



# Cambridge International AS & A Level

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**ACCOUNTING**

**9706/31**

Paper 3 Structured Questions

**October/November 2020**

INSERT

**3 hours**

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**INFORMATION**

- This insert contains all of the required information and questions. The questions are provided in the insert for reference only.
- You may annotate this insert and use the blank spaces for planning. **Do not write your answers** on the insert.



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This document has **12** pages. Blank pages are indicated.

## Section A: Financial Accounting

## Question 1

## Source A1

Barry owns a manufacturing business. He applies a rate of factory profit which varies each year. In this way inventory is valued at a transfer price similar to the price at which the goods could be bought from an external supplier.

Barry provided the following information.

|   |         |
|---|---------|
| At 1 January 2019                             | \$      |
| Inventory of finished goods at transfer price | 140 000 |
| Unrealised profit included in inventory value | 40 000  |

For the year ended 31 December 2019

|   |           |
|---|-----------|
| Prime cost                                  | 505 000   |
| Decrease in work in progress                | 12 000    |
| Revenue                                     | 1 550 000 |
| Decrease in provision for unrealised profit | 15 000    |
| Factory overheads                           | 283 000   |
| Distribution costs                          | 212 000   |
| Administrative expenses                     | 484 000   |
| Finance charges                             | 20 000    |

At 31 December 2019

|   |         |
|---|---------|
| Inventory of finished goods at transfer price | 125 000 |
|---|---------|

**Answer the following questions in the question paper. Questions are printed here for reference only.**

- (a) Calculate the amount of unrealised profit included in inventory on 31 December 2019. [2]
- (b) Calculate the rate of factory profit being applied in 2019. [2]
- (c) Prepare the income statement for the year ended 31 December 2019. [14]

**Additional information**

The factory manager has suggested that a rate of factory profit of 50% should be applied every year.

- (d) Advise Barry whether or not he should apply a rate of factory profit of 50%. Justify your answer. [5]
- (e) Explain where carriage on raw materials is recorded in the financial statements of a manufacturing business. [2]

[Total: 25]

## Question 2

## Source A2

PL plc is a trading company. A trainee in the finance department made a start on preparing the financial statements for the year ended 31 December 2019. He produced the following statement, **which contains errors**.

Statement of changes in equity for the year ended 31 December 2019

|   | Ordinary<br>share capital<br>(\$1 shares) | Retained<br>earnings | Bank loans |
|---|---|----------------------|------------|
|   | \$  | \$                   | \$         |
| Balance at 1 January 2019                   | 250 000                                   | 76 000               | 80 000     |
| Issue of new ordinary shares at \$2.50 each | 150 000                                   |                      |            |
| Dividend paid                               | (20 000)                                  |                      |            |
| 1 for 10 bonus issue of ordinary shares     | (31 000)                                  | 31 000               |            |
| New five-year bank loan received            |   |                      | 25 000     |
| Profit from operations for the year         |   | 63 000               |            |
| Loan interest paid                          |   |                      | (12 000)   |
| Balance at 31 December 2019                 | 349 000                                   | 170 000              | 93 000     |

In addition to the obvious errors, the following had not been considered.

- 1 At the end of the year, the premises had been revalued from \$100 000 to \$195 000.
- 2 A general reserve had been created, \$30 000.
- 3 Accrued interest had amounted to \$3000 on 1 January 2019 and \$5000 on 31 December 2019.

The following information was also available.

- 1 Trade payables at the year end were \$67 000.
- 2 It is the policy of the company to keep its reserves in the most flexible form.
- 3 Of the original bank loan, \$20 000 is due to be repaid during 2020, with the remainder due in the following years.

Answer the following questions in the question paper. Questions are printed here for reference only.

- (a) Calculate the profit for the year ended 31 December 2019. [3]
- (b) Prepare the **correct** equity and liabilities section of the **statement of financial position** at 31 December 2019. [16]

**Additional information**

The financial statements of PL plc also contain a value for goodwill.

- (c) Explain the event which has taken place and caused the company to record the value for goodwill. [2]
- (d) State **two** other reasons why goodwill might arise. [2]
- (e) Explain what is meant by the term 'audit'. [2]

[Total: 25]

**Question 3****Source A3**

Maria is a trader based in Manila. She uses the services of two agents, Nakula in Jakarta and Pedro in Madrid.

During the year ended 31 March 2020, Maria sent goods, costing \$100 per unit, to both Nakula and Pedro. Further information about these consignments was as follows.

|                              | Nakula<br>\$ | Pedro<br>\$ |
|------------------------------|--------------|-------------|
| Goods on consignment         | 6 000        | 15 000      |
| Sales                        | 4 000        | 28 000      |
| Freight costs paid by Maria  | 600          | Nil         |
| Freight costs paid by Pedro  | Nil          | 1 600       |
| Selling costs paid by Nakula | 400          | Nil         |
| Selling costs paid by Pedro  | Nil          | 1 200       |
| Profit on consignment        | 460          | 7 400       |
| Rate of commission           | 18%          | ?           |
| Inventory at 31 March 2020   | ?            | Nil         |

**Answer the following questions in the question paper. Questions are printed here for reference only.**

- (a) Prepare the following in Maria's books of account.
- (i) Consignment to Nakula account [5]
- (ii) Consignment to Pedro account [4]
- (b) Calculate the rate of commission paid to Pedro. [2]

**Additional information**

By the accounting year end, Pedro had remitted to Maria all the monies due to her from the consignment. However, Nakula had made no remittances of monies to Maria.

- (c) Prepare the following in Maria's books of account.
- (i) Nakula account [4]
- (ii) Pedro account [4]
- (d) Explain how unsold goods held by an agent are valued. [3]
- (e) Calculate the number of units held in inventory by Nakula at 31 March 2020. [3]

[Total: 25]

## Question 4

## Source A4

TC plc provided the following information at its year end.

|                           |                          |
|---------------------------|--------------------------|
| Ordinary shares in issue  | 1 million at \$0.50 each |
| Annual dividend           | \$80 000                 |
| Profit from operations    | \$215 000                |
| Profit for the year       | \$195 000                |
| Market value of one share | \$0.75                   |

**Answer the following questions in the question paper. Questions are printed here for reference only.**

- (a) Explain why the use of ratios may be helpful in analysing accounting data. [3]
- (b) (i) Calculate, to **two** decimal places, TC plc's income gearing ratio. [2]
- (ii) State what this ratio tells an investor about the risk of the company. [1]
- (iii) Name **one** other ratio which assesses the relationship between fixed cost capital and total capital. [1]
- (c) (i) Calculate, to **two** decimal places, TC plc's dividend cover. [2]
- (ii) State what this ratio tells an investor about the company's potential for capital growth. [1]
- (d) (i) Calculate, to **two** decimal places, TC plc's dividend yield. [2]
- (ii) State what this ratio tells an investor in the company who needs income. [1]
- (e) Name and calculate the ratio which shows the amount of profit attributable to each ordinary share. [3]
- (f) Name and calculate, to **two** decimal places, the ratio which measures the confidence investors have in the future of the business. [4]

**Additional information**

Fred is considering investing in TC plc. His brother says that in order to make a decision, Fred does **not** need to look at the income statement and statement of financial position, but only needs to look at the directors' report.

- (g) Advise Fred whether or not he should follow his brother's advice. Justify your answer. [5]

[Total: 25]

## Section B: Cost and Management Accounting

## Question 5

## Source B1

Bob manufactures and sells two products. He provides the following information.

|                               | Product A  | Product B  |
|-------------------------------|------------|------------|
| Monthly sales                 | 2000 units | 3000 units |
| Direct material cost per unit | \$8        | \$12       |
| Direct labour cost per unit   | \$10       | \$11       |
| Selling price per unit        | \$29       | \$46       |

The total overheads for the month are as follows.

|                      | \$            |
|----------------------|---------------|
| Rent                 | 42 000        |
| Machine set-up costs | 8 000         |
| Packaging            | 6 160         |
| Quality inspections  | 5 000         |
|                      | <u>61 160</u> |

Overheads are split between the two products on the basis of total sales revenue.

**Answer the following questions in the question paper. Questions are printed here for reference only.**

- (a) Calculate, to **two** decimal places, the profit or loss per unit of **each** product. [5]

**Additional information**

The following additional monthly data is available.

- Approximately 40% of the floor space in the factory is used in the manufacture of product A and 60% in the manufacture of product B.
  - The machinery used to manufacture product A is set up 300 times a month and the machinery for product B 500 times a month.
  - The number of orders packed for despatch are 700 a month for product A and 420 a month for product B.
  - 300 quality inspections take place each month for product A and 700 for product B.
- (b) Calculate the amount of overhead allocated or apportioned to each product using the additional monthly data. [8]
- (c) Name and explain why one of Bob's overhead costs cannot be allocated using activity based costing. [3]
- (d) Calculate, to **two** decimal places, the profit or loss per unit of **each** product which would be earned if overheads were calculated using the additional monthly data. [4]
- (e) Advise Bob whether or not he should make any changes to the selling prices. Justify your answer. [5]

[Total: 25]

## Question 6

## Source B2

Samir has a business in the leisure industry. He is purchasing a boat and plans to start luxury river cruises. In his original plan, which had a positive net present value (NPV), he anticipated the following revenue.

|        | number of tickets<br>sold per year | price per ticket<br>\$ |
|--------|------------------------------------|------------------------|
| year 1 | 8000                               | 100                    |
| year 2 | 8300                               | 110                    |

He is now considering a revised plan, employing local historians to accompany the cruises and give lectures on the history of the area. He thinks that this will result in 20% more tickets being sold each year. The selling price of the tickets would be \$10 higher than under the original plan.

**Answer the following questions in the question paper. Questions are printed here for reference only.**

(a) Calculate the **total** revenue for **each** year for:

(i) the original plan [1]

(ii) the revised plan. [1]

**Additional information**

The majority of the running costs of the cruises will be fixed. Variable costs are expected to amount to \$30 for each ticket sold.

(b) Calculate the **total** variable cost for **each** year for:

(i) the original plan [2]

(ii) the revised plan. [2]

**Additional information**

1 The cost of employing the historians will add \$125 000 per annum to the total fixed costs of running the cruises.

2 The capacity of the boat restricts the total number of tickets which can be sold each year to 10 000.

3 Samir uses a cost of capital of 10% per annum. The discount factors for this rate are as follows.

year 1 0.909

year 2 0.826

(c) Calculate the **increase** in NPV which would arise if the revised plan was used instead of the original. [8]



- (d) Calculate the total number of tickets Samir would have to sell in **year 1** under the revised plan so that the increase in revenue equalled the additional fixed costs. [3]
- (e) Assess any concerns Samir might have about the revised plan. [2]
- (f) Advise Samir whether or not he should implement the revised plan. Justify your answer. [3]
- (g) Explain how sensitivity analysis helps in investment appraisal. [3]

[Total: 25]



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