

Series 4 Examination 2008

CERTIFICATE IN ACCOUNTING (IAS)

Level 3

Friday 21 November

Subject Code: 3902

Time allowed: 3 hours

INSTRUCTIONS FOR CANDIDATES

- Answer any 4 questions. There are no compulsory questions.
- All questions carry equal marks.
- Study the **"REQUIRED"** section of each question carefully and extract from the information supplied the data required for your answers.
- Write your answers in blue or black ink/ballpoint. You can only use pencil for graphs, charts, diagrams etc.
- Begin your answer to each question on a new page.
- All answers must be correctly numbered, but need not be in numerical order.
- Workings must be shown.
- You may use a calculator, provided the calculator gives no printout, has no word display facilities, is silent and cordless. The provision of batteries and their condition is your responsibility.
- Marks may be lost through lack of neatness and poor presentation.

QUESTION 1

Extracts from the draft financial statements of Dore, at 31 December 2007 and for the year ended 31 December 2007, were as follows:

	\$
Gross profit	27,901
Net profit	7,302
Net current assets	24,216
Current liabilities	17,246
Non-current assets	58,146

Dore uses a periodic inventory recording system.

REQUIRED

(a) Calculate for Dore, the following amounts based on the draft financial statements:

- (i) Total assets at 31 December 2007
- (ii) Expenses other than cost of goods sold for the year ended 31 December 2007.

(4 marks)

The following matters still needed to be taken into consideration when completing the accounts:

- (1) Bad debts of \$736
- (2) Closing inventory included \$137 of unsaleable inventory
- (3) Depreciation of \$2,100 for 2007
- (4) Prepaid administrative expenses of \$274 and accrued distribution costs of \$73
- (5) During 2007 Dore took for his own use goods for resale costing \$600
- (6) Purchase invoices totalling \$4,250 for the week ending 31 December 2007. The goods relating to which have been included in closing inventory.
- (7) Sales invoices totalling \$5,175 for the week ending 31 December 2007. The goods relating to which have not been included in closing inventory.

REQUIRED

(b) Calculate for Dore, at 31 December 2007 or for the year ended 31 December 2007, revised figures for each of the following amounts:

- (i) gross profit
- (ii) net profit
- (iii) net current assets
- (iv) current liabilities
- (v) non-current assets.

(15 marks)

Dore finds accrued expenses and prepaid expenses very confusing. He cannot understand why such adjustments are necessary and how they affect profit.

REQUIRED

(c) Give a brief explanation of the need for accrued expenses and prepaid expenses and the effect of such adjustments on profit.

(6 marks)

(Total 25 marks)

QUESTION 2

Diss, a private company, is about to add a product to its range. Machinery costing \$100,000 will be purchased immediately. This will be used for 5 years and then sold for \$10,000. Additional working capital of \$50,000 will be required immediately, but will be released at the end of Year 5.

Sales of the new product for the next five years are expected to be as follows:

Year	\$
1	150,000
2	200,000
3	250,000
4	200,000
5	200,000

Units of the product will sell for \$100 each, with variable costs of manufacture and sale being \$80 each. The only additional fixed cost will be the depreciation of the machine, which will be calculated on a straight line basis.

All cash flows are assumed to occur at the end of each year, "immediately" being Year 0.

REQUIRED

- (a) Calculate, to the nearest 1%, the accounting rate of return on the investment in the new product. (10 marks)
- (b) Calculate the net present value of the investment in the new product, when discounted at 10% and when discounted at 20%. Discount factors are as follows:

Year	10%	20%
1	0.909	0.833
2	0.826	0.694
3	0.751	0.579
4	0.683	0.482
5	0.621	0.402

(9 marks)

- (c) Give one advantage and one disadvantage of each of the following methods of investment appraisal:
- (i) Accounting rate of return
- (ii) Net present value.

(6 marks)

(Total 25 marks)

QUESTION 3

Following are the summarised Balance Sheets of Dean, a public company, and its subsidiary Lye, a private company, at 31 December 2007:

	\$	Dean \$	Lye \$
Non-current assets		280,000	173,000
Investment in Lye			
70,000 \$1 ordinary shares at cost	96,000		
\$10,000 loan stock at nominal value	<u>10,000</u>	106,000	-
Current assets		90,000	96,000
Lye - current account		<u>8,000</u>	-
		<u>484,000</u>	<u>269,000</u>
		\$	\$
Capital and reserves			
\$1 Ordinary shares		200,000	100,000
\$1 Preferred shares		100,000	-
Revaluation reserve		-	20,000
Accumulated profit		<u>126,000</u>	<u>101,000</u>
		426,000	221,000
Long-term liabilities			
Loan stock		-	15,000
Current liabilities		58,000	27,000
Dean – current account		-	<u>6,000</u>
		<u>484,000</u>	<u>269,000</u>

NOTES:

- (1) Dean made the investment in Lye on 1 January 2004, when Lye had a credit balance on the accumulated profits account of \$29,000.
- (2) The revaluation reserve is the result of a revaluation of non-current assets on 31 December 2006.
- (3) On 31 December 2007, Lye recorded, and sent, a cheque for \$2,000 to Dean. The cheque was not received and recorded by Dean until 3 January 2008.
- (4) Included in the current liabilities of Lye is a proposed ordinary dividend of \$10,000. Dean's proportion of this had not been recorded in Dean's books at 31 December 2007.
- (5) On 1 December 2007, Lye sold goods to Dean for \$8,000. Lye prices its goods at cost plus 25%. Of the \$8,000 of goods, \$5,000 remained in Dean's inventory at 31 December 2007.
- (6) Goodwill arising on consolidation is being written off over five years on a straight line basis.

REQUIRED

Prepare the Consolidated Balance Sheet of Dean and its subsidiary Lye at 31 December 2007.

(Total 25 marks)

QUESTION 4

The following information has been extracted from the books of Par, a private company, in respect of 2007:

	\$000	\$000
Profit before interest		210
Interest		<u>20</u>
Profit after interest		190
Preferred dividend	8	
Ordinary dividend	<u>24</u>	<u>32</u>
Retained earnings for the year		<u>158</u>

Par has 100,000 \$1.00 preferred shares and 250,000 \$0.20 ordinary shares. The market value of the ordinary shares at 31 December 2007 was \$4.80 each.

REQUIRED

(a) Calculate, to two decimal places, the following:

- (i) Interest cover
- (ii) Dividend cover for ordinary shares
- (iii) Preferred dividend per share
- (iv) Ordinary dividend per share
- (v) Total market value of ordinary shares at 31 December 2007
- (vi) Earnings per ordinary share
- (vii) Price earnings ratio.

(9 marks)

(b) Show the amounts that will appear in Par's Balance Sheet in respect of preferred share capital and in respect of ordinary share capital.

(2 marks)

The following information has been extracted from the books of Hayle, a private company, at 31 December 2007, or was calculated on the basis of this information:

Payables	\$174,000
Receivables	\$258,000
Inventory of goods for resale	\$180,000
Receivables turnover	40 days
Inventory turnover	36 days

Note: all sales and all purchases were on credit.

REQUIRED

(c) Calculate for 2007, to two decimal places, the following:

- (i) Sales
- (ii) Cost of goods sold
- (iii) Gross profit margin.

(6 marks)

Companies normally wish to reduce the time they hold inventory and maximise the time they take to pay payables.

REQUIRED

(d)

- (i) State **two** ways companies may reduce the time they hold inventory
- (ii) State **two** dangers to companies of maximising the time they take to pay payables.

(8 marks)

(Total 25 marks)

QUESTION 5

The Balance Sheet of Torre, a private company, at 31 December 2006 included the following:

Capital and reserves	\$000
Ordinary shares of \$0.50 each	200
10% Preferred shares of \$0.10 each	100
Share premium	50
Accumulated profits	160

During the year ended 31 December 2007 the following transactions in relation to share and loan capital took place:

- March 31 - a bonus issue of 1 for 5 was made in respect of the ordinary shares
- June 30 - the 6 months' preferred dividend was paid; a dividend of \$0.04 per ordinary share was paid
- July 31 - a rights issue of 1 for 4 at \$0.60 per share was made to, and taken up by, ordinary shareholders
- October 31 - a dividend of \$0.05 per ordinary share was paid
- November 30 - 50,000 ordinary shares were issued to the public at \$0.70 per share; \$30,000 12% Debentures were issued for \$33,000
- December 31 - the 6 months' preferred dividend was paid, a dividend of \$0.01 per ordinary share was paid.

The company's policy is to make maximum use of the Share Premium Account.

REQUIRED

Calculate in respect of Torre:

- (a) The accrued debenture interest at 31 December 2007 (2 marks)
- (b) The number of ordinary shares in issue at 31 December 2007 (4 marks)
- (c) The balance on the Share Premium Account at 31 December 2007 (5 marks)
- (d) The total of all dividends paid in 2007. (6 marks)

Share issues and debenture issues are both ways in which a company can raise finance.

REQUIRED

- (e) State **two** differences between shares and debentures. (4 marks)

A public company, March had a provision for doubtful debts at 31 December 2006 of \$12,800. In the year ended 31 December 2007, \$6,000 of debts were written off. At 31 December 2007 when receivables totalled \$498,000 it was decided to write off a further \$8,000 and adjust the provision for doubtful debts to 3% of the remainder.

REQUIRED

- (f) Calculate the total charge in March's Income Statement for the year ended 31 December 2007 in respect of bad and doubtful debts. (4 marks)

(Total 25 marks)



**Hong Kong
School of Commerce**
香港商業專科學校



ACCOUNTING(IAS)

LEVEL 3

SERIES 4 EXAMINATION 2008

Suggested Answers

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129 King's Road, North Point, Hong Kong

Tel : 2578 1914 Fax : 2807 2017

81 Austin Road, Tsimshatsui, Kowloon

Tel : 2730 5653 Fax : 2736 0612

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LONDON CHAMBER OF COMMERCE AND INDUSTRY
SERIES 4 EXAMINATION 2008
ACCOUNTING (IAS)
(LEVEL 3)

ANSWER 1

DORE

			\$
(a)			
(i)	Non-current assets		58,146
	Net current assets		24,216
	Current liabilities		<u>17,246</u>
	Total assets at 31 December 2007		<u><u>99,608</u></u>
(ii)	Gross profit		27,901
	Less: Net profit		<u>7,302</u>
	Expenses other than cost of goods sold		<u><u>20,599</u></u>
(b)		\$	\$
(i)	Gross profit before adjustments		27,901
	(2) Unsaleable inventory	(137)	
	(5) Drawings	600	
	(6) Purchases invoices	(4,250)	
	(7) Sales invoices	<u>5,175</u>	<u>1,388</u>
	Revised gross profit		<u><u>29,289</u></u>
(ii)			\$
	Net profit before adjustments		7,302
	Adjustments from gross profit		1,388
	(1) Bad debts		(736)
	(2) Stock loss		(137)
	(3) Depreciation		(2,100)
	(4) Prepaid administrative expenses		274
	(4) Accrued distribution costs		<u>(73)</u>
	Revised net profit		<u><u>5,918</u></u>

ANSWER 1 (CONTINUED)

(iii)		\$
	Net current assets before adjustments	24,216
	(1) Bad debts	(736)
	(2) Unsaleable inventory	(137)
	(4) Prepaid administrative expenses	274
	(4) Accrued distribution costs	(73)
	(6) Purchases invoices	(4,250)
	(7) Sales invoices	<u>5,175</u>
	Revised net current assets	<u><u>24,469</u></u>
(iv)		\$
	Current liabilities before adjustments	17,246
	(4) Accrued distribution costs	73
	(6) Trade payable	<u>4,250</u>
	Revised current liabilities	<u><u>21,569</u></u>
(v)		\$
	Non-current assets	58,146
	(3) Depreciation for the year	<u>(2,100)</u>
	Revised non-current assets	<u><u>56,046</u></u>

(c)

Accrued expenses are expenses that have been incurred, but not yet paid for. Prepaid expenses are expenses that have not been incurred, but yet paid already. Both adjustments are required because the actual expenses incurred and revenues arisen are recorded in the financial statements. If expenses accounts do not include the adjustment of prepayment, the profit would be understated. On the contrary, if expenses accounts exclude the adjustment of accrual, the profit would be overstated.

ANSWER 2

(a) Working

Year	Sales	Variable costs (80%)	Sales – VC	Fixed costs	Profit
	\$	\$	\$	\$	\$
1	150,000	120,000	30,000	18,000	12,000
2	200,000	160,000	40,000	18,000	22,000
3	250,000	200,000	50,000	18,000	32,000
4	200,000	160,000	40,000	18,000	22,000
5	200,000	160,000	40,000	18,000	<u>22,000</u>
					<u>110,000</u>

Average annual profit = \$110,000 / 5 = \$22,000

Average capital cost \$(100,000 + 10,000 + 50,000) / 2 = \$80,000

Accounting rate of return = Average annual profit / Average capital cost x 100%

= 22,000 / 80,000 x 100%

= 27.5%

(b) Year		Amount	Discount factor	Present value
		\$		\$
0	Initial cost	(150,000)	1	(150,000)
1	Net cash flow	30,000	0.909	27,270
2	Net cash flow	40,000	0.826	33,040
3	Net cash flow	50,000	0.751	37,550
4	Net cash flow	40,000	0.683	27,320
5	Net cash flow	100,000	0.621	<u>62,100</u>
			Net present value	<u>37,280</u>

Year		Amount	Discount factor	Present value
		\$		\$
0	Initial cost	(150,000)	1	(150,000)
1	Net cash flow	30,000	0.833	24,990
2	Net cash flow	40,000	0.694	27,760
3	Net cash flow	50,000	0.579	28,950
4	Net cash flow	40,000	0.482	19,280
5	Net cash flow	100,000	0.402	<u>40,200</u>
			Net present value	<u>(8,820)</u>

ANSWER 2 (CONTINUED)

(c)

(i) **Accounting rate of return**

Advantage: It is straightforward to calculate.

Disadvantage: It ignores the time value of money.

(ii) **Net present value**

Advantage: It uses time value of money which is more accurate.

Disadvantage: It depends on long-term forecasts of cash flows.

ANSWER 3

DEAN AND ITS SUBSIDIARY LYE
Consolidated Balance Sheet at 31 December 2007

	\$	\$
Non-current Assets		
Tangible (280,000 + 173,000)		453,000
Intangible – goodwill (W1)		<u>1,140</u>
		454,140
Current Assets (90,000 + 96,000 + 2,000 -1,000)	187,000	
Less : Current Liabilities (58,000 + 27,000)	<u>85,000</u>	
Net Current Assets		<u>102,000</u>
		<u>556,140</u>
Financed by:		
Capital and Reserves		
\$1 Ordinary shares		200,000
\$1 Preferred shares		100,000
Revaluation reserve (20,000 x 70%)		14,000
Accumulated profits (W2)		<u>170,840</u>
		484,840
Minority interest (W3)		<u>66,300</u>
		551,140
Long-term Liabilities		
Loan stock (15,000 – 10,000)		<u>5,000</u>
		<u>556,140</u>

ANSWER 3 (CONTINUED)

Workings

(1) Goodwill on consolidation	\$	\$
Cost of investment		96,000
Less : Ordinary shares acquired (100,000 x 70%)	(70,000)	
Pre-acquisition profit (29,000 x 70%)	<u>(20,300)</u>	<u>(90,300)</u>
Goodwill		5,700
Less : Amortised goodwill 2004-2007 (5,700 x 4 / 5)		<u>(4,560)</u>
Unamortised goodwill at 31 December 2007		<u><u>1,140</u></u>
(2) Accumulated profits	\$	\$
Dean		126,000
Add : Lye (101,000 – 29,000) x 70%	50,400	
Less : Unrealised profit (5,000 x 25/125)	<u>1,000</u>	<u>49,400</u>
		175,400
Less : Amortised goodwill (5,700 / 5 x 4)		<u>4,560</u>
		<u><u>170,840</u></u>
(3) Minority interest		\$
Ordinary shares (100,000 x 30%)		30,000
Accumulated profits (101,000 x 30%)		30,300
Revaluation reserve (20,000 x 30%)		<u>6,000</u>
		<u><u>66,300</u></u>

ANSWER 4

		PAR		
(a)			\$000	
(i)	Interest cover	Profit before interest / interest charges	210 / 20	= 10.50 times
(ii)	Dividend cover for ordinary shares	Profit after tax – Preference dividends / Ordinary dividends	(190 – 8) / 24	= 7.58 times
(iii)	Preferred dividend per share	Preferred dividend / Number of preferred shares	8 / 100	= \$0.08 per share
(iv)	Ordinary dividend per share	Ordinary dividend / Number of ordinary shares	24 / 250	= \$0.10 per share
(v)	Total market value of ordinary shares	Number of ordinary shares x Market value	250 x 4.8	= \$1,200
(vi)	Earnings per ordinary share	Profit after interest and preference dividends / Number of ordinary shares	(190 – 8) / 250	= \$0.73 per share
(vii)	Price earnings ratio	Current market value per ordinary share / Earnings per share	4.8 / 0.728	= 6.59 years

(b)		\$
	250,000 Ordinary shares, \$0.20 each	50,000
	100,000 8% Preferred shares, \$1.00 each	<u>100,000</u>
		<u>150,000</u>

(c)

(i) **Calculation of sales**

Debtors / Sales x 365 days = 40 days

\$258,000 / Sales x 365 days = 40 days

Sales = \$2,354,250

ANSWER 4 (CONTINUED)

(ii) Calculation of cost of goods sold

$$\text{Average inventories} / \text{Cost of goods sold} \times 365 \text{ days} = 36 \text{ days}$$

$$\$180,000 / \text{Cost of goods sold} \times 365 \text{ days} = 36 \text{ days}$$

$$\text{Cost of goods sold} = \underline{\underline{\$1,825,000}}$$

(iii) Calculation of gross profit margin

$$(\text{Sales} - \text{Cost of goods sold}) / \text{Sales} \times 100\%$$

$$= (\$2,354,250 - \$1,825,000) / \$2,354,250 \times 100\%$$

$$= \underline{\underline{22.48\%}}$$

(d)

- (i)** One way is to shorten the suppliers' production and/or delivery lead time. Since products can be replenished on time, inventory can be kept with a minimal level.

Another way is to collaborate with the vendors. Forecast the demand with the vendors for the coming year so as to plan their capacity and inventory in response to your order as soon as possible.

- (ii)** Two dangers to companies of maximizing the time they take to pay payables are:
- damaging relationship with suppliers.
 - missing out discounts for prompt payments.

ANSWER 5

TORRE

(a)	Accrued debenture interest at 31 December 2007	\$
	\$30,000 x 12% x 1/12	<u>300</u>
(b)	Number of ordinary shares in issue at 31 December 2007	\$
	31 December 2006 Balance b/f	400,000
	31 March 2007 Bonus issue of 1 for 5 (\$400,000 x 1/5)	80,000
	31 July 2007 Rights issue of 1 for 4 (\$400,000 + \$80,000) x 1/4	120,000
	30 November 2007 Issue to the public	<u>50,000</u>
		<u>650,000</u>

ANSWER 5 (CONTINUED)

(c)	Share Premium Account at 31 December 2007	\$
	31 December 2006 Balance b/f	50,000
	31 March 2007 Bonus issue (80,000 x \$0.5)	(40,000)
	31 July 2007 Rights issue [120,000 x (\$0.6 – \$0.5)]	12,000
	30 November 2007 Issue to the public [50,000 x (\$0.7 – \$0.5)]	<u>10,000</u>
		<u>32,000</u>

(d)	Total of all dividends paid in 2007	\$
	30 June 2007 Preferred dividend (100,000 x 10% x 1/2)	5,000
	Ordinary dividend (400,000 + 80,000) x \$0.04	19,200
	31 October 2007 Ordinary dividend (400,000 + 80,000 + 120,000) x \$0.05	30,000
	31 December 2007 Preferred dividend	5,000
	Ordinary dividend (650,000 x \$0.01)	<u>6,500</u>
		<u>65,700</u>

(e) The shareholders are the owners of the company who have voting and management rights in the company business. Debenture holders are the creditors of the company who do not have those rights. A company declares dividends only when there are profits incurred and the dividend rate may vary from year to year. However, company has to pay the debenture holders with a fixed rate interest no matter there are profits or not.

(f)	Calculation of total charges in March Income Statement	\$	\$
	Bad debts (\$6,000 + \$8,000)		14,000
	Provision for doubtful debts at 31 December 2007		
	(\$498,000 – \$8,000) x 3%	14,700	
	Less : Provision for doubtful debts at 31 December 2006	<u>12,800</u>	<u>1,900</u>
	Total charge in March		<u>15,900</u>

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