Subject: Microeconomics (Class 11)

Max Marks: 30

Worksheet: Consumer's Equilibrium (Utility & IC Analysis)

Time Allowed: 1 Hour

SECTION A: MULTIPLE CHOICE QUESTIONS (1 MARK EACH)

Q1. When Marginal Utility (MU) is zero, Total Utility (TU) is: [1]

(a) Zero

(b) Minimum

(c) Maximum

(d) Negative

Q2. An Indifference Curve (IC) is convex to the origin due to: [1]

(a) Increasing Marginal Rate of Substitution

(b) Diminishing Marginal Rate of Substitution

(c) Constant Marginal Rate of Substitution

(d) Increasing Marginal Opportunity Cost

Q3. If the price of Good X falls, what happens to the budget line? [1]

(a) Shifts parallel to the right

(b) Rotates outwards on the X-axis

(c) Shifts parallel to the left

(d) Rotates inwards on the Y-axis

Q4. Which of the following is a property of an Indifference Curve? [1]

(a) Two ICs can intersect each other

(b) Higher IC represents a lower level of satisfaction

(c) IC slopes upward from left to right

(d) Higher IC represents a higher level of satisfaction

SECTION B: SHORT ANSWER QUESTIONS (3 MARKS EACH)

Q5. Explain the **Law of Diminishing Marginal Utility with a realistic example from everyday life.** [3]

Q6. Define a **Budget Line. State the two core factors that can cause a budget line to shift parallelly.** [3]

Q7. What is meant by **monotonic preferences? Explain why a consumer always prefers a higher indifference curve.** [3]

SECTION C: LONG ANSWER QUESTIONS (4 MARKS EACH)

Q8. Explain the conditions of Consumer's Equilibrium using **Indifference Curve (IC) Analysis. (Use symbols like MRS and price ratios).** **[4]**

Q9. A consumer consumes only two goods, X and Y, whose prices are ₹4 and ₹2 per unit respectively. The marginal utilities are given below: **[4]**

Units	Marginal Utility of X (MU_x)	Marginal Utility of Y (MU_y)
1	24	16
2	20	14
3	16	12
4	12	10
5	8	8

Assuming the consumer's total income is ₹14, find the equilibrium combination of units of Good X and Good Y that maximizes total satisfaction. Show calculations.

SECTION D: CASE-BASED / ASSERTION-REASONING (4 MARKS)

Q10. Read the scenario and evaluate the statements below: **[4]**

> *A student evaluates their utility while buying notebooks and pens. Currently, the ratio of marginal utility to price for notebooks is higher than the ratio of marginal utility to price for pens. To maximize utility, the student starts reallocating their pocket money budget.*

Assertion (A): If MU_x / P_x > MU_y / P_y, a rational consumer will increase the consumption of Good X and decrease the consumption of Good Y.
Reason (R): As consumption of Good X increases, its Marginal Utility (MU_x) will fall due to the Law of Diminishing Marginal Utility, eventually restoring equilibrium.

(a) Both (A) and (R) are true and (R) is the correct explanation of (A).

(b) Both (A) and (R) are true but (R) is NOT the correct explanation of (A).

(c) (A) is true but (R) is false.

(d) (A) is false but (R) is true.

~ End of Worksheet ~

For solutions, batch scheduling, or enrollment inquiries, please visit our website or call our center.