



**STRATHMORE BUSINESS SCHOOL
BACHELOR OF FINANCIAL SERVICES
END OF SEMESTER EXAMINATION
BFS 2104: FINANCIAL MANAGEMENT I**

DATE: Wed, 31st July 2024

TIME: 13:00 – 15:00

Instructions

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

QUESTION ONE

Question one A

- a) Profit maximization is one of the objectives of a firm. However, most stakeholders prefer maximization of their wealth.

Required;

Examine three objections to profit maximization

(3 marks)

- b) You have been employed at XM bank as a loan officer. A client obtains a five-year loan of Sh 20,000,000. One of the conditions of the loan is that the client will each year pay an equal amount into a sinking fund. The sinking fund will earn an interest at 12% p.a.

Required;

Calculate the amount to be paid into the fund each year; show the deposit, interest, increase in the fund and the balance at year end.

(7 marks)

(Total 10 marks)

Question one B

M Ltd is considering a new product line to supplement its range line. It is anticipated that the new product line will involve cash investment of Sh. 700,000 at time 0 and sh. 1,000,000 in year 1. After tax cash flows of Sh.250,000 are expected in year 2, Sh. 300,000 in year 3, Sh. 350,000 in year 4 and Sh. 400,000 each year thereafter through year 10. Though the product line might be viable after year 10, the company prefers to be conservative and end all the calculations at that time. Given that the required rate of return is 15%.

Required;

- a) Calculate the Net Present Value (NPV) of the project **(4 marks)**
- b) Based on the NPV calculated in a) above advise accordingly **(1 marks)**
- c) Calculate the Internal Rate of Return (IRR) **(3 marks)**
- d) Compute the project's payback period **(2 marks)**

(Total 10 marks)

Question one C

Bank ABC intends to issue a 15% Sh. 16 million bond during the year ending 31st March 2025. The dividend per share for the year ending 31st March 2024 is expected to be Sh 6 while the average market price over the same period is estimated to be Sh 60 for the 400,000 shares issued by the bank. The average annual growth rate in dividends is expected to be 7%. The bank has also issued Sh. 5000,000, 10% preference shares.

The corporation tax rate is 30%.

Required;

Calculate the weighted average cost of capital for Bank ABC.

(10 marks)

(TOTAL 30 MARKS)

QUESTION TWO

An investment company is considering an investment of Sh.5 million in a new manufacturing venture and is concerned at the overall burden which this will place on its financial resources.

Month	Sales in units	Production in units
1		2,000
2		3,000
3	1,000	4,000
4	2,000	5,000
5	4,000	5,000
6	5,000	5,000

Production and sales will both level out at 5000 units per month after month 6

	Sh.	Sh.
Selling price		600
Less Variable costs		
Material	200	
Labour	100	
Overhead	150	450
<i>Contribution per unit</i>		<i>150</i>

Additional Information

1. There will also be avoidable (direct) fixed costs of Sh. 200,000 per month.
2. An initial stock of materials will be purchased in month 1 equal to the first three months' usage. Future purchases (month 2 use month 4 usage etc) will be calculated to maintain stock at that period usage.
3. Suppliers of raw materials give one and a half months' credit.
4. Labour is paid half a month in arrear and variable overhead is paid in the month following that in which it is incurred.
5. Fixed overhead is paid quarterly in advance.
6. Sales will be 50% cash and 50% in two months' credit.

Required;

- a) Prepare a cash budget for its first six months of operations using the above information.

(15 marks)

- b) Explain **five** ways of financing a cash deficit in the cash budget. **(5 marks)**
(TOTAL 20 MARKS)

QUESTION THREE

- a) Calculate the value of Sh.100,000 deposited in an account paying 14% compounded semi-annually 10years. **(3 marks)**
- b) If you have Sh.200,000 in an account earning 8% annually. Calculate the constant amount could you withdraw each year and have nothing remaining at the end of 5 years. **(3 marks)**
- c) You deposit Sh.50,000 in a savings account with an interest rate of 7% compounded monthly, Calculate the worth of the investment at the end of five years. **(4 marks)**
- d) You receive Sh.25,000 at the beginning of each year for 21 years. Assume that the first payment is received today. Use a discount rate of 12%, to calculate the present value of the money to be received. **(3marks)**
- e) Calculate the value of the following cash flows on 1/1/2017.

Date cash received	Amount received (Sh)
1/1/2019	10,000
1/1/2020	20,000
1/1/2021	15,000
1/1/2022	10,000
1/1/2023	12,000

Use a discount rate of 10%. **(4 marks)**

- f) You deposit Sh.5100 in a savings account at the beginning of each year for 30 years. The account earns an interest rate of 5%. Calculate the amount of money that will be in the account at the end of the 30th year. **(3 marks)**
(TOTAL 20 MARKS)

QUESTION FOUR

- a) Explain **three** limitations of ratios. **(5 marks)**
- b) The following information relates to XM Bank and ANB Bank for the year ended December 2023

	XM Bank	ANB Bank
	Sh.	Sh.
Ordinary Share capital (Sh.5 par)	14,400,000	3,600,000
7% Preference share capital (Sh.20 par)	350,000	10,500,000
Operating profit for the year	12,000,000	12,000,000
12% debenture capital	1,750,000	13,500,000
Market price per ordinary share (31st Dec 2023)	42.75	1.35
Corporation tax rate is 30%		

Required;

Calculate

- i. The gearing ratio for each bank **(3 marks)**
- ii. Earnings per share for each bank **(6 marks)**
- iii. Price earnings ratio for each bank **(3 marks)**
- iv. Interpret the results obtained from (i) to (iii) above. **(3 marks)**

(TOTAL 20 MARKS)

QUESTION FIVE

- a) Debt is a cheaper source of finance' Discuss. **(6 marks)**
- b) Evaluate the objectives of a firm- Profit maximization *versus* Maximization of Shareholders' wealth. **(8 marks)**
- c) Compare and contrast **two** advantages and **two** disadvantages of payback period and Net Present Value (NPV). **(6 marks)**

(TOTAL 20 MARKS)