### CBSE Test Paper-06

### Class - 11 Economics (Introduction to Microeconomics)

**General Instruction**: All questions are compulsory. Marks are given alongwith their questions.

- 1. Economic choices can be summarized in five big questions. They are \_\_\_\_\_(1)
  - a. What, how, who, where, and would you please.
  - b. Why not, what, how, when, and where.
  - c. What, how, when, where, and why.
  - d. What, how, when, where, and who.
- 2. The consumer is in equilibrium at a point where the budget line: (1)
  - a. Is above an indifference curve.
  - b. Is below an indifference curve.
  - Is tangent to an indifference curve.
  - d. Cuts an indifference curve.
- Total utility schedule of individual A is given below. Derive his Marginal Utility schedule.
   (2)

Units consumed	0	1	2	3	4	5
Total utility	0	16	29	41	52	62

- 4. Is the law of diminishing marginal utility applicable in case of money? (2)
- Take the economic value achieved through the spread of education in the context of production potential. (3)
- 6. Explain the central problem of the choice of products to be produced, (3)
- 7. What do you understand by positive economic analysis? (4)
- Given the price of a good, how will a consumer decide as to how much quantity of that good to buy? Use utility analysis. (4)
- 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. (6)
- 10. How does the budget line change if the price of good 2 decreases by a rupee but the price of good 1 and the consumer's income remain unchanged? (6)

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#### **Answers**

- 1. D. What, how, when, where, and who.
- 2. C. Is tangent to an indifference curve.

3.

Units consumed	0	1	2	3	4	5
Total utility	0	16	29	41	52	62
Marginal utility	-	16	13	12	11	10

- 4. The Law of Diminishing Marginal Utility is not applicable in case of money. This is because the consumer has greed for money. That is, the utility derived from the consumption of additional units of money tend to increase (instead of decreasing).
- Government's endeavor to spread education will lead to an increase in the quality of the work force. The production potential of country would also increase.
   Economic value reflected is in terms of providing better quality work force.
- 6. Problem of 'what to produce' arises as the producers have limited resources. In an economy because of scarcity of resources, producers are unable to produce everything in desired quantity but they will have to make a choice as to which one is important on the whole, so that limited resources can be rationally managed. Problem of 'what to produce' involves two-fold decisions, kinds of goods to be produced and quantity of goods to be produced.
- 7. Positive economic analysis is confined to cause and effect relationship. In other words, it states "what is." It relates to what the facts are, were or will be about various economic phenomena in the economics. e.g., it deals with the analysis of questions like what are the causes of unemployment.
- 8. Given price of a good, a consumer decided how much quantity of that good to buy on the basis of the following conditions:

MU = Price, i.e. 
$$\frac{MU_x}{MU_m} = P_x$$

Total gains falls as more is purchased after equilibrium.

Case I: If  $MU_x(money) > P_x$ 

Consumer keeps on consuming more units. When he consumes more units, the additional

utility derived from consuming X keeps on falling. He keeps on consuming till  $MU_X = P_X$ 

## Case II: lfMUx(money) < Px

He will decrease the consumption of X, when he decreases the consumption of X, the Marginal Utility of X will increase. He will keep on decreasing consumption of X till  $MU_X = P_x$ .

Thus,  $MU_x$ (money) =  $P_x$  is the conditioner consumer's equilibrium in a single commodity case.

9. In case of two commodities, consumer attains equilibrium, when

$$1. \ \frac{MU_x}{P_x} = \frac{MU_y}{P_y}$$

It implies that in state of equilibrium utility per rupee from good X must be equal to utility per rupee from good Y.

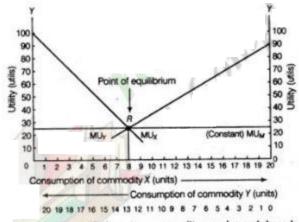
The above condition can also be written as  $rac{MU_x}{MU_y}=rac{P_x}{P_y}$ 

It implies that in state of equilibrium, ratio of Marginal Utilities of two commodities is equal to the ratio of their prices.

$$2. \frac{MU_x}{P_x} = \frac{MU_y}{P_y} = MU_M$$

It implies that in state of equilibrium utility per rupee obtained by the consumer from good X or good Y should be equal to Marginal Utility of money.

Assumption:  $P_x = P_y = 1$  per unit) of utility analysis.



Consumer's equilibrium: two commodity case (curve is based on hypothetical data)

In case of two commodities, consumer attains equilibrium, when

3. 
$$\frac{MU_x}{P_x} = \frac{MU_y}{P_y} = MU_M$$

That is, Marginal Utility of a rupee spent on good A is equal to the Marginal Utility of rupee spent on good B, which is equal to the Marginal Utility of money,

i.e. 
$$MU_{(A)} P_{(A)} = MUgPg = MU_m$$

If price of good B falls, then the value of the fraction (i.e. MUgPg) increases. Mathematically, this implies.

In such a situation, the demand for good B rises and consumer would increase his consumption of good B. He will continue to increase his consumption of good B untill the equality between the Marginal Utilities of each of the goods become equal to the Marginal Utility of money. At this situation, the equilibrium is restored. That is,

$$MU^P_A = MUgPg = MU_m$$

$$P_2 = Rs. 5$$

$$P_{2}^{1} = Rs. 4$$

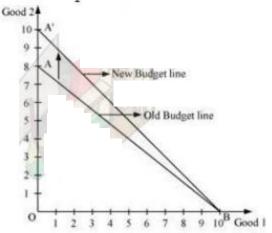
$$M = Rs. 20$$

Since the income and the price of good 1 are unchanged, the decrease in the price of good 2 will increase the vertical intercept of the budget line. The new budget line will also pivot outwards around the same horizontal intercept.

Horizontal intercept will be= 
$$\frac{M}{P_1} = \frac{40}{4}$$

Vertical intercept will be 
$$=\frac{M}{P_1} = \frac{40}{4}$$

Slope = 
$$\frac{-P_1}{P_2} = \frac{4}{4} = 1$$



The slope of the new budget line will be more and the new budget line will be steeper than the original one.