KENYATTA UNIVERSITY

SPECIAL/SUPPLEMENTARY EXAMINATIONS 2023/2024

EXAMINATION FOR DEGREE OF MASTER OF BUSINESS ADMINISTRATION

BAC 823: CORPORATE FINANCE

APRIL/MAY 2024 **TIME: 3 HOURS**

INSTRUCTIONS: **ANSWER ALL THE QUESTIONS**

QUESTION ONE

a) *VB Ltd* is a company that is seeking to grow its investments in the country. The company trades in real estate investments. The firm is seeking your advice on the following;

i) Explain the applications of Capital Asset Pricing Model (CAPM). **(4 Marks)**

ii) Discuss the application of the Arbitrage Pricing Model (APM) while highlighting the economic forces/components of the APM as suggested by Stephen Ross. **(4 Marks)**

b) Suppose an investor is considering the purchase of a 10-year, sh. 2,000 par value bond bearing a nominal rate of interest of 8% per annum. The investor's required rate of return is 10%. What should he be willing to pay now to purchase the bond if it matures at par? **(4 Marks)**

c) *Viter Ltd* is a medium sized firm in the manufacturing sector based in America. As part of its strategy to expand its market share in the country, the company is considering investing in one of two mutually exclusive projects. The following are cash inflows for each of the next 3 years;

	Cash Inflows ($)	
Probability	**Project X**	**Project Y**
0.10	3,000	3,000
0.25	3,500	4,000
0.30	4,000	5,000
0.25	4,500	6,000
0.10	5,000	7,000

Determine;

i) The expected value of each project. **(2 Marks)**

ii) Standard deviation of each project. **(2 Marks)**

iii) The coefficient of variation. **(2 Marks)**

iv) Briefly explain which project has the greater degree of risk. **(2 Marks)**

(Total: 20 Marks)

QUESTION TWO

a) *Willie Ltd* (an all-equity firm) has after-tax operating cash flows of sh. 3.00 per share and pays out 50% of its earnings in dividends. If it expects to keep the same payout ratio and to earn 20% on future investments forever, what will its current price per share be? (Assume that the cost of capital is 15%). **(3 Marks)**

b) *John Lintner* in the 1950s held a classic series of interviews with corporate managers concerning their dividend policies. In later years, *Terry A. Marsh* and *Robert C. Merton* summarized *Lintner's* conclusions in stylized facts on corporate dividend payout. Discuss the four main stylized facts on how companies decide on dividend payout. **(4 Marks)**

c) The chairman of the board of *Wokke Ltd* has announced that the company will change its dividend policy from paying a fixed shilling dividend per share. Instead, dividends will be paid as a residual. This new policy will increase the variability of dividend paid. How do you think it will affect the value of the firm? Discuss. **(3 Marks)**

(Total: 10 Marks)

QUESTION THREE

a) *Collin Ltd* wishes to acquire *Betty Ltd* by exchanging 1.5 shares of its stock for each share of *Betty. Collin Ltd* expects to have the same P/E ratio after the merger as before. The following data is provided below;

	Collin Ltd	*Betty Ltd*
Net Income (**Ksh.**)	400,000	100,000
Shares	200,000	25,000
Market price per share (**Ksh.**)	40	48

Determine the following;

i) The exchange ratio of the market price. (4 Marks)

ii) The EPS and P/E multiples of each firm. (4 Marks)

iii) The P/E ratio used in obtaining *Betty.* (2 Marks)

iv) The EPS of *Collin* after the acquisition. (2 Marks)

v) The anticipated market price per share of the merged firm. (2 Marks)

b) *Xavier Ltd* is a company involved in household items and has been doing business in Kenya for a decade. The company is considering undertaking a divesture of its business segments as part of its strategy for the year 2019. As a financial advisor, explain six (6) reasons as to why *Xavier* would undertake a divesture while using relevant examples. **(6 Marks)**

(Total: 20 Marks)

QUESTION FOUR

York Ltd purchased a special machine 1 year ago at a cost of sh.12,000,000. At that time the machine was estimated to have a useful life of 6 years and no salvage value. The annual cash operating cost is approximately sh.20,000,000. A new machine has just come on the market which will do the same job but with an annual cash operating cost of only sh.17,000,000. This new machine costs sh.21,000,000 and has an estimated life of 5 years with zero salvage value. The old machine can be sold for sh.10,000,000 to a scrap dealer. Straight-line depreciation is used and the company's income tax rate is 40%. Assuming a cost of capital of 8% after taxes, Determine;

i) The initial investment. **(2 Marks)**

ii) The incremental cash inflow after taxes. **(3 Marks)**

iii) The NPV of the new investment. **(3 Marks)**

iv) The IRR on the new investment. **(2 Marks)**

(Total: 10 Marks)