

Production Function: Law of returns to scale

DIVYA KISHORE

GUEST FACULTY

RDS COLLEGE (DEPT OF ECONOMICS)

BRABU

LAWS OF PRODUCTION



- *Law of Diminishing Returns or Law of variable Proportion*



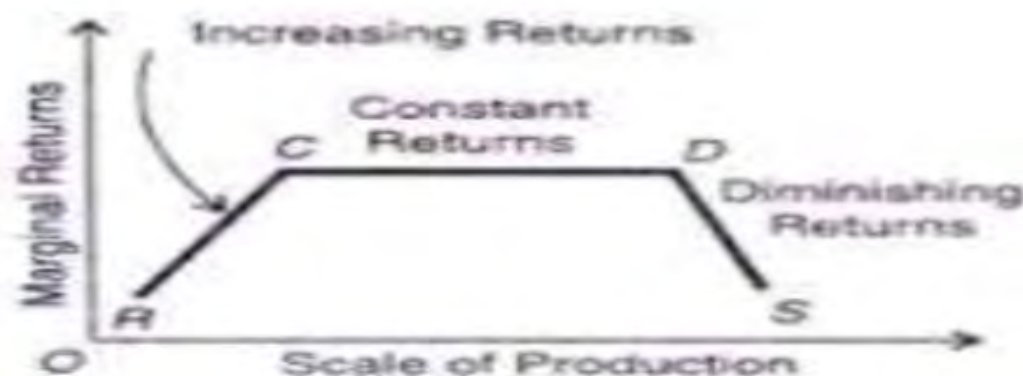
- *Laws of Return to Scale*

Law of Returns to Scale

- It is a Long run analysis & all factors are variable.
- It seeks to analyse the effects of scale on the level of output.

Three kinds of returns to scale:

- INCREASING RETURNS TO SCALE
- CONSTANT RETURNS TO SCALE
- DECREASING RETURNS TO SCALE



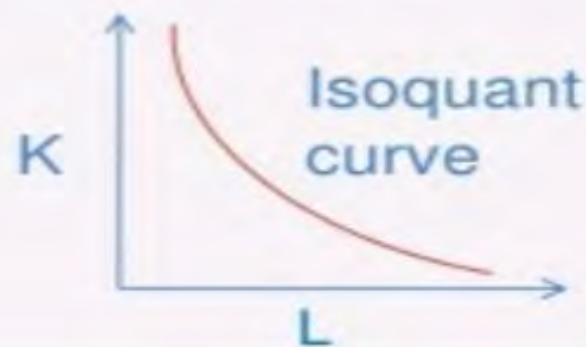
ISOQUANTS

➡ **Isoquant** is a curve representing the various combinations of two inputs that produce the same amount of output.
Also called as **equal product curve**.

➡ Slope of an isoquant indicates the rate at which factors K and L can be substituted for each other while a constant level of production is maintained.

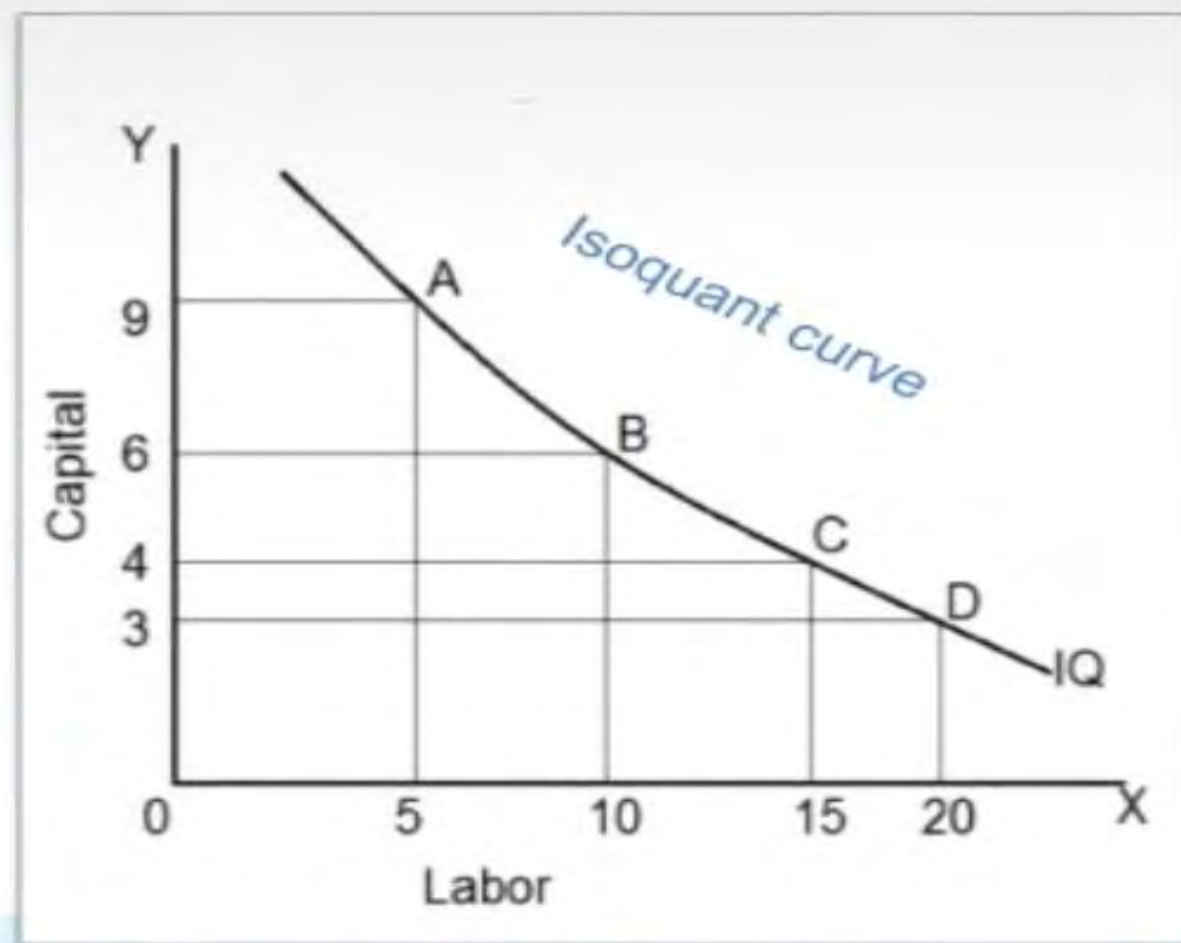
ASSUMPTIONS :

- There are two inputs: Labour L & Capital C to produce a commodity X.
- L, K & X are Perfectly divisible.
- Technology of product is given.



Example:

Factor Production	Labour	Capital
A	5	9
B	10	6
C	15	4
D	20	3
E	25	2



Types of Isoquant

The shapes depends upon degree of substitutability of inputs:

Linear Isoquant:

Perfect substitutability between factors of production.

An output can be produced by either using one or both.




Input- Output Isoquant

Strict complementarity's between inputs.

If a quantity of one input is increased there will be no change in output

PROPERTIES OF ISOQUANTS

- **ISOQUANTS are negatively inclined.**
- **ISOQUANTS are convex to the origin.**
- **Two ISOQUANTS can't intersect each other.**
- **ISOQUANTS doesn't touch either axis.**



THANK YOU