Class B.Com-I.

Subject: Business Economics and Environment.

Paper : II

unit : V

Topic : Factor Pricing: (The Essence of the theory of Marginal Productivity.

Lecture Sequence No : 5

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The Essence of the Theory:

The theory states that the firm employs each factore up to that number where its price is equal to its VMP. Thus wages tend to be equal to the VMP of labour, interest is equal to VMP of capital and so on. By equating VMP of each factor with its cost a profit seeking firm maximises its total profits.

Let us illustrate the theory with reference to the determination of the price of labour iè wage:

Let us suppose that the price of the product is Rs 5 (constant) and the wage per unit of labour are Rs 200 (constant). As the number of factors other than labour remains unchanged wages represent the marginal cost (MC).

Land	capital	Labour	Total product	MPP of Labour	VMP or MRP of Labour	The wage Rate AW = MW
1 unit	1 unit	1 unit	10 units.	-	-	Rs 20
1 unit	1 unit	2 units	16 units	Rs 6 unit	Rs 30	Rs 20
1 unit	1 unit	3 units	1 units	Rs 5 units	Rs 25	Rs 20
1 unit	1 unit	4 units	25 units	Rs 4 units	Rs 20	Rs 20
1 unit	1 unit	5 units	28 units	Rs 3 units	Rs 15	Rs 20
1 unit	1 units	6 units	30 units	Rs 2 units	Rs 10	Rs 20

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The table shows that at 2 or 3 labourers the VMP or MRP of labour is greater than wages, so the firm can earn more profit by employing an additional labour. But at 5 or 6 labourers, the VMP or MRP of labour is less than wages, so it would reduce the number of labourers. But when it reduce the number of labourers But when it employs 4 labourers, the wage rate Rs 20 becomes equal to the VMP or MRP of labour also Rs 20. Here the firm gets the maximum profits because its marginal cost of labour (or marginal wage Rs 20) is equal to its marginal revenue (VMP or MRP) Rs 20.

Thus, under the assumption of perfect competition a firm employs a factor up to that number at which the price of the factor is just equal to the value of the marginal product (MRP of the factor). In the same way it can be shown that rent equal to the VMP of land, interest is equal to the VMP of capital and so forth.

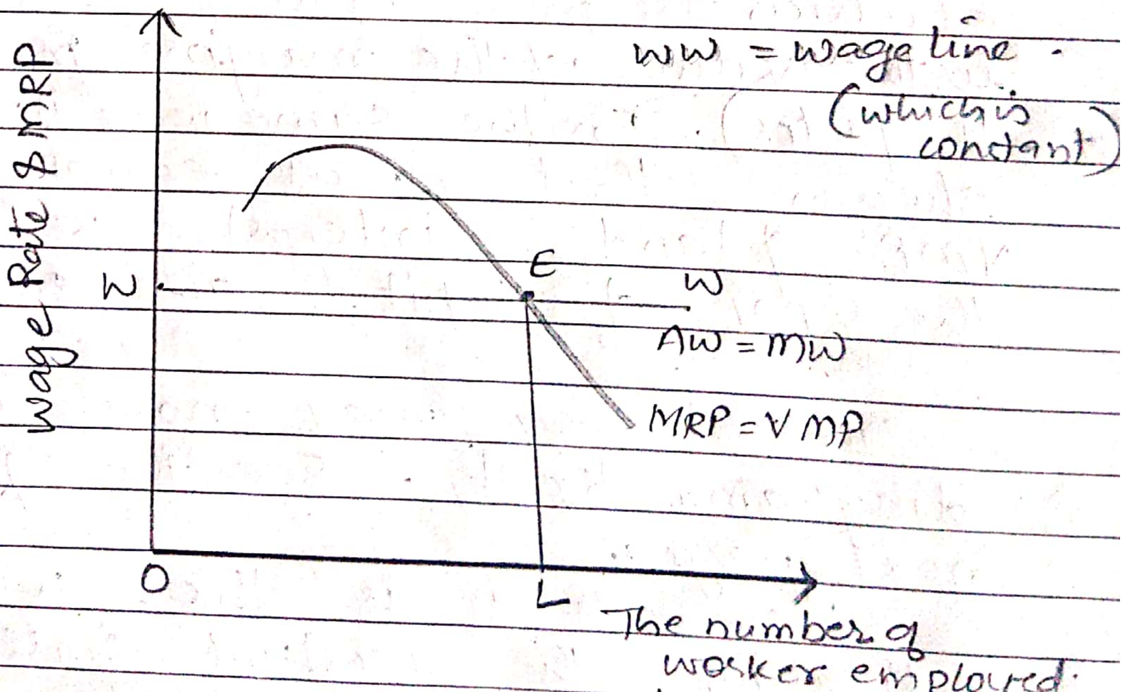
The theory may now be illustrated diagrammatically. See the fig on next page.

Here WW is the wage line indicating the constant rate of wage at each level of employment.

AW = MW is ~~marginal~~. Here AW is Average wage and MW is marginal wage.

The VMP line shows the value of marginal product curve of labour, and it goes downwards from left to right indicating diminishing MPP of labour.

In the fig. below shows that the firm employes OL number of labourers because by doing so it equates the MRP of labour with the wage ratio, and makes optimum purchases of labour.



Wage Determination.