

# **Tutorial Letter Assignment 2**

**MAC3702**

**APPLICATION OF FINANCIAL MANAGEMENT  
TECHNIQUES**

**Semester 2**

**Department of Management Accounting**

**IMPORTANT INFORMATION:**

- Please activate your myLife email address and ensure you have regular access to the myUnisa module site for MAC3702, since this is a fully online module.
- Please familiarise yourself with the fully online study environment, since you will not receive printed assignment tutorial letters for this module.

**MAC3702**  
**APPLICATION OF FINANCIAL MANAGEMENT TECHNIQUES**  
**ASSIGNMENT 03/2015 FOR THE SECOND SEMESTER**

**DUE DATE: 19/08/2015**

**UNIQUE NUMBER: 585335**

For this assignment you must study **Topic 1-7**.

This assignment consists of four (4) questions and counts 100 marks in total. Answer each question and number your answers clearly on your answer sheet. Please note that only one or parts of questions will be marked. It is therefore important that you answer all the questions.

**VERY IMPORTANT**

**No multiple choice questions (MCQ) will be asked in the examination; therefore you must prepare yourselves to answer scenario type of questions for all the topics in this module.**

This assignment is a **written assignment** and can either be written or typed; converted to a **PDF document** and submitted online on *myUnisa*.

**Assignments may not be submitted by post, fax or email.**

Please remember to enter the **correct unique number of the assignment AND your correct student number** on the assignment submitted for marking.

**QUESTION 1 (40 marks; 72 minutes)**

Areyeng (Pty) Ltd is a company that specialises in the transportation of products for South African retailers. The following financial information is available for Areyeng (Pty) Ltd:

**Statement of financial position at 31 December 2X15**

	<b>2X15 R'000</b>
<b>Assets</b>	
<b>Non-current assets</b>	<b>387 614</b>
Property, plant and equipment	306 676
Investments in associates	5 408
Other financial assets	75 530
<b>Current assets</b>	<b>349 563</b>
Inventory	169 694
Trade and other receivables	168 085
Prepayments	1 512
Cash and cash equivalents	10 272
<b>Total assets</b>	<b>737 177</b>
<b>Equity and liabilities</b>	
<b>Total equity</b>	<b>349 138</b>
Ordinary share capital (1 000 000 ordinary shares)	75 000
Non-distributable reserve	53 095
Retained income	221 043
<b>Total liabilities</b>	<b>388 039</b>
<b>Non-current liabilities</b>	<b>144 938</b>
Long-term loans	89 156
Debentures	15 000
Preference shares (500 000 preference shares)	25 000
Deferred tax	15 782
<b>Current liabilities</b>	<b>243 101</b>
Trade payables	187 071
Other payables	29 610
SARS	26 420
<b>Total equity and liabilities</b>	<b>737 177</b>

**QUESTION 1 (continued)****Statement of profit or loss and other comprehensive income for the year ended 31 December 2X15**

	<b>2X15 R'000</b>
Turnover	1 149 808
Cost of sales	(287 658)
Gross profit	<u>862 150</u>
Operating cost	(740 566)
Other operating income	<u>7 510</u>
Earnings before interest and tax	129 094
Finance cost	(13 628)
Earnings after interest before tax	<u>115 466</u>
Income tax	(33 916)
Profit for the year	<u><u><b>81 550</b></u></u>
Operating profit includes depreciation totalling	18 730

**Additional information**

- Ordinary shares currently trade at a market value of R400 each, and cost of equity is 20%. During the 2014 financial year, the company decided to issue an additional 200 000 ordinary shares for its capital expansion programme.
- The preference shares have no conversion rights and carry a dividend pay-out of 11%. Similar preference shares are currently trading at 10%.
- The six-year term debentures were issued at the beginning of the year, and are redeemable at a discount of 5%. These debentures carry an interest rate of 12,5%. Similar debentures are trading at 10%.
- The long-term loan matures in 8 years' time and bears a fixed interest of 12,5%. Interest is paid annually in arrears.
- Trade creditors are normally paid in full within the normal credit period without any interest being paid or discount received.
- The bank overdraft rate is 18%.
- The current tax rate is 28%.

**QUESTION 1 (continued)**

- The following are industry (“market”) averages:

Current ratio	2 : 1
Acid ratio	1 : 1
Debt ratio	45%
Debt to equity ratio	67%
Interest cover (times)	7,5
Net debt to EBITDA ratio	1,1 : 1
Capital gearing ratio	40%
Return on assets	17,25%
Return on operating assets	18,75%
Prime lending rate	9,25%
Net profit percentage	15%
Gross profit percentage	70%

**REQUIRED**

- (a) **Calculate** and **comment** on all possible capital structure and solvency ratios for Areyeng (Pty) Ltd for the year 2x15, using book values.

*Communication skills – layout and structure, logical argument*

(20)

- (b) **Calculate the weighted average cost of capital (WACC)** based on the current capital structure for 2x15 based on market values.

(20)

*All answers must be rounded off to the nearest **two decimal places**.*

**[40]**

**QUESTION 2 (15 marks; 27 minutes)**

Plamba (Pty) Ltd is a company that distributes plumbing parts to industrial developers. The following information relates to the current and other aspects of the company's business:

**Sales and receivables**

- Sales for the year amounted to R15 750 000.
- A 2% discount was offered to debtors that paid within 10 days.
- Bad debt provision for the current year amounted to 3% of credit sales.
- Currently, 40% of debtors pay within 10 days, while the remaining debtors take 30 days on average to settle their accounts.

As many of the customers cannot afford to settle their accounts within the credit terms due to the current economic circumstances, the company has decided to make changes to its current credit policy. The financial manager proposes to grant credit on 5/10 (5% discount for payment within 10 days) net 45 basis in future. The financial manager anticipates that 70% of current debtors will now make use of this option (viz. 70% of current debtors will qualify for a 5% discount), whilst the remaining current debtors will pay within 45 days on average. Bad debt provision for existing customers will remain the same.

The following assumptions were also included in the proposal:

- Sales will increase with R1 500 000 due to new customers.
- 65% of new customers will pay within the discount period, while the remaining new customers will pay within 60 days.
- The increase in sales is expected to result in a R950 000 increase in inventory, and trade payables are likely to increase with R500 000.
- Bad debt will increase with R50 000 as a result of the new sales.

**Purchases and payables**

Plamba (Pty) Ltd purchases inventory in terms of a 3/10 net 30 days policy. The company does not pay within 10 days and therefore does not receive any discount. Management is of the opinion that they will not make use of the discount and that they should consider to delay the payment of creditors even further by only paying within 45 days in order to finance any additional working capital requirements.

**General information**

- All sales are on credit.
- The contribution ratio is determined at 35%.
- The applicable tax rate is 28% and WACC is equal to 20%.

Assume there are 365 days in a year.

**QUESTION 2 (continued)****REQUIRED**

- (a) **Determine** the impact of the new credit policy on the company's profitability and **comment** whether the company should accept the new credit policy by means of the annual after-tax cash flow calculations.

*Communication skills – layout and structure, logical argument* (10)

- (b) **Explain and calculate** the effective cost of creditor financing if you accept the proposal by management in the following circumstances:

(i) the current payment practice **stays intact** and

(ii) the payment is **delayed to 45 days.** (5)

**[15]**

**QUESTION 3 (15 marks; 27 minutes)**

**This question consists of three sub-questions; each question must be considered independently.**

**3.1** The following information is available in the South African currency market on 31 July 20X15.

	<b>ZAR/£1</b>
Spot rate	R16,5404/£
South African (borrowing) interest rate	9,0 % per annum
United Kingdom (borrowing) interest rate	1,5 % per annum
South African inflation rate	6,8% per annum
United Kingdom inflation rate	2,5% per annum

Assume there are 360 days in a year.

**REQUIRED**

- (a) Use the interest rate parity principle to **determine** the 90-day forward rate. (4)
- (b) Use the purchasing power parity theory and **determine** the forward rate for 31 July 20X17. (4)

*All answers must be rounded off to the nearest **four decimal places**.*

**3.2** Chiefs Ltd's shares are currently trading at R125 each. The company proposes a net cash dividend of R2,75 per share held or scrip dividends to all shareholders holding 100 shares or more on the basis of 2,5 shares for every R275 of cash dividends or 100 shares held. Fractions of shares will be converted to cash credits held on behalf of shareholders.

**REQUIRED**

If a shareholder holds 5 500 shares in Chiefs Ltd, how many shares will he or she be **entitled** to if he or she chooses the option of scrip dividends instead of a cash dividend?

(3)



**QUESTION 3 (continued)**

**3.3** Brian successfully tendered for R2 500 000 in treasury bills on 29/07/2015. The price of his investment was R2 400 000. Market discount rates over the 91 day period to maturity were as follows:

29/07/2015	15,45%
29/08/2015	17,30%
29/09/2015	18,90%

Assume there are 365 days in a year.

**REQUIRED**

**Calculate** the effective yield of the investment if Brian holds the investment until maturity.

(4)

**[15]**

**QUESTION 4 (30 marks; 54 minutes)****PART A**

Imperativ Holdings is the world's leading consumer and industrial logistics company listed on the JSE (SA) and on the LSE (UK). The company's economists expect the oil prices to continue to drop for the next five years, and the rand to strengthen against the US dollar. The management has now decided to enter the car rental industry for 5 years and is investigating whether to buy new cars (Project N) or buy pre-owned cars (Project O). A fleet of brand new cars will cost the company R85 000 000, while pre-owned cars are estimated to cost R49 750 000. All its rented cars will come with a free full tank, a standard insurance cover and free 100 km per day.

The company will have to lease premises (showrooms and depot facilities) for the duration of the project and will be required to pay an upfront refundable deposit of R80 000 for pre-owned cars and R100 000 for new cars.

The table below includes more information relating to the two projects:

	<b>Project N</b>	<b>Project O</b>
Realisable value after 5 years	R15 000 000	
Realisable value after 3 years		R9 500 000
Rental income	R64 500 000	R64 500 000
Fixed cost per annum	R20 000 000	R20 000 000
Variable cost per annum	R15 000 000	R21 000 000
Net present value	?	R907 880

**Additional information**

- SARS allows for wear and tear over five years on new vehicles and three years on the used vehicles.
- WACC is 18%, and the corporate tax rate is 28%.

**REQUIRED**

**Prepare** a memorandum in which you:

- (a) advise management on whether they should **invest** in any of these two projects by **making use** of the net present value (NPV) calculation (show your workings)

*Communication skills – layout and structure, logical argument*

(10)

- (b) advise management on which project they should **invest** in if applicable (show your workings) (4)

- (c) **list seven qualitative factors** that the management should consider when they make their investment decision (7)

- (d) **discuss** some of the **shortcomings when using the NPV method** for capital budgeting (4)

**PART B**

The management of Imperativ Holdings will also have to consider how to finance the capital expansion programme detailed in **PART A** above. Two financing alternatives are being explored:

- (1) 19% convertible preference shares  
 (2) bonds with a coupon rate of 16%

**REQUIRED**

**Discuss** which financing option you would **recommend** to the management of Imperativ Holdings and **why** you choose the specific option.

(5)

**[30]**

**TOTAL: 100 MARKS**