C E - U A - R & U - Reason-Based Questions

Q.1. If at the point of equilibrium, IC is not convex to the origin, equilibrium will not be stable.

Ans. True. At the point of equilibrium, IC must be convex to the origin, otherwise the equilibrium will not be stable. This is because, convexity of IC points to the operation of the law of diminishing marginal utility. If indifference curve is not convex, this law is violated and therefore the equilibrium will not be stable.

Q.2. If MU of rupees increases, the quantity demanded of the commodity will also increase.

Ans. False. Quantity demanded will decrease, because corresponding to higher MU of rupees, MU of the commodity should also be higher which is possible only when consumption (quantity demanded) decreases.

Alternatively: In the equation of consumer's equilibrium:

$$\frac{MU_X}{P_X} = MU_M$$

If MU_M increases, P_X remaining constant, MU_X must also increase. Increase in MU_X implies decrease in the consumption (or quantity demanded) of X.

Q.3. Navya consumes *Pizza* and *Coke* and finds her equilibrium. As the price of *Coke* rises, her marginal utility from *Coke falls.*

Ans. False. Navya strikes her equilibrium (in case of two commodities) when:

$$\frac{MU_X}{P_X} = \frac{MU_Y}{P_Y}$$

where, X is *Pizza* and Y is *Coke*.

When price of *Coke* rises, *i.e.*, P_Y rises, $\frac{MU_X}{P_X} > \frac{MU_Y}{P_Y}$ Implying that rupee worth of satisfaction is greater for X (*Pizza*) than Y (*Coke*). Accordingly, she will start buying more of X in place of Y. When consumption of X increases, MU_X must fall, while a cut in consumption of Y would mean a rise in MU_Y.

Therefore, when price of *Coke* rises, more of *Pizza* will be purchased in place of *Coke* by Navya. Implying, increase in marginal utility from *Coke*.

Q.4. Rahul consumes two commodities X and Y whose prices are ₹ 8 and ₹ 12 per unit respectively. He is in a state of equilibrium (utility analysis) when $MU_X = 3$ and $MU_Y = 2$, then according to the utility approach Rahul strikes his equilibrium.

Ans.

False. A consumer strikes his/her equilibrium when:

$$\frac{MU_X}{P_X} = \frac{MU_Y}{P_Y}$$

According to the given question, $\frac{MU_X}{P_X} = \frac{3}{8}$ and $\frac{MU_Y}{P_Y} = \frac{2}{12} = \frac{1}{6}$.

Here, $\frac{3}{8} > \frac{1}{6}$ or $\frac{MU_X}{P_X} \neq \frac{MU_Y}{P_Y}$,Therefore, Rahul does not strike his equilibrium.

Q.5. Consuming two goods X and Y Misha is in equilibrium when prices of the two goods are ₹ 4 and ₹ 2 per unit respectively. At this point, the marginal rate of substitution will be equal to 6.

Ans.

False. According to the given question, $\frac{P_X}{P_Y}$ is equal to $\frac{4}{2}$ Or, we can say that at the point of equilibrium $\frac{P_X}{P_Y}$ is equal to 2. We know, at the point of equilibrium $\frac{P_X}{P_Y}$ MRS (marginal rate of substitution). Accordingly, MRS must also be = 2, NOT = 6.