

UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
General Certificate of Education Advanced Level

## ACCOUNTING

9706/43
Paper 4 Problem Solving (Supplementary Topics)
October/November 2012
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.

1 Nathan Akrill is a sole trader who has successfully run a manufacturing business for many years. His business manufactures one product, the squam.

On 1 January 2011 there were 1000 squams in inventory. During the year 10318 squams were produced by the factory and transferred to the sales department. On 31 December 2011 there were 1240 squams in inventory. Nathan Akrill uses the FIFO method of inventory valuation.

Production is transferred from the factory to the sales department at cost plus $40 \%$.
Unfortunately the book-keeper was taken ill at the year end and Nathan Akrill decided he would have to produce his financial statements himself. He did not know how to value the inventory of finished goods at that date. Therefore he decided to value each squam at the same value as had been used on 1 January 2011.

Nathan Akrill produced the following:
Income statement for the year ended 31 December 2011

|  | \$ | \$ | \$ |
| :---: | :---: | :---: | :---: |
| Revenue |  |  | 880000 |
| Inventory at 1 January 2011 |  |  |  |
| Raw materials |  | 31000 |  |
| Finished goods |  | 58800 |  |
|  |  | 89800 |  |
| Purchases of raw materials |  | $\underline{261000}$ |  |
|  |  | 350800 |  |
| Inventory at 31 December 2011 |  |  |  |
| Raw materials | 46400 |  |  |
| Finished goods | 72912 | 119312 |  |
| Cost of sales |  |  | $\underline{231488}$ |
| Gross profit |  |  | 648512 |
| Manufacturing wages |  | 166000 |  |
| Supervisory wages |  | 42800 |  |
| Factory rent |  | 36000 |  |
| Office rent |  | 21000 |  |
| Depreciation of factory machinery |  | 13800 |  |
| Depreciation of office equipment |  | 2900 |  |
| Direct expenses |  | 9200 |  |
| Carriage on raw materials |  | 2500 |  |
| Administrative and selling expenses |  | $\underline{201000}$ |  |
|  |  |  | 495200 |
| Profit for the year |  |  | 153312 |

## Statement of Financial Position at 31 December 2011

|  | \$ | \$ | \$ |
| :---: | :---: | :---: | :---: |
| Non-current assets |  |  | 570000 |
| Current Assets |  |  |  |
| Inventory |  |  |  |
| Raw materials | 46400 |  |  |
| Finished goods | 72912 |  |  |
|  |  | 119312 |  |
| Trade receivables |  | 96200 |  |
| Bank |  | 11000 |  |
|  |  | 226512 |  |
| Current liabilities |  |  |  |
| Trade payables |  | (84 100) |  |
|  |  |  | 142412 |
|  |  |  | 712412 |
| Capital |  |  |  |
| Balance at 1 January 2011 |  |  | 622300 |
| Profit for the year |  |  | 153312 |
| Drawings |  |  | (80000) |
|  |  |  | 695612 |

## REQUIRED

(a) Prepare, for the year ended 31 December 2011:
(i) the manufacturing account;
(ii) the provision for unrealised profit account;
(iii) a corrected income statement.
(b) Prepare a corrected statement of financial position at 31 December 2011.
(c) Explain your treatment of finished goods in the inventory valuation.

2 Hyung Ltd has the following statements of financial position

|  | $\$ 000$ | At 31 March 2011 |  |
| :---: | :---: | :---: | :---: |
| Non-current assets (note 1) | 1700 |  | 1260 |
| Current assets |  |  |  |
| Inventories | 108 | 82 |  |
| Trade receivables | 90 | 72 |  |
| Cash and cash equivalents | - | 174 |  |
|  | $\overline{198}$ | 328 |  |
| Current liabilities |  |  |  |
| Trade payables | 52 | 108 |  |
| Cash and cash equivalents | 41 | 108 |  |
|  | 93 |  |  |
|  | 105 |  | 220 |
| Total assets less current liabilities | $\overline{1805}$ |  | 1480 |
| Non-current liabilities |  |  |  |
| 8\% Debentures 2010-2020 | 120 |  | 200 |
|  | 1685 |  | 1280 |
| Equity and reserves |  |  |  |
| Ordinary shares of \$1 fully paid | 1400 |  | 1000 |
| Share premium | 70 |  | 50 |
| General reserve | 200 |  | 200 |
| Retained profits | 15 |  | 30 |
|  | 1685 |  | 1280 |
| Notes |  |  |  |
| 1. Non-current assets |  |  |  |
|  | Freehold Property | Motor Vehicles | Total |
|  | \$000 | \$000 | \$000 |
| At cost |  |  |  |
| At 31 March 2011 | 2000 | 370 | 2370 |
| Additions |  | 808 | 808 |
| Disposals |  | (240) | (240) |
| At 31 March 2012 | $\underline{2000}$ | 938 | $\underline{2938}$ |
| Provisions for depreciation |  |  |  |
| At 31 March 2011 | 910 | 200 | 1110 |
| Disposals | - | (108) | (108) |
| Charge for the year | 100 | 136 | 236 |
| At 31 March 2012 | 1010 | $\underline{228}$ | 1238 |
| Net book value at 31 March 2011 | $\underline{1090}$ | $\underline{170}$ | 1260 |
| Net book value at 31 March 2012 | 990 | 710 | 1700 |

2. Proceeds from the sale of fixed assets
\$
Motor Vehicles
30000
3. No dividends were paid during the year.

## REQUIRED

(a) Prepare, in accordance with IAS 7, a statement of cash flows for the year ended 31 March 2012.
(b) Explain the difference between cash and profit.
(c) Assess the liquidity and profitability of Hyung Ltd at 31 March 2012.

## Additional information:

The directors believe they should raise finance to use during 2013.
Their options are:
1 to take out a loan repayable over 5 years with interest at $6 \%$ per annum
or
2 to make a rights issue of one ordinary share for every 2 shares held, at a $5 \%$ discount on the current market price.

## REQUIRED

(d) Explain one disadvantage of each of the possible methods of raising the finance.

3 Kriti Singh manufactures one product, and uses absorption costing in valuation and pricing decisions.

Each product requires 3 kilos of raw material costing $\$ 8$ per kilo, and 4 hours of direct labour at $\$ 7.50$ per hour. Other direct production costs amount to $\$ 4$ per unit.

The salesman is paid a commission and earns $\$ 2.50$ for each item sold. The factory supervisor is paid $\$ 18000$ a year.

Costs of shipping to customers is $\$ 1$ each.
Every time 50 units are completed maintenance costing $\$ 30$ is performed on the machinery.

Factory rent is $\$ 24000$ a year.
Other fixed manufacturing costs amount to $\$ 12000$ a year. Variable administration costs amount to $\$ 8.20$ per unit sold.

On 1 April 2012 there were no units in inventory. During the month 1250 units were produced. On 30 April 2012 there were 150 units unsold.

## REQUIRED

(a) Calculate the value of one unit of inventory.

## Additional information

Kriti Singh uses a mark-up of $30 \%$ on total cost to calculate the selling price.

## REQUIRED

(b) Starting with your answer from (a), calculate the selling price of one unit.
(c) Prepare an income statement for the month of April 2012.
(d) Reconcile the total profit with the mark-up per unit.

Kriti Singh is considering expanding her business and manufacturing an additional product.

Projected costs and revenues for this product are:

Direct production costs
Variable administration and distribution costs
Rent of second factory
Supervisor's salary
Other fixed manufacturing costs
$\$ 60$ per unit
$\$ 10$ per unit
$\$ 30000$ a year
\$22 000 a year
\$18 000 a year

Production is expected to be 2000 units a year with no inventory of finished goods being held. She will use the same mark-up for the new product as at present.

REQUIRED
(e) Calculate the expected profit for the year.
(f) Calculate the sensitivity of the expected profit to changes in:
(i) sales price;
(ii) sales volume;
(iii) variable costs;
(iv) fixed costs.

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