International
A Level

## Cambridge International Examinations

Cambridge International Advanced Level

## ACCOUNTING

Paper 4 Problem Solving (Supplementary Topics)
October/November 2014

No Additional Materials are required.

## READ THESE INSTRUCTIONS FIRST

An answer booklet is provided inside this question paper. You should follow the instructions on the front cover of the answer booklet. If you need additional answer paper ask the invigilator for a continuation booklet.

Answer all questions.
All accounting statements are to be presented in good style.
International accounting terms and formats should be used as appropriate.
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.

1 The directors of Aston plc provided the following financial information at 1 June 2013.
$\$ 000$
Ordinary share capital (\$1 shares) 25000
Share premium 5000
Revaluation reserve 1000
Retained earnings 2950
Land 6000
On 1 July $2013 \$ 1800000$ 8\% debentures were issued.
For the year ended 31 May 2014 profit from operations was $\$ 3752000$.
The tax charge for the year was $25 \%$ of the profit before taxation.

## REQUIRED

(a) Prepare the income statement for the year ended 31 May 2014.

## Additional information

On 1 September 2013 a final dividend relating to the previous year of $\$ 0.04$ per ordinary share was paid.

On 1 October 2013, 5000000 ordinary shares of $\$ 1$ each were issued at a premium of $\$ 0.10$ per share.

On 1 November 2013 a rights issue was made of 1 ordinary share for every 5 ordinary shares owned at $\$ 1$ per share. This was fully subscribed.

On 1 February 2014 land was revalued at $\$ 7500000$.
On 1 February 2014 an interim dividend of $\$ 0.03$ per ordinary share was paid.
On 1 March 2014 a transfer of $\$ 500000$ was made from retained earnings to a newly formed general reserve.

On 1 April 2014 the directors proposed a final dividend for the year $50 \%$ higher per share than the previous year.

## REQUIRED

(b) Copy the following table into your answer booklet and prepare a statement of changes in equity for the year ended 31 May 2014.

Statement of changes in equity

|  | Share <br> capital <br> $\$ 000$ | Share <br> premium <br> $\$ 000$ | Revaluation <br> reserve <br> $\$ 000$ | General <br> reserves <br> $\$ 000$ | Retained <br> earnings <br> $\$ 000$ | Total <br> $\$ 000$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Balance at <br> J June <br> 2013 |  |  |  |  |  |  |
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| Balance at <br> 31 May <br> 2014 |  |  |  |  |  |  |

(c) Explain the treatment of the final dividend proposed on 1 April 2014.

## Additional information

The directors are hoping to expand the business. They are planning a bonus issue of 1 new ordinary share for every 5 ordinary shares held on 31 May 2014.

## REQUIRED

(d) Explain what is meant by a bonus issue and also explain whether it would help the expansion plans for the business.

## Additional information

In July 2014, the directors carried out impairment review of their plant and equipment.
The data for this review is shown below:

| Asset | Carrying value | Net selling price | Value in use |
| :--- | :---: | :---: | :---: |
|  | $\$$ | $\$$ | $\$$ |
| 1 | 1870 | 1560 | 1362 |
| 2 | 2423 | 2514 | 2625 |
| 3 | 1368 | 1287 | 1313 |
|  |  |  |  |

(e) (i) Explain what is meant by impairment.
(ii) Calculate the total impairment loss that would be recognised in the income statement for the year ending 31 May 2015 in accordance with IAS 36, Impairment of assets.

2 The directors of Ragley Limited are considering a new business opportunity. This involves the purchase of machinery costing $\$ 600000$.

Units produced by the machine are expected to have a selling price of $\$ 50$ each and the variable costs of production are expected to be $\$ 31.10$ per unit. Fixed costs are expected to be $\$ 120000$ per annum excluding depreciation.

The machinery is expected to lose its value evenly over four years and then be scrapped.
The directors expect to produce and sell 20000 units a year.

## REQUIRED

(a) Calculate the following expected annual values. Label each answer.
(i) Total contribution
(ii) Net cash flow
(iii) Profit
(b) Calculate the expected annual breakeven level of production, both in units and sales revenue.

## Additional information

Ragley Limited has a cost of capital of $10 \%$. Discount factors are as follows.
Year 10.909
Year 20.826
Year 30.751
Year 40.683
3.169

The directors provide the following incorrect net present value calculation as an aid to decision making.

Annual surplus $\$ 108000$
x Discount factor for four years
3.169

Net present value
\$342 252

## REQUIRED

(c) Explain why the directors' net present value calculation is incorrect.
(d) Calculate the correct net present value of the machinery.
(e) Calculate the sensitivity of the project to changes in the cost of the machinery.
(f) Calculate the sensitivity of the project to changes in the selling price.
(g) State the IAS which deals with property, plant and equipment and identify five items which a company can add to the cost price of an asset.

6
3 The directors of Drosnan Retail Limited provide the following budgeted information.

|  | Revenue | Purchases | Monthly <br> depreciation | Administration <br> costs |
| :--- | :---: | :---: | :---: | :---: |
| 2014 | $\$$ | $\$$ | $\$$ | $\$$ |
| November | 24000 | 14000 | 120 | 6300 |
| December | 26000 | 17000 | 120 | 6200 |
| 2015 |  |  |  |  |
| January | 30000 | 18000 | 120 | 6200 |
| February | 26000 | 15000 | 120 | 6800 |
| March | 28000 | 19000 | 150 | 7100 |
| April | 32000 | 13000 | 150 | 6700 |

Other information is as follows.

1. $10 \%$ of all revenue are cash sales.
2. $50 \%$ of credit customers pay in the month following the sale and receive a $4 \%$ cash discount. Remaining trade receivables pay in the second month following the sale.
3. All purchases are on credit and are paid for in the month following purchase, after deducting a 5\% early settlement discount.
4. The business rent is $\$ 9000$ a year. This is paid in two equal instalments on 1 February and 1 August each year.
5. A dividend of $\$ 3100$ is expected to be paid on 19 January 2015.
6. Administration costs are paid in the month after the one in which they are incurred.
7. The company expects to take out a bank loan of $\$ 10000$ with an interest rate of $7.8 \%$ per annum on 1 March 2015. This is to help finance the purchase of a new vehicle in March which is expected to cost $\$ 12000$. The loan is to be repaid in full together with the interest after one year.
8. The company directors intend to sell an old vehicle in April 2015. This originally cost $\$ 7200$ and by the date of disposal will have accumulated depreciation of $\$ 5100$. The sales proceeds are anticipated to be $\$ 1100$.
9. Inventory on 1 January 2015 is expected to have a value of $\$ 2100$. Inventory on 30 April 2015 is expected to be valued at $\$ 3800$.
10. It is expected that there will be a bank overdraft of $\$ 1303$ on 1 January 2015.

## REQUIRED

(a) Prepare a cash budget for each of the four months January to April 2015.
(b) Prepare a budgeted income statement for the four month period ending 30 April 2015.
(c) Explain two reasons why the change in the bank balance calculated in (a) is different from the profit figure in (b).
(d) State two reasons why management prepares a cash budget.

## Additional information

Drosnan Retail Limited has a financial year end of 31 July 2015.
$40 \%$ of its annual profit is expected to arise in the four month period ending 30 April. The dividend in January will be the interim dividend; the final dividend is expected to be double the interim dividend.

## REQUIRED

(e) Calculate the expected dividend cover for the year ending 31 July 2015.

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