**UNIVERSITY EXAMINATIONS** 





# MAC3702

October/November 2014

# APPLICATION OF FINANCIAL MANAGEMENT TECHNIQUES

Duration

2 Hours

100 Marks

#### **EXAMINATION PANEL AS APPOINTED BY THE DEPARTMENT**

Use of a non-programmable pocket calculator is permissible.

Closed book examination

This examination question paper remains the property of the University of South Africa and may not be removed from the examination venue

This paper consists of 13 pages

# **PLEASE NOTE:**

- 1 This paper consists of FIVE (5) questions
- 2 All questions must be answered
- 3 Basic workings, where applicable, must be shown
- 4 Ensure that you are handed the correct examination script (blue) by the invigilator
- 5. EACH QUESTION MUST COMMENCE ON A SEPERATE PAGE
- A combined final mark of 50% is required to pass this module. The final mark is calculated as follows (a year-mark calculated as 10% of the average mark obtained for the first three assignments) + (90% of the mark obtained in this examination). The year-mark will only be taken into account if a subminimum of 40% is obtained for this examination.

# PROPOSED TIMETABLE

Question	Topic	Marks	Minutes
1	Ratio analysis	22	26
2	Working capital management	13	16
3	Independent projects	20	24
4	Weighted Average Cost of Capital	30	36
5	Short questions	15	18
		100	120

# QUESTION 1 (22 marks, 26 minutes)

The information provided in this question also applies to Question 2.

# DRESSED FOR SUCCESS LIMITED

Dressed for Success Limited trades in the retail clothing sector and is listed on the general retail sector of the Johannesburg Securities Exchange (JSE). The company focuses on young buyers. Their unaudited results for 31 December 2X14 are shown below.

# Statement of comprehensive income for the year ended 31 December 2X14

	2X14	2X13
	R'000	R'000
Turnover	908 191	814 521
Cost of sales	(563 078)	(553 874)
Opening inventory	120 000	198 000
Purchases	657 078	475 874
Less Closing inventory	(214 000)	(120 000)
Gross profit	345 113	260 647
Operating expenses	(187 634)	(125 340)
Operating profit before other income, interest and tax	157 479	135 307
Finance charges (net)	(23 547)	(18 712)
Profit after interest before tax	133 932	116 595
Tax	(37 500)	(32 647)
Profit after tax	96 432	83 948

# QUESTION 1 (continued)

# Statement of financial position at 31 December 2X14

	2X14 R'000	2X13 R'000
Assets		
Non- current assets	330 187	314 124
Current assets	462 434	261 033
Inventory	214 000	120 000
Trade receivables	89 669	45 421
Cash balances and investments	158 765	95 612
	L,,	, 1
Total Assets	792 621	575 157
Equity and liabilities		
Equity	343 876	294 876
Ordinary share capital	82 000	82 000
(82 million ordinary shares at R1 each)		
Accumulated reserves	261 876	212 876
Non-current liabilities	188 386	111 579
Long term loan	188 386	111 579
Current liabilities	260 359	168 702
Trade payables	185 269	140 174
Accruals and provisions	75 090	28 528
Total equity and liabilities	792 621	575 157

# QUESTION 1 (continued)

#### FINANCIAL RATIOS OF DRESSED FOR SUCCESS LIMITED.

Ratio	2X13	2X14
Gross profit percentage	32%	?
Net operating profit percentage	16,6%	?
Change in turnover	10,31%	?
Return on assets	22%	?
Return on equity	27,9%	7
Debtors collection period	29,1 days	7
Inventory days	79,1 days	?
	Gross profit percentage  Net operating profit percentage  Change in turnover  Return on assets  Return on equity  Debtors collection period	Gross profit percentage 32%  Net operating profit percentage 16,6%  Change in turnover 10,31%  Return on assets 22%  Return on equity 27,9%  Debtors collection period 29,1 days

#### Additional information

- The company launched a new exclusive clothing brand at the beginning of 2X14 which is very popular amongst most teenagers
- The annual sales occurred evenly throughout the year Of the turnover in 2014, 65% was credit sales. This represents a slight decrease from the 70% credit sales in 2X13. The financial manager has reviewed the company's credit sales policy and intends to decrease credit sales to 55% of turnover from 2X15 onwards.
- 50% of the net profit is retained within the company
- All inventories are purchased on credit A substantial part of the new clothing brand is imported from China. This inventory is ordered in large quantities to save on shipping costs.
- The budgeted turnover of the company is R1 089 829 000 for 2X15
- There are 365 days in a year
- The company tax rate is 28%

# **QUESTION 1 (continued)**

You may ignore the impact of VAT

# **REQUIRED:**

a) Calculate ratios (i) to (vii) for 2X14 in the table above, and provide possible reasons for the deterioration or improvement thereof from 2X13 to 2X14. Take the additional information into account for providing these reasons. Round your final answer to the nearest two decimal places. [22]

[TURN OVER]

QUESTION 2 (13 marks; 16 minutes)

# DRESSED FOR SUCCESS LIMITED

Use the same set of financial information and additional information as set out in QUESTION 1.

- (a) Calculate the additional working capital required to support the increased sales budget for 2X15 assuming that the 2X14 closing working capital levels are considered optimal (Round your answer to the nearest rand)
- (b) Management has decided to adopt a more **aggressive** working capital management policy from 2X15 onwards. Give three examples of what the company can do in order to achieve a more aggressive working capital management policy. Consider the trade debtors, inventory and trade creditors of the company. (3)

[13]

QUESTION 3 (20 marks; 24 minutes)

SPECIAL SHOES (PTY) LTD

Section A (14 marks; 17 minutes)

Management has spent the past year to address the working capital issues that the company has faced. After adjustments were made to the company's working capital management policy, Special Shoes (Pty). Ltd has excess cash available to invest in a project. The company calculated that it will have R1 800 000 available for the investment and management is considering the following two divisible projects for its investment.

Year	Cash flow for project X (Rand)	Cash flow for project Z (Rand)
0	(1 000 000)	(1 300 000)
1	325 000	410 000
2	450 000	545 000
3	500 000	700 000

The results of the feasibility studies of the two projects indicated that Project Z received a better rating for the environmental impact study than project X Project Z will also be more labour intensive than project X Project X will require staff that are better qualified compared to the requirements of Project Z

The company has a target weighted average cost of capital (WACC) of 10%

#### REQUIRED.

- (a) Calculate the net present value (NPV) for the two projects
- (b) Determine in which project or projects the management of Special Shoes (Pty) Ltd should invest the R1 800 000 Assume these projects can be expanded, contracted or combined Support your motivation with the necessary calculations and round answers to all calculations to the nearest Rand (5)

(5)

# **QUESTION 3 (continued)**

(c) List three environmental and/or quantitative factors that management should consider when making their final decision. Discuss how these factors will impact your conclusion made in (b) above.

(4)

[14]

# Section B (6 marks, 7 minutes)

Use the same information as in section A above but for purposes of this Section, assume that project X and project Z are INDIVISABLE.

#### **REQUIRED**

- (a) Explain the difference between mutually exclusive and independent projects (2)
- (b) If Project X and Project Z were mutually exclusive projects, in which project should the company invest? Provide reasons for your conclusion (2)
- (c) If Project X and Project Z were independent projects, in which project should the company invest? Provide reasons for your conclusion (2)

[6]

[20]

# QUESTION 4 (30 marks; 36 minutes)

Hotels 365 Ltd is a hotel group that operates in the Western Cape

The following is an extract of the Statement of financial position for 30 June 2X14

	Note	Rand (million)
Equity and Liabilities		
Total equity		3 250
Shareholder's equity (20 million issued)	1	2 500
Retained earnings		750
Total liabilities		3 270
Non – current liabilities		2 200
Preference shares (5 million issued)	2	1 250
Debentures	3	850
Deferred tax		100
Current liabilities		1 070
Trade and other payables	4	550
Bank overdraft	5	500
SARS		20
Total equity and liabilities	L	6 520
. •		

# Additional information

# 1 Ordinary share capital

- The number of issued shares has remained unchanged since the incorporation of the company
- The first dividends were declared on 1 July 2X04 and amounted to R12,50 per share
- Since the first year of declaration the dividends increased at a consistent growth rate and management expects that the growth rate will continue in future

[TURN OVER]

# **QUESTION 4 (continued)**

- Dividends declared on ordinary shares for 2X14 was R25 per share. The payment of the dividends are however still outstanding.
- Ordinary shares currently trade at a market value of R225 (cum div) per share

#### 2. Preference shares

- The non- redeemable preference shares have no conversion rights and carry out a dividend pay-out ratio of 12% per annum
- Similar preference shares have a current market return of 10% per annum

#### 3. Debentures

Debentures mature in 8 years' time at a discount of 2%. The debentures carry an
interest rate of 15% (before tax) per annum. The prime interest rate decreased since
and similar debentures are currently trading at a rate of 12,5% (before tax) per
annum.

# 4. Trade and other payables

- Trade creditors are paid within the credit period without any interest charged or discount received
- The long term financing structure does not include any credit (financing) that relates to working capital

#### 5. Bank overdraft

 The bank overdraft rate is 20% per annum and it forms part of the normal working capital funding

### 6 2X15 expansion strategy

- The strategy for 2X15 is to expand the current service offerings to the Eastern Cape area. This expansion will amount to R540 million.
- The project will be financed in the ratio of 60% equity and 40% debt
- R124 million of the retained earnings are available for funding of the expansion
- The new ordinary shares will be issued at the current market value. Issue cost of 8% will apply

# QUESTION 4 (continued)

#### 7. Other

- The current tax rate is 28%
- You may ignore dividend tax
- Cost of capital is calculated based on the market values

# REQUIRED.

- (a) Calculate the weighted average cost of capital (WACC) based on the current capital structure for 2X14 by making use of the market values (Make use of your financial calculator where applicable and include the steps on the financial calculator in your answer sheet)
- (b) Briefly explain how the issuing cost will impact the cost of equity of the new shares (2)
- (c) Calculate the number of ordinary shares which must be issued in order to finance the expansions (4)
- (d) List two assumptions behind the use of a firm's current WACC as the discount rate in an investment appraisal (2)

(Round your calculations and answers to the nearest rand and full percentage)

[30]

# QUESTION 5 (15 marks, 18 minutes)

This question consists of three questions, each question must be considered independently.

- The management team of Impala limited is in the process of negotiating financing for a new investment. The majority of the management team does not have a financial background. Prepare a memorandum for management where you include the following information.
  - (a) The relationship between risk and return (1)
  - (b) Three general factors that will impact on the local interest rate (3)
  - (c) Three factors that will determine what interest rate a financing institution will charge a specific customer (3)
  - (d) Hedging techniques that will reduce interest rate risk (2)

[9]

Toys4U Ltd's shares are currently trading at R250 each. The company proposes a net cash dividend of R5,50 per share held or scrip dividends to all shareholders holding 200 shares or more on the basis of 5 shares for every R550 of cash dividends or 200 shares held.

Fractions of shares will be converted to cash credits held on behalf of shareholders

If a shareholder holds 11 000 shares in Toys4U Ltd, how many shares will be or she be entitled to if he or she chooses the option of scrip dividends instead of a cash dividend?

(3)

# **QUESTION 5 (continued)**

5 3 The following information is available in the South African currency market on 30 June 2x14

	ZAR/£1
Spot rate	R18,1527/£
South African (borrowing) interest rate	9,5 % per annum
United Kingdom (borrowing) interest rate	1,5 % per annum
South African inflation rate	6,3% per annum
United Kingdom inflation rate	2,5% per annum

Assume there are 360 days in a year

# REQUIRED:

Use the purchasing power parity theory and determine the forward rate for 30 June 2X17 (Round your answer to the nearest four decimals ) (3)

[15]

© UNISA

2014