NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY

FACULTY OF MANAGEMENT SCIENCES

DEPARTMENT OF ACCOUNTING, ECONOMICS AND FINANCE

QUALIFICATIONS : BACHELOR OF ECONOMICS, BACHELOR OF ACCOUNTING GENERAL AND BACHELOR OF ACCOUNTING (CHARTERED)	
QUALIFICATION CODE: O7BEC0, 07BOAC AND 07 BACC	**LEVEL: 7**
COURSE CODE: IMI611S	**COURSE NAME**: INTERMEDIATE MICROECONIMICS
SESSION: JUNE 2022	**PAPER:** THEORY
DURATION: 3 HOURS	**MARKS:** 100

SECOND OPPORTUNITY EXAMINATION QUESTION PAPER	
EXAMINER(S)	**Mr Pinehas Nangula** **Mr Eslon Ngeendepi**
MODERATOR:	**Mrs Ndeshi Shitenga**

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

PERMISSIBLE MATERIALS
1. Pens/pencils/erasers
2. Calculator
3. Ruler

THIS QUESTION PAPER CONSISTS OF 3 PAGES (Including this front page)

QUESTION 1 [10 Marks]

State whether the following statements are either positive or normative:

    i.   The Namibian inflation rate is too high.

    ii.   Dr Hage Geingob is the president of Namibia.

    iii. The government should enforce minimum prices for beers sold in Supermarkets in a bid to control alcohol consumption.

    iv. Bank of Namibia hike the Repo Rate by 0.25 basis points on the 13 April 2022.

    v.   The government should increase the minimum wage to N$20 per hour to reduce poverty.

QUESTION 2 [20 Marks]

a) Suppose that the demand function for lamb in Namibia is $Q = 63 - 11p + 7pb + 3pc + 2Y$, where Q is the quantity in million kilograms (kg) of lamb per year, p is the dollar price per kg (all prices cited are in Namibian dollars), pb is the price of beef per kg, pc is the price of chicken per kg, and Y is annual per capita income in thousands of Namibia dollars. What is the demand curve if we hold pb, pc, and Y at their typical values during the period studied: $pb = 19$, $pc = 6$, and $Y = 78$? (8)

b) Using the demand function for lamb from Question 2 (a), show how the quantity demanded at a given price changes as annual per capita income, Y, increases by N$200. (6)

c) Suppose that the inverse demand function for movies is $p = 120 - Q_1$ for college students and $p = 120 - 2Q_2$ for other town residents. What is the town's total demand function? (6)

QUESTION 3 [45 Marks]

i. The coconut oil demand function (Buschena and Perloff, 1991) is $Q = 1200 - 9.5p + 16.2pp + 0.2Y$, Q is the quantity of coconut oil demanded in thousands of metric tons per year, p is the price of coconut oil in cents per pound, pp is the price of palm oil in cents per pound, and Y is the income of consumers. Assume that p is initially 45¢ per N$, pp is 31¢ N$, and Q is 1,275 thousand metric tons per year. Calculate the price and cross-price elasticities of demand for coconut oil. (10)

ii. Given a linear supply function is $Q = g + hp$. Derive a formula for the elasticity of supply in terms of p (and not Q). Now write a formula entirely in terms of Q. (10)

iii. Outline the properties of an indifference curve. (8)

iv. Define Marginal rate of technical substitution. (2)

v. Eslon's utility function is $U(B, Z) = AB^a Z^b$ .What is his marginal utility of B? What is his marginal utility of Z? What is his marginal rate of substitution between B and Z? (10)

vi. Michelle has a utility function $U(B, Z) = AB^a Z^b$, where A, α, and β are constants, B is burritos, and Z is pizzas. If the price of burritos, P_B, is N$2 and the price of pizzas, P_Z, is N$1, and Y is $100, what is Michelle's budget line and the marginal rate of transformation? (Note: burritos are on the vertical axis). (5)

QUESTION 4 [25 Marks]

Give the formulas for *AFC*, *MC*, *AVC*, and *AC* if the cost function is:

a) $C = 10 + q^2$.

b) $C = 10 + 10q - 4q^2 + q^3$.

TOTAL = 100 MARKS