



UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
General Certificate of Education Advanced Level

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ACCOUNTING

9706/04

Paper 4 Problem Solving

For Examination from 2010

SPECIMEN MARK SCHEME

2 hours

MAXIMUM MARK: 120

This document consists of **10** printed pages.



General Points

1. The mark scheme is a positive one. Marks are to be awarded for what is correct. Marks are not to be deducted for what is wrong.
2. The mark scheme cannot provide for all possible variations in candidates' answers.

If a candidate's answer satisfies the requirements of a question and general accepted accounting practice, it will be acceptable for the full range of allocated marks.

3. **OWN FIGURE RULE.** A candidate may not be penalised twice for the same error. A wrong figure will be penalised at its first appearance **in an answer**. If it is required at a later stage in the answer, it will not be penalised a second time.

The 'own figure' rule will only apply to balance brought down on an account if the balance is shown correctly as a debit balance or a credit balance as the case may be.

An item in an account or a financial statement may be shown to be acceptable under the 'own figure' rule, but will not qualify for a mark unless a mark is allocated to it in the mark scheme.

4. Where normal accounting practice requires an item to be described as a 'Cost of Sales', 'Gross Profit', 'Net Profit' or in some other appropriate way, an allocated mark should be awarded only when the nature of the item has been recognised by appropriate wording.

1 (a)

Capital accounts						
	Amal	Ushi			Amal	Ushi
	\$	\$			\$	\$
Debentures (see note 2)	25 000		(1)	Balance b/d	60 000	40 000 (1)
Ordinary shares (60/40) (Note 3)	87 000	58,000	(1)	Current accounts	2 000	1 350 (1)
Bank		6 675	(1)	Loan account	20 000	(1)
				Goodwill	14 000	14 000 (1)
				Gain on revaluation (Note 1)	9 325	9 325 (1)
				Bank	6 675	(1)
	<u>112 000</u>	<u>64 675</u>			<u>112 000</u>	<u>64 675</u>

Bank account				
	\$		\$	
Balance b/d	9 650	(1)	Paid: Ushi (see above)	6 675
Received: Amal (see above)	6 675		Balance c/d	38 650
Received from Djamel (note 3)		(1)		
	<u>29 000</u>			<u>45 325</u>
	<u>45 325</u>			

[11]

- (b) Statement of Financial Position (Balance Sheet) at 1 November 2009 immediately after acquisition of the partnership business of Amal and Ushi

	\$	\$
Non-current assets at cost		
Intangible (Goodwill) (note 1)		28 000 (3)
Tangible		<u>85 000</u>
		113 000
Current assets		
Inventory	31 000	
Trade receivables	37 650	
Cash and cash equivalents	<u>38 650</u> (2)	
	107 300	
Current liabilities		
Trade payables	<u>(21 300)</u>	<u>86 000</u>
		199 000
Non-current liabilities		
8% debentures (note 2)		<u>25 000</u> (2) (see note)
		<u>174 000</u>
Share capital and reserves		
Ordinary shares of \$1 fully paid		120 000 (2) (see note 3)
Share premium account		<u>54 000</u> (1)
		<u>174 000</u>

[10]

Note 1. Calculation of Goodwill

	Per partnership Balance Sheet		Agreed takeover value
	\$	\$	\$
Non-current assets	60 000	+ 25 000	85 000
Inventory	34 000	- 3 000	31 000
Trade receivables	41 000	- 3 350	36 750
Cash and cash equivalents	<u>9 650</u>		<u>9 650</u>
	144 650	+ 18 650	163 300
Less Trade Payables			<u>(21 300)</u>
			142 000 (1)
Purchase consideration			<u>170 000</u> (1)
Goodwill			<u>28 000</u> (1)

Note 2. 8% debentures:

Interest paid to Amal as a partner. 10% of \$20 000 = \$2 000 (1)

8% debentures to yield \$2 000 p.a.: $\$2\,000 \times \frac{10}{8} = \$25\,000$ (1)

Note 3. Issue of ordinary shares.

	\$	
Purchase consideration	170 000	
8% debentures	<u>25 000</u> (1)	
100 000 Ordinary shares	145 000	(valued at \$1.45 per share)
<u>20 000</u> Shares issued to Dix at \$1.45	<u>29 000</u> (1)	
120 000 shares	<u>174 000</u>	(including \$54 000 premium)

- (c) (i) A capital instrument is a document (1)
which is evidence of the provision of long term capital to a company. (1)

The capital instruments in A & U Ltd's Balance Sheet are ordinary shares (1)
and debentures. (1)

[max 3]

- (ii) A bonus issue is an issue of shares made by transferring the reserves of a company to Share Capital account. (1)

Share certificates equal to the amount of the reserves so capitalised are issued free to the existing shareholders pro rata to the shares already held by them. (1)

The net assets of the company are not increased by a bonus issue, and there is no cashflow. (1)

A & U Ltd could use the share premium account to make a bonus issue of shares, possibly on the basis of five new shares for every 12 already held. (1)

[max 3]

- (iii) A rights issue is an invitation to existing shareholders of a company to subscribe for additional shares in the company. (1)

The issue is usually on more favourable terms than the shares can be obtained on the open market. (1)

The net assets of the company are increased by the cash subscribed for the shares. (1)

A & U Ltd could increase its capital by a rights issue because, as a private company, it may not invite the public to buy its shares. (1)

Even if A & U Ltd were a public company, it might prefer to raise additional capital by a rights issue to ensure that the existing shareholders retain control. (1) [max 4]

- (iv) A provision is any amount set aside out of profits (1)
to provide for the diminution in value of assets (1)
or provide for any known liability (1)
the amount of which cannot be ascertained with substantial accuracy (1)

A reserve is any amount set aside out of a profit other than as a provision to strengthen the financing of a company (1) [max 3]

- (v) A revenue reserve is created by debiting the Profit and Loss Appropriation Account and credited to an appropriate Reserve account (1)

Such reserves are revenue reserves as they are created from trading profits (1)

A capital reserve is created by the requirements of the Companies Act, as in the case of the Share Premium account in A & U Ltd (1)

A premium on the issue of shares must be credited to this account. Such reserves are capital reserves. (1)

As are any reserves created by revaluing fixed assets (1) [max 3]

- (vi) Bonus shares (2/1/0)
Paying dividends (2/1/0)
(other uses may be acceptable) [max 3]

- 2 (a) (i) Interest cover $\frac{50}{2} = 25$ times (1)
- (ii) Dividend cover $\frac{28}{12} = 2.33$ times (1)
- (iii) Earnings per share $\frac{(36\,000 - 8\,000)}{16\,000} = \0.175 (1)
- (iv) Price earnings ratio $\frac{1.80}{17.5} = 10.29$ (1)
- (v) Dividend yield $\$0.075 \times \frac{1}{8} \times 100 = 4.16\%$ (1)
- (vi) $\frac{28\,000}{(1.8 \times 16\,000)} \times 100 = 9.72\%$ (1)
- (vii) Gearing $\frac{25 + 80}{372 \div 25} \times 100 = 26.45\%$ (1)
Alternatively $\frac{25 + 80}{292} \times 100 = 35.96\%$
- (viii) Fixed asset turnover $\frac{375}{125} = 3$ times (1)

[8]

- (b) (i) Interest cover measures the ability of a company to cover for the cost of its long term borrowing out of profit. (1)

It is of interest to lenders to the company of long term loans (1)

- (ii) Dividend cover reflects the directors' dividend policy (1)
and the potential ability of a company to maintain its dividends in the future (1)
- (iii) Earnings per share expresses the profit available for distribution to ordinary shareholders as the amount of such profit per ordinary share. (1)

This information is required by the Companies Act 1985 to be disclosed by a company in its annual financial statements. (1)

- (iv) The price earnings ratio relates the market price of a share to the earnings per share. (1)

It indicates how many years' profits (if maintained at the current level) an investor is prepared to pay for in the price of his share. (1)

Many investors regard this ratio as a useful and easily comprehensible guide. (1)

- (v) Dividend yield expresses the dividend as a percentage of the market price of the share. (1)

This is a more realistic measure for the investor than the return on the nominal value of the share. (1)

- (vi) Different companies have different dividend policies which makes it difficult to compare them on the basis of dividends paid. (1)

Earnings yield makes comparisons easier and more meaningful. (1)

- (vii) Debenture holders are entitled to interest on their debentures, and preference shareholders are entitled to dividends, in priority to the rights of ordinary shareholders to receive dividends. (1)

The rights of ordinary shareholders are at risk if the company's profits are insufficient to meet the prior rights of fixed cost capital (i.e. debentures and preference shares). (1)

The gearing ratio measures the degree of the ordinary shareholders' risk. (1)

It is also of interest to existing and potential lenders to the company (1)

- (viii) Fixed asset turnover measures how efficiently the fixed assets of the company are being used to generate revenue. (1)

The higher the rate, the greater the efficiency. (1)

At least 1 point per ratio

[max 18]

(c)

Statement of Financial Position (Balance Sheet) as at 31 October 2009

	\$000	\$000
(1) (1) (1) (1)		
Non-current assets (125-81+30-20+18)		72
Current assets		
Inventory (94-12) (1)	82	
Trade receivables (133 + 14) (1)	147	
Bank (141 + 40) (1)	181	
	<u>410</u>	
Current liabilities		
Trade payables (96 + 9) (1)	105	355
		<u>377</u>
Non-current liabilities		
8% Debentures 2008 - 2012		25 (1)
		<u>352</u>
Capital and reserves		
Ordinary shares of \$1 (160 – 20) (1)		140
Preference shares of \$1 (80 + 20) (1)		100
Share Premium account (40 – 4) (1)		36
General reserve (75 – 10) (1)		65
Profit and Loss account (17 – 6) (1)		11
		<u>352</u>

[14]

[Total: 40]

3 (a)

Flexed budget for 18 000 units		\$	\$
Sales (\$30 x 18 000)			540 000
Direct materials (\$6 x 18 000)	108 000	(1)	
Direct labour (1.2 x 18 000 x \$11)	237 600	(1)	
Fixed overheads	70 000	(1)	415 600
Profit			<u>124 400</u> (1)

Actual price and rates

$$\text{Direct material per kilo } \frac{\$119\,408}{17\,560} = \$6.80 \text{ (1)}$$

$$\text{Direct labour per hour } \frac{\$233\,450}{23\,000} = \$10.15 \text{ (1)}$$

Actual profit from 18 000 units

Sales			504 000	(1)
Direct materials	119 408	(1)		
Direct labour	233 450	(1)		
Fixed overheads	70 000	(1)	422 858	
Profit			<u>81 142</u>	(1)

[12]

(b)

Profit expected from 10 000 units		\$	\$	
Sales			300 000	(1)
Direct materials	60 000	(1)		
Direct labour	132 000	(1)		
Fixed overheads	70 000	(1)	262 000	
Profit			<u>38 000</u>	(1)

$$\text{Direct material cost per unit } \frac{\$60\,000 \text{ (1)}}{10\,000 \text{ (1)}} = \$6$$

$$\text{Direct labour hours per unit } \frac{\$132\,000 \text{ (1)}}{\$11 \times 10\,000 \text{ (1)}} = 1.2 \text{ hours}$$

Statement to reconcile budgeted profit to actual profit

Budgeted profit			\$	38 000
	Variances			
	Adverse	Favourable		
	\$	\$		
Sales volume \$(124 400 – 38 000)		86 400	(1)	
Sales price \$(540 000 – 504 000)	36 000		(1)	
Direct materials				
Usage (18 000 – 17 560) \$6		2 640	(1)	
Price \$(6 – 6.80) 17 560	14 048		(1)	
Direct labour				
Efficiency (21 600 – 23 000) \$11	15 400		(1)	
Rate \$(11 – 10.15) 23 000		19 550	(1)	
	65 448	108 590		43 142
Actual profit				<u>81 142</u> (1)

[16]

- (c) Report format:
To ... (1) From ... (1) Subject matter (1)

The sales volume variance is favourable (1)
but the sales price variance is adverse. (1)

This suggests that the increased volume of sales has been achieved by a reduction in price charged to customers. (1)

The materials usage is favourable (1)
and the price variance is adverse. (1)

This suggests that the materials purchased may have been of better quality than those budgeted for. (1)

The labour efficiency variance is adverse (1)
while the rate variance is favourable. (1)

This suggests that a less skilled labour was employed than budgeted for. (1)

The labour efficiency variance may often be expected to be favourable (1)
if better quality materials are used (1)
because of a reduction in spoiled production and less time wasted. (1)

This is not the case in this instance presumably because of the lower grade of labour. (1)

To a maximum of 10 marks

[max 12]

[Total: 40]