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 Kelang Limited manufactures a single product. Goods are transferred from the production department to the sales department at a mark up of $20 \%$.

The following balances have been extracted from the books of Kelang Limited at 31 December 2015.

## \$

Non-current assets at cost
Property 400000
Manufacturing plant and machinery 350000
Office equipment 120000
Provision for depreciation at 1 January 2015
Property 120000
Manufacturing plant and machinery 230000
Office equipment 96000
Inventories at 1 January 2015
Raw materials 24600
Work in progress 66800
Finished goods at transfer price 162000
The following information was available for the year ended 31 December 2015.

| Direct wages | 344000 |
| :--- | ---: |
| Indirect wages | 69000 |
| Purchases of direct materials | 287000 |
| Purchases of indirect materials | 43000 |
| Carriage inwards on direct materials | 3700 |
| Other factory overheads | 32500 |
| Revenue | 1562000 |
| Administrative expenses | 374000 |
| Provision for unrealised profit at 1 January 2015 | 27000 |
| Water and electricity expenses | 14000 |

Additional information
1 Inventories at 31 December 2015
Raw materials 28800
Work in progress 72200
Finished goods at transfer price 186000
2 Depreciation is to be provided as follows:

Property
Manufacturing plant and machinery
Office equipment
$5 \%$ on cost
$20 \%$ reducing balance method
$15 \%$ on cost

3 Water and electricity expenses owing at 31 December 2015 amounted to $\$ 1500$.
4 The following expenses are to be allocated as:

|  | Factory | Administration |
| :--- | :---: | :---: |
| Depreciation on property | $70 \%$ | $30 \%$ |
| Water and electricity | $80 \%$ | $20 \%$ |

## REQUIRED

(a) Prepare the manufacturing account for the year ended 31 December 2015.
(b) Prepare the income statement for the year ended 31 December 2015.
(c) Explain why finished goods inventory is not shown at transfer price in the statement of financial position.

## Additional information

Sim, the manager of the sales department, says 'It does not make sense for the production department to transfer the goods manufactured to the sales department at a mark-up. As both departments belong to the same company, we should no longer do it.'

## REQUIRED

(d) Recommend whether or not they should continue to transfer goods at a mark-up. Justify your answer giving two reasons to support your recommendation.

2 Chin started business in Hong Kong on 1 January 2015 selling specialist radios.
In his first year of trading he bought 2000 radios, of which 1000 were shipped to his agent Sumit in India.

The following information is available for the year ended 31 December 2015.
Freight charges paid by Chin
$\$ 4000$
Import duties paid by Sumit
?
Selling price per radio
\$60
Commission paid to Sumit
20\% of sales
Cash remitted by Sumit
\$26 800

At 31 December 2015 Chin had the following inventory.

|  | $\$$ |
| :--- | :---: |
| In Hong Kong (50 radios) | 1250 |
| In India (100 radios) | $\underline{3050}$ |
| Total | $\underline{4300}$ |

## REQUIRED

(a) Calculate:
(i) the original price per radio paid by Chin
(ii) the import duties paid by Sumit.
(b) Prepare the following in the books of Chin:
(i) the consignment account
(ii) Sumit's account.

## Additional information

In 2015 the 1000 radios shipped to Sumit were in monthly batches of varying quantities. Each batch had incurred an administration charge of $\$ 160$ which was included in the freight charges paid by Chin.

Chin is now considering sending future annual supplies of radios in one batch each January.

## REQUIRED

(c) Advise Chin, with reasons, whether or not he should make this change.

3 Johnson plc commenced trading on 1 January 2010. On that date there was an issue of 600000 ordinary shares. Each share had a nominal value of $\$ 0.50$ and was issued at $\$ 0.75$.

At the same time there was a share issue at par of $1000005 \%$ non-redeemable preference shares of $\$ 0.25$ each.

On 1 January 2015 Johnson plc issued $\$ 100000$ 12\% debentures repayable in 2027.
On 31 December 2015:
the total assets were $\$ 582000$ of which current assets totalled $\$ 25000$.
the current assets to current liabilities ratio was 2.5:1.
the market value of one ordinary share was $\$ 2.50$ and of one preference share was $\$ 1.25$.
The retained earnings for the year ended 31 December 2015 were calculated as follows.

|  | $\$$ |
| :--- | :---: |
|  | $\$ 192000$ |
| profit from operations | $(12000)$ |
| finance costs | $\underline{(36000)}$ |
| taxation | 144000 |
| profit after taxation | $(54000)$ |
| ordinary share dividend | $\underline{(2000)}$ |
| preference dividend |  |
| retained earnings for the year | $\underline{88000}$ |

## REQUIRED

(a) Prepare the equity and liabilities section of the statement of financial position at 31 December 2015.
(b) Calculate for the year ended 31 December 2015:
(i) the dividend cover
(ii) the gearing ratio
(iii) the return on capital employed.

## Additional information

Samuel plc is a successful company in the same industry sector as Johnson plc. Both companies are considering issuing ordinary shares in 2016.

The following ratios have been calculated for Samuel plc for the year ended 31 December 2015.
Dividend cover 2.1 times
Gearing ratio 67.4\%
Return on capital employed 28.5\%
Ordinary dividend per share $\$ 0.20$
Earnings per share $\$ 0.28$

## REQUIRED

(c) Analyse the performance of both companies. Use all information available.
(d) Recommend which company would provide the better return on an investment in ordinary shares. Justify your answer.

4 Fernando and Gurdip have been in business for several years as sole traders and have decided to merge their businesses into a partnership.

Their statements of financial position at 30 June 2015 were as follows.

|  | Fernando |  | Gurdip |  |
| :---: | :---: | :---: | :---: | :---: |
|  | \$ | \$ | \$ | \$ |
| Assets |  |  |  |  |
| Non-current assets |  | 60000 |  | 220000 |
| Current assets |  |  |  |  |
| Inventories | 32500 |  | 15350 |  |
| Trade receivables | 35000 |  | 28000 |  |
| Cash and cash equivalents | - | 67500 | 14150 | 57500 |
| Total assets |  | 127500 |  | $\underline{277500}$ |
| Capital and liabilities |  |  |  |  |
| Capital |  | 94450 |  | 259000 |
| Current liabilities |  |  |  |  |
| Trade payables | 23000 |  | 18500 |  |
| Cash and cash equivalents | 10050 | 33050 | - | 18500 |
| Total capital and liabilities |  | 127500 |  | $\underline{277500}$ |

The partnership commenced trading on 1 July 2015. The profit sharing ratio was agreed between Fernando and Gurdip to be 1:2.

On that date the assets of both sole traders were revalued as follows:
1 The non-current assets were valued at 10\% higher than the net book value.
2 The inventories were valued at $2 \%$ lower than their book value.
3 Trade receivables were taken over at book value less a 3\% provision for irrecoverable debts.
On 1 July 2015 goodwill was valued at Fernando $\$ 7000$ and Gurdip \$20000. No goodwill account was to be maintained in the books of account.

## REQUIRED

(a) Prepare the opening statement of financial position for the partnership at 1 July 2015.

## Additional information

The other terms of the partnership agreement were:

$$
\begin{aligned}
& \text { Interest on capital - 4\% per annum } \\
& \text { Interest on drawings - 6\% per annum } \\
& \text { Annual salaries - Fernando \$30000 and Gurdip \$20000 } \\
& \text { Annual drawings - Fernando \$27000 and Gurdip \$20000. }
\end{aligned}
$$

The budgeted profit for the year ending 30 June 2016 is $\$ 80000$.

## REQUIRED

(b) Prepare the budgeted appropriation account of the partnership for the year ending 30 June 2016.

## Additional information

The partners have been advised that in future it may be beneficial to 'incorporate' their business.

## REQUIRED

(c) State what is meant by the term 'incorporation'.
(d) Advise the partners whether or not they should convert their business into a limited company. Justify your answer by analysing two benefits and two limitations to the partners.
[Total: 25]

## Section B: Cost and Management Accounting

Jumal Limited manufactures two products, Alpha and Beta.
The following budgeted information is available.

|  | Alpha | Beta |
| :--- | ---: | ---: |
| Production and sales (units) | 1000 | 5000 |
| Machine hours | 5000 | 25000 |
| Direct materials (cost per unit) | $\$ 80$ | $\$ 48$ |
| Direct labour (cost per unit) | $\$ 150$ | $\$ 60$ |

Fixed production overhead is $\$ 540000$ and is allocated to the products by machine hours.

## REQUIRED

(a) Calculate for each product:
(i) total budgeted production cost
(ii) budgeted unit cost.

## Additional information

The directors of Jumal Limited will add $50 \%$ on to the total production cost to set the selling price for each product.

## REQUIRED

(b) Calculate the unit selling price of each product.

## Additional information

Meena is a management accountant newly recruited by Jumal Limited. She suggests that the company should adopt activity based costing to allocate production overheads. She has identified that the production comprises four major activities. The cost of each activity and the activities consumed by each product are as follows:

|  | Production <br> overheads | Alpha | Beta |
| :--- | :---: | :--- | :--- |
|  | $\$$ |  |  |
| Machine set-up | 110000 | 12 times | 8 times |
| Machine maintenance | 180000 | 90 maintenance hours | 110 maintenance hours |
| Materials handling | 90000 | 20 deliveries | 10 deliveries |
| Product inspection | $\underline{160000}$ | 200 inspection hours | 120 inspection hours |
|  | $\underline{540000}$ |  |  |

## REQUIRED

(c) State one benefit of adopting activity based costing.
(d) Prepare a table to show the allocation of the total budgeted production overheads between Alpha and Beta if Jumal Limited changes to activity based costing.
(e) Calculate the budgeted unit cost and budgeted unit selling price of Alpha and Beta if activity based costing is adopted.
(f) Discuss the factors the directors of a business should consider before possibly changing the selling price.
(g) Recommend whether or not the directors of Jumal Limited should change the selling price of the products. Justify your answer.
[Total: 25]

6 Alfa manufactures a single product. Its budgeted production and sales in March was 8000 units. The budgeted data per unit is as follows:

| Direct materials | 3 kilos at $\$ 12$ per kilo |
| :--- | :--- |
| Direct labour | 4 hours at $\$ 20$ per hour |
| Fixed production overhead | $\$ 8$ per direct labour hour |

The product will be sold at full production cost plus $75 \%$.

## REQUIRED

(a) Prepare the trading section of the budgeted income statement for March.

## Additional information

The actual results for March were:

Actual production (units) 22850 kilos direct materials 30800 direct labour hours Fixed production overhead

7500
\$269 000
\$631 000
$\$ 250000$

## REQUIRED

(b) State two reasons why a business will prepare a flexed budget.
(c) Calculate the following variances for March:
(i) direct materials price
(ii) direct materials usage
(iii) fixed overhead expenditure
(iv) fixed overhead volume.

## Additional information

The accountant has also calculated the direct labour variances. They are as follows:

| Direct labour rate | $\$ 15000(\mathrm{~A})$ |
| :--- | :--- |
| Direct labour efficiency | $\$ 16000(\mathrm{~A})$ |

## REQUIRED

(d) (i) Explain the possible reasons why the direct labour adverse variances may have arisen.
(ii) Explain the possible reasons why fixed overhead variances may arise.
(e) Explain how the adverse direct labour efficiency variance can be improved.

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