# Cambridge <br> Cambridge International Examinations 

 InternationalCambridge International Advanced Subsidiary and Advanced Level
AS \& A Level

## ACCOUNTING

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 The following balances were extracted from the books of XY plc on 31 January 2017.

|  | $\$$ |
| :--- | ---: |
| Land and buildings - at cost | 700000 |
| Equipment - at cost | 320000 |
| Motor vehicles - at cost | 230000 |
| Accumulated depreciation |  |
| $\quad$ Land and buildings | 100000 |
| Equipment | 186000 |
| $\quad$ Motor vehicles | 96000 |
| Ordinary shares of \$5 each | 500000 |
| Share premium | 120000 |
| Retained earnings at 1 February 2016 | 125000 |
| Inventory at 1 February 2016 | 37100 |
| Trade receivables | 102000 |
| 8\% Loan | 150000 |
| Provision for doubtful debts | 2100 |
| Revenue | 985000 |
| Purchases | 428000 |
| Administrative expenses | 346000 |
| Distribution costs | 144000 |
| Interim dividend paid | 20000 |

## Additional information

1 Inventories at 31 January 2017 included 100 units of damaged items. These items, with a unit cost of $\$ 80$, were all sold on 2 February 2017 for $\$ 65$ each.
At 31 January 2017 all other inventories were valued at cost, $\$ 36000$, and had a net realisable value of $\$ 85400$.

2 The administrative expenses include an amount of $\$ 30000$ for a machine purchased on 1 February 2016. The machine has a useful life of three years and will then be scrapped with nil proceeds. Any costs related to the machine should be charged to the cost of sales.

3 The figure for land and buildings (at cost) includes land which had cost $\$ 300000$.
4 During the year, XY plc purchased a motor vehicle which cost $\$ 60000$. This was settled by a payment of $\$ 40000$ from the bank and the part exchange of an old vehicle. This old vehicle had originally cost $\$ 75000$ and had been depreciated by $\$ 27000$. Only the bank payment had been recorded in the books of account.

5 Depreciation is to be charged on the following basis:

```
Land not depreciated
Buildings straight-line method over 25 years, charged to cost of sales
Equipment straight-line method over 5 years, charged to administrative expenses
Motor vehicles reducing balance method at 20% per annum, charged to distribution
costs.
```

The company policy is to charge a full year's depreciation in the year of purchase and none in the year of sale.

6 Trade receivables included an irrecoverable debt of \$8800. A provision for doubtful debts of $4 \%$ is to be maintained. These items need to be included in administrative expenses.

7 The loan was obtained on 1 September 2016.

## REQUIRED

(a) State two objectives of financial statements of a limited company.
(b) Prepare the income statement for the year ended 31 January 2017.

## Additional information

In October 2016 XY plc made a bonus issue of 1 ordinary share for every 10 ordinary shares held. No entry had been made in the books of account.

## REQUIRED

(c) Prepare the statement of changes in equity for the year ended 31 January 2017. (A total column is not required.)

## Additional information

The directors are considering making a further issue of bonus shares rather than paying a cash dividend.

REQUIRED
(d) Advise the directors which course of action they should take. Justify your answer.
[Total: 25]

2 The directors of G Limited prepared the following draft statement of financial position at 31 December 2016:

G Limited
Statement of Financial Position at 31 December 2016

|  | \$ |
| :---: | :---: |
| Non-current assets | 642000 |
| Current assets |  |
| Inventory | 78000 |
| Trade receivables | 189000 |
| Other receivables | 3000 |
| Cash and cash equivalents | 54000 |
|  | 324000 |
| Total assets | $\underline{966000}$ |
| Equity and liabilities |  |
| Equity |  |
| Ordinary shares of \$1 each | 550000 |
| Retained earnings | $\underline{235000}$ |
|  | $\underline{785000}$ |
| Current liabilities |  |
| Trade payables | 171000 |
| Other payables | 10000 |
|  | $\underline{181000}$ |
| Total equity and liabilities | $\underline{966000}$ |

The auditor brings the following items to the attention of the directors:
1 G Limited entered into an 18-month rental agreement for a warehouse on 1 May 2016. The following payments totalling $\$ 220000$ were made and charged as an expense in the draft income statement:
$\$ 20000$ rental deposit which is refundable at the end of the lease period; and $\$ 200000$ total rent covering the period from 1 May 2016 to 28 February 2017.

2 After an inspection of G Limited's office premises by the local authority in December 2016, it was found that the fire exits did not meet the safety specifications. A penalty of $\$ 27000$ is probable and G Limited will incur a cost of $\$ 47000$ to rebuild the fire exits. No accounting entries had been made for this.

3 A customer who owed $\$ 12000$ at 31 December 2016 was declared bankrupt on 12 January 2017. It is probable that only $20 \%$ of the debt is recoverable. No accounting entries had been made for this.

## REQUIRED

(a) Prepare the revised statement of financial position at 31 December 2016.
(b) Explain how each of items 1 and 2 should be treated in the financial statements.
(c) Explain the role of an external auditor.
(d) Explain why the audit report of a limited company is addressed to the company's shareholders and not its directors.

## Additional information

G Limited adopted the Weighted Average Cost (AVCO) method to ascertain the value of inventories in 2016. The purchase price has been increasing over recent years. The directors are now considering changing to First in, First out (FIFO) method to value inventory in 2017.

## REQUIRED

(e) Advise the directors whether or not the method of valuing inventory should be changed. Justify your answer.

3 Greaves and Hurst participated in a joint venture sharing profits and losses in the ratio 2:1.
Greaves provided goods valued at $\$ 15000$ and incurred costs of $\$ 900$.
Hurst provided goods valued at $\$ 10000$ and incurred costs of $\$ 800$.
Greaves sold all of the goods for $\$ 35000$.
It was agreed that a commission of $10 \%$ of the sales value would be paid to the person making the sale.

The joint venture was then dissolved.

## REQUIRED

(a) Explain two benefits to Greaves and Hurst of forming a joint venture.
(b) Calculate the share of profit made by Greaves and Hurst from the joint venture.

## Additional information

A separate set of books of account are maintained to record the transactions of the joint venture. Greaves and Hurst kept their own transactions with the joint venture in their own books.

## REQUIRED

(c) Prepare the following ledger accounts:
(i) Greaves account with the joint venture
(ii) Hurst account with the joint venture

## Additional information

Following the closure of the joint venture, Greaves and Hurst have received more orders and are considering forming a partnership.

## REQUIRED

(d) Advise Greaves and Hurst whether or not they should form a partnership. Justify your answer by discussing advantages and disadvantages of forming the partnership.
[Total: 25]

4 James has recently retired and received some cash which he wishes to invest in a company. There are two options. He could invest in either LM plc or AB plc.

The summarised information for the two companies extracted from their financial statements at 31 March 2017 is as follows:

|  | LM plc | AB plc |
| :--- | ---: | ---: |
|  | $\$$ | $\$$ |
| Ordinary share capital | 300000 | 500000 |
| 4\% non-redeemable preference shares of \$1 each | 100000 | 150000 |
| Retained earnings 1 April 2016 | 50000 | 125000 |
| 10\% debentures (2025) | 150000 | 50000 |
| Profit for the year | 125000 | 175000 |

The nominal value of the ordinary shares of LM plc is $\$ 0.50$ and of $A B$ plc $\$ 1$.
The market price of the ordinary shares at 31 March 2016 of both companies was $\$ 2$. At 31 March 2017, this had fallen by $10 \%$ for LM plc but increased by $10 \%$ for AB plc.

Both companies paid a dividend per share of $\$ 0.10$ for the year ended 31 March 2017.

## REQUIRED

(a) Calculate the following ratios for both companies. Give your answers to two decimal places.
(i) Earnings per share
(ii) Price earnings
(iii) Dividend yield
(iv) Dividend cover
(b) Evaluate the performance of each company using each of the ratios calculated in part (a). [8]

## Additional information

The industry average gearing ratio is $25 \%$.

## REQUIRED

(c) (i) Explain what you understand by gearing.
(ii) Calculate the gearing ratio for both companies to two decimal places.
(iii) Analyse the gearing ratios of LM plc and AB plc.
(d) Advise James which company he should invest in. Give reasons for your answer.

## Section B: Cost and Management Accounting

5 EF plc manufactures a single product. No inventories of materials or finished goods are maintained.

The following budgeted information is available for March:

| Production and sales | 1000 units |
| :--- | :--- |
| Unit revenue and costs |  |
| Selling price | $\$ 150$ |
| Direct material | 4 kilos at $\$ 6$ per kilo |
| Direct labour | 6 hours at $\$ 10$ per hour |
| Variable overhead | $\$ 2$ per direct labour hour |
| Fixed overhead | $\$ 14$ per unit |

In March the company actually made and sold 800 units.

## REQUIRED

(a) State two reasons why a business prepares a flexed budget.
(b) Prepare a statement to show the budgeted profit for the month of March.

## Additional information

The actual cost of direct labour in March was $\$ 50176$. Staff had been paid at the rate of $\$ 9.80$ per hour.

## REQUIRED

(c) Calculate the following variances for March:
(i) direct labour rate
(ii) direct labour efficiency
(iii) total direct labour

## Additional information

In April the staff continued to be paid at $\$ 9.80$ per hour. The variances for April were calculated as follows:

| direct labour rate | $\$ 1620$ favourable |
| :--- | :--- |
| direct labour efficiency | $\$ 18000$ adverse |

## REQUIRED

(d) Calculate
(i) the number of hours actually worked in April
(ii) the number of units actually made and sold in April.
(e) Suggest two possible reasons why the efficiency variance was adverse in April.

## Additional information

The management of the company is evaluating a plan to retrain the existing workers to improve their efficiency.

## REQUIRED

(f) Discuss the disadvantages to EF plc if they proceed with this plan.

6 Ahmed manufactures two products. He has recently started using Activity Based Costing (ABC) for allocating the overhead costs to these products. The budgeted data for one month is available as follows:

|  | Product X | Product Y |
| :--- | :---: | :---: |
|  |  |  |
| Demand (units) | 10000 | 14000 |
| $\quad$ Number of orders | 20 | 60 |
| Number of production runs | 12 | 36 |
|  | Per unit | Per unit |
| Direct labour hours | 0.75 | 1.5 |
| Machine hours | 2.5 | 0.5 |
| Direct costs (\$) | 100 | 50 |
|  |  |  |
| Total factory overhead costs | $\$$ |  |
| Machine maintenance costs | 264000 |  |
| Ordering costs | 54000 |  |
| Production run costs | $\underline{24000}$ |  |
|  | $\underline{342000}$ |  |

## REQUIRED

(a) Calculate the full cost per unit for Product $X$ and Product $Y$ using $A B C$.

## Additional information

Ahmed previously used direct labour hours as a basis to charge overheads to each product.

## REQUIRED

(b) Calculate the overhead charged to each product using the direct labour hour rate.
(c) Explain the effect that changing the method has had on the overhead cost of each product.

## Additional information

A customer requires 50 units of Product $X$ and has offered to pay Ahmed a total of $\$ 8450$ for them. Ahmed uses $40 \%$ mark-up on all his products.

## REQUIRED

(d) Recommend whether or not Ahmed should accept the offer. Justify your decision using appropriate calculations and considering both financial and non-financial factors.
(e) State two reasons why a business may use ABC for allocating overhead costs.

## BLANK PAGE

## BLANK PAGE

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (UCLES) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest possible opportunity.

To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced online in the Cambridge International Examinations Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download at www.cie.org.uk after the live examination series.

Cambridge International Examinations is part of the Cambridge Assessment Group. Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge.

