



The Co-operative University of Kenya

END OF SEMESTER EXAMINATION DECEMBER -2018

**EXAMINATION FOR THE DEGREE OF BACHELOR OF CO-OPERATIVE
BUSINESS / BACHELOR OF SCIENCE IN FINANCE**

(YR II SEM I)

UNIT CODE: HCOB 2309 / CMFI 2204

UNIT TITLE: FINANCIAL MANAGEMENT II

DATE: 10TH DECEMBER, 2018

TIME: 9:00 AM – 11:00 AM

INSTRUCTIONS:

- Answer question **ONE (compulsory)** and any other **TWO** questions

QUESTION ONE

- (a) Evaluate the use of simulation analysis in project analysis (5 marks)
- (b) A bank has the following balance sheet. Which of the following projects would be accepted?

Assets(Ksh)		Liabilities + Equity (Ksh)	
Bank assets	10,000	Insured debt	12,000
Deposit insurance	2,000	Equity	0
Total	12,000	Total	12,000

- i) *Project A*: Will require an investment of Ksh1000 by equity holders. There is a 10% chance the project will increase assets to Ksh30,000 and a 90% chance the project will increase assets to Ksh12,000 (2.5 marks)
- ii) *Project B*: Will require an investment of Ksh7000 by equity holders. There is a 20% chance the project will increase assets to Ksh20,000 and a 80% chance the project will increase assets to Ksh18,000. (2.5 marks)
- (c) Tesla Inc CEO estimates his firm's after tax WACC at only 8%. Nevertheless, he sets a 15% companywide discount rate to offset the optimistic biases of project sponsors and to "impose" discipline on the capital budgeting process. Suppose the CEO is correct about the sponsors who are in fact optimistic by 7% on average. Will the increase on the discount rate from 8% to 15% offset the bias? Explain. (5 marks)
- (d) Describe the situations in which it would be advisable to file for formal bankruptcy or private workout if the firm is in financial distress (5 marks)
- (e) Discuss the role of investment bankers in mergers (5 marks)
- (f) Safari Limited finances its operations with \$75 million in stock with a required return of 12 percent and \$45 million in bonds with a required return of 8 percent. Suppose the firm issues 15 million in additional bonds at 8 percent, using the proceeds to retire 15 million worth of equity. If the WACC remains the same, what will be the firm's new cost of equity? (Assume zero taxes and perfect capital markets) (5 marks)

QUESTION TWO

- (a) Discuss the basic thrust of the net operating approach (NOI) of capital structure (10 marks)
- (b) You are considering a recapitalization plan that would convert your firm from its current all-equity capital structure to one including substantial financial leverage. Your firm now has 100,000 shares of common stock outstanding, which are selling for \$50.00 each, and the recapitalization proposal is to issue \$2,000,000 worth of long-term debt at an interest rate of 8.0 percent and use the proceeds to repurchase \$2,000,000 of common stock. The tax rate is 40%. What level of EBIT will earnings per share equal zero for shareholders under the new capital structure? (assume that the stock can be repurchased at \$50 per share) (10 marks)

QUESTION THREE

- (a) Lynx Inc is considering some new equipment whose data are shown below. The equipment has a 3-year tax life and would be depreciated by the straight-line method over 3 years, with no salvage value at the end of Year 3, when the project would be closed down. Revenues and other operating costs are expected to be constant over the project's 3-year life. The project will be housed in warehouse that is currently unused but could be sold for \$100,000

WACC	10.0%
Net investment in fixed assets (depreciable basis)	\$71,500
Sales revenues,	\$123,000
Operating costs (excl. deprec.)	\$25,000
Tax rate	30.0%

Required:

- Calculate the effect of a 10 percent drop in sales on the project's NPV (10 marks)
- (b) Explain the bird in the hand hypothesis (10 marks)

QUESTION FOUR

- (a) Discuss the criticisms leveled against the Modigliani and Miller hypothesis (MM-I without corporate taxes) on capital structure (5 marks)
- (b) Discuss the residual theory of dividends (5 marks)
- (c) Discuss the arguments for mergers and acquisitions (10 marks)

QUESTION FIVE

- (a) The management of ABC Limited is considering the acquisition of XYZ Limited. The following information relates to the two companies.

	ABC	XYZ
Present earnings	KShs20,000,000	KShs6,000,000
Shares	5,000,000	3,000,000
Earnings per share	Shs4	Shs2
Price/Earnings ratio	16	10
Price of shares	Sh64	Sh20

ABC offers 0.50 shares for each share of XYZ to acquire the company. Assuming that the price earnings ratio of ABC is expected to remain constant, calculate

- i) The market price exchange ratio (2 marks)
The Combined effect of the merger on:
- ii) Present earnings (2 marks)
- iii) Shares outstanding (2 marks)
- iv) Earnings per share (2 marks)
- v) Price of shares (2 marks)

(b) Sea Fearers Inc may design a new 30-foot sailboat based on the "winged" keels. First, Sea Fearers Inc would have to invest \$10,000 at $t=0$ for the design and model tank testing of the new boat. The firm's managers believe there is a 60% probability that this phase will be successful, and the project will continue. If Stage 1 is not successful, the project will be abandoned with zero salvage value. The next stage, if undertaken, would consist of making the molds and producing two prototype boats. This would cost \$500,000 at $t=1$. If the boats test well, the firm would go into production. If they do not, the molds and prototypes could be sold for \$100,000. The managers estimate the probability is 80% that the boats will pass testing and that Stage 3 will be undertaken. Stage 3 consists of converting an unused production line to produce the new design. This would cost \$1 million at $t=2$. If the economy is strong at this point, the net value of sales would be \$3 million; if the economy is weak, the net value would be \$1.5 million. Both net values occur at $t=3$, and each state of the economy has a probability of 0.5. Sea Fearers Inc's corporate cost of capital is 12%. Assume this project has average risk.

Required:

- i. Construct a decision tree (6 marks)
- ii. Determine the project's expected NPV (4 marks)