



AFRICAN ECONOMIC RESEARCH CONSORTIUM

**Collaborative Masters Programme in Economics for Anglophone Africa
(Except Nigeria)**

JOINT FACILITY FOR ELECTIVES (JFE) 2012

JUNE - SEPTEMBER

CORPORATE FINANCE AND INVESTMENT II

Second Semester: Final Examination

Duration: 3 Hours

Date: Wednesday, September 19, 2012

INSTRUCTIONS:

1. There are **FIVE** questions in this examination.
 2. You are required to answer **ANY FOUR** questions.
 3. All questions carry equal marks.
 4. Be neat and clear and start each question on a new page.
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Question 1

(a) Define or describe each of the following terms that are applicable in mergers and acquisitions:

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|----------------------|-----------|
| (i) Poison pill | [2 marks] |
| (ii) Shark repellent | [2 marks] |
| (iii) Proxy contest | [2 marks] |
| (iv) White knight | [2 marks] |

(b) The separation of ownership and control is widely considered as creating opportunities for agency problems. These occur when managers or directors take actions that are adverse to the interests of shareholders. The market for corporate control provides mechanisms by which companies can be matched up with management teams who can make the most of the company's resources.

Explain four methods that can be used to change the management of a company, explaining any advantages or disadvantages that may be associated with the methods. **[17 marks]**

Question 2

(a) Briefly explain the following terms:

- | | |
|------------------------------------|-----------|
| (i) Exercising the option. | [2 marks] |
| (ii) Strike, or exercise, price. | [2 marks] |
| (iii) Expiration date. | [2 marks] |
| (iv) American and European option. | [2 marks] |
| (v) Premium. | [2 marks] |



- (b) State three factors that determine the value of a call option, explaining how they affect it. **[9 marks]**
- (c) A share of Flying Eagle Company is currently selling for Shs. 480 each. A one-year call option with strike price of Shs. 550 is selling for Shs. 90, and the risk free interest rate is 6 percent. Wilfred is interested, given the above information, to purchase a put option. Determine, showing all workings, the price he would have to pay to acquire a one-year put with a strike price of Shs. 550. **[6 marks]**

Question 3

- (a) The efficient market hypothesis implies that abnormal returns are expected to be zero. Yet in order for markets to be efficient, arbitrageurs must be able to force prices back into equilibrium. If they earn profits in doing so, is this fact inconsistent with market efficiency? Explain in detail. **[5 marks]**
- (b) Nile-Ku-Mart is a large publicly-traded supermarket. Suppose Nile-Ku-Mart announced today morning that its profit from last quarter has dropped 15% compared to the previous quarter, Nile-Ku-Mart's closing price today was up 2% from yesterday. Explain whether this evidence is against the efficiency market hypothesis. **[5 marks]**
- (c) Superior Images Company is a manufacturer of high definition imaging instruments for a major hospital in the country. Superior Images has successfully developed a prototype of an imaging machine which it believes will revolutionize the work of hospital personnel in their work. In the company's opinion, therefore, this will be a positive net present value venture. The shares of Superior Images Company have been performing fairly well in the market. The management of the company is excited and believes that this information would stimulate the market. However, management does recognize that participants in the market do not have the same characteristics: there are always some laggards, just as there would be others who are overzealous.
- (i) Explain what will happen to the price of the shares of Superior Images Company once this information reaches the market. **[5 marks]**
- (ii) Taking into consideration the presence of the laggards and the overzealous, demonstrate, using a properly keyed graph that their combined reactions will still result in the true value of the shares. **[10 marks]**

Question 4

- (a) Describe the (static) trade-off theory of optimal capital structure. **[3 marks]**
- (b) Moshi and Kilo Company currently has earnings before interest and taxes of Shs. 2,500,000. The company is financed entirely by equity. The earnings are not expected to change anytime in the foreseeable future. The company pays corporate taxes equal to 35 percent of taxable income. The discount rate for the company's projects is 10 percent.
- (i) Compute the market value of Moshi and Kilo Company. **[3 marks]**



- (ii) Assume that the company issues a permanent debt of Shs. 5,000,000, paying interest of 6 percent per year, and using the proceeds to retire equity. State what will happen to the total value of Moshi and Kilo Company, supporting your answer with relevant computations. **[4 marks]**
- (iii) Assume that after the issue of the debt in (ii) above Moshi and Kilo Company realizes that the debt issue raises the possibility of bankruptcy. In fact, the company figures out that it has a 30 percent chance of going bankrupt after three years. If it does go bankrupt, it will incur bankruptcy costs of Shs. 20,000,000. The discount rate remains 10 percent. Was it wise for Moshi and Kilo Company to issue the debt? Motivate your answer with appropriate computations. **[5 marks]**
- (c) Suppose Moshi and Kilo Company above was now considering an optimal combination of debt and equity. Illustrate, using a clearly labeled graph, where the optimal amount of debt would be achieved. **[10 marks]**

Question 5

- (a) What do you think is the typical stock market reaction to the announcement that a firm will increase its dividend payment? Why? **[5 marks]**
- (b) Explain how Miller and Modigliani (M&M) arrive at their conclusion that dividend policy is irrelevant in a world of frictionless capital markets. Why is the assumption of fixed investment policy crucial to this conclusion? **[10 marks]**
- (c) Kingsley General Apparel is a company that is engaged in the manufacture of quality clothing and draperies. It has been successful in the past few years and its directors now believe the company can afford and should make a dividend payment. However, the directors are not decided as to the timing and amount of the dividend payment and are considering two alternative options. One is that, the company can pay out an even dividend of Shs. 1,000,000 per year for each of the next two years. The second is to pay Shs. 500,000 this year, re-invest the other Shs. 500,000 into the firm and then pay the entire amounts from the investment plus Shs. 1,000,000 next year. Investors require a 15 percent return.

Show that, in line with M&M, dividend policy is irrelevant.

[5 marks]