



# MACHAKOS UNIVERSITY

University Examinations for 2022/2023 Academic Year

SCHOOL OF BUSINESS, ECONOMICS AND HOSPITALITY AND TOURISM

MANAGEMENT

DEPARTMENT OF ECONOMICS

THIRD YEAR SECOND SEMESTER EXAMINATION FOR

BACHELOR OF ECONOMICS

BACHELOR OF ECONOMIC AND STATISTICS

BACHELOR OF ECONOMICS AND FINANCE

**EAE 304: LABOUR ECONOMICS**

**DATE:**

**TIME:**

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**INSTRUCTIONS:**

Answer Question ONE and any other TWO questions

**QUESTION ONE (COMPULSORY) (30 MARKS)**

- a) Define the following terms as used in labour economics. (10 marks)
- Monopoly
  - Efficiency wage
  - Derived demand
  - Reservation wage
  - Discrimination coefficient
- b) A utility maximizing worker derives satisfaction by consuming good X and leisure (L) using the following utility function  $U(X,L) = 4X^{1/2} L^{5/2}$ . In order to consume good X, the worker has to commit her time to work as well as utilize the Kshs 5,000 dividends that she draws from the Sacco savings. The worker has a total time of 400 hours that she distributes to work and leisure. For every hour committed to work, the worker earns Ksh 100.

**Required:**

- i. Demonstrate the worker budget line and insert the utility function to show the optimal consumption point. (3 marks)
- ii. What is the optimal hours of leisure, work and consumption for this worker. (7 marks)
- iii. If wage increased by 150 percent, how will the wage adjustment change the consumption of leisure and by how much? (2 marks)
- iv. Show graphically, the effect in (iii) above. (2 marks)
- v. What if the dividends amount doubled with no change in the wage, how would their affect the consumption of leisure and by how much? (2 marks)
- vi. Show graphically the effect in (v) above. (2 marks)
- vii. Based on the outcome in (iii) and (v) above, would you conclude that leisure is a normal good or not and why? (2 marks)

**QUESTION TWO (20 MARKS)**

- a) A rational worker is faced with two alternative career development. The first option entails pursuing a diploma in ICT while the second option entails pursuing a bachelor's degree in Economics. This worker lives in two periods where in the first period, she enrolls for education and in the second period she is active in the labour market. To become an ICT expert, the labour worker requires Kshs 15,000 for training after which she will earn Kshs 472,000 after entering the labour market. To become economist, the worker will invest Kshs 40,000 on education in the first period and then earn Kshs 500,000 in the second period.

**Required:**

- i. What career should the worker pursue if she can lend and borrow money at a 5 percent rate of interest between the two period? (5 marks)
  - ii. If she can lend and borrow money at a 15 percent rate of interest? Will she choose a different options? Why? (5 marks)
- b) Discuss the advantages of labour mobility in your economy. (10 marks)

### QUESTION THREE (20 MARKS)

- a) Why would you advocate for minimum wage legislation in your economy? (5 marks)
- b) The government of Kenya has enacted legal and policy framework that has led to a number of affirmative action's being undertaken to reduce discrimination in the labour market? Why has the government taken these measure? (10 marks)
- c) How does efficiency wage theory inhibit the flexibility of money wage? (5 marks)

### QUESTION FOUR (20 MARKS)

- a) What are the shortcomings of the employer discrimination taste model? (8 marks)
- b) With reference to your country, identify the factors that influence the movement of workers from one place to another. (6 marks)
- c) Discuss the actors in the labour market clearly outlining the objective of each actor. (6 marks)

### QUESTION FIVE (20 MARKS)

- a) Festive Ltd operating in a perfectly competitive market produces bread using technology expressed as follows  $Y=2K^{1/2} L^{3/2}$  where K represents the units of capital employed, L is the number of people employed and Y is the total production of bread. The firm pays the employees at a rate of Kshs 1,200 for each employee. In the short run, capital is fixed at 400 units while the loaf of bread fetches Kshs 50 in the market.

#### **Required:**

- i. What should be the level of employment for festive to maximize profits? (8 marks)
- ii. Graphically illustrate the answer to (i) above (2 marks)
- iii. What will be the firm's level of output? (2 marks)
- iv. What will be the firm's profit? (3 marks)
- b) Highlight the shortcomings of the marginal production theory of wage determination. (5 marks)