

# UNIVERSITY

#### UNIVERSITY EXAMINATIONS

# EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE IN AGRICULTURAL ECONOMICS

**AGEC 242: AGRICULTURAL FINANCE** 

STREAMS: BSC AGRICULTURAL ECONOMICS (Y2S2)

TIME: 2 HOURS

DAY/DATE: WEDNESDAY 18/04/2018 2.30 P.M. – 4.30 P.M.

## **INSTRUCTIONS:**

• Answer question one and any other three questions.

#### **Ouestion one**

- (i) Agricultural financial managers have critical decisions to make from time in the course of business operations. Giving examples discuss the main areas of finance in which they make decisions. (9 marks)
- (ii) Discuss the factors that determine the requirement of fixed capital. (7 marks)
- (iii) Suppose you deposited kshs.20, 000 in a bank and you wish to purchase farm equipment 5 years from today. How much will you receive from the bank if the rate of interest is 20 percent at the end of the 5 years? (4 marks)
- (iv) What is the importance of working capital?

(5 marks)

#### **Question two**

- (i) Discuss the sources of finance available to finance managers clearly distinguishing between debt and equity financing. (8 marks)
- (ii) A company is considering the following investment projects:

Project	C0	C1	C2	C3
A	-10,000			
В	-10,000	7500	7500	
С	-10,000	4000	6000	12000
D	-10,000	10000	4000	4000

### Required

- (a) Rank the projects according to each of the following, NPV, IRR assuming a discount rate of 10 and 20 percent. (6 marks)
- (b) If the projects are mutually exclusive which project is best?

## **Question three**

(i) Assume that you are given the following information

Economic condition	Rate of return	Probability
Growth	18.5	0.25
Expansion	10.5	0.25
Stagnation	1.0	0.25
Decline	-6.0	0.25

## Required, Calculate

(a) The expected rate of return. (2 marks)

(b) The variance and standard deviation. (3 marks)

(c) Explain what is the implication of expected rate of return and standard deviation.

(2 marks)

(1 mark)

- (ii) Despite its weaknesses the payback methods is popular in practice. What are the reasons for its popularity? (5 marks)
- (iii) Exactly ten years from now, assume that George will start receiving a pension of Kshs 3,000 a year. The payment will continue for sixteen years. How much is the pension worth now, if George's interest rate is 10 percent? (5 marks)

# **Question four**

- (i) "Financial ratios is a full method of assessing the financial performance of a firm" Critically discuss this statement. (5 marks)
- (ii) Assume that you are a financial manager in your agro based company and that your company had made plans for next year. It is estimated that the company will employ total assets of \$800,000; 50 percent of the assets being financed by borrowed capital at an interest cost of 8 per cent per year. The direct costs for the year are estimated at \$480,000 and all other operating expenses are estimated at \$80,000. The goods will be sold to customers at 150 percent of direct costs. Tax is assumed to be 50 percent.

# You are required to calculate

(i)	Net profit margin	(2 marks)
(ii)	Return on assets	(2 marks)
(iii)	Asset turn over	(2 marks)
(iv)	Return on owner's equity.	(4 marks)

#### **Ouestion five**

# AGEC 242

(i)	Explain the reasons for valuation of shares.	(4 marks)
(ii)	Explain how a firm can minimize the conflicts between shareholders and	U
(iii)	Differentiate between discounting and compounding.	(6 marks) (2 marks)
(iv)	Suppose a person receives Sh 5000annually for 4 years at the end of every interest rate is 10% per annum. Calculate the present values of annuity.	y year. The (3 marks)