MANAGERIAL ECONOMICS

M.C.O.-21

Time: 3 Hours ]

[ Maximum Marks: 100

Weightage: 70%

Note: Answer any five questions. All questions carry equal marks.

**Q. 1. Discuss the 'Profit Maximisation' and 'Value Maximisation' objectives of the firm with suitable examples.**

**Ans. Ref.:** See Chapter-2, Page No. 16, 'Objective of the Firm', Page No. 17, 'Value Maximisation' and 'Alternative Objectives of the Firms'.

**Q. 2. Differentiate between income elasticity and cross elasticity of demand with the help of suitable graphs and examples.**

**Ans. Ref.:** See Chapter-5, Page No. 53, 'The Price Elasticity of Demand', Page No. 54, 'Determinants of Price Elasticity', Page No. 55, 'Income Elasticity of Demand', 'Cross-Price Elasticity' and Page No. 61, Q. No. 2.

**Q. 3. Explain cost function. Discuss the determinants of cost function and the problems in its estimation.**

**Ans. Ref.:** See Chapter-8, Page No. 95, 'Short-Run Cost Functions', Chapter-9, Page No. 110, 'Long-Run Cost Functions', Page No. 111, 'Cost Function and Its Determinants' and Page No. 112, 'Estimation of Cost Function'.

**Q. 4. "Market selection process includes firm's entry, its survival and finally the exit process." Discuss the conditions of entry and barrier to entry for a firm in different market structures.**

**Ans. Ref.:** See Chapter-10, Page No. 131, 'Classification of Market Structures', Page No. 132, 'Barriers to Entry, Strategic Entry', 'Barriers – A Further Discussion' and Page No. 134, Q. No. 1.

**Q. 5. Discuss the 'Monopolistic Competition.' How will a firm determine its price and output in short-run and long-run? Discuss.**

**Ans. Ref.:** See Chapter-12, Page No. 150, 'Monopolistic Competition', Page No. 151, 'Price and Output Determination in Short-Run and Price' and 'Output Determination in Long-Run'.

**Q. 6. Differentiate between the following with suitable examples:**

**(a) Accounting cost and Economic cost**

**Ans. Ref.:** See Chapter-8, Page No. 93, 'Accounting Costs and Economic Costs'.

**(b) Historical cost and Replacement cost**

**Ans. Ref.:** See Chapter-8, Page No. 96, Q. No. 2 and Page No. 101, 'Historical and Replacement Costs'.

**Q. 7. What is 'Demand Forecasting'? Discuss various techniques of demand forecasting.**

**Ans. Ref.:** See Chapter-6, Page No. 65, 'Introduction' and Page No. 57, 'Demand Forecasting Techniques'.

**Q. 8. Write short notes on the following:**

**(a) Cross elasticity of demand**

**Ans.** The cross price elasticity of demand refers to how responsive or elastic the demand for one product is with the response to the change in price of another product. In other words, the cross price elasticity of demand tracks the relationship between price and demand. By calculating cross price elasticity, it can be determined if the products are substitutes, complements, or are not related to each other. In such a situation, if the products are substitutes of each other, then a positive cross elasticity of demand is observed, while if the products are complements of each other, then a negative cross elasticity of demand is observed. Industry and business owners use this information for determining the price for certain products.

**(b) Opportunity cost principle**

**Ans. Ref.:** See Chapter-2, Page No. 18, 'The Opportunity Cost Principle'.

**(c) Law of diminishing marginal utility**

**Ans. Ref.:** See Chapter-7, Page No. 87, Q. No. 3.

**(d) Economies of scale**

**Ans. Ref.:** See Chapter-9, Page No. 111, 'Economies and Diseconomies of Scale'.

**(e) Transfer pricing**

**Ans. Ref.:** See Chapter-13, Page No. 167, 'Transfer Pricing'. ■ ■

# Sample Preview of The Chapter

*Published by:*



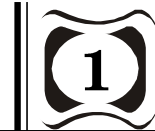
**NEERAJ  
PUBLICATIONS**

[www.neerajbooks.com](http://www.neerajbooks.com)

# MANAGERIAL ECONOMICS

## BLOCK-1: INTRODUCTION TO MANAGERIAL ECONOMICS

### Scope of Managerial Economics



#### INTRODUCTION

Since economics has two primary classifications namely macroeconomics and microeconomics. The basic difference between the both is that macroeconomics is considered as the study of the whole economy, which caters to areas like Gross National Product, Inflation, Unemployment, Exports, Imports, Tax Policies, etc. On the other hand, microeconomics deals with the individual factors in the economy that is firms and individuals.

It is vital to understand that macroeconomics also provides answers to questions pertaining to any changes in investments, employment, prices, exchange rate of the rupee, etc. as these affect the economy at large. Microeconomic data on the other hand forms a part of the data for macroeconomic study of variables. Since only aggregate data of the above mentioned variables is considered, however, the aggregate also includes the data for changes in output of a number of individual firms, plus the consumer's consumption levels and their choice based on any change in the prices of the particular goods and services.

It is on the basis of the importance that the macroeconomics and microeconomics issues command that one gets the attention in media and newspapers while the latter is taken care of in the day-to-day handlings of the manager.

It is said that in order to take appropriate managerial decisions it is important to have an analytical perspective blended with rational decision-making skills. These can be enhanced with the understanding of the applications of Managerial Economics.

Managerial Economics falls under the micro-economics section, which caters to a wide variety of

topics that may range from risk, demand, supply to the understanding of the cost and market structure. Thus, in layman's language it can be said that market is a place where individuals and various products come in contact with each other and the prices of the products are determined. Therefore, it is important to keep the profit maximization quotient for the firm producing the products in mind. The entity, which makes available the factors of production in the form of produced goods and services, is termed as a firm.

The main aim of economics is to have the appropriate allocation of resources, so that they can be utilized to their maximum capacity. It is with the help of economics that managers are able to take the optimizing decisions keeping in mind the alternatives available vis-à-vis the best option for the resources.

The firms operate in the market whereby the forces of demand and supply, inflation, government policies affect it. Thus, it is with the help of managerial economics that the firm is able to react to such changes in the economic environment and predict and devise the best possible alternative, so that their objectives are also met.

#### CHAPTER AT A GLANCE

##### FUNDAMENTAL NATURE OF MANAGERIAL ECONOMICS

A close relationship between management and economics has led to the development of managerial economics. Koontz and O'Donnell define management as the creation and maintenance of an internal environment in an enterprise where individuals, working together in groups, can perform efficiently and effectively towards the attainment of group goals. Thus, management is:



- Coordination
- An activity or an ongoing process
- A purposive process
- An art of getting things done by other people.

The three choice problems that have become the three central issues of an economy are:

1. What to produce?
2. How to produce?
3. For whom to produce?

Economics has developed several concepts and analytical tools to deal with the question of allocation of scarce resources among competing ends. There are three ways by which this can be achieved. One, entirely by the market mechanism, two entirely by the government or finally and more reasonably by a combination of the first two approaches. Realistically all economies employ the last option, but the relative roles of the market and government vary across countries. According to the central deduction of economic theory, under certain conditions, markets allocate resources efficiently. The theory says that markets will produce an outcome such that, given the economy's scarce resources, it is impossible to make anybody better-off without making somebody else worse-off.

According to the central deduction of economic theory, under certain conditions, markets allocate resources efficiently. 'Efficiency' has a special meaning in this context.

In neoclassical economics, market failure is a situation in which the allocation of goods and services by a free market is not Pareto efficient, often leading to a net loss of economic value. Market failures can be viewed as scenarios where individuals' pursuit of pure self-interest leads to results that are not efficient – that can be improved upon from the societal point of view. The first known use of the term by economists was in 1958, but the concept has been traced back to the Victorian philosopher Henry Sidgwick. Market failures are often associated with public goods, time-inconsistent preferences, information asymmetries, non-competitive markets, principal – agent problems, or externalities.

The existence of a market failure is often the reason that self-regulatory organizations, governments or supra-national institutions intervene in a particular market. Economists, especially microeconomists, are often concerned with the causes of market failure and possible means of correction. Such analysis plays an

important role in many types of public policy decisions and studies.

However, government policy interventions, such as taxes, subsidies, wage and price controls, and regulations, may also lead to an inefficient allocation of resources, sometimes called government failure. Most mainstream economists believe that there are circumstances (like building codes or endangered species) in which it is possible for government or other organizations to improve the inefficient market outcome. Several heterodox schools of thought disagree with this as a matter of ideology.

### **SCOPE OF MANAGERIAL ECONOMICS**

It is important to understand the scope and importance that Managerial Economics carries to the firms. It helps them in solving the choice and allocation of scarce resources issues. It helps the firm to identify the activities to which the scarce resources need to be allocated for its proper functioning. The scope of Managerial Economics is not limited to just allocation of resources, it also provides a platform for rational decision-making and forward planning concepts in the managerial decisions. The managers are responsible for appropriate resource allocation, inventory, price and investment issues, which can be taken care of with the help of Managerial Economics concepts.

The aim of the economic activity is to strike a balance between ends and means due to the scarcity of resources. It can be said that the center of economic activity is decision making by management, as it involves making a choice among the various alternative courses of action. Thus, the best economic choices, keeping in mind the objectives and obstacles are the outcome of best decision-making skills. The various tools that come handy to the management for taking rational decisions may include micro-macro, partial-general equilibrium, and positive-normative analysis. Therefore, it can be said that Managerial Economics acts as a link between traditional economics and the decision-making sciences for the business firms. There are four groups of problem in both decisions-making and forward planning.

**Resource Allocation:** Scarce resources have to be used with utmost efficiency to get optimal results. These include production programming and problem of transportation, etc.

**Inventory and Queuing Problem:** Inventory problems involve decisions about holding of optimal levels of stocks of raw materials and finished goods

over a period. These decisions are taken by considering demand and supply conditions. Queuing problems involve decisions about installation of additional machines or hiring of extra labour in order to balance the business lost by not undertaking these activities.

**Pricing Problem:** Fixing prices for the products of the firm is an important decision-making process.

**Investment Problem:** Forward planning involves investment problems. These are problems of allocating scarce resources over time.

#### APPROPRIATE DEFINITIONS

Managerial economics is a branch of economics involving the application of economic methods in the managerial decision-making process. And, Managerial Economics is the integration of economic theory with business practice for the purpose of facilitating Decision making and forward planning by the Management.

According to Edwin Mansfield, Economics Professor, University of Pennsylvania, "Managerial economics is concerned with the application of economic concepts and economic analysis to the problems of formulating rational managerial decisions."

According to Hailstones and Rothwel, "Managerial economics is the application of economic theory and analysis to practice of business firms and other institutions."

#### MANAGERIAL ECONOMICS AND OTHER DISCIPLINES

Managerial economics has its relationship with other disciplines for propounding its theories and concepts for managerial decision making. Essentially it is a branch of economics. Managerial economics is closely related to certain subjects like statistics, mathematics, accounting and operations research. Managerial economics helps in estimating the product demand, planning of production schedule, deciding the input combinations, estimation of cost of production, achieving economies of scale and increasing the returns to scale. It also includes determining price of the product, analyzing market structure to determine the price of the product for profit maximization, which helps them to control and plan capital in an effective manner.

Managerial economics has a very important role to play by helping managements in successful decision-making and forward planning. To discharge his role successfully, a manager must recognize his respon-

sibilities and obligations. There is a growing realization that the managers contribute significantly to the profitable growth of the firms. We can conclude that managerial economics consists of applying economic principles and concepts towards adjusting with various uncertainties faced by a business firm.

#### ECONOMIC ANALYSIS

An economic analysis is a process in which business owners gain a clear picture of the existing economic climate, as it relates to their company's ability to thrive. Economists, statisticians, and mathematicians often carry out this analysis on behalf of for-profit and nonprofit businesses. an evaluation of managerial decisions through concepts, precepts, tools and techniques of economic analysis of the following types:

**Micro and Macro Analysis:** In micro-analysis the problem of choice is focused on single individual entities like a consumer, a producer, a market, etc. Macro analysis deals with the problem in totality like national income, general price level, etc.

**Partial and General Equilibrium Analysis:** In partial equilibrium analysis, we concentrate on a single market, in isolation from the rest of the economy. We analyse in detail a particular market or a set of markets neglecting everything else. For instance, when we want to study the market for wheat in detail, we do not bother about other markets in the economy. Such an analysis is based on ceteris paribus assumption. Demand and supply models of price determination of a good are based on partial equilibrium analysis. It ignores various linkages and inter-relationships that might exist between different markets. On the other hand, in general equilibrium analysis we analyse simultaneously all the markets in the economy.

**Static, Comparative Static and Dynamic Analysis:** Static and dynamic modes of analysis can be differentiated in more than one ways. According to one definition, in a static model (theory) the variables (cause effect) are not dated. The demand-supply model of market behaviour is a static model. The model that demand depends on own price, supply depends on own price, with an equilibrium condition that demand must equal supply, time does not enter into the picture at all and the variables are all undated. According to this definition, a dynamic model would be one where the relevant variables are dated. If the demand-supply model is restructured as follows, then the model would become dynamic according to this criterion.

**Positive and Normative Analysis:** In positive economic analysis, the problem is analyzed in objective

terms based on principles and theories. In normative economic analysis, the problem is analyzed based on value judgement (norms).

### **BASIC CHARACTERISTICS:**

#### **DECISION- MAKING**

Managerial Economics serves as ‘a link between traditional economics and the decision making sciences’ for business decision-making. The basic characteristics of managerial economics can now be enumerated as:

- It is concerned with “decision-making of an economic nature.”
- It is “micro-economic” in character.
- It largely uses that body of economic concepts and principles, which is known as “theory of the firm.”
- It is “goal oriented and prescriptive”
- Managerial economics is both “conceptual and metrical”. It includes theory with measurement.

### **ACTIVITIES**

**Q. 1. Development of Managerial Economics is the result of close interrelationship between management and economics. Discuss.**

**Ans.** As according to McNair and Meriam, “Managerial Economics is the use of economic modes of thought to analyze business situations.” Based on this definition of Managerial Economics, the relationship between economics and management may be justified. The management provides the guidance, leadership as well as the way to appropriately channelize the efforts of a group of individuals towards the attainment of some common objective. While economics, provides for analyzing and providing solution to the big question of scarcity of resources.

According to Koontz and O’Donell, “Management is the creation and maintenance of an internal environment in an enterprise where individuals, working together in groups, can perform efficiently and effectively towards the attainment of group goals.” Therefore, management is co-ordination, an ongoing activity, a purposive process and the manner of getting work done through others.

While economics provides for answers to the basic questions such as what should the firm produce, the production process, i.e. how to produce and the third, for whom to produce. It is in these answers that relationship between management and economics lies. As the firm wants to produce so that it delivers goods and services to the individuals and thereby attain

objective and also derive some profits as well. For which certain factors of production in the form of material, machine, labour, etc. need to be deployed. And it is also a known fact that such resources are scarce in nature, as compared to the unlimited and insatiable human wants. Thus, here economics comes as a savior as provides for the concepts and tools to determine the best possible alternative for the factors of production.

**Q. 2. Which statement is true of the basic economic problem?**

- (i) **The problem will exist as long as resources are limited and desires are unlimited.**
- (ii) **The problem exists only in less developed countries.**
- (iii) **The problem will disappear as production expands.**
- (iv) **The advancement of technology will cause the problem to disappear.**

**Ans. (i)** The problem will exist as long as resources are limited and desires are unlimited.

As the three choice problems faced by an economy are:

- (a) What to produce?
- (b) How to produce?
- (c) For whom to produce?

These problems arise due to the scarcity of resources. Managerial economics caters to the fundamental question of scarcity of resources by providing the organization with appropriate analysis of the various activities undertaken by the organization vis-à-vis the best possible alternative for the effective utilization of the factors of production.

As the scarcity of resources results from the following issues, namely:

- (a) Human wants being unlimited and insatiable.
- (b) Limited economic resources available to satisfy the wants and desires.

The effective and efficient use of the available resources is thus very important, that is the resources need to be utilized to their maximum capacity so that the profits are enhanced and maximum returns are available to the organization as a whole. The purpose of this ongoing process is to maximize the returns and thereby the profits.

**Q. 3. Why is decision-making by any management truly economic in nature?**

**Ans.** Mostly managerial decisions are economic in nature as the firms’ management is faced with the “problems of choice” in simple words various