The Institute of Chartered Accountants of Zimbabwe

QUALIFYING EXAMINATION

Part II – Financial Management Question 1

NOVEMBER 2008

TOTAL MARKS – 100
READING TIME – 20 minutes
WRITING TIME – 150 minutes

INSTRUCTIONS TO CANDIDATES

1 Enter your examination number on the front of the answer book. Your name must not appear anywhere.

2 You are reminded that answers may **NOT** be written in pencil.

3 The marks shown against the requirement(s) for each question should be taken as an indication of the expected length and the required depth of the answer.

4 Answer the questions using –
- appropriate arrangement and presentation;
- clarity of explanation;
- logical argument; and
- clear and concise language.

Marks will be awarded for the above.

5 Working papers must be handed in with scripts.

NOTE: The questions in this paper are not intended to reflect the reality of the Zimbabwean economy. Hence reference to exchange rates, interest rates, return on capital, etc., are to be taken at face value and there is an assumption that financial instruments such as foreign exchange contracts will be freely available. Normal tax rate of 30% may be assumed.

QUESTION 1 **100 marks**

Super Cleaning Products (Pvt) (SCP) was founded in 1988 by Mr Jones, Ms Dhlamini and Mr Gervis. During 1989 SCP entered into an agreement with Drake Inc. (Drake), a major global manufacturer of industrial cleaning equipment and related products with headquarters in the United States of America, to distribute Drake's range of cleaning equipment and chemicals in Zimbabwe. This relationship has gone from strength to strength and SCP has over the past 20 years ensured that Drake products are the leaders in the Zimbabwe industrial cleaning market. The exclusive distribution agreement between SCP and Drake was renewed again early in 2008 for a further five years. In terms of the agreement SCP has exclusive rights to the distribution of Drake products in the Zimbabwe market.

Revenue derived from importing and selling Drake's products represents over 90% of SCP's annual turnover. Drake is acknowledged as a world leader with regard to both the quality and volume of the industrial cleaning machines it manufactures. SCP distributes Drake's extensive range of sweepers, scrubbers, moppers and cleaning trolleys to customers in the contract cleaning industry. SCP also sells Drake's range of cleaning chemicals used in the cleaning and maintenance of all floor types, including carpets, as well as kitchen surfaces and bathrooms.

The executive directors of SCP have positioned the company to supply quality products which provide customers with superior performance and are cost efficient and reliable. SCP's equipment range is not the cheapest in the market but is certainly price competitive given the long useful life of the products.

The executive directors and their respective shareholdings in SCP are set out below:

	Executive responsibility	**Shareholding**
Mr Jones	Chief Executive Officer	45%
Ms Dhlamini	Chief Financial Officer	30%
Mr Gervis	Marketing Director	25%

SCP's head office is situated in Harare and the company has branches in Bulawayo, Gweru and Mutare.

Highlights of SCP's recent financial performance and forecasts

Information extracted from the company's financial results for the year ended 30 September 2008 and the budget for the year ending 30 September 2009 is set out in the table below:

Selected income statement information for the year ended / ending 30 September		**2008**	**2009**
	Notes	**Actual $'000**	**Budget $'000**
Revenue		131 309	150 782
Equipment sales	1	56 404	64 865
Chemicals sales	2	64 728	74 437
Other revenue	3	10 177	11 480
Gross profit		36 965	40 208
Equipment sales		12 973	14 595
Chemicals sales	4	21 037	22 330
Other revenue		2 955	3 283
Earnings before interest, tax, depreciation, and amortisation (EBITDA)		14 905	15 213

Selected balance sheet information for the year ended / ending 30 September		2008	2009
	Notes	Actual	Budget
		$'000	$'000
Share capital		10 000	10 000
Retained profits	5	31 980	39 914
Shareholders' funds		41 980	49 914
Cash resources	6	12 991	20 079

Notes

1 Equipment sales are expected to continue growing at 15% per annum for the foreseeable future due to infrastructural spending by government and the ongoing strong demand for industrial property (which results in more office and industrial space that needs to be cleaned).

2 Chemicals sales are forecast to grow in line with the growth in equipment sales. Chemicals sales as a percentage of total revenue have historically amounted to about 50% and this trend is expected to continue.

3 Revenue from servicing and maintaining customer equipment is classified as 'other revenue' in the above income statements.

4 The gross profit percentage on chemicals sales is expected to decline to 30% in 2009 due to the expectation of SCP's executive directors that there will be a fall in the value of the Zimbabwe dollar against the US dollar. SCP's executive directors are hopeful that the Zimbabwe dollar will stabilise after 2009 as a continued devaluation may further erode margins.

5 SCP has historically declared dividends to its shareholders. The policy to date has been to pay out 30% of annual after tax profits as dividends.

6 The company has no interest-bearing debt at present. SCP is cash generative and has not borrowed monies externally or from its shareholders over the past five years.

Proposed investment in manufacturing plant to produce chemicals

SCP is considering manufacturing its own chemicals for sale to customers as opposed to importing chemicals from Drake. The strategic rationale for this initiative includes the following:

- Increasing gross margins on chemicals sales (detailed research indicates that SCP could increase its gross profit percentage on chemicals to at least 45% if the company manufactured its own chemicals);
- Reducing reliance on Drake; and
- Protecting SCP against the effects of any future adverse currency movements. The majority of raw materials required for the manufacture of the chemical product range can be sourced locally in Zimbabwe.

The executive directors of SCP appointed a firm of external consultants, Majuwba Consulting, to research the feasibility of the proposed venture. Majuwba Consulting's preliminary findings suggested that SCP should seriously consider manufacturing its own chemicals, as this could be the appropriate strategic action and it appears to be a very attractive financial proposition.

SCP has identified a management team to establish and manage the Chemicals Manufacturing Division. This team is currently employed at a major chemicals manufacturer and has indicated that they would be prepared to move to SCP. The team is confident that they have the necessary experience to manage such an operation. The detailed chemical formulations for products would be sourced from expired international patents or developed internally by industrial chemists (two of whom form part of the management team referred to above).

Mr Jones has had preliminary discussions with Drake regarding the possibility of manufacturing chemicals instead of importing from them. Drake's response was –

- disappointment at the prospect of losing business from SCP;
- that the potential loss of revenue and margin for them from discontinuing supplying chemicals to SCP was immaterial financially;
- concern about the possibility that SCP would manufacture inferior chemicals which could adversely affect the performance of Drake equipment; and
- an instruction to SCP that it was not to use the Drake trade name and trademark in any of the chemical product labelling or advertising should SCP manufacture its own chemical products.

Majuwba Consulting, in conjunction with the proposed management team of the new Chemicals Manufacturing Division of SCP, has prepared a detailed capital budget for the division. The salient details of this budget are summarised below:

Extracts from the capital budget for the Chemicals Manufacturing Division:

SUPER CLEANING PRODUCTS (PVT) LTD
EXTRACTS FROM THE INCOME STATEMENT OF THE CHEMICALS MANUFACTURING DIVISION FOR THE YEARS ENDING 30 SEPTEMBER

	Notes	2010	2011	2012
		$'000	$'000	$'000
Revenue	1	85 603	98 443	113 210
Cost of sales		(47 559)	(52 849)	(58 807)
Materials	2	(14 552)	(16 735)	(19 246)
Labour	3	(20 545)	(22 600)	(24 859)
Variable manufacturing overheads	4	(4 280)	(4 922)	(5 660)
Fixed manufacturing overheads				
Depreciation	5	(4 000)	(4 000)	(4 000)
Rental of premises	6	(432)	(467)	(504)
Other fixed overheads		(3 750)	(4 125)	(4 538)
Gross profit		38 044	45 594	54 403
Overhead recoveries	7	(14 013)	(15 414)	(16 956)
Salaries	8	(4 800)	(5 280)	(5 808)
Interest expense	9	(6 442)	(5 003)	(1 939)
Profit before tax		12 789	19 897	29 700
Tax	10	(2 461)	(4 451)	(7 196)
Profit after tax		10 328	15 446	22 504
Earnings before interest, tax, depreciation and amortisation		23 231	28 900	35 639

SUPER CLEANING PRODUCTS (PVT) LTD FORECAST CASH FLOWS OF THE CHEMICALS MANUFACTURING DIVISION FOR THE YEARS ENDING 30 SEPTEMBER					
	Notes	2009 $'000	2010 $'000	2011 $'000	2012 $'000
Acquisition of plant and equipment	5	(40 000)			
Profit before tax			12 789	19 897	29 700
Add back: Depreciation			4 000	4 000	4 000
Tax	10		(2 461)	(4 451)	(7 196)
Movements in working capital					
Inventories	11	(4 000)	(4 712)	(1 058)	(1 192)
Accounts receivable	12		(14 072)	(2 111)	(2 427)
Accounts payable	12		6 564	797	898
Repayment of head office loan	9		(2 108)	(17 074)	(23 783)
Net cash flow		(44 000)	0	0	0

Notes

1. Revenue is forecast to increase by 15% per annum over the next ten years.
2. Material costs have been budgeted to be 17% of revenue throughout the planning period.
3. Labour costs are expected to increase by 10% per annum from 2010 onwards.
4. Variable manufacturing overheads have been budgeted as 5% of annual revenue.
5. The plant and equipment cost per the detailed quote from the preferred supplier is $38 million. Installation costs and project management fees payable are expected to total $2 million, bringing the total cost of plant to $40 million. The plant and equipment is to be installed by September 2009 and manufacturing operations are set to commence on 1 October 2009. For the purposes of the capital budget, payment of the full $40 million is expected to take place on 30 September 2009. SCP has discussed the depreciation of the plant and equipment with its external auditors and the consensus is to depreciate these assets on a straight-line basis over ten years. The plant and equipment is expected to have no residual or realisable value at the end of ten years.
6. SCP has managed to secure the right to rent factory space adjacent to its existing head office for the Chemicals Manufacturing Division. The owner of this property has offered SCP a ten year lease on the premises with rentals escalating by 8% per annum.
7. Overhead recoveries represent the allocation of 50% of SCP's total overheads, excluding those specifically attributable to the Chemicals Manufacturing Division. These overheads consist primarily of finance, administration, marketing and human resource costs which the company incurs in operating its business.
8. Salaries represent the expected employment costs of the management team of the Chemicals Manufacturing Division.
9. The SCP head office will loan the necessary funds to the Chemicals Manufacturing Division. This loan will bear interest at 15% per annum and is repayable out of surplus cash flows of the division.
10. The external auditors have advised that SCP can claim the cost of the plant and equipment in terms of the Income Tax Act. Other assumptions on which the capital budget is based include the following:
    - A normal income tax rate of 30,9%;
    - All expenditure (apart from depreciation) will be deductible for income tax purposes; and
    - All income tax due will be paid in the year incurred.
11. The budget is based on the assumption that raw materials to the value of $4 million will have been acquired and paid for by 30 September 2009. Thereafter, the capital budget assumes that year-end

raw material inventory balances will be equivalent to 20% of total cost of sales for the year (excluding depreciation charges).

12 The average collection period for accounts receivable is budgeted to be 60 days, and the average payment period for accounts payable (calculated based on cost of sales excluding depreciation) is forecast to be 55 days. These calculations are based on 365 days per annum. The working capital ratios set out in notes 11 and 12 are consistent with those of SCP in the 2008 financial year.

13 The forecast cash flows after 2012 are set in the table below:

Forecast cash flows for the years ending 30 September				
	2013	2014	2015	2016 onwards
	$'000	$'000	$'000	$'000
EBITDA	43 628	53 079	64 238	Increase of 10% p.a.
Interest expense	0	0	0	0
Taxation	(9 976)	(12 622)	(17 987)	28% of EBITDA
Working capital	(3 122)	(3 584)	(4 113)	Increase of 15% p.a.
Repayment of head office loan	(1 035)	0	0	0
Net cash flow	29 495	36 873	42 138	

Term loan to be raised from BZN Bank Ltd

SCP is in discussions with its commercial bank, BZN Bank, to obtain a five year term loan to finance the set-up of the Chemicals Manufacturing Division. BZN Bank has offered SCP a loan of $45 million on the following key terms and conditions:

Principal sum	$45 million to be advanced on 30 September 2009
Raising fee	A raising fee determined as 1% of the principal sum will be levied by BZN Bank upon advance of loan. The raising fee will be capitalised
Interest	A fixed interest rate of 15% over the term of loan, calculated and payable monthly in arrears
Repayment terms	The principal sum is to be repaid in 20 equal quarterly instalments of $2 250 000 each commencing on 31 December 2009
Security	A general notarial bond over plant and equipment, a cession of accounts receivable and a limited suretyship of $10 million by SCP shareholders
Early settlement	Early settlement of the loan is permissible. However, a penalty fee of 2% of the amount of the principal sum that is repaid early will be levied

The prime overdraft interest rate has increased from 13,5% in September 2007 to 16% in October 2008. BZN Bank's economists predict that the prime rate will increase to 17% in December 2008 before declining to 15% by late 2009.

Cost of capital

Ms Dhlamini is unsure of what cost of capital to use for the purposes of evaluating the capital budget of the Chemicals Manufacturing Division. SCP has never determined its cost of capital for the company or any division.

Ms Dhlamini has obtained the following reliable information from BZN Bank:

Interest rates	**31 October 2008**	**Average over three months ended October 2008**	**Average over 12 months ended October 2008**
Reserve Bank of Zimbabwe 91 day treasury bills	11,00%	11,50%	10,75%
Average annual interest rate on Reserve Bank 91 day treasury bills over the past 20 years	11,20%		
Yield on the most liquid and traded Zimbabwe government bond in issue, redeemable in 2019	10,00%	8,80%	9,50%
Equity markets	**31 October 2008**	**31 July 2008**	**31 October 2007**
20 year average annual return of all shares listed on the Zimbabwe Stock Exchange (ZSE)	14,0%	16,1%	17,0%
Average of beta coefficients of ZSE listed companies, similar in size and nature of business to SCP	1.20		1.18

REQUIRED

		Marks
(a)	Estimate the cost of equity (shareholders' funds) of Super Cleaning Products (Pvt) Ltd at 31 October 2008 based on the information provided by BZN Bank Ltd. Show all workings and provide reasons for using specific information provided by BZN Bank Ltd.	8
(b)	Assuming Super Cleaning Products (Pvt) Ltd enters into the five year term loan agreement with BZN Bank Ltd, discuss, with reasons, how this may impact, if at all, on the discount rate(s) or weighted average cost(s) of capital used to determine the net present value of the forecast cash flows of the Chemicals Manufacturing Division. No calculations are required.	6
(c)	Critically review the forecast cash flows included in the capital budget of the Chemicals Manufacturing Division over the period 2010 to 2016 and beyond and identify, with reasons – • any errors or omissions from the capital budget; and • any assumptions in the capital budget which may need clarification or amendment.	20
(d)	Based on the capital budget for the Chemicals Manufacturing Division and other information above, determine the net cash flows on 30 September 2009 and for the year ended 30 September 2010 which should be discounted for the purposes of determining the net present value of the Chemicals Manufacturing Division. Show all workings.	10
(e)	Identify and describe four key business risks currently faced by Super Cleaning Products (Pvt) Ltd. Ignore the risks associated with the establishment of the Chemicals Manufacturing Division.	8
(f)	Identify and describe the key business risks of establishing and operating the Chemicals Manufacturing Division. In your answer you should identify and explain at least eight risks, including key financial risks.	16

(g)	Advise the board of directors of Super Cleaning Products (Pvt) Ltd regarding the approach they should follow in the financial evaluation of which strategic alternative to pursue, namely whether to establish and operate the Chemicals Manufacturing Division or whether to continue importing and distributing chemicals. Your answer should include – • an assessment of whether the NPV and IRR techniques would be useful for the purpose of financial evaluation; and • any factors which may impact on the evaluation of the strategic alternatives.	12
(h)	Identify and describe the factors that the directors of Super Cleaning Products (Pvt) Ltd should consider in evaluating whether to continue paying out 30% of the company's after tax profits as dividends to its shareholders.	7
(i)	Critically discuss the terms and conditions of the proposed BZN Bank Ltd loan and indicate, with reasons – • whether or not these terms meet the funding requirements of Super Cleaning Products (Pvt) Ltd, and • to which terms and conditions of the proposed loan from BZN Bank Ltd Super Cleaning Products (Pvt) Ltd should request amendments and/or which should be renegotiated.	8
Presentation marks	Arrangement and layout, clarity of explanation, logical argument and language usage.	5