

**COVENANT UNIVERSITY  
NIGERIA**

*TUTORIAL KIT  
OMEGA SEMESTER*

**PROGRAMME: ECONOMICS**

**COURSE: ECN 226**

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**ECN 226**  
**LABOUR ECONOMICS II**  
**BY**  
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**QUESTIONS**

- 1) Discuss the concept of monopsonistic exploitation in imperfect labour markets.
- 2) Discuss the hiring decision of a perfectly discriminating monopsonist.
- 3) With the aid of a figure, explain the immigration surplus.
- 4) Give justifiable reasons for wage differentials in the labour markets.
- 5) What do you understand by the Cobweb model?
- 6) What is Bilateral Monopoly?
- 7) Explain three methods for estimating human resource requirements
- 8) As a young graduate, which of these 3 concepts of wage: reservation wage, real wage and nominal wage, will be of essence to you. Justify the reason for your stance.
- 9) Discuss the decision criterion for investing in further education.
- 10) Explain the theoretical link between educational attainment and earnings using human capital theory.
- 11) What do you understand by human capital development? Mention some of the processes that it entails.
- 12) Explain the possible effects of the budgetary allocation to the ministry of labour and productivity on employment level and wage rates in Nigeria.
- 13) Explain the factors that influence investment in human capital.
- 14) Assuming that six years after you graduated from Covenant University, you came across one of your friends who you graduated together. Upon discussion, you observe that his/her monthly wage is more than thrice yours. Articulate possible factors accounting for such gap in wage in the spirit of compensating wage differential.
- 15) Mention ten (10) factors that can affect an organization's human capital.
- 16) In what ways does population growth in developing countries exert pressure on their labour market?
- 17) Discuss the human capital model according to Sammis, Miller, and Shukiar (1975).
- 18) Elucidate how the increasing number of universities in Nigeria can exert influence on employment and wage rate in Nigeria.
- 19) Enumerate the key factors that influence labour demand and how they affect the level of both wage rate and employment level.
- 20) In what ways do the operations in labour in developing countries like Nigeria differ from those of the developed countries?

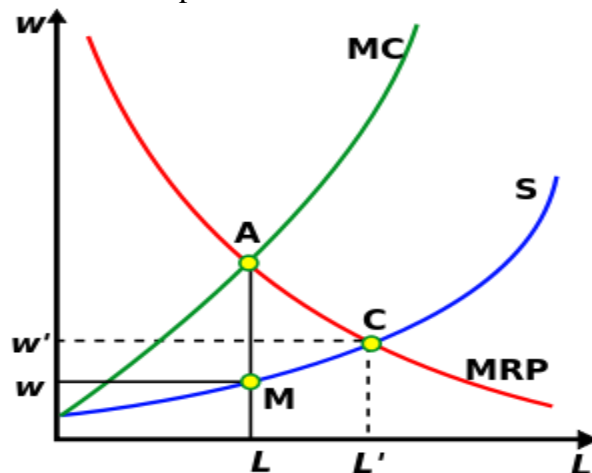
## ANSWERS TO TUTORIAL QUESTIONS

### 1) Discuss the concept of monopsonistic exploitation in imperfect labour markets

Monopsonist exploitation happens when a firm is the only or at least the main employer of workers in a region or industry. Generally, monopsony happens when the entire demand of something consists of only one buyer. In our context, the monopsonist is a company and it is the only (or at least the main) purchaser of labour in a region/industry.

A monopsonist must coax labor out of the labor pool by raising the wage level above the reservation wage of potential workers. Assume a non-discriminating monopsonist, it will raise the wage rate of all workers in order to coax new workers into its employment. This makes the marginal cost of labour higher than the supply of labor. This is because the labour supply curve is the amount of labour available at certain price levels. It slopes up from left to right as the higher a wage rate a firm is willing to pay, the more labour is available. However, the MC curve plots the cost of the next worker. Since a firm has to increase the wages of all workers to hire one new one, MC includes the increase of all wages plus the new wage of the new worker. So the supply curve is simply plotting wage rates and labour, while the MC curve must plot wage rates and labor plus the increase of wages to all workers.  $MC > \text{Supply}$ .

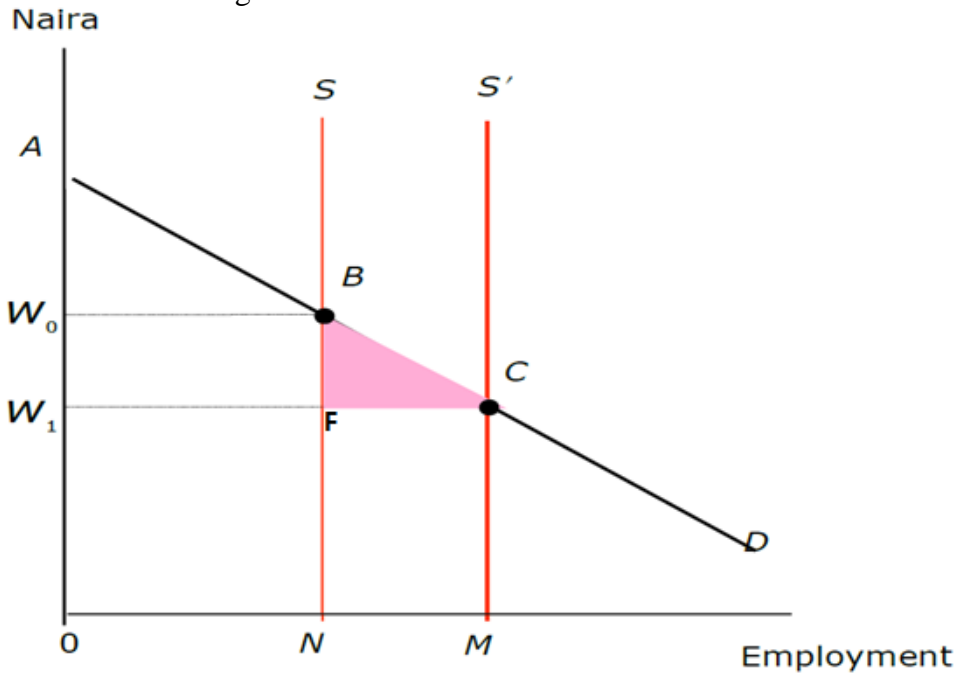
Firms maximize profit where  $MC = MR$ . The MR of workers is downward sloping from right to left. It is called the MRP (Marginal Revenue Product) and slopes downward because at some point, as more and more workers are hired, each additional worker will contribute less and less to total revenue. Here is where exploitation comes into play. Since  $MC > \text{Supply}$  and the firm maximizes profit where  $MC = MR$ , the wage level which corresponds to that lies above the supply curve. Firms do not choose wages, but choose the quantity of labour corresponding to that high wage level. However the wage rate required to employ that quantity of labour is markedly lower than the wage rate where  $MC = MR$  because  $S < MC$ . The area corresponding to the difference between these two wage rates (where  $MC = MR$  and the wage rate at that quantity of labor but on the supply curve) is called dead weight loss. The firm's wage rate is also lower than the competitive market's wage rate where  $S = MRP$  or supply = demand. The area corresponding to the difference between these wage rates is the exploitation.



### 3) With the aid of a figure, explain the immigration surplus.

Prior to immigration, there are  $N$  native workers in the economy and national income is given by the trapezoid  $ABNO$ . Immigration increases the labour supply to  $M$  workers and national income is given by the trapezoid  $ACMO$ . Immigrants are paid a total of  $FCMN$  naira as salary. The

**immigration surplus** gives the increase in national income that accrues to natives and is given by the area in the triangle  $BCF$ .



5) What do you understand by the Cobweb model?

The Cobweb model implies naïve workers who do not form rational expectations. The model is based on two assumptions:

- Time is needed to produce skilled workers
- Persons decide to become skilled workers by looking at conditions in the labour market at the time they enter school

A “cobweb” pattern arises when people are **misinformed** and forms around the equilibrium.



The initial equilibrium wage in a particular market is  $w_0$ . The demand for new skilled workers shifts to  $D'$ , and the wage will eventually increase to  $w^*$ .

This analysis illustrates the cobweb that is formed around the equilibrium point as the labour market responds to the initial demand shock, and as the labour market adjusts to the increase in the demand for labour. The entry wage represents a pattern of booms and busts as the market slowly drifts towards its long-run equilibrium wage ( $w^*$ ) and employment ( $E^*$ ).

### 7) Explain three methods for estimating human resource requirements

a) Utilization-based (or demand-based): Estimates future requirements based on current level of service utilization in relation to future projections of demographic profiles.

*Assumptions:*

- Current level, mix, distribution of health services is appropriate.
- Age- and sex-specific requirements remain constant in the future.
- Size and demographic profile of the population changes in ways predictable by observed trends in age- and sex-specific rates of mortality, fertility and migration.

*Advantages:*

- Economically feasible targets due to no or little change in population-specific utilization rates (assumed).

*Limitations:*

- Requires extensive data.
- Overlooks the consequences of 'errors' arising from the assumptions proving to be invalid.
- Produces a 'status quo' projection, since future population segments are assumed to have similar utilization rates as base year segments.

b) Workforce to population ratio: It specifies desired worker-to population ratio.

*Assumption:*

- Often based on current best region ratio or a reference country, with a similar but presumably more developed sector.

*Advantage:*

- Quick, easy to apply and to understand.

*Limitations:*

- Provides no insight into personnel utilization.
- Does not allow exploring interactions between numbers, mix, distribution, productivity and outcome.
- Base year misdistribution will likely continue in target year.

c) Service target-based: It sets targets for the production and delivery of specific outcome oriented services and converts these targets into HR requirements by means of staffing and productivity standards.

*Assumption:*

- It assumes that the standards of each service covered are practicable and can be achieved within the timescale of the projection.

*Advantages:*

- Relatively easy and understandable.
- Can assess interactions between variables.

*Limitation:*

- Potentially unrealistic assumptions.

## **9) Discuss the decision criterion for investing further education.**

In order to decide whether or not to invest in further education can be done in two ways which are:

- 1) net present value
- 2) Internal rate of return.

In equilibrium, investment in education will be taken to the point at which the present value of expected future earnings exceeds the cost by an amount sufficient to yield an acceptable rate of return. For investment in education to be beneficial, the discounted value of benefit must be greater than or at least equal to the discounted value of cost.

Alternatively, the net present value of the discounted incremental earnings stream accruing to the additional education must be greater than zero. A positive value tells us that the present discounted value of the benefits exceeds the present discounted value of the costs and when this is so, the decision to invest is economically rational. If the net value is negative, then costs exceed benefits and the investment is not economically justifiable. However, this may not be true due to other non-monetary (non pecuniary) benefits as well as social returns to investment in human capital (education).

**The Use of Internal Rate of Returns:** This is an alternative method of making investment decision on educational investment. The internal rate of return (IRR) is that rate of discount at which the net present value of human capital investment will be zero. The value of IRR obtained ( $r$ ) is the maximum rate of interest one could pay on borrowed funds to finance a human capital investment and still break even. As long as  $r$  exceeds  $i$ , the market rate of interest, it is economically justifiable to invest in the educational pursuit. A major limitation of this approach is that it is not easy to correctly calculate IRR given a host of non-pecuniary benefits (returns) to HK.

**11) What do you understand by human capital development? Mention some of the processes that it entails.**

Human capital development simply means any activity that is designed to increase the quality or quantity of labour supply or manpower. Expenditure on education and training can be treated as investment in human capital just as expenditure on capital equipment can be understood as investment in physical capital.

The process of human capital investment includes expenditure on: education, on-the-job training, improved health, migration, investment in job search, other home investments in the form of family care on the pre-school years.

**13) Explain the factors that influence investment in human capital development**

- a) *Length of Income Stream*: The longer the stream of flow of incremental earning the higher is the net present value from human capital investment. Thus, a human capital investment made early in life is expected, *ceteris paribus*, to yield as a higher return than the ones made later in life.
- b) *Costs*: the lower the cost of investment in education and other forms of HK investment, *ceteris paribus*, the larger the number of people who will fund the investment profitable. Remember that the total cost of financing of education is of components: Direct-fees, tuition etc , and Indirect i.e. opportunity cost of schooling. A reduction in any of them increases demand for additional schooling.
- c) *Earning Differentials*: other things being equal, the higher is the differential between say secondary and university education, the larger the number of people who will invest in the university education.

**15) Mention ten (10) factors that can affect an organization's human capital.**

- Demographic trends (aging Human Capital, shrinking talent, distracted and worried work force)
- Unpredictable change of market; economic and political events.
- Program strategies that affect staffing (expanding, merging, acquisitions)
- Divisional Initiatives, quality improvement initiatives
- Cyclical workload factors
- Evaluation of jobs from defined duties and roles (specialists to generalists)
- Growth of team-based organizations
- Better, faster, and cheaper delivery of services
- Shift patterns and demands
- Optimizing return on investment.

**17) Discuss the human capital model according to Sammis, Miller, and Shukiar (1975).**

According to Sammis, Miller, and Shukiar (1975), the following are personnel or human capital model:

**Steady-State or Static Model:** Steady-state personnel planning models are used to study long-range personnel objectives as well as to examine the effects of changes in various personnel policy parameters. These models assume that, for long-term planning purposes, ideal and steady-state conditions will apply. Steady-state conditions are hypothetical and imply that loss rates and other planning factors do not change from year to year. The resulting force structure is in equilibrium,



implying that the size and shape of the force structure within such models is not dependent on time.

**Dynamic Model:** Dynamic models are used to study the short-term effects of a given personnel policy. These models apply a given policy to today's force to show the planner the direction in which such a policy would take the force were it applied right away. Actually, the policy is applied more than once, to each successive structure, so that the planner can see where it would take the force were it adopted now and used for a given number of years.

**Transition Model:** Transition models aid the planner in moving today's force toward a specified objective over a given number of years. Whereas dynamic models successively apply a given policy to today's force to see where that policy leads (it may not lead to a desirable force structure in an acceptable span of time), transition models take today's force, a long-term objective, and a target year; the model then determines what policies should be adopted each year to reach the objective by the target year. While a steady-state model will identify the policy that will maintain a desirable force structure once it has been reached, a transition model allows the planner to investigate alternative ways of moving toward that force objective, beginning with today's officer inventory and policies.

### **19) Enumerate the key factors that influence labour demand and how they affect the level of both wage rate and employment level.**

Labour demand can be defined as the amount (number) of workers needed to get the job done. It is the decision of the management/ownership of a firm on how many employees or labour hours to engage in completing a given task/work.

The following are the factors that that can influence labour demand:

- a) Changes in the Use of Other Factors of Production (e.g capital)
- b) Changes in Technology
- c) Changes in Product Demand
- d) Changes in the Number of Firms

Depending on the direction of the influence at a point in time (i.e. whether increase or decrease), they can result to shifting the labour demand curve outwardly or inwardly. If it is increase (outward shift), it will lead to increase in both wage rate and employment level, *vice versa*. This is depicted graphically below:

