IARE '24 DISCORD TEAM

II-II

BEFA MODULE 1 SOLUTIONS

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INTRODUCTION AND DEMAND ANALYSIS

BEFA MODULE 1

PART A

1. Explain how managerial economics has its roots in Economics and Management. Does it have any links with other subjects? Support your answer

Managerial Economics is economics applied to decision making. It is a special branch of economics, bridging the gap between pure economic theory and managerial practice. Managerial Economics has two main branches — micro-economics and macro-economics.

Micro-economics:

'Micro' means small. It studies the behaviour of the individual units and small groups of units. It is a study of particular firms, particular households, individual prices, wages, incomes, individual industries and particular commodities. Thus micro-economics gives a microscopic view of the economy.

The roots of managerial economics spring from micro-economic theory. In price theory, demand concepts, elasticity of demand, marginal cost, marginal revenue, the short and long runs and theories of market structure are sources of the elements of micro-economics which managerial economics draws upon. It makes use of well known models in price theory such as the model for monopoly price, the kinked demand theory and the model of price discrimination.

Macroeconomics:

Macro-economies is also related to managerial economics. The environment in which a business operates, fluctuations in national income, changes in fiscal and monetary measures and variations in the level of business activity have relevance to business decisions. The understanding of the overall operation of the economic system is very useful to the managerial economist in the formulation of his policies.

Managerial economics have links with other subjects like:

- **Statistics** - Statistics is important to managerial economics. It provides the basis for the empirical testing of theory. It provides the individual firm with measures of appropriate functional relationships involved in decision making. Statistics is a very useful science for business executives because a business runs on estimates and probabilities.
- **Accounting** - Managerial economics is closely related to accounting. It is recording the financial operation of a business firm. A business is started with the main aim of earning profit. Capital is invested / employed for purchasing properties such as building, furniture, etc and for meeting the current expenses of the business.
- **Mathematics** - The mathematical concepts used by the managerial economists are the logarithms and exponential vectors and determinants, input-out tables. Operations research which is closely related to managerial economics is mathematical in character.
- **Operations Research**, etc.

2. How do you explain the relation of managerial economics with other subjects? Explain.

Managerial Economics and Theory of Decision Making:

The theory of decision making is relatively a new subject that has a significance for managerial economics. In the process of management such as planning, organising, leading and controlling, decision making is always essential. Economists are interested in the efficient use of scarce resources hence they are naturally interested in business decision problems and they apply economics in management of business problems. Hence managerial economics is economics applied in decision making.

Managerial Economics and Statistics:

Statistics is important to managerial economics. It provides the basis for the empirical testing of theory. It provides the individual firm with measures of appropriate functional relationships involved in decision making. Statistics is a very useful science for business executives because a business runs on estimates and probabilities.

Statistical tools are widely used in the solution of managerial problems. For eg. sampling is very useful in data collection. Managerial economics makes use of correlation and multiple regression in business problems involving some kind of cause and effect relationship.

Managerial Economics and Accounting:

Managerial economics is closely related to accounting. It is recording the financial operation of a business firm. A business is started with the main aim of earning profit. Capital is invested / employed for purchasing properties such as building, furniture, etc and for meeting the current expenses of the business.

There are three classes of accounts:

(i) Personal account,

(ii) Property accounts, and

(iii) Nominal accounts.

Management accounting provides the accounting data for taking business decisions. The accounting techniques are very essential for the success of the firm because profit maximisation is the major objective of the firm.

Managerial Economics and Mathematics:

Mathematics is another important subject closely related to managerial economics. For the derivation and exposition of economic analysis, we require a set of mathematical tools. The important branches of mathematics generally used by a managerial economist are geometry, algebra and calculus.

The mathematical concepts used by the managerial economists are the logarithms and exponential, vectors and determinants, input-out tables. Operations research which is closely related to managerial economics is mathematical in character.

3. Explain the basic concepts of managerial economics

There are six basic principles of managerial economics. They are:

1. **The Incremental Concept:**

The incremental concept is probably the most important concept in economics and is certainly the most frequently used in Managerial Economics. Incremental concept is closely related to the marginal cost and marginal revenues of economic theory.

The two major concepts in this analysis are incremental cost and incremental revenue. Incremental cost denotes change in total cost, whereas incremental revenue means change in total revenue resulting from a decision of the firm.

2. Concept of Time Perspective:

The time perspective concept states that the decision maker must give due consideration both to the short run and long run effects of his decisions. The economic concepts of the long run and the short run have become part of everyday language. Managerial economists are also concerned with the short run and long run effects of decisions on revenues as well as costs. The main problem in decision making is to establish the right balance between long run and short run.

3. The Opportunity Cost Concept:

Both micro and macro economics make abundant use of the fundamental concept of opportunity cost. In everyday life, we apply the notion of opportunity cost even if we are unable to articulate its significance. In Managerial Economics, the opportunity cost concept is useful in decisions involving a choice between different alternative courses of action.

In managerial decision making, the concept of opportunity cost occupies an important place. The economic significance of opportunity cost is as follows:

1. It helps in determining relative prices of different goods.
2. It helps in determining normal remuneration to a factor of production.
3. It helps in proper allocation of factor resources.

4. Equi-Marginal Concept:

- The equimarginal principle states that consumers will choose a combination of goods to maximise their total utility. This will occur when

$$\frac{\text{Marginal Utility of A}}{\text{Price of A}} = \frac{\text{Marginal utility of B}}{\text{Price of B}}$$

- The consumer will consider both the marginal utility MU of goods and the price.
- In effect, the consumer is evaluating the MU/price.
- This is known as the marginal utility of expenditure on each item of goods.

5. Discounting Concept:

- Discounting principle explains about the comparison of money value in present and future time.

  Example:

  If a person is given the option to take 100/- as a gift for today.

  or

  If a person is given the option to take 100/- as a gift after one month.

- Normally a person chooses the first offer only. Why because "today rupee is having more worth than tomorrows rupee" and the future is uncertain

6. Risk and Uncertainty:

Managerial decisions are actions of today which bear fruits in the future which are unforeseen. Future is uncertain and involves risk. The uncertainty is due to unpredictable changes in the business cycle, structure of the economy and government policies.

This means that the management must assume the risk of making decisions for their institution in uncertain and unknown economic conditions in the future

4. Distinguish between substitutes and complements with examples. How does this distinction of goods help in business decision making?

Basis	Substitute Goods	Complementary Goods
Definition	Substitute goods refer to those goods that can be consumed in place of each other.	Complementary goods refer to those goods that are consumed together.
Relationship with Price	In the case of substitute goods, if the price of one good increases, the consumer shifts his demand to the other (substitute) good i.e. rise in the price of one good results in a rise in the demand of the other good and vice-versa.	In the case of complementary goods, if the price of one good increases then a consumer reduces his demand for the complementary good as well, i.e. a rise in the price of one good results in a fall in demand of the other good and vice-versa.
Examples	Tea and coffee, Colgate and pepsodent, cello pens and Reynolds pen	Tea and sugar, ink pen and ink, printer and paper

5. “The purpose of managerial economics is to show economic analysis can be used in formulating business policies, - Joel Dean. Interpret the meaning of the statement.

As pointed out by Joel Dean "The purpose of managerial economics is to show how economic analysis can be used in formulating business policies". The basic objective of managerial economics is to analyse economic problems of business and suggest solutions and help the managers in decision-making. The objectives of business economics are outlined as below:

- To integrate economic theory with business practice.
- To apply economic concepts: and principles to solve business problems.
- To employ the most modern instruments and tools to solve business problems.
- To allocate the scarce resources in the optimal manner.
- To make overall development of a firm.
- To help achieve other objectives of a firm like attaining industry leadership, expansion of the market share etc.
- To minimise risk and uncertainty
- To help in demand and sales forecasting.
- To help in the operation of a firm by helping in planning, organising, controlling etc.
- To help in formulating business policies.
- To help in profit maximisation.

6. Define Managerial Economics and point out its chief characteristics. How is Macro-Economic useful to Managerial Economics?

Managerial economics is a stream of management studies that emphasises primarily solving business problems and decision-making by applying the theories and principles of microeconomics and macroeconomics. It is a specialised stream dealing with an organisation's internal issues using various economic theories.

Chief Characteristics of Managerial Economics/Nature

- Managerial economics is micro-economic in character as it concentrates only on the study of the firm and not on the working of the economy.
- Managerial economics takes the help of macro-economics to understand and adjust to the environment in which the firm operates.
- Managerial economics is normative rather than positive in character.
- It is both conceptual (theory) and metrical (quantitative techniques).
- The contents of managerial economics are based mainly on the "theory-of firm'.

7. Explain what the economics is and also elaborate its linkage with other subjects

Economics is a social science concerned with the production, distribution, and consumption of goods and services. It studies how individuals, businesses, governments, and nations make choices about how to allocate resources. This view makes economics an academic relative of political science, sociology, psychology and anthropology. All of these disciplines study the behaviour of human beings individually and in groups. Economics can also be linked with the following:

- Theory of Decision Making
- Operations Research
- Research
- Accounting
- Mathematics

8. What is meant by Demand? Everyone desires an ambassador car. Does this mean that the demand for ambassador cars is large?

“Demand in economics means demand backed up by enough money to pay for the goods demanded”. This means that the demand becomes effective only if it is backed by the purchasing power. In addition to this there must be willingness to buy a commodity.

- Demand in economics is the consumer's desire and ability to purchase a good or service.
- Demand can mean either market demand for a specific good or aggregate demand for th koe total of all goods in an economy.
- Demand, along with supply, determines the actual prices of goods and the volume of goods that changes hands in a market.

The demand for an Ambassador car is largely due to the consumers’ desire to own a car. But the number of consumers who are really willing to spend their money to own a car are very less, which is why this desire for owning an Ambassador car is not Demand.

9. ‘Statistical and mathematical techniques complicate the process of demand forecasting.’ Do you agree? Support your answer

The use of mathematics is significant for managerial economics in view of its profit maximization goal long with optional use of resources. The major problem of the firm is how to minimize cost, how to maximize profit or how to optimize sales. Mathematical concepts and techniques are widely used in economic logic to solve these problems. Also mathematical methods help to estimate and predict the economic factors for decision making and forward planning. Mathematical symbols are more convenient to handle and understand various concepts like incremental cost, elasticity of demand etc., Geometry, Algebra and calculus.

Managerial Economics needs the tools of statistics in more than one way. A successful businessman must correctly estimate the demand for his product. He should be able to analyses the impact of variations in tastes. Fashion and changes in income on demand only then he can adjust his output. Statistical methods provide and sure base for decision-making. Thus statistical tools are used in collecting data and analyzing them to help in the decision making process. Statistical tools like the theory of probability and forecasting techniques help the firm to predict the future course of events.

10. What is meant by elasticity of demand? Explain giving a suitable illustration, how elasticity of demand determines the price policy of a firm.

Elasticity of demand explains the relationship between a change in price and consequent change in amount demanded. Elasticity of demand shows the extent of change in quantity demanded to a change in price.
Price elasticity of demand is the ratio of the percentage change in quantity demanded of a product to the percentage change in price. Economists employ it to understand how supply and demand change when a product's price changes. It can be denoted as below:

$$Ed = \frac{\text{% Change in Quantity Demanded}}{\text{% Change in Price}}$$

$$Ed = \frac{\%\Delta Q}{\%\Delta P} = \frac{(Q2-Q1)/(Q1+Q2)}{(P2-P1)/(P1+P2)}$$

Woollen socks, for example, are not an overly complicated product to manufacture. Production requires few raw materials, and the item is lightweight and easy to ship. Therefore, if a company knows it can stimulate a 30% increase in sales by reducing the price by 20%, it is likely to increase production to reap the maximum profit. However, a small business that sells handmade furniture may have a harder time ramping up production or dealing with increased shipping and delivery activity, so an increase in supply may not be feasible, regardless of price elasticity. This is how elasticity of demand determines the price policy of a firm.

PART B

1. How Micro economics differ from Macro Economics? Explain in detail the nature and scope of managerial economics?

Economics is divided into two categories: microeconomics and macroeconomics. Microeconomics is the study of individuals and business decisions, while macroeconomics looks at the decisions of countries and governments. Though these two branches of economics appear different, they are actually interdependent and complement one another. Many overlapping issues exist between the two fields.

Microeconomics: Microeconomics is the study of decisions made by people and businesses regarding the allocation of resources, and prices at which they trade goods and services. It considers taxes, regulations, and government legislation.

Macroeconomics: Macroeconomics, on the other hand, studies the behaviour of a country and how its policies impact the economy as a whole. It analyses entire industries and economies, rather than individuals or specific companies, which is why it's a top-down approach. It tries to answer questions such as "What should the rate of inflation be?" or "What stimulates economic growth?"

Nature of Managerial Economics: The primary function of a management executive in a business organisation is decision making and forward planning.

Decision making and forward planning go hand in hand with each other. Decision making means the process of selecting one action from two or more alternative courses of action. Forward planning means establishing plans for the future to carry out the decision so taken.

1. Close to microeconomics

2. Operates against the backdrop of macroeconomics

3. Normative statements

4. Applied in nature

5 Offers scope to evaluate each alternative

6 Interdisciplinary

7 Assumptions and limitations: Every concept and theory of managerial economics is based on certain assumption and as such their validity is not universal.

Scope of Managerial Economics:

The scope of managerial economics refers to its area of study. Managerial economics, Provides management with a strategic planning tool that can be used to get a clear perspective of the way the business world works and what can be done to maintain profitability in an ever-changing environment

- (a) Theory of demand and Demand Forecasting
- (b) Pricing and Competitive strategy
- (c) Production cost analysis
- (d) Resource allocation
- (e) Profit analysis
- (f) Capital or Investment analysis
- (g) Strategic planning

2. “Managerial Economics” bridges the gap between economic theory and business practice Explain.

Managerial Economics bridges the gap between traditional economics theory and real business practices in two ways. First it provides a number of tools and techniques to enable the manager to become more competent to take decisions in real and practical situations. Secondly it serves as an integrating course to show the interaction between various areas in which the firm operates.

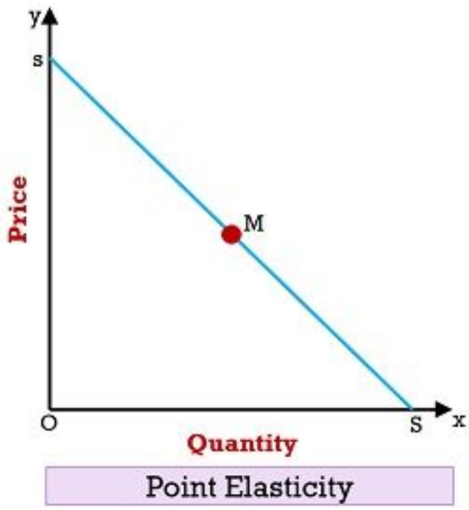
“Managerial Economics is the integration of economic theory with business practice for the purpose of facilitating decision making and forward planning by management”

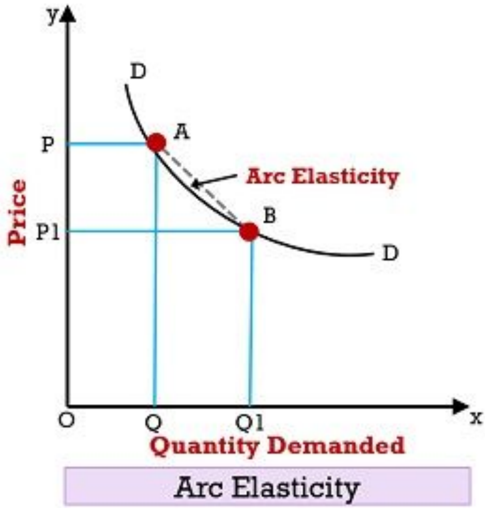
Managerial economics is the discipline, which deals with the application of economic theory to business management. Managerial Economics thus lies on the margin between economics and business management and serves as the bridge between the two disciplines. It is widely known that there exists a gap between theory and practise in all walks of life, more so in the world in economic thinking and behaviour. A theory which appears logically sound may not be directly applicable in practice. For example, when there are economies of scale, it seems theoretically sound that kiif inputs are doubled, output will be, more or less doubled and if the inputs are tripled, output will be more. This theoretical conclusion may not hold well in practice.

3. Explain how managerial economics has its roots in Economics and Management. Does it have any link with other disciplines? Support your answer.

Refer Part-A 1st question solution

4. Explain the concept of Arc & point Elasticity of Demand. Illustrate your answer with a graph.





Elasticity is the responsiveness of the quantity demanded, as a result of a change in price. In other words, it is the rate of change in the quantity demanded with respect to the rate of change in price.

We use the point elasticity method when the changes in price and quantity demanded are very small. Hence, it is easy to calculate the elasticity at a point. And because changes are quite little, one can take the original price and quantity, as a base. But, what to do when the change is substantial? One can neither take the initial price nor the final price as a base. In such a case we use the arc elasticity method, wherein we use an average of both initial and final price.

BASIS FOR COMPARISON	POINT ELASTICITY	ARC ELASTICITY
Meaning	Point Elasticity measures elasticity at a finite point of the demand curve.	Arc Elasticity measures elasticity at the central point of an arc between a pair of two points on the demand curve.

Introduced by	Marshall in 1890	Dalton in 1920
Measured when	Change is infinitesimally small	Change is finite (Discrete)
Uses	Derivative of supply function	Difference quotient
Percentage formula	Apply	Does not apply

5. Define demand and write the exceptions of demand.

Demand is an economic principle referring to a consumer's desire to purchase goods and services and willingness to pay a price for a specific good or service. This means that the demand becomes effective only if it is backed by the purchasing power. In addition to this there must be willingness to buy a commodity. Holding all other factors constant, an increase in the price of a good or service will decrease the quantity demanded, and vice versa. Market demand is the total quantity demanded across all consumers in a market for a given good.

6. What do you understand about the shift in demand curve? Enumerate three possible reasons for such a shift?

In economics, a demand curve is a graph depicting the relationship between the price of a certain commodity (the y-axis. and the quantity of that commodity that is demanded at that price (the x-axis.. Demand curves can be used either for the price-quantity relationship for an individual consumer (an individual demand curve., or for all consumers in a particular market (a market demand curve..

Movement "along the demand curve" refers to how the quantity demanded changes when the price changes. A "shift of the demand curve" occurs when even if the price remains constant the quantity demanded changes because of some other factor such as advertising or higher quality that is not on one of the axes of the diagram, resulting in a shift of the entire demand curve rather than just a change in the current price and quantity.
The shift of a demand curve takes place when there is a change in any non-price determinant of demand, resulting in a new demand curve. Non-price determinants of demand are those things that will cause demand to change even if prices remain the same — in other words, the things whose changes might cause a consumer to buy more or less of a good even if the good's own price remained unchanged.

Some of the more important factors are the prices of related goods (both substitutes and complements., income, population, and expectations. However, demand is the willingness and ability of a consumer to purchase a good under the prevailing circumstances; so, any circumstance that affects the consumer's willingness or ability to buy the good or service in question can be a non-price determinant of demand. As an example, weather could be a factor in the demand for beer at a baseball game.
Three factors that can cause the market demand curve to shift:

- a change in the number of consumers,

- a change in the distribution of tastes among consumers,
- a change in the distribution of income among consumers with different tastes.

7. What is demand and list out the reasons for which the demand exists like that?

Demand in common parlance means the desire for an object. But in economics demand is something more than this. According to Stonier and Hague, “Demand in economics means demand backed up by enough money to pay for the goods demanded”. This means that the demand becomes effective only if it is backed by the purchasing power. In addition to this there must be willingness to buy a commodity.
Thus demand in economics means the desire backed by the willingness to buy a commodity and the purchasing power to pay. In the words of “Benham” “The demand for anything at a given price is the amount of it which will be bought per unit of time at that Price”. (Thus demand is always at a price for a definite quantity at a specified time.. Thus demand has three essentials – price,quantity demanded and time.

We defined demand as the amount of some product a consumer is willing and able to purchase at each price. That suggests at least two factors in addition to price that affect demand.

- Willingness to purchase suggests a desire, based on what economists call tastes and preferences. If you neither need nor want something, you will not buy it. Ability to purchase suggests that income is important. Professors are usually able to afford better housing and transportation than students because they have more income.
- Prices of related goods can affect demand also. If you need a new car, the price of a Honda may affect your demand for a Ford. Finally, the size or composition of the population can affect demand. The more children a

family has, the greater their demand for clothing. The more driving-age children a family has, the greater their demand for car insurance, and the less for diapers and baby formula.

8. What are the needs for Demand forecasting? Explain the various steps involved in demand forecasting?

Demand forecasting refers to an estimate of future demand for the product. It is an objective assessment of the future course of demand. In recent times, forecasting plays an important role in business decision-making. Demand forecasting has an important influence on production planning. It is essential for a firm to produce the required quantities at the right time.
It is essential to distinguish between forecasts of demand and forecasts of sales. Sales forecast is important for estimating revenue cash requirements and expenses. Demand forecasts relate to production, inventory control, timing, reliability of forecast etc. However, there is not much difference between these two terms.

Types of demand Forecasting : Based on the time span and planning requirements of business firms, demand forecasting can be classified in to :
1. Short-term demand forecasting
2. Long – term demand forecasting

Steps in demand forecasting:
Several methods are employed for forecasting demand. All these methods can be grouped under survey method and statistical method. Survey methods and statistical methods are further subdivided into different categories.

1. Survey Method:
   Under this method, information about the desires of the consumer and opinion of exports are collected by interviewing them. Survey method can be divided into four types:

    a. Opinion survey method
    b. Expert opinion method
    c. Delphi Method
    d. Consumers interview method

2. Statistical Methods:
   Statistical method is used for long run forecasting. In this method, statistical and mathematical techniques are used to forecast demand. This method relies on post data.
    a. Time series analysis or trend projection methods
    b. Barometric Technique
    c. Regression and correlation method

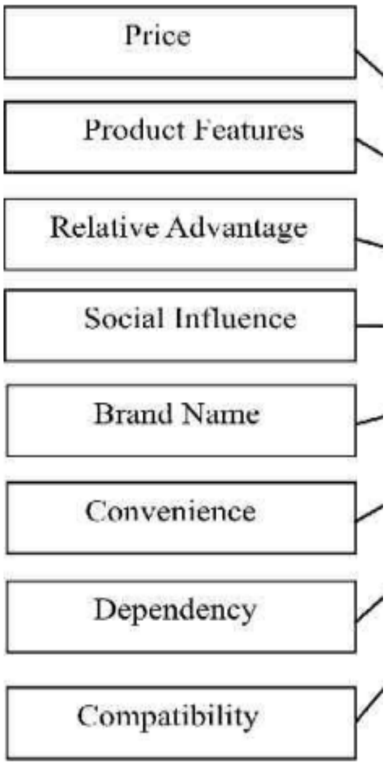
For detailed answer, refer Lecture Notes page 31

9. Illustrate the 'Law of demand'. What are the various factors that determine the demand for 'Mobile Phones'?

The law of demand is one of the most fundamental concepts in economics. It works with the law of supply to explain how market economies allocate resources and determine the prices of goods and services that we observe in everyday transactions.

The law of demand states that the quantity purchased varies inversely with price. In other words, the higher the price, the lower the quantity demanded. This occurs because of diminishing marginal utility. That is, consumers use the first units of an economic good they purchase to serve their most urgent needs first, and then they use each additional unit of the good to serve successively lower-valued ends.

the various factors that determine the demand for 'Mobile Phones' are:



10. Let initial P= 10 and Q = 20 and price declines to 9 and quantity demand increases to 23. Find Price elasticity of demand.

10) $P = 10,\ Q = 20,\ dP = -1,\ dQ = +3$

$$PED = \frac{\frac{dQ}{(Q_2+Q_1)/2}}{\frac{dP}{(P_2+P_1)/2}}$$

$$= \frac{\frac{3}{43/2}}{\frac{-1}{19/2}} = \frac{3}{\frac{43}{2}} \times \frac{19/2}{-1}$$

$$PED = -1.3256$$

ELASTIC

%change in quantity= (Q2-Q1./[(Q2+Q1./2] = 13.95

%change in price= (p2-p1./[(p2+p1./2] = -10.52

$$Price\ Elasticity\ of\ Demand \quad \frac{\%\ change\ in\ quantity}{\%\ change\ in\ price}$$

Price elasticity = 1.32 [Elastic]

11. What are the possible approaches to forecasting the demand for the existing products? Illustrate those methods in detail

Same as Next Question

12. What are the possible approaches to forecasting the demand for new products? Illustrate those methods in detail

Demand forecasting is the scientific tool to predict the likely demand of a product in the future. The demand of new product can be forecasted by any one of the following techniques:

- Substitute Approach
  It is based on the assumption that a new product will be analysed as a substitute of an existing product. In this method, the demand of substitute products is analysed and on the basis of such analysis (or survey) forecasts are made for the new product to be introduced in the market.
- Evolutionary Approach
  This method of sales forecasting is based on the assumption that the new product will be considered an improvement over existing products. It is further assumed that the new product can follow some life-cycles as of existing products. The sales of existing products are analysed and

efforts are made to forecast the sales of the new product of the enterprise on this basis.

- Buyers or consumers view

  In this method, the potential buyers of the product are contacted and efforts are made to know their opinions regarding the new product. Efforts are also made to guess the quantity to be purchased by these consumers. Sales forecasts of the new product are based on these opinions and estimates.

- Expert's opinion

  This approach of sales forecasting of new products is based on the opinion of experts in the field of marketing, who know the needs, desires, tastes and preferences of customers. Experts are contacted and their opinions are collected regarding the utilities and possible demand of the product. Sales forecasts are prepared on the basis of the opinion of these experts.

- Sales experience approach (or Market test method)

  In this method, the new product is offered for sale in a sample market for a fixed period. The results of the sales of the product are considered to be the base of forecasting the demand for the new product. The results of sales of the product in these segments are collected and deeply analysed.

13. Define Demand and outline various determinants of demand.

Demand in terms of economics may be explained as the consumers willingness and ability to purchase or consume a given item/good. The determinants of demand are factors that cause fluctuations in the economic demand for a product or a service.

Some of the important determinants of demand are as follows,

- Price of the Product

  People use price as a parameter to make decisions if all other factors remain constant or equal. According to the law of demand, this implies an increase in demand follows a reduction in price and a decrease in demand follows an increase in the price of similar goods.

- Income of the Consumers

  Rising incomes lead to a rise in the number of goods demanded by consumers. Similarly, a drop in income is accompanied by reduced consumption levels. This relationship between income and demand is not linear in nature. Marginal utility determines the proportion of change in the demand levels.
- Prices of related goods or services
  - Complementary products – An increase in the price of one product will cause a decrease in the quantity demanded of a complementary product. Example: Rise in the price of bread will reduce the demand for butter. This arises because the products are complementary in nature.
  - Substitute Product – An increase in the price of one product will cause an increase in the demand for a substitute product. Example: Rise in the price of tea will increase the demand for coffee and decrease the demand for tea.
- Consumer Expectations

  Expectations of a higher income or expecting an increase in prices of goods will lead to an increase in the quantity demanded. Similarly, expectations of a reduced income or a lowering in prices of goods will decrease the quantity demanded.
- Number of Buyers in the Market

  The number of buyers has a major effect on the total or net demand. As the number increases, the demand rises. Furthermore, this is true irrespective of changes in the price of commodities.

14. Define Elasticity of demand? How is the Advertising elasticity of demand measured? Explain its role in business?

Elasticity of demand refers to the degree of change in demand when there is a change in another economic factor, such as price or income. Advertising elasticity of demand (AED) is a measure of a market's sensitivity to increases or decreases in advertising saturation.
Advertising elasticity is a measure of an advertising campaign's effectiveness in generating new sales. It is calculated by dividing the percentage change in the quantity demanded by the percentage change in advertising expenditures. A positive advertising elasticity indicates that an increase in advertising leads to a rise in demand for the advertised goods or services.

15. Managerial Economics is the study of allocation of resources available to a firm or other unit of management among the activities of that unit explains?

- Managerial Economics assists the managers of a firm in a rational solution of obstacles faced in the firm’s activities.
- It makes use of economic theory and concepts. It helps in formulating logical managerial decisions.
- The key of Managerial Economics is the microeconomic theory of the firm. It lessens the gap between economics in theory and economics in practice.
- It enables the business executive to assume and analyse things. Every firm tries to get satisfactory profit even though economics emphasises maximising profit.
- Hence, it becomes necessary to redesign economic ideas to the practical world. This function is being done by managerial economics.

16. “Managerial economics bridges the gap between economic theory and business practice,” Examine the statement.

Same as 2nd Question

17. How does demand forecasting methods for new products vary from those for established products? Explain.

Similar to the 8th Question.

18. Explain the nature of problems studies in managerial economics. What is the importance of the study of such problems in business management?

The scope of managerial economics covers two areas of decision making.
1. Operational or Internal issues
2. Environmental or External issues
1. **Operational issues**: Operational issues refer to those, which wise within the business organization and they are under the control of the management. Those are:
(a) Theory of demand and Demand Forecasting
(b) Pricing and Competitive strategy
(c) Production cost analysis
(d) Resource allocation
(e) Profit analysis
(f) Capital or Investment analysis
(g) Strategic planning
2. **Environmental or External Issues:** An environmental issue in managerial economics
refers to the general business environment in which the firm operates. They refer to general economic, social and political atmosphere within which the firm operates. A study of
economic environment should include:
(a) The type of economic system in the country.
(b) The general trends in production, employment, income, prices, saving and investment.
(c) Trends in the working of financial institutions like banks, financial corporations, insurance companies

(d) Magnitude and trends in foreign trade;
(e) Trends in labour and capital markets;
(f) Government's economic policies viz. industrial policy monetary policy, fiscal policy,price policy etc.

The environmental or external issues relate managerial economics to macro economic theory while operational issues relate the scope to micro economic theory. The scope of managerial economics is ever widening with the dynamic role of big firms in a society.

19. Explain the differences between Individual and Market demand schedules

Individual Demand	Market Demand
It refers to the demand for a product by a single consumer.	It refers to the demand for a product by all consumers in the market.
The demand curve for individual demand is relatively steeper.	The demand curve for market demand is relatively flatter.
It represents various quantities of a particular commodity that a consumer (single buyer) is willing to purchase at different possible prices.	It represents various quantities of a particular commodity that all consumers in the market are willing to purchase at different possible prices.

20. Explain how you measure elasticity of demand. Illustrate How do you interpret the different types of elasticity?

Elasticity of Demand, or Demand Elasticity, is the measure of change in quantity demanded of a product in response to a change in any of the market variables, like price, income etc. It measures the shift in demand when other economic factors change. In other words, the elasticity of demand is the percentage change in quantity demanded divided by the percentage change in another economic variable.

On the basis of different factors affecting the quantity demanded for a product, elasticity of demand is categorised into mainly three categories:

- Price Elasticity of Demand (PED)
  PED = % Change in Quantity Demanded % / Change in Price
- Cross Elasticity of Demand (XED)
  XED = (% Change in Quantity Demanded for one good (X)%) / (Change in Price of another Good (Y))
- Income Elasticity of Demand (YED).
  YED = % Change in Quantity Demanded% / Change in Income

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