

BACHELOR OF SCIENCE IN AGRICULTURAL EDUCATION AND EXTENSION

AGB 310: FARM MANAGEMENT

DATE: 28/11/2019

TIME:2.00-4.00 PM

INSTRUCTIONS;

Answer ALL questions in section A and ANY TWO questions in section B

SECTION A: 30 MARKS

QUESTION ONE (30 MARKS)

| a) | Defi | Define the following terms | | | | |
|----|------|---|-----------|--|--|--|
| | i. | Planning | (1 mark) | | | |
| | ii. | Economic efficiency | (1 mark) | | | |
| | iii. | Risk | (1 mark) | | | |
| | iv. | Farm data | (1 mark) | | | |
| | v. | Opportunity cost | (1 mark) | | | |
| b) | i | Describe three advantages of using ICT in farm management | (3 marks) | | | |
| | ii | Explain two factors that are considered in a farm layout | (2 marks) | | | |
| c) | Expl | ain two important questions related to farm operation decisions | (4 marks) | | | |
| d) | i | Describe three methods of dealing with risk within a farm | (3 marks) | | | |
| | ii | Describe two limitations of partial budgeting | (2 marks) | | | |
| e) | i | Describe three types of Farm records used in farm management. | (3 marks) | | | |
| | ii | Explain the term "resources" as used in agriculture production | (3 marks) | | | |
| f) | i | Describe three techniques used in a typical farm management | (3 marks) | | | |
| | ii | Explain two disadvantages of land fragmentation | (2 marks) | | | |

SECTION B: 40 MARKS

QUESTION TWO (20 MARKS)

- a) Describe five disadvantages of farm records and accounts in Farm management (10 marks)
- The following information relates to Kwetu farm for the year ended December 2019. b)

| Item | Value (Kshs) |
|------------------------|--------------|
| Barley sales | 100,000 |
| Hay sales | 90,000 |
| Cassava sales | 45,000 |
| Fertilizer costs | 35,000 |
| Seed costs | 15,000 |
| Machine hire | 20,000 |
| Machinery depreciation | 4,060 |
| Labour costs | 16,000 |
| Livestock feed cost | 26,000 |
| Interest on debt | 3,000 |
| Insurance | 2,700 |

Required

| i. | Compute the Gross margin for Itibo farm for the year 2019 | (5 marks) |
|-----|--|-----------|
| ii. | Compute the Net farm income for Itibo farm for the year 2019 | (5 marks) |

QUESTION THREE (20 MARKS)

- a) Describe five steps that are followed in decision making by a Farm manager (10 marks)
- Nyota Dairies ltd has identified a project in which powder milk will be used to produce b) Yogurt product and ice cream. The initial investment is estimated at Ksh4 million. The useful life of the project is estimated to be 6 years after which it will be taken over by the mother company in Machakos. The cost of capital is estimated at 12%. The expected inflows are as follows:

| Year | 1 | 2 | 3 | 4 | 5 | 6 |
|---------------|---|---------|---------|-----------|-----------|-----------|
| Inflows (Ksh) | 0 | 225,000 | 900,000 | 1,650,000 | 4,750,000 | 2,650,000 |
| | | | | | | |

Calculate the expected payback period

QUESTION FOUR (20 MARKS)

Describe five effects of farm size on efficiency of farm operations (10 marks) a)

(10 marks)

b) The following information is provided for Kesho farm for the financial year ending on June, 2019.Prepare an Enterprise budget for Beans for the financial year ending on June, 2019.

(10 marks)

| Particulars | Amounts (ksh) | | |
|--|---------------|--|--|
| A. Returns | | | |
| 1. Main product | 6277 | | |
| 2. By product | 524 | | |
| 3. Gross return | 6801 | | |
| B. Cost | | | |
| 1. Land revenue | 21 | | |
| 2. Seed | 1245 | | |
| 3. Manure and fertilizer | 530 | | |
| 4. Plant protection chemicals | 98 | | |
| 5. Irrigation charges | 190 | | |
| 6. Machine power | 206 | | |
| 7. Bullock power | 304 | | |
| 8. Human labour | 1617 | | |
| 9. Interest on working capital | 128 | | |
| 10. Depreciation on building and machinery | 152 | | |
| 11. Interest on fixed capital | 725 | | |

QUESTION FIVE (20 MARKS)

- a) Describe five steps followed in collection of data in the farm (10 marks)
- b) i Explain five advantages of division of labour in farm operations (5 marks)
 - ii Explain two economic principles taken into consideration in farm management

(5 marks)