CHAPTER -7

Q.1 Explain the marginal productivity theory of distribution.

Or

"Each factor of production gets return equal to its marginal productivity".

Ans:-

Introduction:- The national income of a country is the result of joint and co-operative efforts of the various factors of production.thus,generated national income is to be distributed amongst various factors of production. This aspect is studied under the head of distribution.

The theory of distribution is concerned with the study of the conditions of demand for and supply of the factors of production and the way in which they are rewarded for the services which they render in the production of goods and services. From this point of view, we can say the theory of distribution is an extension of the general theory of values.

Marginal Productivity theory of distribution:

The marginal productivity theory of distribution seeks to explain how the national income is distributed amongst various factors of production. That is it explain how the price or the share of each factor of production is determined.

The theory was first propounded by Devid Ricordo and Edward West. But systematically it was developed by Prof. Jevons,

Prof. Wicksteed, Prof .Clark and recently by Prof.Marshall and Prof. J.R Hicks.

The sum and substance of this theory is that the price of factor of production depends upon its marginal productivity that is to say a particular factor of production gets reward according to the marginal contribution it makes to total output that is according to its marginal productivity.

Prof. J.B .Clark states that according to the theory of marginal productivity each factor of production gets return according to its marginal productivity in other words, it can be said that the price of each factor of production tend to be equal to its marginal productivity.

Explanation of the theory:

According to this theory the reward or return of each factor of production depends on its marginal productivity.Therefore, it is necessary to clarify the meaning of marginal productivity.

If the proportion of other factors of production is fixed and units of any one of the factor are added one by one in production, whatever units produce additionally by variable factor is called marginal physical productivity.

When physical productivity is represented in terms of money through the system of price, it is known as revenue productivity, in other words marginal revenue productivity can be obtained by multiplying units of marginal physical production with market price.

When more and more units of a factor are used, the marginal productivity of each additional unit is decrease. Every

producer wants to make maximum profit. Therefore he will continue to employ each factor of production till price paid to each unit of factor and its marginal productivity are equal and at this point the producer will attain equilibrium. Therefore on one hand producer will get maximum profit and on the other hand, the factor of production will get return according to their marginal productivity.

Illustration of the theory:-

According to this theory, the price or rewards which a factor gets tend to be equal to its marginal productivity. As long as the marginal productivity of a factor is greater than its price, the employer would use more and more units of the factor. The marginal productivity, after a certain stage would tend to diminished because of the operation of the law of diminishing marginal returns. This can be explained with the help of the following example.

Number of Labour	Total Physical Production	Marginal Physical Production	Market price per unit	Value of marginal output	Rate of returns OR wage rate	Net returns from additional labour
6	30	5	2	10	4	6
7	34	4	2	8	4	4
8	37	3	2	6	4	2
9	39	2	2	4	4	0
10	39	0	2	0	4	-4

It is seen in the above table that, in the beginning producer employs 6 labour at 6th labour marginal output is Rs 10 and they are paid Rs 4 thus by employing 6 labour unit producer gets Rs 6 as net return. Therefore he adds 7th and 8th labour respectively and gots Rs4 and Rs 2 as net return. But when he employs 9th units the value of physical output is Rs 4 and wage to be paid is Rs 4, in this way at

9th unit marginal productivity and wages becomes equal. The rational producer will now not add new labour because this is the optimum level for maximum profit. Thus it can be said that the price or reward of a factor of production tend to be equal to its marginal productivity.

Graphical Presentation:-
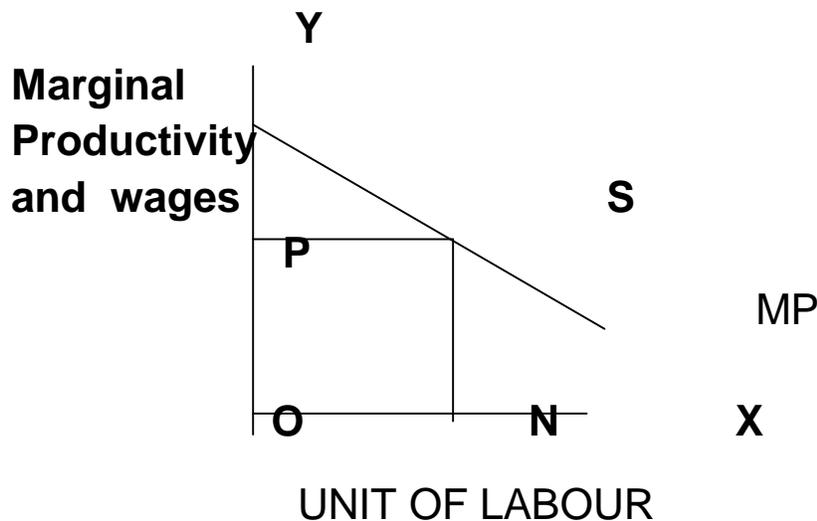
UNIT OF LABOUR

In diagram OX shows unit of labour while OY shows productivity and wages.MP is a diminishing marginal productivity curve.

It is shown in this diagram when the price of a factor is OP,only ON units are employed, at this level of employment marginal productivity is NS which is equal to price or wages.

Assumptions:- The theory is based on following assumptions:-

(1) The theory assumes that there is perfect competition prevails in both factor market as well as commodity market.
(2) All units of a factor of production are homogeneous.
(3) It is also assumed that the factors of production are divisible.
(4) It is also assumed that the factors combinations are alterable.

(5)	The theory is based on the assumption of perfect mobility of factors of production.

(6)	It is assumed that the marginal productivity of a factor tend to diminish after a certain stage as more and more units are employed

(7)	It is also assumed that the full employment in labour market prevails.

(8)	It is assumed that the production technique remain unchanged.

(9)	The theory also assumes that the aim of employer is to get maximum rewards.

(10) It is assumed that the theory is applicable on long period.