

BCM SCHOOL, BASANT AVENUE, DUGRI ROAD, LUDHIANA

Class - XI

July Economics Assignment Solution (2025-26)

1. (c)
2. (e)
3. (c)
4. (b)

5. False: Marginal utility of a good falls and becomes negative when total utility falls as consumption of additional units of a commodity.

True: When marginal utility (MU) falls, total utility (TU) may increase (at decreasing rate) so long as MU is positive.

6. (i) $P_x.Q_x + P_y.Q_y = M$

(ii) $(10.Q_x + 10.Q_y = 200)$

$\Rightarrow Q_x + Q_y = 20$

Slope of Budget line = (ignoring minus sign) = 2

If the entire income is spent on Good Y Q_x is zero;

$10.Q_x + 10.Q_y = 200$

$\Rightarrow Q_y = 20$ units.

8. (a) In case of two goods A and B, a consumer will at equilibrium when:

- MU of good A / Price of good A = MU of good B / Price of good B
- MU falls as consumption increases

If the price of Good B rises the per rupee Marginal Utility derived from the consumption of Good A will be more than the consumption of Good B.

This will create a situation where:

$MU \text{ of good A} / \text{Price of good A} > MU \text{ of good B} / \text{Price of good B}$

This will induce the consumer to reallocate his expenditure from Good B (less satisfying) to Good A (more satisfying). Therefore, consumer will buy more of Good A and less of Good B.

As a result, MU derived from consumption of Good A decreases gradually while the MU derived from consumption of Good B increases. Eventually, this process will continue till $MU \text{ of good A} / \text{Price of good A} = MU \text{ of good B} / \text{Price of good B}$.

(b) Good X				Good Y		
Q_x	TU_x	MU_x	MU_x/P_x	Q_y	TU_y	MU_y/P_y
1	25	25	12.50	1	10	5.00
2	40	15	7.50	2	16	3.00
3	50	10	5.00	3	21	2.50
4	56	6	3.00	4	24	1.50
5	59	3	1.50	5	26	1.00
6	60	1	0.50	6	27	0.50



Given the consumer's income = ₹12 and prices of the two goods ($P_x = ₹2$, $P_y = ₹2$), he will be in equilibrium when the following two conditions are satisfied:

1. For rupee MU from consumption of each good is the same, i.e., $MU_x / P_x = MU_y / P_y$
2. MU falls as more units of a good are consumed.

The condition $MU_x / P_x = MU_y / P_y$ is satisfied at the following combinations of the two goods:

- (i) $3X + 1Y$
- (ii) $4X + 2Y$
- (iii) $5X + 4Y$
- (iv) $6X + 6Y$

Total money expenditure on these combinations are:

- (i) $3 \times 2 + 1 \times 2 = ₹8$
- (ii) $4 \times 2 + 2 \times 2 = ₹12$
- (iii) $5 \times 2 + 4 \times 2 = ₹18$
- (iv) $6 \times 2 + 6 \times 2 = ₹24$

The consumer is in equilibrium when he buys 4 units of Good X and 2 units of Good Y because his money income is ₹12.

He will not buy the combination $3X + 1Y$ because he can gain by purchasing more. Also, he cannot obtain the combinations $5X + 4Y$ and $6X + 6Y$ due to money constraint.

