Department of Commercial Accounting

Financial Management 2A

BFB22A2

LAST ASSESSMENT OPPORTUNITY

17 NOVEMBER 2017

Time:	**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 13 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
1	Financial Instruments and Financial Markets	20	36 minutes
2	Introduction to Foreign Trade	20	36 minutes
3	Risk and Return	20	36 minutes
4	Time Value of Money	20	36 minutes
5	Cost of Capital	20	36 minutes
		100	**180 minutes**

QUESTION 1   **(20 MARKS)**

INSTRUCTIONS:

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   One of the roles of the financial markets is price setting.   **(1)**

1.2   Virtual markets are markets that are confined to a specific place and business hours.   **(1)**

1.3   Over the counter (OTC) markets are usually governed by specific legislation, as well as the exchange`s own rules.   **(1)**

1.4   Listing, also known as an initial public offer (IPO), is the process by which the company enters the equity market and sells its shares to the public through a formal exchange, for example, the JSE Ltd.   **(1)**

1.5   An auction market uses brokers who are required to ensure orderly trading of the shares.   **(1)**

INSTRUCTION:
Answer the following questions.

1.6   List any of the two factors that may have an influence on share prices.   **(2)**

1.7   The primary role of the foreign exchange market is to determine the value of one currency against another. List any two players in the foreign exchange market.   **(2)**

1.8   The Business Report in the Business Day newspaper published the following movements for listed shares on 14 August 2017.

Name	Close (cents)	Day Move (cents)	Volume trade (000)	12-month high	12-month low	DY %	PE ratio
ANGLO	**21481**	**-673**	**3271**	**23687**	**14700**	**2.9**	**7.1**
ARM	**9380**	**-210**	**504**	**12690**	**6726**	**2.4**	**8.1**
ASSORE	**22780**	**99**	**10**	**30033**	**12853**	**4.8**	**7.4**
BHP	**23280**	**-612**	**2286**	**25500**	**17436**	**3.1**	**36.4**
CHROMETCO	**20**	**2**	**1**	**45**	**10**	**0.0**	**-2.7**
KIBO	116	0	0	180	72	0.0	-5.8

Formulae:

PE = MPS ÷ EPS

DY = DPS ÷ MPS

REQUIRED:

Answer the following questions, which relates to the above table.

1.8.1   Why is the information on some of the shares above printed in bold?   **(1)**

1.8.2   Why is there is no asterisk (*) next to any of the shares in the above table?   **(1)**

1.8.3   How many shares of **ARM** changed hands on the 14th of August 2017?   **(1)**

1.8.4   Calculate the share price at which **ANGLO** opened with on the 14th of August 2017.   **(3)**

1.8.5   Calculate the dividend per **BHP** share, based on the market price on the 14th of August 2017.   **(2)**

1.8.6   Calculate the return taking into consideration your answer from 1.8.5 that an investor in **BHP** earned if he/she purchased shares at the 12-month high price and held them until the 14th of August 2017.   **(3)**

QUESTION 2
PART A   **(10 MARKS)**

You and a friend from University have recently started a small business, Hero Hats, which manufactures fashionable hats for both men and women. In today's globalised business environment, you have received an order for a batch of hats from the United States, worth US$ 7 500.

Since your business is based in Johannesburg, you will need to convert the revenue for this order into South African Rands (ZAR). Your bank has provided you with the following rates:

US$1 = R 13.20   US$1 = R 13.45

2.1   Briefly explain the role of the financial manager in the globalised business
       environment.   **(5)**
2.2   Indicate which of the two exchange rates represents the bid rate and which
       represents the offer rate. Motivate your answer.   **(2)**
2.3   Calculate the amount in ZAR that Hero Hats must recognise as revenue.

                                                                         (3)

PART B   **(10 MARKS)**

REQUIRED:

Refer to the following extract and answer the questions that follow. This table relates only to Part B.

International Currency Cross-Rate Table							
CURRENCY	**US$**	**£**	**€**	**ZAR**	**A$**	**BWP**	**HK$**	**Yu**
US ($)	1.000	0.525	0.779	6.662	1.254	**????**	7.770	8.277
UK (£)	1.905	1.000	**[B]**	12.690	2.389	2.691	14.800	15.765
EURO (€)	1.283	0.674	1.000	8.549	1.609	1.812	9.971	10.621
RSA (R)	0.150	0.079	0.117	1.000	0.188	0.212	1.166	1.242
AUSTRALIA (A$)	0.797	0.419	0.621	5.311	1.000	1.126	6.194	6.598
BOTSWANA PULA (BWP)	**????**	0.372	0.552	4.716	0.888	1.000	5.499	5.858
HONG KONG (HK$)	**[A]**	0.068	0.100	0.857	0.161	0.182	1.000	1.065
CHINA (Yu)	0.121	0.063	0.094	0.805	0.152	0.171	0.938	1.000

2.4   Calculate the missing figures denoted by the letters **[A]** and **[B]** in the table above.

(4)

2.5   Calculate how many BWP you would need to buy US$1, using the information below:

- US$1 = R13.20
- BWP1 = R1.29

(4)

2.6   Name two of the G7 countries.

(2)

QUESTION 3
PART A   **(16 MARKS)**

3.1   Mrs Middleton inherited R150 000 from a distant relative. She is strongly considering investing this money on the Alternative Exchange (AltX). After careful consideration, Mrs Middleton has shown immense interest towards an investment report illustrating that the **expected return can be 11%** for a particular share that she considers. Additional information of the share is given below:

State of the economy	Probability of economy occurring	Possible return
Boom	5%	50%
Strong	15%	30%
Moderate	10%	20%
Weak	45%	10%
Recession	25%	-10%

REQUIRED:
Calculate the standard deviation of the share considered by Mrs Middleton. **Show all your calculations in the format of a table and round off to two decimal places**.   **(7)**

3.2   Kgotso, a risk tolerant investor, is considering investing R100 000 in a portfolio consisting of two shares traded on the technological advancement index, Saloon Musk Ltd and AI Ltd. Kgotso wants to invest R50 000 in Saloon Musk Ltd and R50 000 in AI Ltd. Historic returns on the shares are as follows:

Year	Expected return Saloon Musk Ltd	Expected return AI Ltd
2015	7%	10%
2016	10%	12%

REQUIRED:
Calculate the average portfolio return for the past two years of the investment. **(9)**

QUESTION 3

PART B   **(4 MARKS)**

Indicate whether the following statements are TRUE or FALSE: Write your answer as follows, e.g. 2.1. False.

3.3   Risk is the variability of returns (from the expected) associated with a given asset.   **(1)**

3.4   Two series of numbers moving in the opposite direction are referred to as being perfectly positively correlated.   **(1)**

3.5   Expected Return is the sum of the value of each possible outcome multiplied by each outcome's likelihood.   **(1)**

3.6   Standard deviation can be used directly to compare the risk of assets provided that the expected return of the two assets are non-identical.   **(1)**

QUESTION 4   **(20 MARKS)**

4.1   Bob plans to make a donation of R5 000 to his university as an alumnus indefinitely. He would like the donation to grow at a rate of 7% per annum. He will invest a lump sum that is expected to earn nominal interest of 9% per annum.

REQUIRED

Calculate the amount that Bob needs to invest as a lump sum in order to meet his donation goal *using the formula*.   **(3)**

4.2   Spotty wants to make a deposit that will allow him to withdraw R2 000 at the beginning of every year for the next 5 years for his medical bills. His banker has informed him that he could earn 9% interest per annum on his investment.

REQUIRED

Calculate how much Spotty needs to deposit using the formula.   **(5)**

4.3   Scruffy has made deposits into an account at the end of each year as follows:

Year	Amount
2014	R3 500
2015	R4 600
2016	R5 200

REQUIRED

Calculate the annual growth rate of his deposits over the period using the financial calculator.   **(4)**

4.4   Billy has bought himself a car, which has been financed by the bank over a period of 5 years. The interest rate that he has contracted is at a nominal rate of 8% per annum. His annual payment is equal to R35 063.90

REQUIRED

Calculate the cost of the car (present value) using interest factor tables.   **(4)**

4.5   Jinx has received an inheritance of R12 000 and has decided to save it in an account earning an interest rate of 9.5% compounded annually for a period of 9 years.

REQUIRED

Calculate how much Jinx will have saved at the end of the investment period using a financial calculator. **(4)**

QUESTION 5   **(20 MARKS)**

For each of the questions below, select the most correct answer. Present your answer in the front of the answer book as follows e.g. 5.1.12 a

5.1.1   The required rate of return for the providers of capital is also known as the   **(1)**
        a) Cost of equity
        b) Cost of debt
        c) Cost of preference shares
        d) Cost of capital

5.1.2   Which of the following statements is **incorrect**? Cost of capital is   **(1)**
        a) The same as the required rate of return
        b) An appropriate discount rate to use for investing decisions
        c) The return required on a project to compensate investors for the use of their funds
        d) Equal to the cost of debt or ordinary shares, depending on which type of financing an entity uses the most

5.1.3   Weighted average cost of capital (WACC) signals a firms   **(1)**
        a) Earnings potential
        b) Expected growth rate
        c) Hurdle rate for new investments
        d) None of the above

5.1.4   Weighted average cost of capital (WACC) is a function of a firms   **(1)**
        a) Cost of equity
        b) Cost of debt
        c) A combination of the cost of equity and debt
        d) None of the above

5.1.5   When calculating a firms weighted average cost of capital (WACC), the capital structure must be based on   **(1)**
        a) Market values
        b) Book values
        c) A combination of market values and book values

        d) None of the above

5.1.6   Cost of equity is generally   **(1)**
        a) Higher than the cost of debt
        b) Lower than the cost of debt
        c) The same as the cost of debt
        d) None of the above

5.1.7   Cost of debt is generally   **(1)**
        a) Higher than the cost of equity
        b) Lower than the cost of equity
        c) The same as the cost of equity
        d) None of the above

5.1.8   From a theoretical perspective, the risk free interest rate is equal to the cost
        of   **(1)**
        a) Government bonds
        b) Municipal bonds
        c) Bonds issued by large companies
        d) None of the above

5.1.9   The company tax rate is used when calculating the cost of the individual
        components of a firm's financing. Which of the following components formula
        is affected by tax?   **(1)**
        a) Ordinary shares
        b) Preference shares
        c) Debt
        d) None of the above

5.1.10   Which of the following statements relating to the cost of debt is **correct**?   **(1)**
        a) Interest paid is tax deductible when calculating the cost of debt
        b) Interest paid is not tax deductible when calculating the cost of debt
        c) Interest paid is sometimes tax deductible when calculating the cost of
            debt
        d) None of the above

Grand Water is a water utility which provides water to the residents of a large community in an urban area. The company is faced with the challenge of water leaks caused by their ageing pipes. They urgently need to replace these pipes as the water is not reaching their customers. They have been presented with the opportunity to invest in a project which will upgrade the ageing infrastructure and provide returns of 15%.

The financial manager of Grand Water wants you to assist with calculating the company's weighted average cost of capital because he wants to use it as a 'yardstick' in the decision making process to ensure that the company's objective of maximising shareholder wealth is met.

The following information has been made available to you:

Since market values are not available, you have been provided with the following extract from the Statement of Financial Position:

EQUITY AND LIABILITIES

Ordinary share capital	R600 000
9% Preference shares	R300 000
Long-term liabilities	R1 000 000
	R1 900 000

Additional information:

- The cost of ordinary shares has been calculated at 25%.
- The cost of preference shares has been calculated at 16%.
- The pre-tax 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 after-tax cost of debt.   **(1)**

5.2.2   Calculate the weighting of each component (source of finance) of Grand Water. Show all calculations and round off to two decimals.   **(3)**

5.2.3   Calculate the after-tax weighted average cost of capital of Grand Water. Show all calculations and round off to two decimals   **(4)**

5.2.4   Using your answer calculated in 5.2.3, should Grand Water invest in the project? Motivate your answer.   **(2)**

[TOTAL = 100]