Class XI — Economics (Microeconomics)

Chapter: Theory of Demand & Elasticity of Demand

Time Allowed: 2 Hours **Maximum Marks: 50**

General Instructions:

1. This worksheet has six sections: A, B, C, D, E and F. All questions are compulsory.
2. Marks for each question are indicated against it.
3. Section A: Multiple Choice Questions (1 mark each).
4. Section B: Fill in the Blanks (1 mark each).
5. Section C: Very Short Answer Questions (2 marks each, answer in about 30 words).
6. Section D: Short Answer Questions (3 marks each, answer in about 60 words).
7. Section E: Numerical Problems (4 marks each). Show all steps and formulae clearly.
8. Section F: Case Study Based Question (5 marks). Read the case carefully before answering.
9. Draw neat, labelled diagrams wherever required, in the space provided.

SECTION A — Multiple Choice Questions (10 × 1 = 10 Marks)

1. The law of demand states that, other things remaining constant: *[1]*

(a) Price and demand move in the same direction (b) Price and quantity demanded move in opposite directions

(c) Demand is independent of price (d) None of the above

2. Which of the following is an exception to the law of demand? *[1]*

(a) Giffen goods (b) Necessities

(c) Luxuries (d) Perishable goods

3. A movement along the same demand curve, caused only by a change in the price of the good itself, is called: *[1]*

(a) Increase in demand (b) Change in quantity demanded

(c) Decrease in demand (d) Shift in demand

4. If the price elasticity of demand for a commodity is zero, its demand curve is: *[1]*

(a) Horizontal (b) Vertical, parallel to the Y-axis

(c) A rectangular hyperbola (d) Positively sloped

5. The cross elasticity of demand between two complementary goods is: *[1]*

(a) Positive (b) Negative

(c) Zero (d) Infinite

6. Which method measures price elasticity of demand at a single point on the demand curve, using the ratio of lower segment to upper segment? *[1]*

(a) Percentage method (b) Point (geometric) method

(c) Total outlay method (d) Arc method

7. The income elasticity of demand for an inferior good is generally: *[1]*

(a) Positive and greater than 1 (b) Negative

(c) Zero (d) Infinite

8. If a 10% fall in price causes a 20% rise in quantity demanded, the price elasticity of demand (in absolute value) is: *[1]*

(a) 0.5 (b) 1

(c) 2 (d) 5

9. Which of the following does not affect the price elasticity of demand for a commodity? *[1]*

(a) Availability of substitutes (b) Nature of the commodity

(c) Cost of production of the commodity (d) Proportion of income spent on it

10. A commodity with many close substitutes generally has demand that is: *[1]*

(a) Perfectly inelastic (b) Relatively elastic

(c) Zero elasticity (d) None of the above

SECTION B — Fill in the Blanks (5 × 1 = 5 Marks)

11. Demand for a commodity is always defined with reference to a particular _____, _____ and _____. *[1]*

12. The demand curve for a normal good slopes _____ from left to right. *[1]*

13. When the percentage change in quantity demanded exactly equals the percentage change in price, price elasticity of demand is said to be _____. *[1]*

14. Goods whose demand rises even when their price rises (due to the income effect dominating) are called _____ goods. *[1]*

15. Cross elasticity of demand between two substitute goods is _____. *[1]*

SECTION C — Very Short Answer Questions (5 × 2 = 10 Marks)

16. Define demand. Why is a mere desire not the same as demand? *[2]*

17. State the law of demand and write the assumption on which it is based. *[2]*

18. Distinguish between "change in demand" and "change in quantity demanded" with one point of difference. *[2]*

19. Define price elasticity of demand and give its formula. *[2]*

20. What is meant by income elasticity of demand? *[2]*

SECTION D — Short Answer Questions (4 × 3 = 12 Marks)

21. Explain any three determinants of demand for a commodity, other than its own price. *[3]*

22. Explain the "percentage method" of measuring price elasticity of demand. State its formula and explain each term used. *[3]*

23. Distinguish between "perfectly elastic demand" and "perfectly inelastic demand". Support your answer with well-labelled diagrams. *[3]*

(Draw both diagrams here)

24. State and briefly explain any three factors that affect the price elasticity of demand for a commodity. *[3]*

SECTION E — Numerical Problems (2 × 4 = 8 Marks)

25. The price of a commodity falls from ₹20 to ₹16 per unit, and as a result the quantity demanded rises from 100 units to 150 units. Calculate the price elasticity of demand using the percentage method. Also state whether demand is elastic or inelastic, giving a reason. *[4]*

26. A straight-line demand curve AB is drawn on a graph, where A lies on the price axis and B lies on the quantity axis. Point P lies on the curve such that the lower segment PB measures 6 cm and the upper segment AP measures 4 cm. Using the point (geometric) method, calculate the price elasticity of demand at point P. State whether demand is elastic, inelastic, or unitary elastic at this point. *[4]*

(Draw the demand curve AB with point P here)

SECTION F — Case Study Based Question (1 × 5 = 5 Marks)

Read the following case and answer the questions that follow:

A shopkeeper in a local market sells two commodities, Salt and Chocolate. He observes that when the price of both goods rises from ₹10 to ₹12 per unit, the quantity demanded changes as shown below:

Commodity	Price Before (₹)	Price After (₹)	Quantity Demanded Before	Quantity Demanded After
Salt	10	12	100 units	95 units
Chocolate	10	12	100 units	60 units

(i) Calculate the price elasticity of demand for Salt using the percentage method. *[2]*

(ii) Calculate the price elasticity of demand for Chocolate using the percentage method. *[1]*

(iii) Which of the two commodities has more elastic demand? Give one reason based on the nature of the commodity. *[1]*

(iv) Name one other commodity that would show a similar degree of elasticity as Salt, and justify your answer in one line. *[1]*