STRATHMORE UNIVERSITY BUSINESS SCHOOL

BACHELOR OF FINANCIAL SERVICES

END OF SEMESTER EXAMINATION

BFS 2202: FINANCIAL MANAGEMENT II

DATE: 13th December 2023 **Time:** 15:30-17:30

Instructions

1. This examination consists of **FIVE** questions.
2. Answer **Question ONE (COMPULSORY)** and any other **TWO** questions.

QUESTION ONE (30 MARKS)

Question One A

You inherit sh. 5 million from a relative. You decide to invest 60% of the money in stock A and the remainder in B. You assess the prospects of the two stocks as follows:

STOCK	A	B
Expected Return	15	20
Standard Deviation	20	22
Coefficient Correlation	0.5	

Required;

a) Compute the expected return and standard deviation of your portfolio. **(6 marks)**

b) Compute the standard deviation of your portfolio if the correlation coefficient is 0 and -0.5. Interpret the results. **(3 marks)**

c) Is your portfolio better or worse than if you had invested entirely in Stock A? **(1 mark)**

(Total 10 marks)

Question One B

a) Differentiate between a convertible bond and a zero coupon bond. **(2 marks)**

b) A friend of yours is considering to buy a 5 year, Sh.100, 000 bond bearing a coupon rate of 7%. He requires advice on the value of a bond.

Required

i. Determine the value of the bond when the discount rate is 6%, 7% and 8% **(5 marks)**

ii. Explain the values obtained in a) above, use the relationship between the coupon rate, the discount rate and the value of the bond relative to the par/face value. **(3 marks)**

(Total 10 marks)

Question One C

ABC Ltd is experiencing problems with the management of its inventory and cash. As a finance officer you are required to examine ABC Ltd working capital issues and:

i. Explain three motives for holding cash at ABC Ltd **(3 marks)**

ii. Contrast the application of Baumol and Miller Cash management models at ABC Ltd **(4 marks)**

Given the following information on ABC's inventory

Annual demand = 100,000 units

Component cost = Sh. 30 per unit

Ordering cost = Sh. 75 per order

Holding cost = Sh. 60 per unit per year

Required

i. Calculate the Economic Order Quantity (EOQ) **(2 marks)**

ii. The total inventory costs **(1 marks)**

(Total 10 marks)

QUESTION TWO **(15 MARKS)**

The finance director of N Ltd wishes to estimate what impact the introduction of debt finance is likely to have on the company's overall cost of capital. The company is currently financed only by equity;

N Ltd. Summarised capital structure

	Sh. 000
Ordinary shares (sh0.25 par value)	500
Reserves	1,100
	1,600

The company's current share price is Sh.4.20, and up to Sh. 4 million of fixed rate five-year debt could be raised at an interest of 10% per annum. The corporate tax rate is 30%

N Ltd's current earnings before interest and tax are Sh. 2.5 million. These earnings are not expected to change significantly for the foreseeable future.

The company is considering raising either:

- Sh. 2 million in debt finance or
- Sh. 4 million in debt finance

In either case the debt finance will be used to repurchase ordinary shares

Required;

Using Miller and Modigilian's model in a world with corporate tax,

a) Determine the impact on N Ltd's cost of capital of raising

  i. Sh. 2 million in debt finance or

  ii. Sh. 4 million in debt finance **(14 marks)**

b) Comment on the WACC calculated in a) above. **(1 marks)**

QUESTION THREE (15 MARKS)

State limitations of the dividend growth model**.** **(5 marks)**

As a new finance manager of P Ltd, the Publishing, Media and Education Company, you are provided the following information.
P Ltd has just paid an annual dividend of Sh.15 per share and the next is due in one year. For the next three years' dividends are expected to grow at 12% per year. This rapid rate is caused by a

number so favourable factors such as an economic upturn, the fast acceleration stage of newly developed products and a large contract with a government department.
After the third year, the dividend will grow at only 7% per annum because the main boosts to growth will, by then, be absent.
Shares in other companies with a similar level of systematic risk to P Ltd produce an expected return of 16% per annum.

Required;

Calculate the value of one share of P Ltd. **(10 marks)**

QUESTION FOUR (15 MARKS)

Daina has just set up a new company and estimates that the cost of capital is 15%. Her first project involves investing in Sh.150,000 of equipment with a life of 15 years and a final scrap value of sh.15,000. The equipment will produce 15,000 units per annum generating a contribution of Sh.2.75 each. She estimates that additional fixed costs will be Sh15,000 p.a.

Required;

(a) Determine, on the basis of the above figures, whether the project is worthwhile. **(5 marks)**

(b) Calculate the sensitivity to change of the:

- **i.** Initial investment **(2 marks)**
- **ii.** Sales volume p.a. **(2 marks)**
- iii. Contribution p.a. **(2 marks)**
- **iv.** Fixed costs p.a. **(2 marks)**
- v. Comment on the results **(2 marks)**

QUESTION FIVE (15 MARKS)

In spite of the theoretical argument that dividend policy should be irrelevant, many investors like high dividends and therefore, a firm can boost its share price by increasing its dividend payout ratio.

Required;

a) Evaluate the above statement in view of the following theories on dividend policy.

i. MM dividend irrelevance theory **(3 marks)**
ii. Bird in hand theory **(3 marks)**
iii. Information signaling effect theory **(3 marks)**
iv. Clientele effect theory **(3 marks)**

b) Explain implications of each for firm's value. **(3 marks)**