NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY

FACULTY OFCOMMERCE, HUMAN SCIENCE AND EDUCATION

DEPARTMENT OF ECONOMICS, ACCOUNTING AND FINANCE

QUALIFICATION BACHELOR OF ECONOMICS HONOURS DEGREE	
QUALIFICATION CODE: 07BECO	**LEVEL: 8**
COURSE CODE: AMI810S	**COURSE NAME**: ADVANCED MICROECONOMICS
SESSION: JULY 2024	**PAPER:** THEORY
DURATION: 3 HOURS	**MARKS:** 100

SECOND OPPORTUNITY EXAMINATION QUESTION	
EXAMINER(S)	MR. PINEHAS NANGULA
MODERATOR:	Dr Ernest Ngeh Tingum (UNAM)

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 QUESTION PAPER CONSISTS OF _3_ PAGES (Including this front page)

QUESTION ONE [25 MARKS]

Alex is deciding whether to make a loan to Brian who is very poor and who has a bad credit history. Simultaneous to Alex making this decision, Brian must decide whether or not to buy gifts for his grandkids. If he buys gifts, he will be unable to repay the loan. If he does not buy gifts, he will repay the loan. If Alex refuses to give Brian a loan, then Brian will have to go to a loan shark.

If Alex refuses to make a loan to Brian and Brian buys gifts then both Alex and Brian get 0. If Alex refuses to make a loan to Brian and Brian does not buy gifts then Alex gets 0 and Brian gets -1. If Alex makes a loan to Brian and Brian buys gifts then Alex gets -2 and Brian gets 7. If Alex makes a loan to Brian and does not buy gifts, then Alex gets a payoff of 3 and Brian gets a payoff of 5.

a) Identify players in this game [4 marks]
b) What are their strategies [8 marks]
c) Construct the matrix with their payoff [8 marks]
d) Does the game have a dominant strategy and nash equilibrium? [5 marks]

QUESTION TWO [25 MARKS]

John has the utility function $U(Z, B) = 10Z^{0.4}B^{0.6}$, where Z denotes the amount of food consumed and B the amount of clothing. Now suppose that he has an income of N\$1000 per week and that the price of clothing is P_b = N\$20 per unit. Suppose that the price of food is initially P_{z1} = N\$40 per unit and that the price subsequently falls to P_{z2} =N\$20 per unit. Let us assume food is on the x-axis and clothing is on the y-axis.

a) Define and calculate income effect because of a decrease in price of food and use a well labelled graph to present your answer. [10 marks]
b) Define and calculate substitution effect because of a decrease in price and use a well labelled graph to present your answer. [10 marks]
c) Combine the graph in a) and b) to show the total effect of the decrease in price of food. [5 marks]

QUESTION THREE [25 MARKS]

a) There are two goods (good x and good y) to spend your income (I). The utility function is $U(X, Y) = 10X^{0.1}Y$, good Y is a composite good, price of good X is N\$5.00 and consumer's income is N\$100. The price of good X decreases to N\$2.50 while the price of the composite good and consumer's income remain the same.
   Is good X a normal, inferior or giffen good? [15 marks]
b) D_1 =100 - 0.2P represent the initial individual demand curve, D_2 =140 - 0.2P represent individual new demand curve associated with positive network externalities and the market demand = 150 -0.5P. Calculate the pure price effect and bandwagon effect. [10 marks]

QUESTION FOUR [25 MARKS]

a) Explain the difference between a positive and a negative network externality and give an example of each. [2 marks]

b) Explain in detail three microeconomics analytical tools. [3 marks]

c) David is considering his purchases of food (x) and clothing (y). He has the utility function $U(x, y) = xy + 10x$, his income is N\$10.00, price of good x is N\$1.00 and price of good y is N\$2.00. Does David have an interior or a corner solution? Please calculate the interior and corner solution [10 marks]

d) An individual consumes two goods, clothing and food. Given the information below, illustrate both the income-consumption curve and the Engel curve for clothing and food. [10 marks]

Price of food	Price of cloth	Quantity of food	Quantity cloth	Income
N\$10	N\$2	6	20	N\$100
N\$10	N\$2	8	35	N\$150
N\$10	N\$2	11	45	N\$200
N\$10	N\$2	15	50	N\$250

All the best