



MACHAKOS UNIVERSITY

University Examinations for 2018/2019 Academic Year

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF BANKING, ACCOUNTING & FINANCE

THIRD YEAR SECOND SEMESTER EXAMINATION FOR
BACHELOR OF SCIENCE (AGRIBUSINESS AND MANAGEMENT)

AGB 407: AGRIBUSINESS FINANCE AND CREDIT MANAGEMENT

DATE: 24/4/2019

TIME: 2:00 – 4:00 PM

INSTRUCTIONS: Attempt Question One and any other Two Questions

QUESTION ONE (COMPULSORY) (30 MARKS)

- a) Identify and explain **five** sources of finance available to a business (5 marks)
- b) Peleka stores intends to buy a car in three years' time. The car will cost Ksh870 100. Peleka deposited Ksh200 000 in Hela bank at the beginning of the first year and sh 240 000 at the beginning of the second year. The bank pays 10% interest on deposits. Calculate the amount the business should deposit in the same bank account at the beginning of the third year so as to be in a position to buy the car. (5 marks)
- c) On 31 March 2017 you bought a one hectare farm near River Athi banks for Shs.2250,000. You prepared and planted Watermelon which in total cost you another Shs.750,000. The total expenses up to harvest time amounted to another Shs.200,000. If you expect to receive Sh.3,500,000 after selling the output one year later.
- i) What is your expected gross profit margin? (3 marks)
- ii) What is your net profit? (2 marks)

d) An investment has the following possible returns with associated probabilities:

Possible returns	20%	18%	8%	0%	-6%
Probability	0.10	0.45	0.30	0.05	0.10

Required:

Calculate:

- i) Expected rate of return (7 marks)
- ii) Standard deviation of the rate of return. (8 marks)

QUESTION TWO (20 MARKS)

- a) Your father promised to give you a gift of Ksh.300,000 on your graduation which will be in one year's time. You are not sure what kind of investment you can put this money into and you decide to deposit it in a bank account paying 10% p.a interest. Five years after your graduation your Uncle offers to sell you an hectare of Land for Kshs.700,000 to commence an agribusiness. Your father recommends you take this offer and take a loan to top up the amount in your account and purchase this Land. How much loan will you take from the Bank? (8 marks)
- b) Farm resources can be divided Five categories called capital:
 - i) Natural
 - ii) Human
 - iii) Physical
 - iv) Financial
 - v) Social
- c) Explain four of the above types of capital. (12 marks)

QUESTION THREE (20 MARKS)

- a) What do you understand by the term "time value for money"? (3 marks)
- b) Explain the three-risk preference behaviours among managers and investors. (6 marks)
- c) The Bright ways investors have two agricultural investment possibilities A and B. The investments have the following characteristics.

Investment A		Investment B	
Return	Probability	Return	Probability
30%	0.10	-20%	0.05
20%	0.20	10%	0.25
10%	0.40	20%	0.30
5%	0.20	30%	0.30
-10%	0.10	40%	0.10

Required:

- Calculate the expected return of each Investment. (4 marks)
- Calculate the standard deviation of return for each investment. (4 marks)
- Advice Bright Ways Investors on which investment to take. (3 marks)

QUESTION FOUR (20 MARKS)

- Define the term “interest rates”. (2 marks)
- Distinguish between Nominal interest rates and Real interest rates. (4 marks)
- Highlight and explain seven reasons for interest rate changes. (7 marks)
- How does inflation affect interest rates? (7 marks)

QUESTION FIVE (20 MARKS)

- List three items of cash flow for a farmer under each of the following two categories.
 - Cash inflows
 - Cash outflows (6 marks)
- Expert Agribusiness Investors income and expenditure account for the year ended 31 December 2016 was as shown below:

Cash Inflow

Cash outflow

Description	Month	Income	Description	Month	Expenditure
Sale of maize	January	Kshs. 270,000	Money spent on farm inputs(Maize)	March	Kshs. 300,000
	March	300,000		September	300,000
	September	300,000			
	October	100,000			
	November	100,000			
Sale of Cassava	April	340,000	Money spent on farm inputs(Cassava)		37,000
	August	120,000			
Sale of Milk	March-September	420,000	Money spent on farm inputs(Livestock)	January	30,000
				February-September	400,000
				October-	

				December	90,000
Sale of chicken	January September	130,000 60,000	Brooding cost and Feeding(Chickens)	September	60,000
Sale of Beans	July December	450,000 400,000	Money spent on inputs(Beans)	April May July October December	200,000 50,000 40,000 180,000 40,000
			Money to cover living expenses	January- December	120,000
			Money to cover School fees	February May September	200,000 140,000 100,000
Description	Month	Income	Description	Month	Expenditure
			Money to cover health expenses	January- December	120,000
	Total	2,990,000		Total	2,407,000

Required

- i) Prepare a cash flow table for the cash inflows and outflows. (8 marks)
- ii) Prepare the monthly net cash flows (6 marks)