Cambridge International Examinations
Cambridge International Advanced Subsidiary and Advanced Level

ACCOUNTING **9706/31**

Paper 3 Structured Questions **October/November 2017**

3 hours

No Additional Materials are required.

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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.

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Section A: Financial Accounting

1 Ted is the owner of a manufacturing business.

The following information is available for the year ended 31 December 2016:

	$
Factory machinery – at cost	330 000
Office equipment – at cost	142 000
Provision for depreciation at 1 January 2016	
Factory machinery	276 000
Office equipment	67 000
Inventory at 1 January 2016	
Raw materials	52 000
Work in progress	97 000
Finished goods (at cost)	122 000
Revenue	4 268 000
Purchases of raw materials	484 000
Factory direct wages	626 000
Factory indirect wages	132 000
Office salaries	548 000
Carriage inwards	21 000
Carriage outwards	87 600
Direct expenses	120 000
Factory overheads	510 900
General office expenses	276 000
Insurance and rates	92 000
Rent	440 000
Heat and light	178 000

Additional information

1 Goods are transferred from the factory at a mark-up of 20%. Increase in provision for unrealised profit at 31 December 2016 amounted to $15 840.

2 Inventory at 31 December 2016:

	$
Raw materials	67 000
Work in progress	102 000
Finished goods	?

3 Non-current assets are depreciated at 15% per annum using the reducing balance method.

4 At 31 December 2016:

	$
Rent owing	40 000
Insurance and rates prepaid	6 000

Insurance and rates, rent and heat and light are apportioned ¾ factory and ¼ general office.

5 Production for the year ended 31 December 2016 was 80 000 units.

REQUIRED

(a) Explain why a mark-up is added to the factory cost of production. [3]

(b) Prepare the manufacturing account for the year ended 31 December 2016. [10]

(c) Prepare the trading section of the income statement to show the gross profit for the year ended 31 December 2016. [6]

(d) Prepare an extract from the statement of financial position to show the value of finished goods inventory at 31 December 2016. [2]

Additional information

In February 2017, Ted was approached by an existing customer for an extra order of 5000 units. The budgeted production for 2017 was already set at the maximum production capacity. Ted considered whether or not to source the extra 5000 units from an external supplier at a cost of $28 per unit.

REQUIRED

(e) Advise Ted whether or not he should have accepted the extra order. Justify your answer. [4]

[Total: 25]

2 The EF Tennis Club generates revenue from member subscriptions by selling tickets for matches and operating a club shop. It also receives income from renting out their catering facility.

The treasurer has provided the following figures for the year ended 31 December 2016:

Receipts and Payments Account

2016		$	2016		$
Jan 1	Balance b/d	1546	Dec 31	New equipment	1400
Dec 31	Shop sales	8960		Shop purchases	5720
	Match tickets	2740		Printing and advertising for matches	3765
	Sale of old equipment	1760		Ground staff wages	4210
	Rent of catering facilities	2600		Shop staff wages	2200
	Subscriptions	3600		Balance c/d	8911
	Donation	5000			
		26206			26206
2017					
Jan 1	Balance b/d	8911			

Other balances are:

	1 January 2016	31 December 2016
	$	$
Shop inventory	975	826
Equipment at net book value	14760	?
Shop trade payables	1210	1450

REQUIRED

(a) Distinguish between the capital of a sole trader and the accumulated fund of a non-profit-making club or society. [2]

(b) Prepare the shop income statement for the year ended 31 December 2016. [4]

Additional information

1 Equipment is depreciated at 10% of net book value at the year end. Equipment which was sold had a net book value of $1900.

2 The rent received for the catering facility is $200 per month and commenced on 1 January 2016.

3 The annual subscription for the year ended 31 December 2016 was $9 per member. On 1 January 2017 it was increased to $10 per member.

At 1 January 2016:

20 members had paid their subscription in advance for 2016.
There were 6 members in arrears for 2015. Their membership has been withdrawn and the amount they owed is to be written off as a bad debt.

At 31 December 2016:

26 members paid their subscription in advance for 2017.
10 members were in arrears for 2016 and they had until 30 June 2017 to pay.

4 The donation of $5000 was received specifically to start a new fund for a club-house. The treasurer would like to invest this in a separate long-term savings account.

REQUIRED

(c) Prepare the income and expenditure account for the year ended 31 December 2016. [10]

(d) Prepare an extract from statement of financial position at 31 December 2016 to show the current assets and current liabilities of the club. [4]

(e) Discuss whether or not the treasurer should invest the fund for the club-house in a separate long-term savings account. Justify your answer. [5]

[Total: 25]

3 The following information has been extracted from the books of account of M plc at 31 December 2016:

	$
Profit for the year	550 000
Ordinary shares ($1)	900 000
6% Preference shares (non-redeemable)	200 000
5% Debentures (2025)	100 000

The market price of one ordinary share at 31 December 2016 was $1.75.
Dividends of $0.08 per ordinary share have been paid during the year ended 31 December 2016.

REQUIRED

(a) State **two** advantages of ratio analysis to a user of the financial statements. [2]

(b) Calculate the following ratios at 31 December 2016 to **two** decimal places:

(i) earnings per share

(ii) price earnings ratio

(iii) dividend yield

(iv) dividend cover. [5]

Additional information

For the year ended 31 December **2016**:

1 The profit for the year was 10% greater than the previous year.

2 There had been a share issue of 300 000 ordinary shares.

3 The dividend per share had fallen by 20%.

REQUIRED

(c) Calculate the same four ratios as in part **(b)** at 31 December 2015 to **two** decimal places. The market price of one ordinary share at 31 December 2015 was $1.50. [4]

Additional information

An investor, Bevin, is considering acquiring ordinary shares in M plc. He has been advised that the directors intend to raise extra funds by issuing a further 5% debenture (repayable 2027).

REQUIRED

(d) **(i)** Analyse the performance of M plc over the two years 2015 and 2016 using the ratios calculated in parts **(b)** and **(c)**. [8]

(ii) Advise Bevin whether or not he should make the intended investment. Justify your answer. [6]

[Total: 25]

Question 4 is on the next page.

4 Armfield and Bonetti are sole traders. Their statements of financial position at 31 December 2016 are shown below:

	Armfield $	Bonetti $
Assets		
Non-current assets	85 000	135 000
Current assets		
Inventories	8 000	12 000
Trade receivables	6 000	9 000
Cash and cash equivalents	4 000	5 000
	18 000	26 000
Total assets	103 000	161 000
Capital and liabilities		
Capital accounts	100 000	150 000
Current liabilities		
Trade payables	3 000	11 000
	103 000	161 000

They have decided to merge their two businesses into a partnership on 1 January 2017. All assets and liabilities, with the exception of cash and cash equivalents, were transferred to the new partnership at the following agreed values:

	Armfield $	Bonetti $
Non-current assets	80 000	145 000
Inventories	7 000	11 000
Trade receivables	5 000	8 000
Trade payables	3 000	11 000

REQUIRED

(a) State the meaning of the term 'capital account'. [2]

(b) Prepare the capital accounts of Armfield and Bonetti to close their existing businesses.

Transfer the balances on their capital accounts to new partnership capital accounts. [6]

Additional information

Each partner will either invest or withdraw cash to achieve a balance of $125 000 to carry forward on their partnership capital account.

REQUIRED

(c) Prepare the partnership capital accounts clearly showing **each** partner's adjustment for cash. [3]

(d) Prepare the opening statement of financial position for the partnership at 1 January 2017. [5]

Additional information

Profit for the year ended 31 December 2016 of Armfield was $80 000 and Bonetti was $120 000. The profit for the year of the partnership for the year ending 31 December 2017 is expected to be $200 000. The partners agreed to share the profits and losses equally.

REQUIRED

(e) Discuss whether or not the merger of the two businesses has been beneficial to each partner. [5]

Additional information

After the first year's successful trading as a partnership the partners were advised to consider incorporating their business. Both partners are close to retirement age and have family.

(f) Discuss **two** advantages to the partners of incorporating their business. [4]

[Total: 25]

Section B: Cost and Management Accounting

5 WT Limited manufactures a single product. The following information is available from its **master** budget for the month of December:

Monthly sales	1000 units
Selling price per unit	$90
Direct materials per unit	4 kilos costing $5.10 per kilo
Direct labour per unit	3 hours costing $10 per hour
Total monthly fixed costs	$33 000

Competing businesses charge a selling price between $85 and $90 for the same product.

The directors are proposing to reduce the selling price to $80 per unit**.** They believe that monthly sales would increase to 1500 units. The change in demand would cause material costs to fall to $5.02 per kilo and labour costs to rise to $12 per hour. Total monthly fixed costs would remain unchanged.

REQUIRED

(a) Suggest reasons why the cost per unit could change with the increase in sales for:

(i) direct material

(ii) direct labour. [4]

(b) Calculate:

(i) the **total** budgeted profit and budgeted profit **per unit** for December [3]

(ii) the **total** profit and profit **per unit** if the directors' proposal is adopted for December [3]

(iii) the increase or decrease in profit which would arise if the directors' proposal is adopted. [1]

(c) Calculate the following variances which would arise if the directors' proposal is adopted:

(i) sales price

(ii) sales volume

(iii) materials price

(iv) labour rate. [8]

(d) Explain why the total of variances calculated in part **(c)** does not equal the change in the profit in part **(b)(iii)**. [3]

(e) Advise the directors whether or not they should go ahead with the proposal. Justify your answer. [3]

[Total: 25]

6 PMW Limited produces and sells two products, A and B. It provided the following information for a year:

	Product A	Product B
Sales	20 000 units	18 000 units
Selling price per unit	$12	$20
Direct material per unit	$3.20	$4.90
Direct labour per unit	$1.80	$2.10

Total overheads amounted to $300 000. These are currently apportioned to the two products on the basis of **total** sales value.

REQUIRED

(a) Calculate the value of overheads apportioned to **each** product. [3]

(b) Calculate the profit or loss per unit for **each** product. [5]

Additional information

Beryl, the accountant, has analysed the overheads. She discovered that the total of $300 000 **included** costs for delivery to customers and order processing costs. The following information was available.

1 Analysis of orders received

	Product A	Product B	Total
Orders received for more than 100 units	17	23	40
Orders received for 100 units or fewer	664	446	1110
Total orders received	681	469	1150

2 Costs of delivery amounted to $30 per order for orders received for more than 100 units, and $20 per order for orders of 100 units or fewer.

3 Order processing costs amounted to $25 per order irrespective of size.

4 Remaining overheads should now be apportioned to sales units.

REQUIRED

(c) Calculate the total overheads apportioned to **each** product in accordance with the accountant's analysis. [5]

(d) Calculate the revised profit or loss **per unit** for **each** product. [5]

Additional information

Beryl believes that her method of apportioning overheads is more realistic than the current method. She has recommended to the directors that the method be changed in the future.

REQUIRED

(e) Discuss whether or not the directors should change the method of apportioning overheads. Justify your answer using **both** financial and non-financial factors. [5]

(f) State what is meant by the terms 'cost driver' and 'cost pool'. [2]

[Total: 25]