JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF AGRICULTURAL AND FOOD SCIENCES

THIRD YEAR SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN AGRIBUSINESS MANAGEMENT 2020/2021 ACADEMIC YEAR

REGULAR

COURSE CODE: AAE 3427

COURSE TITLE: FARM MANAGEMENT

EXAM VENUE: **STREAM: BSC. (Agribusiness Management; Agricultural & Extension Education; Horticulture; Animal Science)**

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

Q1. 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.

a) Assuming the market price of a piece of land is 65,000.00, the annual return is KES 5000, and the going rate of interest of 8 percent should the Farmer purchase the land or not? Explain your option. **(8 Marks).**

b) 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: R1 = KES 10,000; R2 = KES 6,000; S = KES 2,000; i = 7%; n = 2 years. Should the farmer buy the item or not? **(10 Marks).**

c) A set of farm implements costs KES 5,000 and the owner expects a return of R_1 = 2,000, R_2 = 800, R_3 = 600, R_4 = 400, R_5 = 20 and a salvage value of KES 2,000. With interest set at 5% should the item be purchased? **(12 Marks).**

SECTION B = 40 MARKS

Q2. SAFS Agribusiness Farm had the following information recorded for the Year ending December, 2019:

S/No.	Item	Amount (KES)
1.	Net worth	50,560.00
2.	Total Liabilities	14,000.00
3.	Principal payment on loan	30,000.00
4.	Interest on loan	5,000.00
5.	Gross receipts	90,000.00
6.	Capital investment at the beginning of the year	172,000.00
7.	Capital investment at the end of the year	188,540.00
8.	Gross Income for the year	95,000.00
9.	Profit for the year	40,500.00

a) Compute the following measures of financial position for the SAFS Agribusiness Farm:

i) Debt to Net Worth Ratio **(5 Marks)**
ii) Profit to Total Asset Ratio, **(5 Marks)**
iii) The Capital Turnover Ratio, **(5 Marks)**
iv) Debt Servicing to Gross Receipts Ratio **(5 Marks)**

Q3. A Farmer had the potential to undertake various enterprises as listed in table 1 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*?

i) The expected value theory **(4 Marks)**
ii) La Place game theory **(4 Marks)**
iii) Minimum variance **(4 Marks)**
iv) Maximax strategy **(4 Marks)**
v) Minimum regret **(4 Marks)**

*Show all your work in each case

Sate of Nature

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

Q4. a) There are many situations in agriculture that may be classified as risk. If a possible unfortunate incidence can be insured against, it can be classified as risk. Identify and briefly explain any four (4) precautions against uncertainty. **(4 Marks).**

b) With the help of a schematic, demonstrate the four (4) segments of an agricultural commodity value chain and in each case give any three (3) important Actors in each segment **(7 Marks).**

c) State and briefly explain three (3) main objectives for efficient management of resources. **(3 Marks).**

d) Distinguish between organizational and strategic management as typical farm management decisions **(6 Marks)**