

**L. S. RAHEJA COLLEGE OF ARTS AND
COMMERCE, DEPARTMENT OF ECONOMICS**

BUSINESS ECONOMICS I GLOSSARY

FYBCOM SEMESTER I

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MODULE 1

1) Business Economics

Business economics is a field in applied economics which uses economic theory and quantitative methods to analyse business enterprises and the factors contributing to the diversity of organizational structures and the relationships of firms with labour, capital and product markets.

2) Opportunity Cost

The Opportunity cost is the next best alternative that you have sacrificed. The opportunity lost is nothing but opportunity cost.

3) Variables

A variable is magnitude of interest that can be measured. Variables can be endogenous and exogenous variables. Variables can be independent and dependent.

4) Functions

Functions shows the relationship between two or more variables. It indicates how the value of one variable depends on the value of another one.

5) Equations

An equation specifies the relationship between the dependent and independent variables. Each equation is a concise statement of a particular relation.

6) Graphs

Graphs are geometric tools used to express the relationship between variables. A graph is a diagram showing how two or more sets of data or variables are related to one another.

7) Curves

The functional relationship between the variables specified in the form of equations can be shown by drawing lines in the graph. Depending upon the relationship between the variables the line can have positive and negative slope. The line only suggest but does not prove the underlying relationship between the variables. The line is called as curve in economics.

8) Slopes

Slopes shows how fast or at what rate, the dependant variable is changing in response to a change in the independent variable. If the line is straight then its slope is constant everywhere. On curve lines slope changes at different point.

9) Demand

The demand in economics implies the desires to purchase the commodity which is backed by the ability and willingness to pay for it.

10) Supply

Supply is the amount of a product per unit of time that producers are willing to sell at various given prices when all other factors are held constant.

11) Market Demand

When we sum up the demand of all the consumers for the product we get market demand.

12) Market Supply

When we sum up the supply of all the producers of the products we get market supply.

MODULE 2

1) Demand function

Demand function is an arithmetic expression that shows the functional relationship between the demand for a commodity and the various factors affecting it. This includes the income of a consumer and the price of a commodity along with other various determining factors affecting demand. The demand for a commodity is the dependent variable, while its determinant factors are the independent variables.

$$Q_x = f(P_x, Y, P_y, T, A)$$

Where,

(Q_x) = Quantity demanded of commodity X.

P_x = Price of commodity X.

Y = income of a consumer.

P_y = Price of related commodities.

T = Taste and Preference of and individual consumer.

A = Advertising expenditure made by producer.

2) The law of demand

The law of demand states that other thing being equal the price and the quantity demanded of a commodity are inversely related to each other. Higher is the price lower will be the demand and vice versa.

3) Elasticity of demand

Elasticity of demand helps us to estimate the level of change in demand with respect to a change in any of the determinants of demand. The concept of elasticity of demand helps the firm or manager in decision making with respect to pricing, promotion and production policies. The concept of elasticity of demand therefore refers to the degree of responsiveness of quantity demanded of a good to the change in its one of the determinant.

4) Price Elasticity of Demand

Price elasticity of demand shows the degree of responsiveness of quantity demanded of a Commodity to the change in its price. In other words, price elasticity of demand is defined as the ratio the percentage change in quantity demanded of a commodity to a percentage change in price of the commodity. Thus,

$$\text{Price Elasticity of Demand} = \frac{\text{Percentage change in quantity demanded}}{\text{Percentage change in price}}$$

5) Perfectly elastic demand ($E_p = \infty$)

The demand is said to be perfectly elastic, if slight change in price leads to infinite change in the quantity demanded of the commodity. The demand curve under this situation is horizontal straight line parallel to X axis.

6) Perfectly inelastic demand ($E_p = 0$)

The demand is said to be perfectly inelastic, if the demand for a commodity does not change with a change in price of the commodity. The elasticity of demand will be equal to zero. The demand curve is vertical straight line parallel to Y-axis.

7) Unitary elastic demand ($E_p = 1$)

Demand is said to be unitary elastic when the percentage change in the quantity demanded for a commodity is equal to the percentage change in its price. The numerical value of unitary elastic of demand is exactly equal to one. The demand curve is rectangular hyperbola.

8) Relatively Elastic demand ($E_p > 1$)

Demand is said to be relatively elastic, when the percentage change in quantity demanded of a commodity is greater than the percentage change in its price. In other words, it refers to a

situation in which a small change in price leads to a great change in quantity demanded. The demand curve under this situation is flatter.

9) Relatively Inelastic demand ($E_p < 1$)

Demand is relatively inelastic when the percentage change in the quantity demanded of a commodity is less than the percentage change in the price of the commodity. The demand curve under this situation is steeper.

10) Income elasticity of demand

Income elasticity of demand shows the degree of responsiveness of quantity demanded of a commodity to a small change in the income of a consumer.

$$\text{Income elasticity} = \frac{\text{Percentage change in quantity demanded}}{\text{Percentage change in income of a consumer}}$$

11) Cross elasticity of demand

Cross elasticity of demand shows the degree of responsiveness of quantity demanded of one commodity say A to the change in the price of another commodity say B.

$$\text{Cross elasticity of demand} = \frac{\text{Percentage change in quantity demanded of Commodity A}}{\text{Percentage change in price of Commodity B}}$$

12) Promotional elasticity of demand

Promotional elasticity of demand shows the degree of responsiveness of quantity demanded of a Commodity to the change in advertisement expenditure.

$$\text{Promotional elasticity of demand} = \frac{\text{Percentage change in quantity demanded}}{\text{Percentage change in advertisement expenditure}}$$

13) Revenue

The term revenue refers to the income obtained by a firm or a seller through the sale of commodity at different prices.

14) Total revenue

The total revenue is the income earned by a firm or producer from the sale of the entire output. Thus,

$$\text{TR} = P \times Q$$

Where,

TR = Total Revenue.

P = Price of a commodity.

Q = Total Output sold.

15) Average revenue

The average revenue refers to the revenue obtained by the firm per unit of the output of a commodity.

$$\mathbf{AR = TR / Q}$$

16) Marginal revenue

Marginal revenue is the additional revenue earned by selling an additional unit of the commodity.

$$\mathbf{MR_n = TR_n - TR_{n-1} \quad \text{OR} \quad MR = \Delta TR / \Delta Q}$$

17) Demand forecasting

Demand forecasting is a systematic process that involves anticipating the demand for the product and services of an organization in future under a set of uncontrollable and competitive forces.

MODULE 3

1) Production function

In simple words, production function shows technical relationship between inputs and output. A production function shows the maximum amount of output that firm can produce using given amount of inputs during a given period of time.

Production function of a firm can be expressed as follows.

$$\mathbf{Q = f (L, N, K, E, T)}$$

Where,

Q = Quantity produced

L = Labour

N = Natural resources

K = Capital

E = Entrepreneur

T = Technology

f = Shows functional relationship

In the above mentioned function Q i.e. output is dependent variable and L, N, K, E and T i.e. various inputs are independent variables.

2) Fixed proportion production function

The Fixed Proportion Production Function, also known as a Leontief Production Function implies that fixed factors of production such as land, labour, and raw materials are used to produce a fixed quantity of an output and these production factors cannot be substituted for the other factors.

3) Variable proportion production function

The Variable Proportion Production Function implies that the ratio in which the factors of production such as labour and capital are used is not fixed, and it is variable. Also, the different combinations of factors can be used to produce the given quantity, thus, one factor can be substituted for the other.

4) Short-run production function

A short-run production function refers to that period of time, in which the installation of new plant and machinery to increase the production level is not possible.

5) Long-run production function

The Long-run production function is one in which the firm has got sufficient time to install new machinery or capital equipment, instead of increasing the labour units.

6) Iso-Quant Curve

The word 'iso' is of Greek origin and means equal or same and 'quants' means quantity. Therefore, an isoquant is a curve along which quantity is the same. An iso-quant is also known as equal product curve or iso-product curve. An iso-quant curve represents same level of output with different combinations of factors of production.

7) Iso-quant map

An iso-quant map represents a set of iso-quant curves. A higher level of iso-quant represents the higher level of output. Thus, in simple word, iso-quant map is a family of iso-quant representing the various iso-quant at a particular level of output.

8) Law of variable proportion

Alfred Marshall, had discussed the law in relation to agriculture, according to him, "an increase in the capital and labour applied in the cultivation of land causes in general a less than

proportionate increase in the amount of product raised unless it happens to coincide with an improvement in the art of agriculture”.

9) Total product

The total product is the total amount of output produced by all the variable input in a fixed proportion in production. The total product increases with the increase in the unit of labour and reaches to the maximum and then after decline with further more increase in the variable factor.

10) Average product

The average product is per unit of product produced by the firm with per unit of variable factor inputs. It is obtained by dividing the total product by the unit of total variable factor. The average product increases initially and then declines.

11) Marginal product

Marginal product is the additional output produced by an additional unit of variable factor. Marginal product increases and thereafter falls when TU becomes maximum MU becomes zero and further becomes negative.

12) Ridge lines

The ridge lines are the locus of points of isoquants where the marginal products (MP) of factors are zero. The upper ridge line implies zero MP of capital and the lower ridge line implies zero MP of labour. Production techniques are only efficient inside the ridge lines. The marginal products of factors are negative and the methods of production are inefficient outside the ridge lines.

13) Iso-Cost line

Iso-cost line represents the price of factors along with the amount of money an organization is willing to spend on factors.

14) Expansion path

An expansion path (also called a scale) is a curve in a graph with quantities of two inputs, typically capital and labour, plotted on the axes. The path connects optimal input combinations as the scale of production expands. A producer seeking to produce the most units of a product in the cheapest possible way attempts to increase production along the expansion path.

15) Law of returns to scale

The term returns to scale refers to the changes in output as all factors change by the same proportion. Returns to scale relates to the behaviour of total output as all inputs are varied and is a long run concept.

MODULE 4

1) Private cost and Social cost

Costs which are directly incurred by the individual or firm producing good or service is called **private cost**. This cost gives private benefit to an individual or firm engaged in relevant activity. Some of the examples of private cost are firms expenditure on purchase of raw material, payment of rent, wages and salaries, interest, insurance, depreciation etc. similarly companies expenditure of its labour, advertising cost for the promotion of goods, transportation cost to carry goods from company to the market are also considered as private cost.

Social cost on the other hand is bared by the society as a result of production of commodity. Even though social cost occurs due to production of a commodity it is not bared by the producer. It consists of external cost. E.g.: If a factory is located in a residential area causes air pollution. Due to pollution as the health of the people living in that area affects, they have to spend money on medical facilities. Even though this cost occurs due to the factory, it is passed on to the society. Externalities are included in the social cost.

2) Historical cost and Replacement cost

The original money value spent at the time of purchasing of the asset is called **historical cost**. Most of the assets in the balance sheet are at the historical cost. One of the advantage of historical cost is that records maintained on the basis of historical cost are considered to be reliable, consistent, comparable and verifiable. Historical cost does not reflect current market valuation.

The amount which has to be spent at the time of replacing of the existing asset is called the **replacement cost**. This cost reflects the current market prices.

If we consider an increase in prices over the years, replacement cost will be greater than historical cost. If we consider fall in prices over the years, replacement cost will be less than historical cost and if we consider prices to be constant over the years, replacement cost and historical costs are the same.

3) Fixed cost and Variable cost

Fixed cost refers to the firm's expenditure on fixed factors of production. Even if no output is produced, fixed cost needs to be paid. Even if output increases in the short run, fixed cost remain constant. Eg: If a businessman borrows money from a bank to start his business. Initially even if his output is zero, he has to pay the interest on borrowed capital. Rent on land, insurance

premium, tax payment are some of the examples of fixed cost. Addition of all fixed cost gives Total Fixed Cost.

Variable cost on the other hand refers to the firm's expenditure on variable factors of production. When no output is produced, variable cost is zero. As output increases, variable cost also increases. Payment for raw material, wages and salaries of the workers are some of the examples of variable cost. Addition of all variable costs gives the Total Variable Cost.

4) Sunk Cost and Incremental Cost

In order to enter in to the market certain costs are incurred by the firm. These costs are known as **Sunk cost**. It includes the cost by the firm for setting up the business, advertisement etc. These costs cannot be recovered by the firm if they decide to exit the market.

Incremental cost refers to a change in total cost as a result of policy change or a change in managerial decision. The concept of incremental cost is broader as compared to marginal cost. Marginal cost considers a change in total cost due to a unit change in output whereas incremental cost considers a change in total cost due to an introduction of new product, change in advertising strategy, additional batch of output etc. The concept of incremental cost is more relevant as compared to marginal cost because the firm increases its output in batches and not by unit only.

5) Implicit Cost and Explicit Cost

Implicit cost refers to the cost of all own factors which the entrepreneur employs in the business. It includes salary and wages for the service of entrepreneur, interest on capital invested by the entrepreneur etc. Implicit costs are also called indirect cost because direct cash payment is not made to own factors of production.

If entrepreneur sold these services to others, he would have earned money. Therefore implicit cost is also the opportunity cost of factors owned by him.

Explicit cost on the other hand is the direct cash payment made by the firm for purchasing or hiring of various factors of production. E.g. rent paid for hiring of land, money spent for purchasing for raw material, wages and salaries paid to the employees, expenditure on transport, power, advertising etc.

6) Accounting and Economic Cost

Accounting cost includes only explicit cost i.e. the firm's expenditure on purchasing of various factors of production. For financial purpose and tax purpose, accounting cost is important.

Economic cost on the other hand includes both explicit and implicit cost. This cost is important for managerial decision making therefore an economist who wants to take any decision consider both explicit and implicit cost.

7) Total cost (TC)

Firm's total expenditure on all fixed and variable factors for producing a commodity is called the Total cost of production.

Therefore $TC = TFC + TVC$

For zero level of output there is some total cost. It increases with an increases in the level of output.

8) Average Cost (AC) or Average Total Cost (ATC) –

It refers to per unit cost of producing a commodity. It is calculated by the following formula

$$AC = TC/Q$$

Where AC = Average cost TC = Total cost Q = Number of units produced

Average cost can also be calculated by using following formula-

$$AC \text{ or } ATC = AFC + AVC$$

Where AC- Average Cost AFC- Average Fixed Cost

AVC- Average Variable Cost

9) Average Fixed Cost (AFC) –

It is the per unit fixed cost of production. It can be calculated by the following formula

$$AFC = TFC/Q$$

Where TFC= Total Fixed Cost Q = Number of units produced

10) Average Variable Cost (AVC) –

It is the per unit variable cost of production. It can be calculated by the following formula

$$AVC = TVC/Q$$

Where TVC= Total Variable Cost Q= Number of units produced

11) Marginal Cost (MC) –

It is the addition made to the total cost. Or cost of producing an additional unit of output is called the marginal cost. It can be calculated by using following formula

$$MC = \text{Change in total cost/ change in output}$$

OR

$$MC = TC_n - TC_{n-1}$$

12) Cost Function

Production function gives the functional relationship between the level of output and the various factor inputs (land, labour, capital and entrepreneur). The cost of production depends on the level of output produced, nature of technology used and prices of factors of production. Thus the cost function is derived from the production function. The cost function is given as-

$$C = f(Q, T, Pf)$$

Where C = total cost Q = Level of output produced T = Technology
Pf = Prices of factors f = Functional relationship

If we assume that technology, prices of factors are constant, total cost increases with an increase in the level of output i.e. $C = f(Q)$.

13) Envelop curve / Long run Average Cost Curve

The Long run Average Cost curve includes the family of short run average cost curves, it is called an Envelop curve. In the long run firm can also plan to increase its scale of production and therefore LAC curve is also called the Planning Curve.

14) Learning curve

The learning curve shows an inverse relationship between an average cost of production and the level of output. This means that as firm produces more and more output, its average cost of production declines. Therefore the learning curve slopes downward from left to right.

15) Break-Even Point

Break-even analysis studies the relationship between total cost, total revenue, total profits and losses over a range of output. Break-even point is a point where the total revenue of the firm is equal to total cost. Therefore at break-even point there is no profit, no loss.