

UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
General Certificate of Education
Advanced Level

## ACCOUNTING

Paper 4 Problem Solving (Supplementary Topics)

## Additional Materials: Answer Booklet/Paper

## READTHESE 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 Aneeqa and Emilita are two sole traders who decided to form a partnership combining their businesses. At 31 March 2010 their balance sheets were as follows:

Balance sheets at 31 March 2010

|  | Aneeqa |  | Emilita |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | \$ | \$ | \$ | \$ |
| Non-current (fixed) assets |  |  |  |  |  |
| Premises |  | - |  |  | 86000 |
| Equipment |  | 12000 |  |  | 19000 |
| Fixtures |  | 6000 |  |  | 3000 |
| Motor vehicle |  | 8200 |  |  | - |
|  |  | 26200 |  |  | $\overline{108000}$ |
| Current assets |  |  |  |  |  |
| Inventory (stock) | 15000 |  |  | 5700 |  |
| Trade receivables (debtors) | 17000 |  |  | 18000 |  |
| Cash and cash equivalents (bank) | 9050 |  |  | - |  |
|  | 41050 |  |  | 23700 |  |
| Current liabilities |  |  |  |  |  |
| Trade payables (creditors) | 11000 |  | 12000 |  |  |
| Cash and cash equivalents (bank) | - |  | $\underline{10850}$ |  |  |
|  |  |  |  | 22850 |  |
| Net current assets |  | 30050 |  |  | 850 |
|  |  | $\underline{56250}$ |  |  | 108850 |
| Capital |  | $\overline{56250}$ |  |  | $\underline{108850}$ |

The new partnership was formed on 1 April 2010 when their assets were valued at:

|  | Aneeqa | Emilita |
| :--- | :---: | :---: |
|  | $\$$ | $\$$ |
| Premises | - | 120000 |
| Equipment | 16000 | 20000 |
| Fixtures | 6500 | 2800 |
| Motor vehicle | 12100 | - |
| Inventory (stock) | 14800 | 5100 |
| Goodwill | 9000 | 5000 |

It was agreed that a provision for doubtful debts of $5 \%$ would be created, that the bank accounts would be amalgamated and that goodwill would not be retained in the books.

From 1 April 2010:
Interest on capital was to be $10 \%$.
Partners' salaries were to be $\$ 10000$ each.
Profits were to be shared between Aneeqa and Emilita in the ratio 2:3 respectively.

## REQUIRED

(a) Prepare the balance sheet of the partnership at the start of business on 1 April 2010.

As sole traders Aneeqa and Emilita had earned annual profits of $\$ 16000$ and $\$ 34000$ respectively. They expect the profits of the partnership to be $10 \%$ higher in the first year.

## REQUIRED

(b) Calculate the amount of income each partner has gained or lost by the creation of the partnership. State which partner has benefitted in terms of income.
(c) Aneeqa and Emilita's future incomes are dependent on their businesses being going concerns.

State which partner has benefitted in terms of job security by the creation of the partnership.
Illustrate your answer with two ratios and give reasons for your answer.
(d) Calculate the percentage change in profit which would cause Emilita's income to remain unchanged.

2
A Pakenham Ltd has a financial year end of 30 April each year. The manufacturing account showed the following:

Manufacturing account for the year ended 30 April 2010

Inventory (stock) of raw materials at 1 May 2009
Purchases of raw materials
Inventory (stock) of raw materials at 30 April 2010
Direct labour
Prime cost Factory overheads

Rent and rates 20000
Electricity 72000
Other 12000
Factory cost of goods produced
Factory profit

## \$ <br> \$

12000
162000
(18000)

156000
160000
316000

104000
420000
63000
483000

Other information is as follows:
1 During the year ended 30 April 2010 sales were $\$ 602000$ and selling and administration costs were \$39 000.

2 Rent and rates are allocated on the basis of floor space. The factory occupies $100 \mathrm{~m}^{2}$ and the office and showroom $150 \mathrm{~m}^{2}$.

3 Electricity is allocated on the basis of usage with $80 \%$ being used in the factory.
4 Pakenham Ltd maintains a provision for unrealised profit account. The balance on this account was $\$ 4500$ on 1 May 2009 and was $\$ 4800$ on 30 April 2010. The rate of factory profit had remained constant during the year.

## REQUIRED

(a) Prepare an income statement (trading and profit and loss account) for the year ended 30 April 2010.
(b) Calculate the value of inventory (stock) for inclusion in the balance sheet at 30 April 2010. [4]

B Joy Locke sells wooden toy train sets. She sells engines, carriages and pieces of track, any of which may be bought individually. She buys them in plain wood and employs an assistant at $\$ 10$ an hour to paint them before she sells them.

The following information is available:

|  | Engine | Carriage | Track |
| :--- | ---: | ---: | ---: |
| Cost of plain toy | $\$ 7.00$ | $\$ 5.00$ | $\$ 2.00$ |
| Cost of paint | $\$ 0.80$ | $\$ 0.50$ | $\$ 0.25$ |
| Number painted in one hour | 2 | 5 | 10 |
| Selling price | $\$ 18.00$ | $\$ 11.00$ | $\$ 4.00$ |

## REQUIRED

(c) Calculate the value at which one unit of each toy is included in inventory (stock) once it is ready for sale.

Joy Locke's financial year end fell on 31 January 2010. Unfortunately she was not able to count her inventory (stock) until 4 February. Her inventory (stock) count showed that there were 14 plain engines and 26 painted engines in inventory (stock).

In the period between 31 January and 4 February the following had taken place:
20 engines had been received from the toymaker.
18 engines had been painted by the assistant.
21 engines had been sold to customers.
It was also discovered that on 30 January ten engines had been sent to a customer on a sale or return basis.

During the inventory (stock) count it was also discovered that one of the engines ready for sale was faulty and it would have to be sold for $\$ 4$. This engine was believed to have been in inventory (stock) for some time.

## REQUIRED

(d) Calculate the total value of the inventory (stock) of engines at 31 January 2010. Show your workings clearly.
(e) Name the IAS which deals with inventory (stock).

3 Ghosh Ltd is considering expanding its business and has to decide between taking on Project A or Project B. Both projects have a life of four years. Equipment is expected to have no scrap value.

Other information about the projects is as follows:

|  | Project A | Project B |
| :--- | ---: | ---: |
| Initial outlay | $\$ 150000$ | $\$ 140000$ |
| Annual sales | $\$ 100000$ | $\$ 120000$ |
| Annual purchases | $\$ 40000$ | $\$ 65000$ |
| Other costs as a percentage of sales | $8 \%$ | $5 \%$ |
| Increase in working capital | $\$ 10000$ | $\$ 18000$ |

Ghosh Ltd uses a cost of capital of $10 \%$. Discounting factors at $10 \%$ are as follows:

| Year 1 | 0.909 |
| :--- | :--- |
| Year 2 | 0.826 |
| Year 3 | 0.751 |
| Year 4 | 0.683 |

Using a cost of capital of $10 \%$ Project B has a net present value of $\$ 15281$.
REQUIRED
(a) For each of the two projects calculate the following:
(i) the annual net cash flow
(ii) the accounting rate of return
(iii) the payback period.
(b) Calculate the net present value of Project A only.
(c) State two limitations of each of the following:
(i) accounting rate of return
(ii) the payback period
(iii) the net present value.
(d) State which of the two projects Ghosh Ltd should select. Give reasons for your answer.

BLANK PAGE

## BLANK PAGE

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (UCLES) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest possible opportunity.

University of Cambridge International Examinations is part of the Cambridge Assessment Group. Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge.

