



# INDIAN SCHOOL DARSAIT

## DEPARTMENT OF COMMERCE



|                              |                                |                           |
|------------------------------|--------------------------------|---------------------------|
| Subject : Economics          | Topic : Consumer's Equilibrium | Date of Worksheet : _____ |
| Resource Person: Ekta Gautam |                                | Date of Submission: _____ |
| Name of the Student : _____  | Class & Division : _____       | Roll Number : _____       |

| S.No. |   | Marks |
|-------|---|-------|
| 1.    | How is total utility derived from marginal utility?   | 1     |
| 2.    | What does an indifference curve show?   | 1     |
| 3.    | Why is the study of consumer's equilibrium a subject matter of microeconomics?  | 1     |
| 4.    | What is meant by monotonic preferences?   | 1     |
| 5.    | Suppose a consumer can afford to buy 6 units of good 1 and 8 units of good 2 if she spends her entire income. The prices of the two goods are ₹ 6 and ₹ 8 respectively? How much is the consumer's income?  | 1     |
| 6.    | Why budget line is a straight line?   | 1     |
| 7.    | Suppose your friend is indifferent to the bundles (5, 6) and (6, 6). Are the preferences of your friend monotonic?  | 1     |
| 8.    | Explain the Law of Diminishing Marginal Utility with the help of a utility schedule.  | 3     |
| 9.    | Explain why an indifference curve is convex to the origin?  | 3     |
| 10.   | Explain the distinction between budget set and budget line.   | 3     |
| 11.   | Explain the meaning of diminishing marginal rate of substitution with the help of an example.   | 3     |
| 12.   | Explain conditions determining how many units of a good consumer will buy at a given price.   | 4     |
| 13.   | Suppose a consumer wants to consume two goods which are available only in integer units. The two goods are equally priced at ₹ 10 and the consumer's income is ₹ 10.<br>(a) Write down all the bundles that are available to the consumer.<br><br>(b) Among the bundles that are available to the consumer, identify those which cost her exactly ₹ 40. | 4     |
| 14.   | A consumer consumes only two goods A and B and is in equilibrium. Show that when price of good B falls, demand for B rises. Answer this question with the help of utility analysis.   | 4     |
| 15.   | A consumer consumes only two goods X and Y. Her money income is ₹ 24 and the prices of Good X and Y are ₹ 4 and ₹ 2 respectively. Answer the following questions :<br>(a) Can the consumer afford a bundle 4X and 5Y?   | 4     |

(b) What will be the  $MRS_{XY}$  when consumer is in equilibrium? Explain.

16. Given below is the utility schedule of a consumer for commodity X. The price of the commodity is ₹ 6 per unit. How many units should the consumer purchase to maximize his satisfaction? The utility is expressed in utils and 1 util is = ₹ 1. Give reasons for your answer. 4

|                      |    |    |    |    |    |    |
|----------------------|----|----|----|----|----|----|
| Consumption in Units | 1  | 2  | 3  | 4  | 5  | 6  |
| Total Utility        | 10 | 18 | 25 | 31 | 34 | 34 |
| Marginal Utility     | 10 | 8  | 7  | 6  | 3  | 0  |

17. Suppose the price of a commodity X is given as ₹ 8 and the MU (in terms of money) for 4 units is given as: 4

|            |    |    |   |   |
|------------|----|----|---|---|
| Units      | 1  | 2  | 3 | 4 |
| $MU_x$ (₹) | 12 | 10 | 8 | 6 |

18. A consumer consumes only two goods X and Y. State and explain the conditions of consumer's equilibrium with the help of utility analysis. 4
19. (a) Explain why an indifference curve to the right shows higher utility. 6  
(b) Explain why two indifference curves never intersect each other.
20. A consumer consumes only two goods. Why is the consumer said to be in equilibrium when he buys only that combination of the two goods which lies at that point on the indifference curve where the budget line is tangent to the indifference curve? Explain. Use diagram. 6