

THEORY OF SUPPLY

Q1. What is Supply?

Ans. Supply of a commodity refers to a schedule (or a table) showing various quantities of a commodity that the producers are willing to sell at different possible prices of commodity at a point of time.

Q2. What is Quantity Supplied?

Ans. Quantity supplied refers to a specific quantity which a producer is ready to sell at a specific price of the commodity.

Q3. Types of supply.

Ans.

1. **INDIVIDUAL SUPPLY**:- It refers to a quantity of a commodity that an individual firm is and able to offer for a sale at given price during a given period of time
2. **MARKET SUPPLY**:- It refers to quantity of a commodity that all firms are willing and able to offer for a sale at a given price during a given period of time

Q4. Difference between Supply and Stock.

Ans.

S.no	Supply	Stock
1	Supply is that part of stock which a producer is willing to bring in the market for sale.	Stock refers to total quantity of a particular commodity that is available with the firm at a particular point of time.
2	Supply is always less than stock.	Stock is always greater than supply.
3	Supply relates to a period of time.	Stock relates to a particular point of time.
4	Supply changes with change in price.	Stock remains in fixed quantity it does not change with change in price.

EXAMPLE:- If a seller has a 50 tonnes of Sugar and he is willing to sell 30 tonnes at the rate of 31 kg supply is 30 tonnes and stock is 50 tonnes.

Q5. What are the determinants or factors of supply? X

Ans.

1. **PRICE OF OTHER COMMODITY**:- As there is a direct relationship between price and quantity supplied. When price increases supply also increases and when price decreases supply also decreases.
2. **PRICE OF OTHER GOODS**:- As resources have alternative uses the quantity supplied of a commodity depends not only on its price but also on the price of other commodities. Increase in price of other goods makes them more profitable in comparison to the given commodity. As a result, a firm shifts its limited resources from production of the given commodity to the production of other goods.

EXAMPLE:- Increase in price of other goods, say wheat, will induce the farmer to use land for the cultivation of wheat. In place of the given commodity, say rice.

Diagram:

THEORY OF SUPPLY

Increase in price of rice production of wheat decrease from Q to Q1. Supply curve shift backward and vice versa.

3. **PRICE OF FACTOR OF PRODUCTION**:- When the amount payable to factor of production and cost of input increases. the cost of production also increased. This decreases the profitability. As the result, the seller reduces the supply of the commodity. On the other hand decrease in prices of factors of production, increases in supply due to fall in cost of production and subsequent rise in profit margin.

Diagram:-

As the price of factor of production decreases supply curve forward from Q to Q1. And when cost of factor of production increases supply curve shift backward because of decrease in profit margin.

4. **STATE OF TECHNOLOGY**:- Technological changes influence the supply of commodity. Advanced improved technology reduces the cost of production which raises the profit margin. It produces the seller to increase the supply. However technological degradation or outdated technology will increase the cost of production and it will lead to decrease in supply.

Diagram:-

Supply curve shift backward due to outdated technology which slow decrease in supply and supply curve shift towards right on the up gradation of technology.

5. **GOVERNMENT POLICY**:- Increase in taxes raises the cost of production and this reduce the supply due to lower profit margin. On the other hand, tax concession and subsidies increase the supply as they make it more profitable for the firm to supply goods.
6. **GOAL OF THE FIRM**:- Supply of a commodity increases only at higher prices as it fulfil the objective of profit maximization. However, with change in trend, some firms are willing to supply more than at those prices which do not maxi mix their profit. The objective of such firms is to capture extensive market and enhance their status and prestige.

Q6. What are the determinants of market supply?

Ans. All factors written in individual supply.

1. **NUMBER OF FIRMS IN THE MARKET**:- When the number of firm In the industry increases, market supply also increases due to large number of producers producing that commodity. However, market supply decreases if some of the firm start leaving the industry due to losses.
2. **FUTURE EXPECTATION REGARDING PRICE**:- If seller expect a rise in price in future, than current market supply will decrease in order to use the supply In future at higher prices. However, the seller fears that if price will fall in future, they will increase the present supply to avoid the losses in future.

THEORY OF SUPPLY

3. **MEANS OF TRANSPORTATION AND COMMUNICATION**:- Proper infrastructure development like improvement in the means of transportation and communication help in maintaining adequate supply of the goods.

Q7. Supply function.

Ans. Like demand, the supply of a commodity also depends on a number of factors. When all the determinants of supply are put together in the form of a functional relationship, it is termed as '**Supply Function**'.

Supply function shows the functional relationship between quantity, supplied for a particular commodity and the factors influencing it.

- **INDIVIDUAL SUPPLY FUNCTION**:- Individual supply function refers to the functional relationship between supply and factors affecting the supply of a commodity. It is expressed as:

$$S_x = f(P_x, P_o, P_f, S_t, T, G)$$

Where,

S_x = Supply of the given commodity x ;

P_o = Price of other goods;

S_t = State of technology;

G Goals of the firm.

P_x = Price of given commodity x ;

P_f = Prices of factors of production;

T = Taxation policy;

- **MARKET SUPPLY FUNCTION**:- It refers to the functional relationship between market supply and factors affecting the market supply of a commodity. Market supply function is expressed as: $S_x = f(P_x, P_o, P_f, S_t, T, C, N, F, M)$

Where,

S_x Market supply of given commodity x ;

P_o - Price of other goods;

S_t = State of technology;

C = Goals of the market;

F =Future expectation regarding P_x ;

M Means of transportation and communication.

P_x = Price of the given commodity x ;

P_f = Prices of factors of production;

T = Taxation policy;

we N = Number of firms;

Q8. What is supply schedule and its types?

Ans. Supply 'schedule is a tabular statement showing various quantities of a commodity being supplied at a various level of price, during a given period of time.

❖ **TYPES**:-

1. **INDIVIDUAL SUPPLY SCHEDULE**:- It refers to a tabular statement showing various quantities of a commodity that a producer is willing to sell at various level of price during a given period of time.

Price	Supply
1	5
2	10
3	15
4	20
5	25

2. **MARKET SUPPLY SCHEDULE**:- It refers to a tabular statement showing quantities of a commodity that all producer are willing to sell at various level of price during a given period of time.

Price	A	B	Market supply (A+B)
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THEORY OF SUPPLY

1	5	16	21
2	10	20	30
3	15	25	40
4	20	35	55
5	25	40	65

Q9. What is supply curve and its types?

Ans. Supply curve refers to a graphical representation of a supply schedule.

❖ TYPES:-

- a. INDIVIDUAL SUPPLY CURVE:- It refers to a graphical representation of individual supply schedule.

Diagram:

- b. MARKET SUPPLY CURVE:- It refers to a graphical representation of market supply schedule.

Diagram:

Q10. Why Market supply curve is flatter?

Ans.. Market supply curve is flatter than all individual supply curves. It happens because with a change in price, the proportionate change in market supply is more than the proportionate change in individual supplies

Q11. Discuss slope of supply curve.

Ans. As stated before slope of a curve is defined as the change in the variable on the Y-axis divided by the change in the variable on the X-axis. So, the slope of the supply curve equals the change in price divided by the change in quantity.

i.e. Slope of supply curve = $\frac{\text{Change in price}}{\text{Change in quantity}}$

Change in quantity

- Due to direct relationship between price and supply, the supply curve slopes upwards. So, slope is positive.
- Slope of supply curve measures the flatness or steepness of the supply curve. So, it is based on the absolute change in price and quantity.

Diagram:

Example:- When price rises from Rs. 4 to Rs 8, then quantity supplied increases from 2 units to 4 units. In such a case, the slope of supply curve will be:

Slope of supply curve = $\frac{\text{Change in price}}{\text{Change in quantity}} = \frac{8-4}{4-2} = 2$

THEORY OF SUPPLY

Change in quantity 4-2

Q12. Explain the law of supply?

Ans. The states that there is direct relationship between price and quantity supply keeping other factor consist. It means when price increases supply also increases and vice versa.

❖ ASSUMPTIONS OF LAW:-

- Prices of other goods is constant.
- No change in technology.
- Prices of factor of production remain same.
- No change in taxation.

Price	Quantity
1	10
2	20
3	30
4	40
5	50

In the above table and diagram it shows that as price increases, supply also Increases. When price was OP the quantity supplied was OQ. As price increases to P1 to Q1 supplied also increases. Supply curve is a upward sloping.

Q13. Explain the reasons for the law of supply? / Why more is supply at high Price?

Ans.

- A. **PROFIT MOTIVE**:- The basic aim of producer while supplying a commodity is to secure maximum profits when price of commodity increases without any change in cost, it raises his profits. So producer will increase the supply. On the other hand, with fall in price, supply also decreases as profit margin decreases.
- B. **CHANGE IN NUMBER OF FIRMS**:- A rises in price induces the other producer to enter into the market to produce the given good to earn the profits. With increase in number of firms , the market supply increase. However, if the price start falling, some weak firm may not able to survive at low price and will leave the market and reduce the supply as the number of firms decreases.
- C. **CHANGE IN STOCK**:- When the price of good increases. The sellers are ready to supply more good from their stock. However, relatively at lower price, the producer would not release the quantity from stock. This start increasing their inventories, with the view that price may rise in near future.

Q14. What are the exceptions to the law of supply?

Ans.

- a. **FUTURE EXPECTATION**:- If a seller expect a fall in price in future in this situation the seller will be willing to sell more at present at a lower price. However, if they expect the price to rise in the future. They would reduce the supply of commodity in present. So, to increase the supply in future at high price.
- b. **AGRICULTURAL GOODS**:- Law of supply does not apply to agricultural goods. As their production depend upon the climatic condition. If due to unforeseen change in weather. The production of goods will be low their supply cannot be increased even at high price.

THEORY OF SUPPLY

- c. **PERISHABLE GOODS**:- In case of perishable goods like vegetable, fruit seller will be ready to sell more even if prices are falling. It happen because seller cannot hold such goods for long.
- d. **RARE ARTICLES**:- Rare articles and pernicious articles are also outside the slope of law of supply.

Example:- Supply of rare articles like painting of Monalisa cannot be increased if their prices increased.

- e. **BACKWARD COUNTRIES**:- In economically backward countries production and supply cannot be increased with rise in price due to shortage of resources.

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