## Unit 5
## FACTOR PRICING

1. Explain the marginal productivity theory of distribution.

Ans:- Marginal productivity theory of distribution is the oldest and most significant theory which tries to explain the determination of the rewards of different factors of production. It is a work of many economists. David Ricardo was the first man to use the theory for the determination of rent i.e., price of rent. Then Mount Ford applied it for the determination of wages and interest. But the theory was finally developed by Jevons, Walras and Clark by the end of 19th century. The theory tries to answer the question how to is the price of each factor determined.

According to marginal productivity theory of distribution, each factor has to be paid according to its marginal productivity. In this case the demand for a factor depends upon the marginal productivity of that factor. This theory concentrates on the determination of such factor price and factor employment which maximise the profit of the employer. As per this theory, a firm will engage that number of a factor in the production in which the price of the factor becomes equals to its marginal revenue productivity.

Tabular and diagrammatic representation:
The marginal productivity theory of distribu-

tion can be explained with the help of following table:

| Number of labourers | MPP (In unit) | Price of Product (P=AR=MR) | VMP/MRP (In ₹) | Wage (In ₹) |
|---|---|---|---|---|
| 1 | 10 | 2 | 10×2=20 | 8 |
| 2 | 8 | 2 | 8×2=16 | 8 |
| 3 | 6 | 2 | 6×2=12 | 8 |
| 4 | 4 | 2 | 4×2=8 | 8 |
| 5 | 2 | 2 | 2×2=4 | 8 |

The above table can be illustrated with the help of the following diagram –

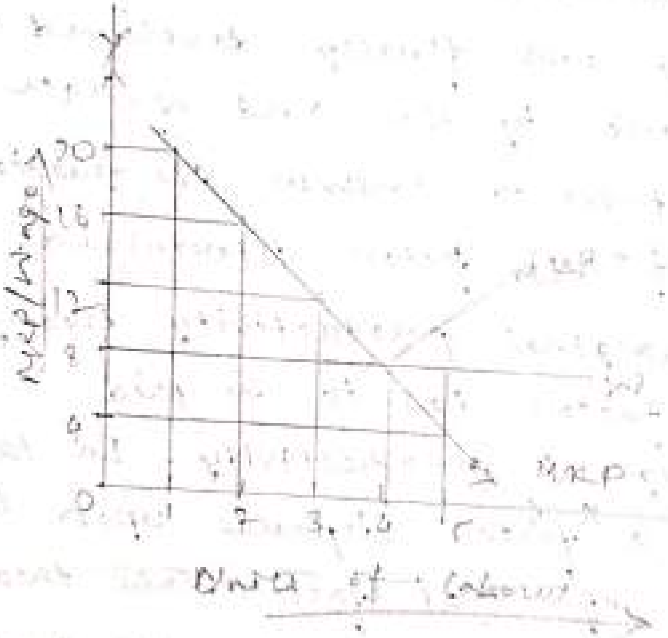



Fig: – Equilibrium of a firm under perfect competition as per the Marginal Productivity Theory of Distribution.

In the above diagram, the number of workers is shown along the ox-axis and the price of worker (wage) and Marginal Revenue Productivity (MRP) are shown on the OY-axis. MRP is the Marginal Revenue Productivity curve and WW line at point E. Therefore, point (E) will be the equilibrium point. because at this point:

MRP = Wage = ₹8

Therefore, the firm will make demand for 4 workers when the rate of wage is Rs. 8 per worker. If the firm engages 5 workers, it will have to incur loss. Therefore, according to this theory, the demand for the factors of productivity of the factor is equal to its price.

Assumptions: —

(i) Perfect competition prevails in both product and factor market.

(ii) All factors are homogeneous in nature.

(iii) There is full employment in the economy.

2. What do you mean by rent?

OR

Explain the concept of rent.

Ans:- In economics rent refers to a payment made for the use of a resource or asset that is in fixed or limited supply. Rent is a concept that applies to various factors of production, mainly land and sometimes other natural resources..

3. "Is rent peculiar to land alone"? Explain.

Ans:- "Though rent is the price of land yet other factors of production also generate rent in the short run. Machines, tools and other assets also generate rent in the short run.

4. What is the view of David Ricardo on rent?

Ans:- According to David Ricardo, "Rent is that portion of the produce of the earth which is paid to the landlord for the use of the original and indestructible power of the soil."

5. Explain the concept of quasi rent?

Ans:- Quasi rent is an economic concept that is closely related to economic rent but is often associated with factors of production that are not fixed in supply in the long run. Quasi rent is a temporary phenomenon. Quasi rent is the earnings of capital equipments such as machineries, buildings, etc which are inelastic in supply in short run. According to marshall it is only a temporary surplus which is enjoyed by the owner of the capital equipments in the short run.

5. Write a note on nominal and real wages.

Ans:- Nominal wages refer to the actual wage rate or income that an individual or worker receives in terms of current currency units without adjusting for inflation. It represents the face value of wages or salary in the currency of the country.

In economics real wages refer to wages or income adjusted for changes in the general price level or in other words they represent the purchasing power of a workers income. Real wages are a critical concept for understanding the actual standard of living or well being of individuals because they take into account the impact of inflation or changes in the cost of living

7. Write a note on collective bargaining.

Ans:- Collective bargaining is the process by which representatives of workers and representatives of employers negotiate employment terms and conditions such as wages, working hours, benefits, etc, with the aim of reaching a mutually acceptable collective bargaining agreement.

Merits

(i) Balancing Power: collective bargaining balances the bargaining power between employees and employers. By negotiating collectively, workers can leverage their collective ~~workers can be~~ strength to secure better wages and working conditions.

(ii) Conflict Resolution: It provides a structured and peaceful means of resolving labor disputes and conflicts between labor and management. This can help maintain labor peace.

(iii) Improved working conditions: CBAs often lead to improved working conditions, benefits, and job security for workers, which can contribute to higher job satisfaction and productivity.

(iv) Standardization: CBAs can standardize employment terms within an industry or sector, ensuring that similar jobs receive similar treatment.

Demerits

1. Conflict and Impasse: Disagreements during negotiations can lead to conflicts, work stoppages, or even breakdowns in negotiations

(ii) Differing interests : Balancing the interests of labour and management can be complex, as the goals and priorities of the two parties may not always align.

(iii) Regulatory and Legal Framework : Laws and regulations governing collective bargaining can vary widely between countries and regions, adding complexity to the process.

Q8. Explain the Ricardian theory of rent.

Ans:- David Ricardo, propounded a theory of rent which is popularly known as Ricardian theory ~~of rent~~. According to David Ricardo, rent is that portion of the produce of the earth which is paid to the landlord for the use of original and indestructible powers of soil.

Assumptions of the law:

(i) Land is a free gift of nature and thus it has no cost of production.

(ii) The supply of land is perfectly inelastic.

(iii) Fertility of land is original that is it can neither be created nor be destroyed.

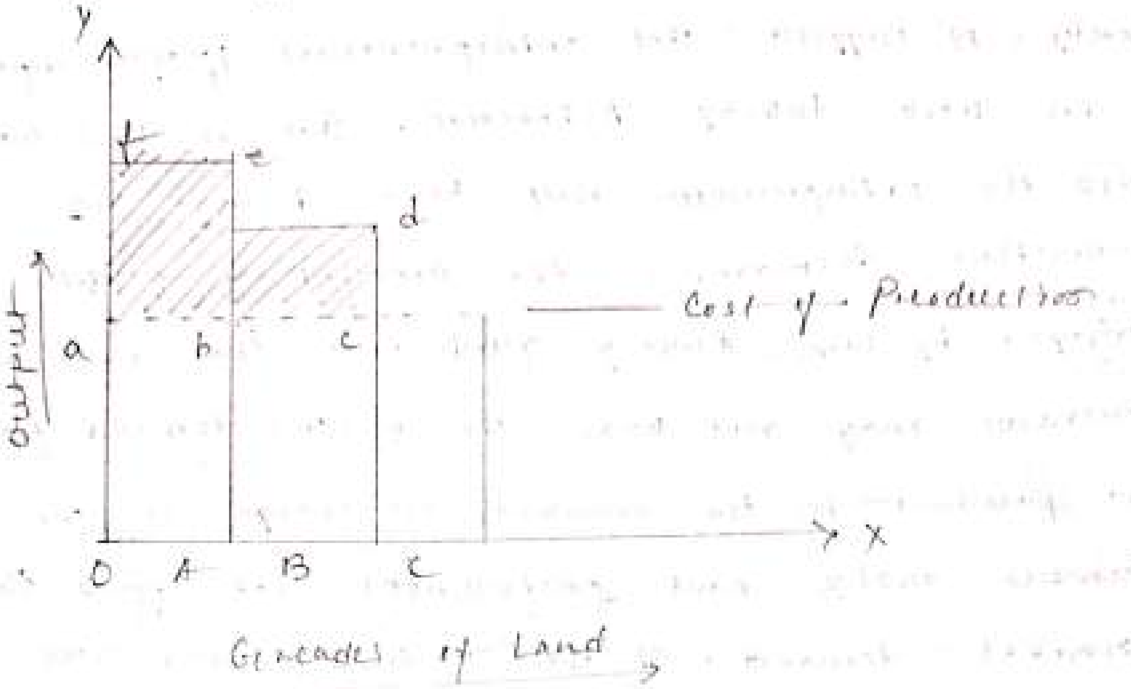
(iv) ~~Every~~ There is perfect competition in the use of land and the goods produced.

Explanation of the law:

The Ricardian theory of rent can be explained with the help of an example. Let us suppose that a group of people lands in a lonely island. The island has three categories of land namely grade A, grade B and grade C. According to David Ricardo Grade A is the most fertile land and he called it super marginal land. Grade B is less fertile which was regarded by David Ricardo as intra marginal land. Grade C is the least fertile land which was regarded by Ricardo as marginal land.

According to Ricardo there is a definite order of cultivation. First of all Grade A land is brought under cultivation. As population increases, Grade A land becomes scarce and so grade B land is brought under cultivation. As further population increases, Grade B land also continues to become scarce and so grade C land is finally brought under cultivation.

The cost of production is determined by the cost of production of marginal land. Grade A land is the most fertile land which produces maximum surplus output known as rent. Grade B land also generate surplus output but it is less than than the Grade A land. In case of grade C land there is there is no any surplus output. That is why grade C land is called marginal land or no rent land.




In the above diagram grades of land are measured along the x-axis and outputs, cost and rent are measured along the y-axis. It is seen that grade A land generates maximum rent whereas grade C land generates no rent.

Criticism

(i) Ricardo takes an unrealistic assumption of perfect competition.

(ii) Rent doesn't accrue to land only.

(iii) Powers of the soil are neither completely original nor completely indestructible.

2. Explain the risk and ~~and~~ uncertainty bearing theory of profit.

Ans:-

Risk bearing theory of profit: The risk bearing theory of profit is established by ~~Hawley~~ Hawley. It suggests that entrepreneurs profit depends on his risk taking behaviour. That is, how much risk the entrepreneur will bear during the production determines the amount of profit enjoyed by him. During production the entrepreneur may not know the exact demand for his product in the market or change in consumers taste and preferences that affects the market demand. If the entrepreneurs production exceeds the demand, he will incur loss for not selling his entire output. This implies that there is a demand side risk associated with production. If there is no compensation or reward for risk, there will be no incentive for taking risk. The nature of risk and the risk bearing capacity vary across industries. The higher the risk under taken, the more will be the profit earned. However, it should be noted that, the amount profit actually depends on how efficiently risk is managed by the entrepreneur not the amount of risk borne by him.

According to risk bearing theory, an entrepreneur envisages with various types of risks. An entrepreneur faces risk in production when technology becomes obsolete. Wh more rivals enter into the production, or when new products or new process of production are launched, a firm will meet competition risk. When there is drastic fall in prices due to economic recession, business cycle risk will arise. A firm also faces risks related to macroeconomic policy changes. For instances, if government adopts policies like price control, tax policy, import or export restriction etc., which may produce risk. An entrepreneur may be gainer or looser at this situation. These risks cannot be avoided by buying insurance or in any other way. Therefore, entrepreneurs have to undertake these risks and claim profit as a reward of bearing these risks.

<u>Uncertainty Bearing theory of profit</u>: Prof Knight suggests that profit is the reward for bearing uncertainty. In the theory of production, the assumption of certainty is somewhat unrealistic as with the progress of economy, entrepreneurs has to face uncertainty in the sphere of production. When production takes place simply for self-consumption, there is no uncertainty. However, if production takes place for commercial purpose, that is price and output depend on the interaction between buyers and sellers, then uncertainty arises in the decisions of entrepreneurs. This uncertainty generates profit.

According to Knight there is difference

between risk and uncertainty. Many situations may arise during the process of production which can be anticipated or whose profits probability of occurrence can be statistically estimated. These situations are known as insureable risks. The loss from insureable risks can be avoided by paying some fixed premium. Therefore, these insureable risks do not cause uncertainty. For instances risks are associated with the losses can be recovered by purchasing insurances.

However, some events which cannot be predicted or whose probability of occurrence cannot be easily estimated, are known as uninsureable risks. No insurance company is ready to provide insurance coverage against these kind of risks. Thus these uninsureable risks can generate uncertainty in the process of production. For example uncertainty can be reflected in the outcomes of price decision taken by firms or the facts that there is no precise information regarding rise or fall of product price. There is no provision for insurance against the commercial losses which may arise due to price decisions, output, product variation etc. Entrepreneurs claim profit as rewards for undertaking these non-insureable risks or uncertainties. According to Knight uncertainty in production can be thought of as factor of production like other factors say land, labour, capital, etc. The price for undertaking this uncertainty is, therefore, considered as part of cost of production. Like other factors there exist supply price of uncertainty. This supply price is known as profit. In the production process since entrepreneurs supply the uncertainty factor, they enjoy profit.

It should be noted that in Knight's theory in the midst of uncertainty, if producers anticipations regarding output and price decisions are found correct, then they enjoy profits otherwise they incur losses.

10. What do you mean by interest?

Ans:- Interest typically refers to the cost of borrowing money or the return earned on savings or such investment. ~~It~~ represents the price paid for the use of funds over time.

11. What ~~do you mean~~ by loanable ~~fiscon~~? fund

Ans:- Loan able fund is an economic concept that refers to the total amount of money available in an economy for borrowing and landing purposes. ~~loan It~~ represents the pool of financial resources that individuals, businesses and governments can use to obtain loans or make investments. Following are the features of loanable funds:

① Savings and investments: Loanable funds are primarily composed of savings made by individuals, businesses and other entities within an economy.

② Interest rates! ~~loa~~ The interest rate is a critical factor in the loanable funds market. It represents the price of borrowing money and the return on investment for lenders.

12. ~~How~~ Explain the modern theory of rent.

Ans:- According to the modern version, rent arises due to scarcity of ~~land rent~~ land.

supply of other factors like labour, capital etc. can also be scarce in relation to demand. Therefore, income earned by these factors in excess of their minimum income is called economic rent.

## Features of Modern Theory of Rent:

The major features of the modern theory of rent are as under:

1. Rent can be a part of the income of all factors of production.

2. Amount of rent depends upon the difference between actual earning and transfer earning.

3. Rent arises when supply of the factor is either perfectly inelastic or less elastic.

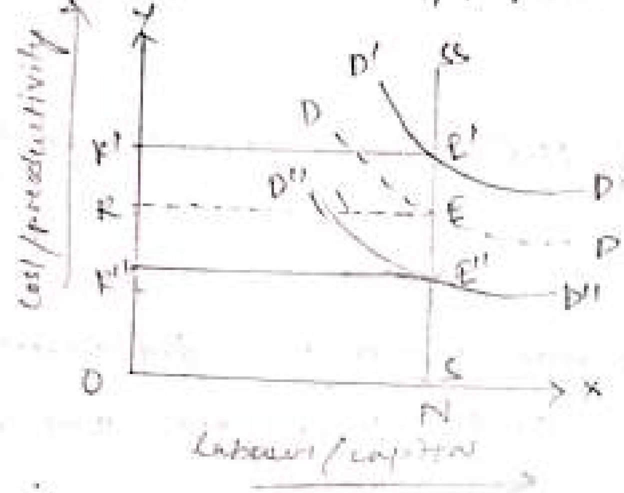
## Determination of rent of land

Modern economists opined that rent arises due to scarcity of land. Scarcity of land means that demand for land exceeds its supply. Rent will be determined at a point where demand for land Demand is equal to its supply.

## Demand for land:

Land has derived demand. It means that demand for land depends on the demand for agricultural products. If demand for food grains increases, demands for land will also increase and vice-versa. Moreover, demand for land is influenced by its marginal productivity. It means as more and more land is used its rent goes on diminishing.

Supply of land: Supply of land is fixed. Its supply is perfectly inelastic. It means, increase in the price of land will not evoke any increase in its supply.




In above diagram units of land have been measured on X-axis and rent on Y-axis. SS is the supply curve of land which is parallel to Y-axis indicating that the supply of land remains fixed. Rent will be determined at a point where the demand and supply of land are equal to each other.

Initially DD is the demand curve which intersects the supply curve at point E. At this point, equilibrium rent OR is determined. Now, if the population rises which gives boost to the demand for food, the demand curve shifts to D'D' and the equilibrium will be point E' and the rent will rise to the extent of OR'.

Similarly, if the demand curve shifts to $D^4D^4$ and labour/capital the new equilibrium point will be $E^4$ and the rent will fall to $OR^4$.

13. Explain the role of trade union in determining wages.

Ans:- Trade union can impact the wage setting process in the following ways:

(i) Collective Bargaining: Trade unions negotiate directly with employers through a process known as collective bargaining. During these negotiations, unions represent the interests of their members and seek to secure better wages and working conditions. The outcome of these negotiations often leads to the establishment of collective bargaining ~~agreem~~ agreements ~~of collect.~~ that specify wage rates, benefits, and other employment terms.

(ii) Minimum wage campaign: Trade unions may advocate for higher minimum wage laws at the government level. They can influence policymakers to raise the legal minimum wage, which can benefit not only their members but also a broader segment of the workforce.

(iii) Industry standards: Trade unions often set wage standards and expectations within specific industries. When they negotiate favourable wage agreements in one company or sector, it can set a benchmark for other employees in the same industry, indirectly influencing wage levels.

(iv) Protest and Strikes: When negotiations break down or disputes arise, trade unions may organize strikes or protests to put pressure on employers to meet their wage demands. The threat or occurrence of strikes can lead to wage concessions by employers.

(v) Advocacy for Equal Pay: Unions may advocate the for equal pay for equal work, working to close gender and other wage gaps within the workplace. They can pressure employers to address wage disparities based on factors like gender, race or age.

(vi) Monitoring and ~~Emp~~ Enforcement: Trade unions often play a role in monitoring and enforcing wage-related laws and regulation. They may file grievances on behalf of their members if they believe wages are not being paid correctly or if labor laws are violated.

(vii) Skill Enhancement: Some trade unions offer training and skill development programs for their members. By enhancing their members' skills and qualifications, unions can help workers command higher wages in the labor market.

(viii) Political Advocacy! Trade unions often engage in political activities to support candidates and policies that align with their goals, including wage-related issues. Their political influence can shape legislation and government policies related to labor and wages.

14. Explain the keynesian theory of interest.

Ans:- The keynession theory of interest rate refers to the market interest rate that is the rate governing the terms on which funds are being currently supplied.

According to keynes, the market interest rate ~~of~~ demand and supply of money. It is the price which brings into balance the willingness to hold wealth in the form of cash with the supply of cash.

Meaning of liquidity preference : Liquidity preference means the preference of the people to hold wealth in the form of liquid cash rather than in other non-liquid assets. The three motives of liquidity preference are!

(i) The transaction motive, $M_t = f(Y)$

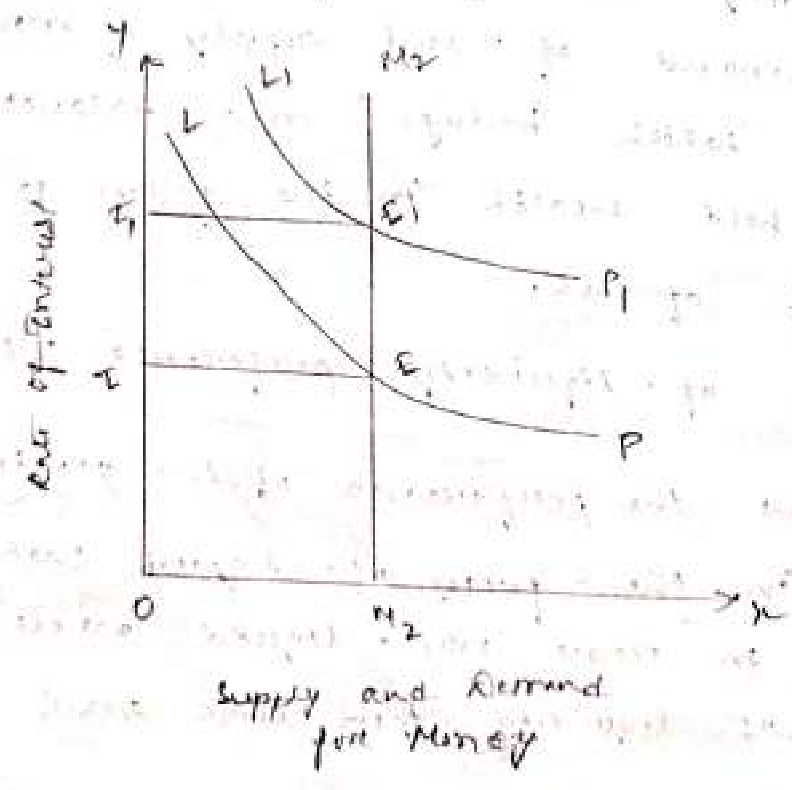
(ii) The precautionary motive, $M_p = f(Y)$

(iii) The speculative motive, $M_s = f(r)$

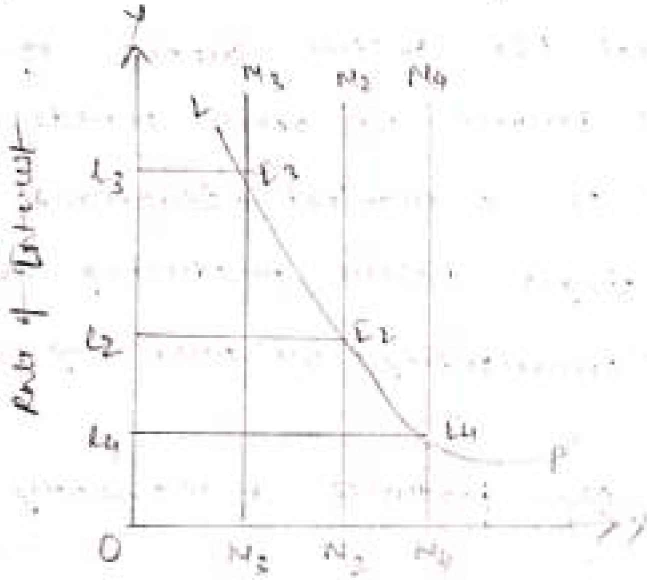
<u>Determination of rate of Interest:</u>

According to keynes, the rate of interest is determined by the demand for and the supply of money. The demand for money is liquidity preference and the supply of money is determined by the policies of the government and the central Bank.

<u>Equilibrium between demand and supply of money:</u> The equilibrium between liquidity preference and demand for money determines the rate of interest. In the short run the supply of money is assumed to be constant



In the above diagram LP is the liquidity preference curve. $M_2$ shows the supply of money to satisfy the speculative motive. Both the curves intersect at point E which is the equilibrium point and hence the rate of interest is determine at point E. If liquidity preference increases from LP to $L_1P_1$, the supply of money remains constant and the rate of interest increases from $OI$ to $OI_1$.




Demand for money and supply of money

In the above diagram LP remains constant. If the supply of money is $OM_2$, then the rate of interest is $OI_2$. Now if the supply of money is reduced from $OM_2$ to $OM_3$ and then the interest rate would increase from $OI_2$ to $OI_3$. Again if the supply of money is increased from $OM_2$ to $OM_4$ then the interest would decrease from $OI_2$ to $OI_4$.

Criticisms: Following are the major criticisms.

of keynesian theory of interest :

(i) productivity of capital is ignored by keynes.

(ii) keynes could not draw distinctions between different degrees of liquidity.

(iii) keynes theory has limited validity from supply side.

(iv) keynes in his theory has not explained the term ~~boding~~ hoarding properly.