Cambridge
International
AS \& A Level

## Cambridge International Examinations

Cambridge International Advanced Subsidiary and Advanced Level

## ACCOUNTING

9706/32
Paper 3 Structured Questions

No Additional Materials are required.

## READ THESE INSTRUCTIONS FIRST

An answer booklet is provided inside this question paper. You should follow the instructions on the front cover of the answer booklet. If you need additional answer paper ask the invigilator for a continuation booklet.

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.
The number of marks is given in brackets [ ] at the end of each question or part question.

## Section A: Financial Accounting

1 Richard Ang is a sole proprietor manufacturing one type of sofa bed. The following balances are extracted from his books of account at 31 July 2016.

## \$

Revenue 986000
Purchases of direct materials 207600
Carriage inwards 6800
Carriage outwards 17500
Returns inwards 12000
Factory wages
Direct 168000

Indirect 51400
Overheads
Factory 155000
Office 194000

Additional information
1 Richard maintains a provision for unrealised profit account. Completed products are transferred from the factory at a mark-up of $20 \%$.

2 Inventories at 31 July 2015 were:
Raw materials 14800
Work in progress 23500
Finished goods (at cost) 32000
3 Inventories at 31 July 2016 were:
Raw materials 16400
Work in progress 20200
Finished goods (at transfer price) 54000
4 Unpaid direct wages at 31 July 2016 amounted to $\$ 3500$.
5 Rent had been allocated to factory overheads and office overheads at $\$ 24000$ and $\$ 16000$ respectively. The allocation should have been in the ratio of $3: 1$ respectively.

## REQUIRED

(a) Prepare the manufacturing account for the year ended 31 July 2016.
(b) Prepare an income statement for the year ended 31 July 2016.

## Additional information

Richard Ang thought of taking some of the finished goods inventory at 31 July 2016 to help his sister set up a furniture business on the same day.

## REQUIRED

(c) Prepare an extract from the statement of financial position of Richard Ang's business at 31 July 2016 to show how inventories are recorded.
(d) Explain why it is important for Richard to create a provision for unrealised profit.
(e) State two advantages and two disadvantages to Richard Ang of helping his sister set up her business.

2 The summarised statement of financial position of M plc at 31 December 2016 was as follows:

|  | $\$ 000$ |
| :--- | ---: |
| Non-current assets | 4220 |
| Net current assets | $\underline{2080}$ |
|  | $\underline{6300}$ |
| Share capital and reserves |  |
| Ordinary shares of $\$ 5$ each | 5000 |
| Share premium | 500 |
| Retained earnings | $\underline{800}$ |
|  | $\underline{6300}$ |

Retained earnings for the year ended 31 December 2016 were $\$ 160000$, after the payment of dividends which represented $60 \%$ of the profit for the year.

The market price of one ordinary share was $\$ 6.40$ on 31 December 2016.

## REQUIRED

(a) Calculate to two decimal places the following ratios at 31 December 2016:
(i) Return on capital employed
(ii) Earnings per share
(iii) Price earnings ratio
(iv) Dividend cover
(v) Dividend yield

## Additional information

It is estimated that the profit for the year ending 31 December 2017 will be same as 2016. The capital employed will also remain unchanged.

On 1 January 2017, M plc has the opportunity to invest $\$ 1200000$ in a project which will bring an additional annual profit of $\$ 185000$. The directors are considering an issue of ordinary shares at a premium of $20 \%$ to finance this project. The rate of dividend paid is expected to remain at $60 \%$ of the profit for the year.

## REQUIRED

(b) Prepare a statement to show the forecast share capital and reserves at 31 December 2017.
(c) Calculate to two decimal places the following expected ratios for the year ending 31 December 2017:
(i) Return on capital employed
(ii) Earnings per share
(d) Advise the directors whether or not M plc should invest in the project. Justify your answer. [5]
[Total: 25]

3 Lushan and Samson are the directors of Z Limited which was newly formed on 1 January 2016. They understand that they are legally obliged to prepare financial statements in accordance with International Accounting Standards.

## REQUIRED

(a) State four reasons why the business should comply with International Accounting Standards when financial statements are being prepared.
(b) Explain what is meant by stewardship with regard to the role of the directors.

## Additional information

The directors prepared the following draft statement of financial position at 31 December 2016:
Z Limited
Statement of financial position at 31 December 2016
\$
Non-current assets
Property, plant and equipment
478000
$\underline{478000}$
Current assets
Inventories
124000
Trade receivables 217000
Cash and cash equivalents
132000
473000
Total assets $\quad \underline{951000}$
Equity and liabilities
Equity
Ordinary shares of \$1 each 500000
Retained earnings $\underline{210000}$
Total equity $\quad \underline{710000}$
Current liabilities
Trade payables 188000
Taxation $\quad 53000$
$\underline{241000}$
Total equity and liabilities $\underline{951000}$

Julia is the auditor of $Z$ Limited. During the course of conducting her audit she was provided with the following information.

1 On 31 December 2016, Z Limited had been sued for an amount of $\$ 29000$. Legal advice indicated that Z Limited had a 90\% chance of losing the case.

2 Included in the trade receivables was a debt of $\$ 30000$ owed by $P$ Limited which was in financial difficulty. The directors of $Z$ Limited had accepted office equipment from $P$ Limited on 31 December 2016 to settle $70 \%$ of $P$ Limited's debt. They were of the opinion that the recovery of the remaining debt was highly improbable.

3 A piece of machinery had been purchased on 1 January 2016 for $\$ 50000$. The machinery had been depreciated at an annual rate of $20 \%$ by using the straight-line method. At 31 December 2016, it had an estimated fair value of $\$ 32500$ and the estimated value in use was $\$ 19500$.

## REQUIRED

(c) Prepare a revised draft statement of financial position at 31 December 2016 after considering the information provided to Julia.
(d) Explain the adjustments you have made to the statement of financial position in (c).

## Additional information

Jack, Julia's brother, is the sole trader of a small business. He has asked his sister if his accounts should be audited.

## REQUIRED

(e) Discuss the advantages and disadvantages to Jack of having his accounts audited.
[Total: 25]

4 Alex and Brown were in partnership sharing profits and losses in the ratio of 3:2 respectively.
They provided the following information at 31 October 2016:

|  | \$ | \$ | \$ |
| :---: | :---: | :---: | :---: |
| Land and buildings |  |  | 320000 |
| Plant and machinery |  |  | 135000 |
| Motor vehicles |  |  | 110000 |
| Inventory |  |  | 38000 |
| Trade receivables |  |  | 54000 |
| Cash and cash equivalents |  |  | 19000 |
| Trade payables |  |  | (39000) |
|  |  |  | $\underline{637000}$ |
|  | Alex | Brown |  |
| Capital accounts | 300000 | $\underline{200000}$ | 500000 |
| Current accounts |  |  |  |
| Balance at 1 November 2015 | 72000 | 57000 |  |
| Partners' salaries | 30000 | 45000 |  |
| Interest on capital | 15000 | 10000 |  |
| Share of residual profit | 36000 | 24000 |  |
| Drawings | (77000) | (75000) |  |
| Balance at 31 October 2016 | 76000 | 61000 | 137000 |
|  |  |  | $\underline{637000}$ |

C Limited purchased this partnership business on 1 November 2016. They took over all the assets and liabilities with the exception of:

Cash and cash equivalents
One motor vehicle which was taken over by Alex at an agreed value of $\$ 28000$.
The remaining assets taken over by C Limited had the following values:

|  | $\$$ |
| :--- | ---: |
| Land and buildings | 450000 |
| Plant and machinery | 120000 |
| Motor vehicles | 60000 |
| Inventory | 49000 |
| Trade receivables | 52000 |

The purchase consideration was five times the partnership profit for the year ended 31 October 2016.

This purchase consideration was settled by C Limited as follows:
$1 \$ 127500$ cash was paid into the partnership bank account.
2 Alex and Brown were issued an amount of $8 \%$ debentures. Both will continue to receive the same amount of interest as they had received from the interest on capital.

3 The balance of the purchase consideration was settled by an issue of $\$ 1$ ordinary shares at a price of $\$ 1.80$ each. The shares were distributed between the partners in their profit and loss sharing ratios.

## REQUIRED

(a) State what is meant by 'goodwill'.
(b) Calculate the value of goodwill paid for by C Limited.
(c) Calculate the total profit on realisation due to the partners.
(d) Prepare the partners' capital accounts to close their business.

## Additional information

The capital employed of C Limited at 31 October 2016 before purchasing the partnership business was as follows:

|  | $\$$ |
| :--- | ---: |
| Ordinary shares of \$1 each | 3400000 |
| Share premium | 300000 |
| Retained earnings | $\underline{816000}$ |
|  | $\underline{4516000}$ |

The company made a profit for the year ended 31 October 2016 of $\$ 352000$.
The directors of C Limited estimate that the profit for the coming year after purchasing the partnership business will be increased to $\$ 540000$.

## REQUIRED

(e) Discuss the advantages to C Limited, other than increase in the profit, of purchasing Alex and Brown's business.

## Section B: Cost and Management Accounting

5 SM Limited makes a single product. In a normal month 1000 units are made and sold for $\$ 150$ each. Standard costs are as follows:

|  | $\$$ |
| :--- | :---: |
| Direct labour (4000 hours at $\$ 10.50)$ | 42000 |
| Direct materials (3000 kilos at $\$ 12.20)$ | 36600 |
| Variable overheads | 10000 |
| Fixed overheads | 19300 |

In April the company received an order for the supply of 800 units in addition to the usual production and sales.

REQUIRED
(a) Prepare the flexed budget for April showing total budgeted profit.

## Additional information

During April the employees were required to work extra hours to meet increased production. The inclusion of overtime rates caused the average wage to rise to $\$ 13.10$ per hour.

Staff worked 7300 hours in total and used 5500 kilos of raw material which had been purchased for $\$ 11.50$ per kilo. The raw materials were of the usual quality.

## REQUIRED

(b) Calculate the following variances for the month of April.
(i) labour efficiency
(ii) labour rate
(iii) materials usage
(iv) materials price
(c) Suggest one cause for each of the materials usage and materials price variances.

## Additional information

One of the directors stated that new staff should have been employed. This would have resulted in fewer overtime payments although extra training costs would have been incurred.

The director believed that 7800 hours would have been worked at a cost of $\$ 10.80$ per hour.

## REQUIRED

(d) Advise the directors whether or not they should have taken this action. Support your answer with calculations where appropriate.
(e) State three advantages to the company of operating a standard costing system.
[Total: 25]

6 Tisha is considering buying a new machine for her factory. The machine will cost $\$ 125000$. At the end of Year 5 the machine will be sold for $\$ 65000$. The machine will be used to manufacture one of Tisha's existing products.

The following information is available:
1 The current annual sales volume of the existing product is 10000 units. This will remain constant over the 5 -year period.

2 The selling price per unit is currently $\$ 12$. Tisha plans to increase this to $\$ 13$ per unit to help cover her costs of the new machine.

3 The variable cost is currently $\$ 5$ per unit. This is expected to fall to $\$ 3$ per unit by using the new machine.

4 The maintenance cost for the new machine will increase the annual fixed costs by $\$ 5000$.
5 At the end of Year 1, Tisha will have to pay a one-off service fee of $\$ 1000$.

## REQUIRED

(a) Prepare one table which shows the change in cash flows for each of the Years 0 to 5 that arise as a result of the purchase of the machine.
(b) Calculate the payback period for the machine.
(c) State three reasons why payback may be a useful investment appraisal technique.

## Additional information

Tisha's cost of capital is $10 \%$. Discount factors are as follows:

| Year | Discount factor |
| :---: | :---: |
| 0 | 1.000 |
| 1 | 0.909 |
| 2 | 0.826 |
| 3 | 0.751 |
| 4 | 0.683 |
| 5 | 0.621 |

## REQUIRED

(d) Calculate the Net Present Value (NPV) of buying the machine.

## Additional information

When using a discount factor of $20 \%$, the machine had a negative NPV of $\$ 24953$.

## REQUIRED

(e) Calculate the Internal Rate of Return (IRR) of the machine to three decimal places.

## Additional information

Tisha has recently discovered an alternative machine that would also be suitable for producing the same product. This also has an expected life of 5 years. Tisha has a limited amount of capital available and only needs one machine.

The following information has been calculated for the alternative machine:

| Capital outlay | NPV | IRR | Payback period |
| :---: | :---: | :---: | :---: |
| $\$$ | $\$$ | $\%$ |  |
| 135000 | 10350 | 9.597 | 4 years 6 months |

## REQUIRED

(f) Recommend, with reasons, which machine Tisha should buy.
(g) Discuss which factors, other than those you have considered in (f), Tisha should consider when making her decision.
[Total: 25]

