UNIVERSITY OF JOHANNESBURG

DEPARTMENT OF ACCOUNTANCY

INTERMEDIATE FINANCE B
ADFM007/S3PFMQ5

LAST ASSESSMENT OPPORTUNITY: NOVEMBER 2017

TIME: 180 Minutes **MARKS: 100**

ASSESSOR: Mr S Modiba

MODERATORS: Mr T Fusire (Internal)
Ms M Boshoff (External)

INSTRUCTIONS TO CANDIDATES

1. This paper consists of 11 pages.
2. You are reminded that answers may NOT be written in pencil. NO tippex may be used.
3. The marks shown against the requirement(s) for every question should be regarded as an indication of the expected length and depth of your answer.
4. Answer the questions by the use of:
   - effective structure and presentation;
   - clear explanations;
   - logical arguments; and
   - clear and concise language.
5. Answer ALL questions in the answer book/s provided.
6. Show all calculations clearly.
7. Silent, non-programmable financial calculators may be used, unless otherwise instructed.
8. All open spaces must be crossed out with a pen.

Question	Marks	Time allocated (minutes)
1	25	45
2	10	18
3	15	27
4	25	45
5	25	45
Total	**100**	**180**

SECTION A [25 marks]

QUESTION 1 (25 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

The unlevered cost of capital is:

A the cost of capital for a firm with debt in its capital structure.
B the cost of capital for a firm with no debt in its capital structure.
C the cost of preference shares for a firm with equal parts preference and ordinary shares in its capital structure.
D the interest tax shield times pre-tax net income. **(1)**

Question 1.2

The equity risk derived from a firm's capital structure is called:

A market risk.
B systematic risk.
C business risk.
D financial risk. **(1)**

Question 1.3

A firm should select the capital structure which:

A produces the highest cost of capital.
B minimizes taxes.
C maximizes the value of the debt.
D maximizes the value of the firm. **(1)**

Question 1.4

Which of the following is **incorrect** regarding the dividend growth model?

I. The dividend growth model generally produces the same estimated cost of equity for a firm regardless of the source of information used to predict the rate of growth.
II. The dividend growth model can only be used if historical dividend information is available.
III. The dividend growth model is applicable only to firms that pay a constant dividend.
IV. The dividend growth model ignores the risk that future dividends may vary from their estimated values.

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

Question 1.5

The outstanding debentures of Samsam Ltd are priced at R1098 each. The debentures have a 10 per cent coupon and pay interest annually. The debentures are non-redeemable and have a par value of R1 000 each. The company's tax rate is 28 per cent. What is Samsam's after-tax cost of debt?

A 7.2%.
B 9.11%
C 10%
D 6.56% **(2)**

Question 1.6

The Price/Earnings (P/E) of a share is 7.5 and the EPS is R5.30. The market price is:

A R39.75
B R1.42
C R0.71
D None of the above **(2)**

Question 1.7

Tapcon currently has a profit before interest after tax (PBAT) of R1 125 000. Depreciation is expected to be R55 000 next year. Tapcon plans to spend R230 000 on new equipment next year. The profit is expected to grow by 10% per annum. Working capital, currently at R60 000 will also grow at 10% per annum. Tapcon's free cash flow for next year will be:

A R1 056 500
B R996 500
C R944 000
D R884 000 **(2)**

Question 1.8

If over time, South Africa has a higher interest rate than the European Union, according to the Purchasing Power Parity theory:

A The Rand will strengthen, relative to the Euro
B The Euro will strengthen, relative to the Rand
C The value of the Rand depends on the US Dollar, not the Euro
D The value of the rand depends on inflation not interest rates **(1)**

Question 1.9

The current spot US Dollar /Rand exchange rate is $1=R13.75. The US Dollar is expected to trade at an annualised premium of 10% a year from today. The US Dollar/Rand exchange rate a year from today can be predicted as:

A $1=R15.13
B $1=R12.38
C $1=R12.75
D $1=R13.52 **(2)**

Question 1.10

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 1.11

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 1.12

The Incremental cash flows of leasing consider which of the following?

I. The cost of the asset
II. The lease payment amount
III. The applicable tax rate
IV. The annual depreciation expense

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

Question 1.13

If Webster limited achieved a nominal return of 10.25% over the last year, while inflation was 5%. The company's real return rate is:

A 5%
B 6%
C 15.76%
D 5.25% **(2)**

Question 1.14

Savoy Ltd is a well-established manufacturer of high-tech equipment. Savoy has a debt-equity ratio of 2:1. Interest cover is 5 times and profit before tax is R1 600 000. Savoy's total debt ratio is:

A 66.67%
B Equivalent to equity less interest cover
C 2
D 33.33% **(2)**

Question 1.15

A company has a return on equity of 13.8%, asset turnover of 23% and equity multiplier of 1.5. Assuming the Du Pont identity is applicable, the net profit margin can be calculated as:

A 40%
B 13.8%
C 4%
D 4.8% **(2)**

Question 1.16

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)**

Question 1.17

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)**

"End of Section A"

SECTION B [25 marks]

QUESTION 2 (15 marks)

Power Tech (Pty) Ltd is a South African based company that imports high quality electronic equipment. The company recently sold electronics to a customer in the USA for US$500 000. The amount is receivable in four months' time.

In order to hedge against currency fluctuations, the financial director is considering taking out a forward contract with the bank. The bank is prepared to buy US$500 000 from Power on a four month FEC at R14.40 per US$. The spot rate for the R/US$ today is R14.50. The expected inflation rate in South Africa for the foreseeable future is 4% per annum and the USA inflation rate for the foreseeable future is 8% per annum.

REQUIRED:

2.1 Calculate, using the Purchasing Power Parity theory, whether or not Power Tech should take out the forward cover contract with the bank. **(9)**

2.2 Identify and explain three forms of currency risk. **(6)**

QUESTION 3 (10 marks)

TimeFace Ltd is a technology company listed on the JSE Ltd. The company paid its first dividend of R7.50 five years ago and managed to steadily increase its dividend by 5% per year over the last 5 years. TimeFace is however considering changing its dividend policy to a residual policy, since it has not been able to invest in a number of profitable projects in the past due to the payment of dividends that drained the cash flow and left them with little to invest.

1. TimeFace is considering investing in a new project that would require a capital outlay of R10 million. The NPV of the new project is positive and it has a high likelihood of success.

2. The debt/equity ratio is 0.40.

3. The earnings for the year is R 38 per share and the current P/E ratio is 3.5.

4. The share capital of the company is made up as follows:

Share capital (240,000 shares)	R 6,982,233
Retained income	R 8,909,340
	R 15,891,573

REQUIRED:

3.1	Will the company be able to maintain its current dividend policy for the current financial year, if the project is rejected? Your answer should be supported by relevant calculations.	**(5)**
3.2	Will the company be able to invest in the new project if it follows a residual dividend policy, and if so, what will the dividend per share be under this new policy?	**(5)**

"End of Section B"

SECTION C [50 marks]

QUESTION 4 (25 marks)

Birdie Distributors Ltd distributes golf equipment and was founded in 1996. The company has been listed on the JSE Limited since 2002. The company focuses on the distribution of golf equipment to sports outlets and shops at golf or country clubs in smaller towns where the large golf equipment retailers do not have stores. Birdie Distributors Ltd does not own any of these outlets.

Earnings have grown steadily over the last few years, but the MD of Birdie Distributors Ltd, Mr Player, is concerned about the worldwide economic downturn and would like to optimise all facets of the business in order to weather the storm, but also to grow aggressively when the economic conditions improve.

Mr Player approaches you for advice. You agree to assist and receive the following un-audited financial information from Mr Dlomo, the financial manager. The information relates to the year ended 31 July 2015.

STATEMENT OF FINANCIAL POSITION		**2015**	**2014**
		R'000	**R'000**
ASSETS			
Non-current assets			
Property, plant and equipment	Note 6	105 846	70 560
Investments		5 000	5 000
Current assets			
Cash and Bank		-	27 500
Inventory	Notes 3&4	58 902	15 345
Trade receivables	Notes 2&7	101 664	32 456
Total assets		**271 412**	**150 861**
EQUITY AND LIABILITIES			
Capital and reserves			
Ordinary share capital		25 000	25 000
Share premium		26 400	26 400
13% Convertible preference shares	Note 5	15 000	15 000
Distributable reserve		54 100	32 640
Non-current liabilities			
Long-term loan (15%)		8 000	8 000
12% Redeemable preference shares		30 000	30 000
Current liabilities			
Bank overdraft (25%)		43 092	-
Trade payables		65 820	11 971
South African Revenue Service		-	250
Shareholders for dividend	Note 8	4 000	1 600
Total equity and liabilities		**271 412**	**150 861**

QUESTION 4 (Continued)

STATEMENT OF COMPREHENSIVE INCOME	**2015**	**2014**
Revenue (Gross sales)	**428 634**	**190 021**
Gross profit	201 825	110 234
Profit before finance charges and taxation	72 093	40 217
Finance charges	15 573	4 800
Profit before taxation	56 520	35 417
Taxation	16 391	10 271
Profit for the period	**40 129**	**25 146**

After scrutinising the information, you arrange a meeting with Messrs. Player and Dlomo, and learn the following:

1. Inventory, trade receivables and trade payables are at levels that could be considered average for the year.

2. Mr Dlomo tells you that his department has been lenient with regards to receivable collections during the last year. He admits that this approach has caused increases in the receivables balance, but he felt that he would rather have more receivables than lose sales. When asked about the company's provision for doubtful debts, Mr Dlomo was vague and changed the topic.

3. Inventory comprises golf equipment. You recently paged through "Golfmad", a local golfing magazine, and remember an article with the heading "Loads of New Equipment to hit SA Market Soon!" You read the article in which the journalist was very excited about the technological advances made with new equipment from all manufacturers of golf equipment.

4. All inventory is purchased from suppliers on credit.

5. The convertible preference shares are convertible into ordinary shares at the discretion of the directors.

6. The growth in property, plant and equipment is largely due to the expansion of the company's fleet of delivery vehicles as well as an investment in a new warehouse. These investments were paid for in cash.

7. Only 10% of revenue is cash sales, the remaining 90% of sales take place on a credit plan allowing interest free repayments of up to 60 days.

8. Dividends declared for the 2015 year amounted to R18 769 000. The amount owing to shareholders for the previous year represents 20% of the total dividends declared. Mr Player and Dlomo felt that dividends should be reduced to keep cash in the company to ensure that there is sufficient cash available to see the company through the tough times that might lie ahead.

QUESTION 4 (Continued)

REQUIRED:

4.1 **Evaluate** the performance of Birdie Distributors Ltd from 2014 to 2015, with reference to relevant financial ratios. Where you deem it appropriate, provide **recommendations** for improvements.
Your evaluation should focus on

- Liquidity issues **(6)**
- Debt management **(6)**
- Efficiency **(11)**
- Presentation **(2)**

Hint: Recommendations for improvements must be concise and to the point in bullet format. Three bonus marks are available for insightful comments or suggestions.

QUESTION 5 **(25 marks)**

Flymax Ltd (Flymax) is a South African technology company based in Johannesburg. Flymax manufactures unmanned aerial vehicles (UAV), also known as drones, for aerial photography and videography. The company has just developed a new drone called "Jujufly" which is expected to be popular with customers in the next 4 years, thereafter production of the drone will be discontinued.

Sales of "Jujufly" for the first year of production (year ended 31 December 2018) are expected to be as follows:

Probability	Sales in Units
0.50	8 400
0.10	10 000
0.40	12 000

Sales are expected to be maintain at the same level annually. The following estimates for machinery, labour, material and overheads required to produce "Jujufly" have been made:

Machinery
Machinery will be purchased on 1 January 2018 for R9 500 000. The machinery will qualify for tax wear and tear allowances at 25% per annum on cost. The machinery will be sold for R1 600 000 in four years' time.

Material
Each drone requires 5 kilograms of material Z. The estimated price for material Z is R70 per kilogram.

Labour
It is anticipated that direct labour will amount to R3 600 000 per annum. Flymax will have to appoint a production manager to manage the production of the drone. The manager will be transferred from another department (and not replaced as he was to have been retrenched). The manager was due to be retrenched on 1 January 2018 and in terms of his retrenchment he would have received a lumpsum of R540 000. The manager will be retained and paid an annual salary of R400 000. The manager will then be retrenched in four years' time under the same retrenchment terms.

Overheads
The share of general overheads expenses relating to production of the drone will be R1 400 000 per annum, of which, R975 000 represents additional cash expenditure as a result of producing "Jujufly".

The proposed selling price of "Jujufly" is R1 200 per drone. Flymax has a weighted average cost of capital of 20%. Company tax rate is 28%

REQUIRED:

5.1 Prepare a Net present value (NPV) analysis and comment on whether Flymax should produce "Jujufly". **(25)**

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