



JECRC Foundation



**JAIPUR ENGINEERING COLLEGE
AND RESEARCH CENTRE**

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTER

Class – B.Tech Civil (IV SEM)

Subject – Managerial Economics & Financial
Accounting (MEFA)

Unit – 2

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Professor)

VISION AND MISSION OF INSTITUTE

VISION OF INSTITUTE

To become a renowned centre of outcome based learning and work towards academic professional ,cultural and social enrichment of the lives of individuals and communities

MISSION OF INSTITUTE

Focus on evaluation of learning ,outcomes and motivate students to research aptitude by project based learning.

- Identify based on informed perception of indian ,regional and global needs ,the area of focus and provide platform to gain knowledge and solutions.
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- Offer opportunities for interaction between academic and industry .
- Develop human potential to its fullest extent so that intellectually capable and imaginatively gifted leaders may emerge.

VISION AND MISSION OF DEPARTMENT

Vision

To become a role model in the field of Civil Engineering for the sustainable development of the society.

Mission

- 1)To provide outcome base education.
- 2)To create a learning environment conducive for achieving academic excellence.
- 3)To prepare civil engineers for the society with high ethical values.

Introduction, Objective and Outcome of MEFA

Objective:

The primary purpose of the study of Fluid mechanics is to develop the capacity to understand important basic terms used in fluid mechanics, understand hydrostatics and buoyancy with practice of solving problems. Student could be able to understand Kinematics of flow and fluid dynamics, Bernoulli's equation and laminar flow with practice of solving problems in practical life for the benefit of society and mankind.

Outcomes

- To understand the basic concepts of economics.
- To understand the relation between demand and supply.
- To learn the concepts of production, cost analysis and market supply strategies.
- To understand financial statement analysis.

Defination of supply

The term '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.

Determinant of Supply

1. Price of the Good

- Other things being equal, the higher the relative price of a good the greater the quantity of it that will be supplied. This is because goods and services are produced by the firm in order to earn profits.

2. Prices of Related Goods

- If price of wheat rises, the farmers may shift lands to wheat production and away from corn and soyabeans.

3. Prices of factors of Production

- A change in the price of one factor of production will cause changes in the relative profitability of different lines of production and will cause producers to shift from one line to another and thus supplies of different commodities will change.

4.State of Technology

- Inventions and innovations tend to make it possible to produce more or better goods with the same resources, and thus they tend to increase the quantity supplied of some products and to reduce the quantity supplied of products that are displaced.

5. Government Policy

- The production of a good may be subject to the imposition of commodity taxes such as excise duty, sales tax and import duties

LAW OF SUPPLY

- The law of supply can be stated as : Other things remaining constant, the quantity of a good produced and offered for sale will increase as the price of the good rises and decrease as the price falls.

Table 8 : Supply Schedule of Good 'X'

Price (₹) (per kg)	Quantity supplied (kg)
1	5
2	35
3	45
4	55
5	65

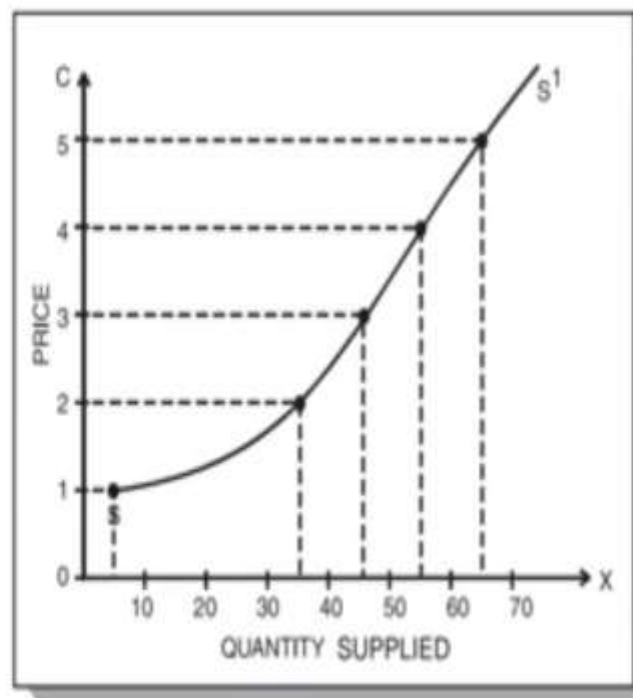





Fig. 19 : Supply Curve

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1. SHIFTS IN SUPPLY CURVE
 2. MOVEMENTS ON THE SUPPLY CURVE
 3. ELASTICITY OF SUPPLY
 4. EQUILIBRIUM PRICE



Shift in Supply Curve

- When the supply curve bodily shifts towards the right as a result of a change in one of the factors that influence the quantity supplied other than the commodity's own price, we say there is an increase in supply.
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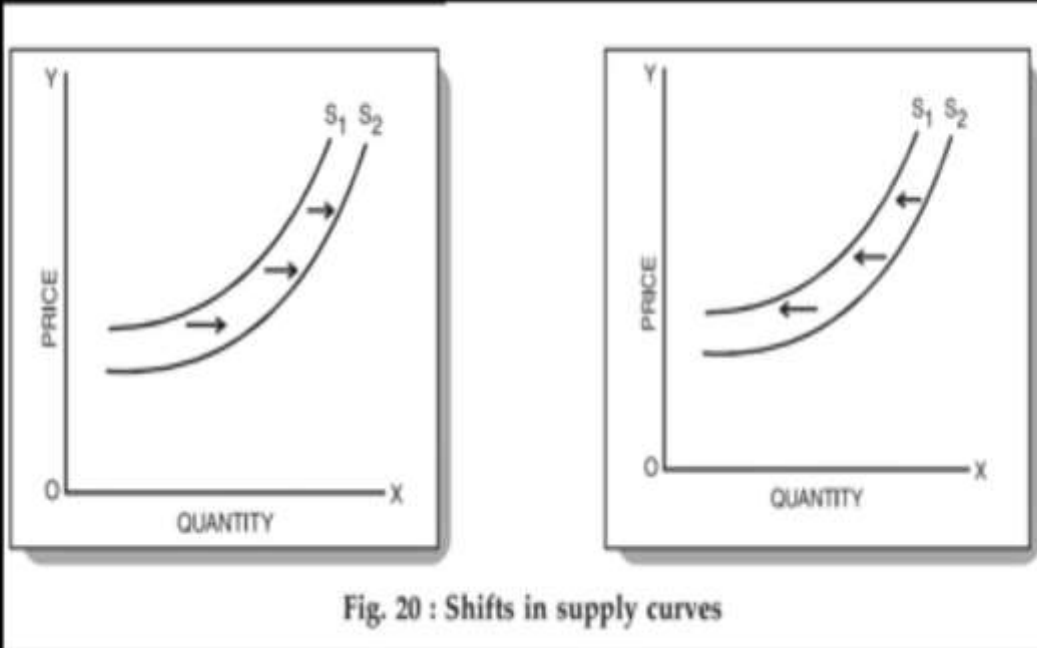
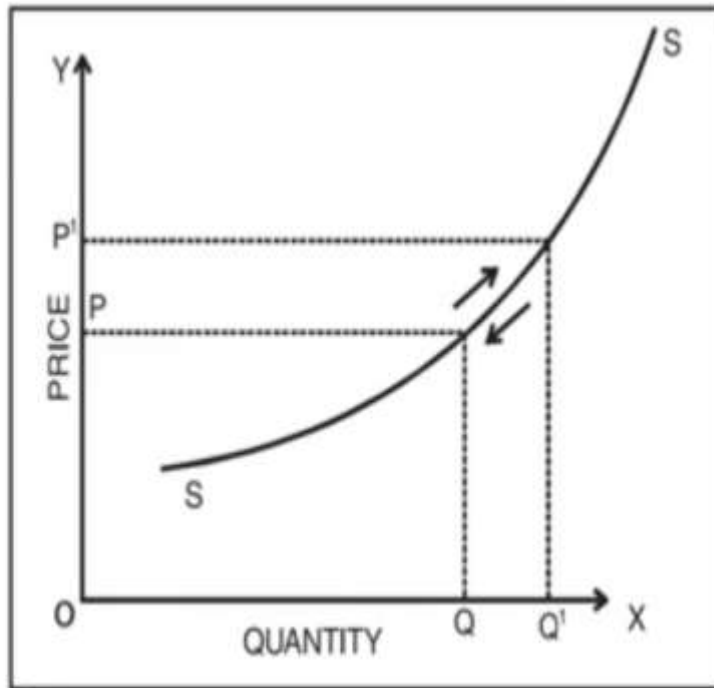


Fig. 20 : Shifts in supply curves

MOVEMENTS ON THE SUPPLY CURVE

- When the supply of a good increases as a result of an increase in its price, we say that there is an increase in the quantity supplied and there is an upward movement on the supply curve.



Elasticity of supply

- The elasticity of supply is defined as the responsiveness of the quantity supplied of a good to a change in its price

$$E_s = \frac{\text{Percentage change in quantity supplied}}{\text{Percentage change in price}}$$

$$\text{or } \frac{\frac{\text{Change in quantity supplied}}{\text{quantity supplied}}}{\frac{\text{change in price}}{\text{price}}}$$

$$\text{or } \frac{\frac{\Delta q}{q}}{\frac{\Delta p}{p}} = \frac{\Delta q}{\Delta p} \times \frac{p}{q}$$

$$\frac{\Delta q}{q} = \frac{\Delta p}{p} \times \frac{p}{q}$$

Where q denotes original quantity supplied.

Δq denotes change in quantity supplied.

p denotes original price.

Δp denotes change in price.

Example:

- a. Suppose the price of commodity X increases from ₹ 2,000 per unit to ₹ 2,100 per unit and consequently the quantity supplied rises from 2,500 units to 3,000 units. Calculate the elasticity of supply.

$$\begin{array}{ll} \text{Here } \Delta q &= 500 \text{ units} & \Delta p &= ₹ 100 \\ p &= ₹ 2000 & q &= 2500 \text{ units} \end{array}$$

$$\begin{aligned} \therefore E_s &= \frac{500}{100} \times \frac{2000}{2500} \\ &= 4 \end{aligned}$$

\therefore Elasticity of Supply = 4.

Type of Supply elasticity

- Perfectly inelastic supply
- Relatively less-elastic supply
- Relatively greater-elastic supply
- Unit-elastic
- Perfectly elastic supply

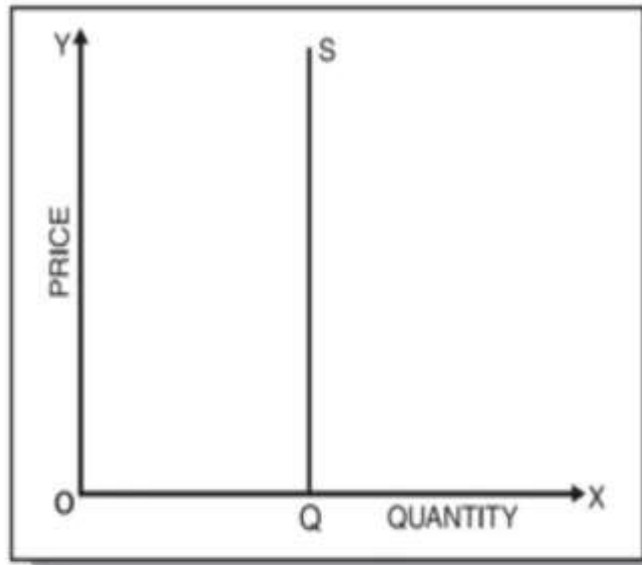


Fig. 22 : Supply curves of zero elasticity

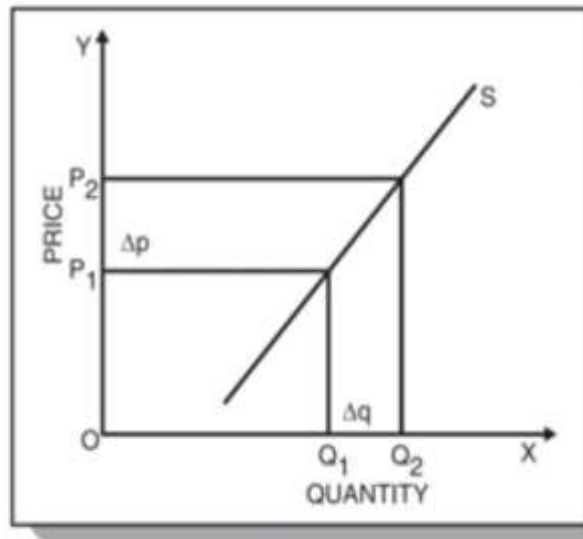


Fig. 23 : Showing relatively less elastic supply

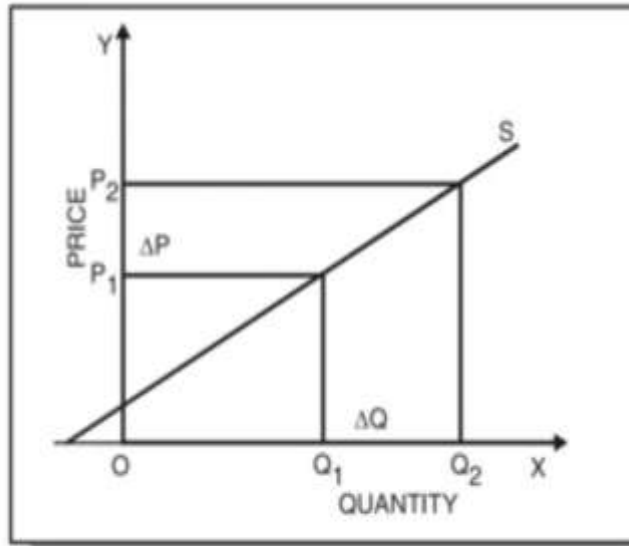


Fig. 24 : Showing relatively greater elastic supply

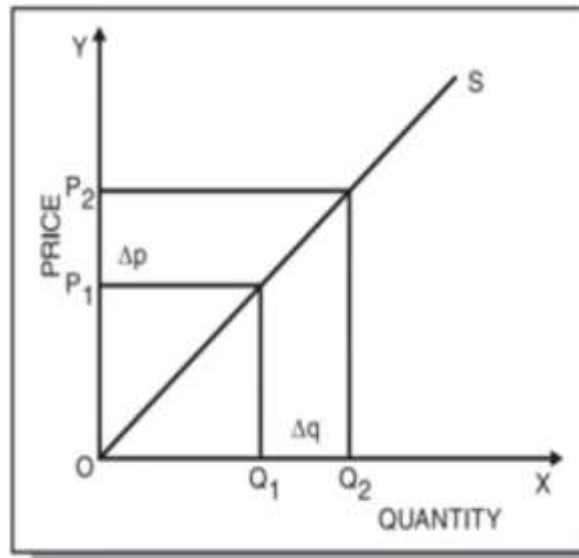


Fig. 25 : Showing unitary elasticity

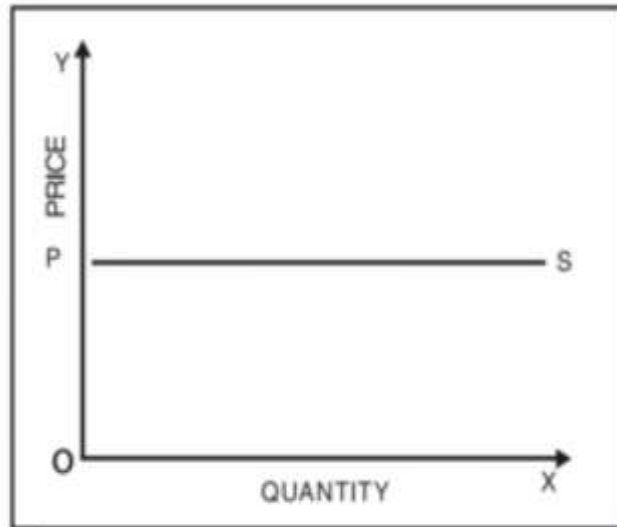


Fig. 26 : Supply curve of infinite elasticity

$$E_s = \frac{q_1 - q_2}{q_1 + q_2} \times \frac{p_1 + p_2}{p_1 - p_2}$$

Where p_1, q_1 are original price and quantity and p_2, q_2 are new price and quantity supplied.

Thus, if we have to find elasticity of supply when $p_1 = ₹ 12$, $p_2 = ₹ 15$, $q_1 = 20$ units and $q_2 = 50$ units.

Then using the above formula, we will get supply elasticity as :

$$E_s = \frac{20 - 50}{20 + 50} \times \frac{12 + 15}{12 - 15}$$

$$= \frac{30}{70} \times \frac{27}{3}$$

$$= +3.85$$

Equilibrium price

- Equilibrium refers to a market situation where quantity demanded is equal to quantity supplied. The intersection of demand and supply determines the equilibrium price. At this price the amount that the buyers want to buy is equal to the amount that sellers want to sell. Only at the equilibrium price, both the buyers and sellers are satisfied.

Supply and Demand Schedule

Price	Quantity Demanded	Quantity Supplied
5	6	31
4	12	25
3	19	19
2	25	12
1	31	6

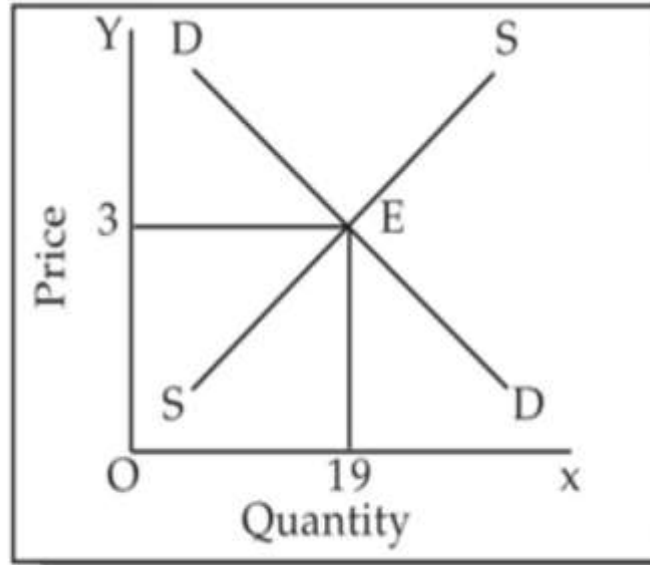


Fig. 27 : Equilibrium Price