

# Botswana College Of Distance and Open Learning

In Collaboration with

**ZIMBABWE OPEN UNIVERSITY**

**Mock Examination**

In

**Business Finance (D-BF 01)**

**October 2008**

**TIME: 3 Hours**

**MARKS: 100**

**INSTRUCTIONS:**

1. Write your name, centre and candidate number on the answer booklet provided.
2. This paper consists of two Sections, A and B.
3. Answer **ALL** the questions in Section A.
4. Answer **TWO** questions in Section B.
5. Answers should be written in the answer booklet provided.
6. Show your calculations in your work.

**SECTION A****Question 1****[25 marks]****Multiple Choice Questions**

1. Which of the following is **most** important to the finance manager as a basis for decision making?
  - A. Net profit
  - B. Cash flow
  - C. Capital
  - D. Company objectives
  
2. Which of the following is true about close corporation?
  - A. Members are jointly liable for debts of the corporation
  - B. It cannot become a subsidiary of a company or another corporation
  - C. Dividends that accrue to the members are not taxed
  - D. It can be formed by a minimum of two and maximum of fifteen members
  
3. Which of the following is an annual report that corporations issue to their shareholders?
  - A. Statement of retained earnings
  - B. Stock control reports
  - C. Staff turnover report
  - D. Dividend pay statements
  
4. Why is stock/inventory excluded when calculating the acid test ratio?
  - A. It is the least liquid in the firm's current assets
  - B. It can be used as security
  - C. It does not form part of the current assets
  - D. Stock amount can be very difficult to calculate
  
5. Which one of the following is affected by depreciation charge?
  - A. Gross profit
  - B. Cash flow
  - C. Net profit
  - D. Creditors

6. \_\_\_\_\_ are traded in the money market.
- A. Shares
  - B. foreign currency
  - C. long term bond
  - D. Short term marketable securities
7. Which of the following can be equated to capital?
- A. Net current assets
  - B. Cash
  - C. Net assets
  - D. Net liabilities
8. Which of the following constitute a cash flow from an investment activity?
- A. Issuing stock to the public
  - B. Cash loan advanced to another company
  - C. Buying stock
  - D. Borrowing a loan to buy a new machine.
9. Cash conversion cycle refers to \_\_\_\_\_.
- A. Time taken by a firm to convert its resources to cash.
  - B. Time from beginning of production to finished goods.
  - C. Average age of inventories and debtors.
  - D. Time taken to pay creditors.
10. Beta value is a relative measure of \_\_\_\_\_.
- A. Unsystematic risk
  - B. Diversifiable risk
  - C. Non-diversifiable risk
  - D. All types of risk.
11. The following information is available for Botshelo Ltd:
- Fixed Assets P80 000
  - Current Assets P20 000
  - Bank Overdraft P40 000
  - Long term loan P30 000

- Owner's equity is \_\_\_\_\_
- A. P40 000
  - B. P60 000
  - C. P30 000
  - D. P80 000
12. Income statement is made of
- A. current assets, equity, and sales
  - B. Current assets, current liabilities, and profit
  - C. Interest income, interest expense, and fixed assets
  - D. Sales, cost of goods sold, operating and administrative expenses.
13. Nchadi has P10 000, she intends to invest the money for 10 years, in a Peo account at Standard Chartered Bank. The interest is 20% compounded annually. How much will she earn after 10 years.
- A. P61 740
  - B. P61 920
  - C. P62 290
  - D. P62470
14. How is Return on Capital Employed calculated?
- A.  $\frac{\text{Total capital employed} \times 100\%}{\text{Net profit}}$
  - B.  $\frac{\text{Net Profit after tax} \times 100\%}{\text{Total capital employed}}$
  - C.  $\frac{\text{Net profit before tax} \times 100\%}{\text{Total capital employed}}$
  - D.  $\frac{\text{Total capital employed} \times 100\%}{\text{Gross profit}}$
15. The bond which sells at below par value, is said to be priced at
- A. Discount
  - B. Premium
  - C. Face value
  - D. Coupon rate

**Short Answer questions****[10 marks]**

1. (a) Define CAPM. [2 marks]  
 (b) List four problems associated with CAPM. [4 marks]  
 (c) State and briefly explain two types of Firm – specific risks. [4 marks]

**Question 2****[25 marks]**

- (a) Briefly explain why after tax cost of debt is used when calculating the Weighted Average cost of capital. [2 marks]  
 (b) (i) What is a stock exchange? Give one example of any stock exchange that you know. [3 marks]  
 (ii) State two advantages and two disadvantages of listing a business in the stock exchange. [4 marks]  
 (c) Briefly discuss any two internal sources of finance. [8 marks]  
 (d) (i) What is a loan covenant? [2 marks]  
 (ii) State and explain any three items that should be included in a loan covenant. [6 marks]

**SECTION B****Answer any two questions in this section****Question 3****[25 marks]**

Mothusi Ltd has recently raised P350 000, and the financial manager is considering investing the funds. There are three projects A, B, and C, where these funds can be invested. One project can be taken at a time, and the life for the equipment for each project equals the life of the project with no salvage value. The following are the forecast net cash flows for each project.

	0	1	2	3	4	5	6	7
Project A	(350 000)	100 000	110 000	104 000	112 000	138 000	160 000	180 000
Project B	(350 000)	40 000	100 000	210 000	160 000	-	-	-
Project C	(350 000)	200 000	150 000	240 000	40 000			

The company's cost of capital is 20% and straight line method of depreciation is used.

From the information above:

- (a) Calculate the payback period for each project [6 marks]  
 (b) Calculate the accounting rate of return for each project [9 marks]  
 (c) Discuss the advantages and disadvantages of Accounting Rate of Return. [10 marks]

#### Question 4

[25 marks]

- (a) (i) Define the terms 'working capital' and 'net working capital' [2 marks]  
 (ii) List the components of working capital [4 marks]

- (b) The following is an extract of financial statement of Mopipi Investment Company.

	2006	2007
	P	P
<b>Current Assets</b>		
Inventory	25 000	36 000
Debtors	17 000	19 000
Prepayments	3 000	2 500
Cash	<u>5 000</u>	—
	50 000	57 500
<b>Current Liabilities</b>		
Creditors	21 950	40 000
Proposed Dividends	4 500	5 700
Tax	5 300	6 100
Overdraft	—	<u>20 325</u>
	31 750	72 125
<b>Net Current assets</b>	<u>18 250</u>	<u>(14 625)</u>
<b>Long term liabilities</b>	37 600	32 700

- (i) Define and calculate **two** ratios that can be used to explain the liquidity position of Mopipi company for each of the two years. [6 marks]  
 (ii) From the information given explain the possible causes of change in the liquidity position of the company over the two years. [5 marks]  
 (iii) Advise Mopipi company management how liquidity position of the company could be improved. [4 marks]

- (c) Briefly discuss the concept of Economic Order Quantity in inventory management. [4 marks]

**Question 5** [25 marks]

- (a) What is a secured loan? [2 marks]

- (b) Give three examples of current assets that can be pledged as security. [3 marks]

- (c) Monna (Pty) Ltd is a brick moulding company. Each brick is sold for P15-00. variable costs per brick are as follows:

Material: P5- 00

Labour: P4 -00

Overhead: P2-00

The owner has the following as the sales forecast for the coming months:

	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
No. of bricks	1000	1000	1000	1250	1500	2000	1900	2200	2200	2300

Customers are expected to pay as follows:

One month after sales 40%

Two months after sales, the remaining 60%

Suppliers are paid two months after production. Bricks are produced and sold two months later.

Variable overhead are paid in the month following production. 60% of the wages are paid during the production month and 40% in the following month.

Some of the equipment used needs to be replaced. The salvage value is P10 000, and the company manages to dispose it for P12 000 in April. Company Tax is P10 000 to be paid in March.

As at December 31, cash balance was P1500.

**Required:**

Prepare a cash budget for the six months from January – June 2000. You must show all your workings for each entry where possible. [20 marks]

**QUESTION 6****[25 marks]**

When selling goods on credit, there is a possibility that the customers might not pay. It is therefore important to thoroughly appraise the potential credit customers.

Discuss the factors you would consider when assessing the customers' creditworthiness. **[25 marks]**

**END OF EXAMINATION PAPER**

# Botswana College of Distance and Open Learning

In Collaboration with

Zimbabwe Open University

**Business Finance (D-BF 01)**

**Sessional Examination, Intake 2, Semester 3, 2009**

**Duration: 3 hours**

**Marks: 100**

## **Instructions**

1. There are two (2) sections in this paper. Section A and Section B
2. Answer questions according to instructions given at the beginning of each section.

**SECTION A****(50 marks)****Answer ALL Questions in this Section.****PART 1: Multiple Choice Questions****(15 marks)**

1. Which one of the following qualifies as an ‘agent’ in corporate financial management?
  - A. Shareholder
  - B. Customers
  - C. Directors
  - D. Tax authority
  
2. By definition, a business form that has limited life is \_\_\_\_\_
  - A. Sole proprietorship
  - B. Public Limited Company
  - C. Government corporations
  - D. Close corporation.
  
3. A stock exchange’s primary market is where \_\_\_\_\_
  - A. Existing shares are sold
  - B. New shares are sold
  - C. New investors buy shares
  - D. Existing investors buy shares.
  
4. Debt factoring and invoice discounting are both examples of?
  - A. Capital investment analysis methods.
  - B. Venture capital.
  - C. Long term finance resources
  - D. Short term finance sources.
  
5. When a firm divides its inventory into groups that depict the level of investment in certain types of inventory, it is said to be using \_\_\_\_\_
  - A. ABC system of stock control.
  - B. Just in time stock management
  - C. Economic order quantity model of controlling stock.
  - D. Materials requirement planning model.

6. The main advantage of 'cash discount' is that
- A. It makes inventory management easier.
  - B. It decreases a firm's investment in accounts receivable.
  - C. It lengthens average collection period.
  - D. It makes monitoring credit easier.
7. What is the present value of a perpetuity that has an annual installment of P500 when the interest rate is fixed at 4% per annum?
- A. P200 000
  - B. P20 000
  - C. P125 000
  - D. P80 000
8. Taxation affects the cost of capital in the sense that,
- A. It decreases the cost of debt
  - B. It increases the interest paid on loans.
  - C. It makes weighted average cost of capital difficult to calculate.
  - D. It reduces cost of ordinary shares.
9. Madirelo Company has a capital structure defined by a total cost of P71 500. If the company's total cost of capital employed is P630 000, what is Weighted Average Cost of Capital for this company.
- A. 0.08%
  - B. 8.8%
  - C. 0.11%
  - D. 11.4%
10. Financial leverage depends on;
- A. Earnings per share
  - B. Level of debt used
  - C. Amount of fixed costs incurred in operations
  - D. Number of shareholders
11. The optimum capital structure model that balances the cost and benefits of using more debt is called \_\_\_\_\_
- A. Signalling theory
  - B. Trade off model
  - C. Profit Before Interest and Tax – Earnings Per Share approach
  - D. Pecking order hypothesis

12. Which one of the following capital budgeting techniques can lead to excessive investments in short term project?

- A. Accounting rate of return
- B. Internal rate of return
- C. Net present value
- D. Payback period.

13. Profitability index is calculated using the formula;

- A.  $PI = \frac{\text{Initial investment}}{\text{Present value of cash flows}}$
- B.  $PI = \frac{\text{Average Annual profits}}{\text{Initial investment}}$
- C.  $PI = \frac{\text{Present value of cash inflows}}{\text{Initial investment}}$
- D.  $PI = \frac{\text{Incremental Revenues}}{\text{Initial investment}}$

14. The global credit crunch that has affected stock prices negatively is an example of

- A. Unsystematic risk
- B. Systematic risk
- C. Sensitivity risk
- D. Tax risk

15. A risk adverse investor is the one who;

- A. Requires greater returns for taking additional risk.
- B. Takes risks of different levels regardless of the expected returns.
- C. Likes higher risks provided returns are also higher.
- D. Do not like risks.

## Part 2

(35 marks)

- 1. (a) Define the term 'lease' (2 marks)
- (b) State the difference between 'an operating lease and a 'financial lease' (2 marks)
- (c) List **three** reasons why business would go for leasing option. (3 marks)
- (d) Give **three** disadvantages of leasing. (3 marks)

- (e) (i) What is a cash budget? (2 marks)
- (ii) Explain **three** operational problems that a business might face without a cash budget. (6 marks)
- (iii) State **two** reasons why over-reliance on a cash budget might be a disadvantage. (2 marks)
- (f) Awasi small scale retailer has compiled cash estimates for the next 5 months based on historical records.
- An average of 60% of the sales are on cash basis while 40% are paid the following month.
  - Cash balance at end of January is P2000.
  - The business requires a minimum cash balance of P3000 every month.
  - Total cash receipts from sales and payments estimates for each month are given below.

Month	Receipts from sales	Payments
January	P 6 000	P 7 000
February	7 000	9 000
March	12 000	10 000
April	12 000	9 000
May	12 000	6 000

- (i) Prepare Awasi cash budget for four months from February to May. (6 marks)
- (ii) Use the cash budget to determine how much Awasi retailers need to borrow each month from February to May. (4 marks)
- (g) (i) State **three** motives for Awasi retailer to require a minimum cash balance. (3 marks)
- (ii) Explain any **one** of the three motives given in (g) (i) above. (2 marks)

## SECTION B

**(50 marks)**

Answer **any two** questions from this section.

### Question 3

**(25 marks)**

- (a) Discuss how the following factors may affect a firm's 'cost of capital'.
- (i) Taxation (2 marks)
  - (ii) Dividend policy (3 marks)
  - (iii) Investment policy (3 marks)

(b) Digitech company's balance sheet as at 31<sup>st</sup> Dec 2007 is as below:

	P
Current Assets	425 000
Net fixed Assets	<u>628 750</u>
	<u>1 053 750</u>
Current liabilities	234 500
Long term liabilities	
12% debentures (P1000 per value)	280 000
10% preference shares	19 250
Ordinary shares (P20 per share)	<u>520 000</u>
	<u>1 053 750</u>

Additional information

1. The debentures have a current market price of P920
2. Digitech declared and paid P3.00 as dividend per share.
3. Dividends are expected to have a growth rate of 10% per annum. Currently the shares are trading at P35 per share at the stock exchange.
4. Prevailing interest rate is 16% per annum.
5. Corporation tax is 20% per annum.

**Required;**

Calculate

- (i) Cost of debentures
- (ii) Cost of ordinary shares
- (iii) Weighted average cost of capital

(Hint: cost of preference shares = 10%)

(3 marks) ✓

(3 marks) ✓

(11 marks) ✓

**Question 4**

**(25 marks)**

(a) Give a detailed explanation of 'capital structure' (5 marks)

(b) Discuss the effect of capital structure on the following.

- (i) Earning per share.
- (ii) A firm's ability to raise further finance.
- (iii) Amount of dividend paid out.

(12 marks)

(c) Contrast the two models 'Trade off model' and 'Profit before interest and Tax-earning per share approach – PBIT-EPS in terms of their explanation of an optimum capital structure'.

(8 marks)

**Question 5**

**(25 marks)**

The failure of some small and medium scale businesses in Botswana has been blamed on poor credit management. Assume you are a financial consultant in charge of credit policy formulation. You have been asked to address this issue with a group of small and medium scale business owners. Outline and briefly explain measures you would advise them to employ to ensure effective credit management. (25 marks)

# **Botswana College of Distance and Open Learning**

**In Collaboration With**

**Zimbabwe Open University**

**Business Finance D-BF 01**

**Assignment 2, Covering Units 4 and 5**

**( 2010)**

**Marks: 100**

**Instructions to candidates**

1. Answer all questions
2. A non-programmable, silent calculator can be used
3. Marks will be awarded for presentation and neatness

**SECTION A: Multiple choice questions****[25 marks]**

1. It is said that a pula received today is worth more than a pula received one year later.

This is because:

- A. Inflation and other risks may erode the expected gains
- B. Accounting policies may change in future
- C. The pula can become obsolete
- D. Future values are difficult to determine.

Kutlo lends her friend P1000 to be paid after one month with interest of 10% per month. Use this statement to answer questions 2 and 3 below:

2. The P1000 is called

- A. Future value
- B. Present value
- C. Compounded value
- D. Interest value

3. The correct relationship between the present and future values and interest is given by:

- A.  $\text{Future value} = \text{Present value} + \text{Interest}$
- B.  $\text{Present value} = \text{Future value} + \text{interest}$
- C.  $\text{Future value} = \text{Present value} \times \text{interest}$
- D.  $\text{Present value} = \text{Future value} \times \text{interest}$

4. What is the difference between ordinary annuity and annuity due?

- A. Ordinary annuity uses present value while annuity due uses future value factors
- B. Ordinary annuity uses future value while annuity due uses present value factors
- C. Annuity due instalments start at the end of the period while ordinary at the beginning
- D. Annuity due instalments start at the beginning of the period while ordinary at the end.

- 
5. What is the present value of P500 to be received each period forever if the interest rate is 8%?
- A. P7500
  - B. P6250
  - C. P6500
  - D. P7250
6. A financing institution will normally consider two most important factors when determining cost of funds to give to a company. These two factors are;
- A. Amount of funds requested and expected returns
  - B. Type of the company and risks
  - C. Risk and expected returns
  - D. Tax rates and amount of funds requested
7. What is the effect on the cost of debt if corporate tax increases
- A. It decreases
  - B. It stays the same
  - C. It also increases
  - D. It multiplies by a factor
8. Which of the following statements is true?
- A. There is no relationship between a project's NPV and cost of capital
  - B. A firm's capital structure determines its cost of capital
  - C. Knowledge of cost of capital is important in shareholders' wealth maximization.
  - D. Returns from a project is its cost of capital.

A company is financed using ordinary shares worth P3 million, retained earnings worth P1.5 million, 10% preference shares worth P1 million and 15% debt finance worth P 800 000. Use this information to answer questions 9, 10, and 11. Tax rate is 25%

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9. What is the company's after tax cost of debt?
- A. 15%
  - B. 85%
  - C. 11.25%
  - D. 0.15%
10. What is the total equity finance of the company?
- A. P6 300 000
  - B. P3 000 000
  - C. P1 500 000
  - D. P4 500 000
11. The monetary value of cost of preference shares is:
- A. P10 000 000
  - B. P100 000
  - C. P10 000
  - D. P1 000
12. Which of the following is a debt capital?
- A. Preference stock
  - B. Supplier credit
  - C. Long term bank loan
  - D. Retained earnings
13. Pecking order theory postulates that a firm generally prefers to employ funds sources in the order of;
- A. Retained earnings, debt, common stock
  - B. Debt, retained earnings, common stock
  - C. Common stock, retained earnings, debt
  - D. Retained earnings, common stock, debt.

14. Which of the following set of financial ratios are used to assess financial risk?
- A. Earnings per share, dividend cover
  - B. Gearing, debt ratio
  - C. Return on equity, Net profit margin
  - D. Return on capital employed, earnings per share
15. A good capital structure is the one that:
- A. Is not easy to change
  - B. Puts excessive risks on the shareholders
  - C. Increases the debt capacity of the firm
  - D. Maximises shareholders benefits
16. The fundamental principle of financial leverage is that:
- A. Using a higher percentage of equity compared to debt increases returns to shareholders and reduces risk
  - B. Substituting long term debt for equity in the capital structure increases expected returns and risk
  - C. Long term debt or equity does not have any effect on the returns or risk level of a company
  - D. Using a higher percentage of long term debt in the capital structure decreases returns to shareholders but increases risk.
17. Two companies have the same projected annual cash flows from two separate future projects. One uses a higher while another uses a lower cost of capital. Which of the following statements could be true based on NPV method of project appraisal?
- A. They will gate the same value of NPV
  - B. The one using lower rate is likely to get a Positive NPV
  - C. The one using a higher rate is likely to get a positive NPV
  - D. Both of them will get negative NPV.

18. Accounting based methods of capital budgeting are:
- A. ARR and discounted payback
  - B. ARR and profitability index
  - C. NPV and Internal rate of return
  - D. ARR and payback period
19. When using discounted cash flow methods of project appraisal, which of the following types of costs are usually considered?
- A. Incremental costs
  - B. Sunk Costs
  - C. Committed costs
  - D. None of the above
20. The expected NPV of a project is P -726 000 at a discount rate of 15% and P 1 973 000 at a rate of 12%. What is the project's IRR?
- A. 10.8%
  - B. 27%
  - C. 14.2%
  - D. 13.5%
21. Which of the following capital budgeting techniques is in line with shareholders wealth maximization principle?
- A. Net Present Value
  - B. Internal Rate of Return
  - C. Profitability Index
  - D. Pay back period
22. Consider the following statements
1. The amount of systematic risk varies from one type of investment to another.
  2. Systematic risks can be diversified by holding a wide portfolio of investments.

Which of the following options is correct based on the two statements above?

	Statement 1	Statement 2
A.	True	True
B.	False	True
C.	True	False
D.	False	False

23. A company with beta of less than one is the one which:

- A. Has a higher non-diversifiable risk
- B. Has higher returns
- C. Has same risk as that of the average market
- D. Has lower returns

24. Market risk can be caused by which of the following factors?

- A. Change of taste of clients
- B. Inflation
- C. Entry of more competitors
- D. Litigation

25. The best measure of risk that compares risks of assets with differing expected returns is:

- A. Standard deviation
- B. Beta
- C. Coefficient of variance
- D. Probability

## SECTION B

### Question 1

[25 marks]

- (a) (i) Explain the concept of 'Time value of money' [3marks]
- (ii) Explain how Opportunity cost, Inflation, and Risk are related to time value of money [6 marks]

- (b) Define the following terms
- (i) Discounted cash flow [2 marks]
  - (ii) Present Value [2 marks]
- (c) A company uses Net Present Value, Internal rate of return, and discounted payback period methods to appraise its new investment opportunities. They recently appraised a project that gave them an NPV of P10.5 million, IRR of 15%, and a discounted payback period of 3 years. They later found out that the rate they used was lower than expected. State and explain the effect on the figures given should the rate be adjusted to a higher value. [6 marks]
- (d) Identify and briefly describe any **three** factors, external to the company, that affect cost of capital. [6marks]

**Question 2** [25 marks]

- (a) (i) What is financial leverage? [2 marks]
- (ii) Explain how high and low levels of financial leverage are related to shareholder's wealth. [5 marks]
- (b) Bingo Company Ltd has identified a project, which it intends to invest in. It has two funding options explained below;

**Option 1**

Use only equity finance of P1 000 000 by floating 50 000 shares of P20 each.

**Option 2**

Use equity finance of P500 000 consisting of 25 000 shares of P20 each. Raise the remaining P500 000 by taking debt charging a fixed interest rate of 10%.

Assuming that projected profit before interest and tax (PBIT) will be P120 000 when economic conditions are good and P80 000 when economic conditions are bad, and taking a tax rate of 30%.

- (i) Calculate earnings per share (EPS) under each of the two economic conditions [14 marks]
- (ii) What conclusions can be made from the results in (i) above? [4 marks]

**Question 3****[25 marks]**

(a) (i) Differentiate between systematic and unsystematic risks [4 marks]

(ii) Explain how an investor can take care of systematic and unsystematic risks.

[2 marks]

(b) What do you understand by the term 'beta factor?' Give examples in your explanation

[4 marks]

(c) (i) Explain the meaning of Capital Asset Pricing Model [2 marks]

(ii) An investment has risk free rate of return of 6% when the average market return is 10%. What will be the expected return from a share whose beta factor is 0.9? [4 marks]

(d) Discuss the following problems associated with CAPM

(i) Investors hold well diversified portfolios [3 marks]

(ii) Assumption that the stock market is perfect [3 marks]

(iii) Estimation of future betas [3 marks]

**END OF ASSIGNMENT**

**BOTSWANA COLLEGE OF DISTANCE  
AND OPEN LEARNING**

**Diploma in Business Management**

**Business Finance**

**BF101**

**Sessional Examination**

**Marks: 100**

**3 HOURS**

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**Instructions**

1. This examination consists of **Four** sections: A, B, C and D
2. Begin each answer to a new question on a new page.
3. Answer questions according to instructions given in each section
4. Write answers in the answer booklet provided
5. Write in grammatical English

SECTION A –Multiple Choice Questions

[10 marks]

Answer ALL questions. Each question carries ONE (1) mark.

Choose the best alternative answer

1. Given the following information, what is the cash conversion cycle in days of Pula Companies

	P000
Total sales	276
Cost of goods sold	200
Purchases	120
Stocks	37
Debtors	43
Creditors	15

- A. 75.5 days
- B. 98.8 days
- C. 78.8 days
- D. 1,080 days

2. Annual demand for a component is 20 000 units per year. Storage cost per unit per year is P8 and each order costs P200. What is the company's economic order quantity?

- A. 5 00
- B. 1 000
- C. 5 000
- D. 7 00



3. Lolo Supplies, Inc., has an 8 percent return on total assets of P300, 000 and a net profit margin of 5 percent. What are its sales?
- A. 380,000
  - B. 480,000
  - C. 400,000
  - D. 450,000
4. What is the current assets ratio given Current Assets of P200, 000 and Current Liabilities of P160, 000?
- A. 1.225
  - B. 1.25
  - C. 0.8
  - D. 0.08
5. Kabo want to buy an ordinary annuity that will pay him P4, 000 a year for the next 20 years, annual interest rates will be 8 %. The maximum price he would be willing to pay for the annuity is \_\_\_\_\_.
- A. 39,000
  - B. 39,272
  - C. 39,400
  - D. 40,000

6. Boemo, Inc.'s preferred stock just paid its P0.10 per share annual dividend. The preferred stock has a current market price of P0.96 a share. The firm's marginal tax rate is 25% percent. The component cost of preferred stock to Boemo would be \_\_\_\_\_.
- A. 10%
  - B. 10.4%
  - C. 7.8%
  - D. 7%
7. Apache manufacturing purchased a new machine for P100, 000. The machine will last ten years and is to be depreciated by the straight-line method. The estimated salvage value of the machine is zero. The machine should generate a yearly cash inflow of P25, 000. What is the accounting rate of return on this investment?
- a) 12%
  - b) 15%
  - c) 25%
  - d) 75%
8. If projects are mutually exclusive the project that is undertaken is the carry is the one with \_\_\_\_\_.
- A. A negative NPV
  - B. Lowest NPV
  - C. Highest NPV
  - D. 0 NPV



9. The following risks shareholder except \_\_\_\_\_.
- A. Interest rate risk
  - B. Liquidity risk
  - C. Market risk
  - D. Business risk
10. \_\_\_\_\_ are the primary roles of a manager except.
- A. Financial analysis and planning
  - B. Buying porch cars
  - C. Making business investment decisions
  - D. Making financing decisions

**SECTION B – TRUE/FALSE QUESTIONS**

**[10 marks]**

**Answer ALL questions. Each question carries ONE (1) mark.**

**State whether each of the following statements is TRUE or FALSE**

1. Agency problem is the likelihood that the manager or director may put his personal interests before that of the owners of the business.
2. Choppies is an example of a private limited company.
3. Working capital is found by subtracting long-term liabilities from current assets.
4. Sources of finance can either be short-term, medium term or long-term.
5. Cash planning is one of the methods of managing cash.
6. Bankruptcy is the reorganization or liquidation of a firm that cannot pay its debts.
7. Government does not need to use accounting information.
8. Retained earnings are a source of cash.
9. Ratio analysis has no limitations.
10. An annuity is an equally spaced stream of cash flows with each period having the same amount.

**SECTION C – SHORT ANSWER QUESTIONS**

**[30 marks]**

**Answer all questions in this Section.**

1. Explain how business finance differs from accounting. **(4 marks)**
2. Mention four (4) ways of raising finance internally. **(4 marks)**
3. Use the information below to construct a cash budget for the first four months for the year 2013. **(8 marks)**  
Cash balance, as at 31/12/2012 was P5, 000.  
Interest on savings is P100.  
Long-term loan taken in January 2013 was P25, 000 that will be paid in 5 years.  
Loan repayment installment, which each payment will start, end of February 2013 is P450.  
Revenue for January 15,000, February P18, 000, March P20, 000 and April 19,000.  
Salaries per month amount to 15,000.  
Rental payment per month 3, 500  
Advertising and promotion 1, 000 paid once in two months.  
Telephone expenses 500  
Utilities estimated at 1000 per month  
Bought a second hand mini tractor for 15,000 cash in February 2013.
4. Kopo saved P5, 000 with BBS for 5 years earning an interest of 10% per annum.
  - a) Calculate the amount of money that Kopo will receive at the end of 5 years if simple interest was used. **(3 marks)**
  - b) How much money will Kopo receive at the end of 5 years if compound interest was used? **(3 marks)**
  - c) What is the present value of perpetuity where an amount of P5, 000 was paid at an interest rate of 10%? **(2 marks)**
  - d) Calculate the cost of debt where a long-term loan was borrowed at an interest rate of 20% per annum for 10 years. The company was taxed 20% of profits made. **(2 marks)**
5. Outline four (4) factors that influence target capital structure. **(4 marks)**

**SECTION D ESSAY-TYPE QUESTIONS**

**[50 marks]**

Answer any TWO questions from this Section.

**QUESTION 1**

Read the information below and answer questions that follow.

**G4S Group Statement of Comprehensive income for the year ended 31/12/2012**

	<b>2012</b>	<b>2011</b>
	<b>Pula</b>	<b>Pula</b>
Revenue	186,989,256	163,702,145
Cost of sales	(119,180,539)	(93,919,432)
<b>Gross Profit</b>	<b>67,808,717</b>	<b>69,782,713</b>
Other income	2,093,284	1,222,663
Administrative expenses	(61,420,432)	(45,639,391)
<b>Profit from operations</b>	<b>8,481,569</b>	<b>25,365,985</b>
Finance expense	(490,438)	(497,878)
Income from investments	2,119,681	4,363,371
Loss on disposal of business	-	-
Profit before taxation	10,110,812	29,231,478
Taxation	(1,561,495)	(5,092,197)
<b>Profit for the year</b>	<b>8,549,317</b>	<b>24,139,281</b>
<b>Total comprehensive income for the year</b>	<b>8,549,317</b>	<b>24,139,281</b>
Profit attributable to:		
Equity holders of the parent company	7,910,317	24,139,281
Non-controlling interests	639,000	-

**G4S Group Statement of Financial position as 31/12/2012**

	2012	2011
	Pula	Pula
<b>Assets</b>		
<b>Non-current assets</b>		
Plant and Equipment	23,919,973	19,370,829
Goodwill	18,066,103	9,715,123
Investment in subsidiary company	-	-
	41,986,076	29,085,952
<b>Current assets</b>		
Inventory	3,302,378	4,617,433
Trade and other receivables	26,079,289	20,820,178
Amount due from related companies	5,827,524	29,174,637
Taxation refundable	4,329,263	1,945,629
Cash and cash equivalents	12,266,668	9,891,753
	51,805,122	66,444,630
<b>Total assets</b>	<b>93,791,198</b>	<b>95,530,582</b>
<b>Equity &amp; liabilities</b>		
<b>Equity</b>		
Stated capital	1,804,557	1,804,557
Dividend reserve	5,896,000	14,000,000
Retained earnings	48,557,861	51,800,544
Non-controlling interest	1,090,836	-
	2,880,897	3,077,148
<b>Non-current liabilities</b>		
Interest bearing borrowings	1,269,116	1,097,975
Operating lease accrual	657,536	329,873
Deferred taxation	954,245	1,649,300
	2,880,897	3,077,148
<b>Current liabilities</b>		
Trade and other payables	29,098,295	19,864,553
Short term portion of interest bearing borrowings	845,178	2,760,954
Amounts due to related companies	3,617,574	2,222,826
	33,561,047	24,848,333
<b>Total equity &amp; liabilities</b>	<b>93,791,198</b>	<b>95,530,582</b>

**Additional information**

1. G4S have 80 000 000 ordinary shares listed in the Botswana Stock Exchange.
2. G4S paid a total of P5, 896,000 as interim dividends and a total of P5, 896,000 as final dividends.
3. Share price was P35 before the share split 2011.

Required :

- a) i) Calculate earnings per share (EPS) and interpret your results. **(3 marks)**
- ii) Assuming that you want to buy shares, looking at G4S EPS will you buy the shares or you will think otherwise. **(2 marks)**
- b) What is G4S's dividend per share? Interpret the results **(3 marks)**
- c) i) Calculate the dividend cover. **(2 marks)**
- ii) Looking at the dividend cover results what message does this send to shareholders. **(2 marks)**
- d) How much does this dividend yield? **(2 marks)**
- e) What is the Price/Earnings ratio? How will shareholders react to the results? **(3 marks)**
- f) What is the Return on Capital Employed (ROCE)? Comment on the results. **(3 marks)**
- g) Name five types of ratios. **(5 marks)**

**QUESTION 2**

a) i) Kago wants to buy a house in five years time. He saved 200,000 with Stanbic Bank receiving an interest of 10% compound interest per annum. Calculate the future value of this amount. **(2 marks)**

ii) State the present value of this amount. **(1 marks)**

iii) Assume that Biki wants to sell to Kago a house for 250,000 today whose value will be the same as the figure in (i) above in 5 years time, should Kago buy or not. State your reasons clearly **(2 marks)**

iv) Mofusi is offering to sell to him today the house that is the same size and conditions as the one offered by Biki for a value of P 180,000. What should he do. State your reasons clearly. **(2 marks)**

v) What if Masego proposes to sell her the house for P200, 000. Advice him with reasons. **(2 marks)**

b) Calculate the value of the debenture that has a market value of P9 million, par value P10 million, interest rate of 10% and tax rate of 20%. **(3 marks)**

c) Cresta PLc Ltd a company listed on Botswana Stock Exchange has a current share price of 80thebe per share. Its expected dividend is P0.04 and dividends are expected to grow at 3% per share. Calculate the company's cost of retained earnings. **(3 marks)**

d) Name two types of investor's behavior towards risk. **(2 marks)**

e) State six advantages of a sole trader. **(6 marks)**

**QUESTION 3**

**(25 marks)**

Boago (Pty) Ltd farms consider buying a tractor as the business expands. They are evaluating between buying Tractor Y or Tractor Z. They will be spending P130, 000 on Tractor Y and P150, 000 on Tractor Z. The discounting factor for the above tractors is 16%. The net cash flows are shown below:

	Tractor Y	Tractor Z
	Net Cash flows	Net Cash flow
Year 0	(130000)	(150000)
1	50000	80000
2	60000	80000
3	40000	80000
4	40000	80000

- Calculate the payback period for the each tractor. Which tractor should the business buy and why? **(5 marks)**
- Calculate the Net Present Value **(8 marks)**
- If the above were mutually exclusive which tractor will you choose and why. **(2 marks)**
- If the above projects are independent which project will you choose and why. **(2 marks)**
- Calculate IRR for both projects given 14% as a second discounting factor. **(8 marks)**

Table A-1 Present Value of \$1 Due at the End of n Periods:

Equation:  $PVIF_{i,n} = \frac{1}{(1+i)^n}$

Financial Calculator Keys:  $n$   $i$   $PV$   $PMT$   $FV$

TABLE VALUE

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	12%	14%	15%	16%	18%	20%	24%	28%	32%	36%
1	.9901	.9804	.9709	.9615	.9524	.9434	.9346	.9259	.9174	.9091	.8929	.8772	.8696	.8621	.8475	.8333	.8065	.7813	.7576	.7353
2	.9803	.9612	.9426	.9246	.9070	.8900	.8734	.8573	.8417	.8264	.7972	.7695	.7561	.7432	.7182	.6944	.6504	.6104	.5739	.5407
3	.9706	.9423	.9151	.8890	.8638	.8396	.8163	.7938	.7722	.7513	.7118	.6750	.6575	.6407	.6086	.5787	.5245	.4768	.4348	.3975
4	.9610	.9238	.8885	.8548	.8227	.7921	.7629	.7350	.7084	.6830	.6355	.5921	.5718	.5523	.5158	.4823	.4230	.3725	.3294	.2923
5	.9515	.9057	.8626	.8219	.7835	.7473	.7130	.6806	.6499	.6209	.5674	.5194	.4972	.4761	.4371	.4019	.3411	.2910	.2495	.2149
6	.9420	.8880	.8375	.7903	.7462	.7050	.6663	.6302	.5963	.5645	.5066	.4556	.4323	.4104	.3704	.3349	.2751	.2274	.1890	.1580
7	.9327	.8706	.8131	.7599	.7107	.6651	.6227	.5835	.5470	.5132	.4523	.3996	.3759	.3538	.3139	.2791	.2218	.1776	.1432	.1162
8	.9235	.8535	.7894	.7307	.6768	.6274	.5820	.5403	.5019	.4665	.4039	.3506	.3269	.3050	.2660	.2326	.1789	.1388	.1085	.0854
9	.9143	.8368	.7664	.7026	.6446	.5919	.5439	.5002	.4604	.4241	.3606	.3075	.2843	.2630	.2255	.1938	.1443	.1094	.0822	.0628
10	.9053	.8203	.7441	.6756	.6139	.5584	.5083	.4632	.4224	.3855	.3220	.2697	.2472	.2267	.1911	.1615	.1164	.0847	.0623	.0462
11	.8963	.8043	.7224	.6496	.5847	.5268	.4751	.4289	.3875	.3505	.2875	.2366	.2149	.1954	.1619	.1346	.0938	.0662	.0472	.0340
12	.8874	.7885	.7014	.6246	.5568	.4970	.4440	.3971	.3555	.3186	.2567	.2076	.1869	.1685	.1372	.1122	.0757	.0517	.0357	.0250
13	.8787	.7730	.6810	.6006	.5303	.4688	.4150	.3677	.3262	.2897	.2292	.1821	.1625	.1452	.1163	.0935	.0610	.0404	.0271	.0184
14	.8700	.7579	.6611	.5775	.5051	.4423	.3878	.3405	.2992	.2633	.2046	.1597	.1413	.1252	.0985	.0779	.0492	.0316	.0205	.0135
15	.8613	.7430	.6419	.5553	.4810	.4173	.3624	.3152	.2745	.2394	.1827	.1401	.1229	.1079	.0835	.0649	.0397	.0247	.0155	.0099
16	.8528	.7284	.6232	.5339	.4581	.3936	.3387	.2919	.2519	.2176	.1631	.1229	.1069	.0930	.0706	.0541	.0320	.0193	.0118	.0073
17	.8444	.7142	.6050	.5134	.4363	.3714	.3166	.2703	.2311	.1978	.1456	.1078	.0929	.0802	.0600	.0451	.0258	.0150	.0089	.0054
18	.8360	.7002	.5874	.4936	.4155	.3503	.2959	.2502	.2120	.1799	.1300	.0946	.0808	.0691	.0508	.0376	.0208	.0118	.0068	.0039
19	.8277	.6864	.5703	.4746	.3957	.3305	.2765	.2317	.1945	.1635	.1161	.0829	.0703	.0596	.0431	.0313	.0168	.0092	.0051	.0029
20	.8195	.6730	.5537	.4564	.3769	.3118	.2584	.2145	.1784	.1486	.1037	.0728	.0611	.0514	.0365	.0261	.0135	.0072	.0039	.0021
21	.8114	.6598	.5375	.4388	.3589	.2942	.2415	.1987	.1637	.1351	.0926	.0638	.0531	.0443	.0309	.0217	.0109	.0056	.0029	.0016
22	.8034	.6468	.5219	.4200	.3418	.2775	.2257	.1839	.1502	.1228	.0826	.0560	.0462	.0382	.0262	.0181	.0088	.0044	.0022	.0012
23	.7954	.6342	.5067	.4057	.3256	.2618	.2109	.1703	.1378	.1117	.0738	.0491	.0402	.0329	.0222	.0151	.0071	.0034	.0017	.0008
24	.7876	.6217	.4919	.3901	.3101	.2470	.1971	.1577	.1264	.1015	.0659	.0431	.0349	.0284	.0188	.0126	.0057	.0027	.0013	.0006
25	.7798	.6095	.4776	.3751	.2953	.2330	.1842	.1460	.1160	.0923	.0588	.0378	.0304	.0245	.0160	.0105	.0046	.0021	.0010	.0005
26	.7720	.5976	.4637	.3607	.2812	.2198	.1722	.1352	.1064	.0839	.0525	.0331	.0264	.0211	.0135	.0087	.0037	.0016	.0007	.0003
27	.7644	.5859	.4502	.3468	.2678	.2074	.1609	.1252	.0976	.0763	.0469	.0291	.0230	.0182	.0115	.0073	.0030	.0013	.0006	.0002
28	.7568	.5744	.4371	.3335	.2551	.1956	.1504	.1159	.0895	.0693	.0419	.0255	.0200	.0157	.0097	.0061	.0024	.0010	.0004	.0002
29	.7493	.5631	.4243	.3207	.2429	.1846	.1406	.1073	.0822	.0630	.0374	.0224	.0174	.0135	.0082	.0051	.0020	.0008	.0003	.0001
30	.7419	.5521	.4120	.3083	.2314	.1741	.1314	.0994	.0754	.0573	.0334	.0196	.0151	.0116	.0070	.0042	.0016	.0006	.0002	.0001
35	.7059	.5000	.3554	.2534	.1813	.1301	.0937	.0676	.0490	.0356	.0189	.0102	.0075	.0055	.0030	.0017	.0005	.0002	.0001	*
40	.6717	.4529	.3066	.2083	.1420	.0972	.0668	.0460	.0318	.0221	.0107	.0053	.0037	.0026	.0013	.0007	.0002	.0001	*	*
45	.6391	.4102	.2644	.1712	.1113	.0727	.0476	.0313	.0207	.0137	.0061	.0027	.0019	.0013	.0006	.0003	.0001	*	*	*
50	.6080	.3715	.2281	.1407	.0872	.0543	.0339	.0213	.0134	.0085	.0035	.0014	.0009	.0006	.0003	.0001	*	*	*	*
55	.5785	.3365	.1968	.1157	.0683	.0406	.0242	.0145	.0087	.0053	.0020	.0007	.0005	.0003	.0001	*	*	*	*	*

\*The factor is zero to four decimal places.

Table A-2 Present Value of an Annuity of \$1 per Period for n Periods:

Equation:  $PVIFA_{i,n} = \frac{1 - \frac{1}{(1+i)^n}}{i} = \frac{1}{i} - \frac{1}{i(1+i)^n}$

Financial Calculator Keys:  $n$   $i$   $PV$   $PMT$   $FV$

TABLE VALUE

Number of Periods	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	12%	14%	15%	16%	18%	20%	24%	28%	32%
1	0.9901	0.9804	0.9709	0.9615	0.9524	0.9434	0.9346	0.9259	0.9174	0.9091	0.8929	0.8772	0.8696	0.8621	0.8475	0.8333	0.8065	0.7813	0.7576
2	1.9704	1.9416	1.9135	1.8861	1.8594	1.8334	1.8080	1.7833	1.7591	1.7355	1.6901	1.6472	1.6257	1.6052	1.5656	1.5278	1.4568	1.3916	1.3315
3	2.9410	2.8639	2.8286	2.7751	2.7232	2.6730	2.6243	2.5771	2.5313	2.4869	2.4018	2.3216	2.2832	2.2459	2.1743	2.1065	1.9813	1.8684	1.7663
4	3.9020	3.8077	3.7171	3.6299	3.5460	3.4651	3.3872	3.3121	3.2397	3.1699	3.0373	2.9137	2.8550	2.7982	2.6901	2.5887	2.4043	2.2410	2.0957
5	4.8534	4.7135	4.5797	4.4518	4.3295	4.2124	4.1002	3.9927	3.8897	3.7908	3.6048	3.4331	3.3522	3.2743	3.1272	2.9906	2.7454	2.5320	2.3452
6	5.7955	5.6014	5.4172	5.2421	5.0757	4.9173	4.7665	4.6229	4.4859	4.3553	4.1114	3.8887	3.7845	3.6847	3.4976	3.3255	3.0205	2.7594	2.5342
7	6.7282	6.4720	6.2303	6.0021	5.7864	5.5824	5.3893	5.2064	5.0330	4.8684	4.5638	4.2883	4.1604	4.0386	3.8115	3.6046	3.2423	2.9370	2.6775
8	7.6517	7.3255	7.0197	6.7327	6.4632	6.2098	5.9713	5.7466	5.5348	5.3349	4.9676	4.6389	4.4873	4.3436	4.0776	3.8372	3.4212	3.0758	2.7860
9	8.5660	8.1622	7.7861	7.4353	7.1078	6.8017	6.5152	6.2469	5.9952	5.7590	5.3282	4.9464	4.7716	4.6065	4.3030	4.0310	3.5655	3.1842	2.8681
10	9.4713	8.9826	8.5302	8.1109	7.7217	7.3601	7.0236	6.7101	6.4177	6.1446	5.6502	5.2161	5.0188	4.8332	4.4941	4.1925	3.6819	3.2689	2.9304
11	10.3676	9.7868	9.2526	8.7605	8.3064	7.8869	7.4987	7.1390	6.8052	6.4951	5.9377	5.4527	5.2337	5.0286	4.6560	4.3271	3.7757	3.3351	2.9776
12	11.2551	10.5753	9.9540	9.3851	8.8633	8.3838	7.9427	7.5361	7.1607	6.8137	6.1944	5.6603	5.4206	5.1971	4.7932	4.4392	3.8514	3.3868	3.0133
13	12.1337	11.3484	10.6350	9.9856	9.3936	8.8527	8.3577	7.9038	7.4869	7.1034	6.4235	5.8424	5.5831	5.3423	4.9095	4.5327	3.9124	3.4272	3.0404
14	13.0037	12.1062	11.2961	10.5631	9.8986	9.2950	8.7455	8.2442	7.7862	7.3667	6.6282	6.0021	5.7245	5.4675	5.0081	4.6106	3.9616	3.4587	3.0609
15	13.8651	12.8493	11.9379	11.1184	10.3797	9.7122	9.1079	8.5595	8.0607	7.6061	6.8109	6.1422	5.8474	5.5755	5.0916	4.6755	4.0013	3.4834	3.0764
16	14.7179	13.5777	12.5611	11.6523	10.8378	10.1059	9.4466	8.8126	8.3126	7.8237	6.9740	6.2651	5.9542	5.6685	5.1624	4.7296	4.0333	3.5026	3.0882
17	15.5623	14.2919	13.1661	12.1657	11.2741	10.4773	9.7652	9.1216	8.5436	8.0216	7.1196	6.3729	6.0472	5.7487	5.2223	4.7746	4.0591	3.5177	3.0971
18	16.3983	14.9920	13.7535	12.6593	11.6896	10.8276	10.0591	9.3719	8.7556	8.2014	7.2497	6.4674	6.1280	5.8178	5.2732	4.8122	4.0799	3.5294	3.1039
19	17.2260	15.6785	14.3238	13.1339	12.0853	11.1581	10.3356	9.6036	8.9501	8.3649	7.3658	6.5504	6.1982	5.8775	5.3162	4.8435	4.0967	3.5386	3.1099
20	18.0456	16.3514	14.8775	13.5903	12.4622	11.4699	10.5940	9.8181	9.1285	8.5136	7.4694	6.6231	6.2593	5.9288	5.3527	4.8696	4.1103	3.5458	3.1129
21	18.8570	17.0112	15.4150	14.0292	12.8212	11.7641	10.8355	10.0168	9.2922	8.6487	7.5620	6.6870	6.3125	5.9731	5.3837	4.8913	4.1212	3.5514	3.1158
22	19.6604	17.6580	15.9369	14.4511	13.1630	12.0416	11.0612	10.2007	9.4624	8.7715	7.6446	6.7429	6.3587	6.0113	5.4099	4.9094	4.1300	3.5558	3.1180
23	20.4558	18.2922	16.4436	14.8568	13.48														

Table A-3 Future Value of \$1 at the End of n Periods:

Equation:  $FVIFA_n = (1 + i)^n$

Financial Calculator Keys: N, I, PV, PMT, FV

TABLE VALUE

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	12%	14%	15%	16%	18%	20%	24%	28%	32%	36%
1	1.0100	1.0200	1.0300	1.0400	1.0500	1.0600	1.0700	1.0800	1.0900	1.1000	1.1200	1.1400	1.1500	1.1600	1.1800	1.2000	1.2400	1.2800	1.3200	1.3600
2	1.0201	1.0404	1.0609	1.0816	1.1025	1.1236	1.1449	1.1664	1.1881	1.2100	1.2544	1.2996	1.3225	1.3456	1.3924	1.4400	1.5376	1.6384	1.7424	1.8496
3	1.0303	1.0612	1.0927	1.1249	1.1576	1.1910	1.2250	1.2597	1.2950	1.3310	1.4049	1.4815	1.5209	1.5609	1.6430	1.7280	1.9066	2.0972	2.3000	2.5155
4	1.0406	1.0824	1.1255	1.1699	1.2155	1.2625	1.3108	1.3605	1.4116	1.4641	1.5735	1.6890	1.7490	1.8106	1.9388	2.0736	2.3642	2.6844	3.0360	3.4210
5	1.0510	1.1041	1.1593	1.2167	1.2763	1.3382	1.4026	1.4693	1.5386	1.6105	1.7623	1.9254	2.0114	2.1003	2.2878	2.4883	2.9316	3.4360	4.0075	4.6526
6	1.0615	1.1262	1.1941	1.2653	1.3401	1.4185	1.5007	1.5869	1.6771	1.7716	1.9738	2.1950	2.3131	2.4364	2.6996	2.9860	3.6352	4.3980	5.2899	6.3275
7	1.0721	1.1487	1.2299	1.3159	1.4071	1.5036	1.6058	1.7138	1.8280	1.9487	2.2107	2.5023	2.6600	2.8262	3.1855	3.5832	4.5077	5.6295	6.9826	8.6054
8	1.0829	1.1717	1.2668	1.3686	1.4772	1.5938	1.7182	1.8509	1.9926	2.1436	2.4760	2.8526	3.0590	3.2784	3.7589	4.2998	5.5895	7.2058	9.2170	11.703
9	1.0937	1.1951	1.3048	1.4233	1.5513	1.6895	1.8385	1.9990	2.1719	2.3579	2.7731	3.2519	3.5179	3.8030	4.4355	5.1598	6.9310	9.2234	12.166	15.917
10	1.1046	1.2190	1.3439	1.4802	1.6289	1.7908	1.9672	2.1589	2.3674	2.5937	3.1058	3.7072	4.0456	4.4114	5.2338	6.1917	8.5944	11.806	16.060	21.647
11	1.1157	1.2434	1.3842	1.5395	1.7103	1.8983	2.1049	2.3316	2.5804	2.8531	3.4785	4.2262	4.6524	5.1173	6.1759	7.4301	10.657	15.112	21.199	29.439
12	1.1268	1.2682	1.4258	1.6010	1.7959	2.0122	2.2522	2.5182	2.8127	3.1384	3.8960	4.8179	5.3503	5.9360	7.2876	8.9161	13.215	19.343	27.983	40.037
13	1.1381	1.2936	1.4685	1.6651	1.8856	2.1329	2.4098	2.7196	3.0658	3.4523	4.3635	5.4924	6.1528	6.8858	8.5994	10.699	16.386	24.759	36.937	54.451
14	1.1495	1.3195	1.5126	1.7317	1.9799	2.2609	2.5785	2.9372	3.3417	3.7975	4.8871	6.2613	7.0757	7.9875	10.147	12.839	20.319	31.691	48.757	74.053
15	1.1610	1.3459	1.5580	1.8009	2.0789	2.3966	2.7590	3.1722	3.6425	4.1772	5.4736	7.1379	8.1371	9.2655	11.974	15.407	25.196	40.565	64.359	100.71
16	1.1726	1.3728	1.6047	1.8730	2.1829	2.5404	2.9522	3.4259	3.9703	4.5950	6.1304	8.1372	9.3576	10.748	14.129	18.488	31.243	51.923	84.954	136.97
17	1.1843	1.4002	1.6528	1.9479	2.2920	2.6928	3.1588	3.7000	4.3276	5.0545	6.8660	9.2765	10.761	12.468	16.672	22.186	38.741	66.461	112.14	186.28
18	1.1961	1.4282	1.7024	2.0258	2.4066	2.8543	3.3799	3.9960	4.7171	5.5599	7.6900	10.575	12.375	14.463	19.673	26.623	48.039	85.071	148.02	253.34
19	1.2081	1.4568	1.7535	2.1068	2.5270	3.0256	3.6165	4.3157	5.1417	6.1159	8.6128	12.066	14.232	16.777	23.214	31.948	59.568	108.89	195.39	344.54
20	1.2202	1.4859	1.8061	2.1911	2.6533	3.2071	3.8697	4.6610	5.6044	6.7275	9.6463	13.743	16.367	19.461	27.393	38.338	73.864	139.38	257.92	468.57
21	1.2324	1.5157	1.8603	2.2788	2.7860	3.3996	4.1406	5.0338	6.1088	7.4002	10.804	15.668	18.822	22.574	32.324	46.005	91.592	178.41	340.45	637.26
22	1.2447	1.5460	1.9161	2.3699	2.9253	3.6035	4.4304	5.4365	6.6586	8.1403	12.100	17.861	21.645	26.186	38.142	55.206	113.57	228.36	449.39	866.67
23	1.2572	1.5769	1.9736	2.4647	3.0715	3.8197	4.7405	5.8715	7.2579	8.9543	13.552	20.362	24.891	30.376	45.008	66.247	140.83	292.30	593.20	1178.7
24	1.2697	1.6084	2.0328	2.5633	3.2251	4.0489	5.0724	6.3412	7.9111	9.8497	15.179	23.212	28.625	35.236	53.109	79.497	174.63	374.14	783.02	1603.0
25	1.2824	1.6406	2.0938	2.6658	3.3864	4.2919	5.4274	6.8485	8.6231	10.835	17.000	26.462	32.919	40.874	62.669	95.396	216.54	478.90	1033.6	2180.1
26	1.2953	1.6734	2.1566	2.7725	3.5557	4.5494	5.8074	7.3964	9.3992	11.918	19.040	30.167	37.857	47.414	73.949	114.48	268.51	613.00	1364.3	2964.9
27	1.3082	1.7069	2.2213	2.8834	3.7335	4.8223	6.2139	7.9681	10.245	13.110	21.325	34.390	43.535	55.000	87.260	137.37	332.95	784.64	1800.9	4032.3
28	1.3213	1.7410	2.2879	2.9987	3.9201	5.1117	6.6488	8.6271	11.167	14.421	23.884	39.204	50.066	63.800	102.97	164.84	412.86	1004.3	2377.2	5483.9
29	1.3345	1.7758	2.3566	3.1187	4.1161	5.4184	7.1143	9.3173	12.172	15.863	26.750	44.693	57.575	74.009	121.50	197.81	511.95	1285.6	3137.9	7458.1
30	1.3478	1.8114	2.4273	3.2434	4.3219	5.7435	7.6123	10.063	13.268	17.449	29.960	50.950	66.212	85.850	143.37	237.38	634.82	1645.5	4142.1	10143.
40	1.4889	2.2080	3.2620	4.8010	7.0400	10.286	14.974	21.725	31.409	45.259	93.051	188.88	267.86	378.72	750.38	1469.8	5455.9	19427.	66521.	*
50	1.6446	2.6916	4.8339	7.1067	11.467	18.420	29.457	46.902	74.358	117.39	289.00	700.23	1083.7	1670.7	3927.4	9100.4	46890.	*	*	*
60	1.8167	3.2810	5.8916	10.520	18.679	32.988	57.946	101.26	176.03	304.48	897.60	2595.9	4384.0	7370.2	20555.	56348.	*	*	*	*

\*FVIF > 99.999.

Table A-4 Future Value of an Annuity of \$1 per Period for n Periods:

Equation:  $FVIFA_n = \sum_{t=1}^n (1 + i)^{n-t} = \frac{(1 + i)^n - 1}{i}$

Financial Calculator Keys: N, I, PV, PMT, FV

TABLE VALUE

Number of Periods	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	12%	14%	15%	16%	18%	20%	24%	28%	32%	36%
1	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
2	2.0100	2.0200	2.0300	2.0400	2.0500	2.0600	2.0700	2.0800	2.0900	2.1000	2.1200	2.1400	2.1500	2.1600	2.1800	2.2000	2.2400	2.2800	2.3200	2.3600
3	3.0301	3.0604	3.0909	3.1216	3.1525	3.1836	3.2149	3.2464	3.2781	3.3100	3.3744	3.4396	3.4725	3.5056	3.5724	3.6400	3.7776	3.9184	4.0624	4.2096
4	4.0604	4.1216	4.1836	4.2465	4.3101	4.3746	4.4399	4.5061	4.5731	4.6410	4.7793	4.9211	4.9934	5.0665	5.2154	5.3660	5.6842	6.0156	6.3624	6.7251
5	5.1010	5.2040	5.3091	5.4163	5.5256	5.6371	5.7507	5.8666	5.9847	6.1051	6.3528	6.6101	6.7424	6.8771	7.1542	7.4416	8.0484	8.6999	9.3983	10.146
6	6.1520	6.3081	6.4684	6.6330	6.8019	6.9753	7.1533	7.3359	7.5233	7.7156	8.1152	8.5355	8.7537	8.9775	9.4420	9.9299	10.980	12.136	13.406	14.799
7	7.2135	7.4343	7.6625	7.8983	8.1420	8.3938	8.6540	8.9228	9.2004	9.4872	10.089	10.730	11.067	11.414	12.142	12.916	14.615	16.534	18.696	21.126
8	8.2857	8.5830	8.8923	9.2142	9.5491	9.8975	10.260	10.637	11.028	11.436	12.300	13.233	13.727	14.240	15.327	16.499	19.123	22.163	25.678	29.732
9	9.3685	9.7546	10.159	10.583	11.027	11.491	11.978	12.488	13.021	13.579	14.776	16.085	16.786	17.519	19.086	20.799	24.712	29.369	34.895	41.435
10	10.462	10.950	11.464	12.006	12.578	13.181	13.816	14.487	15.193	15.937	17.549	19.337	20.304	21.321	23.521	25.959	31.643	38.593	47.062	57.352
11	11.567	12.169	12.808	13.486	14.207	14.972	15.784	16.645	17.560	18.531	20.655	23.045	24.349	25.733	28.755	32.150	40.238	50.398	63.122	78.998
12	12.683	13.412	14.192	15.026	15.917	16.870	17.888	18.977	20.141	21.384	24.133	27.271	29.002	30.850	34.931	39.581	50.895	65.510	84.320	108.44
13	13.809	14.680	15.618	16.627	17.713	18.882	20.141	21.495	22.953	24.523	28.029	32.089	34.352	36.786	42.219	48.497	64.110	84.853	112.30	148.47
14	14.947	15.974	17.086	18.292	19.599	21.015	22.550	24.215	26.019	27.975	32.393	37.581	40.505	43.672	50.818	59.196	80.496	109.61	149.24	202.93
15	16.097	17.293	18.599	20.024	21.579	23.276	25.129	27.152	29.361	31.772	37.280	43.842	47.580	51.660	60.965	72.035	100.82	141.30	198.00	276.98
16	17.258	18.639	20.157	21.825	23.657	25.673	27.888	30.324	33.003	35.950	42.753	50.980	55.717	60.925	72.939	87.442	126.01	181.87	262.36	377.69
17	18.430	20.012	21.762	23.698	25.840	28.213	30.840	33.750	36.974	40.545	48.884	59.118	65.075	71.673	87.068	105.93	157.25	233.79	347.31	514.66
18	19.615	21.412	23.414	25.645	28.132	30.906	33.999	37.450	41.301	45.599	55.750	68.394								

**BOTSWANA COLLEGE OF DISTANCE**  
**AND OPEN LEARNING**

**Diploma in Business Management**

**Business Finance**

**BF121**

**Sessional Examination**

**Marks: 100**

**3 HOURS**

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**Instructions**

1. This examination is based on material covered in the course module
2. This examination consists of **Two** sections: A and B
3. Answer questions according to instructions given in each section
4. Write in grammatical English

**SECTION A**

**[40 marks]**

**There are eight questions in this section. Answer all**

1. a) Define a stock exchange. **(2 marks)**  
b) Name the two activities that occur at the stock exchange. **(2 marks)**
2. Name five forms of preference shares. **(5 marks)**
3. Identify three ways in which a business can raise finance internally? **(3 marks)**
4. Name three reasons of why a business should have sufficient cash. **(3 marks)**
5. State four reasons of why businesses offer credit. **(4 marks)**
6. a) Define bankruptcy **(2 marks)**  
b) Outline five reasons of why businesses fail. **(5 marks)**
7. Explain four accounting concepts. **(8 marks)**
8. List the six factors that influence the target capital structure. **(6 marks)**

**SECTION B**

[60 marks]

There are two questions in this section. Answer all

(All workings carry marks)

**Question 1**

(30 marks)

Read the following statements and answer questions that follow.

Engen Botswana Limited Statement of Comprehensive Income for the year ended 31  
December 2013

	31/12/2013	31/12/2012
Revenue	2,621,681	2,247,476
Cost of goods sold	(2,374,281)	(2,021,788)
<b>Gross Profit</b>	<b>247,400</b>	<b>225,688</b>
Other income	1,404	3,406
Foreign currency gains	9,694	5,129
Administrative expenses	(22,828)	(20,745)
Distribution and marketing expenses	(60,082)	(52,741)
Other operating expenses	(2,298)	(736)
<b>Profit before finance costs and tax</b>	<b>173,290</b>	<b>160,002</b>
Share of profit of joint ventures	3,114	3,534
Finance costs	(1,340)	(2,415)
<b>Profit before tax</b>	<b>175,064</b>	<b>161,120</b>
Taxation	(44,847)	(40,716)
<b>Profit for the year</b>	<b>130,217</b>	<b>120,404</b>
<b>Profit for the year attributable to equity holders of the parent</b>	<b>130,217</b>	<b>120,404</b>
Other comprehensive income	(2,015)	(141)
<b>Total comprehensive income for the year</b>	<b>128,202</b>	<b>120,263</b>

Engen Botswana Limited Statement of Financial Position for the year ended 31  
December 2013

	31/12/2013	31/12/2012
<b>ASSETS</b>		
<b>Non-Current Assets</b>		
Property, plant & equipment	244,378	226,452
Share of investments in joint ventures	20,136	19,003
Prepaid leases	6,116	6,652
Investments	37	37
	<b>270,667</b>	<b>252,144</b>
<b>Current Assets</b>		
Inventories & accommodation	31,906	20,540
Trade and other receivables	107,891	159,451
Tax receivable	-	4,760
Prepaid leases	540	540
Cash & cash equivalents	320,092	182,694
Forward exchange contract asset	-	845
	460,429	368,830
<b>TOTAL ASSETS</b>	<b>731,096</b>	<b>620,974</b>
<b>EQUITY &amp; LIABILITIES</b>		
<b>Equity</b>		
Stated capital	8,138	8,138
Non distributable reserves	2,200	2,200
Cash flow hedge reserve	(1,243)	772

Retained earnings	430,517	363,550
<b>Total equity</b>	<b>439,612</b>	<b>374,660</b>
<b>Non Current Liabilities</b>		
Deferred tax liabilities	5,928	6,233
Deferred operating lease liability	2,366	1,923
Provisions	43,789	20,900
	52,083	29,056
<b>Current Liabilities</b>		
Trade and other payables	235,323	216,952
Deferred operating lease liability	206	234
Tax payable	2,629	-
Forward exchange contract liability	1,243	72
	239,401	217,258
<b>Total liabilities</b>	<b>291,484</b>	<b>246,314</b>
<b>TOTAL EQUITY AND LIABILITIES</b>	<b>731,096</b>	<b>620,974</b>

Required:

- a) Calculate the following:
  - i) Current ratio for both years. (3 marks)
  - ii) Acid test ratio for both years. (3 marks)
  - iii) Assuming that the industry averages for current ratio for 2012 was 1.25, 2013 was 1.1 and acid test ratio for 2012 was 1.2 while for 2013 was 1.2 comment on the results. (2 mark)

- iv) Closely scrutinize the above balance sheet and state, at least, three reasons as to why the company has such liquidity. **(3 marks)**
- v) Name three factors that pose as a risk if the business has too much cash. **(3 marks)**
- b) i) What is the Inventory turnover for the year ending 2013? **(4 marks)**
- c) Boago inherited P100, 000 and used the money to equally buy 4 stocks being A, B, C and D. The expected rate of returns on these stocks are 10%, 12%, 10% and 8% respectively. The asset betas for these stocks are 1.2, 1.5, 1.2 and 0.9 respectively. Calculate the:
- i) Portfolio return **(3 marks)**
- ii) Portfolio risk **(3 marks)**
- iii) Required rate of return if risk free rate of return is 6% and market risk is 10%. **(3 marks)**

**Question 2**

**(30 marks)**

- a) Bobo wants to raise additional capital. He issued 10,000 bonds at a par value of P500 and a coupon rate of 10% per annum. Calculate the cost of the bond if the tax rate is 20%. **(3 marks)**
- b) What is the cost of debt if Bobo got a loan of P2, 000,000 at an annual interest rate of 12%? **(3 marks)**
- c) Assume Bobo listed in the Botswana stock exchange and retained profits of P3, 000,000. The company's current share price is P5 and expected dividend per share is P0.2. Dividends are expected to grow at the rate of 3%. What is the cost of retained earnings? **(3 marks)**
- d) Calculate the cost of new equity if Bobo's floatation costs are P0.20 per share and have issued 500,000 @ P2.00 per share. **(3 marks)**
- d) What is the cost of the preference shares if dividend per preference share of Bobo is P0.50 and market price of preference share is P8.00. 20,000 Preference shares were issued at P10.00 per share **(3 marks)**
- e) Calculate the weighted average cost of capital of Bobo. **(11 marks)**
- f) Name four methods of determining optimal capital structure. **(4 mark)**