# UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS <br> General Certificate of Education <br> Advanced Subsidiary Level and Advanced Level 

## ACCOUNTING

Paper 4 Problem Solving (Supplementary Topics)
October/November 2006
2 hours
Additional Materials: Answer Booklet/Paper

## READ THESE INSTRUCTIONS FIRST

If you have been given an Answer Booklet, follow the instructions on the front cover of the Booklet. Write your Centre number, candidate number and name on all the work you hand in.
Write in dark blue or black pen.
You may use a soft pencil for any diagrams, graphs or rough working.
Do not use staples, paper clips, highlighters, glue or correction fluid.
Answer all questions.
All accounting statements are to be presented in good style. Workings should be shown.
You may use a calculator.
At the end of the examination, fasten all your work securely together.
The number of marks is given in brackets [ ] at the end of each question or part question.

1 Knotsogood Ltd has been trading unprofitably for the past few years. The court has recently approved a scheme of capital reconstruction.

A Balance Sheet at 31 August 2006 showed the following position.

|  | Cost \$ | Accumulated depreciation \$ | NBV $\$$ |
| :---: | :---: | :---: | :---: |
| Fixed assets |  |  |  |
| Intangible fixed asset |  |  |  |
| Goodwill | 110000 |  | 110000 |
| Tangible fixed assets |  |  |  |
| Freehold land | 80000 |  | 80000 |
| Premises | 310000 | 50000 | 260000 |
| Vehicles | 220000 | 160000 | 60000 |
|  | $\underline{\underline{720000}}$ | $\underline{\underline{210000}}$ | 510000 |
| Investments at cost |  |  | 210000 |
| Current assets |  |  |  |
| Stock |  | 40000 |  |
| Trade debtors |  | 56000 |  |
| Cash |  | 4000 |  |
|  |  | 100000 |  |
| Creditors: amounts falling due within one year |  |  |  |
| Trade creditors | 80000 |  |  |
| Bank overdraft | 100000 | 180000 |  |
| Net current liabilities |  |  | (80000) |
|  |  |  | 640000 |
| Creditors: amounts falling due after more than one year |  |  |  |
| 8\% Debenture (2021) (secured on the freehold land) |  |  | 100000 |
|  |  |  | $\underline{540000}$ |
| Capital and reserves |  |  |  |
| Ordinary shares of \$1 each fully paid |  |  | 500000 |
| 8\% preference shares of \$1 each fully paid |  |  | 200000 |
| Share premium account |  |  | $\underline{250} 000$ |
|  |  |  | 950000 |
| Less Profit and loss account |  |  | (410 000) |
|  |  |  | $\underline{\underline{540} 000}$ |
| Authorised share capital |  |  |  |
| 1000000 ordinary shares of \$1 each |  |  | 1000000 |
| $5000008 \%$ preference shares of \$1 each |  |  | 500000 |

Note: The preference shares are cumulative and the dividends on the shares are 3 years in arrears.

The approved scheme for the reduction of capital was implemented as follows:
(i) The preference shares were reduced to $\$ 0.50$ per share.
(ii) The ordinary shares were reduced to $\$ 0.25$ per share.
(iii) Two new ordinary shares issued for every $\$ 1$ of gross preference dividend in arrears. The share premium account was utilised for the issue.
(iv) Goodwill was written off.

In addition:
(v) Stock costing $\$ 6000$ had been included in the final accounts at its selling price of $\$ 10000$.
(vi) A debt of $\$ 21000$ was written off as bad.
(vii) The debenture holder took over the freehold land at an agreed valuation of \$125 000. The balance was paid to the company.
(viii) The investments were sold for \$235000.

## REQUIRED

(a) Prepare a capital reconstruction account.
(b) Prepare a balance sheet at 31 August 2006 immediately after the capital reconstruction had taken place.
(c) Calculate the net asset value of each ordinary share
(i) before the implementation of the scheme;
(ii) after the implementation of the scheme.
(d) Identify and explain one factor that the court would consider before agreeing to the scheme of reconstruction.

2 The managers of Draxian Industries Ltd operate a system of standard costing and budgetary control. The company manufactures components which pass through two departments machining and finishing. The standard cost and budget information for March 2006 was as follows:

|  | Machining department | Finishing department |
| :--- | :---: | :---: |
| Standard cost per unit <br> direct materials | $\$ 4$ |  |
| direct labour machining (2 hours) | $\$ 14$ |  |
| direct labour finishing (11/2 hours) |  | $\$ 12$ |
| Budgeted output - units | 20000 | 20000 |
| Budgeted direct labour hours | 40000 | 30000 |

All output passes through both departments.
Additional information:
1 The actual production cost and details for March 2006 were as follows:
(i) Output passing through each department was 18000 units and there was no opening or closing work in progress.
(ii) Direct materials used at standard prices was $\$ 71360$.
(iii) Direct materials used at actual prices was \$73 144.
(iv) The direct labour hours used and the direct wages paid for the machining department were:

|  | hours | $\$$ |
| :---: | :---: | :---: |
| Machining department | 36300 | 263175 |

2 Variances for the finishing department have been calculated and are:
Direct labour efficiency variance
$\$ 3200$ adverse
Direct labour rate variance $\$ 2740$ favourable

## REQUIRED

(a) Calculate
(i) the total direct material variance for the machining department;
(ii) the direct material usage variance for the machining department;
(iii) the direct material price variance for the machining department.
(b) Calculate
(i) the total direct labour variance for the machining department;
(ii) the direct labour efficiency variance for the machining department;
(iii) the direct labour rate variance for the machining department.
(c) Calculate
(i) the actual direct labour hours used for the finishing department;
(ii) the actual direct wage rate paid per hour for the finishing department;
(iii) the total direct labour variance for the finishing department.
(d) Identify one possible reason for each of the following variances calculated in (a) and (b) and also the variances given for the finishing department in (c).
(i) the direct material usage variance for the machining department;
(ii) the direct material price variance for the machining department;
(iii) the direct labour efficiency variance for the machining department;
(iv) the direct labour rate variance for the machining department;
(v) the direct labour efficiency variance for the finishing department;
(vi) the direct labour rate variance for the finishing department.
(e) Discuss possible links between two pairs of variances calculated above.
(f) Explain two reasons why a system of standard costing might be introduced into a business.

3 The directors of Hamilton Ltd provide the following balances extracted from the ledgers of the company at 30 September 2006.

|  | Dr | Cr |
| :--- | ---: | ---: |
|  | $\$ 000$ | $\$ 000$ |
| Cost of sales and Sales | 819 | 1626 |
| Operating expenses | 672 |  |
| Interest paid | 12 |  |
| 600000 ordinary shares of $\$ 0.50$ each | - | 300 |
| $10 \%$ redeemable preference shares | - | 100 |
| $8 \%$ Debentures (2000) | - | 150 |
| Interim preference dividend paid | 5 | - |

Additional information:
The market price of the ordinary shares on 30 September 2006 was $\$ 1.60$.
The directors wish to make provision for:
(i) Corporation taxation for the year of $\$ 28000$.
(ii) Final preference dividend.
(iii) Final ordinary dividend of $\$ 35000$ (no interim dividend was paid).

The corporation tax charge for the year was $\$ 28000$.

## REQUIRED

(a) Prepare a Trading, Profit and Loss and Appropriation Account for the year ended 30 September 2006.

The following information relates to the Profit and Loss and Appropriation Account for the year ended 30 September 2005.
$\$ 000$
Operating profit 120
Debenture interest paid 12
Provision for corporation tax 25
Preference dividends for the year 10
Proposed ordinary dividend (no interim dividend was paid) 20

The market price per share at 30 September 2005 was $\$ 1.35$.
The issued ordinary share capital was 600000 shares of $\$ 0.50$ each at both balance sheet dates.

## REQUIRED

(b) Calculate the following ratios for each of the years ended

30 September 2005 and 30 September 2006:
(i) interest cover;
(ii) earnings per share (EPS);
(iii) price earnings ratio (P/E);
(iv) dividend yield;
(v) dividend cover.
(c) Comment on the changes in the ratios calculated in (b) over the two years.

The directors of Hamilton Ltd have drawn up the following draft balance sheet at 30 September 2006.
Fixed assets $\$ 000$ \$000 ..... $\$ 000$
Premises ..... 460
Other fixed assets ..... $\underline{200}$660
Current assets
Current assets other than bank ..... 65
Balance at bank ..... 91156
Creditors: amounts falling due in less than one year
Trade creditors ..... 18
Proposed dividends ..... 40
Taxation ..... 28
Creditors: amounts falling due after more than one year 8\% Debentures (2010) ..... 150$\underline{\underline{580}}$
Share Capital and Reserves
Ordinary shares of $\$ 0.50$ each fully paid ..... 300
$10 \%$ redeemable preference shares of $\$ 1$ each fully paid ..... 100
Profit and loss account ..... 180$\underline{\underline{580}}$

Note: Both the debentures and the preference shares were issued in 1996.
The directors have not taken into account the following transactions that took place at the close of business on 30 September 2006:
(i) the premises were revalued at $\$ 750$ 000;
(ii) the preference shares were redeemed at a premium of $10 \%$;
(iii) a bonus issue of 1 new ordinary share for every 2 held was made;

It is company policy to maintain reserves in their most flexible form.

## REQUIRED

(d) An extract showing the share capital and reserves section of the balance sheet of Hamilton Ltd after the items (i) to (iii) have been incorporated.

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