UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
General Certificate of Education
Advanced Level

## ACCOUNTING

Paper 4 Problem Solving (Supplementary Topics)

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.
International accounting terms and formats should be used as appropriate.
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 Smilbo Smaggins plc has been manufacturing cutlery for many years. It provided the following financial statements:

## Statements of financial position at 30 April

|  | 2012 |  | 2011 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | \$ | \$ | \$ | \$ |
| Non-current assets |  |  |  |  |
| Plant and machinery |  | 82500 |  | 64900 |
| Office equipment |  | 34519 |  | 38355 |
|  |  | 117019 |  | 103255 |
| Current assets |  |  |  |  |
| Inventories | 18758 |  | 16521 |  |
| Trade receivables | 17623 |  | 12517 |  |
| Cash and cash equivalents | $\underline{27754}$ |  | $\underline{6459}$ |  |
|  |  | 64135 |  | 35497 |
| Total assets |  | 181154 |  | 138752 |
| Current liabilities |  |  |  |  |
| Trade payables | 22758 |  | 18654 |  |
| Taxation | $\underline{5} 350$ |  | 4200 |  |
|  |  | 28108 |  | 22854 |
| Non-current liabilities |  |  |  |  |
| 4\% Debentures 2020 |  | 30000 |  | 50000 |
| Net assets |  | $\underline{123046}$ |  | $\underline{\underline{65898}}$ |
| Equity |  |  |  |  |
| Ordinary share capital |  | 60000 |  | 40000 |
| Share premium |  | 18000 |  | 8000 |
| Retained earnings |  | 45046 |  | 17898 |
|  |  | $\underline{123046}$ |  | 65898 |

Income statement for the year ended 30 April 2012

|  | $\$$ |
| :--- | ---: |
| Revenue | 396672 |
| Cost of sales | $\underline{259329}$ |
| Gross profit | 137343 |
| Distribution costs | 32357 |
| Administrative expenses | $\underline{70438}$ |
| Profit from operations | $\underline{54648}$ |
| Finance costs | 32948 |
| Profit before taxation | $\underline{5800}$ |
| Taxation | $\underline{27148}$ |
| Profit attributable to equity holders |  |

## Additional information:

1 The debentures were redeemed at par.
2 Plant and machinery costing $\$ 27500$ was sold during the year for $\$ 10000$. It had been depreciated by $\$ 19600$.

3 Additional machinery was purchased at a cost of $\$ 35000$. There is no depreciation charge in the year of acquisition.

4 There were no acquisitions or disposals of office equipment during the year.

## REQUIRED

(a) Prepare a statement to show the net cash flow from operating activities.
(b) Prepare a statement of cash flows for the year ended 30 April 2012 in accordance with IAS 7.

## Additional information:

1 For the year ended 30 April 2011 the trade receivables turnover was 20 days and the trade payables turnover was 25 days.

2 All sales and purchases are made on credit.

## REQUIRED

(c) (i) Calculate both the trade receivables turnover and trade payables turnover for the year ended 30 April 2012.
(ii) Comment on the change in the trade receivables turnover.
(iii) Comment on the change in the trade payables turnover.

2 Brian Mills and Beryl Smart had been in partnership for many years. Accounts were prepared to 30 April. It was decided that the partners would retire on 30 April 2012 and the business was sold to Chipperfield Ltd.

The partnership's statement of financial position at 30 April 2012 was as follows:

\$

\$
Non-current assets
Property
85000
Fixtures and fittings 27500
Plant and machinery
14750
127250
Current assets

| Inventories | 28800 |
| :--- | ---: |
| Trade receivables | 10950 |

Bank $\underline{5450}$

| Total assets | $\frac{45200}{172450}$ |
| :--- | :--- |

## Current liabilities

Trade payables 13950

## Non-current liabilities

Loan from Brian Mills at 8\% per annum 15000
Loan from Beryl Smart at 6\% per annum 10000
25000
Net assets
$\underline{\underline{133500}}$

## Capital accounts

Brian Mills
76000
Beryl Smart $\quad \underline{57500}$
133500

Chipperfield Ltd's statement of financial position at 30 April 2012 was as follows:
\$ ..... \$
Non-current assetsProperty145000
Fixtures and fittings ..... 57750
Plant and machinery ..... 18750
Current assets
Inventories ..... 39450
Trade receivables ..... 12380
Bank ..... 69675221500
121505
Total assets ..... 343005
Current liabilities
Trade payables ..... 18675
Net assets ..... 324330
Equity
300000 Ordinary shares of $\$ 0.50$ ..... 150000
Share premium ..... 75000
Retained earnings ..... 99330324330

Chipperfield Ltd purchased the business on 1 May 2012 for $\$ 160$ 000. The company took over all of the assets (except the bank account) together with the current liabilities. The purchase consideration was:

1120000 ordinary shares of $\$ 0.50$ nominal value issued at a premium of $\$ 0.10$.
$2300006 \%$ non-redeemable preference shares of $\$ 0.50$.
$310 \%$ debentures redeemable in 2020 issued so that Brian and Beryl receive the same interest payments as in the partnership.

4 The balance paid from the bank account.
The partnership assets were re-valued as follows:

|  | $\$$ |
| :--- | :---: |
| Property | 95000 |
| Fixtures and fittings | 24500 |
| Plant and machinery | 12500 |
| Inventories | 27500 |
| Trade receivables | 10250 |

## REQUIRED

(a) Prepare Chipperfield Ltd's statement of financial position at 1 May 2012, after the partnership had been acquired.

Chipperfield Ltd's profit for the year ended 30 April 2012 was $\$ 82350$.
The budgeted profit for the year ended 30 April 2013 is $\$ 116000$.

## REQUIRED

(b) Calculate the return on capital employed for the two years. State whether Chipperfield Ltd has benefited from the purchase of the partnership.

## Additional information:

During the next financial year it is anticipated that plant modernisation will be required and that additional capital will have to be raised. The directors are considering four options:

1 Bonus issue.
2 Issue of 10\% debentures.
3 New share issue.
4 Rights issue.

## REQUIRED

(c) Explain the advantages and disadvantages of each option and recommend the most appropriate option.

3 The directors of a clothing company are proposing to manufacture coats. They anticipate that the coats would stay in fashion for the next 4 years.

This would require the purchase of additional equipment at a cost of $\$ 250000$ which would be scrapped after 4 years.

Sales are expected to be 4000 coats in year 1. In years 2 and 3 the expected number of coats sold will increase by $10 \%$ on the previous year but will fall to 3500 in year 4 .

The selling price of the coats will be $\$ 80$ in year $1, \$ 90$ in years 2 and 3 and $\$ 75$ in the final year.

Variable costs will be $\$ 65$ per coat for years 1 and 2, rising to $\$ 70$ for years 3 and 4 .

The company's cost of capital is $10 \%$.
The discount factors are:
Year 1
0.909

Year 2
0.826

Year 3
0.751
$\begin{array}{ll}\text { Year } 4 & 0.683\end{array}$

## REQUIRED

(a) Calculate the net cash flows for each year.
(b) Calculate the accounting rate of return.
(c) Calculate the net present value of the proposal.
(d) Advise the directors whether they should proceed with the proposal.
(e) (i) Explain what you understand by the internal rate of return (IRR).
(ii) Identify how IRR could be used to appraise this proposal.

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