CSIT(A)
21BS1A3326

MEFA Assignment-01

1) Define managerial economics. Explain nature and scope.

Defination: The integration of economic theory with business practice for the purpose of facilitating decision-making and forward planning by management.

(or)

Managerial economics is the discipline which deals with the application of economic theory to business management.

Nature of managerial economics

(i) Art and science:

Management theory requires a lot of critical and logical thinking and analytical skills to make decisions or solve problems. Many economics find it a source of research, saying it includes applying different economic concepts, techniques, and methods to solve business problems.

(ii) Microeconomics:

Managers typically deal with the problems relevant to a single entity rather than the economy as a whole. It is, therefore considered an integral part of microeconomics.

(iii) Uses of Macro Economics:

A corporation works in an external world, i.e., serving the consumer, an important part of economy. For this purpose, managers must evaluate the various macroeconomic factors, such as market dynamics, economic changes, government policies etc., and their effect on company

(iv) Multidisciplinary:

Managerial economics uses many tools and principles that belong to different disciplines, such as accounting, finance, statistics mathematics, production, operational research, human resources, marketing etc.

(v) Prescriptive or Normative Discipline.

By introducing corrective steps managerial economics aims at achieving the objective and solves specific issues or problems

(vi) Management Oriented

This serves as an instrument in manager's hands to deal effectively with business-related problems and uncertainties. This also allows for setting priorities, formulating policies, and making successful decisions.

(vii) Pragmatic

The solution to day-to-day business challenges is realistic and rational.

Scope of ME

(i) Demand Decision:

The analysis and forecasting of demand, behavioural implications impact of changes in prices, income levels and prices of alternative products are assessed and accordingly the decisions are taken.

(ii) Input-output Decision:

The entire focus of this decision is to optimise the output at minimum cost. It is necessary for the manager to know relationship between the cost and output both in short-run and long-run to position his products amidst competitive environment.

(iii) Price-output Decision:

Here, product is ready & task is to determine price these in different market situations such as perfect market and imperfect markets ranging from monopoly, monopolistic competition, duopoly & oligopoly

(iv) Profit-related Decisions: Here we employ techniques such as break-even analysis, cost reducⁿ & cost control & ratio analysis to ascertain the level of profits

(v) Investment Decisions: Investment decisions are also called capital budgeting decisions These involve commitment of large funds, which determine the fate of firm These decisions are irreversible.

(vi) Economics forecasting and Forward Planning: Economic fore-casting leads to forward planning. The firm operates in an environment which is dominated by external and internal factors this will minimise risk and uncertainity about future.

2) Explain different demand forecasting methods in detail.

Demand forecasting methods are classified into

(i) Survey methods
(ii) Statistical methods
(iii) Other methods

Survey methods

(i) Survey of buyer intentions:

In this method information is drawn from the buyer to estimate demand. Buyer is asked how much does he plan to buy at a given point of time. This is most effective method because the buyer is ultimate decision maker and we are collecting info from potential buyer. Survey can be conducted by considering whole population or a small group

→ If survey is conducted by considering ~~either~~ whole population it is called census method (total enumeration method)

→ If survey is conducted by considering small group of potential buyers who can represent whole population, it is called sample method

(ii) Sales force opinion method:

Sales people are in constant touch with the large number of buyers of a particular market. Sales force is capable of assessing the likely reaction of customers of their territories quickly, given the companies marketing strategy.

(iii) Delphi Method:

A variant of survey method is delphi method. Under this method, a panel is selected to give suggestions to solve the problems in hand. Both internal and external experts can be members of panel. Panel members are kept apart from each other. and express their views in anonymous manner. A coordinator acts as intermediary who prepares questionnaire and sends the to panelist. At end of each round summary report is made. on basis of report panel members have to give suggestions.

Statistical methods

i) Trend projection methods:

A well-established firm will have accumulated data. These data is analyzed to determine the nature of existing trend. Then this trend is projected in to future and the results are used as basis for forecast.

(ii) Barometric technique:

The use of economic indicators is described as the barometric technique. It is an improvement over the trend projection method. It is based on the assumption that certain events occuring in the present can be used to predict future. Under this technique one set of data is used to predict another set.

Leading Indicators: These tend to reflect future market changes

Coincident Indicators: These are indicators which coincide with or fall ~~fah~~ behind general economic activity or market trends.

Lagging Indicators: It confirm long term trends, but they do not predict them. ~~Example~~ :

(iii) Correlation describes degree of association between two variables such as sales and ads expenditure

→ Regression analysis is a statistical measure that attempts to determine the strength of relationship between one dependent variable and a series of other changing variables.

Other methods

(i) Expert opinion method:

An expert is good at forecasting and analysing the future trends in a given product or service at given technology. Apart from salesmen, consumers & ~~disturbinns~~ distributors, outside experts may also used for forecasting. Results of this method would be more reliable, independent demand forecasts. This method constitutes as valid strategy particularly in the case of new products. The main disadvantage is an expert can't be held accountable if his estimates are found incorrect.

(ii) Test marketing:

In test marketing the entire product and marketing program is carried for the first time in a small no. of well chosen and authentic sales environment. The primary objective is to know whether the customer will accept product in present or not.

(iii) Controlled experiments:

Major determinants of demand are manipulated to suit to the customers with different tastes and preferences. In this method the product is introduced with different packages, different prices, in different markets to assess which combination appeals to customer most.

(iv) Judgmental approach:

When none of statistical and other methods are directly related to given product / service the management has no alternative other than using its own judgement in forecasting the demand

3) Explain what is returns to scale. Explain economics and Diseconomics of scale?

The percentage increase in output when all inputs vary in the same proportion is known as "Return to Scale". Return to scale relate to greater use of inputs maintaining the same techniques of production. where returns to scale occurs, three alternative situations are possible.

Laws of Return to Scale:

(a) Law of Increasing Return to Scale:

This laws states that the volume of output keeps on ↑ing with ↑se in inputs.

(b) Law of Constant Return to Scale:

The rate of increase in the total output remains constant, i.e output ↑es by a ~~lesser~~ same proportion ~~than~~ as the ↑se in inputs

(c) Decreasing Returns to Scale:

Where the proportionate ↑se in the inputs does not lead to equivalent ↑se in output, the output ↑es at a decreasing rate, the law of decreasing returns to scale is said to operate.

Economies and diseconomies of scale:

→ The term economies of scale refers to a situation where the cost of producing one unit of a good or service decreases as the volume of production increases

→ More units of a goods or service produced on a larger scale, with less input costs, economies of scale are said to be achieved.

Economies of scale is divided into two types:

(i) Internal economies of scale

→ This refers to the economies in production costs which accrue to the firm alone when it expands its output - Arise from the increased output of the business itself.

Types of economies of scale:

(i) Technical: Large capital equipment with high fixed costs

(ii) Specialisation: Division of labour and specialisation within production - more efficient with high input.

(iii) Bulk buying: Lower average costs for buying large quantity

(iv) Marketing: firm spends large amounts on issues in marketing and is still not sure of results

(v) Risk bearing: Bigger firms more able to survive downturns

(vi) Container principle: ↑ce in surface area leads to double the ↑ce in volume.

(vii) Financial: Larger firm gets better rate of interest from bank

(ii) ~~(viii)~~ External economies of scale:

External economies refer to all the firms in industry, because of growth of industry as a whole or because of growth of ancillary industries. It benefits all the firms in the industry as the industry expands

Economies of external can be grouped under three types:

(i) Economies of concentration:
Because of all the firms are located at one place, it is likely that there is better infrastructure in terms of all factors.

(ii) Economies of R&D:
All firms can pool resources together to finance research and development activities and thus share the benifits of research.

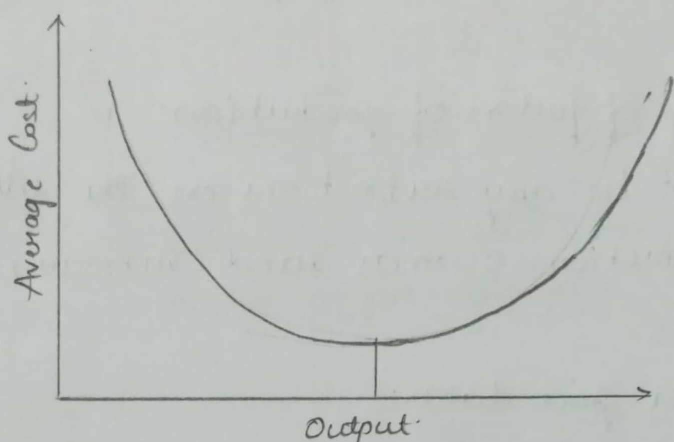
(iii) Economies of Welfare:-
There could be common facilities such as canteen, industrial housing, hospitals and so on, which can be used in common by employees in whole industry.

Diseconomies of scale:
→ The word diseconomies refers to all those losses which accrue to the firm in the industry due to the expansion of their output beyond a certain limit.
→ Economic theory predicts that a firm may become less efficient if it becomes too large. The additional costs of becoming too large is called diseconomies of scale.

External diseconomies
(i) Breakdown of relationships with suppliers and buyers:
When firm is small there is direct relations between owner managers and customers or suppliers. As firm grows these relationships are hard to maintain.
(ii) Competition for labour: More firms means ~~incd~~ demand for labour, making best workers harder to recruit and keep
(iii) Increasing employment costs: More firms means incd demand

pushing up the price of labour - wages.

(iv) Traffic congestion:- The firm grows, suppliers move in, the area becomes an industrial centre, the roads are clogged with vehicles making delivers late



4) Mention the features of perfect competition How the profit maximizing o/p level will be determined in the long run.

Features of perfect competition.

(i) Large number of buyers and sellers:

There should be significantly large no. of buyers and sellers in market. The no. should be so large that it should not make any difference in terms of price or quantity supplied even if one enters the market or leaves the market.

(ii) Existence of Homogeneous product:

The products and services of each seller should be homogeneous. They cannot be differentiated from one another. The price is one and the same in every firm. It makes no difference to the buyer whether he buys from firm x or firm z.

(iii) Freedom to enter or exit the market:

There should not be any restrictions on the part of buyers and sellers to enter the market or leave the market. There should not be any restrictions.

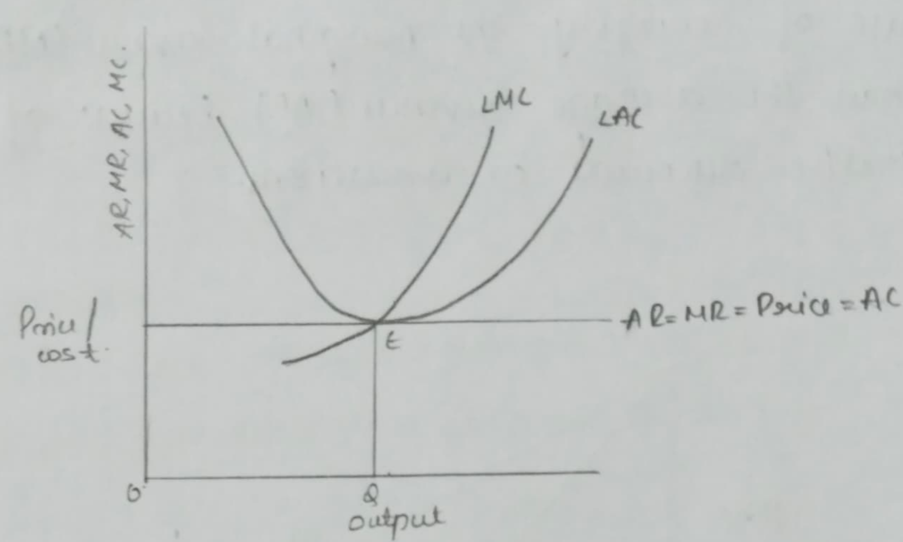
(iv) Perfect information available to the buyers and sellers:
Each buyer and seller has total knowledge of the prices prevailing in the market at every given point of time, quantity supplied, costs, demand, nature of product and other relevant information.

(v) Perfect mobility of factors of production:
There should not be any restrictions on the utilisation of factors of production such as land, labour, capital and so on.

(vi) Each firm is a price taker:
An individual firm can alter its rate of production or sales without significantly affecting the market price of the product. A firm in a perfect market can't influence the market through its own individual.

General steps to determine the profit-maximizing o/p level in long run:

1) Understand Market Cond^{n}s: including demand for its product and prices at which it can sell its output
2) Minimize Long-run Average Total Cost.
3) Equate Marginal cost and Marginal revenue.
4) Maximize profit: The profit-maximizing output level occurs when firm produces the quantity at which MR = MC at that point the firm is producing an output level that maximizes its profit.
5) Firms in long run need to adjust their capital and resources to reach the profit-maximizing output level.



Price output in case of long-run under perfect competition.

5) Define monopoly. Explain its features. How the price and o/p will be determined under monopoly.

Monopoly refers to a situation where a single firm is in a position to control either supply or price of a particular product or service. It cannot control or determine both price and supply as it can't control demand.

Features of Monopoly:-

1) There is a single firm dealing in a particular product or a service.

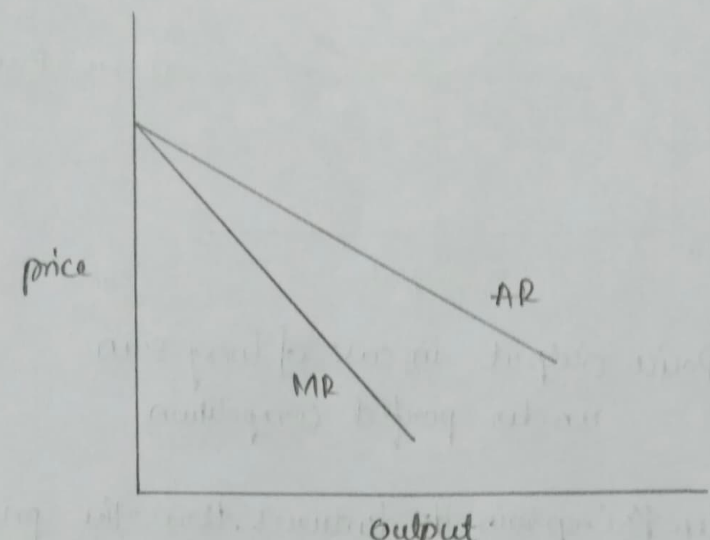
2) There are no close substitutes and no competitors. Railways had monopoly over distribution system till the road transport system developed in terms of fuel efficient heavy trucks.

3) The monopolist can decide either the price or quantity not both.

4) The products and services provided by the monopolist bear inelastic demand

5) Monalopy may be created through statutory grant of special privileges such as licences, permits, patent rights and so on.

In case of monopoly, the marginal revenue (MR) is always less than the average revenue (AR) because of the quantitative discounts or concessions.



In Monopoly MR < AR

Price - output determination in a monopoly:-

(i) Monopoly and Average Revenue (AR)

→ In monopoly, AR is downward sloping. when monopolist reduces the price of their product the quantity demand ↑es and vice verse

(ii) Marginal Revenue (MR) and Average Revenue (AR):

→ In monopoly, MR lies below the average curve (AR). This means that for each add^n unit sold, the monopolist earns less revenue due to need to lower prices to sell more.

(iii) Profit maximization:

→ Monopolist goal is to maximize profits. This is acheived when MR = MC

(iv) Marginal Revenue and Marginal cost:

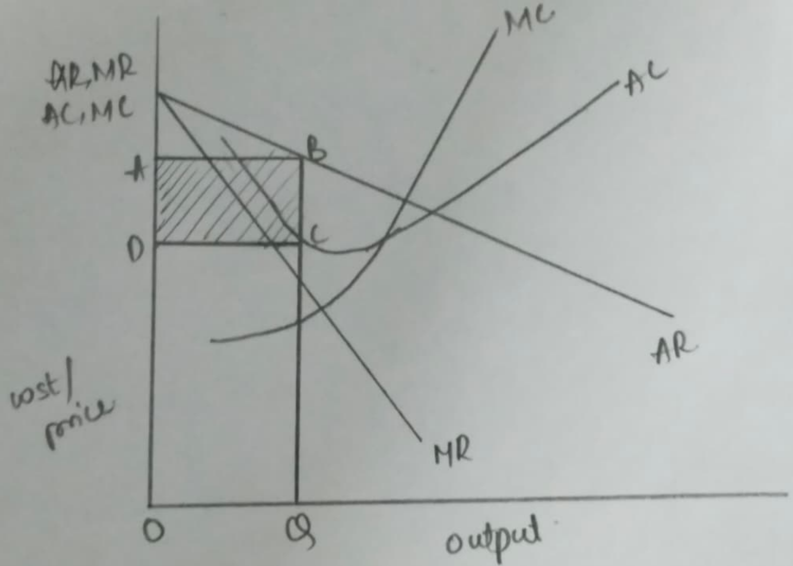
→ Monopolist continues to produce and sell as long as marginal revenue (MR) > (MC). This ensures that add^n production is profitable.

(v) Equilibrium point:

→ The equilibrium point for profit maximization in a monopoly is ~~M~~ where MR = MC.

(vi) Short-run-profit:

→ In short run, the monopolist can earn profits and equilibrium output and price are determined at point OQ and price OA, resp.



Price-output determination in Monopoly