Economics   Date 3/7/22

Demand & Supply

1. Explain the law of demand.

Ans:- The law of demand expresses the functional relationship between price and quantity demanded of a commodity. According to the law of demand, other things being equal or constant, if the price of a commodity falls, the demand for it will rise and if the price of the commodity rises, in that case the demand of the commodity will fall.

According to the law of demand, demand function can be expressed as under:-

$D_x = f(P_x, P_r, Y, T)$

where D_x = Demand of the commodity

P_x = Price of the commodity x

Y = Income of the consumer

T = Taste and preference of the consumer.

f = functional relationship

P_r = price of related commodities

The above demand function states that demand for commodity x rises when its price falls and vice-versa provided price of related commodities, income of the consumer and taste and preference of the consumer remains constant.

The law of demand can be explained with the help of following demand curve and demand schedule.

Demand Schedule

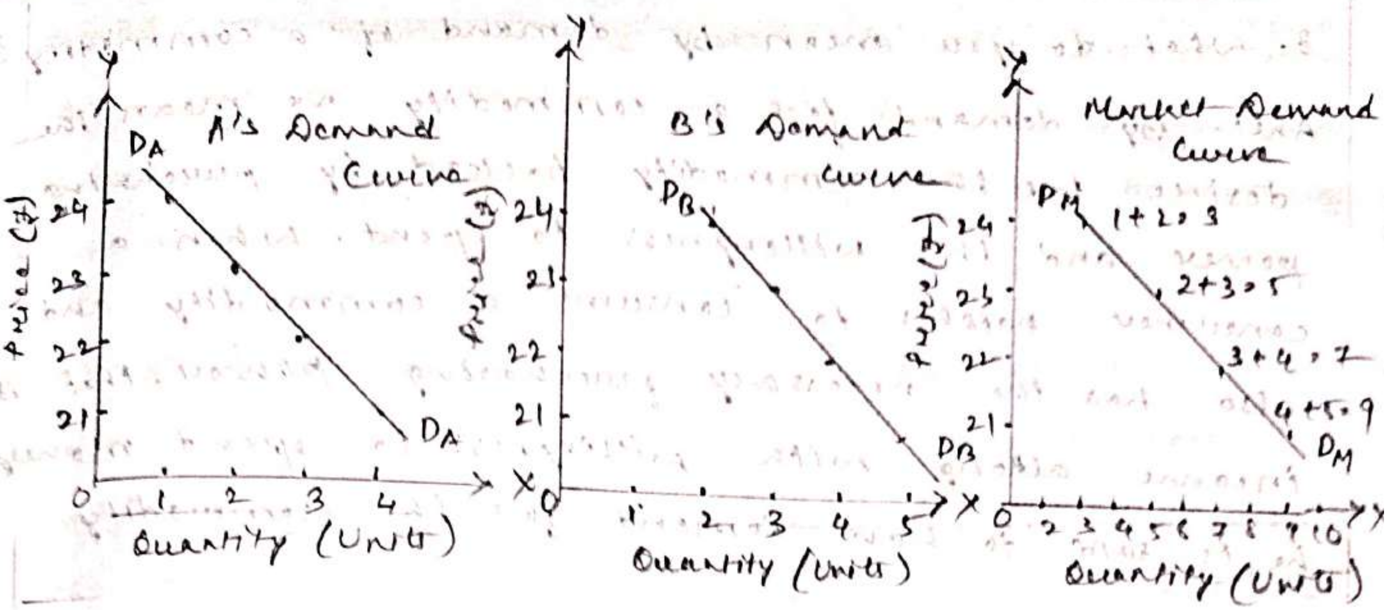
The table relating to price and quantity demanded is called demand schedule. Demand schedule is of two types :- ① Individual demand schedule, ② Market demand schedule.

Price of Icecream (₹)	Demand of Consumer A	Demand of Consumer B	Market Demand
21	4	5	9
22	3	4	7
23	2	3	5
24	1	2	3

The above table shows two individual demand schedules of consumer A and B and a market demand schedule. All these schedule show that as the price of icecream goes on rising, quantity demanded goes on falling.

Demand Curve

A demand curve is the graphical representation of the relationship between the price and quantity demanded of a commodity. It can be obtained by joining all points that reflect the various combinations of price and quantity demanded of a commodity.



Conclusion :- The study of demand schedule and demand curve clearly shows that price of a commodity and its quantity demanded are inversely related, prices of related goods, income of the consumer, taste and preference remains unchanged.

2. What are the assumptions of the law of demand ?

Ans :- Following are the main assumptions of the law of demand.

(i) Taste and preference of the consumer remains unchanged.

(ii) There is no change in the income of the consumer.

(iii) Prices of the related goods do not change.

(iv) Consumers do not expect any change in the price of the commodity in the near future.

3. What do you mean by demand of a commodity?

Ans:- By demand for a commodity we mean the desire for the commodity backed by purchasing power and the willingness to spent. When a consumer wishes to consume a commodity and also has the necessary purchasing power, that is income along with willingness to spend money, he is said to have demand for the commodity.

4. What do you mean by price elasticity of demand?

Ans:- Price elasticity of demand measures the degree of responsiveness of quantity demanded of a commodity due to change in its price. According to professor marshall, "it is the ratio of proportional changes in the quantity demanded of a commodity due to given pro-portionate change in its price.
proportionate

5. What are the factors affecting/influencing/determining price elasticity of demand for a commodity? 92,93

Ans:- In general, the magnitude of price elasticity depends on the following factors:

(1) Availability of close substitutes: If close substitutes of a good are readily available, its price elasticity of demand is likely to be high, because even a very small increase in price will

make consumers to shift over to other goods in a big way. For example, demand for cold drinks e.g., coke, pepsi, limca etc, is highly elastic because of availability of close substitutes.

(ii) Nature of the Commodity: An important determinant of elasticity of demand for a commodity is the nature of the commodity itself. If the commodity is a necessity of life, its demand will not change much when its price changes. Hence, the elasticity of demand will be low.

(iii) Proportion of Total Expenditure: If the amount spent on a commodity constitutes a very small portion of the total expenditure on all goods and services then the price elasticity is likely to be small. The demand for newspapers, match box, shoe polish etc are examples of such goods.

(iv) Habits: Habits also play a role in the determination of elasticities. For instance, if a person has developed the habit of smoking, he may not be able to reduce his consumption of cigarettes even when the price of cigarettes goes up. His demand for cigarettes will then be inelastic.

(v) Number of uses: The demand for a commodity which can be put to several uses, will be relatively elastic. For instance, coal can be used for cooking, heating, etc. When the price of coal rises, the consumers can cut down some of the uses of coal restricting themselves to the more urgent uses only.

(vi) Income of the purchaser: The elasticity of demand is also influenced by the income of the consumer. If the consumer is rich, he will not bother much by small changes in price. A poor consumer, on the other hand, will give importance even to small changes in price.

(vii) Postponement of consumption: If the good is such that it is possible to postpone its consumption, it will obviously have a high elasticity of demand. For example, when the price of cement rises, people can postpone their plans for house building for this reason.

(viii) Period of time: If the price of a product rises, consumers will search for cheaper substitutes. The longer period they have, the more likely they are to find the one. Demand will, therefore, more price elastic in the long run.

(ix) Joint demand: Finally, joint demand for goods also affects the price elasticity of demand. For example, if demand for car is inelastic, the demand for petrol will also be inelastic.

Date : 5/7/23

6. What are the differente types / degrees of price elasticity of demand ?

Ans :- Following are the different kinds of price elasticity of demand :

(i) Inelastic / Relative inelastic demand : Demand is said to be relatively inelastic when the percentage change in demand is less than percentage change in price.

(ii) Elastic demand : Demand is said to be elastic when the percentage change in demand is more than percentage change in price.

(iii) Unitary elastic demand : When the percentage change in demand is equal to the percentage change in price of the commodity then demand is said to be unitary elastic.

(iv) Perfectly inelastic demand : Demand is perfectly inelastic when it does not change irrespective of the changes in prices.

(v) Perfectly elastic demand : When the demand for a commodity reduces to zero with an infinitely small increase in price and increases to infinity with a very small reduction in price, then demand is said to be perfectly ~~in~~elastic.

7. What are the different methods of measuring price elasticity of demand?

Ans:- Following are the different methods of measuring price elasticity of demand:

(i) Percentage method: According to percentage method, price elasticity of demand is measured by taking ratio of percentage change in demand and the percentage change in price. This has been shown by the following formula:

$$e_p = \frac{\text{Percentage change in quantity demanded}}{\text{Percentage change in price.}}$$

(ii) Total expenditure or outlay method: Price elasticity of demand for a commodity can be measured with the help of the total outlay or expenditure spend on purchase of a commodity. Total outlay is defined as the ~~product of the~~ price of the commodity and number of units ~~per~~ purchased of this commodity. The change in total expenditure brought about by a change in price is directly related to the elasticity of demand. If price elasticity is less than unity, the percentage change in price will exceed the percentage in quantity.

(iii) Geometric or point method: According to this method, elasticity of demand on any point on a straight line demand curve is measured by dividing the lower segment of the demand curve by the upper segment of the demand curve

8. What do you mean by elasticity of supply?

Ans:- Price elasticity of supply is a measure of degree of responsiveness of supply of a commodity to change in its price. It measures the percentage change in quantity supplied due to one percent change in the price of that commodity.

9. What are the different kinds / types of price elasticity of supply?

Ans:- Same as ans no. 6

10. What are the different methods of measurement of price elasticity of supply?

Ans:- Same as ans. no. 7; 'demand' replaced by 'supply'.

11. What do you mean by individual demand?

Ans:- Individual demand for a commodity refers to the amount of that commodity, a consumer is willing to buy at different prices.

12. What do you mean by market demand?

Ans!- Market demand for a commodity is the aggregate demand of all individuals for that commodity at various possible prices during a given time period.

13. What do you mean by normal goods?

Ans!- Normal goods are those goods the demand for which increases with increase in the income of the consumer., other things remaining constant.

14. What do you mean by inferior goods?

Ans!- Inferior goods are those goods, the demand for which falls as income of the consumer increases.

15. What do you mean by substitute goods?

Ans!- Substitute goods refer to those goods which can be used in place of one another for satisfaction of a particular want. For example cocacola and pepsi.

16. What do you mean by complimentory goods?

Ans!- Complimentory goods refer to those goods which are used together to satisfy a particular want.

17. What do you mean by demand forecasting?

Ans:- Demand forecasting refers to the process of predicting the quantity of goods and services that will be demanded by consumers at a future point of time. Demand forecasting may be used in resource allocation, inventory management, assessing future capacity requirements or making decisions on whether to ~~enter~~ enter a new market.

18. What are the different methods of demand forecasting?

Ans:- Following are the different methods of demand forecasting:

(i) Survey of buyer's choice method: When the demand needs to be forecasted in the short run, for example a year then the most appropriate method is to ask the customers directly that what they are willing to buy in the coming time period. Thus, under this method, potential customers are directly interviewed. This survey can be done in any of the following ways:

(a) Complete enumeration method.
(b) Sample survey method.
(c) End use method.

(ii) Collective opinion method: Under this method the sales persons of a firm predicts the estimated future sales in their region. The individual estimates are aggregated to calculate the total estimated future sales. The principle underlying this method is that as the salesmen are closer to the consumers, they are more likely to understand the changes in their needs and demands.

(iii) Barometric method: This method is based on the past demands of the product and tries to project the past into the future. The economic indicators are used to predict the future trends of the business. Based on the future trends the demand for the product is forecasted.

(iv) Market experiment method: This is one of the important method of demand forecasting. Under this method the demand is forecasted by conducting market studies and experiments on consumer behaviour under actual but controlled market conditions.

(v) Expert opinion method: Usually market experts have explicit knowledge about the factores affecting demand. Their opinion can health help in demand forecasting. The delfy technique developed by Olef Helmare is one such method. Under this method, experts are given a series of carefully design questionnes and are asked to forecast the demand. They are also required to give suitable reasons. The opinions are shared with the experts to arrive at a conclusions

19. What are the usefulness of demand forecasting?

Ans:- Demand forecasting plays a vital role in the decision making of a business. In competitive market conditions there is a need to take correct decisions in order to survive. Demand is the most important aspect for business for achieving its objectives as because without proper analysis of demand it is almost impossible for a business to survive in the market. Demand forecasting helps a business in many ways. Demand forecasting reduces risk related to business activities and helps it to take efficient business decisions. For firms having production at the mass level, the importance of demand forecasting has reached an unmatchable level. A good demand forecasting helps a business firm in better planning relating to business goals. There is a huge role of forecasting in functional areas of accounting. Good forecast helps in appropriate production planning, process selection capacity planning, facility layout planning and inventory management, etc. Demand forecasting provides:

reasonable data for organization capital investment and expansion decision. It also provides a way for the formulation of suitable pricing and advertisement strategies. Following are the significance of demand forecasting :

(i) Fulfilling objectives of the business ~~to preparing the budget~~

(ii) Preparing the budget.

(iii) Taking management decision.

(iv) Evaluating performance, etc.

Moreover, forecasting is not completely full of prooff and correct. It thus helps in evaluating various factors which affect demand and enables management staff to know about various forces relavant to the study of demand behaviour.

20. What are the determinants of demand forecasting
Ans:- Following are the determinants of demand forecasting :

(i) Cost of the product : Demand for a product changes as per the change in the price of the commodity. People deciding to buy a product remain constant only if all the factors relating to it remains unchanged.

(ii) The income of the consumers: When the income increases the ~~da~~ number of goods demanded also increases like wise if the income decreases the demand also decreases.

(iii) Consumer expectations: High expections of income or expectation in the increase in price of a good also leads to an increase in demand. Similarly low expections of income or low pricing of goods will decrease the demand.

(iv) Buyers in the market: If the number of buyers for a commodity are more or less, then there will be a shift in demand.

(v) Cost of related goods and services: For a complimentary product an increase in the cost of one commodity will decrease the demand for a complimentary product. For example an increase in the rate of bread will decrease the demand for butter. Similarly an increase in the rate of one commo- ~~H~~ dity will generate the demand for a substitute product to increase. Example, an increase in the cost of tea will raise the demand for coffee and therefore, decreases the demand for tea.

21. What do you mean by supply?

Ans:- The term supply implies the various quantities of a commodity offered for sale by producers during a given period of time at various prices.

22. What do you mean by stock of a commodity?

Ans:- By stock of a commodity we mean the total volume of a commodity which can be brought into the market for its sale at short notice.

*23. Explain the law of supply?

Ans:- According to the ~~&~~ law of supply, other things being equal, the quantity ~~demanded~~ supplied of a commodity raises directly with its price. In other words when price of a commodity rises, quantity supplied increases and vice-versa, other things being equal.

Assumptions of the law: ~~of supply~~ The law of supply will work under the following assumptions:

(i) There is no change in the price of related goods.

(ii) There is no change in the state of technology.

(iii) There is no change in the ~~golds~~ goals of the firm.

(iv) Prices of factors of production do not change

Explanation of the law: The law of supply can be explained with the help of following supply schedule and a supply curve.

(a) Supply schedule: A supply schedule is a tabular statement showing various ~~col~~

quantities which producers are willing to produce and sell at various alternative prices during a given period of time. It state the relationship between the price of a commodity and the quantity that would be supplied. Supply schedule is of two types namely individual supply schedule and market supply schedule. Individual supply schedule for any product indicates different quantities supplied per period by the producer at different possible prices of that commodity whereas market supply schedule of a commodity is the table which shows various quantities of that commodity that all the firms are willing to supply at each market price during a specified time period.

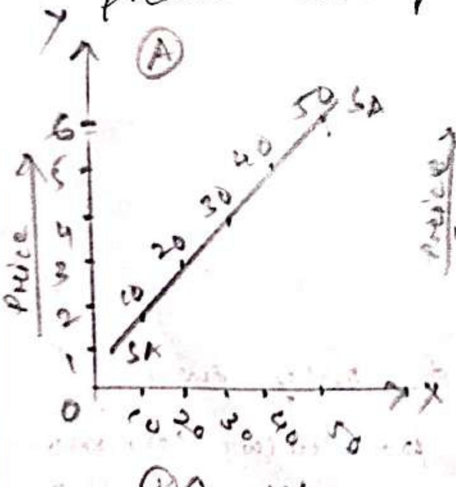
Price of Product X	Quantity supplied by firm A	Quantity Supplied by firm B	Market Supply
2	10	20	30
3	20	30	50
4	30	40	70
5	40	50	90
6	50	60	110

Here we have assumed only two firms namely A and B and one particular commodity namely product X. At a price of ₹2 firm A supplies 10 units and firm B supplies 20 units and the total market supply was 30 units. As the price of the product rises, the market supply also gradually rises.

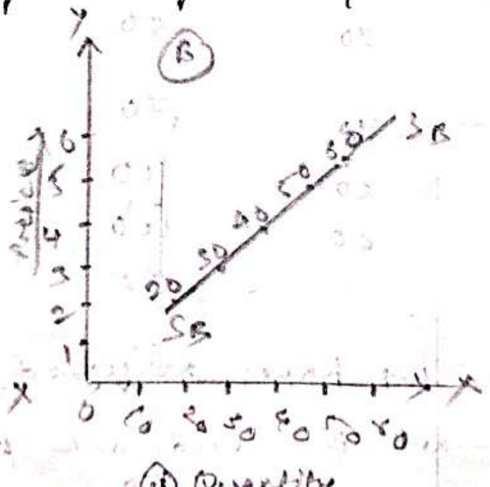
Supply curve : A supply curve is the graphical representation of the relationship between price of a commodity and the quantity supply assuming all other factors influencing are held constant. It is obtained by joining all price quantity supplied combinations. Like supply schedule, supply curve is also of two types namely individual supply curve and market supply curve.

Individual supply curve : It shows the various quantities of a given commodity which an individual producer is willing to supply at different prices during a period of time.

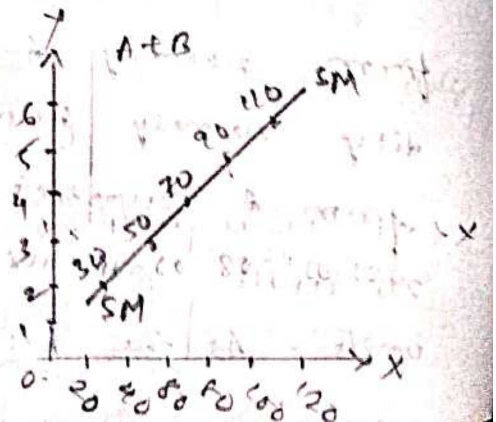
Market supply curve : Market supply curve is the curve which shows various quantities of a commodity which all the producers are willing to produce and sell at different prices during a given period of time.



(i) Quantity



(ii) Quantity



24. What are the exceptions of the law of supply?

Ans! ~~The law of~~ supply followings are the exceptions to the law of supply:

(i) When prices are expected to fall much, ~~not~~ sellers will sell more in order to clear their stock.

(ii) The taste and preferences of the consumer must remain constant for supply to increase.

(iii) Weather conditions affect the supply of commodities, particularly agricultural commodities. When monsoon fails, the supply of agricultural commodities may not rise when their prices go up.

(iv) In case of certain commodities like art of masters or the items which are found in very low ~~com~~ quantity, the law of supply is not applicable.

25. Difference between supply and stock of a commodity

Ans!– Following are the distinctions between supply and stock of a commodity:

(i) By supply we mean the total amount of a commodity which ~~is~~ available in the market at a given price. But by stock we mean the total volume of a commodity which can be brought into the market for its sales at a short notice. Thus, the word stock means total volume of a commodity that can be offered for sale if the condition of the market is favourable.

(iv) There is no difference between stock and supply in case of perishable goods but there is a quite difference between stock and supply in case of durable goods.

26. What are the factors determining the supply of a commodity?

Ans:- Following are the major factors influencing the supply of a commodity:

(i) Own price of the commodity: Price of a commodity is the most important factor that determines its supply. The higher the price, the larger will be its supply and vice-versa.

(ii) Prices of related commodities: The supply of a commodity also depends upon the prices of other goods. ~~And~~ An increase in the prices of other goods makes their production more profitable to the producers. Therefore, they will increase their supply.

(iii) State of technology: If there is an improvement in production technology, then it may be possible for the firm to produce more with the given resources. In such case the average cost of production may fall and the firm may be able be supply more at a given price.

(iv) Number of firms : If the number of firms selling the same type of product in the market increases, then the supply of that product will also increase in the market.