

UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
General Certificate of Education
Advanced Level

9706/41
Paper 4 Problem Solving (Supplementary Topics)
October/November 2011
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.
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.

This document consists of $\mathbf{6}$ printed pages and $\mathbf{2}$ blank pages.

1 Alan, Brian and Clive have been in partnership for several years sharing profits in the ratio $3: 2: 1$, after charging an annual salary for Alan of $\$ 18000$ and interest on capital of $6 \%$ per annum.

Financial statements are prepared to 30 June.
Additional information:
1 The capital account balances on 1 July 2010 were:

## \$

Alan 42500
Brian 32000
Clive 28000
2 Alan retired on 31 December 2010. Dilip was admitted to the partnership on this date.
3 Dilip introduced fixed capital of $\$ 50000$. Brian also contributed a further $\$ 50000$ fixed capital.

4 It was decided that the profit sharing ratio for Brian, Clive and Dilip would be 2: 1:1 after charging an annual salary for Dilip of $\$ 10000$ and interest on capital of $6 \%$ per annum.

5 The following adjustments were made on 31 December 2010:
Goodwill was valued at $\$ 132000$ for the purposes of the change in partnership and the following revaluations were made:

|  | NBV | Revalued amount |
| :--- | :---: | :---: |
|  | $\$$ | $\$$ |
| Non-current Assets | 350000 | 300000 |
| Trade Receivables | 242000 | 216000 |
| Trade Payables | 83000 | 73000 |

Goodwill is not to be retained in the books of account.
6 Any balance on Alan's capital account on the date of retirement is to be transferred to his current account.

## REQUIRED

(a) Prepare partners' capital accounts in columnar form for the year ended 30 June 2011.

The current account balances on 1 July 2010 were:
\$
Alan $\quad 16852 \mathrm{Cr}$
Brian $\quad 7482 \mathrm{Dr}$
Clive $\quad 11743 \mathrm{Cr}$
The partners made drawings in their profit sharing ratios.
The total drawings were:
$\$ 30000$ on 31 December 2010 (immediately prior to the partnership change) \$20 000 on 30 June 2011

The net profit for the year ended 30 June 2011 was $\$ 48000$ and this accrued evenly throughout the year.

Any final balance owed to Alan is to be paid through the bank account.
REQUIRED:
(b) Prepare an appropriation account for the year ended 30 June 2011.
(c) Prepare partners' current accounts in columnar form for the year ended 30 June 2011.
(d) Identify two possible advantages and two possible disadvantages to Brian and Clive of admitting Dilip to the partnership on the retirement of Alan.
[Total: 40]

2 The following information is available for Phoenicia Ltd for the year ended 30 June 2011.

| Inventories at 1 July 2010 | $\$ 28000$ |
| :--- | :--- |
| Inventories at 30 June 2011 | $\$ 34000$ |
| Rate of inventory turnover | 8 times |
| Gross profit percentage | $35 \%$ |
| Net profit percentage | $12 \%$ |
| Income gearing | $40 \%$ |

Administrative expenses were twice as much as distribution costs.
The share capital consists of 250000 ordinary shares of $\$ 0.50$ nominal value.
Dividends paid during the year were $\$ 0.05$ per share.
The directors are not required to implement the IAS regulations because Phoenicia Ltd is a private limited company.

## REQUIRED

(a) Prepare an income statement (profit and loss account) and appropriation account, in as much detail as possible, for the year ended 30 June 2011.

The directors of Phoenicia Ltd have decided to invest in either Algebra plc or Vector plc.
Financial information for these two companies is shown below:

## For the year ended 30 June 2011

| Algebra plc | Vector plc |
| :---: | :---: |
| $\$ 000$ | $\$ 000$ |


| Profit from operations | 100 | 200 |
| :--- | :---: | :---: |
| Finance charges | $\frac{(40)}{60}$ | $\frac{(70)}{130}$ |
| Profit for the year | $(8)$ | $(40)$ |
| Preference dividend | $\underline{(20)}$ | $\underline{(10)}$ |
| Ordinary dividend | $\underline{\underline{32}}$ |  |

At 30 June 2011

|  | Algebra plc <br> $\$ 000$ | Vector plc <br> $\$ 000$ |  |
| :--- | ---: | :--- | ---: |
| Non-current assets | 850 | Non-current assets | 1450 |
| Net current assets | 80 | Net current assets | 130 |
| 2020 8\% Debentures | $\underline{500}$ | $201610 \%$ Debentures | $\underline{700}$ |
|  | $\underline{\underline{430}}$ |  | $\underline{\underline{880}}$ |
| Ordinary shares of \$1 | 100 | Ordinary shares of $\$ 1$ | 100 |
| 8\% \$1 Preference shares | 100 | $8 \% \$ 1$ Preference shares | 500 |
| Retained profit | $\underline{230}$ | Retained profit | $\underline{280}$ |
|  | $\underline{430}$ |  | $\underline{\underline{880}}$ |

The market value of one ordinary share at 30 June 2011 in each company was:

| Algebra plc | $\$ 2.50$ |
| :--- | :--- |
| Vector plc | $\$ 3.25$ |

## REQUIRED:

(b) For each company calculate the following ratios giving your answer to two decimal places.
(i) Gearing ratio
(ii) Earnings per share
(iii) Price earnings ratio
(iv) Dividend cover
(v) Dividend per share
(vi) Dividend yield
(c) Based on these calculations advise the directors of Phoenicia Ltd whether they should invest in either Algebra plc or Vector plc. Give reasons for your decision.

3 Jardiniere Ltd manufactures three types of garden chairs, Alpha, Beta and Gamma, using the same raw materials. The budget for November and December 2011 showed the following details per unit.

|  | Alpha | Beta | Gamma |
| :--- | :---: | :---: | :---: |
|  | $\$$ | $\$$ | $\$$ |
| Selling price | 58 | 52 | 47 |
| Direct labour | 12 | 15 | 9 |
| Direct materials | 21 | 21 | 14 |
| Variable overheads | 12 | 10 | 10 |
| Fixed overheads | 3 | 2 | 3 |

## REQUIRED

(a) Calculate the contribution per unit of each variety of chair.
(b) Jardiniere Ltd manufactures 10000 units of each type of chair per month.

Prepare a profit statement which shows the budgeted profit for November.

The cost of material is $\$ 7$ per kilo.
Due to festivals and holidays in December only 70\% of the total material required will be delivered.

## REQUIRED

(c) Prepare a statement which shows the optimum production plan and maximum profit achievable as a result of the material shortage in December.
(d) The company has a contract to supply 5000 of each type of chair to a major customer. Calculate the loss in total profit for December as a result of satisfying this contract.
[Total: 40]

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