5. Supply Analysis

Q:1 Explain the Meaning of Supply and the Law of Supply?

(A) **Supply:-** "Supply means amount of Commodity that Producers are able and willing to offer for sale during a given period of time."

Stock is the Source of Supply. Stock of Commodity is a Fund while Supply is Flow.

Supply is a part of stock. It can be Less than or Equal to the Stock.

In case of Durable goods, stock can be greater than Supply as durable goods can be stored in godowns

Example- Mobile, T.V, Car, Scooter, furniture etc.

But in case of Perishable goods there is no difference between stock and supply because Perishable goods Cannot stored for Long Period

Example Fruits, Vegetables, Flowers, Milk, bread, meat, fish etc.

(B) **Reservation Price:-** "Reservation Price is the Minimum Price which the Seller must get in order to offer a part or whole stock of goods for sale."

Reservation Price greatly affect the supply.

When Reservation Price is below Market Price, Seller

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is not willing to sell more goods.
But if Market Price is greater than Seller's Reservation Price then selling will be willing to sell more goods.

(C) Factors Affecting Reservation Price :-

1. **Cost of Production :-** Higher the Cost of Production, higher will be the Reservation Price.
2. **Need for Cash :-** When seller is in need For Cash then he will Reduce the Reservation Price.
3. **Cost of Storing :-** If the Cost of Storing in godowns is Lower then seller will Keep higher Reservation Price.
4. **Nature of Commodity :-** Seller fix Lower Reservation Price For Perishable gouds because it require Costly storage facility.
But Seller Fix higher Reservation Price for Durable goods because they need Ordinary storage Facility.

(D) Law of Supply :-

The Law of Supply was developed by Alfred Marshall in his book - 'Principles of Economics' in 1890. He explained Producer behaviour in the market.

According to Marshall -

" Other things being equal, Supplier is Ready to supply more Quantity at high Price and Less Quantity at Low Price "

Thus, Price and supply have direct Relationship.

(E) Schedule :-

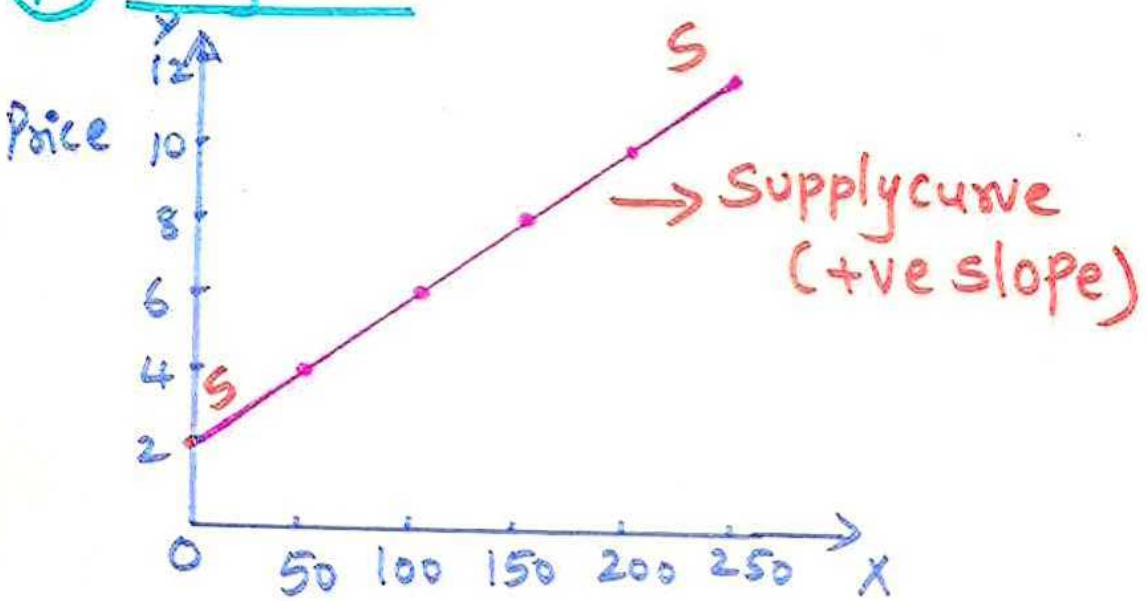
Price Per Unit (₹)	Quantity supplied
2	0
* 4	50
6	100
8	150
10	200
* 12	250

1) In the Schedule we observe that, Seller is ready to supply more at higher Price.

2) When Market Price is below Reservation Price i.e - ₹ 2, Seller is not willing to supply.

3) When Price is very high i.e ₹ 12, Maximum Quantity was supplied by seller.

(F) Diagram :-



1) On X-axis, Quantity supply and on Y-axis Price of commodity are shown.
2) SS is supply Curve Sloping Upward from Left to Right.
3) As Price and supply have direct relationship so supply Curve has Positive Slope.

Q:2 Explain the Individual and Market supply curve?

(A) **Individual supply :-** "Individual Supply shows various quantities of a commodity an individual seller is willing to sell at different Prices."

"Individual supply means supply of single seller at different Prices during a Period of time."

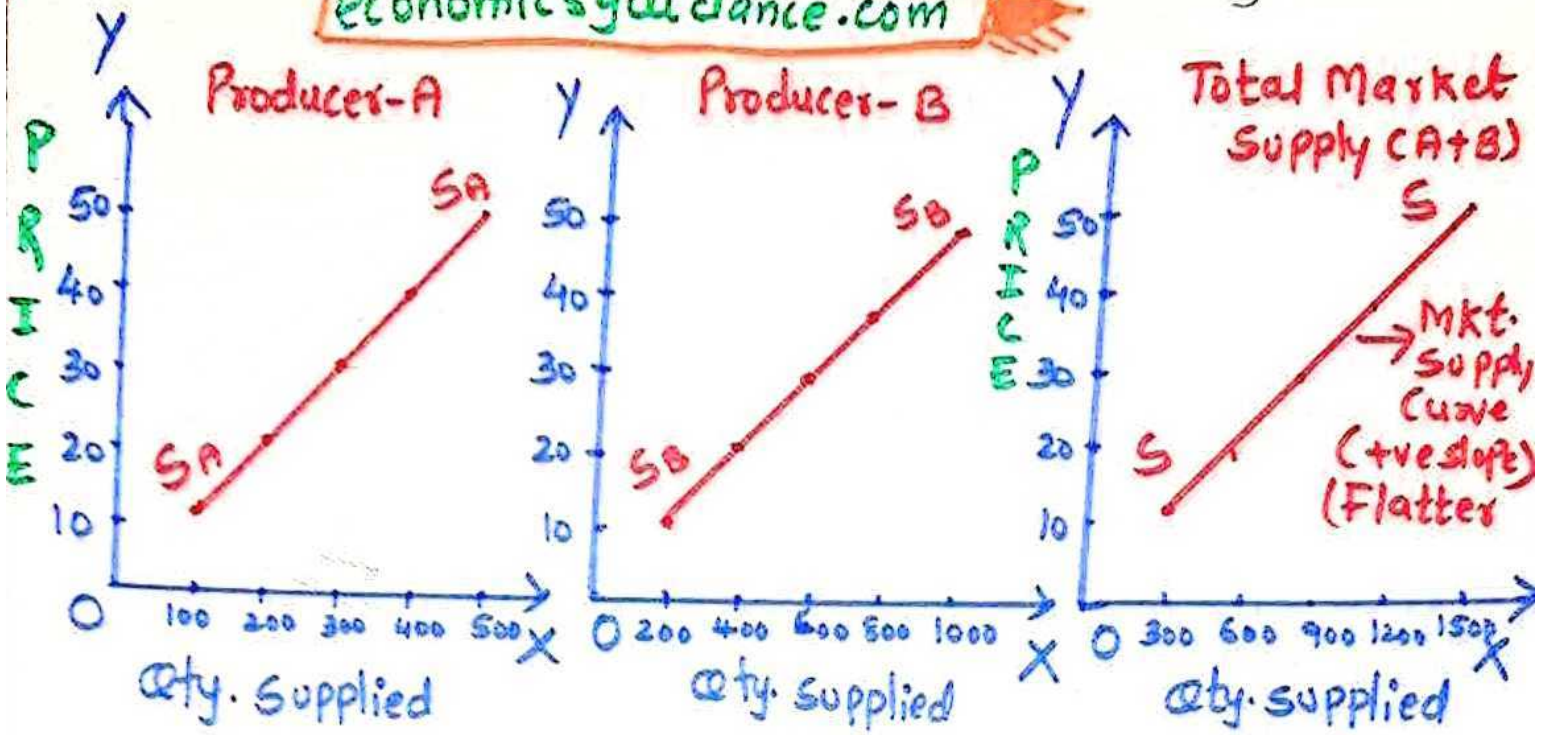
(B) **Market Supply :-** "Market supply is sum total supply of several sellers at different Prices during a Period of time."

Price Per Apple	Quantity Supply		Total Market Supply
	Producer - A	Producer - B	
₹ 10	100	200	300
₹ 20	200	400	600
₹ 30	300	600	900
₹ 40	400	800	1200
₹ 50	500	1000	1500

1] In above Schedule we observe, Producer-A and Producer-B supply different quantity due to different investment. Both sellers are willing to supply more quantity with Rise in Price.

2] When Price is Low, i.e ₹ 10, Very Limited quantity is supplied by Producers i.e 300 Apples only

3] When Price is High i.e ₹ 50, Maximum quantity is supplied by Producers i.e 1500 Apples.



1] In above diagram, S_A is Supply Curve of Producer A which is sloping upward from Left to Right.

2] S_B is Supply Curve of Producer-B which is sloping Upward from Left to Right.

3] SS is Total Market Supply which is derived by horizontal addition of Individual Supply Curves.

4) As Price and Quantity supply have direct Relationship So Supply Curve has Positive slope.

5] Individual supply Curve is Steeper Curve but Market Supply Curve is Flatter.

Q83 Explain the determinants of Supply and Shifts in Supply Curve ?

(A) **Supply :-** "Supply means amount of Commodity which a seller is able and willing to offer for Sale at different Price during a given Period of time."

(B) Determinants / Factors affecting supply :-

1. **Price of Commodity :-** Price is the single largest factor affecting supply of commodity. There is direct relationship between Price and supply.

2. **Price of other Substitutes :-** Price of other related commodities is also important determinant of supply.
   (e.g) If the Price of wheat rises in relation to the Price of Rice, then farmers will prefer to cultivate more wheat and Less Rice.

3. **Cost of Production :-** The cost of factors of Production is one of important determinant of supply.
   (e.g) If cost of Production is Less, the supplier will increase its supply and Vice Versa.

4. **State of Technology :-** The supply of commodity is also affected by Level of Technology. Advanced and modern Technology will always helpful to increase supply.

5. **Infrastructural Facilities :-** Infrastructure Facilities in the Form of Transport, communication, Marketing, Power etc. influence the Production on supply. Better infrastructural facilities will help the Producers to supply more.

(6) **Government Policy :-** Government Policies Like - Licensing Policies, Tax Policy, Subsidies, Industrial Polices etc. may encourage or discourage production and supply of goods and Services.

(7) **Climate :-** Climatic conditions like - Floods, drought, epidemics etc. also affect the supply. Favourable Climate will help the Producers to supply more.

(8) **Seller's Future Expectations :-** Supply is also affected by Sellers Future Expectations

e.g - If Seller expect to rise in Price in near future then he will prefer to supply Less in Present.

(9) **Goal of Producer :-** Generally Producer have two motives - i) Profit Maximisation
ii) To capture Market.

Some Producers supply more at high Price to earn maximum Profit. But Some Producer supply more at Low Price to capture market.

(10) **Self-Consumption :-** Every Producer is also a Consumer. If Producer needs more for Self-Consumption then he can supply Less and Vice Versa.

(11) **Export and Imports :-** In case of Exports, supply of goods in domestic market increase.

But in Case of imports, supply of goods in domestic market increase.

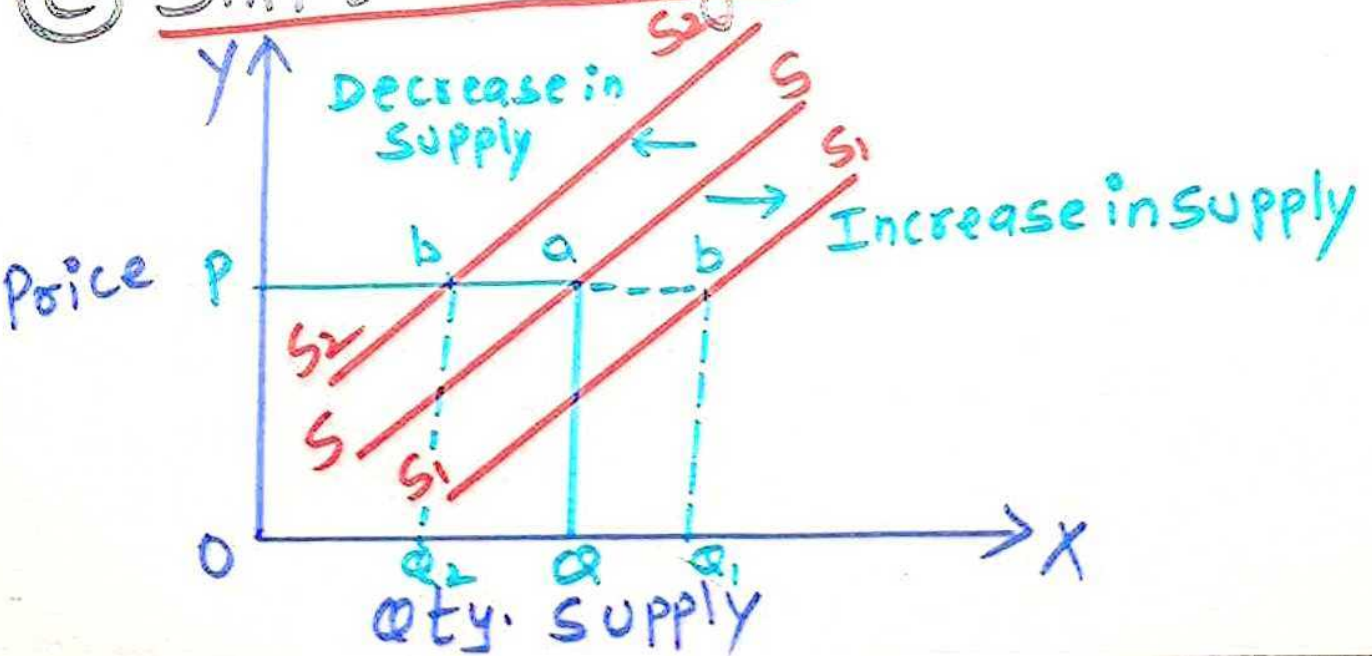
(12) **Nature of Market :-** In Perfect market or in Competitive market, supply of goods is more. But in Monopoly market, supply of goods is Less.

(13) **Availability of Resources :-** Producers Can Supply more goods due to Large and abundant availability of resources and Vice Versa.

(14) **Time Period :-** Producers Can Supply Less in Short-Period and supply more in Long-Period. and in Very Short Period supply remain Constant.

(15) **Scale of Production :-** Producer Can Supply Less at small scale of production and Supply more at Large scale of Production.

(C) **Shift in Supply :-**



"When Change in Supply is found due to change in Factors but Price Remain Constant is called Changes in Demand."

Here demand will shift either Right side or Left side.

In above diagram :-

1) SS is original Supply Curve, sloping upward.
2) S_1S_1 is Increase in supply Curve which is shifted on Right side.
3) S_2S_2 is Decrease in Supply Curve, which is shifted on Left side.

Q:4 Explain Price Elasticity of Supply. and types of Supply Curves ?

(A) Elasticity of Supply / Price Elasticity of supply :-

The Concept of Elasticity of supply is developed by - Alfred Marshall. It measures how much the Quantity supplied respond to Changes in Price or other Variable.

(B) Meaning :-

"Price Elasticity of Supply means degree of Responsivess of Change in Quantity Supply due to Change in Price."

(C) Formula :-

$$\text{Elasticity of Supply} = \frac{\% \text{ change in qty. supply}}{\% \text{ change in Price.}}$$

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$$E_s = \frac{\Delta Q_s}{Q_s} \div \frac{\Delta P}{P}$$

$$E_s = \frac{\Delta Q_s}{Q_s} \times \frac{P}{\Delta P}$$

(D) Types of Price Elasticity of supply :-

There are five types of Elasticity of supply.

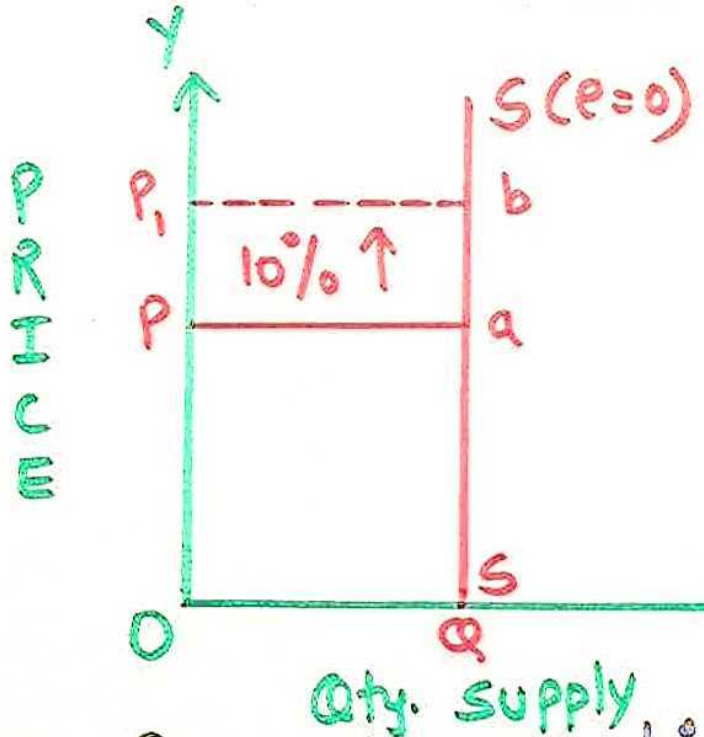
1. Perfectly Inelastic Supply (e=0) :-

"When Change in Price brings no Change in Quantity Supply is called Perfectly inelastic supply"

Example - $E_s = \frac{\%\text{ Change in Qty. supply}}{\%\text{ Change in Price}}$

$E_s = \frac{0\%\text{ rise in supply}}{10\%\text{ rise in Price}} = \frac{0}{10} = 0$

$e = 0$



i) SS is Perfectly inelastic supply curve which has Vertical slope.

ii) It is a Rare phenomenon.

iii) It is Parallel to Y-axis.

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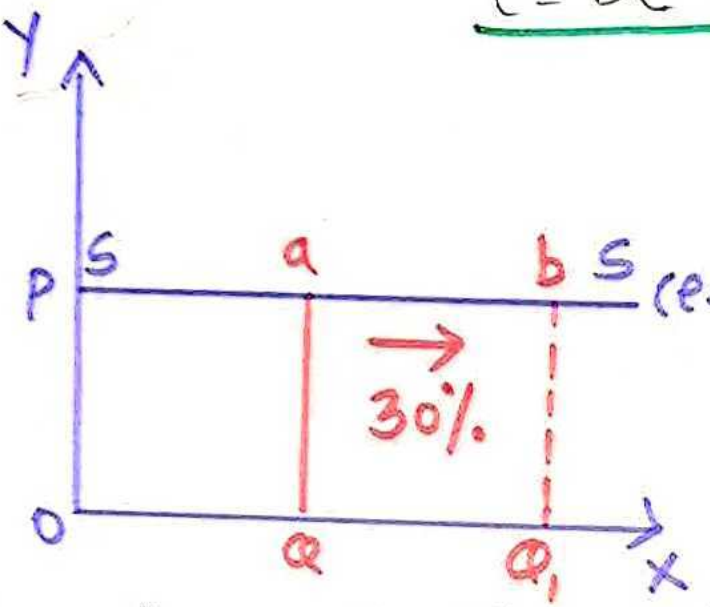
2. Perfectly Elastic supply (e=∞) :-

"When Slight or No Change in price brings Infinite

Change in Quantity supply is called Perfectly Elastic supply."

Example: $Es = \frac{30\% \text{ Rise in supply}}{0\% \text{ rise in Price}} = 30\%$

$e = \infty$



i) SS is Perfectly elastic supply curve. It has Horizontal slope.

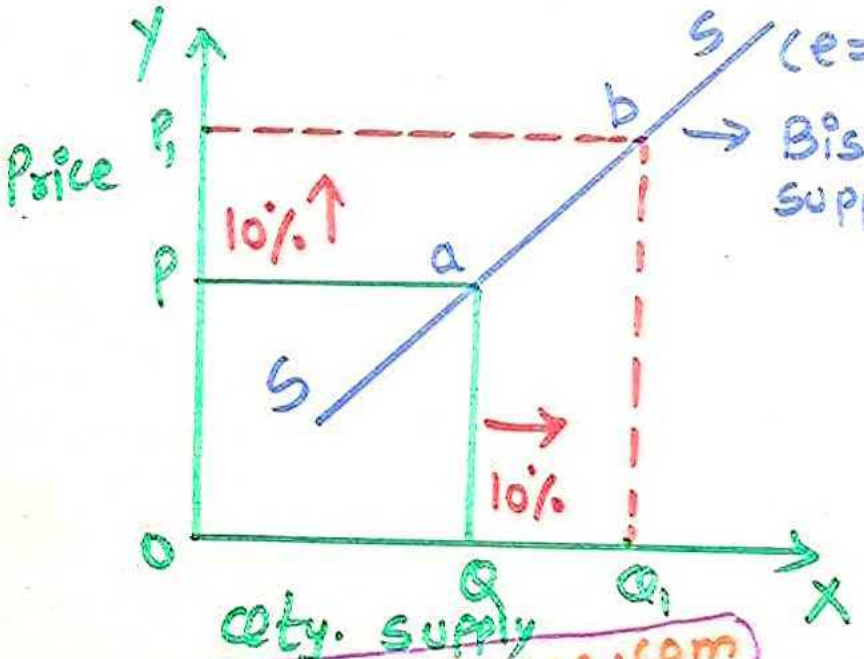
ii) It is Parallel to X-axis.

iii) It is Rare phenomenon.

3] Unitary Elastic Supply (e=1) :-

"When Change in Price brings exactly Same Change in Quantity Supply is Called Unitary Elastic supply."

Example :- $Es = \frac{10\% \text{ rise in supply}}{10\% \text{ rise in Price}} = \frac{10}{10} \therefore e = 1$



i) SS is Unitary Elastic supply Curve which is Sloping Upward From Left to Right

ii) It is also called bisector supply curve because it divide entire area into Two equal Parts.

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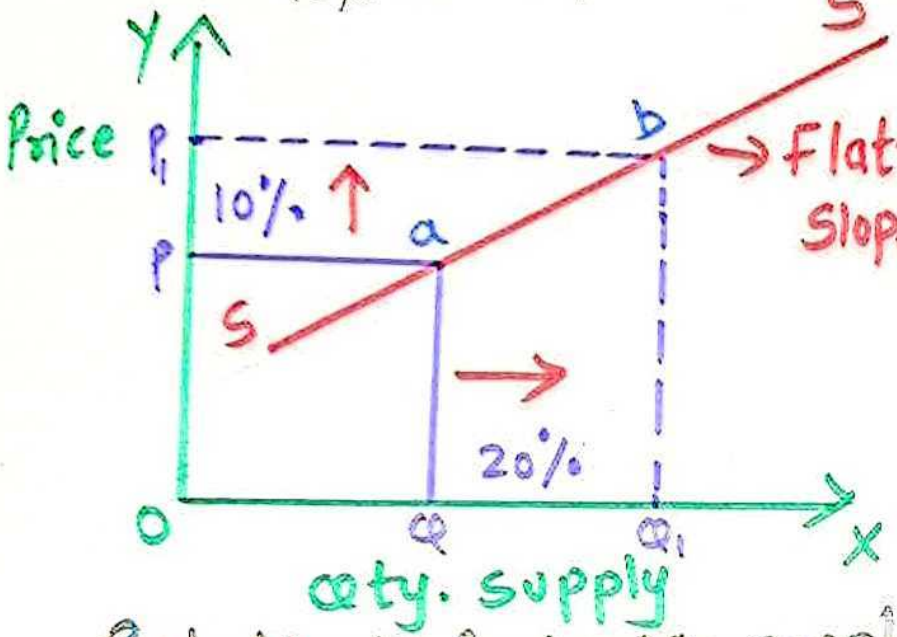
4. Relatively Elastic Supply (e>1) :-

"when Change in Price brings more than Proportionate Change in quantity supply is called Relatively Elastic supply"

$$E_s = \frac{20\% \text{ rise in supply}}{10\% \text{ rise in price}} = \frac{20}{10} = 2 \therefore e > 1$$



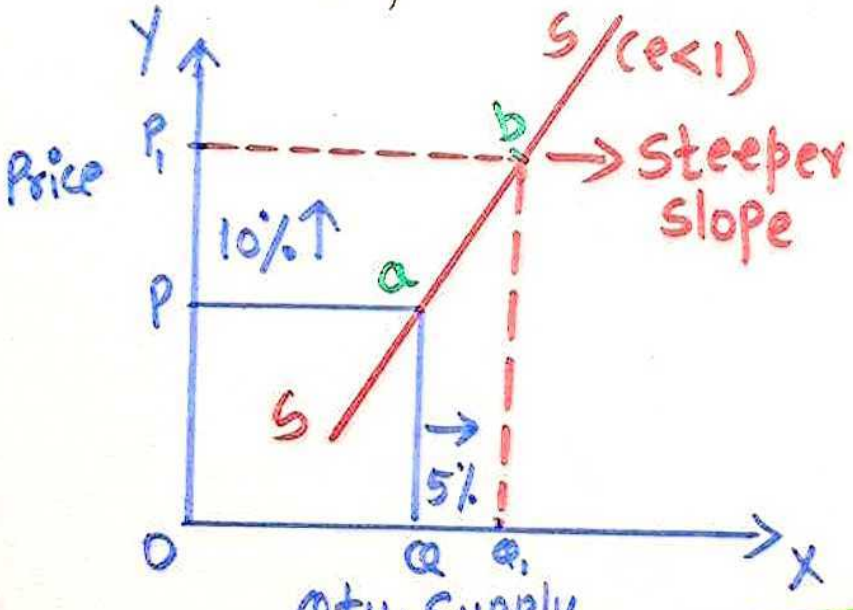
i) SS is Relatively elastic supply curve sloping upward.

ii) It has Flatter slope because change in Price brings more Change in supply.

5. Relatively inelastic supply (e<1) :-

"when Change in Price brings Less than Proportionate Change in quantity supply is called Relatively inelastic supply"

$$E_s = \frac{5\% \text{ rise in supply}}{10\% \text{ rise in price}} = \frac{5}{10} = \frac{1}{2} = 0.5 \therefore e < 1$$



i) SS is Relatively inelastic supply curve sloping upward.

ii) It has steeper slope because Change in Price brings Less Change in supply.

Q:5 Choose the Correct answer :—

1. Reservation Price is the minimum Price which the Seller must get in Order to Offer a part or the whole stock of goods for sale.
a) Reservation b) supply c) selling.

2) Supply refers to the amount of a commodity that Producers are able and willing to offer For sale.
a) able b) willing c) able and willing.

3) According to the Law of supply, the relationship between Price and supply is Positive
a) Positive b) Inverse c) Proportional.

4) Change in Price brings about a movement along the supply Curve.
a) Price b) input Price c) Exports.

5) A Change in Government Policy shift the supply Curve.
a) Price b) Government Policy c) Taste

6) When the Elasticity of supply is Less than one the supply Curve is steeper.
a) steeper b) Flatter c) Vertical.

7) When the supply is Perfectly Elastic, the supply Curve is Horizontal.
a) Vertical b) Horizontal c) Upward sloping.

Q:6 State whether the following statements are True or False. Give Reasons.

1. Reservation Price is the Maximum Price which the Seller must get in order to Offer the goods For sale.

Ans:- False. Reasons: Q:1 - B Part.

2. According to the Law of Supply, there is direct Relationship between Price and Quantity Supplied.

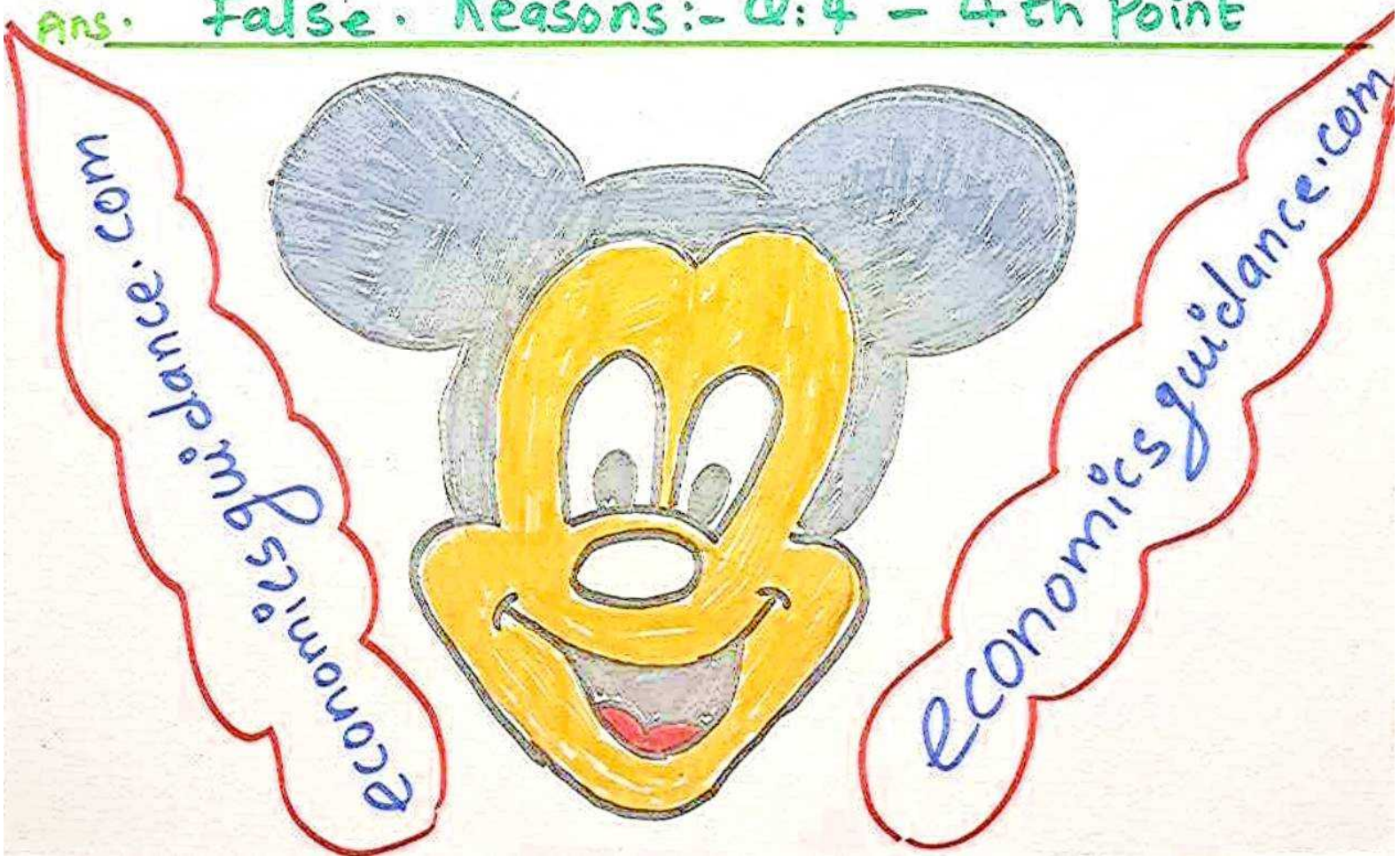
Ans:- True. Reasons: Q:1 - D Part.

3. Change in Price of goods Shift the supply Curve.

Ans:- False. Reasons: Q:3 - C Part.

4. In the Case of Vertical supply Curve with the Change in Price the Quantity Supplied Changes.

Ans:- False. Reasons:- Q:4 - D Part - 1st Point

5. When the Supply Curve is Flatter, the Change in Price brings about a small Change in Quantity Supplied.

Ans. False. Reasons:- Q:4 - 4th Point