

| FACULTY/COLLEGE | College of Business and Economics |
| :--- | :--- |
| SCHOOL | School of Accounting |
| DEPARTMENT | Commercial Accounting |
| CAMPUS(ES) | SWC |
| MODULE NAME | Cost and Financial Management |
| MODULE CODE | CFM22A2 |
| SEMESTER | First |
| ASSESSMENT OPPORTUNITY, <br> MONTH AND YEAR | Supplementary Summative Assessment Opportunity <br> July 2019 |


| ASSESSMENT DATE | July 2019 | SESSION |  |
| :---: | :---: | :---: | :---: |
| ASSESSOR(S) | Mr. W.H. Otto, Ms. P. Ramutumbu and Ms. L. Pelcher |  |  |
| MODERATOR(S) | Mr. D. du Plessis |  |  |
| DURATION | 3 hours (180 min) | TOTAL MARKS | 100 |

## NUMBER OF PAGES OF QUESTION PAPER (Including cover page) 13

## INFORMATION/INSTRUCTIONS:

- This is a closed-book assessment.
- There are 5 questions. Answer question 1 to question 5 (compulsory). In total, you must answer 5 questions.
- Read the questions carefully and answer only what is required.
- Number your answers clearly and correctly as per the question paper.
- Write neatly and legibly on both sides of the paper in the answer book, starting on the first page.
- Show all formulae, calculations and workings clearly.
- Please start each question on a new page.
- Silent, non-programmable calculators may be used.
- Where applicable, round all calculations to two decimal places, unless stipulated otherwise.
- Indicate your INDEX NUMBER on the front cover of your script.

The information below presents the Annual Financial Statements of Big Bad Wolf (Pty) Ltd for the year ending 28 February.

| Big Bad Wolf (Pty) Ltd Statement of <br> Financial Position ended 28 February 2018. | Rand |
| :--- | ---: |
| ASSETS |  |
| Non-current assets | $\mathbf{7 7 7 5 0 0 0}$ |
| Property, plant and equipment | 2075000 |
| Land and buildings | 2700000 |
| Investment in financial assets | $\mathbf{3 0 0 0 0 0 0}$ |
| Current assets | $\mathbf{1 3 1 0 0 0 0}$ |
| Inventory | 210000 |
| Trade and other receivables | 350000 |
| Cash and cash equivalents | $\mathbf{9 0 8 5 0 0 0}$ |
| Total assets | 2400000 |
| EQUITY AND LIABILITIES | 250000 |
| Share capital | 4000000 |
| Accumulated retained earnings | $\mathbf{6 6 5 0 0 0 0}$ |
| Reserves | $\mathbf{1 5 0 0 0 0 0}$ |
| Total equity | 1500000 |
| Non-current liabilities | $\mathbf{9 3 5 0 0 0}$ |
| Long term loans | 900000 |
| Current liabilities | $\mathbf{3 5 0 0 0}$ |
| Trade and other payables | $\mathbf{9 0 8 5 0 0 0}$ |
| Tax payable |  |


| Big Bad Wolf (Pty) Ltd Statement of <br> Comprehensive Income ended 28 February 2018. | Rand |
| :--- | ---: |
| Revenue | 462500 |
| Cost of sales | $(385600)$ |
| Gross profit | $\mathbf{7 6 9 0 0}$ |
| Other operating income | 25200 |
| Operating expenses | $(32100)$ |


| Profit from operating activities | $\mathbf{7 0 0 0 0}$ |
| :--- | ---: |
| Investment income from interest received | 350000 |
| Finance costs | $(250000)$ |
| Profit before tax | $\mathbf{1 7 0 0 0 0}$ |
| Taxation (28\%) | $(47600)$ |
| Net profit | $\mathbf{1 2 2 ~ 4 0 0}$ |
| Non-controlling interest | $(19000)$ |
| Attributable earnings | $\mathbf{1 0 3 ~ 4 0 0}$ |
| Ordinary dividends | $(85000)$ |
| Retained earnings | $\mathbf{1 8 ~ 4 0 0}$ |

## Additional information:

- Issued ordinary shares is 420000.
- Market price per share for ordinary shares as at 28 February 2018 is R16.
- Big Bad Wolf (PTY) Ltd have not issued out any preference shares.
- Interest on long term loans is $16.67 \%$ per annum.


## REQUIRED:

1.1 Calculate the following ratios for Big Bad Wolf (Pty) Ltd for the year ended on 28 February 2018. Round off your answer to two decimal places. Show the relevant formula for each ratio calculated from 1.1.1 to 1.1.6.
1.1.1 Earnings per share (EPS).
1.1.2 Dividend per share (DPS).
1.1.3 Price earnings ratio (P/E).
1.1.4 Dividend pay-out ratio.
1.1.5 Ordinary dividend coverage ratio.
1.1.6 Market-to-book value ratio based on the book value of ordinary shareholders equity only.
1.2 As a ratio analysis expert you are required to answer the questions listed below in assisting Big Bad Wolf (Pty) Ltd in conducting a proper ratio analysis.
1.2.1 Provide a definition of what the calculation of ordinary dividend coverage ratio measures.
1.2.2 Provide a definition of what the calculation of market-to-book value ratio measures.

## QUESTION 2

## The following CASE STUDY relates to question 2.1 - 2.5:

A low accounts receivable turnover ratio can suggest a few things about a company. For example, the company may have poor collection processes, a bad credit policy or no credit policy at all, or customers with financial difficulties. Theoretically, a low ratio can also mean that the company has a high amount of cash that it can collect from its debtors if it improves its collection processes. Generally or in practical terms, a low ratio implies that the company should reassess its credit policies in order to ensure the timely collection of credit given to customers.*
*Extract:https://www.investopedia.com/terms/r/receivableturnoverratio.asp accessed on 02/2019.

REQUIRED:
2.1 What component of the cash conversion cycle does the extract above refer to?
2.2 List the other two components of the cash conversion cycle.
2.3 What does a favourable cash conversion cycle indicate?
2.4 According to the extract above, theoretically, what else can a low accounts receivables turnover ratio indicate?
2.5 Provide examples of how the company can increase their accounts receivables turnover ratio.

## The following scenario applies to questions 2.6 to 2.8

In order to avoid too much cash being invested in debtors and an increased occurrence of bad debts, most companies set a credit policy that states what is acceptable. Credit standards put a limit on the amount of credit allowed to customers. A credit term is the period for which credit is allowed.

## Example:

A company extends credit based on the following credit terms of 10/30 net 180.

## REQUIRED:

2.6 How much of a discount will a debtor receive in this scenario, if they pay early?
2.7 Within how many days must the debtor repay the debt in order to receive the early payment discount?
2.8 Calculate the number of days that payment can be delayed by giving up the cash discount?
2.9 A business decides that they will order in bulk in order to reduce their ordering costs. However, now the business foresees a problem. If orders are made in bulk, they will need storage or warehouse space for the inventory, which will in turn increase the carrying costs.

The following information is also available:

- Annual demand 100000 units
- Ordering costs 20 cents per unit
- Carrying costs 10 cents per unit

This company has 360 business days in their financial year.

## REQUIRED:

Calculate the Economic Order Quantity.

## The following scenario applies to questions 2.10 to 2.11

A seemingly obscure packaging company (PaperPlastix Ltd) has emerged as one of the gems on the JSE. The company uses recycled paper and plastic to produce packing for various purposes. Their biggest customers are local farmers in the Western Cape who make use of their box packing to export fresh produce overseas. The drought in the Western Cape has adversely affected the farmers' crops and the impact has been a lower demand for packaging from PaperPlastix Ltd. Now, the company has to pay particular attention to the management of its working capital.

The following is an extract from their cash budget for May:

| CASH BUDGET | MAY |
| :--- | ---: |
| Income from the sale of an industrial paper <br> shredder | R10 000 |
| Cash sales | R6 000 |
| Debtors collection | R4 000 |
| Cash purchases | R11 000 |
| Creditors payments | R5 000 |
| Interest received on fixed deposit | R1 000 |
| Bonuses paid | R500 |
| Income tax expense | R3 000 |
| Closing Balance | R? |

## REQUIRED:

2.10 List four cash inflow line items from the cash budget.
2.11 List four cash outflow line items from the cash budget.

## QUESTION 3

## The following scenario applies to questions 3.1 to 3.2

Cheetahs Ltd presented you with the following expected information about their shares:

| State of the economy | Probability | Expected return |
| :--- | :---: | :---: |
| Recession | $10 \%$ | $8 \%$ |
| Normal | $\mathbf{? ?}$ | $20 \%$ |
| Good | $60 \%$ | $32 \%$ |

## REQUIRED:

3.1 Calculate the average expected return of a Cheetah Ltd share.
3.2 Calculate the standard deviation of Cheetah Ltd. Assume that the expected average return is $26 \%$.

## The following scenario applies to questions 3.3 to 3.4

Siya Kholisi is considering investing R1 000000 in the below portfolio of shares. Before he does, he has asked you for your advice. The below information has been provided to you:

|  | Blue Bulls | Sharks |
| :--- | ---: | ---: |
| Total investment | R500 000 | R500 000 |
| Expected return | $14 \%$ | $18 \%$ |

## REQUIRED:

3.3 Calculate the weighting of each investment in the portfolio
3.4 Calculate the expected return of the portfolio. Show all your calculations.

## The following scenario applies to question 3.5

Stuart Baxter has a portfolio of shares invested in two companies. The variance of each company is provided to you.

| Company | Weight | Variance |
| :--- | :---: | :---: |
| AFCON | $60 \%$ | 45 |
| CONFED | $40 \%$ | 25 |

The covariance of the portfolio is 8 .

## REQUIRED:

3.5 Calculate the standard deviation of the portfolio. Show all your workings.

## QUESTION 4

The following CASE STUDY relates to question 4.1 - 4.2:

Lerato bought a new sound system at the purchase price of R20 000. She received a loan and the loan is repayable annually for the next three years. The interest received is $20 \%$ per annum compounded annually.

## REQUIRED:

### 4.1 Calculate the annual repayment.

4.2 Present the amortisation table for all three years. Present your answer in the same format as the table below.

| Year | P1 | P2 | Payment | Interest <br> paid | Capital <br> repaid | Closing <br> balance |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: |
|  |  |  |  |  |  |  |

4.3 Jermaine plays world-class soccer. She receives annual fees for playing for the club and want to invest it. She estimates that her fees will be R500 000, R590 000 and R670 000 at the end of each year, for the next three years. The investment will earn an interest rate of $12 \%$ per annum compounded annually.

## REQUIRED:

Calculate the present value of the cash flows.
4.4 Luke invests R1 100000 today with the sole purpose to withdraw annual income until he dies sometime in the future.

## REQUIRED:

How much will Luke receive annually if the investment will earn $9 \%$ interest?
4.5 Mr Dlamini is concerned about his retirement savings. He did basic calculations and realised that he needs R8 000000 at retirement to sustain him. Mr Dlamini is currently 33 years old and will retire at 65 years. His retirement investment is earning $14.16 \%$ per annum compounded monthly. He has a total current savings of R400 000.

## REQUIRED:

How much should he invest on a monthly basis to reach his retirement goal?

## QUESTION 5

The following extract from Fin24 relates to question 5.1-5.2:
'S\&P revises outlook for Eskom from negative to stable.' 1 March 2019
Ratings agency Standard \& Poors' has kept Eskom at junk status, but has revised outlook from negative to stable. The power utility said in a statement issued on Friday afternoon.
S\&P has SA's foreign and local currency long-term ratings at CCC+, with a stable outlook.

## REQUIRED:

5.1 Name one other ratings agency.
5.2 What is the role of the rating agencies?

## This CASE STUDY relates to question 5.3

Mr Nkosi read the below extract from an article published by Finweek ('Should DIY investors even bother with bonds?', 21 March 2018)
'Bonds can give stable, predictable returns especially if we consider the local RSA Government Retail Bonds.'

He is consider purchasing a bond with a R6 000 nominal value payable in 8 years' time. The bond pays $5 \%$ coupons. The current sales price of the bond is R7 000.
Mr Nkosi is interested in knowing how this bond compare in the bond market and asked for your assistance.

## REQUIRED:

5.3 Calculate the yield-to-maturity.
5.4 Mr Nkosi is looking to diversify his investment portfolio and he received the following information regarding All Unity (Pty) Ltd shares.
Dividends have just been declared at a value of R15.00, with an expected dividend growth rate of $40 \%$ for the next two years. Due to the nature of the business, it is expected for the dividend growth rate to then decrease to $21 \%$, where it is expected to remain for the foreseeable future. Mr Nkosi determined that, for the industry, a 30\% rate of return is required by investors.

## REQUIRED:

Calculate the price of one All Unity (Pty) Ltd share.

The following CASE STUDY relates to question 5.5 - 5.7:
Moneyweb published on 18 May 2017:
'Don't discount the Capital Asset Pricing Model just yet. It's a better predictor than you realise.'

## REQUIRED:

5.5 Provide ONE advantage of the dividend growth model as a method to calculate cost of capital.
5.7 Provide ONE disadvantage of the Capital Asset Pricing Model as a method to calculate cost of capital.

## The following CASE STUDY relates to question 5.8:

Will Smith has his own Adventure Company, where all people are receiving a tailored adventure experience to their own risk preference. Some of these adventures range from mountain climbing, skydiving, bridge swinging to a full Super Adventurer package which includes 7 days and nights of adventures. Before a new adventure is added to the list, Will tests the adventure out himself and then need to determine the costs of adding a new adventure to the list.

He has just completed an adventure in the Himalayas and would like to add it to his business. According to his finance team, the expected return of the Himalaya Adventure will be $30 \%$, but the cost of getting the capital must first be calculated in order to make an informed decision.
The Adventure Company has a beta of 1.8. The expected return on the market portfolio is $23 \%$ and the current risk-free rate is $7 \%$.
5.8 Calculate the cost of ordinary shares.

