

Cambridge
International
A Level

Cambridge International Examinations
Cambridge International Advanced Level

ACCOUNTING

9706/42

Paper 4 Problem Solving (Supplementary Topics)

May/June 2014

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 an HB pencil for any diagrams, graphs or rough working.

Do not use staples, paper clips, 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 **8** printed pages.

* 1 6 2 5 1 1 6 2 4 4 *

- 1 Ann, Jan and Tan are in partnership sharing profits and losses equally. They provide the following information.

1 Statement of financial position at 1 January 2013.

| | | |
|-------------------------|----------------|----------------|
| Assets | \$ | \$ |
| Non-current assets | | |
| Land and buildings | | 130 000 |
| Motor vehicles | | <u>25 000</u> |
| | | 155 000 |
| Current assets | | |
| Inventory | 15 000 | |
| Trade receivables | <u>30 000</u> | |
| | | 45 000 |
| Total assets | | <u>200 000</u> |
| Capital and liabilities | | |
| Capital accounts: Ann | 40 000 | |
| Jan | 40 000 | |
| Tan | <u>30 000</u> | |
| | | 110 000 |
| Current accounts: Ann | 5 000 | |
| Jan | 2 000 | |
| Tan | <u>(4 000)</u> | |
| | | 3 000 |
| Non-current liabilities | | |
| Loan: Tan | | 50 000 |
| Current liabilities | | |
| Trade payables | 25 000 | |
| Bank overdraft | <u>12 000</u> | |
| | | <u>37 000</u> |
| Total liabilities | | <u>200 000</u> |

2 Summary of the business bank account for the year ended 31 December 2013.

| Bank account | | | |
|-------------------------|--------|--------------------------------|--------|
| | \$ | | \$ |
| Receipts from customers | 85 000 | Payments to suppliers | 55 000 |
| | | Payments for business expenses | 20 500 |
| | | Drawings – Ann | 5 000 |
| | | – Jan | 8 000 |
| | | – Tan | 2 000 |

- 3 At 31 December 2013 amounts outstanding from credit customers were \$20 000 and amounts due to credit suppliers were \$30 000.

- 4 The partners were unable to value their inventory at 31 December 2013. However, products are sold at a uniform gross profit margin of 40%.
- 5 The partnership agreement stated that there were to be no partners' salaries, interest on capital or interest on drawings. However, Tan is paid interest on his loan at 4% per annum.

REQUIRED

- (a) Prepare the income statement for the year ended 31 December 2013. [9]
- (b) Prepare Tan's current account at 31 December 2013. [4]

Additional information

On 1 January 2014 Tan retired from the partnership. It was agreed that Tan would take a motor vehicle at a value of \$5000. He agreed to leave \$20 000 of his loan in the partnership with any money owed to him being paid from the business bank account. At that date land and buildings were revalued at \$160 000. Goodwill was valued at £18 000 but would not be retained in the books of account.

Ann and Jan would now share profits and losses in the ratio of 2:1.

REQUIRED

- (c) Prepare the partners' capital accounts to record all of these adjustments and Tan's retirement from the partnership. [11]

Additional information

Tan is considering how to invest the money he received when he retired from the partnership. He has three options.

Option 1

Purchase ordinary shares in XY Limited. The shares have a nominal value of \$1 and a current market value of \$2.

The total share capital of XY Limited is 100 000 ordinary shares. For the last financial year the company made a profit for the year of \$24 000 and paid a dividend of 8%.

Option 2

Start a new business as a sole trader. He believes that in the first year of trading he will break even, in year two he will earn a profit for the year of \$2000, and in year three a profit for the year of \$10 000.

Option 3

Invest the money in a bank earning interest of 5% per annum.

REQUIRED

- (d) Calculate the dividend yield for XY Limited. [4]

- (e) Calculate the dividend cover for XY Limited. [3]
- (f) Discuss the advantages and disadvantages of each of the three options, and advise Tan which option he should choose. [9]

[Total: 40]

- 2 Bridlington plc prepares accounts annually to 30 September. The directors provide the following information.

Trial Balance
at 30 September 2013

| | Debit \$ | Credit \$ |
|------------------------------------|------------------|------------------|
| Revenue | | 936 011 |
| Purchases | 479 352 | |
| Distribution costs | 108 376 | |
| Administrative expenses | 236 758 | |
| Ordinary share capital | | 400 000 |
| Share premium | | 40 000 |
| Retained earnings | | 57 386 |
| Land and buildings | | |
| Cost | 380 000 | |
| Accumulated depreciation | | 78 400 |
| Plant and machinery | | |
| Cost | 105 000 | |
| Accumulated depreciation | | 66 500 |
| Motor vehicles | | |
| Cost | 65 000 | |
| Accumulated depreciation | | 37 578 |
| Loss on disposal of motor vehicle | 850 | |
| Inventory at 1 October 2012 | 177 838 | |
| Provision for doubtful receivables | | 6 834 |
| Trade receivables | 138 450 | |
| Trade payables | | 51 243 |
| Cash and cash equivalents | | 17 672 |
| | <u>1 691 624</u> | <u>1 691 624</u> |

Additional information

- 1 Land, which cost \$100 000, is not to be depreciated.
- 2 Depreciation is to be provided as follows:

| | |
|---------------------|-----------------------|
| buildings | 4% on cost, |
| plant and machinery | 10% on cost, |
| motor vehicles | 25% reducing balance. |

A full year's depreciation is charged in the year of acquisition and none in the year of disposal.

The charge is split in the ratio 3:1 between administrative expenses and distribution costs.

Plant and machinery costing \$10 000 was acquired on 1 April 2013.

A motor vehicle which had been purchased on 1 February 2011 for \$16 000 was sold on 1 June 2013 for \$8 150.

- 3 The inventory at 30 September 2013 was valued as follows:

| | |
|----------------------|------------|
| Net realisable value | \$212 653, |
| Cost | \$172 927. |

- 4 The provision for doubtful receivables is to be provided at 4% of the trade receivables and the movement is to be treated as an administrative expense.
- 5 An invoice for an administrative expense of \$4 525 remained unpaid at 30 September 2013.
- 6 There was a prepayment for a distribution cost at 30 September 2013 of \$2 760.
- 7 The tax charge for the year is estimated to be \$16 730.

REQUIRED

- (a) Prepare an income statement for the year ended 30 September 2013. [16]
- (b) Prepare a schedule of property, plant and equipment at 30 September 2013 suitable to be used as a note to the accounts. [10]
- (c) Prepare a statement of financial position at 30 September 2013. [8]

Additional information

During October 2013 the following transactions took place.

| | |
|------------|--|
| 6 October | A rights issue of 1 share for each 8 held was made at \$1.50 per share. The rights were fully taken up. Nominal value of each share is \$1.00. |
| 15 October | A bonus issue of 1 share for every 10 held was made. The company maintains its reserves in the most flexible manner. |
| 31 October | Land was revalued at \$200 000. |

Profit for the month of October was \$2615.

REQUIRED

- (d) Prepare the equity section of the statement of financial position at 31 October 2013. [6]

[Total: 40]

- 3 The directors of Drake plc wish to invest in a new production plant, and must choose between Project Utopia and Project Sylvania.

In each case the investment will be financed with a bank loan for the full amount. This will be repaid in full on the day the plant is purchased. The loan will be repaid in full in a single payment at the end of year five, however interest is payable throughout the useful life of the plant at 10% per annum.

The useful life of the plant will be 5 years, and it will then be scrapped with no sale proceeds.

The following information is available for Project Utopia:

| | |
|--------------------------|----------------------|
| Cost of production plant | \$200 000 |
| Cost of capital | 10% |
| Depreciation rate | 30% reducing balance |
| Revenue in year 1 | \$110 000 |
| Direct costs in year 1 | \$40 000 |

Revenue each year will be 5% higher than the year before.

Costs each year will be 3% higher than the year before.

Discount factors showing net present value of \$1

| | | |
|------|-------|-------|
| Year | 10% | 40% |
| 1 | 0.909 | 0.714 |
| 2 | 0.826 | 0.510 |
| 3 | 0.751 | 0.364 |
| 4 | 0.683 | 0.260 |
| 5 | 0.621 | 0.186 |

Copy the following table into your answer booklet.

| Year | Revenue | Costs | Interest | Net cash flow |
|-------|---------|-------|----------|---------------|
| | \$ | \$ | \$ | \$ |
| 0 | | | | |
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| 5 | | | | |
| Total | | | | |

REQUIRED

- (a) Complete the table from the information given to calculate the net cash flow for **each** year and in total for Project Utopia. [7]

- (b) Calculate the net present value for Project Utopia. [7]

(c) Calculate the accounting rate of return (ARR). [5]

(d) Calculate the internal rate of return (IRR). [7]

Additional information

The following information has also been calculated for Project Sylvania.

| | |
|---------------------------------|----------|
| Net present value | \$41 680 |
| Accounting rate of return (ARR) | 19.48% |
| Internal rate of return (IRR) | 17.29% |

REQUIRED

(e) State, with reasons, in which project the directors of Drake plc should invest. [4]

Additional information

The directors of Drake plc could finance the new project by issuing new ordinary shares and not using a bank loan.

REQUIRED

(f) Explain how financing the new project from the proceeds of issuing new ordinary shares would affect the accounting rate of return (ARR). [6]

(g) State and explain **two** other sources of finance for the project. [4]

[Total: 40]