



# MACHAKOS UNIVERSITY

University Examinations for 2020/2021 Academic Year

SCHOOL OF AGRICULTURAL SCIENCES

DEPARTMENT OF AGRIBUSINESS MANAGEMENT AND TRADE

THIRD YEAR FIRST SEMESTER EXAMINATION FOR

BACHELOR OF SCIENCE (AGRICULTURAL EDUCATION AND EXTENSION)

**AGB 310: FARM BUSINESS MANAGEMENT**

**DATE: 9/8/2021**

**TIME: 2.00-4.00 PM**

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## INSTRUCTIONS:

Answer **Question ONE** and **ANY TWO** other questions

### QUESTION ONE (30 MARKS)

- a) Explain the differences between the following concepts using graphical illustrations where applicable.
- Increased efficiency and technological progress (4 marks)
  - Economies of size and economies of scale (4 marks)
- b) Farm management tools can be used at farm level and on individual farm enterprise to analyse and plan farm management activities. In line with this;
- Define gross margin budgeting (2 marks)
  - Explain two use of gross margin (2 marks)
  - Suppose a farmer produces 4000 litre of milk and the price per liter is Ksh. 40. Given that the cost for feedstuff is Ksh 100,000, labour cost is Ksh 10,000 and miscellaneous cost is 40,000. In addition, the cost for land is 5,000 while that of machinery and building is Ksh15,000. Calculate the gross margin. (4 marks)
- c) Explain three types of farm budget and their importance in management of the farm (3 marks)
- d) Using relevant examples in each case, distinguish between productivity of individual resources and total productivity measures of efficiency (4 marks)

- e) Explain the following unique features of agricultural production and how they affect management of the farm, citing the relevant examples;
- i. Biological nature of agricultural production (2 marks)
  - ii. Fixed resource limitations (2 marks)
- f) Explain three types of farm records (3 marks)

**QUESTION TWO (20 MARKS)**

- a) Describe the four types of budget-based measures of enterprise or activity performance commonly used in farm management (8 marks)
- b) Explain 4 criteria by which the performance of a farm-system may be evaluated by policy makers (8 marks)
- c) Discuss the three gross margin based indicators of enterprise performance that are commonly used in whole farm planning (4 marks)

**QUESTION THREE (20 MARKS)**

- a) Describe the five components of farm business management and how they affect optimization of farm resources (10 marks)
- b) The following is a farm record kept by Mr. Muriithi farm up to 30<sup>th</sup> June 2020. Study it carefully and answer the questions that follows:

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	KES
Cash at hand	7,000
Layers	25,000
Dairy cattle	130,000
Cassava in store	5,000
Calves	19,000
Buildings	80,000
Land	180,000
Machinery	85,000

On the same day, the following information was obtained from the farmers' record

Bank loan	21,000
Eggs sale on credit	10,000
Milk sales on credit	15,000
Vegetable sales on credit	5,000
Farm inputs purchased on credit	20,000
Wages payable	6,200
Cash in bank	25,000
Interest payable	2,500
Taxes payable	800

- i. Prepare a balance sheet for Mr. Muriithi farm using the above information (8 marks)
- ii. Explain two uses of balance sheet (2 marks)

#### QUESTION FOUR (20 MARKS)

- a) Explain five attributes of a good farm manager in an enterprise (5 marks)
- b) Explain five importance of keeping farm accounts in a business environment (5 marks)
- c) Explain five ways in which ICT tools could contribute to effective management of a farm (10 marks)

#### QUESTION FIVE (20 MARKS)

- a) Explain the difference between complete budgeting and partial budgeting (4 marks)
- b) Discuss the types of farm efficiency as distinguished by Farrell (1957) (6 marks)
- c) A farm is considering two mutually exclusive project with cash flow of Ksh 10,000 each and with a useful life of 5 years. The farm required rate of return is 10% and approximate tax rate of 50%. The project will be depreciated on straight-line basis. Before depreciation and tax, cash flows are expected to be generated by the projects as follows;

Year	1	2	3	4	5
Project A	4000	4000	4000	4000	4000
Project B	6000	3000	2000	5000	5000

Calculate the Payback period for project A and B (10 marks)