

MANICALAND STATE UNIVERSITY OF APPLIED SCIENCES

FACULTY OF AGRIBUSINESS AND COMMENCE

Department of Agriculture Economics and Development

INTRODUCTION TO AGRICULTURE ECONOMICS

CODE: AEDT101

SESSIONAL EXAMINATIONS

SEPTEMBER 2021

DURATION: 3 HOURS

EXAMINER: Ms. P. Dube

INSTRUCTIONS

1. *Answer any four questions*
2. *Each question carries 25 marks*
3. *Total marks 100*
(Graph paper to be provided)

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Question 1

- a) Define the following terms:
- i) Derived demand for inputs [2]
 - ii) Least Cost combination [2]
 - iii) Equi-marginal principle [2]
 - iv) Microeconomics [2]
- b) Outline at least eight (8) features of agricultural production that distinguishes it from industrial production. [8]
- c) With the aid of a well labeled diagram explain the concept of opportunity cost, choice, scarcity, allocative efficiency and production efficiency [9]

Question 2

- a) The table below shows the production cost and the corresponding quantities of mushrooms for a Women Cooperative Group in Chigodora growth point.

Quantities of potatoes produced (kg)	Total Cost (\$)
0	100
10	200
20	280
30	330
40	360
50	450
60	600
70	770

Using the information provided on the table above determine:

- i) The fixed cost and explain your answer [2]
 - ii) The variable costs of producing 30 kg of potatoes [2]
 - iii) The average cost of producing 40 kg of potatoes [2]
- b) Using the information in the table above, draw **one** graph showing the following
- i) Total costs (label the curve TC)

- ii) Total variable costs (label the curve VC)
- iii) Total fixed costs (label the curve FC) [16]
- c) With reference to the graph you have constructed in part (b) does the graph resemble the short run or the long run? Explain your answer. [3]

Question 3

- a) Discuss the following laws of returns:
 - i.) Law of increasing returns
 - ii.) Law of constant returns
 - iii.) Law of decreasing returns [9]
- b) Mr Dickson recently introduced a plantation for oranges in Headlands. Discuss the possible economies of scale and **diseconomies** of scale that the plantation may experience should it expand its scale of production in the long run. [16]

Question 4

- a) Differentiate between:
 - i) Implicit Cost and Explicit Cost
 - ii) Fixed and Sunken cost [4]
- b) With the aid of a diagram discuss why a rational firm should produce or not produce in stages I, II and III. [8]
- c) Consider the production function $Y=100+2x-x^2$
 - i) Find the level of X at which Y reaches the maximum output. [4]
 - ii) Calculate the elasticity of production, APP and MPP when $X=30$. [6]
 - iii) Find the level of X maximizing net returns (i.e. profit) when $P_x=\$1$ and $P_y=\$10$. [3]

Question 5

- a) Suppose you have been recently employed as an agri-business loans officer at CBZ. A group of farmers approach you for advice on different type of loans to secure to start up a farm business. Discuss at least four types of loans you would advise them to take. [9]
- b) State and explain three stages of farm business analysis. [6]
- c) Enlist three advantages and two problems associated with farm of financial analysis. [10]

Question 6

- a) State and explain 5 categories of risk and uncertainty in agriculture. [10]
- b) Briefly explain the following concepts as they apply to farm management:
 - i) Time flexibility [2]
 - ii) Cost flexibility [2]
 - iii) Product flexibility [2]
 - iv) Liquidity [2]
 - v) Diversification [2]
- c) Briefly outline five factors that influence farm management decisions [5]

END OF EXAMINATION