



UNIVERSITY OF SWAZILAND
FINAL EXAMINATION PAPER

PROGRAMME: BSc. in Agricultural Economics and Agribusiness Management Year 1
BSc. in Agronomy Year 1
BSc. in Animal Science Year 1
BSc. in Animal Science (Dairy) Year 1
BSc. in Horticulture Year 1
BSc. in Consumer Sciences Year 1
BSc. in Consumer Sciences Education Year 1
BSc. in Food Science, Nutrition and Technology Year 1
BSc. in Textiles Apparel Design and Management Year 1
BSc. in Agricultural Biosystems and Engineering Year 1
BSc. in Agricultural Education Year 1
BSc. in Agricultural Extension Year 1

COURSE CODE: AEM 102

TITLE OF PAPER: PRINCIPLES OF ECONOMICS

TIME ALLOWED: TWO (2): HOURS

INSTRUCTIONS:

1. ANSWER ALL FOUR QUESTIONS IN ANSWER SHEET- EACH QUESTION CARRIES 25 MARKS
2. FOR THE MULTIPLE CHOICE QUESTIONS WRITE THE NUMBER AND ANSWER, FOR EXAMPLE **i): B.**
3. FOR THE TRUE OR FALSE QUESTIONS WRITE THE NUMBER AND ANSWER, FOR EXAMPLE **i): FALSE.**

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Question 1

Choose the most appropriate answer. **Each question carries 2.5 marks**

- i. Economics is best defined as
 - A. The study of how society make decisions
 - B. The study of how people interact with one another
 - C. The study of how society make decisions under scarcity
 - D. The study of how people make economic decisions

- ii. Opportunity cost is best defined as
 - A. What must be given up to obtain one item
 - B. The cost of various alternatives
 - C. The largest cost of going to college
 - D. The benefits of alternatives with cost

- iii. The price determined by forces of supply and demand, such that the quantity supplied is equal to quantity demanded is called?
 - A. Absolute market price
 - B. Exact market price
 - C. Economic price
 - D. Equilibrium price

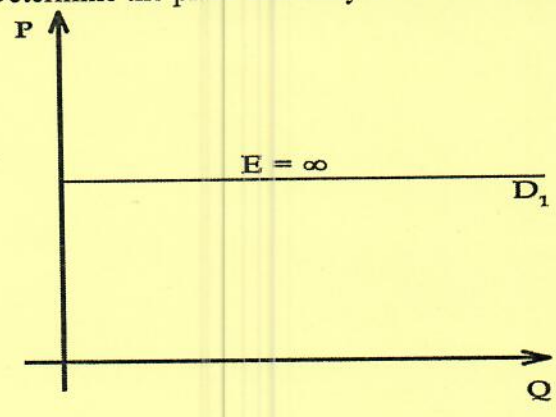
- iv. Which variable can shift the demand curve
 - A. The price of the good itself
 - B. Input prices
 - C. Technology
 - D. Prices of related goods

- v. What is cross-price elasticity of demand?
 - A. Percentage change in quantity demanded of the first good divided by the percentage change in price of the first good
 - B. How much the quantity demanded of one good responds to a change in the price of another good
 - C. Percentage change in quantity demanded of the first good divided by the percentage change in price of the third good
 - D. How much the quantity demanded of one good responds to a change in the price of the third good

- vi. In monopolistic competition the numbers of firms are?
 - A. Many
 - A. Few
 - B. One
 - A. Two

- vii. In monopolistic competition
 - A. $P = MC$
 - B. $P > MC$
 - C. $P < MC$
 - D. $P \leq MC$

viii. Determine the price elasticity of demand in the following figure



- A. Elastic demand
- B. Perfectly inelastic demand
- B. Perfectly elastic demand
- C. Inelastic demand

Suppose that an increase in the price of milk from E2.85 to E3.15 a liter raises the amount that dairy farmers produce from 9,000 to 11,000 liters per month.

- ix. Using the midpoint method, what is the percentage change in price?
 - A. 5%
 - D. 30%
 - B. 10%
 - B. 0.30%
- x. What is the percentage change in quantity supplied?
 - A. 30%
 - E. 20%
 - B. 10%
 - C. 15%

Question 2

25 MARKS

State whether the statement is True or False. **Each question carries 2.5 marks**

- i. Trade does not allow each person to focus in the activities he/she does best.
- ii. Goods with close substitutes have more elastic demand.
- iii. For an inferior good an increase in income leads to a decrease in demand.
- iv. The consumer surplus is the area below the price and below the demand curve.

- v. The government of Swaziland should set a price floor on minimum wage that is above the equilibrium price in order to ensure that workers have a minimally adequate standard of living.
- vi. An externality is the compensated impact of one person's actions on the well-being of a bystander.
- vii. Economic profit is equal to accounting profit.
- viii. Diminishing marginal product is the property whereby the marginal product of an input increases as the quantity of the input increases.
- ix. GDP is the market value of goods and services produced within a region in a country.
- x. When does a profit-maximizing competitive firm decide to shut down? In the short run when a firm cannot recover its fixed costs, the firm will choose to shut down.

Question 3

a) Using appropriate formulas for: Variable Cost (VC); Total Cost (TC); Average Fixed Cost (AFC); Average Variable Cost (AVC); Average Total Cost (ATC) And Marginal Cost (MC), fill out the the table below (**Transfer the table to your answer sheet**):

13 MARKS

Quantity of input	TVC	TC	AFC	AVC	ATC	MC
0		50	n/a	n/a	n/a	<u>10</u>
1	10			10	60	_____
2	30	80				<u>30</u>
3			16.67	20	36.67	_____
4	100	150	12.50		37.50	_____
5	150			30		<u>60</u>
6	210	260	8.33	35	43.33	_____

b) Where should a rational firm produce? In your answer discuss why the rational firm should produce or not produce in stages I, II and III.

12 MARKS

Question 4

Consider the following table showing data for an economy that produces only two goods, namely hot dogs and hamburgers. The table shows the prices and quantities produced of the two goods in the years 2008, 2009, and 2010.

Year	Prices of Hot Dogs	Quantity of Hot Dogs	Prices of Hamburgers	Quantity of Hamburgers
2008	\$1	100	\$2	50
2009	\$2	150	\$3	100
2010	\$3	200	\$4	150

Using the data in the table calculate:

- a) Nominal GDP for each year **5 MARKS**
- b) Real GDP for each year (Use 2008 as the base year) **5 MARKS**
- c) The deflator for each year **5 MARKS**
- d) Is GDP a perfect measure of economic wellbeing? Why? **10 MARKS**