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

1. The aim of the consumer in allocating his income is to_____ (1)
    a. Maximise his total utility.
    b. Maximise his marginal utility.
    c. To buy the goods he wants most whatever the price.
    d. To buy the goods which he expects to be short in supply.
2. An indifference curve slopes down towards right since more of one commodity and less of another result in: (1)
    a. Same satisfaction.
    b. Greater satisfaction.
    c. Maximum satisfaction.
    d. Decreasing expenditure.
3. What would be the impact on total utility, if marginal utility curve lies below X-axis? (2)
4. How does Production Possibility Curve (PPC) is affected by unemployment in the economy? Explain. (2)
5. Suppose your friend is indifferent to the bundles (5, 6) and (6, 6). Are the preferences of your friend monotonic? (3)
6. What do you understand by normative economic analysis? (3)
7. What is Marginal Rate of Transformation? Explain With the help of an example. (4)
8. Draw a Production Possibility Curve. What does a point below this curve indicate?(4)
9. A consumer wants to consume two goods. The prices of the two goods are Rs. 4 and Rs. 5 respectively. The consumer's income is Rs 20.
    a. Write down the equation of the budget line.
    b. How much of good 1 can he consume if she spends her entire income on that good?
    c. How much of good 2 can she consume if she spends her entire income on that good?
    d. What is the slope of the budget line? (6)
10. Distinguish between Microeconomics and Macroeconomics. (6)

1. A. Maximise his total utility.
2. A. same satisfaction.
3. If marginal utility curve lies below X-axis, i.e. marginal utility become negative, then total utility will fall.
4. Production Possibility Curve (PPC) will not shift due to unemployment in an economy. Due to unemployment in the economy, labour is under utilised (or less than fully employed). As a result, actual output is less than the potential output. Economy operates from a point below PPC.
5. It is given that my friend is indifferent towards the bundles (5, 6) and (6, 6). This implies that his/her preferences are not monotonic. If he/she is indifferent towards both the bundles, then it means that he/she derives the same level of satisfaction and assigns them the same rank. However, the second bundle consists of more of both the goods. Thus, according to the monotonicity assumption, he/she must prefer the second bundle over the first.
6. Normative economic analysis is concerned with what 'ought to be'. It examines the real economic events from moral and ethical angles and judge whether certain economic events are desirable or undesirables. e.g., it deals with the analysis of questions like what should be the prices of food grains.
7. It is the ratio of number of units of good 'Y sacrificed to produce an additional unit of good 'X'. Marginal Rate of Transformation of a particular good along PPC is the amount of a particular good which is sacrificed to increase the production of the other good by one unit. It is also called marginal opportunity cost.

Production of X	Production of Y	$MRT\left(\frac{\Delta Y}{\Delta X}\right)$
0	10000	-
1	9000	1000:1
2	7500	1500:1
3	5500	2000:1

Marginal Rate of Transformation (MRT) $= \dfrac{\text{Unit of one Good sacrifieced}}{\text{More Units of other Good Produced}} = \dfrac{\Delta Y}{\Delta X}$

8. It is a curve which shows various production possibilities with the help of given limited resources and technology. It is also known as production possibility frontier and transformation curve.
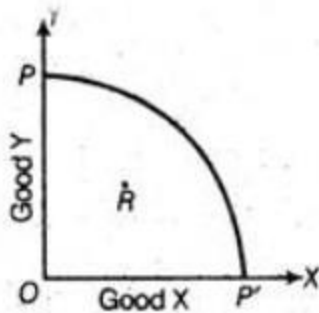
Production Possibility Curve

In the given figure, PP' shows the Production. Possibility Curve. Any point inside Production Possibility Curve (like point R) corresponds to under utilisation of resources or inefficient utilisation of resources.

9. 1. P_1 = Rs 4

    P_2 = Rs 5

    M = Rs 20

    Equation of the budget line $= P_1 x_1 + P_2 + x_2 = M$

    $4x_1 + 5x_2 = 20$

    2. If Rs 20 is entirely spent on good 1, then the amount of good 2 demanded will be zero i.e., $x_2 = 0$ as the consumer has no income left to spend on good 2.

    $4x_1 + 5(0) = 20$

    $4x_1 = 20$

    $x_1 = \dfrac{20}{4}$

    $x_1 = 5$

    Amount of good 1 consumed = 5 units

    3. If Rs 20 is entirely spent on good 2, then $x_1 = 0$, as the consumer has no income left to spend on good 1.

    $4(0) + 5x_2 = 20$

    $5x_2 = 20$

$$x_2 = \frac{20}{5}$$

$$x_2 = 4$$

Amount of good 2 consumed = 4 units

4. Slope of the budget line = $\dfrac{-P_1}{P_2}$

$= \dfrac{\text{-Price of good 1}}{\text{Price of good 2}} = -\dfrac{4}{5}$

$= -0.8$

10. Difference between Microeconomics and Macroeconomics

	Microeconomics	Macroeconomics
Meaning	It is that part of economics, which studies the economic problems of individual unit	It is that part of economics, which studies the economic problems of aggregate level
Objective	Its aim is to determine the commodity price or factors of production for an individual firm	its aim is to determine national income, employment growth of nation in the economy as a whole.
Tools	its main tools are demand and supply	its main tools are aggregate demand and aggregate supply
Level of aggregation	it involves limited degree of aggregation	it involves highest level of aggregation
Theory	related theories are: theory of price and theory of consumer behavior	related theories are: theory of multiprice and theory related to gap in economy