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

## ACCOUNTING

Paper 4 Problem Solving (Supplementary Topics)
October/November 2009
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 Yip and Sim have been in partnership for many years sharing profits and losses in the ratio 2:1 respectively. The partners do not take an active part in running the business. Instead, Danny has managed the business for them for the past few years.

The partners provide the following balance sheet at 31 January 2009:

|  | \$ | \$ |
| :---: | :---: | :---: |
| Fixed assets at cost | 129000 |  |
| Depreciation to date | 51600 | 77400 |
| Current assets |  |  |
| Stock | 38700 |  |
| Trade debtors | 25800 |  |
| Bank balance | 9675 |  |
|  | 74175 |  |
| Current liabilities |  |  |
| Trade creditors | 18850 | 55325 |
|  |  | 132725 |
| Capital accounts |  |  |
| Yip |  | 80000 |
| Sim |  | 50000 |
| Current accounts |  |  |
| Yip |  | 4875 |
| Sim |  | (2150) |
|  |  | $\underline{132725}$ |

Profits shared by the partners for each of the past three years have been $\$ 39000$ after paying Danny a manager's salary of $\$ 27000$. It is believed that this level of profitability can be maintained in the future.

Danny wishes to expand the business. This would involve expenditure on new fixed assets at a cost of $\$ 250$ 000. The finance for the new fixed assets would be in the form of a loan at $8 \%$ interest per annum.

Yip, Sim and Danny all agree that the expansion should take place. This would increase the operating profit by $\$ 50000$.

Yip and Sim are considering retirement from the business.
Yip and Sim offer Danny two options.
Option 1: Danny will be admitted to the business as a partner. He would introduce a total of $\$ 60000$ cash for his capital and goodwill. He would be entitled to $75 \%$ of profits and losses, the remainder being shared by Yip and Sim in the same ratios as previously. Danny would keep his salary as a manager.

Yip, Sim and Danny agree that:
(i) the existing fixed assets of the business would be revalued at $\$ 100000$;
(ii) stock would be valued at $\$ 38$ 100;
(iii) a debt of $\$ 1000$ would be written off as bad;
(iv) goodwill would be valued at $\$ 72000$ but would not be shown in the books of account;
(v) the proposed expansion would take place immediately.

Option 2: Danny would buy all the assets including cash and assume all the liabilities of the business for a payment of $\$ 185000$. The expansion would also take place immediately.

## REQUIRED

(a) Prepare the balance sheet of the partnership as it would appear immediately after option 1 was implemented.
(b) Prepare the balance sheet of Danny as it would appear immediately after option 2 was implemented.
(c) Compare the annual profits to be gained by Danny from the implementation of each of the options being considered.
(d) Advise Danny which option he should choose. Support your answer with financial data.
[Total: 40]

2 The managers of Svennsen Ltd provide the following information.
Selected balances at 1 October 2009
\$
Fixed assets (Net book value) 210000
Ordinary issued share capital 150000
Profit and loss account 27150
Revaluation reserve 25000
Share premium account 40000
Stock
1000

Cash budget for the six months ending 28 February 2010

|  | Sept $\$$ | $\begin{gathered} \text { Oct } \\ \$ \end{gathered}$ | Nov | $\begin{aligned} & \text { Dec } \end{aligned}$ | $\begin{gathered} \text { Jan } \\ \$ \end{gathered}$ | Feb \$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Receipts |  |  |  |  |  |  |
| Cash sales | 4600 | 3700 | 4700 | 4800 | 4600 | 4200 |
| Debtors (1 month's credit) | 24000 | 23000 | 18500 | 23500 | 24000 | 23000 |
| Debtors (2 month's credit) | 16800 | 19200 | 18400 | 14800 | 18800 | 19200 |
| Sale of fixed assets |  |  | 8000 |  |  |  |
|  | 45400 | 45900 | 49600 | 43100 | 47400 | 46400 |
| Payments |  |  |  |  |  |  |
| Creditors (1 month's credit) | 22000 | 21000 | 18000 | 21000 | 24000 | 20000 |
| General expenses | 14500 | 16800 | 16600 | 20400 | 17700 | 15900 |
| Ordinary dividend |  |  |  | 4000 |  |  |
| Purchase of fixed asset |  |  | 8500 |  |  |  |
|  | 36500 | $\underline{37800}$ | 43100 | 45400 | 41700 | 35900 |
| Net cash flow | 8900 | 8100 | 64500 | (2300) | 5700 | 10500 |
| Balance b/fwd | (9 250) | ( 350 ) | 7750 | 14250 | 11950 | 17650 |
| Balance c/fwd | (350) | 7750 | 14250 | 11950 | 17650 | $\underline{28150}$ |

## REQUIRED

(a) Explain two measures that might be taken to resolve a forecast cash deficit in one month. [4]

Additional information:
$110 \%$ of sales each month are cash sales.
$50 \%$ of sales are expected to be settled one month following the sale.
The remaining $40 \%$ of sales are expected to be settled two months after sale.
2 All purchases will be on credit. Suppliers will be paid in the month following purchase.
3 General expenses will be paid as incurred.
4 A bonus issue of 1 new ordinary share for every 3 held will be made on 1 December 2009. The directors propose that equal amounts are used from the company's capital reserves.

5 Fixed assets will be purchased on 1 November 2009 for $\$ 17000$. Half of the cost will be paid on that date, the balance will be paid on 1 April 2010.

6 Fixed assets that cost $\$ 20000$ will be sold in November 2009 for $\$ 8000$. They will have been depreciated by $\$ 11000$ at the date of sale.

7 Fixed assets are depreciated at $10 \%$ per annum on net book value at the balance sheet date.

8 Stock at 31 December 2009 was valued at $\$ 2000$.

## REQUIRED

(b) Prepare a forecast trading and profit and loss account and an appropriation account for the three months ending 31 December 2009 in as much detail as possible.
(c) Prepare a forecast balance sheet at 31 December 2009 in as much detail as possible.

3 The Clang company manufactures parts for the car industry. The company has two production departments and a works canteen that provides meals and refreshments for the two production departments.

The following information is available:

| Department |  | A | Canteen |
| :--- | ---: | ---: | ---: |
| Floor area $\left(m^{2}\right)$ | 13000 | 10000 | 2000 |
| Staff employed | 30 | 70 | 10 |
| Power used (Kwh) | 1200 | 300 | 100 |
| Cost of machinery | $\$ 80000$ | $\$ 20000$ | $\$ 5000$ |

The following budgeted costs for the month of May have not been apportioned to a department.

|  | $\$$ |
| :--- | ---: |
| Rent and rates | 10000 |
| Insurance of machinery | 2625 |
| Heating and lighting expenses | 7500 |
| Supervisory wages | 12100 |
| Power | 4800 |
| Depreciation of machinery | 9030 |

Additional budgeted information per month

|  | Department A | Department B |
| :--- | :---: | :---: |
| Direct labour hours | 5120 | 12605 |
| Direct machine hours | 17250 | 1000 |

## REQUIRED

(a) Prepare a statement showing the apportionment of overheads for the month of May.
(b) Calculate an overhead absorption rate for department $A$ and department $B$ using the most appropriate method.

The managers of the Clang company have been asked to cost a new job, reference 55/ZR.
The job would require:
6 kilos of materials costing $\$ 7.40$ per kilo;
Other variable costs of $\$ 30.50$.
The job would spend 14 hours in department $A$ and a further 6 hours in department $B$.
The job would be marked up by $60 \%$ on cost to achieve the selling price.

## REQUIRED

(c) Calculate the price to be quoted to the customer for job 55/ZR.

The Kustom Bilt car company requires a special component for one of its cars. This will be a unique "one off" order.

The special component would take:
5 kilos of materials at $\$ 7.40$ per kilo;
Variable overheads of \$18.30;
It will require extra power estimated to cost $\$ 28.00$.
The component will spend 10 hours in department $A$ and 5 hours in department $B$.
The managers of Clang have calculated a selling price of $\$ 170.08$. Kustom Bilt cars are only willing to pay $\$ 100$.

## REQUIRED

(d) Advise the managers of Clang whether or not they should accept the order from Kustom Bilt cars at a price of $\$ 100$. Support your answer with financial and non financial data.

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