



Strathmore
UNIVERSITY

STRATHMORE INSTITUTE OF MATHEMATICAL SCIENCES
BBS ACTUARIAL SCIENCE
END OF SEMESTER EXAMINATION
BSA 2103: FINANCIAL STATEMENT ANALYSIS AND VALUATION IN ACTUARIAL
SCIENCE

DATE: 31st July 2024

Time: 2 Hours

Instructions

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

Question One

(a) Financial statement analysis is the process of gathering the financial data of a company from the various sources, analyzing the data, interpreting the data and providing recommendation which assist in investment decision of the company under study.

Requirement:

- (i) Describe the roles of financial reporting and financial statement analysis. **(3 marks)**
- (ii) Describe the importance of financial statement notes and supplementary information including disclosures of accounting policies, methods, and estimates and management's commentary. **(4 marks)**
- (iii) Identify and describe information sources that analysts use in financial statement analysis besides annual financial statements and supplementary information. **(3 marks)**

Mawingu Co is an international airline which flies to destinations all over the world. Mawingu Co experienced strong initial growth but in recent periods the company has been criticized for under-investing in its non-current assets.

Extracts from Mawingu Co's financial statements are provided below:

Statements of Financial Position as at 30 June

	2025	2024
	Shs'000'	Shs'000'
Assets		
Non-current assets		
Property, plant and equipment	317,000	174,000
Intangible assets	20,000	16,000
	337,000	190,000
Current assets		
Inventories	580	490
Trade and other receivables	6,100	6,300

Cash and cash equivalents	9,300	22,100
Total current assets	15,980	28,890
Total assets	352,980	218,890
Equity and liabilities		
Equity		
Equity shares	3,000	3,000
Retained earnings	44,100	41,800
Revaluation surplus	145,000	-
Total equity	192,100	44,800
Non-current liabilities		
6% loan notes	130,960	150,400
Current liabilities		
Trade and other payables	10,480	4,250
6% loan notes	19,440	19,440
Total current liabilities	29,920	23,690
Total equity and liabilities	352,980	218,890

Other EXTRACTS from Mawingu Co's Financial Statements for the years ended 30 June

	2025	2024
	Shs'000'	Shs'000'
Revenue	154,000	159,000
Profit from operations	12,300	18,600
Finance costs	(9,200)	(10,200)
Cash generated from operations	18,480	24,310

The following information is also relevant:

- (i) Mawingu Co had exactly the same flight schedule in 2025 as in 2024, with the overall number of flights and destinations being the same in both years.
- (ii) In April 2025, Mawingu Co had to renegotiate its licenses with five major airports, which led to an increase in the prices. Mawingu Co had to pay for the right to operate flights there. The licenses with ten more major airports are due to expire in December 2025, and Mawingu Co is currently in negotiation with these airports.

Requirements:

(b) Calculate the following ratios for the years ended 30 June 2024 and 2025:

- (i) Operating profit margin;
- (ii) Return on capital employed;
- (iii) Net asset turnover;
- (iv) Current ratio;
- (v) Interest cover;
- (vi) Gearing (Debt/Equity).

Note: For calculation purposes, all loan notes should be treated as debt.

(6 marks)

(c) Comment on the performance and position of Mowair Co for the year ended 30 June 2025.

Note: Your answer should highlight any issues which Mowair Co should be considering in the near future.

(14 marks)

(Total: 30 marks)

Question Two

- a) Using IAS 33 “Earnings per Share”, explain why the diluted earnings per share is more suitable for valuation purposes than the basic EPS. (4 marks)
- b) Malcolm Ltd reported Shs. 100,000 in net income for 2004 on weighted average common shares outstanding of 12,500. Malcolm Ltd has Shs. 400,000 face value of convertible bonds outstanding with an annual coupon rate of 6%. The bonds were issued on April, 1, 2004 and can be converted into common shares at a conversion ratio of 20 shares per 1,000 of face value. Malcolm Ltd has also had 5,000 outstanding warrants with an exercise price of Shs. 40 that were issued on December 31, 2003. The average share price during the year was Shs. 45, and the marginal tax rate is 35%.
Required: Compute the basic and the diluted earnings per share. (8 marks)
- c) Financial ratios can help a firm identify its strategic and competitive capabilities and adjust accordingly. Giving a *relevant example*, analyze the relevance of this proposition. (4 marks)
- d) Indicate the main sources of information available to an equity investor in a company listed on the Nairobi Stock Exchange and outline the type of information he/she could expect to obtain from each source. (4 marks)

Question Three

- a) A company fails when it becomes insolvent; this is when the company cannot achieve a satisfactory return on capital over the longer term. Insolvency arises from the inability to pay debts when they fall due.
Requirement:
List down the signs of corporate failure. (6 marks)
- b) Qplast Industries Limited is a company which deals with the manufacture of polythene papers. As a result of a new legislation banning the use of polythene papers in country K in 2009, Qplast Limited has been experiencing cash flow problems since then. The information provided below shows the performance of various subsidiaries of the company for the year ended 31st December 2011:

Qplast Industries Limited

Shs ‘000	Working capital	Retained earnings	EBIT	Market value of equity	Liabilities	Sales	Total assets
Ally Ltd	4,000	60,000	10,000	20,000	120,000	200,000	200,000
Belt Ltd	2,000	20,000	0	5,000	2,000	120,000	100,000
Cord Ltd	6,000	20,000	-30,000	48,000	740,000	900,000	800,000
Dyer Ltd	40,000	200,000	30,000	100,000	1,000,000	2,000,000	1,800,000

Requirement:

- i) The Altman’s Z Score for each subsidiary company and a comment on each of the results obtained. (8 marks)
- ii) It has been suggested that other ratios ought to be incorporated into the Altman’s bankruptcy prediction model. What is your opinion on this? (6 marks)

(Total: 20 marks)

Question Four

- a) Explain the importance of presenting a cash flow statement? **(4 marks)**
 b) The following is an extract of the Financial statements of InfoTech Limited for the years 2024 and 2025:

InfoTech Limited		
Statement of financial position as at 30 th June		
	2024	2025
	Shs'000'	Shs'000'
Non-current Assets	<u>72,500</u>	<u>75,000</u>
Current Assets:		
Inventory	24,500	26,500
Receivables	34,000	36,500
Cash at Bank	<u>1,250</u>	<u>2,250</u>
	<u>59,750</u>	<u>65,250</u>
	<u>132,250</u>	<u>140,250</u>
Capital and Reserves:		
Issued Share Capital	50,000	50,050
Reserves	26,100	32,600
Non-current liabilities:		
10% Loan Notes	20,000	21,500
Current Liabilities:		
Trade payables	31,900	31,000
Taxation	2,250	2,950
Dividend	<u>2,000</u>	<u>2,150</u>
	<u>132,250</u>	<u>140,250</u>

InfoTech Limited
 Statement of comprehensive income for the year ended 30th June 2025

	Ksh '000
Sales Revenue	<u>195,000</u>
Profit from Operations	13,750
Net Interest Cost	<u>(2,150)</u>
Profit before Taxation	11,600
Income Tax Expense	<u>(2,950)</u>
Profit after Tax	8,650
Dividends	<u>(2,150)</u>
Net Profit for Period	<u>6,500</u>

Additional information:

Depreciation charge for the year is Kshs 6,000,000. Non-current assets which were disposed in year at Kshs 300,000 had an accumulated depreciation of Kshs. 175,000 and had a cost of Kshs 500,000.

Requirement:

- i) A statement of cash flows for the year ended 30th June 2025. **(8 marks)**
 ii) An analysis of profitability and risk of the entity. **(8 marks)**

(Total: 20 marks)

Question Five

The financial markets are vast and complex, not only in Kenya, but also the global markets. Choices are endless on where to invest, including investments in stocks, bonds, real estate, hedged funds, commodities, mutual funds, derivatives, options among other investments. Everyone wants to make the best investment decisions and create value for his/her investment. Yet, throughout the past years we have faced tremendous market swings, rendering investors (and their money) in a sea of lost hopes and few investors with a plethora of wealth. Many of these market anomalies and swings are dependent, and in a sense dictated by the investors. The investor plays a part in setting the current stock price. The reaction of the investor can aid in determining the success of an initial public offering (IPO). The collective psychology of the market as a whole plays a major role, but if the everyday investor were better equipped with the proper tools to understand the underlying fundamentals of a rational investment, smarter investment decisions could be made, more rational investments would be made, and the markets would be a more efficient environment.

Requirement:

- a) Discuss the benefits of financial statement analysis and valuations. **(5 marks)**
- b) How are business analysis and financial statement analysis connected. **(5 marks)**
- c) Using the Porter's five forces, discuss how the financial analyst can apply the forces in assessing the business to invest in. **(6 marks)**
- d) What is the role of the professional analyst. **(4 marks)**

(Total: 20 marks)