Moderated
[illegible]
22/01/2020

BACHELOR OF ECONOMICS & FINANCE EXAM

EAE 302: ECONOMICS OF MICROFINANCE I

DATE: APRIL 2020

INSTRUCTIONS:

(i) **Answer question one (Compulsory) and any other two questions**

(ii) **Do not write on the question paper**

(iii) **Show your working clearly**

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03/02/2020

QUESTION ONE (30 MARKS)

a) Differentiate between the following terms as used in micro-finance: (2 mks each)

i) Limited liability ~~Vs~~ VS group lending **(2 Marks)**

ii) Declining balance method ~~Vs~~ VS flat rate method of calculating interest rate **(2 Marks)**

iii) Informal and the formal Sector VS **(2 Marks)**

iv) Adverse selection problems ~~Vs~~ agency problems **(2 Marks)**

v) Micro-credit and micro-finance **(2 Marks)**

b)

i) Explain how group lending with joint responsibility can help ~~Microfinance~~ M icrofinance ~~Institution~~ institutions overcome ~~Moral~~ M oral ~~Hazard~~ h azard problem. **(6 Marks)**

ii) Provide four reasons as to why group lending with joint responsibility may not work in practice especially in urban areas. **(4 Marks)** c)

i) Use the principle of marginal returns to capital to explain the economic theory proposition that small firms should be able to generate higher returns to investment than larger firms. **(6 Marks)**

ii) Why is the principle of marginal returns to capital not applicable to Kenya and other African countries? **(4 marks)**

QUESTION TWO (20 MARKS)

a) Microfinance has come under close scrutiny in recent years and there are many who argue that the positive effects of micro-finance have been exaggerated and that the rapid expansion of micro-credit has caused unintended consequences and limited benefits in reducing extreme poverty. Discuss any five criticisms ~~on~~ to microfinance. **(10 Marks)**

b)

i) Discuss four disadvantages of ROSCAs relative to credit cooperatives and three advantages of credit cooperatives relative ROSCAs. Rephrase the question **(7 Marks)**

ii) Given that poor people have many opportunities to borrow ~~in~~ from the informal sector and ~~from~~ microfinance institutions, how can one explain that, despite all its disadvantages, ROSCAs are still very widespread among developing economies. ~~(At least three reasons)~~ **(3 Marks)**

QUESTION THREE (20 MARKS)

a) Much as there is free entry into the moneylenders' market, there are constraints that are specific to the market, which keep out potential entrants into the market. Discuss four such constraints. **(4 Marks)**

b) Briefly describe using a relevant example the three stages in which agency problem manifests itself in relation to microfinance lending in Kenya. **(6 Marks)**

c) Identify and briefly explain five (5) main components of the core cost structure of Microfinance institutions that are used to determine marginal cost and the interest rate on loans. **(10 Marks)**

QUESTION FOUR (20 MARKS)

a) Consider the following set-up. The economy has a bank that aims at breaking even and potential borrowers can be of two different types. If a borrower wants to start a project, this costs him Kshs. 100. The project will yield a return after one period. The bank faces gross costs k for every Kshs. 100 loan. Here k is Kshs. 110.

A potential borrower of type 1, when borrowing KES ~~$~~100 and starting her project generates a gross return y_1 = Kshs. 230 with probability 90%. A borrower of type 2, if she gets the credit and starts her project, she generates a gross return y_2 = Kshs. 400 with probability 50%. In case of failure, she gets zero.

In the economy, 60% of the potential borrowers are of type 1, 40% are of type 2. All borrowers in this economy are protected by limited liability.

i) What is the interest rate the bank would charge to break even given that it cannot observe the type of borrower? **(4 Marks)**

ii) If both types of borrowers would both earn a wage of Kshs. 75 per period in case of working and not borrowing, who will borrow and how will the equilibrium (where the bank breaks even) in the credit market look like. **(6 Marks)**

b) Now suppose that the bank is not able to observe the type of borrower but willing to lend to all individuals on the condition that all individuals form pairs and that each pair mutually accepts to be linked via a joint responsibility clause. That means if one individual fails, her partner has to pay in addition to her own rate also the rate of the unsuccessful partner. Otherwise, they will both be excluded from access to future loans, which is infinitely costly.

i) Assume assortative matching. Compute the gross interest per each Kshs. 100 loan the bank will have to charge in order to break even. Show the decision of the borrowers. Is this improving efficiency? **(6 Marks)**

ii) Giving the information above on the characteristics of the borrowers, is there a combination of interest rate and collateral at which both types are willing to borrow and the bank breaks even? Explain. If so, give an example. **(4 Marks)**

QUESTION FIVE (20 MARKS)

a) You are a graduate student living in Nairobi with Ksh: 100,000 shillings to invest. You can choose between buying shares of DT Dobie or lending it to Juma, a fruit vendor in your estate. Juma tells you, he wants to use the money to open his own fruit shop in a poor suburb of Nairobi. He claims that he will pay you back the 100,000 shillings in 5 months with an interest rate of 30%.

i) Give arguments for and against lending the money to Juma instead of investing in DT Dobie. **(4 Marks)**

ii) Propose two conditions (either about the contract or about her or your living situation) under which you would be much more likely to lend out to Juma. **(6 Marks)**

b) Identify and explain five risks faced by microfinance institutions. **(10 Marks)**