



**NAMIBIA UNIVERSITY  
OF SCIENCE AND TECHNOLOGY**

**FACULTY OF HEALTH, NATURAL RESOURCES AND APPLIED SCIENCES**

**DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES SCIENCES**

<b>QUALIFICATION: BACHELOR OF SCIENCE IN AGRICULTURE</b>	
<b>QUALIFICATION CODE: 07BAGA</b>	<b>LEVEL: 7</b>
<b>COURSE CODE: AEM520S</b>	<b>COURSE NAME: AGRICULTURAL ECONOMICS</b>
<b>DATE: JANUARY 2023</b>	
<b>DURATION: 3 HOURS</b>	<b>MARKS: 100</b>

<b>SECOND OPPORTUNITY EXAMINATION QUESTION PAPER</b>	
<b>EXAMINER(S)</b>	Mr. Teofilus Shiimi
<b>MODERATOR:</b>	Mr. Mwala Lubinda

<b>INSTRUCTIONS</b>
1. Answer ALL the questions. 2. Write clearly and neatly. 3. Number the answers clearly.

**PERMISSIBLE MATERIALS**

1. Examination question paper
2. Answering book

**THIS EXAMINATION QUESTION PAPER CONSISTS OF 4 PAGES (Excluding this front page)**

### Question 1

(a) The equity principles when markets fail and do not achieve efficiency, government intervention can improve society's welfare. Governments usually intervene in the market to make them fair (equitable). Discuss any two policies that are being implemented by the Namibian government to ensure fair distribution of economic resources to all citizens irrespective of their background or status. [4]

(b) "Production possibilities frontier is an economic theory used to demonstrate the production of two goods economy". Explain the meaning of the following terms on the PPF. [6]

(i) Production Efficiency

(ii) Allocative efficiency

(iii) Not feasible

(c) Explain what happened to the PPF when the economy experience economic growth. [2]

(d) Explain why consumers are faced with opportunity cost when buying their goods? [2]

(e) Agriculture is regarded as a backbone of the national economy of many nations, especially in Africa. With specific examples discuss the importance of the agricultural sector to the economy of Namibia in general. [6]

**Sub-Total Marks [20]**

### Question 2

Study the following market supply and demand information, draw a market supply and demand curve and answer the following questions:

Price	Quantity supplied	Quantity Demanded
0	0	20
1	2	18
2	4	16
3	6	14
4	8	12
5	10	10
6	12	8
7	14	6
8	16	4
9	18	2
10	20	0

- (a) Draw (plot) the supply and demand curve of Oranges on one graph and label them accordingly. [2]
- (b) (i) Given the graph you drew in (a), show the equilibrium price of Oranges [1]
- (ii) Given the graph you drew in (a), show the equilibrium quantity of Oranges [1]
- (c) Mention three factors that affect the demand for agricultural commodities and explain how each factor affects the demand? [6]
- (d) Explain the difference between a change in supply and a change in quantity supplied. [4]

(e) "Supply is more than just having the resources and technology to produce something" Discuss three points that should be considered as pre-requisite to a firm intending to supply any goods or services. [6]

**Sub-Total Marks [20]**

### Question 3

(a) Define what is comparative advantage? [2]

(b) Discuss three determinants of elasticity. [6]

(c) What kinds of goods is this one, when your income change or price change in relation to quantity demanded as: [3]

(i) When your income increase, the quantity demanded of that goods increases

(ii) When your income increases the quantity demanded of that goods decreases

(iii) When the price of a commodity goes up, the quantity demanded goes up

(d) Indifference Curve is a line that shows all combinations of two goods that give the consumer equal satisfaction. Mention three characteristics of the indifference curve. [3]

(e) Discuss the main influencing factors that affect the shape of the indifference curve. [6]

**Sub-Total Mark [20]**

### Question 4

(a) Assume the market for tomatoes at Hyden house garden is modeled through the following market functions:

(i) Calculate the equilibrium quantity [3]

(ii) Calculate the equilibrium price [3]

(b) Calculate the following:

(i) Calculate the choking price [2]

(ii) Calculate minimum selling price [2]

(iii) Calculate the quantity supplied when the selling price is N\$12? [2]

(c) Calculate price elasticity when price change from N\$9 to N\$11 per kg and quantity demand fall from 110 kg to 90 kg, using a midpoint method. [5]

(d) Interpret the elasticity of demand you found in Question 4 (c), [1]

(e) As a Marketing Manager of this garden do you think you will make a profit by increasing the price of tomatoes from N\$9 to N\$11 per kg? Motivate your answer. [2]

**Sub-Total Mark [20]**



**Question 5**

(a) Define the term “production function” or production curve. [2]

The following Table is incomplete, using the formula of MPP and APP, complete the Table below, show all your calculation:

Daily labour use	Daily output level of Mahangu	Marginal Physical Product (MPP)	Average physical Product (APP)
10	1.0		I
16	3.0	A= 0.33	II
20	4.8	B	III
22	6.5	C= 0.85	IV= 0.29
26	8.1	D	V= 0.31
32	9.6	E	VI = 0.30
40	10.8	F= 0.15	VII
50	11.6	G	VIII= 0.27
62	12.0	H	IX
76	11.7	I= 0.19	X = 0.10
80	10.0	J=0.43	XI= 0.125

(b) Copy the Table into your answering book and calculate MPP and APP and fill in the missing data. [5]

(c) Using the data provided plot the graph showing the total output. [4]

(d) On the above plotted graph, indicate the three stages of production function. [3]

(e) Below the plotted graph, sketch the MPP and APP to demonstrate the relationship between MPP, APP and TPP [3]

(f) Discuss the relationship of TPP, MPP and APP in the III stages of production function. [3]

**Sub-total marks [20]**

**End!**