

# PRINCIPLES OF ECONOMICS

B. Com Hons Part-I

TOPIC -

Explanation of Law of Equi-Marginal Utility through Table & Diagram

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● Explanation of law of equi-marginal utility with the help of Table & Diagram.

→ Table 1 :- Marginal utility Gained from Commodity

Units	Marginal utility of oranges	Marginal utility of apples
1	10	8
2	8	6
3	6	4
4	4	2
5	2	0
6	0	-2
7	-2	-4
8	-4	-6

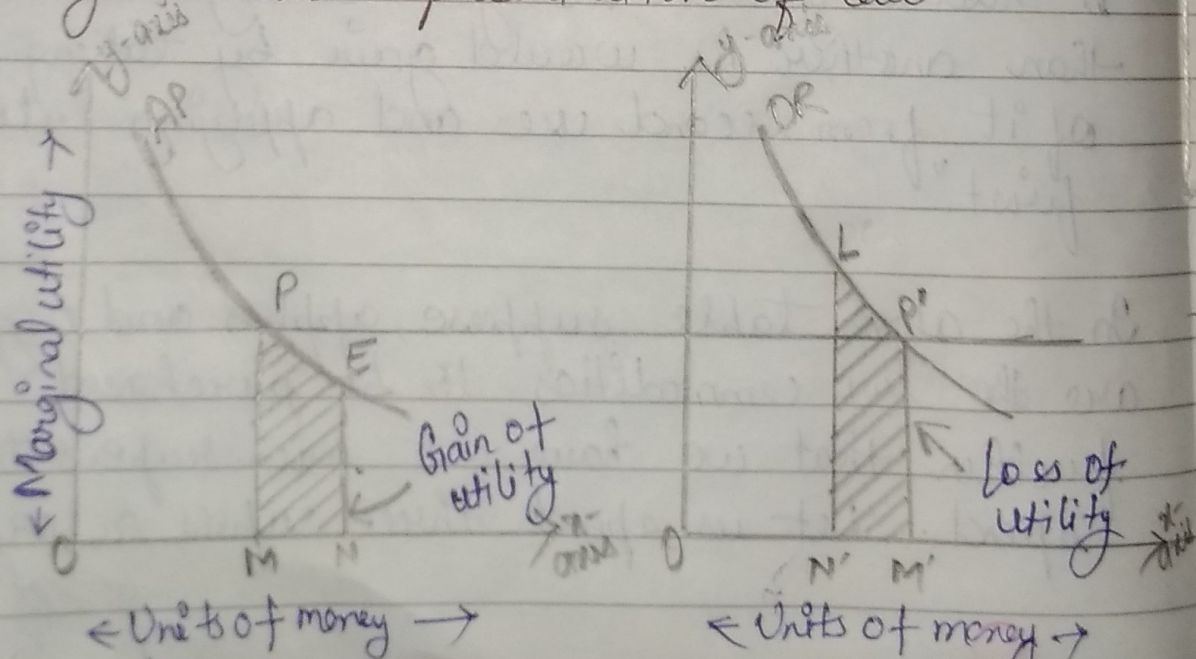
According to Marshall, "If a person has a thing which can be put to several uses, he will distribute it among those in such a way that it has the same marginal utility in all. For if it had a greater marginal utility in one use than another he would gain by taking some of it from second use and applying it to the first."

In the above table suppose, apples and oranges are the two commodities to be purchased. Suppose further that we have got seven rupees to spend. Let us spend three rupees on oranges

and four rupees on apples. What is the result? The utility of the 3<sup>rd</sup> unit of oranges is 6 and that of the 4<sup>th</sup> unit of apples is 2. As the marginal utility of both oranges and apples is the same. This 0 oranges is higher, we should buy more of oranges and less of apples. Let us substitute one orange for one apple so that we buy four oranges and three apples.

Now the marginal utility of both oranges and apples is the same i.e., 4. This arrangement yields maximum satisfaction. The total utility of 4 oranges would be  $10 + 8 + 6 + 4 = 28$  and of three apples  $8 + 6 + 4 = 18$  which gives us a total utility of 46. The satisfaction given by 4 oranges and 3 apples at one rupee each is greater than could be obtained by any other combination of apples and oranges.

→ Diagrammatic Representation of law :-



In the above figure,  $OX$  and  $OY$  are two axes. On  $X$ -axis  $OX$  are represented the units of money and on the  $Y$ -axis marginal utility.

Suppose a person has 7 rupees to spend on apples and oranges whose diminishing marginal utilities are shown by the two curves  $AP$  and  $OR$  respectively.

The consumer will gain maximum satisfaction if he spends  $OM$  money (3 rupees) on apples and  $OM'$  money (4 rupees) on oranges because in this situation the marginal utilities of the two are equal ( $PM = P'M'$ ). Any other combination will give less total satisfaction. We then conclude that no other combination of apples and oranges gives as great a satisfaction to consumer as when  $PM = P'M'$  i.e., where the marginal utilities of apples and oranges purchased are equal, with given amount of money at our disposal.