INTRODUCTION TO BUSINESS ECONOMICS

Meaning and Definition of Economics

Economics is a social science. Its basic function is to study how people- individuals, households, firms and nations- maximize their gains from their limited resources and opportunities. In economic terminology, this is called maximising behaviour or, more appropriately, optimizing behaviour. Optimizing behaviour is, selecting the best out of available options with the objective of maximizing gains from the given resources. Economics is thus a social science which studies human behaviour in relation to optimizing allocation of available resources to achieve the given ends.

Economics can be defined as "Economics is a social science that studies how society chooses to allocate its scarce resources, which have alternative uses, to provide goods and services for present and future consumption".

Meaning and Definition of Business Economics

Business economics is often called as Managerial Economics or Economics for Firms or Economics for Executive. Business economics generally refers to the integration of economic theory with business practice. Economics provides tools; business economics applies these tools to the management of business. In simple terms, business economics means the application of economic theory to the problem of management. Business economics may be viewed as economics applied to problem solving at the level of the firm.

According to Spencer and Siegelman "Business Economics is the integration of economic theory with business practice for the purpose of facilitating decision making and forward planning by management"

According to Mc Nair and Meriam "Business Economics is to how economic analysis can be used formulating policies".

Nature of Business Economics

1) Micro- Economic in nature

   Micro-Economic is the branch of economics that deals with the individual units of an economy. These individual units may be a person or firm or a group of person or firms. Since business economics is concerned with the analysis of and finding optimal solution to decision making problem of business firm, it is essentially microeconomics in nature.

2) Pragmatic

   Business Economics is a practical subject. Some places it avoids difficult abstract issues of economic theories, at some others, it incorporates complications ignores by economic theory in order to analyze the overall situation in ehich business decision making takes place.

3) Related to Normative Economics

Economics can also be classified as positive or normative. Positive economics describes what is i.e., observed economic phenomenon. Normative economics on the other hand prescribes what ought to be, i.e., is distinguishes the ideal from the actual

4) Conceptual in Nature
Business economics is based on a sound framework of economic concepts. It aims to analyse business problems on the basis of established concepts.
5) Utilizes some Theories of Macro-Economics
When all individual matters are added-up and it becomes a matter of analyzing the problems of the economy or the nation as whole, we call it macro-economics. Business economics does not prescribes solutions to business problems in isolation. In order to arrive at logical outcomes, it takes place the help of some macroeconomic theories to understand the environment in which the firm operates.
6) Problem-Solving in Nature
Besides analyzing the managerial problems of business units, business economics aims at finding out optional solutions to the business problems of firms.
7) Business Economics Deals with the Application of Economics
Business economics is the branch of study which deals with economic theory and its application to business management. It helps them in managing business in a structured manner with the application of the principle of economics to managerial decision making. Some important aspects of economics theory applied to business management are; Demand analysis, production analysis and market analysis.
8) Business Economics is the study if Allocation of Resources
Resources allocation is key to managing business. In fact, theory of economics also deals with the problems of resource allocation like what to produce, how to produce and for whom to produce. Allocation of resources is wide concept which includes; Input allocation, Output allocation and Allocation of Funds.
9) Interdisciplinary
Business economics is a new discipline. Its techniques, tools, and contents emerge from different subjects, such as Economics, Management, Statistics ect. As such, it is the integrated form of multidiscipline.

Scope of Business Economics

1) Demand analysis and Forecasting
A business firm is an economic organization, which is engaged in transforming productive resources into goods that are to be sold in the market. A major part of business decision making depends on accurate estimates of demand. A forecast of future sales serves as a guide to management for preparing production schedules and employing resources.
2) Cost and Production Analysis
Cost estimates are most useful for management decision the different factors that cost variation in cost estimates should be given due consideration for planning purpose.
3) Pricing decision, Policies and practices
The various aspects that are dealt under it cover the price determination in various market forms, pricing policies, pricing, pricing method, differential pricing, productive and forecasting.
4) Profit Management

There is always an element of uncertainty about profits because of variation in costs and revenue. The important aspects covered under this area are nature and measurement of profit , profit policies and techniques of profit planning like Break-Even analysis.

5) Capital Management
   Capital management implies planning and control of capital expenditure because it involves a large sum and moreover the problems in disposing the capital assets of are so complex that they require considerable time and labour. The main topics dealt with under capital management are cost of capital, rate of return and selection projects.
6) Analysis of Business Environment
   The environment factors influence the working and performance of a business undertaking. Therefore, the managers will have to consider the environment al factors in the process of decision making.
7) Allied Disciplines
   The concepts that help the management in taking business decision are qualitative in nature. Therefore, mathematical tools are widely used in determining relationships between economic variables. The linear programming techniques, which is mathematical, is used by firms to maximise or minimise their objective function.

Importance/Significance of Business Economics

1) Assist in Decision making
   It presents those aspects of traditional economics which are relevant for business decision making in real life. For the purpose, it culls from economic theory the concepts, principles and techniques of analysis which have a bearing on the decision making process.
2) Optimization of Resources
   Business economics takes the aid of other academic disciplines having a bearing upon the business decision of a manager in view of the various explicit and implicit constraints subject to which resource allocation is to be optimized.
3) Creates Good Working Environment
   Business economics helps in reaching a variety of business decision in a complicated environment .
4) Relationship building
   Business economics makes a manger a more competent model builder. Thus, he can capture essential relationships which characterize a situation while leaving out the cluttering details and peripheral relationships.
5) Coordination Building
   Business economics serves as an integrating agent by coordinating the different areas and bringing to bear on the decision of each department or specialist the implications pertaining to other functional areas.

Limitations of Business Economics

1) Business economics has led to the emergence of monopolies in the free market economics for the production of some important products or services, have been exploiting the consumers by charging high prices and making excessive profits.

2) Business economics has led to the emergence of oligopoly, whereby few producers or firms formally collude with each other or form a cartel, and thus charge high prices and restrict output.
3) There is an exploitation of workers by the undesirable activity of private business, due to unequal bargaining power of employers and workers.
4) The limitation of micro economics and business economics can be classified into two broad categories. (i) Those requiring use of optimization techniques, and (ii) Those requiring supply-demand analyses to arrive at equilibrium solutions.
5) Multinational corporations have given rise to cut-throat competition whereby closing the future prospects of small business enterprises.
6) Focus only on firm's internal management.
7) There could be some other goals or criterion then efficiency or profit (i) Environment protection (ii) Humanism, Charity, (iii) Nationalisation or patriotism

Relationship of Business Economics with other Discipline

1) Business economics and Statistics
   Statistical tools are a great aid in business decision-making. A good deal of business e course of economic events.
2) Business Economics and Mathematics
   The major problem of business is how to maximise cost or how to maximise profit or how to optimise sales. Mathematical concepts and technique are widely used in economic logic with a view to find out answer to this question
3) Business Economics and Accounting
   Accounting information is one of the principle source of data required by a business economic for a decision making purpose.
4) Business Economics and operation Research
   Business economics depends heavily on the models and tools of operation research or quantitative techniques. Operation research is subject that consist of a number of models and analytical tools which are developed on the basis of interdisciplinary research for solving complex problems of planning and allocation of scarce resource primarily in defence industries
5) Business Economics and Theory of Decision making
   Decision theory has been developed to deal with the problems of choice or decision making under uncertainty where they applicability of figures required for the utility calculus are not available.
6) Business Economics and Economics
   Business economics has been described as economics applied to decision making it may be studied as a special branch of economics bridging and gap between pure economic theory and business practice.
   Business has two main branches Micro economics and Macro economics
1) Micro economics
   Micro means small it studies behaviour of the individual units and small groups of such units. It is study of a particular firms, particular house holds, individual price, wages, income, individual industries and particular commodities
2) Macro Economics

Macro means large. It deals with the behaviour of the large aggregate in the economy. The large aggregates are total saving, total consumption, total income, total employment, general price level, wage level, cost structure etc.

Objective of Business Firms

Entrepreneur's main function is to bring together various factors of production, coordinate, supervise and manage them in order to produce goods and service for the firm so as to maximise profit. This is the principle objective of firm in perfect competition, monopoly, monopolistic competition and oligopoly markets. Primary objective of any organisation is to increase profit

Classification of Business Objective

Objective of a business can be classified as following categories on the basis of there nature

1) Economic objectives , 2) Strategic and 3) Social Objective

I)Economic Objective

Economic objective of the business refer to the objective of earning profit and also other objectives that are necessary to pursued to achieve the profit objective which includes creation of customers, regular innovation and best possible use of available resource

Economic objective of a firm are as follows

1) Profit maximization

   Profit is the life blood of business without which no business can survive in competitive market. Profit must be earned to ensure to survival of business, its growth and expansion over time according to traditional economic theory profit maximization is sole objective of a business firm. It means the largest absolute amount of money profit in given demand and supply condition .

   A firm will maximise its profit at that level of output at which the difference between total and revenue and total cost is maximum.

   Significance of profit maximization

   1) Profit is indispensible for firm's survival
   2) Achieving firm ability to make profit
   3) Profit maximization has never been disproved in business
   4) Profit maximization objective has greater predictive power compared to other business objective
   5) Profit is more reliable measure of firm's efficiency

   Criticisms of Profit maximization

   1) Profit Uncertain

      Profits are most uncertain for they accrue from the difference between the receipt of revenue and incurring of costs in the future. It is, therefore, not possible for firms to maximise their profits under conditions of uncertainty.

   2) No perfect Knowledge

The profit maximisation hypothesis is based on the assumption that all firms have perfect knowledge not only about their own costs and revenue but also of other firms.

3) Static theory

   The neo-classical theory of the firm is static in nature. The theory does not tell the duration of either the short or the long period.

4) Not applicable to Oligopoly Firms

   As a matter of fact, the profit maximization objective has been retained for the perfectly competitive or monopolistic competitive firm in economic theory.

5) Doubtful Validity

   There is no reason to believe that all business pursue the same objective. They may aim at sales maximisation, expansion of market share etc.

6) Not applicable to Modern business world

   The assumption of traditional theory that firm are owner-managed is not valid in the modern business world where firm is a complex organization run by the salaried managers whose interests may, and often do, differ from those of the shareholders who want maximum profits.

7) Lack of Predictive Power of Managers

   Lack of predictive power of managers, and they generally being risk-averse, results in firms settling with less-than-maximum profit as their objective.

2) Sales Maximization

According to Baumol, the firms aim at maximising their sales revenue

According to Baumol, with the separation of ownership and control in modern corporations, managers seek prestige and higher salaries by trying to expand company sales even at the expense of profits. Being a consultant to a number of firms, Baumol observes that when asked how their business went last year, the business managers often responded "our sales were up to three million dollars". Thus According to Baumol, revenue or sales maximisation rather than profit maximisation is consistent with the actual behaviour of firms.

He gives number of arguments in support his theory. These are as follows

1) A firm attaches great importance to thee magnitude of sales and is much concerned about declining sales.
2) If the sales of a firm are declining, banks, creditors and the capital market are not prepared to provide finance to it.
3) Its own distributors and dealers might stop taking interest in it.
4) Consumers might not buy its product because of its unpopularity.
5) If firm's sales are large, there are economics of scale, the firm expands and earns large profit.
6) Firm reduces its managerial and other staff with fall in sales.
7) Salaries of workers and management also depend to a large extent on more sales and the firm gives tem bonus and other facilities.

Significance of Sales Maximization

1) Salaries and earnings of managers correlated with sales than with profit.
2) Banks a d other financial institutions closely look into sales of firms while financing firms.

3) When sales are growing, employees can be given higher earnings and better terms of work.
4) Growing sales over time prestige to managers, whereas profit goes into the pockets of shareholders.
5) Managers prefer steady performance of profit rather than spectacular profit.
6) Growing sales strengthen the power to adopt competitive tactics.

Criticism of Sales Maximisation

1) Rosenberg has shown that it is difficult to specify exactly the relevant profit constraint for a firm.
2) In the case of multi products, Baumol has argued that revenue and profit maximisation yield the same results.
3) Another weakness of this model is that it ignores the interdependence of the prices of oligopolistic firm.
4) The model fails to explain observed market situations in which price are kept for considerable time periods in the range of inelastic demand
5) The model ignores not only actual competition, but also the threat of potential competition from rival oligopolistic firms.

3) Maximization of Growth Rate
This is a dynamic objective for affirm which is consistent with profit constraints i.e., a firm can attain maximum rate of growth with optimal net profit.
4) Managerial Utility Maximisation
Williamson argues that managers have discretion in pursuing policies which maximise their own utility after a minimum profit level is attained. A minimum profit level is necessary for job security of the manager.

The managerial utility function includes variables such as salary, security, power, status, prestige and professional excellence. Of these variables, only salary is measurable. Non-measurable variables are expressed in terms of expense preference to make them operational. The expense preference is the satisfaction derived out of certain types of expenditures and ready availability of funds
5) Satisfactory Level of Profits
The management generally is not even certain whether it is maximising profits of not; instead it aims merely at satisfactory profits.

II) Strategic Objective

Strategy is defined as the determination of the basic long-term objectives and goals of an enterprise and the formulation of an enterprise and the formulation of plans and the acquisitions, allocation and utilization of resources necessary to accomplish these objectives. Strategic objectives concerned mainly with the designing of business. The strategic objectives of the business are as follows.

1) Long-Run Survival
This is a long-term objective. Of course profitability is required for survival. But it need not be maximum profits but reasonable profits. It can survive only if it wins the goodwill of the

people by producing goods and services of good quality. A good name earned would help the firm to enjoy a bigger share of the market and this will enable it in its aspirations of survival over a long period.

2) Market Leadership

Each business firm tries to become a leader in the market. Efforts are made to maintain reputation, goodwill and dominance in market.

Market leadership is usually understood in terms of the position of a given company within an industry or market, based on three factors. When determining whether a corporation can properly be referred to as a market leader, the profitability of the company will play a major role. Along with how profitable the company happens to be, the market share volume and value will also be considered.

3) Market share

Market share refers to share of a firm's sales of a particular product in the total sales made by all firms in the market. The strength and success of a firm depends on market share.

It is the percentage of an industry or market's total sales that is earned by a particular company over a specified time period. Market share is calculated by taking the company's sales over the period and dividing it by the total sales of the industry over a same period.

4) Prevention of potential Entry

Prevention of potential entry is suggested as another objective of the firms. The motive behind entry prevention is profit maximisation, securing of constant market share and avoidance of risk caused by unpredictable behaviour of new firms. Availability of attractive returns would entice new players into an industry.

5) Desire for Liquidity

The liquidity motive to be more important than that of profit maximisation. This refers to the desire of a firm to keep adequate amount of cash so that it can avoid a liquidity crisis. This is referred to as Banker Mentality, i.e., the fear of financial crisis and the fears of bankruptcy are very powerful factors in influencing the firm's behaviour to keep adequate cash while pursuing profit.

6) Building-Up Public Confidence for the Product

This is an objective secondary to the objective of survival. The primary aim of some firms may be to build-up the customer confidence for its product and services.

III) Social Objectives

Being an important part of the country, every business must have the objective of fulfilling national and social aspirations. Social objectives are those objectives of business which are desired to be achieved for the benefit of the society. Since business operates in a society by utilising its scarce resources, the society expects something in return for its welfare. To fulfil the expectation of society is the social responsibilities of business.

1) Concepts of Social Responsibilities

According to K.R. Andrews, "Conceptually social responsibility may be taken to mean intelligent and objective concern for the welfare of the society".

2) Social responsibility of business towards different Interest Groups

Business is responsible towards various interest groups. Business must fulfil its responsibility/obligation towards each of these groups.

1) Responsibility towards share holders or Owner
   If ownership and management of business are in different hands, then managers have following responsibility towards owners
   1) Reasonable dividend
   2) Soundness (sound financial position)
   3) Information regarding financial position of the company
   4) Protection of assets of the company
2) Responsibility towards Workers/Employees
   The employees should be treated as human beings and their co-operation must be achieved for the realization of organizational objectives. The management of a business should fulfil the following obligation towards its employees.
   1) Every business should pay fair wages.
   2) Provide good working condition
   3) Provide adequate service benefit
   4) Co-operation with workers for creating good working condition
   5) Management should recognise the workers' rights
   6) Management should give the opportunity for develop their capabilities
3) Responsibility towards Customers
   Customer satisfaction is the ultimate aim of all economic activities. This involves providing products at the lowest possible price. The management of a business should fulfil the following obligation towards its Customers.
   1) Company produce the goods which meet the needs of customers
   2) The business should make goods of the right quality available to the right people at the right time and place at reasonable price.
   3) The business provide prompt and adequate service to customers
   4) Providing right information to the customers
   5) Fair trade practice
4) Responsibility towards suppliers
   Management should deal with the suppliers judiciously. Their dealings with the suppliers should be based on integrity and courtesy in the absence of which the suppliers will not supply them the goods on credit.
   1) Provide accurate information regarding the financial health of the organisation.
   2) Ensure a reasonable price for the articles supplied, and make prompt repayments.
   3) Promote a healthy atmosphere where creditors, suppliers and other interest groups
   4) Business enterprise should develop and maintain healthy relations with suppliers
   5) Dealing with suppliers should be based on fair terms and conditions, payment to suppliers should be made well in time.
   6) Informing them about future development plans.
5) Responsibility towards government
   Every business enterprise is governed by various laws. It is the duty of the management of every enterprise to manage its affairs according to the laws affecting it. Management policies should be laid down taking into consideration the provisions of various legislations and guidelines issued by the government management should follow fair trade practice. The specific responsibilities of business
   1) To abide by the laws of the nation.

2) To pay government taxes honestly
3) To avoid corrupting government employees.
4) To discouraging the tendencies of concentration of economic power monopoly.
5) To encourage fair trade practice.
6) Responsibility towards society/ community
   The specific responsibilities of business towards the society are discussed below:
   1) Socio-economic objective
   2) Improvement of local environment
   3) Employment opportunities to the public
   4) Efficient use of Resources
   5) Welfare activities for weaker sections of the society.
   6) Business ethics.

DEMAND ANALYSIS

Meaning and definition of Demand

The concept of demand refers to the quantity of a goods or service that consumers are willing and able to purchase at various prices dealing a period of time. The demand in economics is something more than desire to purchase through desire is one element of it.

According to Benham, "The demand for anything, at a given price, is amount of it, which will be bought per unit of time, at that price".

Features of Demand

1) Desire and demand
   Demand is the amount of a commodity for which a consumer has the willingness and the ability to buy.
2) Demand and price
   Demand is always at a price. Unless price stated the amount demanded has nomening
3) Utility
   Demand depends upon utility of the commodity .
4) Point of time
   The amount demanded must refer to some period of time
5) Effective demand

   Demand always means effective demand

6) Flow concept

Demand is a flow concept ie, so much per unit of time

7) Demand means dememand for final consumer goods.
8) Desired quantity

Demand is a desired quantity .It shows consumers wish or need to buy the commodity

Objective of demand analysis

Objective of demand analysis are as follows

1) Demand forecfasting

   Forecasting of demand is the art of prediting demand for a product or a service at some future date on the basis of certain present and past behaviour pattern of some related events.

2) Production planning

   Demand analysis is prerequisite for the production planning of a business firm.

3) Sales forecasting

   Sales forecasting is based on the demand analysis promotional efforts of the firm should be

   based on sales forecasting

4) Control of business

   For controlling of business it is essential to have a well conceived budgeting of costs and profit that is based on the estimation of annual demand ,sales and profit.

5) Inventory Control

   A satisfactory control of business inventories,semi-finished goods ,finished good etc requires demand analysis.

6) Growth and long term investment programs

   Demand analysis is necessary for determining the groath rate of firm and its longterm investment programs and planning.

7) Economic planning and policy making

   Demand analysis helps to the planners and policy makers for a better planning and rational allocation of the countries productional resources.

Types of Demand

Types of demand are as follows

1) Individual and market demand

   Quantity of a commodity which and indicidual is willing to buy at a particular price of the commodity during a specific time period,given his money income ,his taste and price of other commodities is known as individual demand for a commodity.

   The total quantity which all the consumers of a commodity are willing to buy at a given price per unit ,given their money income taste and price of other commodities is known as market demand for the commodity.

2) Demand of a firm’s product and industry’s product

   The quantity of a firm’s produce that can be disposed of at a given price over a time period denotes the demand for the firm’s product. The aggregate of demand for the product of all the firms or an industry is known as the market demand for industry’s product.

3) Autonomous and derived demand

Autonomous demand for a commodity is one that arises independent of the demand for any other commopdity where as derived demand is one that is tied tothe demand for some parent product.

4) Durable goods are those whose utility is not exhausted by a single use .Such goods can be used repetedly or continuously over a period durable goods may be consumer as well as producer goods cloths, shoes ete are eg.
   Non durable goods on the other hand ,are those which can be used or consumed only once and their total utility is exhausted in a single use.
5) Short term and long term demand
   Short term demand referse to the demand for such goods as are demanded over a short period fashion consumer goods ,goods of seasonal use ete are eg.
   The long term demand on the other hand ,referse to the demand referse to the demand which exist over a long period.eg. demand for a consumer and producer goods
6) Joint demand and composite demand
   When two or more goods are jointly demanded at the same time to satisfy a single want is called joint or complementary demand.car and petrol pen and ink etc are eg.
   A commodity is said to have composite demand when it can be put to several alternative use. Steel ,coal,paper etc are eg.
7) Direct and indirect demand
   Demand for a goods that are directly used for consumption by the ultimate consumer is known as direct demand. Such demand is also called consumers goods demand.
   Bread ,tea etc are eg.
   Indirect demand is the demand for goods that are not used by consumers directly. this is also known as producers;s goods demand.
8) Total market and market segment demand
   The total market demand will be aggregate demand for the product from all the segments while market segment demand would refer to demand for the product in that specific market segment.

Classification of demand

Classification criteria	**Types of demand**
End use of goods	Cosumer's goods and producers goods
Durability	Perishable and durable/ non perishable goods
Size of buyers	Individual and market /total demand
	Demand by market segment and total demand
Market share	Company and industry demand
Linkage	Autonomous and induced demand
Time period	Short term and long term

Demand function

The demand function is an algebraic expression of the relationship between demand for a commodity and its various determinants that affect this quantity.

There are two types of demand unction

1) Individual demand function
   An individual demand function refers to the quantities of a commodity demanded at various price
   D= f(p)

2) Market demand function

It refers to the total demand for a goods or service of all the buyers taken together .

Dx=f(px,pr,M,T,A,U)

Where

Dx=Quantity demanded for commodity x

F=functional reaction

Px=price of commodity x

Pr=price of relative commodity /substitute

M=money income of consumers

T=taste of consumers

A =advertisement effect

U=unknown variable

Determinants of demand

1) Price of commodity

   The law of demand state that if other things remain the same,the demand of commodity inversely related to its price.It implies that a rise in price of commodity brings about a fall in purchase and vice versa.

2) Income of the consumer

   When the income of the consumer increases they buy more and when income falls they buy less.A rich consumer demands more and more goods because his purchasing power is high.

3) Taste and preference

   If a consumer develop a taste for a commodity they buy whatever may be the price .A favourable change in consumer preference will cause the demand to increase.

4) Price of related goods

   The related goods are generally substitute and complementary goods.When a want can be satisfied by alternative similer goods they are called substitutes such as coffee abn tea.When commodities are compliment a fallin the price of one will cause of other to rise such as car and petrol.

5) Advertisement and sales propaganda

   Advertisement helps in increasing demand by informing the potential consumers about the availability of the product.

6) Consumers expectation

   Aconsumer expectation about the futire change in price and income may also affect in demand .if a consumer expect rise in price he buy large quantities and vise versa

7) Growth of population

   With the increase in population ,people naturally demanded more goods for their survival.

8) Weather condition

   The demand for certain items purely depend on climatic and weather conditions.eg.Cold drinks

9) Tax rate

   A highly taxed commodity will have a lower demand

10) Avilability of credit

If there is availability of credit consumer try to spen more on consumer durasbles there by the demand demand for certain products increases.

11) Pattern of savings
    If people begin to save more their demand will decrease.
12) Circulation of money
    When more money circulates among the people more of a thing is demanded by the people because they have more purchasing power and vice versa

Law of demand

Law of demand explains the relationship between change in quantity demanded and change in price.It state that the higher the price lower would we the quantity demanded in the market and vice versa.

In other words the law of demand says tha t the price and quantity demanded are inversely related ,all other things being equal.

According to Marshel “The amount demanded increases with a fall in price and diminishes with the rise in prise@

Assumptions of law of demand

Assumptions are as follows

1) Income level should remain constant
   Stability in income is an essential condition for the operation of the law of demand.
2) Taste of the buyer should not change
   When tastes or fashion change people revise their preference.
3) Price of other goods should remain constant
   The law of demand operate it is very necessary that price of other goods donot change
4) No new substitute for the commodity
   With the availability of new substitute some buyer will be attracted hence the law of demand operates only whenthe marketbfor a commodity is not threatened by new substitute.
5) Price rise in future should not be expected
   For the operation of law of demand it is necessary that there must not be any expectation of price rise in future.
6) Advertising expenditure should remain same
   If the advertising expenditure of a firm increases the consumers may be tempted to buy more of its product, therefore advertising expenditure on the goods under consideration is taken to be constant.

Demand schedule

Demand schedule is a table or chart which shows the relationship between price and demand of acommodity or service unit of time .If we list the different quantity of a commodity demanded at different price in the form of raw and column ,the resulting format is demand schedule

Types of Demand schedule

Demand schedule are of two types-

1) Individual demand schedule
   This is a tabular statement showing the different quantities of a commodity demanded by a consumer or a house hold with in a given period of time at different prices.
2) Market demand schedule
   For obtaining the market demand schedule ,quantities demanded by different buyers at each price are added up .Every individual buyer will purchase different quantities of goods at different price . The slop this demand curve will be negative, that is it will be slop downward from left to right. If there are two buyers in the market the demand schedules are identical the demand for the commodity in the market will be exactly double e quantity demand by single buyer.

DEMAND CURVE

THE GRAPHICAL ERPRESENTATOIN OF demand schedule is the demand curve, that is the whole of line showing price demand relationship called demand curve. Demand curves are two types.

1) Individual demand curve
   It represents the graphical presentation of various quantities of a commodity demanded by a single consumer per period of time at various price of commodity, keeping all the other factor effecting the demand constant.
2) Market Demand Curve
   It represents the diagrammatic presentation of various quantities of commodity demanded by all the existing consumers per period of time at various price of the commodity keeping all other factors effecting demand constant. It is summation of all the consumers purchasing the commodity all various price level.

Rational for Law of Demand-Why does demand curve slop down wards

The down ward slop of demand curve implies inverse relationship between demand and price of commodity. Following are the reason for the down ward or negative slop of demand curves;

1) Substitution effects
   When the price of a commodity falls, it become relatively chipper than other commodities it induces consumers substitute the commodity whose price has fallen for other commodity, which have now become relatively expensive. The result is that total demand for the commodity whose price has fallen increases.
2) Income Effects
   As a result of fall in the commodity, consumers real income purchasing power increases. This increase in real income induce him to buy more that commodity. Thus increase demand for that commodity increases.
3) New consumer creating demand
   When the price of commodity falls, more consumers starts buying it, because those who could not afford to buy it previously may now afford to buy it.

4) Based on the law of diminishing marginal utility
   According to this law when consumer buys more unit of commodity the marginal utility of that commodity continuous to decline. Therefore the consumer will buy more unit of that commodity only when its price falls.

5) Price effects
   Every commodity has certain consumers but when it price falls, new consumers starts to consuming it, as result of demand increases and with the increase in the price of product Many consumers will either reduce or stop its consumption and demand will be reduced.
6) Different income Group
   Ordinary people buy more when price falls and less when price rises. The rich do not have any effect on the demand curve because there are capable of buying the same quantity even at a higher price.
7) Different uses
   There are different uses of certain commodity and service that are responsible for the negative slop of demand curve.

Exception to the law of demand

The following are the important exception

1) Some consumers measure the utility of commodity by its price, that is if the commodity is expensive they think that it has got more utility.
2) Giffen goods-Sir Roberts Giffen; generally those goods which are considered inferior by the consumers and which occupy a substantial price in consumers budgets are called Giffen goods. E.g. wheat, Rice
3) Necessities of life- normally the law of demand does apply on necessity of life such as food, cloth etc.
4) Conspicuous necessities:- certain goods effects the consumption pattern of social group to which an individual belongs. These goods due to their constant usage have become necessities of life. E.g. cooking gas,
5) Future expectation about price:- it has been observed that when the price are rising tents to buy large quantities of commodity.
6) Ignorance effects:- in practice the house hold may demand larger quantities of a commodity even at a higher price, because it may be ignorant of the ruling price of the commodity.
7) Outdated goods:- goods that go out of use due to advancement in the underline technology are called outdated goods.

Elasticity of demand

Meaning

The term elasticity of demand is used to denote a measure of the rate at which demand changes in response to the changes in price. We can say that it is the percentage change in quantity demanded divided by the percentage in one of the variable on which demand depends.

Types of elasticity of demand

They are;

1) Price elasticity of demand
2) Income elasticity of demand
3) Cross elasticity of demand
4) Advertising and promotional elasticity of demand

1) Price elasticity of demand
   It expreses the response of quantity demanded of goods ,to a change its price,given the consumers income,his tastes and prices of all other goods.
   According to prof.Lipsey " elasticity of demand defined as the ratio of the percentage change in demand to the percentage in price"
   Thus price elasticity of demand is the ratio of percentage change in amount demand to a percentage change in price it may be written as ,
   Price elasticity (E_P)=% change in quantity demanded /% change in prices

   Types or degree of price elasticity

Price elasticity of demand is classified in to 5 categories

1) Perfectly elastic demand or E=
   In case of perfectly elastic demand the demand for a commodity changes even though there is no changing price.It also implies that with a small % change in price , the quantity demand would change indefinitely and so the seller would not change the price
2) Perfectly inelastic demand or E=0
   If the demand for a commodity does not change in spite of an increase or decrease in its price, the demand is perfectly inelastic.
3) Unitary elastic demand or E=1
   Price elasticity of demand is unity when the change in demand is exactly proportionate to the changes in price.The demand curve in this case is a rectangular hyperbola .
4) Elastic Demand or E> 1
   If the % change quantity demanded is greater than the % change change in price, price elasticity of demand is greater than one.This is known as elastic demand.
5) In elastic demand or E<1
   If the % change in quantity demanded is less than the % change in price, price elasticity of demand is less than one this is known as inelastic demand.

Determinants of price elasticity of demand

1) Avilabilty of substitutes
   One of the most important determinant elasticity of demand for a commodity is the availability its close substitute. The higher the degree of the closeness of the substitute , the greater the elasticity of demand for the commodity.
2) Position of a commodity in a consumers budgets
   The greater the proportion of income spend on a commodity , the greater will be the elasticity of demand and vice versa.

3) Nature of the need that a commodity satisfies
   In general luxury goods are price elastic while necessities are price inelastic.
4) Number of uses to which a commodity can be put
   More possible uses of commodity the greater will be its price elasticity and vice versa

5) Possibility of postponing the consumption
   There are certain commodity consumption of which cannot be postponed even for a short period. There demand is generally in elastic because the consumer has no choice but to maintain his consumption level in spite of price rise
6) Joint demand
   In the case of joint demand , demand of one goods varies along with the demand of the other goods.
7) Consumer habits
   If consumer is a habitual consumer of a commodity no matter how much its price change, the demand for the commodity will be indicate.
8) Tied Demand
   The demand for those goods which are tied to other is normally inelastic as against those whose demand is of autonomous nature.
9) Price Range
   Goods which are in very high range or in very low price range, have inelastic demand but those in the middle range have elastic.
10) Brand
11) Distribution of income
12) Time period

Measurement of Price Elasticity of Demand

1) Percentage Method
   The price elasticity of demand is measured by its coefficient (E_P). This Coefficient (EP) measures the percentage change in the quantity of a commodity demanded resulting from a given percentage change in its price.

   E_P= %change in q / %change in p

   q= quantity demanded, p to price
2) Point Method or Geometric Method
   This method measures the elasticity of demand on different points of a demand curve. It is a variant of proportionate method. To measure elasticity of demand we take a straight line demand curve.
3) Arc Method
   Segment of a demand curve between two points is called an Arc. Arc elasticity is calculated from the following formula.

   EP=(Q1-Q2/Q1+Q2)+(P1-P2/P1+P2)

P1= Original price

P2=new price

Q1=original quantity

Q2= new quantity

4) Total outlay method

   In this case of total outlay method, price elasticity of demand is measured on the basis of change in total outlay or total expenditure in response to a change in the price of the commodity. Marshall maintains that elasticity of demand can be of three types.

   1) Unitary Elasticity:- if small changes in price total outlay unaffected, price elasticity of demand is unity.
   2) Elastic Demand:- if a small reduction in price increase total outlay or if small increase in price reduces total outlay, demand in elastic.
   3) Inelastic Demand:- if a small reduction in price leads to a fall in total outlay or if a small increase in price increases total outlay demand is inelastic

5) Revenue Method

   Revenue refers to the sale proceeds of a firm. Elasticity of demand can be estimated if average revenue and marginal revenue are known. Average revenue is the price per unit of the commodity. Marginal revenue is the addition to total revenue by the sale of an additional unit of the commodity.

   EP= A/(A-M)

   EP= stands for elasticity of demand

   A=Stands for average revenue

   M=stands for marginal revenue

INCOME ELASTICITY OF DEMAND

Income elasticity of demand is defined as the percentage in the quantity demanded of a goods divided by the percentage change in the income of the consumer.

Types of income elasticity of Demand

1) High income Elasticity:- When the quantity demanded of goods increases by a larger percentage as compared with the income of the consumer, income elasticity of demand is high.
2) Unitary income Elasticity:- When the percentage change in quantity demanded is equal to the percentage change in income, income elasticity of demand is unitary.

3) Low income Elasticity:- when the quantity demanded of goods increases by a smaller percentage as compared with the income of consumer, income elasticity of demand is low.
4) Zero income Elasticity:- When the quantity demanded of a goods remains unchanged upon the change of income, income elasticity of demand is zero.
5) Negative income Elasticity:- When the quantity demanded of a goods falls in response to an increase in income, the income elasticity of demand is negative.

Cross Elasticity of Demand

A change in the demand for one goods in response to a change in the price of another goods represents cross elasticity of demand of the goods for the latter goods.

EC=percentage change in purity demanded of goods A / Percentage change in price of goods B

The elasticity coefficients give significant results about the type of goods

1) Substitute Goods:

   If cross elasticity of demand is positive, meaning that sale of X move in the same direction as a change in the price of Y, then X and Y are substitute goods.
2) Complementary Goods

   When cross elasticity is negative, we know that X and Y “go together”; an increase in the price of one decrease the demand for the other. So, the two are complementary goods.
3) Independent Goods

   A zero of near zero elasticity suggests that the two products being considered are unrelated or independent goods.

Advertising and promotional Elasticity of Demand

The promotional elasticity of demand is a measure of the responsiveness of demand for a commodity to the change in outlay on advertisement and other promotional efforts.

EA= Percentage change in demand / percentage change in expenditure on advertisements and other promotional efforts

Significance /Uses of Elasticity of Demand

1) Determination of price Policy:

   While fixing the price of this product, a businessman has to consider the elasticity of demand for the product. He should consider whether lowering of price will stimulate demand for his product and if so to what extent and whether his profits will also increase result thereof.
2) Price Discrimination:

It refers to the act of selling the technically same products at different prices to different section of consumers of different in different sub-markets.

3) Shifting of Tax Burden:

   To what extent a producer can shift the burden of indirect tax to the buyers by increasing price of his product depends upon the degree of elasticity of demand.

4) Taxation an d Subsidy policy:

   The govt. Can impose higher taxes and collect more revenue if the demand for the commodity on which a tax is levied in inelastic.

5) Importance in international Trade:

   The success of the policy of devolution to correct the adverse balance of payment depends upon the elasticity of demand for exports and imports of the country.

6) Importance in the Determination of Factors Prices:

   A factor with an elastic demand can always command a higher price as compared to a factor with relatively elastic demand.

7) Pricing of Joint supply Products:

   The goods that are produced by a single production process are jointly supply products. The cost of production of these goods is also joint. Therefore, while determining the prices of these products their elasticity of demand is considered .

8) Effects on Use of Machines on Employment:

   Ordinarily it is thought that use of machines reduced the demand for labour. Therefore, trade unions often oppose the use of machines fearing unemployment. But this fear is not always true because use of machines may not reduce demand for labour. It depends on the price elasticity of demand for the products.

9) Public Utilities:

   The nationalization of public utility services can also be justified with the help of elasticity of demand.

10) Output decisions:

    The elasticity of demand helps the businessman to decide about production.

PRODUCTION ANALYSIS

Introduction

Production analysis or the theory of production deals with the general relationship of output of goods or service with factor inputs. Normally a physical output is related to physical input ie, only operating efficiency is the subject matter of production analysis.

Meaning and definition of production

Production in economics refers to the process by which man utilize s or converts the resources of nature , working upon them ,so as to satisfy human wants .in other words ,production is an economic activity that transforms inputs or resources in to output of goods and services, thus creating or adding utility.

According to J.R. Hicks," production in any activity directed to the satisfaction of other people's want through exchange"

Factors of Production

Land , labour, capital and organisation ,each group being called a Factor of production.

1. Land

   According to Marshall ,"Land means the material and the forces which nature gives freely for man's aid , in land and water, in air light and heat"

Characteristics of land

1. Land is free gift of nature
2. Land is strictly limited in quantity
3. Land has no cost of production
4. Production from land is subject to the law of diminishing return
5. Production power of soil is indestructible
6. Land cannot be shifted from one place to another
7. Land varies in fertility and uses

2. Labour

The term labour is mental or physical exertion directed to produce goods or services.In other words it referse to various types of human effort which require the use of physical exertion,skill and intellect.