QUESTIONS FOR PRACTICE – ELASTICITY OF DEMAND

1. Studies indicate that the price elasticity of demand for cigarettes is about (-) 0.4. If a pack of cigarettes currently costs Rs. 20 and the government want to reduce smoking by 20 percent, by how much should it increase the price?
2. Suppose that your demand schedule for T-shirts is as follows.

Price (Rs.)	Quantity demanded (Units)
6	20
8	16
11	12
14	8
17	4

   a) Calculate price elasticity of demand as the price of T-shirts increases from Rs. 14 to Rs. 17. Use the mid-point method.
   b) Using the price elasticity coefficient value calculated above, analyse the nature of the demand curve for T-shirt.
   c) If price in the market falls by 20%, how much quantities of T-shirt the will be demanded in the market.

3. Your price elasticity of demand for bananas is -4. If the price of bananas rises by 5 percent, what is (a) the percentage change in the quantity of bananas you buy and (b) the change in your expenditure on bananas?
4. When the price of bubble gum is Rs.0.50, the quantity demanded is 400 packs per day. When the price falls to Rs.0.40, the quantity demanded increases to 600. Given this information and using the midpoint method, what you can say about the price elasticity of demand for bubble gum?
5. The following information is given. By using percentage and mid-point method, calculate price elasticity of demand coefficient value and interpret the result. Which method provides you appropriate result and why?

Price (Rs)	Quantity demanded (units)
Initial = 10	Initial = 1000
New = 20	New = 700

6. The price elasticity of demand of orange in Bhubaneswar for this month is estimated at -1.5. The price of orange is expected to increase by 10% in the next month. What will be the expected change in demand for orange?
7. Suppose demand is perfectly elastic. What will happen to equilibrium price and equilibrium quantity if supply of the good in question decreases? Analyse with the help of suitable diagram. (Hint: Draw the demand curve which is parallel to quantity axis, because price elasticity of demand is elastic. Draw a supply curve and find the initial equilibrium price and equilibrium quantity. Then shift the supply curve to left, since supply decreases. Find the new equilibrium price and equilibrium quantity. Compare with the initial equilibrium.)
8. Suppose demand is perfectly inelastic. What will happen to equilibrium price and equilibrium quantity if supply of the good in question increases? Analyse with the help of suitable diagram.

9. Suppose demand is relatively inelastic. What will happen to equilibrium price and equilibrium quantity if supply of the good in question decreases? Analyse with the help of suitable diagram.
10. Suppose demand is relatively elastic. What will happen to equilibrium price and equilibrium quantity if supply of the good in question increases? Analyse with the help of suitable diagram.
11. If price elasticity of demand coefficient value is zero, then what will be the shape of the demand curve?
12. For computation of price elasticity of demand, which method you think as mare appropriate among percentage method and mid-point method and why?
13. Brooks Pizza, the leading pizza seller in Bhubaneswar, wants to increase its total revenue. One strategy is to provide an offer of 10% discount on every pizza it sells by reducing the price of pizza from Rs.21 to Rs.19. Brooks Pizza knows that its customers can be divided into two distinct groups according to their likely responses to the discount. The accompanying table shows how the two groups respond to the discount.

	Group A (sales per day)	Group B (sales per day)
Volume of sales before the 10% discount	1550	1500
Volume of sales after the 10% discount	1650	1700

a) Explain the meaning of price elasticity of demand.
b) Calculate the price elasticity of demand for group A and group B. (Use midpoint method)
c) Suppose Brooks Pizza knows which group each customer belongs to and can choose whether or not to offer the 10% discount. If Brooks Pizza wants to increase its total revenue, should discounts be offered to group A, to group B, to neither group, or to both groups?

14. Studies indicate that the price elasticity of demand for beer is about (-) 0.4. If a bottle of beer is currently costs Rs. 60 and the government want to reduce consuming beer by 20 percent (%), by how much should it increase the price?

15. A 5% rise in price of a good leads to 20% fall in its demand. A consumer buys 80 units of good at a price of Rs.10 per unit. How many units will the consumer buy when price changes to Rs.11?

16. Statistics shows, 200 cup of coffee demanded in ITER cafeteria per day when price per cup of coffee is Rs. 10.00. When price per cup of coffee increases to Rs. 12.00, new quantity demanded of coffee decreases to 190 cup. Find out price elasticity of demand coefficient (ed) using mid-point method and interpret the result. What will be the shape of demand curve in this situation?

17. Explain perfectly price elasticity of demand and perfectly price inelasticity of demand using appropriate diagrams.

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