Lesson – 19
Supply

Summary

The firms produce goods and services which are demanded by the households for the satisfaction of their wants. Firms have to incur some expenditure on the purchase of inputs required for producing the goods and services. They get revenue by selling these goods and services. In this process, the firms have an objective of earning maximum profit. Supply is a fundamental economic concept that describes the total amount of a specific good or service that is available to consumers. The focus of this chapter is to understand why a firm or a seller is willing to sell its product in the market.
Supply refers to the amount of a good or service that the producers are willing and able to offer to the market at various prices during a period of time. There are two important aspects of supply: Supply refers to what is offered for sale and Supply is a flow.

Definition of Supply

- Supply of a commodity by a firm or seller may be defined as the quantity of a commodity that a firm or seller offers for sale at a given price during a given time period.

The definition of supply includes-

(i) the quantity of the commodity that a firm is willing to supply
(ii) the price at which it is willing to supply that quantity and
(iii) the time period during which it is willing to supply that quantity.

Factors Determining Supply or Determinants of a good

Six factors are as follow to determine supply of a goods-

- Price of commodity
- Price of other related good
- Price of inputs/factors
- Taxation policy of government
- Objective of the firm
- Technology of production

Supply Function

When the relationship between quantity supplied and the determinants of supplied is expressed mathematically in an equation, it is called a supply function. So a supply function can be expressed as –

$S_n = f(P_n, P_r, P_f, T, T_r, G)$

Where,

S_n = Supply of commodity n

P_n = Price of the commodity n

P_r = Price of other related goods

P_f = Price of inputs/factor

T = Technology of production

T_r = Government policy or tax rate

G = Goal or objective of the producer.

Individual and Market Supply

Individual Supply

- Individual supply refers to the quantity of a commodity which an individual firm is willing to sell at a given price during a given period of time.

Market Supply

- Market supply can be defined as the horizontal summation of supply of all the individual firms in the market.

Supply Schedule

- Supply schedule is a table showing different quantities of a commodity that a firm is willing to sell at different prices during a given period of time.

Individual Supply Schedule

- Individual supply schedule refers to a tabular statement showing various quantities of a commodity that a producer is willing to sell at various levels of price, during a given period of time.

Price(Rs.)	Quantity supplied of a good X (Units)
1	15
2	20
3	25
4	30
5	35

Market supply schedule

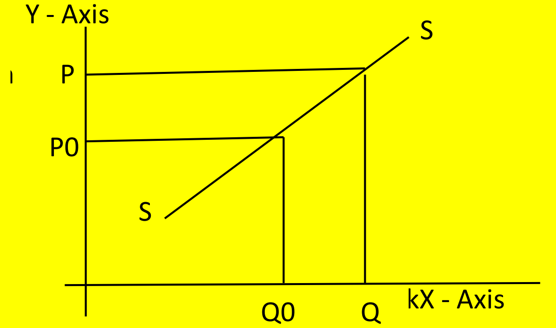
- It refers to a tabular statement showing various quantities of a commodity that all the producers are willing to sell at various levels of price, during a given period of time. Horizontal summation of supply schedules is known as market Supply schedule.

Market supply schedule

Price (Rs.) Px	Individual Supply (units) SA	Market Supply (units) SB	Market Supply (units) {SA+SB)
1	25	10	35
2	30	20	50
3	35	25	60
4	40	35	75
5	45	40	85

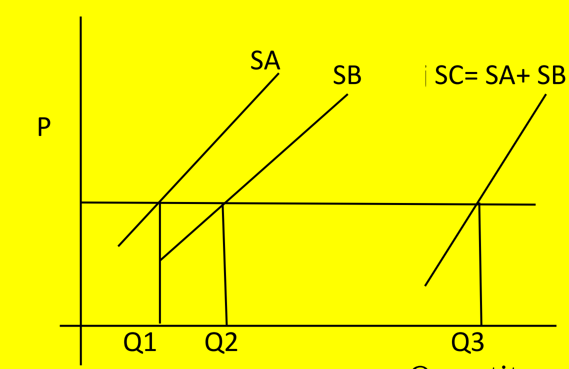
Market supply is obtained by adding the supplies of suppliers A and B at different prices.

Individual Supply Curve



Market Supply Curve

Price



Quantity

Law of Supply

Statement –

- Law states that there is a direct relationship between price and quantity supplied of a commodity, other factors remain constant.

Assumptions of the Law of Supply

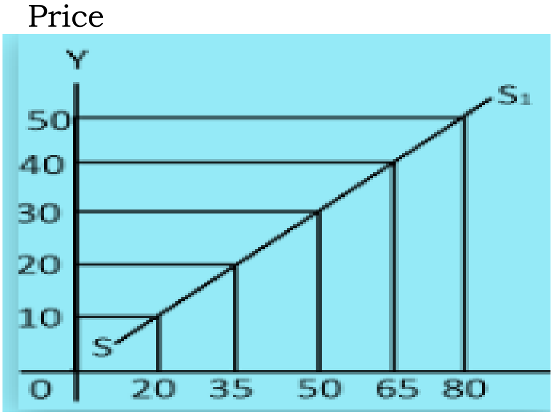
- Price of other related goods should remain the same.
- There should be no change in the price of inputs (factors).
- Technology of production should not change.
- There is no change in the taxation policy of the government.
- Objective of the firm should not change.

Individual Supply Schedule

Price(Rs.)	Quantity supplied of a good X (Units)
10	20
20	35
30	50
40	65
50	80

Individual Supply Curve

Price



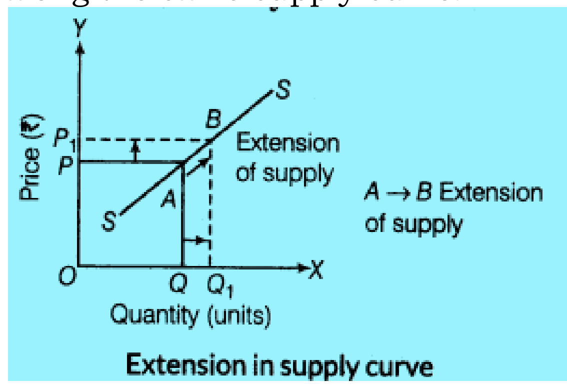
Movement along Supply Curve and Shift in Supply

Movement along Supply Curve

- Extension of Supply and
- Contraction of Supply.

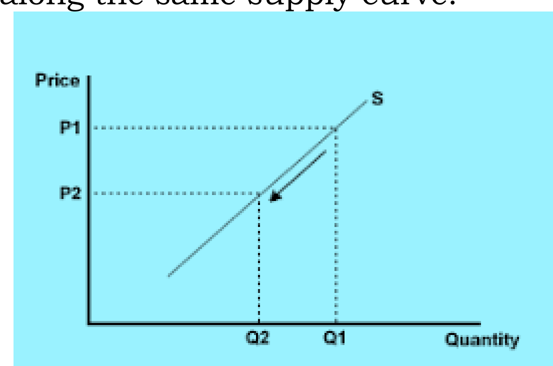
Extension of Supply

Expansion of supply is shown through an upward movement along the same supply curve.



Contraction of Supply

Expansion of supply is shown through an downward movement along the same supply curve.



Shift in Supply

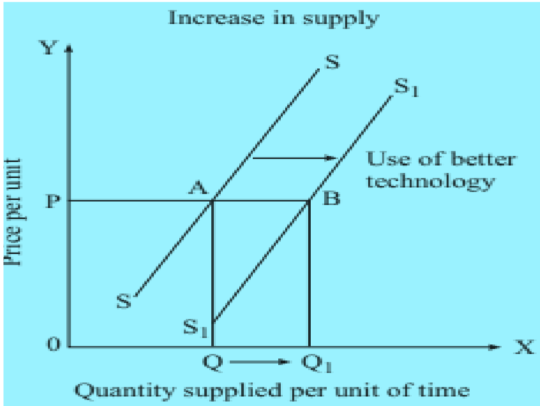
- Increase in Supply
- Decrease in Supply

If there is change in factors other than the price of the commodity, then either more is supplied at the same price or less supplied at the same price. In such cases, the price of the commodity remains constant but there is a change.

Increase in Supply

In this situation supply curve shift to right from its original position due to factors other than price.

Increase in Supply

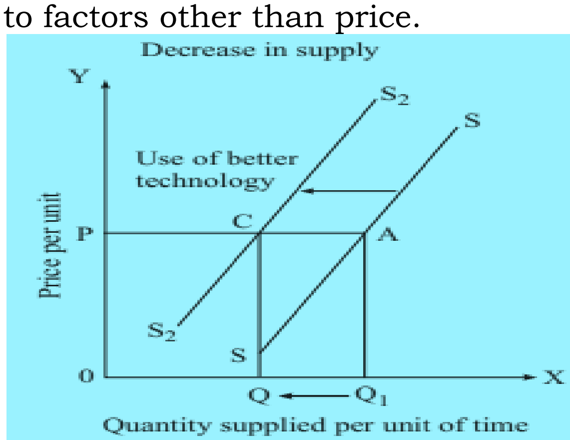


Main factors causing increase in supply or rightward shift of supply Curve -

- Fall in the price of other related goods
- Fall in the price of inputs/factors
- use of better technology in production
- Decrease in the rate of excise duty by government
- If the objective of producer changes from profit maximization to sales maximization

Decrease in Supply

In this situation supply curve shift to left from its original position due to factors other than price.



Main factors causing increase in supply or leftward shift of supply Curve.

- Increase in the price of other related good.
- Rise in the price of inputs/factors.
- use of inferior technology in production
- Increase in the rate of excise duty by the government
- If the objective of the producer changes from soles maximization to profit maximization.

Evaluate Yourself

Q. Mention supply function and give brief description of various components.

Q. Distinguish between decrease in supply and contraction of supply.

Q."Horizontal summation of individual supply curves is known as market supply curve." Explain.

Q. Explain the concept supply schedule and a supply curve.