

Page 1 of 3

## UNIVERSITY OF SWAZILAND

### FINAL EXAMINATION PAPER

## 2nd SEM. 2011/2012

PROGRAMME: BSc. in Agricultural & BioSystems Engineering Year 2

BSc. in Agricultural Economics and Agribusiness

Management Year 2

BSc. in Agricultural Education Year 2

BSc. in Agronomy Year 2

BSc. in Animal Science Year 2

BSc. in Animal Science (Dairy option) Year 2

BSc. in Horticulture Year 2

**COURSE CODE: AEM 205** 

TITLE OF PAPER: FARM MANAGEMENT.

TIME ALLOWED: 2:00 HOURS

INSTRUCTION: ANSWER QUESTION 1 AND ANY OTHER THREE

**QUESTIONS FROM THE REMAINING** 

FOUR QUESTIONS.

DO NOT OPEN THIS PAPER UNTIL PERMISSION HAS BEEN GRANTED BY THE CHIEF INVIGILATOR

## **QUESTION ONE**

- (a) Give an accurate definition of farm management. [2 marks]
- (b) What are organizational and operational decisions in farm management? [6 marks]
- (c) Explain how organizational decisions are different from operational decisions. [4 marks]
- (d) Given that the nitrogen fertilizer price is E0.25/kg and maize price is E4.00/kg, copy and complete the table below by filling the missing values in the appropriate spaces. [11 marks]

Nitrogen fertilizer (Kg/Ha)	TPP of maize (Kg/Ha)	TVP (E)	TIC (E)	Net returns (E)	MPP	MVP (E)	MIC (E)
0	32.0		0	128.00	-	-	
10	33.4						
20	34.6						
30	35.6						
40	36.4						
50	37.0						
60	37.4						
70	37.6						

(e) From the table in question (d) above, at what level of nitrogen fertilizer application will the profit be maximum? [2 marks]

#### **QUESTION TWO**

- (a) Give the three sections in an enterprise budget which a decision maker should pay attention to [3 marks]
- (b) Tiphele Dlamini has the following items for her one hectare yellow maize enterprise:

Seed	E960.00				
Fertilizer	E2, 760.00				
Chemicals	E1, 280.00				
Machinery, fuel and repairs E1, 800.00					
Custom spraying	E960.00				
Transport	E 480.00				
Labour	E 1,760.00				
Miscellaneous	E 320.00				
Interest on variable cost	E 516.00				
Machinery depreciation, taxes					
and incurance	E 2 880 00				

and insurance E 2,880.00 Land charge E 8,000.00 If the expected yield of maize is 1200kg per hectare and the producer price per kg of yellow maize is E18.40,

- (i) Prepare an enterprise budget for Tiphele Dlamini [15 marks] Calculate the:
- (ii) Gross margin [3½ marks]
- (iii) Expected profit [3½ marks]

### **QUESTION THREE**

- (a) Provide the narrow and broad definitions of capital as being used by farm management specialists. [4 marks]
- (b) Suppose an amortized loan of E10, 000 is obtained by Celani Mtshali to purchase a fairly used tractor for her farming operations. If the interest rate is 12% per annum, and the repayment schedule is E5, 000 in 6 months and the remaining E5, 000 at the end of one year.

  Calculate:
  - (i) The amount of interest needed to be paid by Celani Mtshali during the first payment. [4 marks]
  - (ii) The amount of interest needed to be paid by Celani Mtshali during the second payment. [4 marks]
  - (iii) The total payments needed to be paid by Celani Mtshali for the first and second payments respectively. [6 marks]
- (c) What is credit in the context of farm management? [2 marks]
- (d) Give any five factors to be considered in loan decisions. [5 marks]

# **QUESTION FOUR**

- (a) Provide any two reasons why it might be necessary to collect farm management data. [5 marks]
- (b) Explain the positive and normative approaches of collecting farm management information. [5 marks]
- (c) Differentiate between the following items in farm management:
  - (i) Data and information.[5 marks]
  - (ii) Farm accounts books method and farm business survey method. [5 marks]
  - (iii) Cost route method and model farm method. [5 marks]

# **QUESTION FIVE**

- (a) Explain the main causes of depreciation. [10 marks]
- (b) If the cost of an asset is E10, 000 and the residual value is E256 while the asset has an expected life of four years, calculate depreciation provision per annum using:
  - (i) Straight line method. [4½ marks]
  - (ii) Reducing balance method. [10½ marks]