# National Institute of Open Schooling <br> Senior Secondary- Economics(318) <br> Lesson 20: Price Elasticity of Supply <br> Worksheet - 20 

1. The description of a firm regarding changes in quantity supplied due to changes in the price of the product is given below as follow-

- percentage change in price is $25 \%$ whereas percentage change in quantity remains zero.
- Percentage change in price is $25 \%$ where as percentage change in quantity supplied is equal to $50 \%$.
- Percentage change in price is $25 \%$ whereas percentage change in quantity supplied is equal to $25 \%$.
- Percentage change in price is $50 \%$ whereas percentage change in quantity supplied $25 \%$.
- Percentage change in price is zero whereas percentage change in quantity supplied is 25\%

On the basis of above information, draw the diagram to show the degrees of elasticity of supply.
2. The price of a commodity changes from P1 to P2 and quantity changes from Q1 to Q2. Find the formula for elasticity of supply using percentage method of calculation.
3. Show the different degrees of elasticity of supply from negative range, positive range and from point of origin. Use diagram for explanation and mention formula for or the same.
4. Sometimes it has been observed that sellers who are selling vegetables and milk sell out their products at a cheaper price. Support the statement with the help of your day to day experiences and example.
5. Calculate elasticity of supply from below mentioned schedule. Calculate elasticity of supply when the price rises from Rs. 30 to Rs.. 40.

| Price per kg (Rs.) | Quantity Supplied (kgs) |
| :--- | :--- |
| 25 | 100 |
| 30 | 200 |
| 35 | 300 |
| 40 | 400 |
| 45 | 500 |

6. At a price of Rs. 10 per unit, the quantity supplied of a commodity is 400 units. If its price Rises to Rs. 12 per unit and quantity supplied rises by $10 \%$, calculate its price elasticity of supply.
7. On the basis of the value of elasticity of supply calculated in Q6, draw the graphical presentation to show the degree of elasticity.
8. Price elasticity of supply for a product is "unity". A firm supplies 25 units of this product at a price of Rs. 5 per unit. If the price of a product rises to Rs. 6 per unit, how much quantity of the product will be supplied by the firm?
9. You are suggested to make a visit to a production unit in your nearby locality and collect the data about increasing cost of production of the firm for one year. Study the data and make a brief description regarding how the profit of the firm is being affected in terms of quantity supplied of a commodity by the firm.
10. A firm has changed its scale of production from short run production to long run production by making variations in various factors of production. In the short run production, the producer has not been able to make variations in quantity supplied of a commodity whereas in the long run, he has been able to make more variations in the quantity supplied of the commodity. Explain how does time factor affect the elasticity of supply.
