



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND
TECHNOLOGY**

SCHOOL OF AGRICULTURAL AND FOOD SCIENCES

**FOURTH YEAR SECOND SEMESTER EXAMINATION FOR THE DEGREE
OF
BACHELOR OF SCIENCE IN AGRIBUSINESS MANAGEMENT
2016/2017 ACADEMIC YEAR**

REGULAR

COURSE CODE: AAE 3427

COURSE TITLE: FARM MANAGEMENT

EXAM VENUE:

STREAM: BSC. (Agribusiness Management)

DATE:

EXAM SESSION:

TIME: 2 HOURS

Instructions:

- 1. Answer ALL questions in section A and ANY other 2 Questions in section B**
- 2. Candidates are advised not to write on question paper.**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room.**

SECTION A**[30 MARKS]****Answer ALL questions in this section**

Q1. The JOOUST Agribusiness Farm had the following information for the Accounting period ending 31st December, 2015:

S/No.	Item	Value (KES)
1.	Net Farm income	125,000.00
2.	Interest paid	4,750.00
3.	Opportunity cost of labour	12,850.00
4.	Opportunity cost of management	25,000.00
5.	Opportunity cost of capital	10%
6.	Total value of farm assets	950,000.00
7.	Farm business Networth	4675,000.00

Use the information above to:

- Rate of returns to capital **(6 Marks).**
- Returns to Labour **(6 Marks).**
- Returns to Management **(6 Marks).**
- Rate of returns to equity **(6 Marks).**
- Briefly explain why the net farm income needs to be adjusted in computing the returns to factors of production. **(6 Marks).**

SECTION B = 40 MARKS**Answer ANY TWO questions in this section**

Q2. If a farmer wants to determine whether a piece of land is worth buying or not for his Business, the capitalization of earnings method can be used as long as the farmer has access to the expected yearly returns.

- Assuming the market price of a piece of land is 60,000.00, the annual return is KES 4000, and the going rate of interest of 8.5 percent should we purchase the land or not? Explain your option. **(6 Marks).**
- Capital may be obtained from savings or borrowed funds. When the fund is borrowed, the interest which has to be paid is the price paid for using the funds. If a piece of capital item has the following returns: $R_1 = \text{KES } 5000$; $R_2 = \text{KES } 3000$; $S = \text{KES } 1000$; $i = 7.5\%$; $n = 2$ years. Should the farmer buy the item or not? **(6 Marks).**
- A set of farm implements costs KES 2500 and the owner expects a return of $R_1 = 1000$, $R_2 = 600$, $R_3 = 400$, $R_4 = 300$, $R_5 = 20$ and a salvage value of KES1000. With interest set at 9% should the item be purchased? **(8 Marks).**

Q3. The University Farm (JOOUST) has the potential to undertake various enterprises as listed in the table below. Using your knowledge on decision rules or strategy models, which enterprise will you recommend considering the risk and uncertainties in relation to the following models*? potential to undertake various enterprises as listed in table 1 below.

- i) La Place game theory (with equal probability of 0.35) **(4 Marks).**
- ii) Minimum variance **(4 Marks).**
- iii) The expected value theory (with probability for the 3 states of nature are 0.25; 0.5; and 0.25 respectively) **(4 Marks).**
- iv) Pessimism – Optimism Index (with probability of 0.3 and 0.7 in that order) **(4 Marks).**
- v) Maximax strategy (with the states of nature not known so well) **(4 Marks).**

*Show all your work in each case

Enterprises	State of Nature		
	1	2	3
Layer	20	30	45
Beef cattle	60	30	40
Piggery	30	50	50
Turkey	15	40	70

Q4. Resources are the means available for producing goods which in turn are used to satisfy wants

- a) Briefly discuss the three (3) objectives of efficient management of resources **(3 Marks).**
- b) Discuss any three (3) causes of price instability in agriculture **(3 Marks).**
- c) State and briefly explain any four (4) Uncertainties associated with farm enterprises **(8 Marks).**
- d) Define the following Farm Management terms:
 - i) A Priori risk **(1 Mark)**
 - ii) ii) Capital Turnover Ratio **(1 Mark)**
 - iii) ; iii) Farm management **(1 Mark)**