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

ACCOUNTING 9706/04

Paper 4 Problem Solving (Supplementary Topics)

October/November 2004

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 on both sides of the paper.

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.

At the end of the examination, fasten all your work securely together.

The questions in this paper carry equal marks.

All accounting statements are to be presented in good style. Workings should be shown.

You may use a calculator.

The number of marks is given in brackets [ ] at the end of each question or part question.

This document consists of **6** printed pages and **2** blank pages.



1 Rengaw Ltd's Balance Sheet at 30 September 2004 was as follows.

| Fixed assets  | \$000     | \$000                        | \$000<br>142                 |
|---|-----------|------------------------------|------------------------------|
| Current assets Stock Debtors Bank                                     |           | 82<br>30<br><u>28</u><br>140 |                              |
| Current liabilities<br>Creditors                                      | 59        |                              |                              |
| Proposed dividend   | _8        | <u>67</u>                    | $\frac{73}{215}$             |
| Less Long term liability  |           |                              |                              |
| 10% Debentures 2003 – 2005  |           |                              | 40<br>175                    |
| Capital and reserves  |           |                              |                              |
| Ordinary shares of \$1 8% Redeemable preference share Retained profit | es of \$1 |                              | 80<br>30<br><u>65</u><br>175 |

On 1 October 2004 the following transactions occurred:

- The debentures were redeemed at a premium of 5%.
   The directors decided that the debentures should be replaced by a reserve equal to the amount of the debentures redeemed.
- 2. An additional 30 000 ordinary shares of \$1 were issued at \$1.50 to provide for the redemption of the preference shares.
- 3. The 8% redeemable preference shares were redeemed at a premium of \$0.20 per share. The shares had been issued originally at par value.

## **REQUIRED**

(a) Prepare Rengaw Ltd's Balance Sheet immediately after the above transactions were completed, and before any further transactions had taken place. [12]

Following the completion of the above transactions, the directors require a cash budget for the four months October 2004 to January 2005 to be prepared from the following information.

- 1. Sales in September 2004 were \$40 000.
- 2. Forecast sales are as follows:

2004 October \$48 000 2005 January \$36 000 November \$60 000 February \$36 000 December \$54 000

- 3. 25% of all sales are cash transactions. One month's credit is allowed on the remainder.
- 4. A gross profit of  $33\frac{1}{3}\%$  is made on all sales.
- 5. Goods are purchased one month before sale and paid for two months after purchase.
- 6. Wages of \$28 000 and overheads of \$10 000 are paid each month.
- 7. The ordinary dividend for the year ended 30 September 2004 will be paid on 1 January 2005.
- 8. A machine costing \$30 000 will be purchased and paid for in November 2004.

## **REQUIRED**

**(b)** Prepare a cash budget **in columnar form** for **each** of the four months October 2004 to January 2005. (All calculations should be made to the nearest \$000.) [17]

Rengaw Ltd's bank overdraft is limited to \$40 000.

# **REQUIRED**

(c) State four actions the directors could take to avoid the overdraft limit being exceeded.

Where possible state the effect of each of the actions on the bank balance.

[11]

[Total: 40]

Ragle Ltd's Balance Sheets at 30 June 2003 and 2004 were as follows. 2

|                  | Tangible fixed assets (note 1)  |                             | At :            | 30 June 2<br>\$000           | 003<br>\$000<br>630                  | At 30<br>\$000                       | 0 June 2<br>\$000      | 2004<br>\$000<br>850                        |
|------------------|---|-----------------------------|-----------------|------------------------------|--------------------------------------|--------------------------------------|------------------------|---|
|                  | rangible fixed assets (flote 1)   |                             |                 |                              | 000                                  |                                      |                        | 000   |
|                  | Current assets Stock Debtors Bank   |                             |                 | 41<br>36<br>87<br>164        |                                      |                                      | 54<br>30<br>103<br>187 |   |
|                  | Creditors: amounts due within<br>Creditors<br>Proposed dividend   | one year                    | 29<br><u>25</u> | _54                          |                                      | 41<br><u>35</u>                      | <u>76</u>              |   |
|                  | Net current assets Total assets less current liabilit   | ties                        |                 |                              | 110<br>740                           |                                      |                        | <u>111</u><br>961                           |
|                  | Creditors: amounts due after of 10% Debentures 2002 – 2005  |                             |                 |                              | 100<br>640                           |                                      |                        | 60<br>901                                   |
|                  | Capital and reserves Ordinary shares of \$1 fully pai Share premium General reserve Retained profit                         | d                           |                 |                              | 500<br>25<br>100<br><u>15</u><br>640 |                                      |                        | 700<br>50<br>120<br><u>31</u><br><u>901</u> |
| Notes<br>1. Tang | gible fixed assets  |                             |                 |                              |                                      |                                      |                        |   |
|                  |   | Freehol<br>propert<br>\$000 | -               | Plant ar<br>machine<br>\$000 |                                      | Motor<br>vehicles<br>\$000           |                        | Total<br>\$000                              |
|                  | At cost<br>At 30 June 2003<br>Additions<br>Disposals<br>At 30 June 2004   | 1 000<br>-<br>-<br>1 000    |                 | 230<br>302<br>(35)<br>497    |                                      | 140<br>250<br>(85)<br>305            |                        | 1 370<br>552<br>(120)<br>1 802              |
|                  | Provisions for depreciation<br>At 30 June 2003<br>Depreciation on disposals<br>Depreciation for the year<br>At 30 June 2004 | 540<br>50<br>590            |                 | 120<br>(30)<br>200<br>290    |                                      | 80<br>(78)<br><u>70</u><br><u>72</u> |                        | 740<br>(108)<br>320<br>952                  |
|                  | Net book values at<br>30 June 2004  | <u>410</u>                  |                 | 207                          |                                      | <u>233</u>                           |                        | <u>850</u>                                  |

2. Proceeds from the sales of fixed assets were:

\$000

Plant and machinery 10 Motor vehicles 5

- 3. 200 000 ordinary shares of \$1 were issued on 1 July 2003 at a premium of \$0.125 per share.
- 4. An interim dividend of \$0.03 per share was paid on 1 November 2003.
- 5. The directors propose to pay a final dividend of \$0.05 per share for the year ended 30 June 2004 on 1 January 2005.
- 6. \$40 000 of debentures were redeemed at par on 31 December 2003. Interest on the debentures is paid each year on 30 June and 31 December.

#### **REQUIRED**

- (a) Calculate the operating profit for the year ended 30 June 2004. [5]
- **(b)** Prepare a reconciliation of the operating profit for the year ended 30 June 2004 to the net cash flow from operating activities. [7]
- (c) Prepare a cash flow statement for the year ended 30 June 2004. [9]
- (d) Prepare a statement showing the change in the bank balance between 30 June 2003 and 30 June 2004. [3]
- (e) Explain why a cash flow statement is important to shareholders. [8]
- (f) Explain how cash flow statements differ from cash budgets. [8]

[Total: 40]

3 The directors of Relham Ltd plan to introduce a new product.

A new machine costing \$125000 will be required. It will be sold at the end of five years for \$30000. Machinery is depreciated using the straight line method.

The new product will earn \$90 000 revenue annually and incur additional expenditure of \$60 000 each year

The purchase of the new machine will be financed by a loan at 8% per annum.

The following discounting factors are given.

|        | 8%    | 14%   |
|--------|-------|-------|
| Year 1 | 0.926 | 0.877 |
| 2      | 0.857 | 0.769 |
| 3      | 0.794 | 0.675 |
| 4      | 0.735 | 0.592 |
| 5      | 0.681 | 0.519 |

#### **REQUIRED**

(a) Calculate for the new product

(i) net present value (NPV) [10]

(ii) internal rate of return (IRR) [7]

(iii) accounting rate of return (ARR) [5]

The budget for the new product is based upon the production and sale of 1000 units each year at \$90 per unit. The standard cost of production of each unit is made up as follows:

Direct material: 4 kilos at \$5.50 per kilo.

Direct labour: 1.75 hours at \$12 per hour.

The balance of the additional expenditure consists of administration expenses.

10% is added to the cost of production for factory profit.

#### **REQUIRED**

(b) Prepare Manufacturing, Trading and Profit and Loss Accounts in as much detail as possible to show the product's budgeted additional annual profit. [10]

1000 units of the product were made and sold. The actual expenditure per unit was as follows:

Direct material: 4.2 kilos at \$5.25 per kilo.

Direct labour: 1.5 hours at \$12.60 per hour.

#### **REQUIRED**

- (c) Calculate the following variances:
  - (i) direct materials usage
  - (ii) direct materials price
  - (iii) direct labour efficiency

(iv) direct labour rate.

[8]

[Total: 40]

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