



# MACHAKOS UNIVERSITY

University Examinations for 2020/2021 Academic Year

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF ECONOMICS

THIRD YEAR SPECIAL/SUPPLEMENTARY EXAMINATION FOR

BACHELOR OF ECONOMICS AND STATISTICS

BACHELOR OF ECONOMICS AND FINANCE

BACHELOR OF ECONOMICS

EAE 302: ECONOMICS OF MICROFINANCE I

DATE:

TIME:

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## INSTRUCTIONS:

1. Answer QUESTION ONE and any other two questions
2. Question one is compulsory and carries (30 marks)
3. All other questions carry (20 marks each)

## QUESTION ONE (30 MARKS)

- a) Assume a money market with safe and risky borrowers. The MFI is ready to lend money but does not know who is safe and who is risky. However experience has led to MFI to know what 75% of the borrowers are safe. Given that the risky borrower's probability to succeed is 90% and that the loan amount is ksh. 200,000.
- i. Calculate the expected gross revenue for each borrow if the gross revenue is ksh, 30,000 and ksh 360,000 for safe and risky borrower respectively (2 marks)
- Also, suppose the contract terms are that the:
- MFI charges 25% interest
  - Groups constitute of two members only
  - Borrower pays ksh 0. If their business fails and
  - Additional payment due if borrower's partner fails is ksh 60,000/=
- ii Calculate the borrower's expected net return if:
- I. A safe borrower has a safe partner (2 marks)
- II. A safe borrower has a risky partner (2 marks)

- III. A risky borrower has a safe partner (2 marks)
- IV. A risky borrower has a risky partner (2 marks)
- V. Demonstrate that adverse selection cannot be experienced in this money market (4 marks)
- b) A microfinance bank is being subsidized by the government in the following way: each time and the bank extends a ksh, 1000 loan, it gets a subsidy of kshs200. There are two potential borrowers to which the manager of the bank can extend a subsidized loan. A borrower type A promises to pay 50 percent of her percent of her profit on the kshs, 1000 loan. A borrower type B promises to repay 10 percent of her profit. However, A can generate a gross return of ksh 1,200 with probability of 0.8 , and nothing with probability of 0.2, while borrower B can generate a gross return of kshs 1,100 with certainty
- i. Define "social efficiency" and explain why it's necessary to offer credit to both type A and B. (2 marks)
- ii. Which of the borrowers will the manager choose to finance if they want to maximize expected profits? (4 marks)
- c) Explain how innovations of microfinance may be used to overcome problems such as high collateral that many poor households face. (10 marks)

### **QUESTION TWO (20 MARKS)**

- a) Using relevant example describe the three stages in which agency problem manifest itself in relation to lending. (8 marks)
- b) ROSCAS are one of the most popular MFIs in developing countries. Explain the advantages and disadvantages with it. Provide six reasons in each case. (12 marks)

### **QUESTION THREE (20 MARKS)**

- a) Dynamic incentives refer to the practice of promising larger and larger loans for groups and individuals in good standings with regard to loan repayment. Explain any three forms of dynamic incentive used by micro finance institutions in Kenya. (6 marks)
- b) Loan pricing is an important element of loan product designs. Explain the elements that MFI should consider when determining interest rates. (6 marks)
- c) Explain any four guidelines that the government must consider when regulating microfinance institutions. (8 marks)

#### **QUESTION FOUR (20 MARKS)**

- a) Microfinance has grown most quickly in low-income countries, but many poorer households in richer countries also lack access to high quality financial service at reasonable prices. Why would opportunities and constraints for micro finance differ between richer countries and poorer countries? (8 marks)
- b) Explain the key components of Kenya's Microfinance Act (2006) and how the Act helps increase micro finance outreach, (12 marks)

#### **QUESTION FIVE (20 MARKS)**

- a) Provide at least three reasons why, relative to men, women may be better clients, from the standpoint of a micro lender simply interested in maximizing profits. (6 marks)
- b) If being a moneylender is a profitable as many observers claim, why don't money lenders face great competition? Explain. (4 marks)
- c) In relation to Micro and Small Enterprises
- i. What is the legal definition of both micro and small enterprises? (2 marks)
  - ii. Briefly explain any four policies that the government has established to support MSEs. (8 marks)