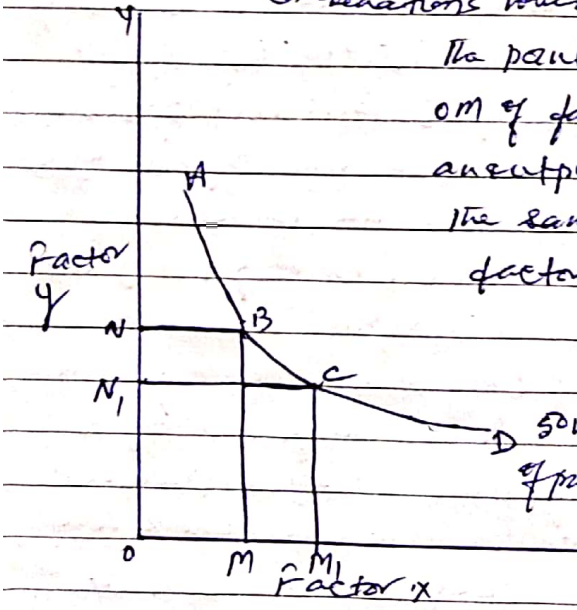
ISO QUANT

A production function with two variable inputs can be represented by a family of iso product curves or iso quants. They are also known as equal product curve. we shall prefer to call them equal product curves because this is the simplest term.

As we know, a given output can be obtained by employing a series of different alternative factor combinations by the firm Let us suppose that a firm can produce a given output of 50 units of a commodity by employing any of the following alternative combination of the two factors X + Y. Below table will clear it very much.

Factor X		Factor Y	output
1	+	10	50 units
2	+	7	"
3	+	5	"
4	+	4	"

If we plot this iso product schedule, we shall get an iso product or an equal product curve as is clear from the diagram. On X axis factor X is measured and on Y axis factor Y is measured. AD is the equal product curve or Iso quant curve. This curve shows all those alternative factor combinations which yield an output of 50 unit. For example the point B on the curve shows a combination of OM of factor X and ON of factor Y, which produces an output of 50 units. Likewise the point C on the same curve shows a combination of OM_1 of factor X and ON_1 of factor Y which also yields the same output of 50 units Any other point on this curve will also show a combination of the two factors yielding an equal product that is why the AD curve is known as equal product curve.



we assume here that technical production conditions are constant and that the factors are being combined as efficiently as possible in these

given technical production conditions. The equal product curve, thus, shows the various combinations of the two factors required in the existing state of technology, to produce any given output.

Features of equal product curve :- We will now