

Q1. What is meant by Demand and quantity demanded? Explain Demand Schedule?

Demand refers to the quantities of a commodity that the consumers are able and willing to buy at each possible price of the commodity during a given period of time, other things being equal. Ordinary, the term want, desire and demand are used interchangeably. But in economics, all the three have different meanings. supposing, you desire to have colour T.V. but you do not have enough money, then this desire will remain just a wishful thinking from the point of view of economics and will not be called demand. And if in spite of having sufficient money, you do not have enough money, then this desire will remain just a wishful thinking from the point of view of economics and will not be called demand. And if in spite of having sufficient money, you do not want to spend it in colour T.V. then this desire will be called want and not demand. This desire will be termed demand only when you are ready to spend the necessary money to realize your demand. It may be pointed out that economists distinguish between demand and quantity demanded.

Quantity Demanded :-

Quantity demanded is a particular amount the buyers are willing and able to buy at a given price during a given time, other things being equal. (e.g) at a price of Re 1 per ice-cream, the consumer buys 5 ice-creams. Accordingly, the quantity demanded at Re 1 per ice cream is 5 ice-creams. Demand is the quantities that buyers are willing and able to buy at alternative prices during a given period of time, other things being equal. (e.g) at the price of Re 1 per ice cream, the demand is for 5 ice-creams. At Rs 2, the demand is for 4 ice-creams and at Rs 3, it is for 2 ice-cream. There are three elements of demand for a commodity.

1. Desire for a commodity.
2. Money to fulfill that desire.
3. Readiness to spend money.

Thus, demand may be defined as the desire to buy a commodity, backed by sufficient purchasing power and the willingness to spend.

Demand Schedule

Demand schedule is that schedule which, other things remaining constant, express the relation between different quantities of the commodity demanded at different prices. Acc. to Samuelson "the table relating to price and quantity demanded is called the demand schedule". Demand schedule is of two types :

1. Individual Demand Schedule.
2. Market demand schedule.

1. **Individual market Schedule** : it is defined as the quantities of a given commodity which a consumer will buy at all possible prices, at a given moment. Table 1. Is an individual demand Schedule. It indicates the different quantities of ice-cream bought by a consumer at different prices at a given time.

Table. 1. Individual Demand Schedule :-

| Price Rs. | Quantity Demand |
|-----------|-----------------|
| 1 | 4 |
| 2 | 3 |
| 3 | 2 |
| 4 | 1 |

It is seen from table 1 that as the price of ice-cream goes increasing, the quantity demanded goes on falling when price is Rs 4 per Cup. Then the consumer demands one cup but when price falls to Re 1 per cup, the demand of the consumer goes up to 4 cups.

Market Demand Schedule

In every market, there are several consumers of a commodity, say ice-cream. Market demand schedule is one that shows total demand of all the consumers in the market at different prices of the commodity. On

the assumption that there are only 2 buyers in the market, market demand schedule for (ice-cream) may be drawn as under :

The schedule shows that when price of commodity (ice-cream) falls its market demand extends (e.g) when

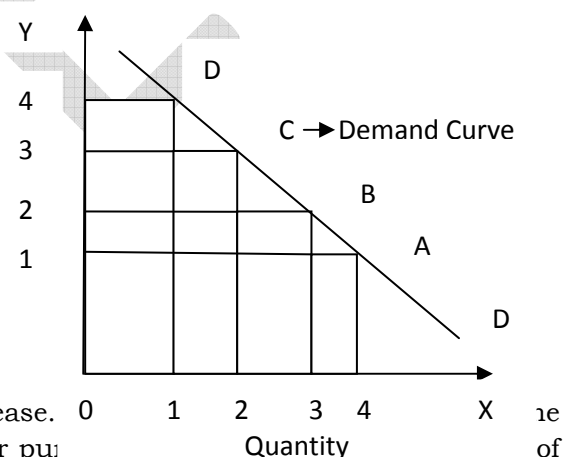
| Price of ice-cream Rs | A's Demand 1 | B's Demand 2 | Market Demand 3 (1+2) |
|--------------------------|-----------------|-----------------|--------------------------|
| 1 | 4 | 5 | 4+5=9 |
| 2 | 3 | 4 | 3+4=7 |
| 3 | 2 | 3 | 2+3=5 |
| 4 | 1 | 2 | 1+2=3 |

price of Re 1 then A's demand is for 4 ice-cream cups and B's demand is for 5 ice-cream cups. Thus, the total market demand at Re 1 is 9 cups of ice -cream. But when price rises to Re 2 per cup then market demands falls to 7 ice-cream cups.

Q3. What is demand curve ? why does demand curve slope Down wards?

Demand curve is simply a graphic representation of demand schedule expressing the relationship between different quantities demanded at different possible prices of a commodity.

In fig I 'OX' we measure demand and along OY the price by joining the points DCBAAD, we get DD, the demand curve. It comes from upwards to downwards and from left to right because the force behind the demand curve is utility and as we consume more of the commodity the utility goes on falling, that is the reason why demand curve slopes down wards from left to right. Another reason why demand curve slopes downwards is that with a fall in price of commodity, people who did not use it before will start demanding it and using it. Old consumers will be tempted to buy more because of the fall in its price. Hence demand will increase. When the price of a commodity falls, the income of the consumer will go up. He can either purchase more of the commodity with the same money or the same quantity with less money. It is called income effect of price reduction. Moreover, there is what is called substitution effect as a result of a fall in the price of a commodity because consumers will replace other commodities which are costly with the commodity which is cheaper and whose price has fallen. As a result of all these factors, more and more commodity will be purchased and demanded and the demand curve will slope from upwards to down wards and from left to right.



Q4. Explain the law of Demand with help of demand curve & demand schedule?

The law of demand states that, other things being equal, the demand for a good extends with a decrease in price and contracts with an increase in price. In other words there is an inverse relation ship between quantity demanded of a commodity and its price, provided other factors influencing demand remain unchanged. The term other things being equal implies that income of the consumer; his tastes and pre ferences and prices of other related goods remain constant. Law of demand may be explained with the help demand schedule and demand curve.

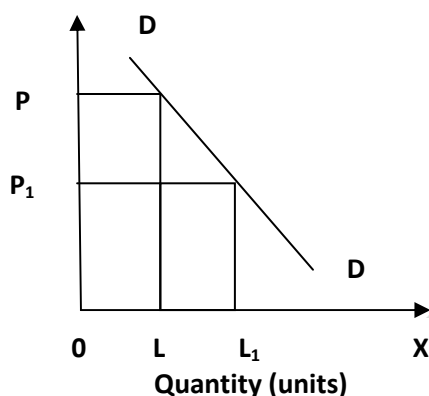
| Price (Rs) | Quantity (units) |
|------------------------|---------------------|
| Demand Schedule | |
| 10 | 100 |
| 9 | 150 |
| 8 | 200 |

The schedule shows extension of demand in response to decrease in price of the commodity. Thus,

demand stretches from 100 to 150 units when price reduces from Rs 10 to 9 per unit. It may be further illustrated with the help of demand curve.

In fig II,
demand
OL₁ when
down

Fig.II



demand curve DD shows that for commodity X extends from OL to price falls from OP to OP₁. In fact, ward slope of demand curve is an expression of the law of demand.

Assumption of the law of Demand :-

1. Tastes & preferences of the consumers remain constant.
2. There is no change in the income of the consumer.
3. Prices of the related goods do not change.
4. Consumers do not expect any change in the price of commodity in the near future.

Q5. Explain Elasticity of Demand. Give examples and diagrams to illustrate your answer. Can we measure elasticity?

The concept of elasticity of demand refers to the degree of responsiveness of quantity demanded of a good to a change in its price, or change in income, or change in price of related goods. The change in demand is not always in proportion to change in price. A slight change in price may bring a considerable change in demand. In such a case we say that demand is elastic. Some times a considerable change in price may be followed by a slight or no change in demand. We shall say that the commodity has an inelastic demand or less elastic demand.

In fig 'A' DD is the more elastic demand curve. This elastic demand curve slopes down wards from upwards & runs parallel to OX along which we measure demand. PM is the original price and the quantity demanded is OM. Suppose price falls from PM to P'M'. As a result of which the demand extends from OM to OM'. The change in price is little (PK) but the change in demand is more (MM'). Therefore it is called more elastic demand.

In fig B, DD is the inelastic demand curve. The original price PM, the demand is OM. Suppose. The price falls to P'M', as a result of which the demand extends to OM'. We find that a considerable change in price (PK) there is very little change in demand (MM'). This is called inelastic demand.

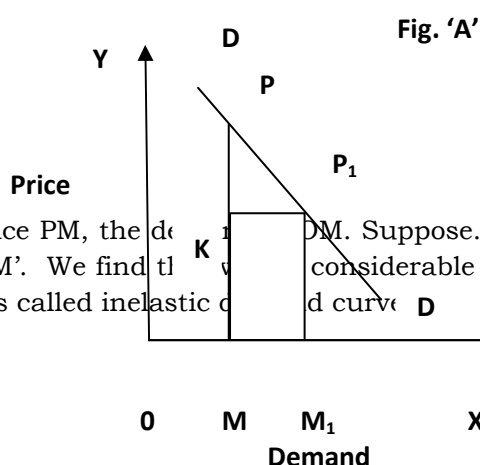
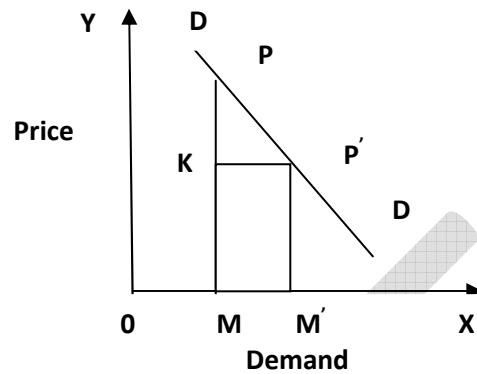
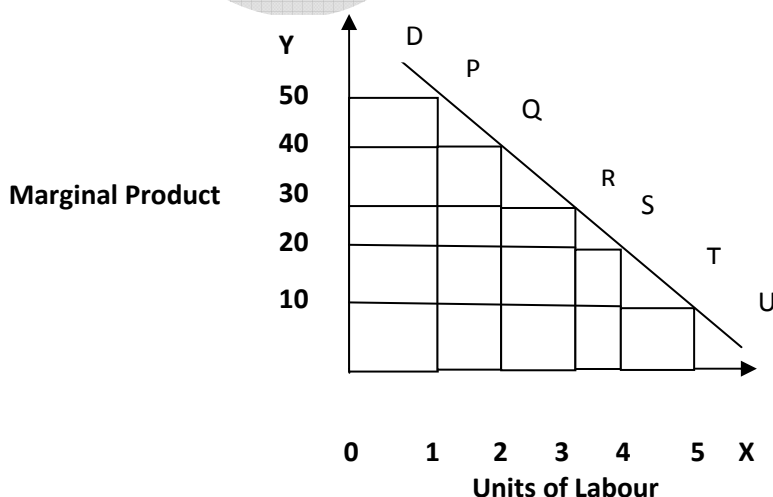


Fig. 'B'**Q6. State and explain the law of Diminishing Returns with the help of diagram?**

Law of diminishing returns is the fundamental law of economics. It was first scientifically presented by prof. Marshall. According to him application of law is restricted to agriculture only. In the opinion of modern economist, this law is applicable in every field in economics, keeping the fixed factors constant, when marginal product diminishes returns. From cost point of view, it is law of increasing cost. Because marginal cost increases with the increases in variable factors. Let us suppose that land is fixed factor and labour is variable factor. If labour employed is one, total product and marginal product are 50. If units of labour are increased to two, total product increases to 90 but the marginal product comes down to 40. Successive doses of labour increases total product to 120, 145, and 165, but the marginal product falls down to 30, 25, and 20. This has been presented by the following schedule.

| Land (in acres) | Labour (in Units) | Total Product (in Quintal) | Marginal Product (in Quintals) |
|-----------------|-------------------|----------------------------|--------------------------------|
| 5 | 1 | 50 | 50 |
| 5 | 2 | 90 | 40 |
| 5 | 3 | 120 | 30 |
| 5 | 4 | 145 | 25 |
| 5 | 5 | 165 | 20 |

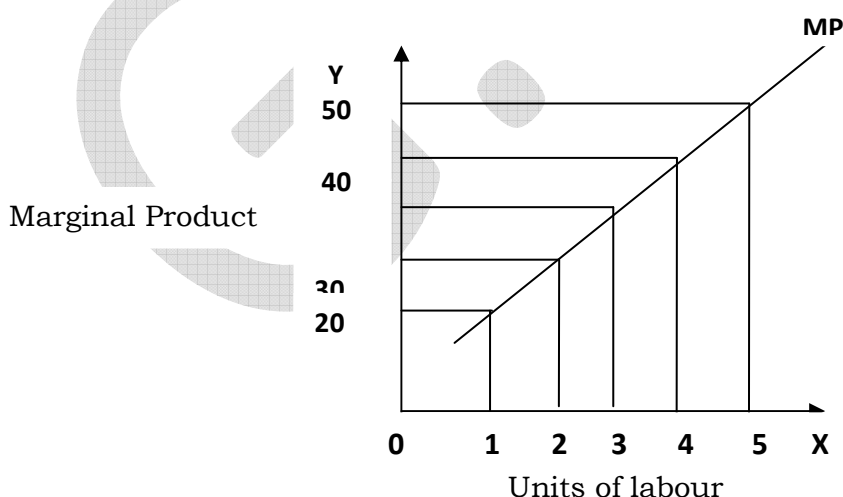


| Units of Labour | Total Product (in units) | Marginal Product (in units) |
|-----------------|--------------------------|-----------------------------|
| 1 | 20 | 20 |
| 2 | 45 | 25 |
| 3 | 75 | 30 |
| 4 | 115 | 40 |
| 5 | 165 | 50 |

Q7. What is the law of increasing Returns? Explain with Diagram.

Maximization of profit is the ultimate end of every production unit. In order to attain this objective the producer expands the level of production. He increases the quantity of variables factors. In the initial stages, he finds that the production is increasing at increasing rates. In other words, marginal and average product goes on increasing. Due to increase in efficiency, level of production and related economics of large scale production, marginal product goes on increasing till the point of optimum combination of factors of production, is achieved. In other words, marginal and average product shows a tendency to rise at increasing rates with input of additional doses of variable cost. Such behavior of product is termed as law of increasing returns. Inversely from cost point of view it is termed as law of diminishing cost showing that suppose that one unit of labour, a variable factor produces 20 units of product and thus total and marginal product will remain the same. Application of 2nd, 3rd, 4th, and 5th doses of inputs results in the marginal product of 25, 30, 40 and 50. It should be noted that the marginal product is increasing at increasing rates. This example is presented in the following schedule.

The above schedule can be diagrammatically presented as under :



Q8. Explain with diagram the law of constant returns.

Law of constant returns is an intermediate stage between the initial stage of increasing return and final stage of decreasing return. The law states that if the quantity of variable factors is changed, average and marginal product do not change, but remain constant. This is why, the law is also known as law of

constant returns, keeping other factors as constant, when production increases in the same proportion as increase in the variable factor it is called as constant returns to scale. Here, in this case with the increase in variable factor, marginal product remains constant marginal cost also remain same, so it termed as law of constant cost also. In the situation of constant returns, marginal product and average product both are same and constant. This is shown in the following schedule and diagram.

| Unit of Labour | Total Product (in units) | Marginal Product (in units) | Average product (in units) |
|----------------|--------------------------|-----------------------------|----------------------------|
| 1 | 25 | 25 | 25 |
| 2 | 50 | 25 | 25 |
| 3 | 75 | 25 | 25 |
| 4 | 100 | 25 | 25 |
| 5 | 125 | 25 | 25 |

The diagram clearly shows that under constant returns marginal product and average product curves become one and the same and it becomes constant (i.e) parallel to X- axis.

