

Q3. What is the average product of an input?

Ans: Average product is defined as the output produced by per unit of variable factor (labour) employed. Algebraically, it is defined as the ratio of the total product by units of labour employed to produce the output, i.e. AP = TP/L Where,

TP = Total Product

L = units of labour employed.

Q4. What is the marginal product of an input?

Ans: Marginal Product is defined as the additional output produced because of the employment of an additional unit of labour. In other words, it is the change in the total output brought by employing one additional unit of labour. Algebraically, it is expressed as the ratio of the change in the total product to the change in the units of labour employed, i.e.

$$MP_L = \frac{\Delta TP}{\Delta L} = \frac{\text{Change in total product}}{\text{Change in labour units}}$$

Or, 
$$MP_L = TP_n - TP_{n-1}$$

Where,

 $TP_n$  = Total product produced by employing n units of labour

 $TP_{n-1}$  = Total product produced by employing (n – 1) units of labour

