NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY

FACULTY OFCOMMERCE, HUMAN SCIENCE AND EDUCATION
DEPARTMENT OF ECONOMICS, ACCOUNTING AND FINANCE

QUALIFICATION : BACHELOR OF ECONOMICS	
QUALIFICATION CODE: 07BECO	**LEVEL: 7**
COURSE CODE: IMI611S	**COURSE NAME**: INTERMEDIATE MICROECONOMICS
SESSION: JULY 2025	**PAPER:** THEORY
DURATION: 3 HOURS	**MARKS:** 100

SECOND OPPORTUNITY EXAMINATION QUESTION PAPER	
EXAMINER(S)	MR. PINEHAS NANGULA
MODERATOR:	**MR. MALLY LIKUKELA**

INSTRUCTIONS
1. Answer ALL the questions 2. Write clearly and neatly. 3. Number the answers clearly.

PERMISSIBLE MATERIALS

1. Scientific calculator
2. Pen and Pencil
3. Ruler

THIS EXAMINATION QUESTION PAPER CONSISTS OF _4_ PAGES (Including this

front page)

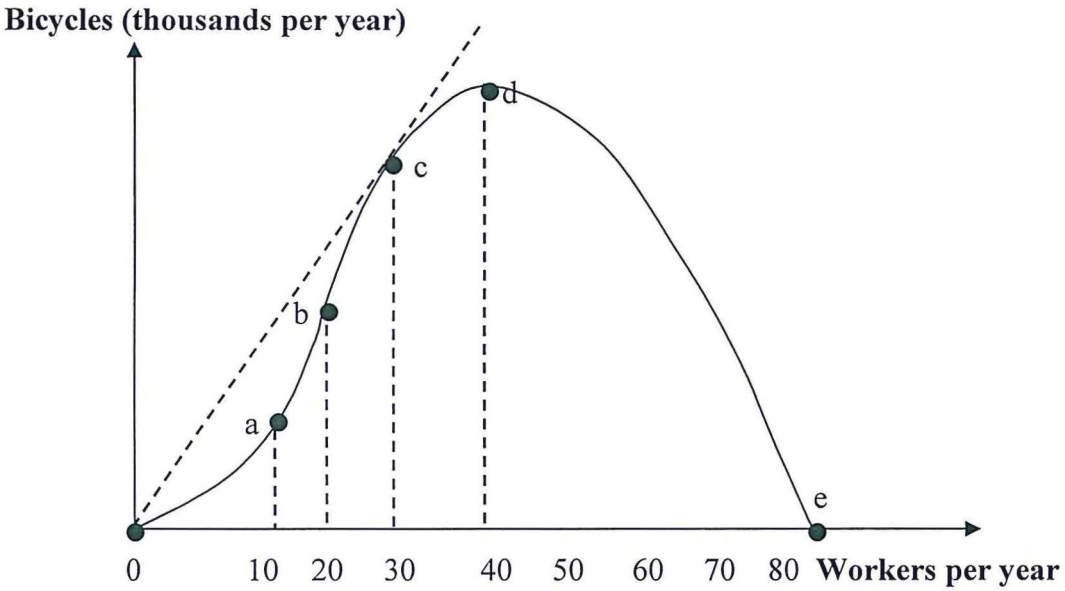
SECTION A **[20 MARKS]**

1. **The arc elasticity formula is used to estimate elasticity when** **[2 Marks]**
   a) the product is thought to be inelastic.
   b) the product is thought to be elastic.
   c) the demand function is known.
   d) there are two observations of price and quantity.

2. **An elasticity coefficient of -1 means that** **[2 Marks]**
   a) the demand curve is perfectly inelastic.
   b) the demand curve is perfectly elastic.
   c) the relative changes in price and quantity are equal.
   d) expenditures on the good would increase if prices were reduced.

3. **If consumers spend N$15 million a month on CDs, regardless of whether the price they pay goes up or down, that implies that their price elasticity of demand for CDs is[2 Marks]**
   a. 0.
   b. 1.
   c. infinite.
   d. 15.

When answering the next five questions (4-8), refer to the following graph.



4. **The marginal product of labor is rising with increased use of labor until** **[2 Marks]**
   a) 10 workers are employed.
   b) 20 workers are employed.
   c) 30 workers are employed.
   d) 40 workers are employed.

5. **The average product of labor is falling with increased use of labor once** **[2 Marks]**
   a) 10 workers are employed.

b) 20 workers are employed.
c) 30 workers are employed
d) 40 workers are employed.

6. As long as fewer than 30 workers are employed, **[2 Marks]**

a) the average product of labor exceeds the marginal product of labor.
b) the marginal product of labor exceeds the average product of labor.
c) the marginal product of labor is rising.
d) both (a) and (c) are true.

7. Between points d and e, increased use of labor means **[2 Marks]**

a) negative marginal product of labor.
b) falling average product and falling marginal product of labor.
c) marginal product of labor below average product of labor.
d) all of the above.

8. Maximum average product of labor corresponds to **[2 Marks]**

a) point a.
b) point b.
c) point c.
d) point d.

9. A supply curve for a good shows the **[2 Marks]**

a) maximum quantities sellers are willing to offer for sale at alternative prices.
b) maximum quantities that can be produced at alternative prices.
c) quantities sellers will offer as their production costs change.
d) quantities sellers can legally supply.

10. If the income elasticity of demand is +4 **[2 Marks]**

a) the good is an inferior good.
b) the good is an inelastic normal good.
c) the good is an elastic normal good.
d) the good is an elastic inferior good.

SECTION B **[80 marks]**

QUESTION ONE **[25 MARKS]**

The government is planning to introduce a ban on the importation of potatoes between June 2025 and August 2025. The domestic demand function for potatoes is $Q_d = 250 - 4P$, the domestic supply function for potatoes is $Q_s = -50 + 3P$ and the foreign supply function for importing potatoes is$Q_s = -50 + 3P$.

a) Draw the following curves:
   i. Domestic demand curve [2 marks]
   ii. Domestic supply curve with and without a ban [2 marks]
   iii. Foreign supply curve with and without a ban [4 marks]
   iv. Total supply curve with and without a ban [4 marks]

b) Calculate the market price for potatoes before the government introduces a ban and after the government introduces a ban. [5 marks]

c) Analyse the impact of this government policy on the Namibian economy. [8 marks]

QUESTION TWO **[30 MARKS]**

a) The demand function for milks is $Q_d = 50 - 3P$ and supply function for milks is $Q_s = 10 + 2P$. Price elasticity of demand is – 0.4 and price elasticity of supply is 0.6.
   i. Calculate the prevailing price of milk in the market and quantity of milk demanded or supplied. [5 marks]
   ii. Calculate new price of milk in the market when the government introduces a specific tax of N$0.25 per kg. [10 marks]
   iii. Calculate government tax revenue and indicate the percentage paid by consumer and the percentage paid by the producer. [10 marks]

b) Estimated demand function for processed pork is $Q = 171 - 20p + 20p_b + 3p_c + 2Y$
   Using the estimated demand function for processed pork in Namibia, show how the quantity demanded at a given price changes as price of beef (Pb) decreases by N$0.95 a year. [5 marks]

QUESTION THREE **[25 MARKS]**

A certain firm in the beverage industry is faced with the following Cobb-Douglas production function of $Q(K, L) = K^{0.6}L^{0.4}$

a) Use the production function above to derive marginal product of labour and marginal product of capital. [6 marks]

b) What is the level of MPL and MPK when K = 40 and L = 30? Interpret your answer [6 marks]

c) According to the Cobb- Douglas function above, calculate the marginal rate of technical substitution when K =55 and L = 45 and interpret your answer. [6 marks]

d) Prove that if you increase both capital and labour by 50%, output will also increase by 50%. [7 marks]

All the best