Ordinal Utility Approach

Ordinal Utility Approach:

The basic idea behind **ordinal utility approach** is that a consumer keeps number of pairs of two commodities in his mind which give him equal level of satisfaction. This means that the utility can be ranked qualitatively.

The ordinal utility approach differs from the cardinal utility approach (also called classical theory) in the sense that the satisfaction derived from various commodities cannot be measured objectively.

Indifference Curve

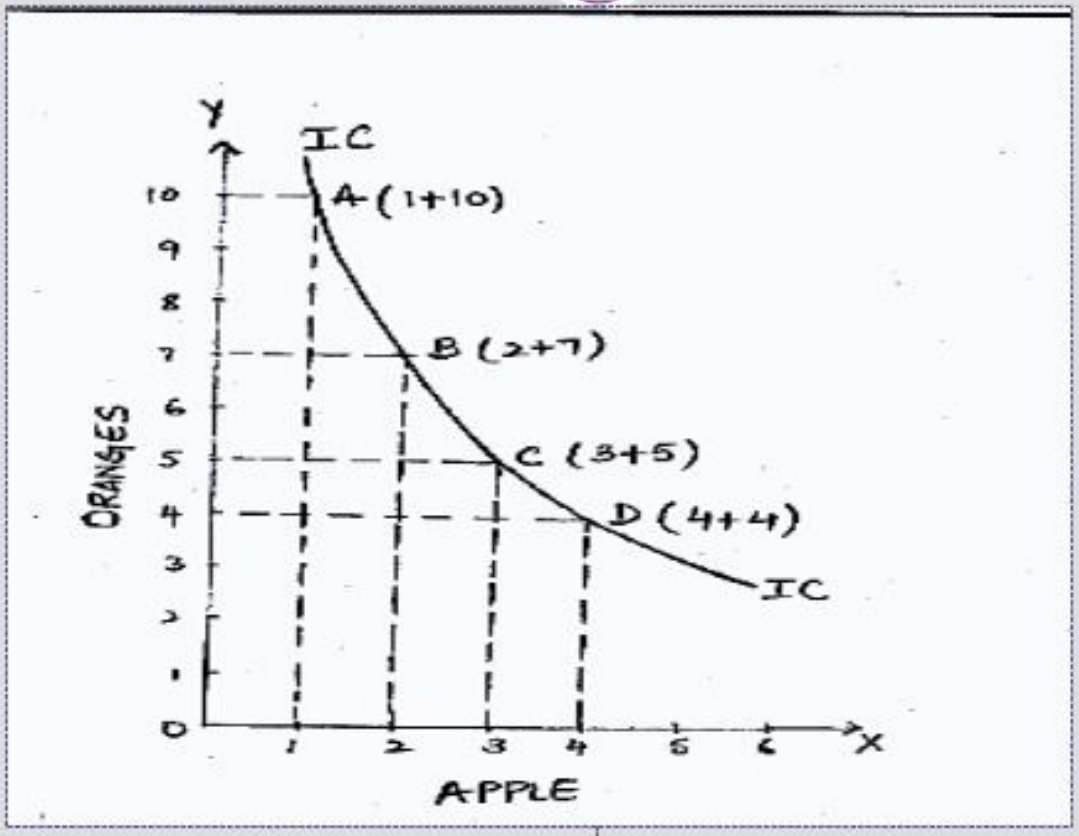
Indifference Curve is a locus of all such points which shows different combination of two commodities which yield equal satisfaction to the consumer, so that he is indifferent to the particular combination he consumes.

Indifference Curve schedule

It refers to a schedule that indicates different combinations of two commodities which yield equal satisfaction. table 1. indifference curve schedule

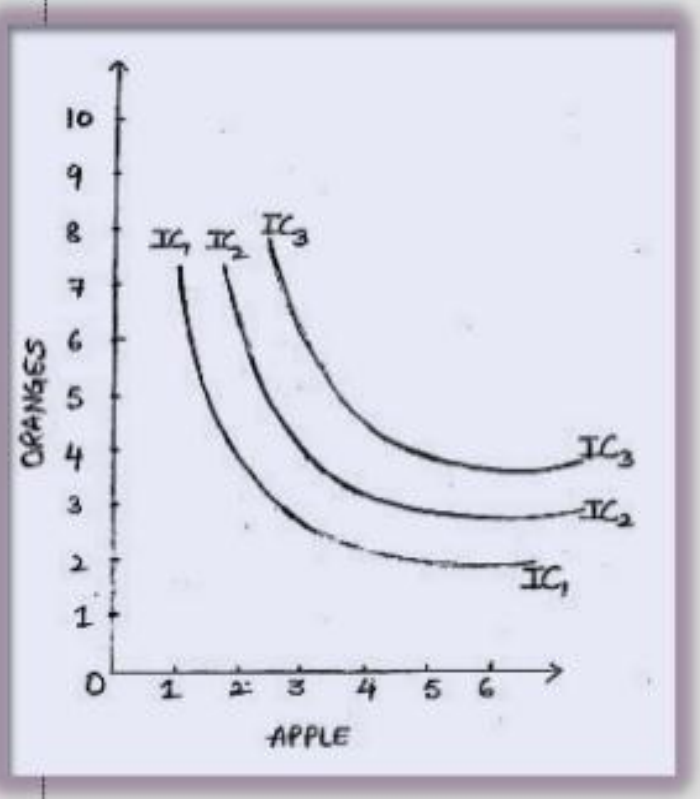
Combination of apple s and oranges	Apples	Oranges
A	1	10
B	2	7
C	3	5
D	4	4

Indifference Curve



Indifference Map

Indifference Map refers to a set of Indifference Curve.



Assumptions of Indifference Curve Analysis:

a) Consumer is **rational**.

b) Utility can be measured in **Ordinal numbers**.

c) Marginal rate of substitution **(MRS) diminishes**

(marginal rate of substitution is the rate at which a consumer is ready to give up one good in exchange for another good while maintaining the same level of utility)

d) Consumer's behavior is **Consistent.**
E.g. if consumer prefers A combination > B combination at one time, then at another time he will not prefer more of B combination than A combination.

e) **Transitivity**.
E.g. if consumer prefers A combination to B combination and B combination to C combination, then he will definitely prefer A combination to C combination.

f) Consumer's **scale of Preference is Independent** of his income and prices of goods in the market.

Properties of Indifference Curve

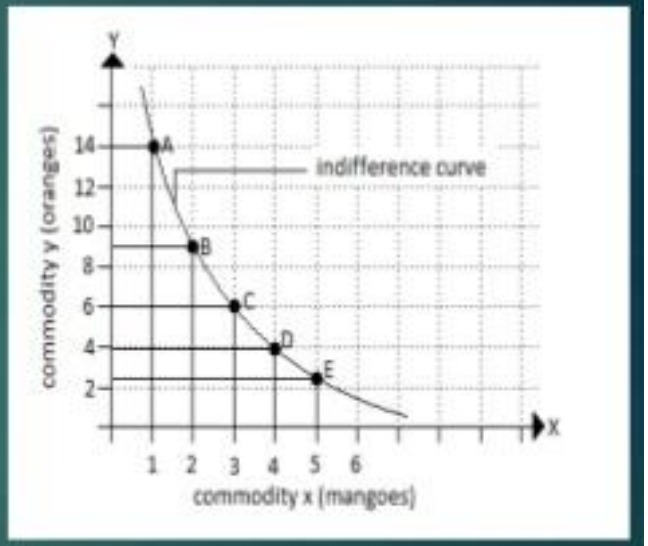
There are 4 basic properties of an indifference curve. These are -

1. **Indifference Curve Slope Downwards to Right:**

- An indifference curve can neither be horizontal line nor an upward sloping curve. This is very important.

When a consumer wants to have more of a commodity, he/she will have to give up some of the other commodity, given that the consumer remains on the same level of utility at constant income.

As a result, the indifference curve slopes downward form left to right.



- 2. **Indifference Curve is Convex to the Origin:**

- This is an important property of indifference curves. They are convex to the origin (bowed inward). This is equivalent to saying that as the consumer substitutes commodity X for commodity Y, the marginal rate of substitution diminishes of X for Y along an indifference curve.
- In this figure (3.6) as the consumer moves from A to B to C to D, the willingness to substitute good X for good Y diminishes. This means that as the amount of good X is increased by equal amounts, that of good Y diminishes by smaller amounts. The marginal rate of substitution of X for Y is the quantity of Y good that the consumer is willing to give up to gain a marginal unit of good X. The slope of IC is negative. It is convex to the origin.

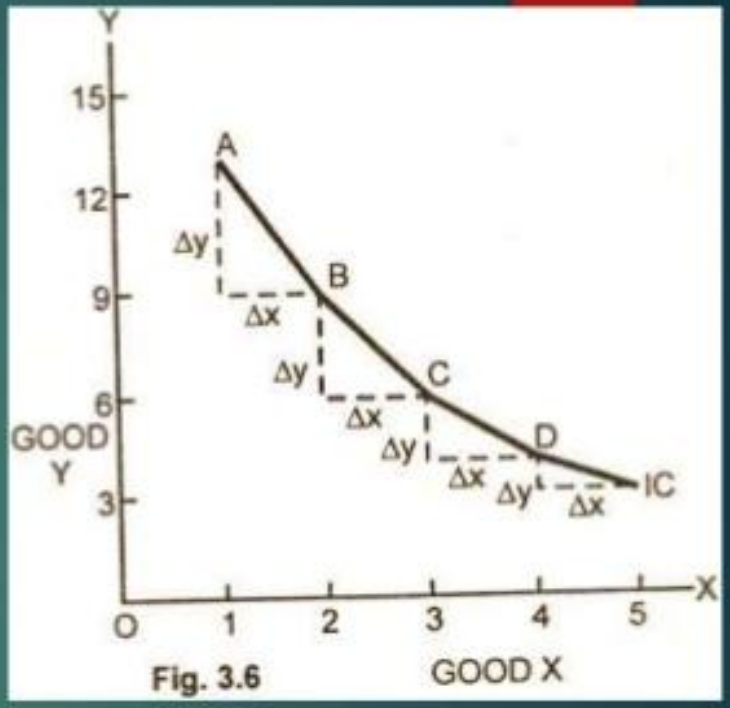


Fig. 3.6

- 3. **Indifference Curve Cannot Intersect Each Other:**

Each indifference curve is a representation of particular level of satisfaction.
The level of satisfaction of the consumer for any given combination of two goods is same throughout the curve, that's why indifference curve cannot intersect each other.

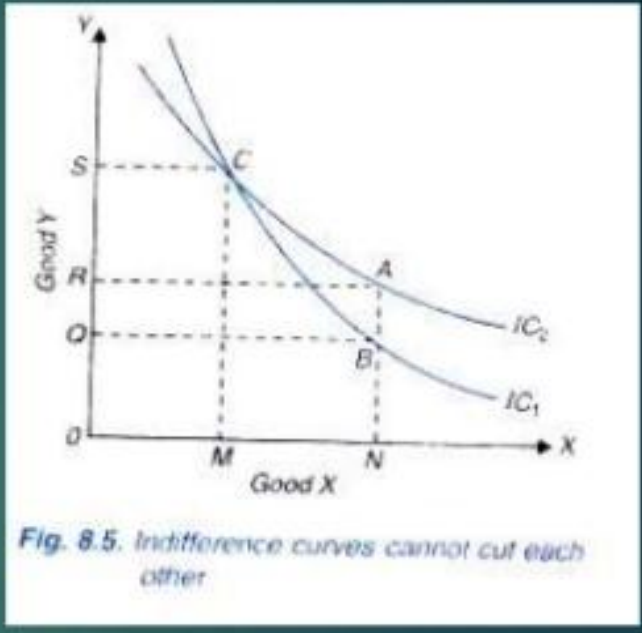


Fig. 8.5. Indifference curves cannot cut each other

- 4. **Higher Indifference Curve Represents Higher level of Satisfaction:**

Higher the indifference curves, higher will be the level of satisfaction. This means any combination of two goods on the higher curve give higher level of satisfaction to the consumer then the lower one.

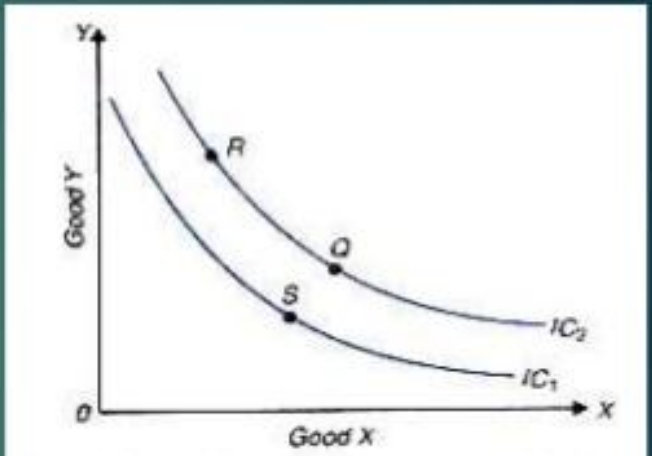
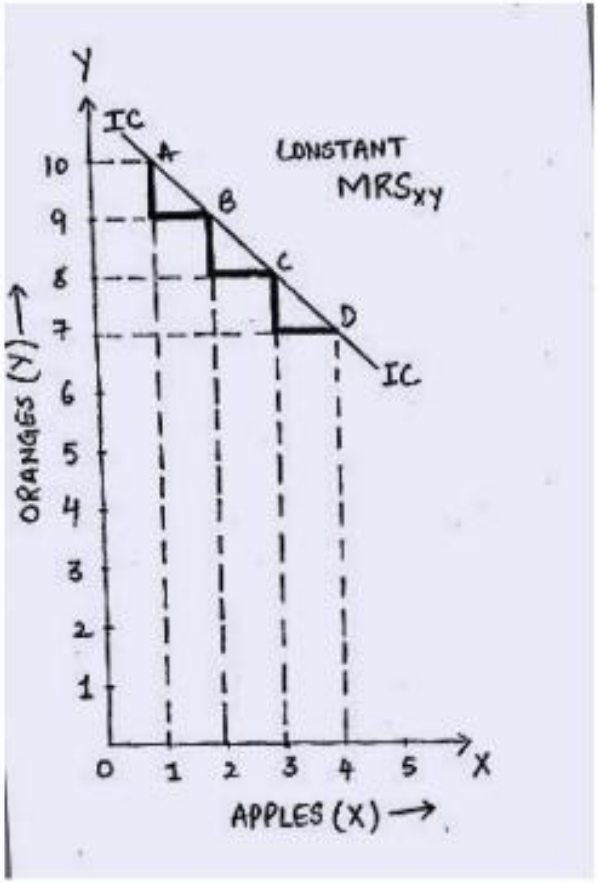


Fig. 8.6. *A higher indifference curve shows a higher level of satisfaction.*

Shape of Indifference Curve



1) Straight line indifference curve :

In case of **Perfect Substitutes**, IC may be a straight line with negative slope.

e.g. Taj Mahal (X-commodity) and Brooke Bond tea (Y-commodity) are perfect substitute of each other.

Here,

$MRS_{xy} = 1$

2)Right-angled Indifference Curve :

In case of **Perfectly Complementary goods**, the shape of IC is right-Angle.

e.g. a consumer will buy right and left shoes in a fixed ratio.

Here,

MRSxy = 0