

# **NAMIBIA UNIVERSITY**

## OF SCIENCE AND TECHNOLOGY

#### FACULTY OF MANAGEMEMNT SCIENCES

## DEPARTMENT OF ACCOUNTING, ECONOMICS AND FINANCE

QUALIFICATION: BACHELOR OF ECONOMICS		
QUALIFICATION CODE: 07BECO	LEVEL: 7	
COURSE CODE: IMI611S	COURSE NAME: INTERMEDIATE MICROECONOMICS	
SESSION: JUNE 2019	PAPER: THEORY	
<b>DURATION:</b> 3 HOURS	MARKS: 100	

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

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]

 a) People makes trade-offs because they can't have everything. State three trade-offs a society faces.

- b) The demand function for roses is Q = 200 0.4p, and the supply function is Q = 100 + 0.4p + 0.5t, where p is the price of roses and t is the average temperature in a month. Show how the equilibrium price varies with temperature. [4 marks]
- c) The demand function for processed pork is Q = 100-P + 5P<sub>b</sub> + P<sub>c</sub> + 8Y and supply function for processed pork is Q = 50 + P-6P<sub>h</sub> where Pb is the price of beef, Pc is the price of chicken, Ph is the price of hog and Y is the consumer income. Initial values are Pb=N\$2, Pc=N\$5, Y=N\$100 and Ph=N\$3. Draw the demand and supply curve for processed pork.
  [8 mark]
- d) Suppose the market for wheat is competitive, with an upward-sloping supply curve, a downward-sloping demand curve, and an equilibrium price of N\$4.00 per kilogram. Why would a price of N\$8.00 per kilogram and N\$3.00 kilogram not be an equilibrium prices?

  [5 marks]

QUESTION TWO [25 MARKS]

 a) Calculate and interpret the elasticity of demand for each of the following demand functions at point where price is N\$12:

i. 
$$P = 65 - 0.4Q$$
 [5 marks]

ii. 
$$4P + 2Q = 74$$
 [5 marks]

iii. 
$$Q = 60 - 0.5P$$
 [5 marks]

iv. 
$$5P = 120 - 3Q$$
 [5 marks]

b) Is it true, as many people claim, that taxes assessed on producers are passed along to consumers? That is, do consumers pay for the entire tax? [5 marks]

QUESTION THREE [25 MARKS]

a) Use appropriate diagrams to discuss the effect of a quota  $(\bar{Q})$  on the equilibrium price and equilibrium quantity of maize in the local market. [10 marks]

- b) Explain and discuss the effect of an increase in the consumer's income on equilibrium price and quantity given the following information:
  - i) Demand curve is inelastic, and supply curve is perfect inelastic
  - ii) Demand and supply curves are inelastic [5 marks]

[5 marks]

c) With examples, explain the difference between positive and normative analysis [5 marks]

QUESTION FOUR [25 MARKS]

You are given the production function:  $Q(K, L) = 4K^{0.6}L^{0.4}$ 

- a) What is the average product of labour, holding capital fixed at K? Simplify fully [6 marks]
- b) What is the marginal rate of technical substitution (MRTS)? Simplify fully [13 marks]
- c) Does the above function exhibit increasing, decreasing or constant returns to scale?

  Illustrate why and explain what this means [6 marks]

All the best