## Cambridge International AS \& A Level

## ACCOUNTING

Paper 3 Structured Questions
INSERT

## 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.


## Section A: Financial Accounting

## Question 1

## Source A1

The following are the statements of financial position for $W$ Limited at 31 December.

|  | $\begin{gathered} 2019 \\ \$ \end{gathered}$ | $\begin{gathered} 2018 \\ \$ \end{gathered}$ |
| :---: | :---: | :---: |
| Non-current assets |  |  |
| Premises | 380000 | 320000 |
| Machinery | 203000 | 202000 |
| Motor vehicles | 113200 | 118000 |
|  | 696200 | 640000 |
| Current assets |  |  |
| Inventory | 32550 | 36500 |
| Trade receivables | 49300 | 46200 |
| Cash at bank | 16400 | 8100 |
|  | 98250 | 90800 |
| Total assets | 794450 | 730800 |
| Equity and liabilities |  |  |
| Equity |  |  |
| Ordinary share capital (\$1 shares) | 440000 | 400000 |
| Share premium | 60000 | 40000 |
| General reserve | 50000 | 35000 |
| Retained earnings | 79300 | 104000 |
| Revaluation reserve | 80000 | Nil |
|  | 709300 | 579000 |
| Non-current liabilities |  |  |
| Bank loan | 30000 | $\underline{100000}$ |
| Current liabilities |  |  |
| Trade payables | 41000 | 36700 |
| Tax payable | 13400 | 12600 |
| Accrued interest | 750 | 2500 |
|  | 55150 | 51800 |
| Total equity and liabilities | $\underline{794450}$ | 730800 |

The following information relates to the year ended 31 December 2019.
1 Premises were revalued at $\$ 400000$ on 1 January 2019. There were no purchases or disposals of premises during the year.

2 Additional machines costing $\$ 28000$ were purchased during the year.
3 A motor vehicle costing $\$ 65000$, with an accumulated depreciation of $\$ 26000$, was sold during the year for $\$ 32500$. It was replaced by a new motor vehicle at a cost of $\$ 74000$.

4 Tax and interest charged for the year amounted to $\$ 13400$ and $\$ 8250$ respectively.
5 Interim dividend of $\$ 0.11$ per share was paid in August 2019 before 40000 additional ordinary shares were issued for cash.

6 Profit from operations for the year ended 31 December 2019 was $\$ 55950$.

Answer the following questions in the Question Paper. Questions are printed here for reference only.
(a) State three differences between a statement of cash flows and a cash budget.
(b) Prepare a statement reconciling the profit from operations with the cash from operations for the year ended 31 December 2019.
(c) Prepare a statement of cash flows for the year ended 31 December 2019. Start your answer with cash from operations from (b).
(d) Discuss the effect of an increase in general reserve during the year on cash flow.

## Additional information

The bank loan of $\$ 100000$ was to be repaid in 2022. The directors made an early repayment in part on 30 September 2019.
(e) Discuss whether or not the directors were right in repaying part of the bank loan during the year ended 31 December 2019. Justify your answer.
[Total: 25]

## Question 2

## Source A2

AD Limited sells watches and clocks. Watches are manufactured by the company and clocks are bought from a local manufacturer.

The following balances were extracted from the books of AD Limited at 31 December 2019.

Sales revenue
watches 628000
clocks
Purchases
raw materials 132700
clocks 252600
Plant and machinery (at cost) 320000
Office equipment (at cost) 210000
Accumulated depreciation at 1 January 2019
plant and machinery
184000
office equipment 94000
Inventory at 1 January 2019
watches finished goods (cost) 40000
watches work in progress 9000
raw materials 12500
clocks 28400
Direct wages 168000
Manufacturing overheads 63500
Rent and rates 68000
Administrative expenses 94000
The following information is also available.
1 Manufactured watches are transferred to the trading account at production cost plus a mark-up of 20\%.

2 Inventory at 31 December 2019 is as follows:

|  | $\$$ |
| :--- | ---: |
| watches finished goods (at transfer price) | 54000 |
| watches work in progress | 9700 |
| raw materials | 13400 |
| clocks | 29600 |

3 Prepaid rent and rates at 31 December 2019 were $\$ 4000$.
4 Rent and rates are allocated between manufacturing and administrative expenses in the ratio of 3:2.

5 Depreciation is provided as follows:
plant and machinery $\quad 25 \%$ per annum using the reducing balance method office equipment $\quad 15 \%$ per annum using the straight-line method

## Answer the following questions in the Question Paper. Questions are printed here for reference only.

(a) State:
(i) the meaning of the term 'work in progress'.
(ii) how work in progress is valued.
(b) Prepare the manufacturing account (for watches) for the year ended 31 December 2019. [7]
(c) Calculate the gross profit for the year ended 31 December 2019 on the sale of watches and clocks.
(d) Prepare an extract from the income statement for the year ended 31 December 2019, showing the gross profit, the manufacturing profit and the adjustment of the provision for unrealised profit.
(e) Explain the accounting treatment in the income statement and the statement of financial position of the provision for unrealised profit. Support your answer with reference to the accounting concepts.

## Additional information

The directors are considering whether they should stop selling watches and sell only clocks in the future.
(f) Advise the directors whether they should sell only clocks in the future. Justify your answer with reference to your calculations in (c) and (d).
[Total: 25]

## Question 3

## Source A3

Ang and Kim had been in partnership for many years, sharing profits and losses in the ratio of 3:2. The books of account of the business had the following balances at 31 December 2019.

|  | $\$$ |
| :--- | :---: |
|  | $\$ 2400$ |
| Office equipment | 27700 |
| Motor vehicles (two vehicles) | 11400 |
| Inventory | 19500 |
| Trade receivables | 13700 |
| Trade payables | 4500 |
| Bank overdraft | 42000 |
| Capital account | 38000 |
| Ang |  |
| Kim | 2500 |
| Current account | 5300 credit |
| Ang |  |

The business was taken over by X Limited on 1 January 2020.
1 X Limited took over the assets of the partnership as follows:

| office equipment | \$35600 |
| :---: | :---: |
| one motor vehicle | \$20000 |
| inventory | value increased by 20\% |
| trade receivables | after allowing a provision for doubtful debts of 4\% |
| goodwill | calculated as the average profit for the last three years |

2 X Limited settled the purchase consideration by issuing 50000 ordinary shares of $\$ 1$ each at a share premium of $\$ 0.80$ per share and the remainder in cash. Ordinary shares were allocated to the partners equally.

3 Trade payables were settled in full by the partnership for $\$ 13000$.
4 The other motor vehicle was taken over by Ang at a value of $\$ 10000$.
5 Realisation costs incurred by the partnership amounted to $\$ 3700$.

## Answer the following questions in the Question Paper. Questions are printed here for reference only.

(a) Calculate the purchase consideration payable by $X$ Limited.
(b) Prepare the realisation account.

## Additional information

It was agreed that the allocation of $X$ Limited's shares to the partners and the final settlement by the partners to or from the partnership bank account will go through the partners' capital accounts.
(c) Prepare partners' capital accounts in a columnar form.

## Additional information

After issuing 50000 ordinary shares to Ang and Kim, X Limited had an issued ordinary share capital of $\$ 300000$.

Ang and Kim were appointed as directors of $X$ Limited and each received $\$ 25000$ per annum as director fees.

X Limited forecasted that the profit for 2020, after acquisition of the partnership business, would increase by $\$ 60000$ to $\$ 260000$.

It is expected that the dividend paid for 2020 will be $\$ 0.65$ per share.
(d) Suggest three reasons for the forecast increase in profit in 2020.
(e) Discuss whether or not Ang and Kim had made the right decision to sell the partnership business to $X$ Limited. Justify your answer giving both financial and non-financial reasons.

## Question 4

## Source A4

The draft financial statements of $M$ plc are being prepared. The equity and current liabilities at 31 December 2019 amounted to $\$ 480000$ and $\$ 45000$.

The following information is available.
Gearing ratio 20\%
Current ratio $\quad 2.2: 1$
Answer the following questions in the Question Paper. Questions are printed here for reference only.
(a) Prepare the summarised draft statement of financial position at 31 December 2019.

## Additional information

1 Further analysis of the equity at 31 December 2019 is as follows:

|  | $\$$ |
| :--- | ---: |
| ordinary share capital (\$1 shares) | 300000 |
| share premium | 40000 |
| general reserve | 28000 |
| retained earnings | $\underline{112000}$ |
|  | $\underline{480000}$ |

2 The current market price of one ordinary share is $\$ 2.40$.
3 The price earnings ratio is 10 and the dividend yield is $5 \%$.
4 An amount of $\$ 10000$ had been transferred from retained earnings to the general reserve during the year ended 31 December 2019.
(b) Prepare an extract from the statement of changes in equity for the year ended 31 December 2019 showing the movement of retained earnings.

## Additional information

During their review of the draft financial statements, the auditors brought two issues to the attention of the directors.

Issue 1
During the year ended 31 December 2019, M plc had bought a specialised machine. The machine had been designed by $M$ plc and made by an overseas manufacturer. The following costs had been incurred:

|  | $\$$ |
| :--- | ---: |
| Design | 7000 |
| Manufacture | 26000 |
| Installation | 3000 |
| Repair and maintenance | 4000 |

M plc had capitalised the manufacture cost, $\$ 26000$, and all other costs were charged to the income statement. The company depreciates the machinery at $25 \%$ per annum using the straight-line method. A full year's depreciation is charged in the year of purchase.

## Issue 2

M plc owns a warehouse. It was purchased on 1 January 2015 at a cost of $\$ 150000$. It has a useful life of 25 years with no expected residual value. Its carrying value had been included in the total value of non-current assets, without taking into account its fair value of $\$ 100000$ and value in use of $\$ 112000$.
(c) Define the term 'impairment of assets'.
(d) Explain how the directors should adjust the draft financial statements to account for:
(i) issue 1
(ii) issue 2.
(e) Calculate the adjusted profit for the year after considering issue 1 and issue 2.

## Section B: Cost and Management Accounting

## Question 5

## Source B1

T Limited had the following standard cost and budget information for the month of August.
Direct materials : kilos per unit 5
cost per kilo \$4
Direct labour : hours per unit 3
rate per hour \$12
Budgeted output and sales (units) 4000
Budgeted direct labour hours 12000
Budgeted fixed overheads \$42000
Expected unit selling price $\$ 82$
T Limited uses absorption costing. The overhead absorption rate is based on direct labour hours.
Answer the following questions in the Question Paper. Questions are printed here for reference only.
(a) Calculate the total budgeted profit for August.

## Additional information

Actual output and sales for August were 4300 units, selling for $\$ 80$ per unit.
Actual costs for August were as follows.

|  | $\$$ |
| :--- | ---: |
| Total direct materials cost (22790 kilos) | 95718 |
| Total direct labour costs (12040 hours) | 150500 |
| Fixed overheads | 43600 |

(b) Calculate the actual profit for August.
(c) Calculate the following variances:
(i) sales price variance
(ii) sales volume variance (use standard profit margin per unit)
(iii) labour rate variance
(iv) labour efficiency variance
(v) fixed overhead expenditure variance
(vi) fixed overhead volume variance.

## Additional information

Material price variance and material usage variance have been calculated at $\$ 4558$ (adverse) and $\$ 5160$ (adverse).
(d) Prepare a statement reconciling the budgeted profit at 4000 units level with the actual profit. You should start the statement with the budgeted profit in (a).

## Additional information

After analysing the direct materials variances, the directors of Timited plan to purchase raw materials from a new supplier who provides better quality raw materials but at a higher price and with no trade discount.
(e) Advise the directors whether or not T Limited should change to the new supplier. Justify your answer.
[Total: 25]

## Question 6

## Source B2

$\checkmark$ Limited manufactures two products, Standard and Premium.
The following budgeted information for 2020 is available.

|  | Standard | Premium |
| :--- | ---: | ---: |
| Units produced and sold | 10000 | 4000 |
| Direct materials : unit cost | $\$ 20$ | $\$ 30$ |
| Direct labour : hours per unit | 3 | 5 |
| $\quad$ rate per hour | $\$ 18$ | $\$ 18$ |

Budgeted factory overheads, $\$ 240000$, are to be allocated to the products on the basis of direct labour hours.

## Answer the following questions in the Question Paper. Questions are printed here for reference only.

(a) Calculate the total production cost and the unit cost for each product.

## Additional information

V Limited normally adds $40 \%$ to the cost of each product to set the selling price.
(b) Calculate the unit selling price for each product.

## Additional information

V Limited is considering implementing an activity based costing (ABC) system. The management accountant has prepared the following cost analysis.

|  | Overhead |  | Occurrences |  |
| :--- | :---: | :--- | ---: | ---: |
| Activity | costs | Cost driver | Standard | Premium |
|  | $\$$ |  | 30 | 10 |
| Materials handling | 80000 | Number of purchase orders | 65 | 25 |
| Machine setups | 90000 | Number of setups | 10000 | 4000 |
| Inspection | $\underline{70000}$ | Number of units produced |  |  |

(c) Define the term 'cost driver'.
(d) State three benefits of adopting $A B C$.
(e) Calculate the total production cost and unit cost for each product if $A B C$ is used.
(f) Calculate the unit selling price for each product if $A B C$ is used.
(g) Explain the difference in total production cost for each product in respect of (a) and (e).

## Additional information

V Limited plans to manufacture only the Premium product from 2021.
(h) Explain why V Limited would find ABC useful in 2020 but not in 2021.
[Total: 25]

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