

**National Institute of Open Schooling**  
**Sr. Sec – Economics(318)**  
**Lesson 16: Elasticity of Demand**  
**Work-Sheet 16**

1. A consumer purchases three commodities x, y and z. The description of his purchases is given below as-
  - b) When he purchases commodity X, he finds his total expenditure decreases.
  - c) When he purchases commodity Y, he finds his total expenditure remains constant.
  - d) When he purchases commodity Z, he finds his total expenditure increases.

On the basis of the above description, discuss reasons and degree of elasticity of demand for all these commodities.

2. The price of salt and cigarettes increases by 10%, what will be the effect of quantity demanded? Explain it with the help of graphical presentation.
3. The price of coffee has increased by 10% and resultantly demand for tea has gone up by 25%.

Answer the following questions,

- a) Type of elasticity
  - b) How are these two goods related
  - c) Value of elasticity of demand.
4. Draw a straight line demand curve touching both the axis X and Y. Use a geometrical method for calculating the different degrees of elasticity on that straight line and mention the formula for the same.
  5. A consumer purchases a lot of goods and services to meet his/her requirements. He/she considers many factors while making expenditure on various goods and services. In the light of the above statement, explain different factors affecting elasticity of demand for consumers.
    - a) Nature of commodity
    - b) Availability of substitute
    - c) Time period
    - d) Price level of commodity
  6. Explain the following situations with the help of examples and diagrams
    - a) Perfectly elastic demand ( $E_d = \infty$ )
    - b) Perfectly inelastic demand ( $E_d < 1$ )
    - c) Unitary elasticity demand ( $E_d = 1$ )

7. "Change in income leads to change in quantity demanded". To support the statement, calculate the formula of Income-Elasticity of demand.
8. You are provided with the following information:-

Commodity	Original price	New price	Original demand	New demand
X	10	11	50	45
Y	02	12	10	8
Z	90	92	40	35
W	05	06	25	22

- a) Calculate elasticity of demand for each commodity.
- b) Which commodity has the greatest elasticity and which has the least elasticity?
9. "Concept of elasticity provides a sound basis for the govt. to make policies for essential commodities". To support the statement, give one example with explanation and graph.
10. The market demand for a good at Rs.4 per unit is 100 units. The price rises and as a result its market demand falls to 75 units. Find out the new price if the price elasticity of demand of that good is(-)1.