

**Series 4 Examination 2011**

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**CERTIFICATE IN ACCOUNTING**

**Level 3**

**Wednesday 9 November**

Subject Code: 3012

Time allowed: **3 hours**

**INSTRUCTIONS FOR CANDIDATES**

- Answer **any 4** questions. There are no compulsory questions.
- All questions carry equal marks.
- Study the “**REQUIRED**” section of each question carefully and extract the data required for your answers from the information supplied.
- Write your answers in blue or black ink/ballpoint. You can only use pencil for graphs, charts, diagrams etc.
- Begin your answer to each question on a new page.
- All answers must be correctly numbered, but need not be in numerical order.
- Workings must be shown.
- You may use a calculator, provided the calculator gives no printout, has no word display facilities, is silent and cordless. The provision of batteries and their condition is your responsibility.
- Marks may be lost through lack of neatness and poor presentation.

## QUESTION 1

Yarra, a sole trader, lost some of his accounting records in respect of the year ended 31 December 2010. The following information is available:

- (1) all sales were on credit and made at a mark up of 80%
- (2) his business bank statements show:

|                 |                                     |                |  |
|-----------------|-------------------------------------|----------------|--|
|                 |                                     | <b>£</b>       |  |
| <b>Receipts</b> | - debtors                           | <u>275,000</u> |  |
|                 |                                     |                |  |
|                 |                                     | <b>£</b>       |  |
| <b>Payments</b> | - creditors                         | 142,500        |  |
|                 | plant and machinery                 | 52,000         |  |
|                 | rent                                | 51,800         |  |
|                 | insurance                           | 8,000          |  |
|                 | salaries                            | 60,000         |  |
|                 | postage                             | 4,000          |  |
|                 | heat and light                      | 12,000         |  |
|                 | sundry expenses                     | <u>1,200</u>   |  |
|                 |                                     | <u>331,500</u> |  |
|                 |                                     |                |  |
|                 |                                     | <b>£</b>       |  |
|                 | Balance in hand at 31 December 2010 | <u>14,063</u>  |  |

- (3) rent is paid annually, in advance, on 1 October each year, and the prepayment at 1 January 2010 was £36,600
- (4) insurance is paid annually, in advance, on 1 April each year, and the prepayment at 1 January 2010 was £1,200
- (5) Yarra paid himself a salary of £2,000 per month up to 30 June 2010, and £2,500 per month from 1 July to 31 December 2010
- (6) the cost of plant and machinery, owned at 1 January 2010, was £370,000. Plant and machinery, sold in 2010, cost £18,000 in 2007 and realised £8,000. The proceeds were paid into Yarra's personal bank account.

the cost of plant and machinery is written off in equal annual amounts over ten years, with a full charge in the year of purchase but no charge in the year of disposal. No depreciation has yet been charged for 2010.

No other fixed assets were owned by the business

- (7) sundry year end balances were as follows:

|                                      | <b>2009</b> | <b>2010</b> |
|--------------------------------------|-------------|-------------|
|                                      | <b>£</b>    | <b>£</b>    |
| Debtors                              | 41,200      | unknown     |
| Stock                                | 18,700      | 21,200      |
| Creditors                            | 11,800      | 13,700      |
| Plant and machinery (net book value) | 174,000     | unknown     |

- (8) the business does not have any loan capital.

**QUESTION 1 CONTINUED**

**REQUIRED**

- (a) Calculate the following amounts:
- (i) the profit or loss on disposal of plant and machinery
  - (ii) the balance of accumulated depreciation at 31 December 2010
  - (iii) Yarra's capital at 31 December 2009.
- (8 marks)

- (b) Prepare, for Yarra, his Trading and Profit and Loss Account for the year ended 31 December 2010 and his Balance Sheet at that date.
- (17 marks)

**(Total 25 marks)**

## QUESTION 2

The following information has been extracted from the records of Seine Plc, in respect of the year ended 31 December 2010:

- (1) the operating profit was £157,800
- (2) 5,000,000 £0.10 ordinary shares had been issued at a premium of 20%
- (3) £800,000 6% debentures had been redeemed at a premium of 10%
- (4) stock at 31 December 2010 was £29,700 higher than at 31 December 2009
- (5) debtors at 31 December 2010 were £198,000 (**before** deducting a provision for bad debts of 5%), debtors at 31 December 2009 were £187,000 (**after** deducting a provision for bad debts of 10%)
- (6) creditors at 31 December 2010 were £109,460, which was 30% higher than creditors at 31 December 2009
- (7) land and buildings were valued at £1,400,000 (cost), of which land cost £900,000, at 31 December 2010. Depreciation is charged on buildings at 2% per year on cost
- (8) plant and machinery was valued at £380,000 (cost), at 31 December 2009. On 1 July 2010, machinery which cost £70,000 on 1 October 2007 was traded in, in part exchange for machinery costing £63,000. The trade-in allowance was £40,000. Depreciation on plant and machinery is charged at the rate of 12% per year on cost.

### REQUIRED

- (a) Calculate the following items which will appear in the Cash Flow Statement of Seine Plc for the year ended 31 December 2010:
  - (i) net cash inflow from operating activities
  - (ii) net cash outflow from financing.

(16 marks)

The Marketing Director is critical of the decision to redeem the debentures. He comments that, whilst recognising the need to increase cash flowing into the business, the company should not be buying debentures at a premium of 10% when the current interest rates on debentures are only 2% and these debentures were due to be redeemed in three years' time at par.

### REQUIRED

- (b) Explain to the Marketing Director why redeeming the debentures was a sensible decision. (3 marks)
- (c) suggest three methods (other than those involving shares or loans) by which a company could improve its cash flow, giving one problem associated with each method. (6 marks)

**(Total 25 marks)**

### QUESTION 3

The following information has been extracted from the accounts of two quoted companies in respect of 2010:

|                                       | <b>Tamar Plc</b> | <b>Exe Plc</b> |
|---------------------------------------|------------------|----------------|
| <b>Year to 31 December</b>            | <b>£000</b>      | <b>£000</b>    |
| Sales                                 | 4,000            | 10,000         |
| Gross profit                          | 3,000            | 1,000          |
| Debenture interest                    | 100              | NIL            |
| Dividends: ordinary                   | 500              | 300            |
| preference                            | NIL              | 100            |
| Retained profit                       | 400              | 60             |
| <br>                                  |                  |                |
| <b>At 31 December</b>                 |                  |                |
| Ordinary share capital (£0.25 each)   | 2,500            | 3,000          |
| Preference share capital (£1.00 each) | NIL              | 1,000          |
| Share premium                         | 500              | 2,000          |
| Revaluation reserve                   | 1,000            | NIL            |
| Retained earnings                     | 3,800            | 700            |
| 10% Debentures (issued 30 June 2010)  | 2,000            | NIL            |

#### Notes

- (1) There were no changes in the number of shares in issue for either company during 2010
- (2) The market prices per ordinary share at 31 December 2010 were: Tamar Plc £2.00, Exe Plc £0.25.

#### REQUIRED

- (a) Calculate, to two decimal places, for **each** of Tamar Plc and Exe Plc, the following ratios:
  - (i) gross profit to sales percentage
  - (ii) net profit to sales percentage
  - (iii) earnings per ordinary share

(7 marks)
  
- (b) Calculate to two decimal places, for **each** of Tamar Plc and Exe Plc, **three additional** investment ratios relating to ordinary shares. You must name each ratio, provide a formula for each ratio, calculate each ratio and state briefly the purpose of each ratio.

(12 marks)

Extracts from two recent newspaper articles about the two companies are as follows:

- (A) The company, which operates an airline, has come through a difficult year. It has suffered from strikes and the effects of volcanic ash. However, it has invested heavily in new aeroplanes and is now led by a new Chief Executive, Billy Bolsh. The market rates Bolsh and the company very highly.
- (B) The company, which is a rather old fashioned supermarket, has seen its share price slump in recent years. Losses have been recorded in previous years, so any profit however small, must be seen as a cause for cautious optimism. However the company is still not highly regarded by the stock market.

#### REQUIRED

- (c) State which article is likely to relate to which company, giving **two** reasons for your choice for **each** article.

(6 marks)

**(Total 25 marks)**

#### QUESTION 4

Tay Plc uses three criteria for assessing whether to accept proposed new capital investment projects, as follows:

- (1) Payback period: must be four years or less
- (2) Accounting rate of return: must exceed 15%
- (3) Net present value: must be positive at a discount rate of 10%.

The manager of each division of Tay Plc is awarded a bonus of 1% of his annual salary for every 1% by which his accounting rate of return (based on the division's fixed assets) exceeds a target of 15% for the year.

The manager of the Clyde division was awarded a bonus of £2,500 for the year ended 31 December 2010, due to achieving an accounting rate of return of 20%. This ratio was based on the book value of the Clyde division's fixed assets, which were £800,000 on 1 January 2010.

#### REQUIRED

- (a) Calculate the following amounts in respect of the Clyde division for the year ended 31 December 2010:

- (i) net profit
- (ii) manager's salary excluding his bonus
- (iii) manager's salary plus bonus.

(5 Marks)

The Clyde division's management is considering a new project which will last for five years. This is expected to generate additional profits (before deducting depreciation) of £70,000 in each year. The project will require machinery, costing £200,000, which will be sold for £20,000 after the five years.

Additional working capital of £50,000 will be required, but this will be recovered in five years' time.

All cash flows can be assumed to occur at the end of each year, except the initial investment in machinery and working capital, which occurs at the beginning of the project. Discount factors at an interest rate of 10%, are as follows:

| Year | Factor |
|------|--------|
| 1    | 0.909  |
| 2    | 0.826  |
| 3    | 0.751  |
| 4    | 0.683  |
| 5    | 0.621  |

#### REQUIRED

- (b) Calculate whether or not the new project is acceptable using Tay Plc's assessment criteria.

**Note:** the accounting rate of return is assumed to exclude working capital from the initial investment.

(13 marks)

- (c) Discuss giving reasons, whether or not the manager of the Clyde division would wish the project to be accepted.

(4 marks)

- (d) Identify which of the three assessment criteria used by Tay Plc is the best for assessing new projects giving **two** reasons why.

(3 marks)

**(Total 25 marks)**

## QUESTION 5

The summarised Profit and Loss Accounts of Oder Plc and Main Plc for the year ended 31 December 2010 are as follows:

|                    | <b>Oder Plc</b> | <b>Main Plc</b> |
|--------------------|-----------------|-----------------|
|                    | <b>£000</b>     | <b>£000</b>     |
| Sales              | 18,000          | 12,000          |
| Cost of goods sold | ( 9,000)        | ( 6,800)        |
| Gross profit       | 9,000           | 5,200           |
| Operating expenses | (2,400)         | ( 4,100)        |
| Interest expense   | ( 1,000)        | ( 700)          |
| Net profit         | <u>5,600</u>    | <u>400</u>      |

On 30 November 2010 Oder Plc had sold goods to Main Plc for £280,000. These goods had cost Oder Plc £224,000. Only three quarters (in value) of these goods had been sold by Main Plc by 31 December 2010.

### REQUIRED

- (a) Prepare the Consolidated Profit and Loss Account of the Oder Plc Group for the year ended 31 December 2010, assuming **alternatively** that:
- (i) Oder Plc acquired 75% of the ordinary shares in Main Plc on 31 March 2010. Goodwill arising on acquisition was £4,000,000 and its value was estimated to have fallen to £3,600,000 at 31 December 2010.
  - (ii) Oder Plc acquired 80% of the ordinary shares in Main Plc on 30 September 2010. Goodwill arising on acquisition was £4,500,000 and its value was estimated to have fallen to £4,300,000 at 31 December 2010.

(19 marks)

- (b) Explain the following matters in relation to the goodwill on the acquisition of Main Plc:
- (i) Why goodwill may have been higher in respect of the 30 September 2010 acquisition than in respect of the 31 March 2010 acquisition.
  - (ii) Why goodwill may have fallen less in value in respect of the 30 September 2010 acquisition than in respect of the 31 March 2010 acquisition.

(6 marks)

**(Total 25 marks)**