Elasticity of Demand (Questions) - Numericals

Basics (EASY)

(Q-1) When price is ₹10/unit, demand is 100 units. As the price falls to ₹8/unit, demand expands to 150 units. Calculate elasticity of demand.

Ans- $E_d = 2.5$

(Q-2) When price of sugar is ₹5/kg, its demand is 50 kg. When price rises by ₹5/kg, its demand falls by 10kg. Calculate elasticity of demand.

Ans- $E_d = 0.2$

MODERATE)

(Q-3) The market demand for a good at ₹4/unit is 100 units. Due to increase in price, the market demand falls to 75 units. find out the new price, if $E_d = -1$.

Ans- new price → ₹5

(Q-4) When the price of a good X is ₹5, the consumer buys 100 units of good X. At what price would he be willing to purchase 140 units of good X? $E_d = 2$ (given)

Ans- new price → ₹4

(Q-5) The demand for a good at ₹10/unit is 40 units. price falls by ₹5. If $E_d = -3$, calculate the new quantity demanded.

Ans- 100 units

(Q-6) When price of a commodity falls by 80%, the quantity demanded of it increases by 100%. find out its price elasticity of demand.

Ans → $E_d = 1.25$

(Q-7) When price of a commodity gets doubled, its quantity demanded reduced to half. Calculate the coefficient of price elasticity of demand.

Ans- $E_d = 0.5$

(Q-8) When price of a good falls from ₹5 to ₹3 per unit, its demand rises by 40%. Calculate E_d. Ans- $E_d = 1$

(Q-9) Calculate E_d when →

Price (₹)	Total expenditure (₹)
5	500
6	420

Ans- $E_d = 1.5$

(Q-10) Calculate the elasticity of demand by total expenditure method.

(i)

Price (₹)	Total exp. (₹)
4	40
6	50

Ans- $E_d < 1$ (inelastic)

(ii)

Price (₹)	T.E (₹)
5	50
6	50

Ans- $E_d = 1$ (unitary elastic)