# Theory of Consumer Behaviour

Standard difficulty · 20 questions · 40 marks · Time: 37 minutes

Name: _____ Date: _____ Score: ____ / 40

Write full answers in Sections B and C. Answers are on the last page — try every question first!

## Section A — Choose the correct answer — 8 × 1 = 8 marks

**1.** The change in total utility from consuming one more unit is:

**(a)** average utility **(b)** opportunity cost
**(c)** total utility **(d)** marginal utility

**2.** What happens to the demand for a good if income rises and the good is normal?

**(a)** the demand curve shifts right **(b)** the supply curve shifts instead
**(c)** the demand curve becomes vertical **(d)** a movement up along the demand curve

**3.** Which pair of goods are complements?

**(a)** pens and pencils **(b)** bus rides and train rides
**(c)** tea and coffee **(d)** bread and butter

**4.** The total utility from 1, 2, 3, 4, 5 and 6 samosas is 36, 64, 86, 104, 114, 118. What is the marginal utility of samosas number 5?

**(a)** 18 utils **(b)** 114 utils **(c)** 22.8 utils **(d)** 10 utils

**5.** A consumer has ₹440 to spend on two goods priced ₹2 and ₹20. What is the most units of good 2 she can buy?

**(a)** 11 units **(b)** 22 units **(c)** 220 units **(d)** 44 units

**6.** When the price of socks rises from ₹100 to ₹125, the quantity demanded falls from 2,000 to 1,250. What is the price elasticity of demand?

**(a)** 1.5 **(b)** 0.67 **(c)** 3 **(d)** 0.75

**7.** The demand for a good is $q = 102 - 3p$. What is the price elasticity of demand at $p = 24$?

**(a)** 0.42 **(b)** 0.71 **(c)** 2.4 **(d)** 2.9

**8.** At the consumer's optimum, with prices ₹12 for good 1 and ₹10 for good 2, what is the marginal rate of substitution (units of good 2 given up per unit of good 1)?

**(a)** 1.2 **(b)** 22 **(c)** 0.83 **(d)** 120

## Section B — Short answer — 8 × 2 = 16 marks

**9.** State the law of diminishing marginal utility.

**10.** Substitutes or complements? (a) tea and coffee (b) cars and petrol

**11.** Explain each term: (a) budget line (b) marginal utility

**12.** The marginal utility of successive bananas is 38, 36, 28, 20, 16, 8. Find the total utility after each one. When is total utility greatest?

**13.** Prices are ₹10 and ₹5, and income is ₹550. Write the budget line. Is the bundle (46, 70) affordable?

**14.** The price of soap falls from ₹40 to ₹20 and the quantity demanded changes from 1,000 to 1,600. Find the elasticity of demand and the change in total expenditure.

**15.** Two consumers' demands are $q_1 = 45 - 4p$ and $q_2 = 32 - 3p$. Write the market demand and find it at $p = 5$.

**16.** What happens to the demand curve for a good if (a) the price of the good itself falls (b) the price of the good itself rises?

## Section C — Longer answers — 4 × 4 = 16 marks

**17.** Explain the consumer's optimum with indifference curves and a budget line.

**18.** Match each with its meaning: (a) budget line (b) inferior good (c) normal good. Choose from: bundles costing exactly the whole income; demand rises when income rises; demand falls when income rises.

**19.** The demand curve is q = 288 − 8p. (a) Find the elasticity at p = 2 and at p = 28. (b) At what price is demand unitary elastic? (c) Why does elasticity differ along a straight line?

**20.** A shop finds that when the price of milk falls by 10% (from ₹40), sales rise from 1,600 to 1,760. (a) Find the elasticity of demand. (b) Is demand elastic, inelastic or unitary? (c) What happens to the money spent on milk?

**Want another sheet on this chapter?** In the Ambiful Worksheets app every sheet is new, with its answer key, and your child never gets the same question twice.

Scan the code to get the free app, or open **worksheets.ambiful.com/get**

# Answer key

Theory of Consumer Behaviour · AW-12SS-CBH-2026-V1 · For parents — fold back or tear off before handing the sheet to your child.

| Q | Answer | Working |
|---|---|---|
| 1 | **(d) marginal utility** | — |
| 2 | **(a) the demand curve shifts right** | — |
| 3 | **(d) bread and butter** | — |
| 4 | **(d) 10 utils** | 114 − 104 |
| 5 | **(b) 22 units** | 440 ÷ 20 |
| 6 | **(a) 1.5** | 37.5% ÷ 25% |
| 7 | **(c) 2.4** | e = 3 × 24 ÷ (102 − 72) = 72 ÷ 30 |
| 8 | **(a) 1.2** | MRS = $p_1/p_2$ = 12/10 |
| 9 | **As more units of a good are consumed, the utility from each extra unit keeps falling.** | — |
| 10 | **(a) substitutes (b) complements** | — |
| 11 | **(a) bundles costing exactly the whole income (b) the change in total utility from one more unit** | — |
| 12 | **38, 74, 102, 122, 138, 146; greatest (146) at 6 bananas** | TU = sum of MUs so far; TU is greatest where MU last stays positive (or is zero) |
| 13 | **$10x_1 + 5x_2 = 550$; it costs ₹810, so it is outside the budget set (not affordable)** | 10 × 46 + 5 × 70 = 810 |
| 14 | **e = 1.2 (elastic); expenditure goes from ₹40,000 to ₹32,000** | 60% ÷ 50%; 40 × 1,000 and 20 × 1,600 |
| 15 | **q = 77 − 7p; at p = 5, q = 42** | (45 − 20) + (32 − 15) |
| 16 | **(a) a movement down along the demand curve (b) a movement up along the demand curve** | — |
| 17 | **She picks the bundle on the budget line on the highest indifference curve she can reach, where the budget line is tangent to it, so MRS equals the price ratio $p_1/p_2$.** | — |
| 18 | **(a) bundles costing exactly the whole income (b) demand falls when income rises (c) demand rises when income rises** | — |
| 19 | **(a) 0.06 and 3.5 (b) p = 18 (the midpoint) (c) The slope is fixed but p/q changes along the line.** | e = 8p ÷ (288 − 8p); e = 1 when 8p = 288 − 8p |

| Q | Answer | Working |
|---|---|---|
| 20 | **(a) 1 (b) unitary elastic (c) from ₹64,000 to ₹63,360: it falls** | 10% ÷ 10% |