

Cambridge
International
AS & A Level

Cambridge International Examinations
Cambridge International Advanced Subsidiary and Advanced Level

ACCOUNTING

9706/32

Paper 3 Structured Questions

May/June 2017

3 hours

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.

This document consists of **12** printed pages and **1** Insert.

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	986 000
Purchases of direct materials	207 600
Carriage inwards	6 800
Carriage outwards	17 500
Returns inwards	12 000
Factory wages	
Direct	168 000
Indirect	51 400
Overheads	
Factory	155 000
Office	194 000

Additional information

- Richard maintains a provision for unrealised profit account. Completed products are transferred from the factory at a mark-up of 20%.
- Inventories at 31 July 2015 were:

	\$
Raw materials	14 800
Work in progress	23 500
Finished goods (at cost)	32 000
- Inventories at 31 July 2016 were:

	\$
Raw materials	16 400
Work in progress	20 200
Finished goods (at transfer price)	54 000
- Unpaid direct wages at 31 July 2016 amounted to \$3500.
- Rent had been allocated to factory overheads and office overheads at \$24 000 and \$16 000 respectively. The allocation should have been in the ratio of 3 : 1 respectively.

REQUIRED

- Prepare the manufacturing account for the year ended 31 July 2016. [7]
- Prepare an income statement for the year ended 31 July 2016. [7]

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. [3]
- (d) Explain why it is important for Richard to create a provision for unrealised profit. [4]
- (e) State **two** advantages and **two** disadvantages to Richard Ang of helping his sister set up her business. [4]

[Total: 25]

- 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	<u>2080</u>
	<u>6300</u>
Share capital and reserves	
Ordinary shares of \$5 each	5000
Share premium	500
Retained earnings	<u>800</u>
	<u>6300</u>

Retained earnings for the year ended 31 December 2016 were \$160 000, 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

[8]

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 \$1 200 000 in a project which will bring an additional annual profit of \$185 000. 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.

[6]

5

(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 [6]

(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. [4]
- (b) Explain what is meant by stewardship with regard to the role of the directors. [2]

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	<u>478 000</u>
	<u>478 000</u>
Current assets	
Inventories	124 000
Trade receivables	217 000
Cash and cash equivalents	<u>132 000</u>
	<u>473 000</u>
 Total assets	 <u>951 000</u>
Equity and liabilities	
Equity	
Ordinary shares of \$1 each	500 000
Retained earnings	<u>210 000</u>
Total equity	<u>710 000</u>
Current liabilities	
Trade payables	188 000
Taxation	<u>53 000</u>
	<u>241 000</u>
 Total equity and liabilities	 <u>951 000</u>

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 \$29 000. Legal advice indicated that Z Limited had a 90% chance of losing the case.
- 2 Included in the trade receivables was a debt of \$30 000 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 \$50 000. 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 \$32 500 and the estimated value in use was \$19 500.

REQUIRED

- (c) Prepare a **revised** draft statement of financial position at 31 December 2016 after considering the information provided to Julia. [8]
- (d) Explain the adjustments you have made to the statement of financial position in (c). [6]

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. [5]

[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			320 000
Plant and machinery			135 000
Motor vehicles			110 000
Inventory			38 000
Trade receivables			54 000
Cash and cash equivalents			19 000
Trade payables			<u>(39 000)</u>
			<u>637 000</u>
Capital accounts	<u>300 000</u>	<u>200 000</u>	500 000
Current accounts			
Balance at 1 November 2015	72 000	57 000	
Partners' salaries	30 000	45 000	
Interest on capital	15 000	10 000	
Share of residual profit	36 000	24 000	
Drawings	<u>(77 000)</u>	<u>(75 000)</u>	
Balance at 31 October 2016	<u>76 000</u>	<u>61 000</u>	<u>137 000</u>
			<u>637 000</u>

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 \$28 000.

The remaining assets taken over by C Limited had the following values:

	\$
Land and buildings	450 000
Plant and machinery	120 000
Motor vehicles	60 000
Inventory	49 000
Trade receivables	52 000

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 \$127 500 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'. [1]
- (b) Calculate the value of goodwill paid for by C Limited. [4]
- (c) Calculate the **total** profit on realisation due to the partners. [4]
- (d) Prepare the partners' capital accounts to close their business. [11]

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	3 400 000
Share premium	300 000
Retained earnings	<u>816 000</u>
	<u>4 516 000</u>

The company made a profit for the year ended 31 October 2016 of \$352 000.

The directors of C Limited estimate that the profit for the coming year after purchasing the partnership business will be increased to \$540 000.

REQUIRED

- (e) Discuss the advantages to C Limited, other than increase in the profit, of purchasing Alex and Brown's business. [5]

[Total: 25]

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)	42 000
Direct materials (3000 kilos at \$12.20)	36 600
Variable overheads	10 000
Fixed overheads	19 300

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. [6]

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 [2]
 - (ii) labour rate [2]
 - (iii) materials usage [2]
 - (iv) materials price [2]
- (c) Suggest **one** cause for each of the materials usage and materials price variances. [2]

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. [6]
- (e) State **three** advantages to the company of operating a standard costing system. [3]

[Total: 25]

- 6 Tisha is considering buying a new machine for her factory. The machine will cost \$125 000. At the end of Year 5 the machine will be sold for \$65 000. 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 10 000 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. [5]
- (b) Calculate the payback period for the machine. [2]
- (c) State **three** reasons why payback may be a useful investment appraisal technique. [3]

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. [3]

Additional information

When using a discount factor of 20%, the machine had a **negative** NPV of \$24 953.

REQUIRED

- (e) Calculate the Internal Rate of Return (IRR) of the machine to **three** decimal places. [4]

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
\$	\$	%	
135 000	10 350	9.597	4 years 6 months

REQUIRED

(f) Recommend, with reasons, which machine Tisha should buy. [4]

(g) Discuss which factors, other than those you have considered in **(f)**, Tisha should consider when making her decision. [4]

[Total: 25]

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