NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY

FACULTY OF MANANGEMENT SCIENCES

DEPARTMENT OF ACCOUNTING, ECONOMICS AND FINANCE

QUALIFICATION: BACHELOR OF ECONOMICS	
QUALIFICATION CODE: 07BECO	**LEVEL:** 7
COURSE CODE: IMI611S	**COURSE NAME**: INTERMEDIATE MICROECONOMICS
SESSION: JULY 2019	**PAPER:** THEORY
DURATION: 3 HOURS	**MARKS:** 100

SUPPLEMENTARY / SECOND OPPORTUNITY EXAMINATION QUESTION PAPER	
EXAMINER(S)	MR. PINEHAS NANGULA MS. KALILA MACKENZIE
MODERATOR:	MS LAVINIA HOFNI

INSTRUCTIONS
1. Answer ALL the questions in section A and B. 2. Write clearly and neatly. 3. Number the answers clearly.

PERMISSIBLE MATERIALS

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

THIS QUESTION PAPER CONSISTS OF 5__ PAGES (Including this front page)

SECTION A **[20 MARKS]**
MULTIPLE CHOICE QUESTIONS

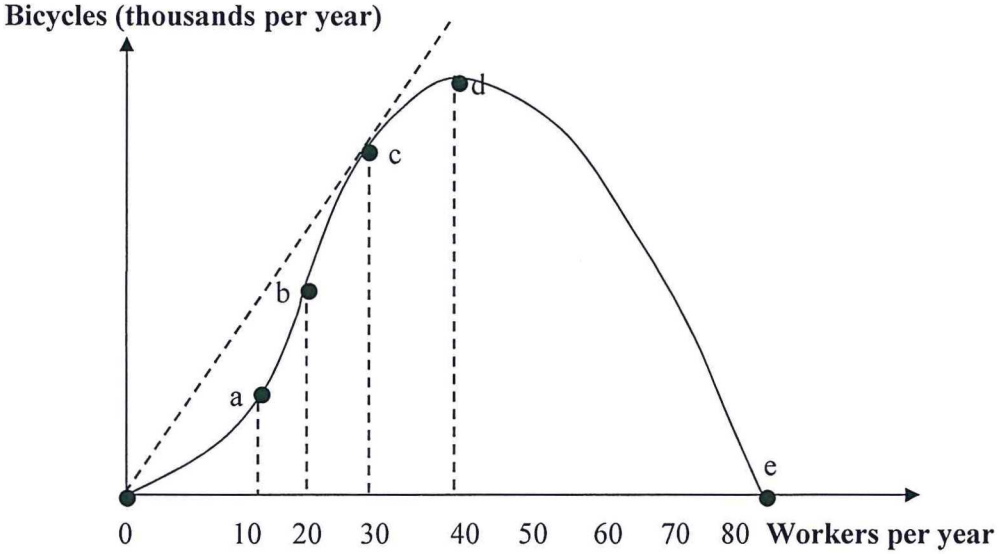
Answer all questions in this section

1. **The arc elasticity formula is used to estimate elasticity when**
   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**
   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**
   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**
   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**
   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,**
   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**
   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**
   a) point a.
   b) point b.
   c) point c.
   d) point d.

9. **A supply curve for a good shows the**
   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**
   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 **[21 marks]**

a) **True or false and explain. Illustrate with a graph where appropriate.**
   i) Rent control for apartments creates surplus of rental apartments [6 marks]
   ii) Since demand for agricultural products is inelastic, higher prices mean lower incomes for farmers. [5 marks]

b) Use appropriate diagrams to discuss the relationship between:

Total product of labour (TP_L) and marginal product of labour and; Average product of labour and marginal product of labour. [10 marks]

Question Two **[30 marks]**

a) Given the following demand function for beef (kg), $P = 100 - 2Q$
   i) By how much would the price have to fall for consumers to be willing to buy 1 more kg of beef per day? [5 marks]
   ii) If the price decreases by N$0.7, by how much will the demand changed? [5 marks]

b) Define marginal utility. Provide an argument why to maximize total utility of good x and good y, the consumer should consume until the ratio of marginal utilities over price is the same across both goods. [6 marks]

c) Consider John who consumes two goods, (X and Y), with prices $P_X = N\$24$, $P_y = 12$ and income I =120
   i) Construct budget constraint [3 marks]
   ii) Draw Mr. Eslon budget line with good X on the horizontal axis. [3 marks]
   iii) Use a graph to show the effect of an increase in income from N$120 to N$150. [3 marks]
   iv) What will happen to the slope of the budget line if the price of good X decreases to N$18? [5 marks]

Question Three **[29 marks]**

The current world production of oil is 250 barrels per day and the current world price of oil is N$726.10 per barrel. The price elasticity of demand (ε) is -0.2 and the elasticity of supply (η) is 0.3. Shiwa Investment is planning to enter the world oil market with a daily production of 11 barrels of oil per day. For simplicity, assume that the supply and demand curves are linear Use a well labelled diagram to analyse the effect of Shiwa Investment production on the supply

of oil.

a) Use the information provided above to determine the long-run demand and supply functions that are consistent with pre-Shiwa Investment world output and price. [10 marks]

a. Determine the post-Shiwa Investment long-run linear supply function [7 marks]

b. Use the demand function and the post-Shiwa Investment supply function to calculate new equilibrium price and quantity. [7 marks]

c. Explain why the equilibrium quantity increases with less than 11. [5 marks]

All the best