AFRICA UNIVERSITY

(A United Methodist-Related Institution)

"Investing in Africa's Future"

FACULTY OF MANAGEMENT AND ADMINISTRATION

COURSE TITLE: MEC205 MONEY AND BANKING
MAC207 MONEY AND CAPITAL MARKETS

SEMESTER 1: FINAL EXAMINATION- NOVEMBER 2013- MTRE

LECTURER: MR T. MASESE

TIME: 3 HOURS

INSTRUCTIONS

Answer **ALL Questions in this Paper**
Total possible mark is **60.**

Start **each** question on a new page in your answer Booklet.

The marks allocated to **each** question are shown at the end of the section.

Show all your workings.

Credit will be awarded for logical, systematic and neat presentations.

Question One

a. Distinguish between an ordinary annuity and an annuity due. Suppose that you want to buy a car on an "easy payment" scheme of $5,000 a year at the end of each of the next 3 years. What is the present value of this payment scheme if interest rate is 10%? How would this change if you made your first deposit of $5000 now? **(4 marks)**

b. Today's date is 30 March 2006. E-pay P/L shares pay a dividend every year on 29th March. The most recent dividend was $1.50 per share. You expect the dividends to grow at a rate of 20% per year up to 29 March 2009. After that you expect that dividends will increase at 8% per a year. Investors require a 12% return on E-pay P/L shares. Calculate the expected dividends from 30 March 2007 through to 30 March 2010 and the price of shares on the following dates: 30 March 2006, 30 March 2007, 30 March 2008 and 30 March 2009. Calculate the dividend yield and percentage change in the price of E-pay shares for years ending 30 March 2006, 30 March 2007 and 30 March 2008. **(12 marks)**

c. What is risk and how is it related to return? The return of E-pay P/L shares depends on the state of the economy which can be in recession, expansion or boom. If the probabilities of the respective states are 20%, 40% and 30%, calculate the stand-alone of risk and the coefficient of variation for E-pay shares whose respective expected returns are -20%, 15% and 45% should each of these economic states occur **(6 marks)**

Question Two

a. Distinguish between the narrow definition and wide definition of money supply. Why is this distinction important to the Central bank's ability to control money supply? What are the main components of the M2 money supply? **(3 marks)**

b. Kuda has just joined your company as an intern and you have to teach her a bit about financial markets and securities. Explain to her how a negotiable certificate of deposit differs from bankers' acceptance and tell her what it means if a portfolio has a correlation coefficient of -1. Define for her the following terms commonly used in financial language; (a) stand-alone risk (b) market risk (c) risk attitude. Distinguish between a bond and an ordinary stock to Kuda. Calculate for her the expected return on a $100000 portfolio consisting of Econet, Barclays, Meikles and Dawn shares whose respective expected returns are a 14%, 13%, 20% and 18% if an equal amount has been spent on each stock. Also help her find the price she should charge for a \$1000 par value bond that has a coupon rate of 8% and a required return of 10%? **(9 marks)**

c. Explain why the government regulates the financial markets and outline any three most common regulations used by the Central banks to regulate banks. Explain any three monetary policy tools may the central bank use to reduce the money-creation abilities of banks **(5 marks)**

d. City Link is a Mutare-based bus company. Over the past 10 year it has seen both its annual and interim dividends grow at a rate of approximately 5%. Suppose the investors expect City Link to pay a dividend next year of \$3.10 per share and they expect that the dividend will continue to grow at 5% indefinitely. How much would you pay for 1000 City Link shares if you requie a return of 12%? **(3 marks)**

Question Three

a. Mucha has just contracted to sell a small piece of land that he inherited from his father a few years ago. The buyer is willing to pay \$25000 at the closing of the transaction or will pay the amounts shown in the following table at the beginning of each of the next 5 years. Because Mucha does not really need the money today, he plans to let it accumulate in an account that earns 7% annual interest. Given his desire to buy a house at the end of five years after closing the sale of land, he decides to choose the payment alternative that provides the highest future value at the end of five years.

Mixed Stream of Cash flows	
Beginning of Year (t)	Cash Flow
1	\$4000
2	\$2000
3	\$8000
4	\$6000
5	\$10000

i. What is the future value of the lump sum at the end of year 5? **(3 marks)**

ii. What is the future value of the mixed stream at the end of year 5? **(3 marks)**

iii. Based on your answers in (i) and (ii) above, which alternative should Mucha take? **(2 marks)**

b. You have just won a lottery that promises to pay \$1000 000 exactly ten years from today. Because the \$1000 000 is guaranteed by the government, opportunities exist to sell the claim to the lottery today for an immediate lump-sum cash payment. What is the least you will sell your claim to the lottery if you could earn the following rates of return during the ten year period: (a) 9% (c) 12%. **(4 marks)**

c. Explain the major problems that arise from asymmetric information in financial markets. Explain the advantages of an efficient financial system to the economy. With the aid of a flow diagram explain how funds flow through the financial system clearly distinguishing between direct and indirect finance. How do you think policies like indigenization may affect the efficiency the financial system? **(8 marks)**

End of Paper