UNIVERSITY
OF
JOHANNESBURG

PROGRAMME	:	M.COM BUSINESS MANAGEMENT
SUBJECT	:	**FINANCIAL MANAGEMENT**
CODE	:	**BMB9X05**
DATE	:	June 2016
DURATION	:	3 hours
WEIGHT	:	50%
TOTAL MARKS	:	100

EXAMINER	:	Prof G Els (UJ)
MODERATOR	:	Prof CH van Schalkwyk (UP)

INSTRUCTIONS TO CANDIDATES

1. Answer ALL the questions.
2. Silent, non-programmable calculators may be used, unless instructed otherwise.
3. Show ALL calculations clearly.
4. Round all calculations to two decimal places unless instructed otherwise.
5. This is an <u>open book assessment opportunity</u> where candidates are allowed to refer to the prescribed textbook *Corporate Finance – A South African Perspective.*

QUESTION 1 [25 marks]

A company is considering which of two projects it should invest in. It has only got sufficient funds to invest in one project. The finance director thinks that the project with the higher NPV should be chosen, whereas the managing director thinks that the one with the higher IRR should be undertaken, especially as both projects have the same initial investment of R2 000 000 life of five years after investment.

The company has a cost of capital of 10% and the net cash flows after tax of the projects are given as follows:

Year	Project A (R)	Project B (R)
Year 1	350 000	2 180 000
Year 2	800 000	100 000
Year 3	900 000	100 000
Year 4	750 000	40 000
Year 5	200 000	30 000

REQUIRED:

a) Calculate the NPV and IRR of <u>each</u> project. (10)

b) State which project, if any, the finance director and which project the managing director would recommend. Motivate your answers. (6)

c) Explain the differences in the ranking of the two projects in view of the remarks made by the directors. (5)

d) Another member of the management team stated that they should consider using the accounting rate of return (ARR) to evaluate the projects. Explain what the ARR is and state ONE advantage and ONE disadvantage of using it. (4)

QUESTION 2 [25 marks]

Delta is a medium-sized company which specialises in the manufacture of ethically sourced wood-based products. Due to the recession and to remain competitive with other lower cost manufacturers the company has been forced to extend their credit terms to their customers. This has raised concerns with the finance director about the strength of the company's working capital cycle.

Below is some summary information from the recent two years' accounts:

	2014 R'000	2013 R'000
Sales revenue	800.0	692.0
Cost of sales	572.0	528.0
Gross profit	228.0	164.0
Current assets	**225.0**	**193.7**
Inventories	45.6	41.5
Accounts receivable	163.4	134.2
Cash at bank and in hand	16.0	18.0
Current liabilities	**193.6**	**162.0**
Overdraft	18.4	13.1
Taxes	24.0	18.0
Dividend	7.2	5.5
Accounts payable	144.0	125.4
Net current assets	**31.4**	**31.7**

REQUIRED:

a) You are the financial accountant for the company and the finance director has asked you to compile the relevant working capital cycle ratios based on the information above. (12)

b) Write a memo to the finance director explaining each ratio you have calculated, and comment on the change of the ratio between the two years, highlighting any trends which may be of concern in the future. (13)

QUESTION 3 [25 marks]

Question 3.1

Johnny is feeling the pressure! All of his friends are driving brand new cars and he desperately wants to purchase a car.

The following advert played during a commercial break while Johnny was watching the final episode of his favourite television show:

Ceugeot - Pitroen Orsa 1.0 Prime

Number of monthly instalments: 72

Interest Rate: Prime plus 2.5% p.a. compounded quarterly

Retail Price: R132 000

Deposit required: 10% of retail price

Final payment: R25 750

Johnny applied online for a bank loan and it was approved the very next day!

His banker informed him that the prime rate is currently 9% p.a. compounded quarterly.

REQUIRED:

a) Calculate the quarterly payments that Johnny would need to make. **(6)**

b) Calculate the total amount repayable by Johnny for this vehicle. **(6)**

c) What is this 'prime' interest rate referred to in the advertisement? **(3)**

Question 3.2

Two years ago, Three Ltd started saving to accumulate a total of R900 000 by the end of five years so that they could replace their current machine that was expected to be obsolete by that date.

Three Ltd has been making equal semi-annual deposits in arrears into a fund which has earned interest at 6% per annum compounded semi-annually. To date, Three Ltd has made four equal semi-annual deposits in arrears into the fund.

The Rand has recently depreciated significantly against the US dollar and Three Ltd will now need to accumulate R1 million in three years' time to be able to afford the machine. In addition, the interest that Three Ltd can earn has decreased to 5.5% per annum compounded semi-annually. As a result, Three Ltd has decided to make deposits in advance into the fund for the remaining three years.

REQUIRED:

a) Distinguish between an annuity, annuity due as well as a perpetuity and explain which is/are evident in the scenario above. **(4)**

b) Calculate the increased semi-annual deposit that Three Ltd will need to make in advance so that the fund will contain R1 million in three years' time. **(6)**

QUESTION 4 [25 marks]

The following information is available relating to ABC Company:

◦ Risk free rate of return	3%
● Market premium	5%
● WACC	7.3%
● Beta	2.5
● Current market price/share	R8,60
● Last dividend paid/share	R1,20

REQUIRED:

a) Using the information above, calculate the required rate of return and the cost of equity capital of ABC Company. **(10)**

b) Explain how a company's dividend affects its share price. State what happens to the share price when a share is classified as 'cum div' and when it is 'ex div'? **(6)**

c) Explain THREE weaknesses of the dividend growth model. Motivate your answer with examples. **(9)**

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