## Department of Commercial Accounting

## Financial Management 2A

BFB22A2

## SUPPLEMENTARY LAST ASSESSMENT OPPORTUNITY

JANUARY 2018

Time: $\quad 180$ minutes
Marks: 100
Assessors: Mrs L Boyce, Mrs R Khoza, Mrs P Ramutumbu, Mr WH Otto, Mr N Strydom
Moderator: Mrs L Joubert

## INSTRUCTIONS:

- This paper consists of 12 pages (including the cover page and formula sheets).
- Answer all questions. 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, GROUP AND LECTURER on the front cover of your script.

| Question | Topic | Marks | Time |
| :---: | :--- | :---: | :---: |
| $\mathbf{1}$ | Financial Instruments and Financial Markets | 20 | 36 minutes |
| $\mathbf{2}$ | Introduction to Foreign Trade | 20 | 36 minutes |
| $\mathbf{3}$ | Risk and Return | 20 | 36 minutes |
| $\mathbf{4}$ | Time Value of Money | 20 | 36 minutes |
| $\mathbf{5}$ | Cost of Capital | 20 | 36 minutes |
|  |  | $\mathbf{1 0 0}$ | $\mathbf{1 8 0}$ minutes |

## QUESTION 1

## PART A

Indicate whether the statements from 1.1 to 1.5 are True or False. Write your answer as follows, e.g. 1.8 True.
1.1 A market can be defined as a place where commodities or financial instruments are traded between willing buyers and willing sellers.
1.2 One of the roles of the financial markets is investing.
1.3 The spot market refers to the market where one buys or sells a specific currency pair at a predetermined amount, rate and date, which are agreed upon at the time of dealing.
1.4 Exchange rates can be extremely volatile, moving in response to the latest news.
1.5 The money market is the market where long-term financial instruments trade.

## PART B

1.6 The capital market consists of two markets. List those two markets.
1.7 Interest rates fluctuate due to certain reasons. List any two reasons why the general level of interest rates change.
1.8 The Business Report on the Business Day newspaper published the following movements for listed shares on 14 August 2017.

| Name | Close <br> (cents) | Day <br> Move <br> (cents) | Volume <br> trade <br> $(000)$ | 12- <br> month <br> \%move | DY <br> $\%$ | PE <br> ratio |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ANGLOGOLD | 13039 | -37 | 3512 | -56.5 | 1.0 | 32.9 |
| CENTRSLRAND | 9 | 0 | 0 | -74.3 | 0.0 | -27.0 |
| DRDGOLD | 456 | 6 | 1128 | -60.5 | 2.6 | 59.2 |
| GOLDFIELDS | 5492 | 6 | 3295 | -37.1 | 2.0 | 14.4 |

```
Formulae:
PE = MPS \divEPS
```

$$
\mathrm{DY}=\mathrm{DPS} \div \mathrm{MPS}
$$

## REQUIRED:

Answer the following questions, which relates to the above table.
1.8.1 Calculate the share price at which DRDGOLD opened with on the $14^{\text {th }}$ of August 2017.
1.8.2 Indicate which company investors have the highest confidence in? Motivate your answer.
1.8.3 Calculate the dividend per share for GOLDFIELDS based on the market price on the $14^{\text {th }}$ of August 2017.
1.8.4 Calculate the return taking into consideration your answer from 1.8.3 that an investor in GOLDFIELDS earned if he/she purchased shares exactly one year ago and held them until the $14^{\text {th }}$ of August 2017.
(5)

## QUESTION 2

## PART A

2.1 In the context of globalisation, explain the expression "capital has feet".
2.2 List and briefly explain three different factors that affect exchange rates.

## PART B

(12 MARKS)

Refer to the following extract from a South African newspaper, and answer the questions that follow. This table relates only to Part B.

| Nigerian naira | 0.036 |
| :--- | :--- |
| Botswana pula | 1.28 |
| Zambian kwacha | 0.0017 |
| Gambian delasi | 0.28 |
| Namibian dollar | 1 |
| Ugandan shilling | 0.0036 |
| Central African franc | 0.024 |

2.3 Indicate whether the exchange rates in the above table are direct quotes or indirect quotes. Motivate your answer.
2.4 How much Nigerian naira could you buy with R500?
(2)
2.5 What is the Rand value of 750 Botswana Pula?
2.6 Calculate how many Ugandan shilling you would need to buy one Zambian kwacha.
2.7 Explain the term Rand hedge company.

## QUESTION 3

## PART A

You, the financial manager of Burkshire Construction Ltd, decided to invest excess capital of Burkshire Construction Ltd in one of the following two companies. The following information about the investment decision is available:

| Instrument | Expected <br> Return | Standard <br> deviation |
| :--- | :---: | :---: |
| Ordinary shares in Plum Ltd, a Small and Medium <br> Enterprises (SME) company and share listed on <br> the Alternative Exchange (AltX) | $17.6 \%$ | $?$ |
| Ordinary shares in Figtree Ltd, a well-established <br> company and share listed on the Main board | $16.2 \%$ | $1.31 \%$ |

## REQUIRED:

3.1 Discuss what you as a financial manager of Burkshire Construction Ltd will expect of the missing statistics for Plum Ltd, when compared to Figtree Ltd. Motivate your answer. You should not perform any calculations.
3.2 Assume Burkshire Construction Ltd is classified as a conservative investor. With reference to the above, which financial instrument should Burkshire Construction Ltd choose to invest in? Motivate your answer. You should not perform any calculations.

## QUESTION 3

PART B

Elizabeth Beth Cooper is a world-renowned money market investor, and as a rational investor, she carefully selects which company to invest in based on the risk and returns associated with each share. Elizabeth Beth Cooper is considering investing her money in one of two listed companies. The first company, Lakeside Minerals is listed in the resources and mining sector. The second company, Gordhan \& Manuel, listed in the financial sector. Additional details on the two companies is provided in the table below:

|  | Lakeside <br> Minerals |  <br> Manuel |
| :--- | :---: | :---: |
| Expected return | $12 \%$ | $26 \%$ |
| Expected standard deviation | $10 \%$ | $22 \%$ |

## REQUIRED:

3.3 Advise Elizabeth Beth Cooper on which measure is appropriate to use when comparing assets with different returns.
3.4 Perform the necessary calculations to assist Elizabeth Beth Cooper in making her final decision.
3.5 Based on your calculations in 3.4, which listed company should Elizabeth Beth Cooper invest in? Motivate your answer.

## QUESTION 3

## PART C

(10 MARKS)

The following pertains to the share of King Shaka Wildlife Estate.

| King Shaka Wildlife Estate |  |
| :---: | :---: |
| Possible return | Probability |
| $26 \%$ | $42 \%$ |
| $12 \%$ | $43 \%$ |
| $22 \%$ | $15 \%$ |

The following pertains to the share of Bumblebee Ltd.

| Bumblebee Ltd |  |  |
| :---: | :---: | :---: |
| Expected return | Standard <br> deviation | Coefficient of <br> variation |
| $20.60 \%$ | $7.50 \%$ | 0.36 |

## REQUIRED:

3.6 Calculate the expected return, standard deviation and coefficient of variation for King Shaka Wildlife Estate. Round off all answer to two decimal places.
3.7 Compare the share of King Shaka Wildlife Estate against the share of

Bumblebee Ltd. As a conservative investor, which share is the more viable investment and give a reason for your selection.

## QUESTION 4

4.1 Bully is saving for his retirement in 30 years' time. He has estimated that he can start saving R3 500 at the beginning of every year towards his pension at an interest rate of $7.5 \%$ per annum.

## REQUIRED

Calculate how much Bully will have saved up for retirement using a financial calculator.
4.2 Brownie would like to make a lump sum investment into an account that earns interest of $10 \%$ compounded annually for a period of 7 years in order to save for a trip overseas which will cost R35 000.

## REQUIRED

Calculate how much she needs to invest in order to meet her target using a formula.
4.3 Boxer has asked you for advice on which bank to select for his investment as the banks have quoted their rates differently. The quotes he received are presented below.

| Bank | Rate | Number of compounding <br> periods |
| :--- | ---: | :---: |
| Pets Bank | $10.50 \%$ | Quarter |
| Owners Bank | $11.00 \%$ | Annual |

## REQUIRED

4.3.1 Calculate the effective interest rate for Pets Bank.
4.3.2 Advise Boxer on which bank he should select. Motivate your answer.
4.4 The SPCA receives an amount of R8 500 per annum from an undisclosed donor. The amount has been growing at a rate of $7.5 \%$ per annum.

## REQUIRED

Calculate how much the donor must have invested as a lump sum to be able to continue with these payments indefinitely.
4.5 Max plans to invest his bonus over a two year period in order to have a deposit for a new car. His expected bonus amount is as follows:

| Year | Amount |
| :---: | ---: |
| 20.1 | R6500 |
| 20.2 | R7 200 |

His adviser has informed him that he can earn a fixed nominal interest rate of $9 \%$ for both years.

## REQUIRED

Calculate how much Max will have at the end of the investment period using interest factor tables.

## QUESTION 5

PART A
5.1 Choose the phrase, written in italics and bold, which best completes each sentence:
5.1. $\quad$ The $\qquad$ is the collective charge of all the providers of finance for every one Rand invested in the company.

- cost of capital, or
- expected return
5.1.2 The expected return of a project must be $\qquad$ than the cost of capital for the company to invest in that specific project.
- lower, or
- higher
5.1.3 The cost of $\qquad$ is calculated by adding the risk-free rate to the 'risk premium' determined by the market.
- preference shares, or
- ordinary shares
5.1.4 The dividends paid on ordinary shares and preference shares are
- tax deductible, or
- not tax deductible
5.1.5 The components of cost of capital include $\qquad$ funding.
- short-term, or
- permanent


## PART B

(15 MARKS)
Umgeni Water is a water utility that provides water to a small farming community in the rural areas of Kwazulu Natal. The company extracts water from the dams, purifies the water and supplies it to the local farming community. The community has been complaining about the quality of the water that is being supplied. The company is losing revenue as most residents are opting to make use of boreholes on their properties instead of the water supplied by Umgeni Water.

Umgeni has the option of investing in a project which will entail the purification of water to Blue drop status. Blue drop status is an international quality standard for water. This project promises to provide returns of $15 \%$ to Umgeni Water.

You have been provided with the following information:

## PERMANENT SOURCES OF FUNDING

- Ordinary share capital: 100000 shares with a market value of R8 each
- Preference shares: 500000 preference shares with a face value of R1 each
- Long-term liabilities: two long terms loans to the value of R600 000 each


## Additional information:

- The cost of ordinary shares has been calculated at $25 \%$.
- The cost of preference shares has been calculated at $16 \%$.
- The cost of debt has been calculated at $9 \%$.
- All of the costs provided are before tax.
- Assume a company tax rate of $28 \%$.


## REQUIRED:

5.2.1 Calculate the value of each component (ordinary shares, preference shares, long term liability) that the company will use as a source of finance.
5.2.2 Calculate the cost of debt.
5.2.3 Calculate the after-tax weighted average cost of capital of Umgeni Water. Show all calculations and round off to two decimals.
5.2.4 Using your answer calculated in 5.2.3, should Umgeni Water invest in the project? Motivate your answer.

