

## Lesson 4

Answer to each of the following questions

1. What is meant by Price Elasticity of Demand? How would you measure it?
2. What do you mean by Price Elasticity of Demand? Examine the factors on which price elasticity of demand depends. (Delhi 2004, Foreign 2005)
3. Explain with the help of diagram the concepts of Elasticity of Demand? What is its importance?
4. What do you understand by price elasticity of demand? Under what conditions elasticity is equal to (a) Zero (b) Unitary (c) Less than Unitary (d) More than Unitary.

### NUMERICAL PROBLEMS

1. The price elasticity is 0.5. The % change in quantity is 5. What is the % change in price?
2. The price elasticity is 2. The % change in price is equal to 5. Find the % change in quantity.
3. The price of commodity increases by 5% the demand of commodity falls by 8%. What is the elasticity of demand?
4. The price of a product decreases by 7% the total expenditure on it has gone up by 3.5%. What can be the elasticity of demand?
5. The price of a product goes up by 8%. The total expenditure on the product goes up by 8%. What is elasticity of demand?
6. The quantity demanded of a commodity at a price of Rs. 10 per unit is 40 units. Its price elasticity of demand is  $-2$ . Its price falls by Rs. 2 per unit. Calculate its quantity demanded at the new price.
7. The price elasticity of demand is 2. The % change in price is equal to 5. Find out the % change in quantity.
8. The price of a commodity goes up by 8% and total expenditure of a family goes up by 8%. Find out the price elasticity of demand of commodity.
9. A consumer spends Rs. 250 on a good when its price is Rs. 5 per unit. When the price rises to Rs. 6 per unit, he spends Rs. 240. Calculate price elasticity by percentage method.
10. At a price of Rs. 4 per unit, a consumer buys 50 units of a good. The price elasticity of demand is  $-2$ . How many units will the consumer buy at Rs. 3 per unit?
11. At a price Rs. 6 per unit a consumer buys 50 units of a good. The price elasticity of demand is  $-2$ . At what price will the consumer buy 100 units?
12. At a price of Rs. 8 per unit a consumer buys 40 units of a good. The price elasticity of demand is  $-1$ . Find out the price at which the consumer will buy 60 units.
13. The quantity demanded of a commodity at a price of Rs. 8 per unit is 600 units. Its price falls by 25% and quantity demanded rises by 120 units. Calculate its price elasticity of demand.
14. At a price of Rs. 50 per unit the quantity demanded of a commodity is 1000 units when its price falls by 10 per cent its quantity demanded rises to 1080 units. Calculate its price elasticity of demand.
15. A consumer spends Rs. 70 on a good when its price is Rs. 5 per unit. When price falls to Rs. 4 per unit, he spends Rs. 84. Calculate the price elasticity b