Cambridge
International
AS \& A Level

## Cambridge International Examinations

Cambridge International Advanced Subsidiary and Advanced Level

## ACCOUNTING

Paper 3 Structured Questions INSERT

3 hours

## READ THESE INSTRUCTIONS FIRST

This Insert contains all of the required information and questions. The questions are provided in the Insert for reference only.

Anything you write in this Insert will not be marked.
The businesses described in this Insert are entirely fictitious.

## Section A: Financial Accounting

## Question 1

## Source A1

Marco manufactures garden chairs. He transfers all finished goods from the factory at cost plus $25 \%$.
The following selected balances are available for the year ended 31 January 2018:

|  | $\$ 000$ |
| :--- | ---: |
| Carriage inwards | 12 |
| Carriage outwards | 24 |
| Heating and lighting | 70 |
| Inventories at 1 February 2017 | 40 |
| $\quad$ Raw materials | 60 |
| $\quad$ Work in progress | 132 |
| $\quad$ Finished goods at transfer price |  |
| Machinery |  |
| $\quad$ Cost | 640 |
| $\quad$ Accumulated depreciation | 200 |
| Office equipment at cost | 110 |
| Office salaries | 190 |
| Purchase of raw materials | 568 |
| Rent and rates | 133 |
| Returns inwards | 5 |
| Returns outwards | 23 |
| Revenue | 1920 |
| Wages | 520 |

The following additional information is available.
1 Inventories at 31 January 2018 were:

|  | $\$$ |
| :--- | ---: |
| Raw materials | 42000 |
| Work in progress | 80000 |
| Finished goods at transfer price | 150000 |

2 Depreciation is to be charged as follows:
machinery $15 \%$ per annum using the reducing balance method office equipment $5 \%$ per annum using the straight-line method.

3 Rent and rates have not been adjusted for $\$ 7000$ owing at 1 February 2017 and $\$ 6000$ paid in advance at 31 January 2018. Rent and rates are apportioned $60 \%$ to the factory and $40 \%$ to administration.

4 Heating and lighting are apportioned $80 \%$ to the factory and $20 \%$ to administration.
5 At 31 January 2018 wages due but unpaid were $\$ 10000$. Wages are apportioned $50 \%$ direct factory wages, $30 \%$ indirect factory wages and $20 \%$ administrative wages.

Answer the following questions in the Question Paper. Questions are printed here for reference only.
(a) Prepare the manufacturing account for Marco for the year ended 31 January 2018.
(b) Prepare an extract from the statement of financial position at 31 January 2018 to show how inventories are recorded.
(c) State two accounting concepts relating to the provision for unrealised profit.
(d) (i) Explain why it is important for Marco to create a provision for unrealised profit.
(ii) Analyse the effect on profit if Marco does not create a provision for unrealised profit.
[Total: 25]

## Question 2

## Source A2

Raj and John enter into a joint venture to share profits and losses equally.
Both take an active role in the business which sells bicycles.
Each records his own transactions.
There is no joint bank account.
During May 2017 the following transactions took place.
May $1 \quad$ Raj purchased 12 bicycles for $\$ 900$ and also paid carriage of $\$ 90$.
2 Raj paid $\$ 160$ for repairs to the bicycles.
4 John paid garage rental of $\$ 100$ and advertising costs of $\$ 70$.
10 Raj sold all the bicycles he purchased for $\$ 1850$.
14 Raj paid John \$500.
15 John purchased 4 bicycles for $\$ 200$ and also paid carriage of $\$ 50$.
20 Raj paid $\$ 120$ for repairs to the bicycles which John had purchased.
26 John kept one bicycle for his daughter. This bicycle was valued at $\$ 60$. The rest of the bicycles were sold by Raj for $\$ 340$.

30 The amounts due from one party to the other were paid in full. The joint venture was then dissolved.

Answer the following questions in the Question Paper. Questions are printed here for reference only.
(a) Prepare a statement to calculate the profit or loss from the venture.
(b) Prepare the:
(i) joint venture account with John in Raj's books of account
(ii) joint venture account with Raj in John's books of account.
(c) State one benefit to both Raj and John of setting up a joint venture.

## Additional information

John is interested in working with Raj again but is proposing that they form a partnership, sharing profits and losses equally. Raj is unsure whether he should take this action.
(d) Advise Raj whether or not he should enter into a partnership with John. Justify your advice and support your answer with calculations, where appropriate.

## Question 3

## Source A3

R Limited has been trading for one year and is considering whether or not to purchase the business of Joe Tu, a sole trader.
The draft statements of financial position for both businesses at 31 December 2017 are shown below:

|  | R Limited <br> $\$$ | Joe Tu <br> $\$$ |
| :--- | ---: | ---: |
| Non-current assets (at net book value) |  |  |
| Land and buildings | 454000 | 128000 |
| Plant and equipment | $\underline{294000}$ | $\underline{30000}$ |
| Current assets | $\underline{748000}$ | $\underline{158000}$ |
| Inventory | 98000 | 35000 |
| Trade receivables | 123000 | 39000 |
| Cash and cash equivalents | $\underline{58000}$ | $\underline{279000}$ |
|  | $\underline{76800}$ |  |
| Total assets | $\underline{1027000}$ | $\underline{234800}$ |

Equity and liabilities
Equity
Ordinary shares of \$1 each 800000
Capital at 1 January 2017
Profit for the year
Drawings
Current liabilities
Trade payables
Total equity and liabilities

| 800000 |  |
| ---: | ---: |
|  | 160000 <br> 132000 |
| 932000 | $\underline{(12000)}$ |
| 95000 | $\underline{67000}$ |

The following information is also available.
Robert and Paul are the only shareholders and directors of $R$ Limited. As part of the purchase agreement, Joe Tu will be appointed as a director of $R$ Limited with an annual director's fee of $\$ 30000$, the same amount as Robert and Paul each receive.

The sales revenue and gross margin for both businesses for the year ended 31 December 2017 were:

|  | $R$ Limited | Joe Tu |
| :--- | :--- | :--- |
|  |  | $\$ 1500000$ |
| Sales revenue | $\$ 250000$ |  |
| Gross margin | $50 \%$ | $45 \%$ |

Robert is in favour of buying Joe Tu's business and of him becoming a director. He believes that for the year ended 31 December 2018:

Combined sales revenue can be increased by 20\%, earning a gross margin of $50 \%$.
Combined operating expenses, other than directors' fees, can be reduced by $30 \%$.
However, Paul is not happy about buying Joe Tu's business or him becoming a director.

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

(a) (i) Prepare a statement to calculate the operating expenses for each business for the year ended 31 December 2017.
(ii) Prepare a statement to calculate the expected additional profit R Limited will make for the year ended 31 December 2018 if it buys Joe Tu's business.

## Additional information

1 Purchase consideration will be $\$ 180000$ payable to Joe Tu by issuing 150000 ordinary shares of R Limited.

2 R Limited will take over Joe Tu's assets and liabilities, except the bank account, at the following values:
\$
Land and buildings 139000
Plant and equipment 14000
Inventory 40000
Trade receivables 36000
Trade payables 67000
3 The directors of R Limited will also revalue their own land and buildings upwards by $\$ 28000$.
(b) State why a business may revalue its assets when it is being purchased by another business.
(c) Prepare the statement of financial position of R Limited at 31 December 2017 if Joe Tu's business was purchased by it on that date.
(d) Advise Robert and Paul whether or not they should buy Joe Tu's business. Justify your answer by discussing the non-financial advantages and disadvantages of this action.

## Question 4

## Source A4

DG Limited has been trading for several years. The external auditors are about to commence work on the financial statements for the year ended 31 December 2017.

The following draft financial information for the year ended 31 December 2017 has been provided by the directors before the audit work is started.
\$
Ordinary shares of $\$ 1$ each 500000
Share premium 80000
Retained earnings at 1 January 201794000
Profit for the year 78000
The directors also provided the following information:
1 The value of inventory at 31 December 2017 was $\$ 120000$. As the purchasing cost had decreased, the company had changed its valuation method from First in, First out (FIFO) to Weighted Average Cost (AVCO). The inventory value would have been $\$ 104000$ if FIFO had been used.

2 The profit for the year ended 31 December 2017 was arrived at after charging the following dividends:

Interim dividend paid during the year 75000
Proposed dividend for the year
82500
3 A bonus issue of 1 ordinary share for every 10 ordinary shares held was made during the year. No entries had been made in the books of account for this issue. The directors wished to keep the reserves in their most flexible form.

This was the only change to share capital during the year.
4 On 1 July 2017 the company had entered into a 3 -year tenancy agreement for a new office. The monthly rent was $\$ 21000$. A total of $\$ 105000$ was paid during the year ended 31 December 2017 and this amount had been charged in the income statement.

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

 reference only.(a) Distinguish between the roles of the shareholders and the directors of a limited company.
(b) State one reason why a sole trader does not require an audit of their financial statements
(c) Calculate the adjusted profit for the year ended 31 December 2017.
(d) Explain the accounting treatment of information items 1 and 2.
(e) Prepare the statement of changes in equity for the year ended 31 December 2017.

## Additional information

The directors are trying to obtain a bank loan for expanding the business. The bank has requested the audited financial statements for the last three years.
(f) Advise the directors whether or not the audited financial statements provide all the information required in order for the bank to make its decision. Justify your answer.
[Total: 25]

## Section B: Cost and Management Accounting

## Question 5

## Source B1

Hyung Min manufactures glass vases.
Each vase passes through three production departments: casting, polishing and finishing.
Hyung Min had the following budgeted information for the year ending 31 January 2018.
1 All vases produced were expected to be sold. The selling price would be $\$ 60.25$ each.
2 The fixed overheads were expected to be $\$ 240000$ per annum and are absorbed on the basis of production labour hours.

3 The business is open for 50 weeks a year and each employee works for 40 hours a week.
4 The production costs per vase were expected to be:

|  | Casting department | Polishing department | Finishing department |
| :--- | :---: | :---: | :---: |
| Materials | 25 grams at $\$ 8$ per <br> 100 grams | 0 | 25 grams at $\$ 16$ per <br> 100 grams |
| Labour | 40 minutes at $\$ 12$ per hour | 15 minutes at $\$ 8$ per hour | 2 hours at $\$ 14$ per hour |

5 A total of 24000 vases were budgeted to be produced and sold for the year ending 31 January 2018.

Answer the following questions in the Question Paper. Questions are printed here for reference only.
(a) Explain what is meant by the term 'budgetary control'.
(b) Prepare the labour budget for the year ending 31 January 2018.

Clearly show the number of labour hours, the number of employees and the annual labour cost for each department.
(c) Analyse the benefits to Hyung Min of using budgetary control in order to achieve his target profit.

## Additional information

On 31 January 2018 the following information was available.
1 The actual production and sales during the year were 28500 vases.
2 The labour variances were calculated as:

|  | Casting department | Polishing department | Finishing department |
| :--- | :---: | :---: | :---: |
| Rate | $\$ 28750$ favourable | $\$ 9500$ adverse | $\$ 52250$ adverse |
| Efficiency | $\$ 57000$ adverse | $\$ 21000$ favourable | $\$ 70500$ favourable |

(d) Discuss the possible causes of the adverse variances.
(e) Advise Hyung Min whether or not he should be concerned about labour variances. Justify your answer.

## Question 6

## Source B2

Daniyar has run a successful manufacturing business for several years.
He currently has $\$ 140000$ in the business bank account.
Daniyar is considering replacing one of his current machines with either Machine A or Machine B.
The following information is available:

|  | Machine A | Machine B |
| :--- | :---: | :---: |
| Cost | $\$ 210000$ | $\$ 161500$ |
| Expected life | 5 years | 4 years |
| Annual net cash inflows | $?$ | $\$ 51000$ |
| Payback period | 2 years and 11 months | $?$ |
| Net present value | $?$ | $\$ 7412$ |
| Average rate of return | $?$ | $?$ |

All revenue and expenditure is expected to accrue evenly throughout the life of each machine.
Annual net cash flows for each machine stay the same every year.
The cost of capital is $8 \%$.
The discount factors are:
Year 10.926
Year 20.857
Year 30.794
Year 40.735
Year 50.681
The company policy is to depreciate all non-current assets over their expected life using the straight-line method. Neither machine will have any residual value.

Answer the following questions in the Question Paper. Questions are printed here for reference only.
(a) Explain the difference between the net present value and payback methods of investment appraisal.
(b) Calculate:
(i) the payback period for Machine B
(ii) the net present value for Machine $A$
(iii) the average rate of return for both machines.
(c) Advise Daniyar which machine he should purchase. Justify your decision.

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