



UNIVERSITY OF SWAZILAND

SUPPLEMENTARY EXAMINATION PAPER

2nd SEMESTER 2007/2008

PROGRAMME: BSc. AGRICULTURAL ECONOMICS & AGBMGT YR2
BSc. AGRICULTURAL EDUCATION YR2
BSc. AGRONOMY YR2
BSc. ANIMAL SCIENCE YR2
BSc. HORTICULTURE YR2
BSc. LAND & WATER MANAGEMENT YR2

COURSE CODE: AEM 205

TITLE OF PAPER: FARM MANAGEMENT

TIME ALLOWED: TWO (2) HOURS

INSTRUCTIONS: ANSWER ALL QUESTIONS
EACH QUESTION CARRIES A TOTAL OF 25 MARKS

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THE CHIEF INVIGILATOR.**

QUESTION 1

With the aid of a diagram, describe the key management functions, giving a clear indication how these functions are interlinked. **[25 marks]**

QUESTION 2

You are a consultant and have been requested by Mr Shongwe who is a farmer to provide advice on the feed ration to consider as a means of accomplishing his profit maximizing goal. Mr Shongwe is using a combination of maize grain (Y_1) and hay (Y_2) as his inputs to achieve a constant weight gain for his feeder steers. The price of maize is E4.40/kg and that of hay is E3.00/kg.

Feed ration	A	B	C	D	E	F	G
Maize Grain (kg)	825	900	975	1050	1125	1200	1275
Hay (kg)	1350	1130	935	770	630	520	440

Using the above information, what advice would you give to your client? Justify your answer. **[25 marks]**

QUESTION 3

Use the following information to provide advice regarding a shift from 50 ha of maize to 50 ha of sorghum. The irrigated land is currently cash rented for E175 per ha. Maize provides revenue of E280.00 per ha with total costs of E250.00 per ha. Sorghum has anticipated revenue of E880.00 per ha with expected costs of E660.00 per ha. Sorghum will also require the purchase of additional equipment, which is expected to increase costs by E9,000.00 per year for depreciation and interest.

- Should the change be adopted? Justify your answer. **[15 marks]**
- What other factors (provide 2) would you consider in your decision whether or not to adopt the change? **[10 marks]**

QUESTION 4

Mrs Ngozo plans to operate a 500 broiler production unit. When she bought the farm, she was lucky that the previous owner used to run a broiler project, meaning she no longer needs to invest in infrastructure and equipment. The costs that she is likely to incur, though, are as follows:

Day-old chicks	-	E1, 500
Broiler starter	-	E1, 400
Broiler finisher	-	E2, 300
Insurance	-	E 300
Saw dust	-	E 140
Vaccine	-	E 60
Disinfectant	-	E 60
Depreciation on equipment	-	E 100
Vitamins	-	E 65
Electricity	-	E 200
Water	-	E 150
Casual labour	-	E 600

The birds will be sold after 6 weeks. Based on the current mortality rate in broiler production, Mrs Ngozo expects to sell only 475 broilers at the end of the 6 weeks with each bird selling at E10.00.

- (a) Calculate the Gross margin for the broiler enterprise [10 marks]
- (b) Calculate the break-even price [5 marks]
- (c) Should the economic principles for determining profit-maximising input levels be applied before or after completing an enterprise budget? Why? [10 marks]