



MUEO

**MOI UNIVERSITY**

**OFFICE OF THE DEPUTY VICE CHANCELLOR, ACADEMIC  
AFFAIRS, RESEARCH & EXTENSION**

**UNIVERSITY EXAMINATIONS  
2014/2015 ACADEMIC YEAR**

***FOURTH YEAR END OF SEMESTER EXAMINATIONS***

**FOR THE DEGREE OF  
BACHELOR OF BUSINESS MANAGEMENT**

**EXAM CODE:-           BBM 410**

**COURSE TITLE:-    FINANCIAL MANAGEMENT**

**DATE:- 30<sup>TH</sup> NOVEMBER, 2015**

**TIME:-9.00A.M. – 12.00NOON.**

---

INSTRUCTION TO CANDIDATES

➤ SEE INSIDE.

THIS PAPER CONSISTS OF (3) PRINTED PAGES

PLEASE TURN OVER

Instructions: ANSWERS QUESTION ONE AND ANY OTHER THREE QUESTIONS.

### QUESTION ONE

- a) Although profit maximization has long been considered as the main goal of a firm, shareholder wealth maximization is gaining acceptance amongst most companies as the key goal of a firm.

**Required:** Distinguish between the goals of profit maximization and shareholder wealth maximization. (4 marks)

- b) Gap Co. Ltd, a printing firm in Mombasa is evaluating whether to replace an old printing machine with a new one. The following information relate to the two machines:

#### Old Machine

Original cost	Sh.850,000
Estimated life	10 years
Estimated salvage value	Sh.55,000
Book value	Sh.385,000
Market value	Sh.165,000

#### New Machine

Cost	Sh.1,100,000
Estimated life	5 years
Estimated salvage value	Sh.110,000
Savings in production	Sh.182,000 per year

The company's marginal tax rate is 30% and cost of capital 10%. The firm uses straight line method of depreciation on its property, plant and equipment items.

#### Required:

- i) Using the net present value (NPV) method, analyze the replacement decision and state whether or not the old machine should be replaced. Show your workings. (10 marks)
  - ii) Explain three characteristics of long term capital investment decisions. (3 marks)
  - iii) Identify and briefly explain three methods of handling risks in capital budgeting. (3 marks)
- c) Distinguish between systematic risk and unsystematic risk with an aid of a well labeled diagram (3 marks)
- d) Examine at least one relative advantage of leasing over hire purchase as a means of acquiring capital assets (2 marks)

(Total: 25 marks)

### QUESTION TWO

- a) XYZ Co. Ltd is considering a project which will cost sh.4 million to be financed by 60% equity and 40% debt. The company is considering raising a 10% debt at a cost of sh. 60,000 and to issue new ordinary shares whose cost will be sh. 52,000. The firm's expected net cash inflows from the project are sh. 900,000 p.a for the 5 year economic useful life of the project. A similar firm which is unleveraged has a cost of equity ( $K_{eu}$ ) of 12%. The tax rate is 30%.

**Required:** Evaluate the project using Adjusted Present Value (APV) method.

**(5 marks)**

- b) Assume that these two firms, the levered firm (A) and the unlevered firm (B) are identical in all important respects except capital structure. Firm A has Sh 10 million of 7.5% debt, while Firm B is all equity funded. Both firms have EBIT of Sh 1,000,000 and the firms are in the same business risk class. Initially assume that both firms have the same equity capitalization rate  $K_{c(A)} = K_{c(B)} = 10\%$ .

**Required:**

- i) Compute the value of the firms under MM hypothesis. **(4 marks)**  
 ii) What is the overall cost of capital (WACC) for both firms? **(4 marks)**  
 iii) What are some the assumptions of MM hypothesis? **(2 marks)**

**(Total: 15 marks)**

### QUESTION THREE

- a) Explain the four key functions of a financial manager of a firm of your choice in this turbulent business environment. **(4 marks)**
- b) XYZ Limited a debt collection agent has estimated that the standard deviation of its daily net cash flows is Sh.22, 750. The company pays Sh.120 in transaction cost every time it transfers fund into and out of the money market. The rate of interest in the money market is 9.465%. The company uses Miller-Orr model to set its target cash balance. The minimum cash balance has been set at Ksh 75,000. **Required:**

(i) The return point/target cash point **(3 marks)**

(ii) The upper cash limit **(2 marks)**

- c) Neby Co. Ltd has a dividend payout policy of 45% and its EPS is sh. 50.20. The rate of return on internal funds is 16%. The owners require a capitalization rate of 12%.

**Required:** Determine the current market value per share using;

i) Gordon model **(3 marks)**

ii) Walter model **(3 marks)**

**(Total 15 marks)**

### QUESTION FOUR

- a) Explain two factors that finance managers should consider before making a dividend decision. **(4 marks)**

- b) XYZ Ltd. is considering two possible capital projects, i.e A and B for next year. Each project has a 1 year life, and project returns depend on next year's state of the economy. The estimated rates of return are shown below.

STATE OF THE ECONOMY	PROBABILITY OF OCCURRENCE		RATE OF RETURN	
			A	B
Growth	0.20	10%	9%	
Recovery	0.30	15	16	
Boom	0.50	12	18	

Required:

- (i) Find each project expected rate of return, standard deviation and coefficient of variation. **(5 marks)**
- (ii) Compute the covariance between A and B. **(2 marks)**
- (iii) Compute the correlation coefficient between asset A and B. **(2 marks)**
- (iv) Compute the expected return on a portfolio if the firm invests equal wealth on each asset. **(2 marks)**

**(Total: 15 marks)**

### QUESTION FIVE

- a) In the context of capital budgeting, explain the difference between "hard rationing" and "soft rationing" and how each arises. **(5 marks)**
- b) ABC Co Ltd. Is intending to review its corporate strategy by investing in an ambitious and very risky project. The available data in the market indicate that return on 181-day government securities is 9% and aggregate market expected return is 19%. The covariant of this project returns and returns on the market is estimated at 4.5% and market variance at 3%. The project is to cost a cool Ksh. 100 million with annual net cash inflows of Ksh 25 million p.a for its 5 years economic life.

**Required:**

- (i) Determine viability of the project under Risky scenario **(5 marks)**
- (ii) Determine viability under the Certainty Equivalent Approach.

**(5 marks)**

**(Total: 15 marks)**

### QUESTION SIX

- a) Briefly explain two models or approaches used in cash and cash equivalent management by most firms. **(4 marks)**
- b) Distinguish between corporate governance (CG) and corporate social responsibilities (CSR). **(4 marks)**
- c) The following information relates to a call option
  - Asset underlying price ksh. 125
  - Exercise/strike price ksh. 98

- Volatility of returns 33%
- Time to maturity 9 months
- Average risk free (riskless) rate of return 10% p.a

**Required:** Determine the value of a call option and put option using black-scholes model.

(7 marks)

(Total: 15 marks)