UNIVERSITY OF JOHANNESBURG

Department of Finance and Investment Management

Financial Management 3B

BSR3B01

LAST ASSESSMENT OPPORTUNITY

23 November 2016

Time: 200 Minutes **Marks: 150**

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Internal Moderator: Mr K Thomas (UJ)

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INSTRUCTIONS:

- This paper consists of **16** pages.
- The total of 200 minutes comprises of 20 minutes reading time and 180 minutes writing time.
- The reading time will be **before the examination begins** during which you should read the question paper and, if you wish, highlight and/or make notes on the question paper. However, you will **not** be allowed, **under any circumstances**, to open the answer book and start writing or use your calculator during this reading time.
- You are strongly advised to carefully read ALL the question requirements before attempting the question concerned (that is all parts and/or sub questions).
- Start each question on a new page.
- Silent, non-programmable calculators may be used, unless otherwise instructed.
- Where applicable, show all calculations clearly.
- Answers with Tippex and in pencil will **not** be marked.
- Scratch out all empty pages.
- Good luck!

Section	Topic	Marks	Time
	Reading	---	20 minutes
A	Objective questions	50	60 minutes
B	Short answer questions – various topics	25	30 minutes
C	Valuations	25	30 minutes
	Analysis and interpretation of financial information	25	30 minutes
	Lease vs buy	25	30 minutes
		150	**200 minutes**

SECTION A **[50 MARKS]**

QUESTION 1 **(50 Marks)**
[Where applicable, round all answers to the nearest rand]

Select the correct option by WRITING the corresponding letter of the answer on the answer sheet.

Question 1.1

Which of the following is correct regarding a company's overall cost of capital?

A The overall cost of capital is equivalent to the after-tax cost of the company's liabilities.
B The overall cost of capital changes when the debt-equity ratio changes.
C The overall cost of capital is equivalent to the cost of equity less the cost of debt.
D The overall cost of capital is unaffected by changes in corporate tax rates. **(1)**

Question 1.2

Which of the following statements is **correct** regarding the Traditional theory on capital structure?

A Introducing debt into a company's capital structure brings with it financial risk which increases the cost of equity.
B The cost of debt is higher than the cost of equity due to higher risk, higher expected returns and tax advantages.
C The optimal target capital structure for every company is not affected by the level of debt.
D A company with debt will always have a lower WACC than a company without debt.
(1)

Question 1.3

The weighted average cost of capital for a company is not dependent upon:

A company's tax rate.
B debt-equity ratio.
C level of risk.
D individual tax rates. **(1)**

Question 1.4

Transpax Ltd just paid an annual dividend of R10.50 per share. The market price of the share is R150 and the growth rate is 5% per annum. What is Enzo's cost of equity?

A 5.00%
B 12.35%
C 12.00%
D 7.00% **(2)**

QUESTION 1 (Continued)

The following information applies to question 1.5 – 1.6

Tapcon Ltd has a debt-equity ratio of 0.5. The cost of equity is 19% and the after-tax cost of debt is 10%.

Question 1.5

What is Tapcon's weighted average cost of capital?

A 16.00%
B 13.00%
C 17.20%
D 19.00% **(2)**

Question 1.6

Assuming all other variables remain constant, how will a change in the debt-equity ratio to 0.4 affect Tapcon's weighted average cost of capital?

A Tapcon's weighted average cost of capital will remain constant.
B Tapcon's weighted average cost of capital will increase.
C Tapcon's weighted average cost of capital will decrease.
D Impossible to determine. **(2)**

Question 1.7

Putbol has non-redeemable preference shares that pay a constant dividend of R54. The preference shares currently trade at R520 and were issued 3 years ago at R540 per share. What is the market related cost of the preference shares?

A 10.00%
B 10.38%
C 15.50%
D 14.50% **(2)**

Question 1.8

Which of the following risks will not influence the cost of equity of a company?

I. Business risk.
II. Personal risk.
III. Health risk.
IV. Financial risk.

A II only.
B IV only.
C II and III only.
D I and IV only. **(1)**

QUESTION 1 (Continued)

Question 1.9

A company has a business value of R1 million and its debt is valued at R400 000. The after tax cost of debt is 9% and the cost of equity is calculated to be 18%. What is the weighted average cost of capital?

A 14.40%
B 15.43%
C 12.60%
D Impossible to calculate. **(2)**

Question 1.10

Which of the following is not an assumption of the Modigliani and Miller theory on capital structure?

A Capital markets are perfect.
B There are no transaction costs.
C All investors have the same expectations about the future.
D Individuals and firms cannot borrow at the same rate. **(1)**

Question 1.11

If over time, South Africa has a lower inflation rate than the USA, according to the Purchasing Power Parity theory:

A The Rand will strengthen, relative to the US dollar.
B The US dollar will strengthen, relative to the Rand.
C The value of the Rand depends on the Euro, not the US dollar.
D None of the above. **(1)**

Question 1.12

The current spot US Dollar/Rand exchange rate is R1=$0.075. The US Dollar is expected to trade at a discount of 20% in two months from today. The US Dollar/Rand exchange rate in two months from today can be calculated as:

A R1=$0.090
B R1=$0.060
C R1=$0.094
D None of the above. **(2)**

QUESTION 1 (Continued)

Question 1.13

The current spot US Dollar/Rand exchange rate is R1=$0.075. The Rand is expected to trade at a discount of 20% in two months from today. The US Dollar/Rand exchange rate in two months from today can be calculated as:

A R1=$0.090
B R1=$0.060
C R1=$0.094
D None of the above. **(2)**

Question 1.14

A company achieves positive financial leverage when:

A return on equity is equivalent to the cost of debt.
B return on assets is less than return on equity.
C assets are greater than liabilities.
D liabilities are greater than assets. **(1)**

Question 1.15

Which of the following ratios is not a measure of a company's profitability?

A Profit margin
B Return on total assets
C Return on equity
D Dividend per share **(1)**

Question 1.16

An increase in total assets:

A means that net working capital is also increasing.
B requires an investment in non-current assets.
C must be offset by an equal increase in liabilities and shareholders' equity.
D can only occur when a firm has positive net profits. **(1)**

Question 1.17

A company has net working capital of R350. Long-term debt is R600, total assets are R950 and non-current assets are R400. What is the amount of the total liabilities?

A R600
B R200
C R800
D R950 **(2)**

QUESTION 1 (Continued)

Question 1.18

When considering the valuation of equity shares that represents a majority shareholding, the appropriate valuation methodology is:

A Gordon's dividend growth model / dividend discount model
B Price/Earnings (P/E) ratio
C Net asset value (NAV)
D Free cash flow methodology **(1)**

Question 1.19

The market price of a share is R15 and the EPS is R2.10. The Price/Earnings (P/E) ratio is:

A 0.14
B 31.5
C 7.14
D None of the above **(2)**

Question 1.20

A company recently declared a dividend of 10c per share. It is assumed that the dividend will grow by 12% per annum. The company has a weighted average cost of capital of 8%. The current price of the share, according to Gordon's dividend growth model is:

A – R2.50
B – R2.80
C R2.80
D Impossible to calculate with Gordon's dividend growth model. **(2)**

Question 1.21

The information content of a dividend increase generally signals that:

A the firm has a one-time surplus of cash.
B the firm has few, if any, net present value projects to pursue.
C management believes that the future profits of the firm will be strong.
D the firm has more cash than it needs due to sales declines. **(1)**

Question 1.22

A firm which adopts a residual dividend policy:

A prefers to offer new securities for sale on a routine basis.
B prefers constant dividends to a constant debt-equity ratio.
C places a higher priority on funding its investment needs than on paying dividends.
D will pay regular cash dividends that are constant in amount. **(1)**

QUESTION 1 (Continued)

Question 1.23

Merlo, Inc. maintains a debt-equity ratio of 0.40 and follows a residual dividend policy. The company has after-tax profits of R1 600 for the year and needs R1 400 for new investments. What is the total amount Merlo will pay out in dividends this year?

A R0
B R200
C R600
D R640 **(2)**

Question 1.24

An increase in a firm's number of shares outstanding without any change in owners' equity is called a:

A share split.
B share repurchase.
C tender offer.
D liquidating dividend. **(1)**

Question 1.25

The most valuable investment given up if an alternative investment is chosen is a(n):

A salvage value expense.
B sunk cost.
C opportunity cost.
D erosion cost. **(1)**

Question 1.26

The cash flows of a new project that come at the expense of a firm's existing projects are called:

A salvage value expenses.
B sunk costs.
C opportunity costs.
D erosion costs. **(1)**

QUESTION 1 (Continued)

Question 1.27

A financial lease:

I. is generally a fully amortised lease.
II. usually requires the lessor to insure the asset.
III. is generally cancellable without penalty if the lessee provides 30 days advance notice.
IV. is referred to as a capital lease by accountants.

A I and III only
B II and IV only
C II and III only
D I and IV only **(1)**

Question 1.28

Which one of these statements is correct concerning the lease versus buy decision?

A The lessee is primarily concerned about the use of the asset.
B If Dell Computer became a lessor of its own computers they would be doing direct leasing.
C A firm should always purchase an asset rather than lease it if the asset has a positive salvage value.
D Dell Computer would be a captive finance company if it became a lessor of its own computers. **(1)**

Question 1.29

The relevant discount rate for evaluating a lease vs buy decision is the firm's:

A cost of equity financing.
B weighted average cost of capital.
C pre-tax cost of borrowing.
D after-tax cost of borrowing. **(1)**

Question 1.30

Your firm is considering either leasing or buying some new equipment. The lessor will charge R27 500 a year should you decide to lease. The purchase price is R50 000. The equipment has a 2-year life after which time it will be worthless. Your firm uses straight-line depreciation which is equivalent to wear and tear and can borrow money at 8 per cent after tax. Your firm has sufficient tax loss carryovers to offset any potential taxable Income the firm might have over the next five years. What is the net advantage to leasing?

A R960
B R1 037
C R2 074
D R4 630 **(2)**

QUESTION 1 (Continued)

Question 1.31

An increase in which one of the following will increase the operating cash flow?

A Employee salaries
B Office rent
C Building maintenance
D Taxation wear and tear allowance of machinery **(1)**

Question 1.32

Bell Computers is considering a project which will require additional inventory of R128 000 and will also increase accounts payable by R45 000 as suppliers are willing to finance part of these purchases. Accounts receivable are currently R80 000 and are expected to increase by 10% if this project is accepted. What is the initial, incremental project cash flow requirement for net working capital?

A R75 000
B R91 000
C R99 000
D R136 000 **(2)**

Question 1.33

Table Makers Ltd. uses tool and die machines to produce equipment for other firms. The initial cost of one customised tool and die machine is R850 000. This machine costs R10 000 a year to operate. Each machine has a life of 3 years before it is replaced. What is the equivalent annual cost of this machine if the required return is 9 per cent (Ignore the effect of Tax)?

A R325 797
B R340 002
C R345 797
D R347 648 **(2)**

Question 1.34

A project will increase sales by R140 000 and cash expenses by R95 000. The project will require an initial investment in assets of R100 000 which will be written off for taxation purposes using the straight-line method to a zero book value over the 4-year life of the project. The company has a tax rate of 28 per cent. What is the annual cash flow as a result of the wear and tear tax shield?

A R6 650
B R7 000
C R9 800
D R12 600 **(1)**

QUESTION 1 (Continued)

Question 1.35

Jozi Property Developers (Pty) Ltd is considering accepting a project with a NPV index of 1.10. The project life is 5 years with a NPV of R5 750. The initial cost of the project can be calculated as:

A R63 250
B R57 500
C R5 750
D Impossible to calculate **(2)**

"End of Section A"

SECTION B [25 MARKS]

QUESTION 2 (15 Marks)

You have recently been appointed as a foreign exchange (forex) manager. Your responsibility is to identify arbitrage opportunities for the company and also mitigate any currency risks.

You recently received a 3-month forward rate quote of R15.50 per US$. The spot rate for the R/US$ today is R14.50. The expected inflation rate in South Africa for the foreseeable future is 8% per annum and the USA inflation rate for the foreseeable future is 2% per annum.

REQUIRED:

Answer the following, providing supporting calculations where appropriate.

2.1	Identify and explain three forms of currency risk.	**(6)**
2.2	List eight factors that influence exchange rates.	**(4)**
2.3	Determine if an arbitrage opportunity exists with regards to the 3 month forward contract.	**(5)**

QUESTION 3 (10 Marks)

You have recently been appointed as the financial manager of M&H Ltd. The Financial director would like to propose a dividend pay-out at the next Board of Directors meeting and has requested your input on the following matters relating to this:

REQUIRED:

3.1	Identify practical factors that may affect M&H if they decide on paying a dividend.	**(4)**
3.2	Discuss possible alternative of dividend payment.	**(6)**

"End of Section B"

SECTION C **[75 MARKS]**

QUESTION 4 **(25 Marks)**

Tony's Pizza Palace (Pty) Ltd (Tony's) is a family pizza restaurant in Randburg. Tony's was founded 25 years ago by Tony Rossi and is well known for its high standard of quality food as well as excellent service.

Six months ago, Tony passed away. He left 100% of the shares in the company to his only daughter, Sofia. Sofia is a successful fashion designer and lives in Durban. She tried to manage the restaurant, while also managing her fashion boutique in Durban, and found it increasingly difficult. She decided to sell Tony's and requested you to prepare a valuation of the company, to which you agreed.

Later that afternoon the management accountant of Tony's sends you a document containing the following information relating to the financial year ended 30 September 2016:

- Profit after tax amounted to R12 500 000, which includes depreciation on assets of R2 000 000.
- The company has a long-term loan of R6 000 000, on which it paid R500 000 in interest during the year. A similar loan can currently be obtained at an interest rate of 8% per annum.
- Tony's is a 10% shareholder in an Italian food wholesaler, Nonna's Food (Pty) Ltd, from which it received a dividend of R500 000 in 2016. Nonna's is experiencing good growth and it is anticipated that the dividend will grow by 5% per annum. The management accountant believes a reasonable cost of equity for Nonna's is 22%.
- Tony's is situated in a small shopping centre, "The Village". Tony's is also the owner of "The Village" and received net rental income of R2 800 000 from it. Since Tony's owns the property, they do not pay rent. A market related rental yield for similar properties is 6%. If Tony's were to pay rent, a reasonable rental would have been in the region of R800 000 per year.
- The expectation is that Tony's will experience real growth in profit over the next few years as follows:
  2017: 8%
  2018: 6%
  2019: 6%
- After 2019 it is expected that growth will be equal to inflation.
- Current assets and liabilities are as follows at the end of the 2016 financial year:

Accounts receivable/Debtors:	R80 000
Inventory:	R600 000
Cash on hand:	R18 000
Accounts payable/Creditors:	R160 000

- It is expected that non-current assets will be replaced at an annual cost equal to inflation-adjusted depreciation.

After conducting some research, you determine that inflation is expected to remain fairly stable at 5% for the foreseeable future. You estimate that a reasonable WACC for a restaurant such as Tony's is likely to be in the region of 30%.

REQUIRED:

4.1 Prepare a report in which you advise Sofia on the value of her shareholding in Tony's Pizza Palace (Pty) Ltd on 1 October 2016. **(25)**

QUESTION 5 **(25 Marks)**

QuickPay is a well-established fashion manufacturer and retailer which sells fashionable merchandise at reasonable prices. Quickpay creates value for its customers through lower margins on high fashionable clothes. The company operates over 400 stores and 20 plants across South Africa employing over 3 000 people.

On 1 January 2015, QuickPay decided to increase its gross profit margin by 7% to 20% in order to boost profits.

You are a specialist in the field of finance and the Financial Director approached you for advice. He feels that the company is not profitable enough, and would appreciate any advice that you can provide. You received the following extract from audited financial information (for the year ended 31 December 2015 from the Financial Director:

QuickPay (Pty) Ltd
Statement of financial position as at 31 December 2015

	2015 R'000	**2014 R'000**
ASSETS		
Non-current assets		
Property, plant and equipment	1 296 000	1 137 000
Current assets		
Cash and bank	11 000	15 000
Inventory	105 000	60 000
Receivables	72 000	108 000
Total assets	**1 484 000**	**1 320 000**
EQUITY AND LIABILITIES		
Equity		
Share capital	500 000	500 000
Retained earnings	614 000	340 000
Non-current Liabilities		
Long term loan (9%)	300 000	380 000
Current liabilities		
Trade payables	60 000	88 000
Short term borrowings (15%)	10 000	12 000
Total equity and liabilities	**1 484 000**	**1 320 000**

QUESTION 5 (Continued)

QuickPay (Pty) Ltd
Statement of comprehensive income for the year ended 31 December 2015

	2015	**2014**
	R'000	**R'000**
Revenue	?????	?????
Cost of sales	?????	?????
Gross profit	1 537 000	1 114 000
Operating expenses	959 000	696 000
Profit before finance charges and taxation	578 000	418 000
Finance charges	55 000	80 000
Profit before tax	523 000	338 000
Taxation	159 000	101 000
Profit for the year	364 000	237 000

After scrutinising the information, you arranged a meeting with the Managing Director and learned the following:

1. Inventory and trade receivables are at levels that could be considered average for the year. Inventory opening balance on 1 January 2014 was R65 000 000. All inventory purchases are made on credit.

2. The directors consider debt that is not interest bearing to be part of assets.

3. Only 20% of revenue is for cash, it is QuickPay's policy to collect receivables within 7 days.

4. During 2015, the directors of QuickPay declared and paid a dividend to shareholders.

5. Increase in property, plant and equipment is due to additions to the manufacturing plant.

6. The following industry norms are relevant:
   - Receivables collection period 15 Days
   - Payables payment period 30 Days

REQUIRED:

5.1 Discuss the performance of QucikPay from 2014 to 2015, with reference to relevant financial ratios. Where you deem it appropriate, make suggestions for improvements.

Your discussion should focus on:
- Debt management **(6)**
- Liquidity **(4)**
- Efficiency **(14)**
- Presentation **(1)**

QUESTION 6 **(25 Marks)**

Frulato Ltd is a large and profitable company that processes canned Fruit. The management of Frulato is keen to expand and is continuously searching for suitable investment opportunities.

In the past Frulato had always outsourced their canning processes at a cost of 50 cents per can. A new mini-canning plant was recently introduced in the market and the management of Frulato is keen to determine whether it would be to their advantage to have their own canning plant rather than outsourcing the canning processes.

The canning plant will cost R350 000 and will qualify for wear and tear of 50%, 30% and 20% in years one to three respectively. It is estimated that the plant's useful life will be five years. It is further estimated that at the end of five years the plant will have a residual value of R40 000. A compulsory maintenance contract of R2 000 per annum will be payable if the plant is leased.

In addition to the special canning plant price of R350 000, the manufacturer also offers two financing options:

- A loan at 10% per annum payable in equal instalments annually in arrears.
- A lease with five annual lease instalments of R43 000 which is payable annually in advance. The lease contract also requires the lessee to maintain the plant.

If the machine is obtained with a lease, the lessee does not gain possession of the asset at the end of the lease contract.

You may assume a company tax rate of 28%. Frulato's cost of debt before taxation is 15% and its weighted average cost of capital is 20%.

The founder and managing director of the business Mr Patel is not keen on acquiring the plant using debt, he is of the view that debt is just too expensive and that the company should rather raise money for this plant from existing shareholders.

REQUIRED:

6.1 Calculate the net benefit of leasing and comment on the effect of your result. **(20)**

6.2 Comment on Mr Patel's attitude towards debt and mention why debt would be better than other forms of funding that could be used to finance the plant. **(5)**

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