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UNIVERSITY OF ESWATINI

DEPARTMENT OF ACCOUNTING AND FINANCE

MAIN EXAMINATION PAPER MAY 2019

PROGRAMME	:	Bachelor of Commerce
YEAR OF STUDY	:	Year Three / Level Five (Full Time/Part Time)
TITLE OF PAPER	:	CORPORATE FINANCE I
COURSE CODE	:	ACF 318/ AC325/416 (M) MAY 2019
TOTAL MARKS	:	100 MARKS
TIME ALLOWED	:	THREE (3) HOURS

INSTRUCTIONS

1 This paper consists of <u>**6**</u> numbered pages, including this page.

2. There are **four (4)** questions, ANSWER all questions.

2 Begin the solution to each question on a new page.

3 The marks awarded for a question are indicated at the end of each question.

4 Show all the necessary workings.

5 Round off all prices to the nearest cent, values to the nearest rand and decimalized interest rates to four decimal places, and decimalized weightings to four decimals.

Note: You are reminded that in assessing your work, account will be taken of accuracy of the language and general quality of expression, together with layout and presentation of your answer.

THIS PAPER MUST NOT BE OPENED UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR OR SUPERVISOR.

Question 1 **[25 marks]**

Answer all three unrelated parts of this question

Part A **(9 marks)**

Shongololo Trading is examining ways in which it can manage its working capital more effectively. The financial manager has come up with 5 possible plans which will have varying effects on the firm's inventory period, receivables period and payable period. The five plans and their likely effects are as follows:

	Effected change		
Plan	Inventory Period	Receivables Period	Payables Period
A	+30 days	+20 days	+5 days
B	+20 days	-10 days	+15 days
C	-10 days	0 days	-5 days
D	-15 days	+15 days	+10 days
E	+5 days	-10 days	+15 days

Required:

Rank the plans from most effective to least effective, in terms of Shongololo's aim of improving their working capital management. Provide the rationale behind your ranking method.

(9 marks)

Part B **(4 marks)**

Erica Store works in the accounts payable department. She has attempted to convince her boss to take the discount on the 3/10 net 45 credit terms most suppliers offer, but her boss argues that forgoing the 3% discount is less costly than a short-term loan at 14% p.a. (effective).

Required:

Calculate whether Erica or her boss is correct. Assume a 360-day year, and round interest rates off to two decimal places (four decimal places if in decimalised format).

(4 marks)

Part C **(12 marks)**

The Slapiton Paint Company uses 60 000 litres of pigment per annum. The cost of carrying the pigment in inventory is E1 per litre per annum, and the cost of ordering pigment is E200 per order. The firm uses pigment at a constant rate each day throughout the year.

Required:

(a) Calculate the firms' Economic Order Quantity (EOQ). Round your answer off to the nearest litre.

(3 marks)

(b) Calculate the total cost of the plan suggested by the EOQ calculated in (a). Round your answer off to the nearest cent.

(4 marks)

(c) Determine the total number of orders suggested by this plan. Round your answer off to two decimal places.

(2 marks)

(d) Assuming that it takes 20 days to receive an order once it has been placed, and the firm likes to keep 1 000 litres in stock at all times, determine the reorder point in terms of litres of pigment. Use a 360-day year, and round off your answer to the nearest litre.

(3 marks)

Question 2 [25 marks]

Answer all two unrelated parts of this question

Part A (12 marks)

Wichita (Pty) Ltd sells its products on a cash-only basis. The price per unit is R80 and the variable cost per unit is E30. The company currently sells 1 500 units per month. Management are concerned about flat levels of sales in recent years, and have heard rumours that their major competitor is planning on introducing credit sales to their customers.

After some market research, Wichita management determined that the company's sales could increase to 1 800 units per month and the sale price per unit could increase to E90, if the firm introduced credit terms of net 30 days. Furthermore, the variable costs per unit would increase to E40 per unit with the change in policy. All the firm's sales would be on credit. The required monthly return is 1.5%.

Required:

Calculate the NPV of the proposed switch and advise the company accordingly.

(12 marks)

Part B (13 marks)

The accounts receivable for the Boulder Brick Company (BBC) include the following invoices:

Invoice Number	Invoice Date	Amount (E)
522	February 3	1 200
530	February 12	1 800
533	March 2	600
540	March 4	2 400
544	March 12	1 800
548	March 15	1 200
550	April 5	1 200
551	April 8	2 400
552	April 12	1 200
553	April 15	1 800
554	April 16	2 400
555	April 27	1 200

BBC extends terms of 'net 60 days' to its customers.

Required:

(i) Prepare an ageing schedule as of April 30 for BBC, using the following format:

Age	Accounts Receivable (R)	Percent (%)
0 – 30 days	xxx	xx
30 – 60 days	xxx	xx
60 – 90 days	xxx	xx
Total	xxx	100

Round off all percentages to three decimal places.

(11 marks)

(ii) Comment on the outcome of the ageing schedule prepared in (i) with reference to BBC's credit terms, and explain briefly how BBC would use this ageing schedule to manage their accounts receivable.

(2 marks)

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Question 3 [25 marks]

(a) The latest abridged financial statements of Fundisa Book Suppliers (Pty) Ltd are presented below:

Fundisa Book Suppliers (Pty) Ltd
Statement of Comprehensive Income for the year ended 30 April 2019

	E (000s)
Sales	25 000
less Cost of Sales	20 000
Gross Profit	5 000
less Operating Costs including Interest	3 750
Profit before Tax	1 250
less Taxes	250
Net Profit after Tax	1 000
less Dividends	500
Retained Profit for the Year	500

Fundisa Book Suppliers (Pty) Ltd
Statement of Financial Position as at 30 April 2019

	E (000s)
EQUITY AND LIABILITIES	
Equity	10 000
Ordinary Share Capital	8 500
Retained Profit	1 500
Liabilities	7 500
Long - Term Debt	1 000
Overdraft	2 000
Accounts Payable	4 500
Total equity and Liabilities	17 500
ASSETS	
Net Non-Current Assets	7 000
Current Assets	10 500
Inventory	5 000
Accounts Receivable	4 000
Cash	1 500
Total Assets	17 500

The Marketing manager advised the Board that the company's sales in the next financial year will grow by E5million as a result of electronic purchasing system they recently launched. Assume the following additional information for 2020:

- Cost of Sales and operating costs will increase at the same rate as sales.
- All assets items and accounts payable will grow at the same rate as sales.
- The dividend payout **ratio** will be increased to 60%.
- The tax **rate** expenses will remain unchanged.
- The company's Chief Financial Officer (CFO) has decided against using any additional long-term debt, thus any additional finance required to sustain the growth, will be raised as follows:
  - o Overdraft funds first, with the firm's new current ratio not falling below 2:1, and
  - o Ordinary Share Capital, only if necessary, thereafter.

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Required:

(a) Use the percentage of sales approach along with the above instructions to complete a pro forma Statement of Comprehensive Income and Statement of Financial Position, and to determine the additional financing needed (AFN) or external financing needed (EFN) to achieve the targeted level of growth in 2020.

(25 marks)

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Question 4 **[25 marks]**

Woods is an ambitious young executive who has recently been appointed to the position of financial director of Tiger Ltd, a small listed company.
Tiger Ltd has recently raised E350 000 from shareholders, and the directors are considering investing these funds in one of three potential projects. Each of these projects bear the same amount of risk and will involve an immediate purchase of equipment of E350 000. One project only can be undertaken, and the equipment in each case will have a useful life equal to that of the project, with no scrap value. In Wood's report to the chairman, he recommends Project C because it shows the highest internal rate of return (IRR). The following summary is taken from his report.

Project	**Net Cash Flows (E000's)**								**IRR**
Year	0	1	2	3	4	5	6	7	%
A	-350	100	110	104	112	138	160	180	27.5
B	-350	40	100	210	260	160	-	-	26.4
C	-350	200	150	240	40	-	-	-	33.0

The chairman is accustomed to projects being appraised in terms of Payback and Accounting Rate of Return, and he is consequently suspicious of the use of the IRR as a method of project selection. The chairman has therefore asked you for independent advice on the choice of project. The company's cost of capital is 20% and a policy of straight-line depreciation is used to write off the cost of equipment.

Required:

(a) Calculate the payback period for each project.

(3 marks)

(b) Calculate the accounting rate of return for each project

(9 marks)

Hint: The figures provided are cash flows, not net profit figures.

(c) Do the calculations **you** deem necessary to indicate to the chairman which project should be preferred.

(7 marks)

(d) Explain to the chairman why neither of the two project appraised methods, to which he is accustomed, nor the IRR method should be used to make this choice. Also explain why your chosen technique should be used, in the final analysis.

(6 marks)

Instructions: ***Work in E000's and round off to the nearest E000.***
Round off whole % rates to two decimal places.
Round off factors to four decimal places.
Ignore taxation.