



UNIVERSITY
OF
JOHANNESBURG

Department of Commercial Accounting

Cost and Financial Management 1B

CFM11B1

Supplementary Last Assessment Opportunity December 2014

Time: 3 hours

Marks: 100

Assessors: Mrs L Boyce
Mrs L Pelcher
Mrs P Ramutumbu
Mrs N Williams

Internal moderator: Mr R Boersma

INSTRUCTIONS:

- This paper consists of 11 pages (including the cover page) and 6 pages of formulas and tables.
- Answer all questions. Show all calculations and workings clearly.
- **Start each question on a new page.**
- Silent, non-programmable calculators may be used.
- Round all calculations to two decimal places, unless stipulated otherwise.
- **INDICATE YOUR INDEX NUMBER (FROM THE CLASS LIST) IN THE TOP MIDDLE OF YOUR SCRIPT.**

Question	Topic	Marks	Time
1	Financial management function	15	27 minutes
2	Basic financial instruments and financial markets	15	27 minutes
3	Risk and uncertainty	15	27 minutes
4	Time value of money	20	36 minutes
5	Cost of capital	20	36 minutes
6	Principle of foreign trade and exchange rates	15	27 minutes
		100	180 minutes

QUESTION 1**(15 marks)****Part A:**

1.1 Which of the following are examples of *non-diversifiable* risks?

- i) The inflation rate spikes nationwide.
- ii) An unexpected terrorist event occurs.
- iii) The price of wool suddenly spikes.
- iv) Taxes on car rental companies are increased.

- a) Statements (i) and (iii)
- b) Statements (iii) and (iv)
- c) Statements (i) and (ii)
- d) Statements (ii) and (iii)

(1)

1.2 Which of the following are examples of *diversifiable* risks?

- i) The inflation rate spikes nationwide.
- ii) An unexpected terrorist event occurs.
- iii) The price of wool suddenly spikes.
- iv) Taxes are increased on car rental companies.

- a) Statements (i) and (iii)
- b) Statements (iii) and (iv)
- c) Statements (i) and (ii)
- d) Statements (ii) and (iii)

(1)

1.3

Diversification is the least effective when the returns of assets are

- a) perfectly positively correlated.
- b) moderately positively correlated.
- c) moderately negatively correlated.
- d) perfectly negatively correlated.

(1)

1.4 The best measure for evaluating the risk of a single asset is:

- a) variance.
- b) standard deviation.
- c) coefficient of variation.
- d) correlation coefficient.

(1)

1.5 Which one of the following statements are correct?

- a) Most assets in a particular market are negatively correlated.
- b) Portfolio risk can be reduced by combining assets in the portfolio that are perfectly positively correlated.
- c) Expected portfolio return is the weighted average of the individual assets' returns.
- d) Expected portfolio risk is the weighted average of the individual assets' standard deviations.

(1)

Part B:

1.6 Tabulate three differences between financial management and financial accounting.

(6)

1.7 Name and describe the two main decisions that the financial manager must make.

(4)

QUESTION 2**(15 marks)****Formulae:**

$$PE = MPS \div EPS$$

$$DY = DPS \div MPS$$

This question consists of TWO individual parts.

PART A

- 2.1 Name the market in which negotiable certificates of deposit and commercial paper belong. **(1)**
- 2.2 There are 5 considerations that the financial manager must consider when the company is in need of funds. Name 3 such considerations. **(3)**
- 2.3 Identify the market where initial public offerings are traded. **(1)**
- 2.4 The SATRIX 40 has decreased by 54 base points and is quoted at 4606 points on 29 August 2014.
- Name the term that would be used to describe the nature of the SATRIX 40? **(1)**
- 2.5 Name 3 factors that can affect the exchange rate. **(3)**

PART B

Use the information below to answer question 2.6.1-2.6.4 (extracted from the Business Report on 29 August 2014):

Name	Close (cents)	High	Low	Day move (cents)	Volume trade (000)	12m %	DY	PE
MASSMART	13188	13694	13077	-251	343.086	-12.7	2.7	21.4
MR PRICE	20399	20789	20343	-263	386.058	70.0	2.0	26.7
WOOLIES	7906	7951	7850	153	4450.989	32.1	2.7	21.6
ABIL*	31	-	-	-	-	-	-97.4	-0.1

REQUIRED:

- 2.6.1 Calculate the opening price of a WOOLIES share. (1)
- 2.6.2 Indicate whether the share price of MR PRICE increased or decreased in the past year? (1)
- 2.6.3 Calculate the dividends received for one MASSMART share. (2)
- 2.6.4 Calculate the earnings yield of WOOLIES. (2)

QUESTION 3**(15 marks)**

Instrument	Expected Return	Standard deviation
Debentures in Cha Cha Ltd	9.6%	3.23%
Cumulative preference shares in Tango Ltd	14.1%	4.31%
Ordinary shares in Waltz Ltd, an established blue chip company	17.3%	5.12%
Ordinary shares in Salsa Ltd, a young, growing company listed on the Venture capital market	?	?

You have not yet completed the calculation for Salsa Ltd. You have, however, collected the following information:

Possible return	Probability
25%	14%
33%	17%
38%	27%

Management has decided that capital growth on the investment is more important than to receive steady cash flow. The company has always displayed an appetite for taking on risk.

REQUIRED:

- 3.1 Discuss what you expect of the missing statistics for Salsa Ltd when compared to Waltz Ltd. Motivate your answer. (You should not perform any calculations in answering this question.) **(2)**
- 3.2 Calculate the expected return for Salsa Ltd. **(3)**
- 3.3 **Assume that the expected return for Salsa Ltd is 20%.** Calculate the standard deviation for Salsa Ltd. **(5)**

- 3.4 What does a coefficient of variation measure? (1)
- 3.5 Calculate the coefficient of variation for Cha Cha Ltd and Tango Ltd. (2)
- 3.6 Assume that you are an investor who prefers the lowest level of risk from an investment. Based on your calculations in 3.5 above, which company would you choose to invest in, and why? (2)

QUESTION 4**(20 marks)**

- 4.1 Your dad needs R50 000 in five years' time to pay for your wedding. He believes that he will earn an interest rate of 11% compounded annually. Calculate the amount that he will have to deposit at the beginning of each year by using the applicable **interest rate factor table**. Round your answer off to two decimal places. **(3)**
- 4.2 Colin wants to invest R2 500 at the beginning of each year at an interest rate of 5% p.a. compounded yearly. Calculate how much he will have after 15 years by using your **calculator**. Show all calculations and round off to two decimal places. **(5)**
- 4.3 Gladys bought a holiday home in 2002 and currently in 2014 the house is valued at R4 500 000. The agent has indicated that the market has increased at 13% p.a. compounded annually. Calculate how much Gladys paid for the house by using the applicable **interest rate factor table**. Round off to two decimal places. **(2)**
- 4.4 The following mixed stream cash flows are provided at the beginning of each year:

Year	Cash flow
1	R6 000
2	R4 000
3	R5 000

- Calculate the future value of each stream using an interest rate of 11% compounded annually. Show all calculations, use the **interest rate factor tables** and round your answer off to two decimal places. **(4)**
- 4.5 Mrs Bless would like to buy a house and she currently has a deposit of R24 000. She has been looking around and the perfect house will cost her R1 500 000. Mrs Bless is planning to invest her deposit at the bank, but she does not know how long it will take her to accumulate an amount of R1 500 000, if the bank provides an interest rate of 21.76% p.a. compounded yearly. Calculate the period it will take to accumulate R1 500 000 by using your **calculator**. **(5)**

QUESTION 5**(20 marks)**

5.1 X-Men Ltd is busy with the calculation of its cost of equity and they have requested your assistance. On investigation, the following information has been found. The return on the R153 government bonds is 8% at present. Due to the recent wars in the Middle East, the risk in the global markets is perceived as high and a risk premium of 6% is considered to be appropriate. The company has a fairly low business risk and financial risk. A further premium of 3% is considered appropriate.

REQUIRED:

Calculate X-Men Ltd's required rate of return on **Equity**. Show all calculations. **(4)**

5.2 X-Men Ltd is busy with the calculation of its cost of preference shares and they have requested your assistance. On investigation, the following information has been found. 100 000 redeemable preference shares of 8% were issued 5 years ago at a par value of R5. The shares are redeemable at par. X-Men Ltd's preference shares are currently trading at R5,15.

REQUIRED:

Calculate X-Men Ltd's cost of **preference shares**. Show all calculations and round your answer off to two decimal places. **(8)**

5.3 X-Men Ltd is busy with the calculation of its cost of debt and they have requested your assistance. On investigation, the following information has been found. Taxation is currently 28%. A R 400 000 loan was taken out 4 years ago. The loan is repayable in 4 equal instalments of R 115 000 per year starting from today.

REQUIRED:

5.3.1 Calculate X-Men Ltd's **cost of debt**. **(7)**

- 5.4 Advise X-Men Ltd on whether or not they should use the required return of the individual sources of finance to evaluate potential projects that the company can invest in or rather use the weighted average cost of capital (WACC)? Do not perform any calculations as part of your answer. (1)

QUESTION 6**(15 marks)**

The following Rand exchange rate is provided as at 11 September 2014:

Table 6.1:		
Bid rate	Sell (offer) rate	Forward rate
US\$1 = R10.66	US\$1 = R10.86	US\$1 = R11.19
CAD\$1 = R9.77	CAD\$1 = R10.35	CAD\$1 = R11.05
AUS\$1 = R10.23	AUS\$1 = R9.73	AUS\$1 = R10.38

REQUIRED:

- 6.1 What does 'Sell (offer) rate' mean? Use the above US\$ exchange rate to illustrate your answer. (2)
- 6.2 What does the 'forward rate' mean? (3)
- 6.3 Explain what a 'Rand hedge' company is. (1)
- 6.4 Indicate two major trade currencies, other than the three currencies indicated in table 6.1 above. (2)
- 6.5 The company bought goods worth CAD\$2 430 on 11 September 2014. Calculate how much the company will pay if they would buy CAD\$-currency on the 11th of September 2014? Show all calculations and round the answer off to two decimal places. (1)
- 6.6 You would like to buy Anglo American shares. You have done some investment research and you noticed the following share price as per stock exchange markets:

JSE	NYSE
R633 per share	\$59 per share

- 6.6.1 Explain what 'arbitrage' is. (2)
- 6.6.2 Calculate the arbitrage opportunity. Show all calculations and round your answer off to two decimal places. (4)

[TOTAL MARKS = 100]