Cambridge International AS & A Level

Cambridge International Examinations
Cambridge International Advanced Subsidiary and Advanced Level

ACCOUNTING **9706/31**

Paper 3 Structured Questions **May/June 2016**

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.

This document consists of **9** printed pages, **3** blank pages and **1** insert.

IB16 06_9706_31/3RP

CAMBRIDGE
International Examinations

Section A: Financial Accounting

1 The Pavey Sports and Social Club is a not for profit organisation. Accounts are prepared annually to 31 March. The membership has been constant for some years at 350 members paying an annual subscription of $100.

A life membership scheme was introduced to try to boost membership. On 1 April 2015, there were 25 new members who joined under this scheme, each paying $750. It was agreed that the life membership fund would be transferred to the income and expenditure account over 15 years.

The following receipts and payments account was prepared for the year ended 31 March 2016.

Receipts		Payments	
	$		$
Balance b/d	12 120	Purchase of fixtures and fittings	34 500
Annual subscriptions	34 000	Payments to restaurant suppliers	6 950
Life membership	18 750	Restaurant wages	5 450
Donations	8 500	Administrative expenses	4 750
Restaurant takings	17 450	Balance c/d	39 170
	90 820		90 820

The following information is available for the year ended 31 March 2016.

1	1 April 2015	31 March 2016
	Number of members	Number of members
Subscriptions in advance	4	3
Subscriptions in arrears	10	?

2	1 April 2015	31 March 2016
	$	$
Restaurant suppliers owing	845	955
Restaurant wages owing	–	280
Administrative expenses owing	–	350
Administrative expenses prepaid	–	200

3 No inventories of restaurant supplies were held.

4 Fixtures and fittings acquired on 1 April 2013 had cost $20 000. Depreciation is charged at 20% per annum using the reducing balance method. A full year's depreciation is charged in the year of acquisition.

5 All donations are capitalised.

6 The opening balance on the accumulated fund at 1 April 2016 was $24 675.

REQUIRED

(a) Distinguish between the terms ‘capital’ and ‘accumulated fund’. [2]

(b) Prepare the income and expenditure account for the year ended 31 March 2016, clearly identifying the profit or loss from the restaurant within the account. [14]

(c) Explain why a club may capitalise donations received from its members. [2]

Additional information

The club is considering modernising the pavilion which will cost $75 000.

REQUIRED

(d) **(i)** Compare and contrast **two** sources of finance which the club could use. [4]

(ii) Advise the club members which source of finance would be most appropriate. Justify your answer. [3]

[Total: 25]

2 Ahmed and Bashmir have separate garage businesses and have agreed to form a joint venture to buy and sell second hand cars.

They have agreed to share the profits and losses as two thirds to Ahmed and one third to Bashmir.

They record purchases and sales of cars in their own books of account.

The following financial information is available for the period of the joint venture.

	Ahmed $	Bashmir $
Credit purchases	24 500	17 600
Expenses	3 200	2 300
Commissions received	1 000	
Discount received	500	100
Cash sales	6 000	4 800
Credit sales	32 000	50 700
Returns inwards	4 500	
Irrecoverable debts		300

It was agreed that Bashmir would take over the inventory of unsold cars at the end of the venture. Bashmir has advised that he has an inventory of unsold cars at the end of the venture valued at $6500.

REQUIRED

(a) Prepare the memorandum joint venture account. [9]

(b) Prepare the joint venture account in the books of Ahmed and show the balance due to or from Bashmir. [8]

(c) State the heading under which the balance due will be shown in Ahmed's statement of financial position. [1]

Additional information

Ahmed has discovered that Bashmir did not hold any inventory but had sold the closing inventory of cars for $12 500.

REQUIRED

(d) Calculate:

(i) the correct **total** profit for the joint venture. Start your calculation with your answer from **(a)**. [3]

(ii) the extra profit due to Ahmed from the joint venture. [1]

(e) Evaluate whether or not Ahmed should have entered into the joint venture with Bashmir. Justify your answer. [3]

[Total: 25]

3 ACM plc provided the following information about its non-current assets.

	Accumulated depreciation at 1 January 2015	Cost at 1 January 2015	Cost at 31 December 2015
	$	$	$
Property	17 000	200 000	200 000
Plant and machinery	210 000	258 000	310 000
Delivery vans	10 000	23 000	23 000

Additional information

1 Half of the value of property relates to land. Property is depreciated at the rate of 1% per annum using the straight-line method.

2 Plant and machinery is depreciated at the rate of 10% per annum using the straight-line method. A full year's depreciation is provided in the year of purchase and none in the year of disposal.

On 1 June 2015 a machine, bought on 10 July 2007, was sold for $17 800. This resulted in a profit on disposal of $13 000.

3 The delivery vans are depreciated at the rate of 25% per annum on the reducing balance basis.

REQUIRED

(a) Prepare the disposal of machinery account for the year ended 31 December 2015. [6]

(b) Prepare the non-current assets schedule for inclusion in the published financial statements of the company for the year ended 31 December 2015 in accordance with International Accounting Standards. [8]

(c) Explain why a business depreciates its non-current assets. [3]

Additional information

The Return on Capital Employed (ROCE) of the company was 9.81%. This was lower than the industry average and the directors wished to find a way to increase it.

Some of the machinery was 10 years old at the start of January 2016 and it had become unreliable and unproductive. The marketing director suggested that it should be scrapped and replaced at a cost of $120 000, to be financed by the issue of 8% debentures. This would increase production. Annual sales and costs would be as follows:

	$
Revenue	62 000
Prime costs	39 000
Selling and distribution costs	3 000

He calculated that the return from the new machinery would be 62 000 / 120 000 or 51.67%, which, being higher than the existing 9.81%, would cause the Return on Capital Employed (ROCE) to increase.

REQUIRED

(d) Evaluate the marketing director's proposal. Support your answer with calculations. [8]

[Total: 25]

4 Winterbottom plc and Ramsey plc are two similar trading companies which have been successfully trading for many years. Their financial statements prepared for internal purposes are shown below:

Income statements for the year ended 30 June 2015

	Winterbottom	Ramsey
	$000	$000
Revenue	6 279	4 527
Cost of sales	(2 075)	(1 254)
Gross profit	4 204	3 273
Depreciation	(1 285)	(720)
Other expenses	(1 227)	(992)
Profit on disposal of non-current assets	28	15
Profit from operations	1 720	1 576
Finance charges	(300)	(180)
Profit before taxation	1 420	1 396
Taxation	(317)	(312)
Retained profit for the year	1 103	1 084

Statements of financial positions at 30 June 2015

	Winterbottom	Ramsey
	$000	$000
Non-current assets	9 864	6 192
Current assets		
Inventories	782	451
Trade receivables	1 362	742
Cash and cash equivalents	135	98
	2 279	1 291
Total assets	12 143	7 483
Equity and liabilities		
Equity		
Ordinary share capital ($1 each)	4 500	2 500
Share premium	200	–
Retained earnings	1 447	1 244
	6 147	3 744
Current liabilities		
Trade payables	679	427
Taxation	317	312
	996	739
Non-current liabilities		
6% Debentures (2024)	5 000	3 000
Total equity and liabilities	12 143	7 483

Additional information

1 Neither company has paid an interim dividend during the year ended 30 June 2015.

2 The directors of Winterbottom plc propose a dividend of $0.20 per share and those of Ramsey plc $0.35 per share for the year ended 30 June 2015.

3 At 30 June 2015, the market value of an ordinary share in Winterbottom plc is $3.50 and in Ramsey plc $2.75.

REQUIRED

(a) Calculate the following ratios for **both** companies to **two** decimal places.

(i) Income gearing

(ii) Earnings per share

(iii) Price earnings ratio

(iv) Dividend yield

(v) Dividend cover [10]

Additional information

Alfredo is considering investing in one of the companies but is uncertain which will offer the best return.

Recent industry averages were as follows:

Income gearing	20.25%
Earnings per share	$0.33
Price earnings ratio	12.50
Dividend yield	10.45%
Dividend cover	1.20 times

REQUIRED

(b) Analyse the performance of **both** companies compared to the industry averages. [10]

(c) Advise Alfredo which company he should invest in. Justify your answer. [5]

[Total: 25]

Section B: Cost and Management Accounting

5 Chetna runs a business printing logos on sweatshirts. The sweatshirts come in two types, Standard and Superior. The selling price is set at cost plus 30%.

The following information is available for the year.

	Standard	Superior
Number of sweatshirts sold	22 500	9 000
Purchase cost per sweatshirt	$5	$8
Printing materials per sweatshirt	$0.50	$0.50
Labour time to print each sweatshirt	5 minutes	5 minutes

Overheads were as follows:

	$
Machine set up costs	18 900
Other production overheads	5 850
Selling and administration	17 250
Total	42 000

REQUIRED

(a) Calculate an overhead absorption rate based on labour hours. [2]

Additional information

Staff printing the logos are paid $10 an hour.

REQUIRED

(b) (i) Calculate the total cost allocated to each type of sweatshirt. [4]

(ii) Calculate the selling price for **each** sweatshirt. [2]

Additional information

Chetna has suggested that it would be better to allocate the machine set up cost to each product based on the number of times the machine is set up. The machine has to be set up each time there is a different logo.

During the year the machine was set up 600 times for Standard sweatshirts and 975 times for Superior sweatshirts. Other overheads are still allocated on the basis of labour hours.

REQUIRED

(c) (i) Calculate the total costs allocated to **each** type of sweatshirt when machine set up costs are allocated using the number of set up times. [4]

(ii) Calculate the revised selling price for **each** type of sweatshirt. [2]

(iii) Calculate the change in selling price for **each** type of sweatshirt. [2]

(d) Explain **three** differences between activity based costing and absorption costing. [6]

(e) Advise Chetna which method she should use. Justify your answer. [3]

[Total: 25]

6 One of the assembly machines at Artem Limited needs to be replaced.

A replacement machine will cost $300 000, which will be paid on purchase. The replacement machine is expected to last for three years. It will need complete maintenance check-up in year 2 at a cost of $75 000.

The existing machine assembles 4000 units per year.

The number of units assembled by the replacement machine is expected to be 35% lower in year 1 than the existing machine due to the time lost during installation and testing.

In year 2 it is expected that 4500 units will be assembled and this will increase by 20% each year compared to the previous year.

The replacement machine will produce units at a cost of $24 each. From year 2 this will increase by 25% each year compared to the previous year.

The selling price will be $45 per unit. This will increase by 30% each year compared to the previous year.

The cost of capital is 14%.

The following is an extract from the present value tables for $1.

	14%
Year 1	0.877
Year 2	0.769
Year 3	0.675

It is assumed that all production will be sold.

REQUIRED

(a) Distinguish between the payback method of investment appraisal and the net present value method. [4]

(b) Calculate the expected net cash flows for **each** year for the replacement machine. [8]

(c) Calculate the payback period for the replacement machine. [2]

(d) Calculate the net present value for the replacement machine. Assume that revenues are received and costs are paid at the end of each year. [6]

(e) **(i)** Analyse the benefits to the business of purchasing the replacement machine. [3]

(ii) Recommend whether or not the managers of Artem Limited should purchase the replacement machine. Justify your answer. [2]

[Total: 25]

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