Mona Assistant Professor (Guest Faculty) Department of Economics Maharaja College Veer Kunwar Singh University, Ara B.A. Economics B.A Part - 3 Paper- 8 ,Group -A, (Labour Economics) Topic : Labour Market Equilibrium Email I'd: <u>monapryal2223@gmail.com</u>

<u>Labour Market Equilibrium</u>

The labor market differs somewhat from the market for goods and services because labor demand is a derived demand; labor is not desired for its own sake but rather because it aids in producing output. Firms determine their demand for labor through a lens of profit maximization, ultimately seeking to produce the optimum level of output and the lowest possible cost.

Conditions of Equilibrium

Equilibrium in the labor market requires that the marginal revenue product of labor is equal to the wage rate, and that MPL/PL=MPK/PK.

Labor Market Equilibrium

In order to find the equilibrium quantity and price of labor, economists generally make several assumptions:

- The marginal product of labor (MPL) is decreasing;
- Firms are price-takers in the goods market (cannot affect the price of output) as well as in the labor market (cannot affect the wage rate);
- The supply of labor is elastic and increases with the wage rate (upward sloping supply); and
- Firms are profit-maximizers.
 The marginal revenue product of labor (MRPL) is equal to the MPL multiplied by the price of output. The MRPL represents the additional revenue that a firm can expect to gain from employing one additional unit of labor it is the marginal benefit to the firm from labor. Under the above assumptions, the MRPL is decreasing as the quantity of labor increases, and firms can increase profit by hiring more labor if the MRPL is greater than the marginal cost of that additional unit of labor the wage rate. Thus,

firms will hire more labor when the MRPL is greater than the wage rate, and stop hiring as soon as the two values are equal. The point at which the MRPL equals the prevailing wage rate is the labor market equilibrium.



Optimal Demand for Labor: The optimal demand for labor is located where the marginal product equals the real wage rate. The curved line represents the falling marginal product of labor, the y-axis is the marginal product/wage rate, and the x-axis is the quantity of labor.

Equilibrium in Labour Market

The competitive market wage rate, and the quantity of labour employed, is determined by the interaction of demand and supply. The equilibrium wage rate is the rate that equates demand and supply. (In the below given graph, "We" is the equilibrium wage rate.)

Economists understand the processes of firms hiring and workers working for pay by using the standard supply-and-demand model. Demand represents the firms paying for workers' time and effort, and supply represents the workers supplying their labor. The wage rate, then, is the price of the labor, and if the labor market is in equilibrium (at a wage rate of We in the figure below), then the quantity of work that workers want to do (or supply) will be equal to the quantity that firms want to hire (or demand).



Figure 1 : The Unemployment and Equilibrium in the Labor Market. In a labor market with flexible wages, the equilibrium will occur at wage We and quantity Qe, where the number of people who want jobs (shown by S) equals the number of jobs available (shown by D).



Figure 2 :Unemployment in the Labor Market. When the wage rate is at W, above the equilibrium, the number of those who want jobs (Qs) is greater than the number of job openings (Qd). The result is unemployment, shown by the bracket in the figure.