Write your name here

Surname	Other names

Pearson Edexcel
International Advanced Level

Centre Number | | | | | |

Candidate Number | | | | |

Accounting

International Advanced Level
Paper 2: Corporate and Management Accounting

Monday 15 January 2018 – Morning
Time: 3 hours

Paper Reference
WAC12/01

You must have:
Source Booklet (enclosed)

Total Marks

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **both** questions in Section A and **three** questions from Section B.
- Answer the questions in the spaces provided
  – *there may be more space than you need.*
- Do not return insert with the question paper.

Information

- The total mark for this paper is 200.
- The marks for **each** question are shown in brackets
  – *use this as a guide as to how much time to spend on each question.*
- Calculators may be used.
- The source material for use with Questions 1 to 6 is in the enclosed source booklet.

Advice

- Read each question carefully before you start to answer it.
- Check your answers if you have time at the end.

Turn over ▶

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Pearson

SECTION A

Answer BOTH questions in this section.

1 Barind Stone plc has bought land where it plans to extract gravel for use in the construction industry. The land is expected to supply gravel for five years and then be sold.

The following information is available:

- The initial cost of the land and the equipment is £2 000 000
- In year one, sales will be 180 tons of gravel per week, at a price of £20 per ton.
- In years two and three, sales will be 190 tons of gravel per week, at a price of £21 per ton.
- In years four and five, sales will be 170 tons of gravel per week, at a price of £22 per ton.
- In years one and two, the running costs (including depreciation) are expected to be £2 000 a week.
- In years three and four, the running costs (including depreciation) are expected to be £2 200 a week.
- In year five, the running costs (including depreciation) are expected to be £2 500 a week.
- On the last day of year five, the land and equipment will be sold for £1 800 000
- Barind Stone plc will extract gravel for 52 weeks in each year.

Required

(a) Calculate the net cash flow for each of the five years of the project.

(15)

The cost of capital of Barind Stone plc is 5%. The discount factors for 5% are shown below.

Year	5% Discount Factor
1	0.952
2	0.907
3	0.864
4	0.823
5	0.784

(b) Calculate the net present value of the project.

(7)

(c) Calculate the average rate of return (accounting rate of return) of the project.

(12)

Barind Stone plc is also appraising the project using the internal rate of return method. Using a discount rate of 4%, the accountant has calculated a net present value of £37 696

(d) Calculate, clearly stating the formula used, the internal rate of return correct to two decimal places.

(9)

(e) Evaluate the project for Barind Stone plc, using the calculations made in (a) to (d) and any other relevant non-financial factors.

(12)

(Total for Question 1 = 55 marks)

Question Number	Answer	Mark
1 (a)	**AO1: (8), AO2 (1), AO3 (6)** **AO1: Four marks for correct calculation of cash inflows.** **Four marks for correct calculation of net cash flow in years 1 to 4.** **AO2: One mark for correct calculation of net cash flow in year 5.** **AO3: Three marks for correct calculation of depreciation.** **Three marks for correct calculation of running costs.**	**(15)**

Question Number	Answer	Mark
1 (b)	**A01: (4), A02 (3)** **AO1: Four marks for correct calculations for Years 1 to 4.** **AO2: Three marks for correct calculations in Years 0 and 5 and total.**	**(7)**

Question Number	Answer	Mark
1 (c)	**A02: (12)** **AO2: Twelve marks for correct calculation of Average rate of return.**	**(12)**

(a)

	Sales				Price	Sale			
Inflows	(tons)		Weeks		£-per ton	Value	Total (£)		
Year 1	180	x	52	x	20	=	187 200	**(1)**	AO1
Year 2	190	x	52	x	21	=	207 480	**(1)**	AO1
Year 3	190	x	52	x	21	=	207 480		Both
Year 4	170	x	52	x	22	=	194 480	**(1)**	AO1
Year 5	170	x	52	x	22	+1 800 000=	1 994 480	**(1)**	AO1
							4 marks		
Depreciation									
	2 000 000	-	1 800 000	=	200 000	**(1)** AO3	= 40 000	**(1)**	per year
					5	**(1)** AO3	**3 marks**		AO3
Running costs	Per week		weeks				Deprectn		Total
Year 1	2 000	x	52	=	104 000	-	40 000	=	64 000
Year 2	2 000	x	52	=	104 000	-	40 000	=	64 000
Year 3	2 200	x	52	=	114 400	-	40 000	=	74 400
Year 4	2 200	x	52	=	114 400	-	40 000	=	74 400
Year 5	2 500	x	52	=	130 000	-	40 000	=	90 000
					(1) AO3		**(1of)** AO3		**(1of)** AO3
					Whole column		Whole column		Whole column
							3 marks		
Cash Flow	Inflow		Outflow		NCF				
Year 1	187 200	-	64 000	=	123 200	**(1of)** AO1			
Year 2	207 480	-	64 000	=	143 480	**(1of)** AO1			
Year 3	207 480	-	74 400	=	133 080	**(1of)** AO1			
Year 4	194 480	-	74 400	=	120 080	**(1of)** AO1			
Year 5	1 994 480	-	90 000	=	1 904 480	**(1of)** AO2			
							5 marks		
									15 marks

(b)

NPV			**5%**						
			Discount						
	NCF		Factor						
Year 0	(2 000 000)	x	1	=	(2 000 000)	**(1)** AO2			
Year 1	123 200	x	0.952	=	117 286	**(1of)** AO1			
Year 2	143 480	x	0.907	=	130 136	**(1of)** AO1			
Year 3	133 080	x	0.864	=	114 981	**(1of)** AO1			
Year 4	120 080	x	0.823	=	98 826	**(1of)** AO1			
Year 5	1 904 480	x	0.784	=	1 493 112	**(1of)** AO2			
					(45 658)	**(1of)** AO2			**7 marks**

(c)									
ARR									
Profit									
Year	Revenue		Costs		Profit				
1	187 200		104 000		83 200	both			
2	207 480		104 000		103 480	**(1of)** AO2			
3	207 480		114 400		93 080	both			
4	194 480		114 400		80 080	**(1of)** AO2			
5	194 480		130 000		64 480	**(1of)** AO2			
			Total		424 320	**(1of)** AO2			
Average annual	=		424 320	**(1of)**	AO2 =	84 864	**(1of)** AO2		
profit			5	**(1)**	AO2				
Average	=		2 000 000	+	1 800 000	=	1 900 000	**(1)**	AO2
investment				2					
Accounting	=		84 864	**(1of)** x	AO2 100	=	4.47	%	**(1of) (1)** C
rate of return			1 900 000	**(1)**	AO2				2 xAO2
									12 marks

Question Number	Answer	Mark
1 (d)	**AO1 (4), AO2 (5)** **AO1: Four marks for correctly stating formula.** **AO2: Five marks for correct substitution of figures into formula and calculation.**	**(9)**

Internal rate of Return
= Lower rate **(1)** + (% difference between rates **(1)** x NPV using lower % rate) **(1)** AO1
A01 AO1 Difference between NPVs) **(1)** AO1

= 4% **(1)** AO2 + (1 **(1)** AO2 x 37 696) **(1)** AO2
83 354 **(1of)** AO2

= 4.45% **(1of)** AO2

Question Number	Indicative Content	Mark
1 (e)	**AO1 (1), AO2 (1), AO3 (4), AO4 (6)** Answers may include: Case against investment The net present value at 5% cost of capital is negative £45 658 (o/f), which is not meeting the investment criteria of the company, which is to have a positive NPV. The average rate of return is 4.47% (o/f), which is less than the cost of capital of the company. The internal rate of return is 4.45% (o/f), which is less than the cost of capital of the company. Environmental impact of a quarry, i.e. effect on landscape, wildlife, spoils (excavated soil). Pollution, i.e. noise, dust, inconvenience of excavation, effect on the water table, increased traffic. Case for investment The figures are only estimates. The rates of return are only about 0.5% below (o/f) the cost of capital used in the calculations. Are Barind Stone plc able to obtain capital at a slightly lower rate? This may make the project worthwhile. Perhaps the company could make costs savings to make the project worthwhile. Perhaps the company could increase sales volume, or the selling price, to make the project worthwhile. Creation of jobs and employment opportunities at the quarry and further job creation within the local economy, i.e. use of local services. Other points Are there any other projects that may be invested in? Do these give a better (or worse) return? Does this investment fit the objectives and strategy of the company? Decision The financial information states the project should not go ahead.	**(12)**

Level	Mark	Descriptor
	0	A completely incorrect response.
Level 1	1-3	Isolated elements of knowledge and understanding recall based. Weak or no relevant application to the scenario set. Generic assertions may be present.

Level 2	4 - 6	Elements of knowledge and understanding, which are applied to the scenario. Chains of reasoning are present, but may be incomplete or invalid. A generic or superficial assessment is present.
Level 3	7 - 9	Accurate and thorough understanding, supported throughout by relevant application to the scenario. Some analytical perspectives are present, with developed chains of reasoning, showing causes and/or effects. An attempt at an assessment is presented, using financial and non-financial information, in an appropriate format and communicates reasoned explanations.
Level 4	10 - 12	Accurate and thorough knowledge and understanding, supported throughout by relevant and effective application to the scenario. A coherent and logical chain of reasoning, showing causes and effects. Assessment is balanced, wide ranging and well contextualised using financial and non-financial information and makes informed recommendations and decisions.

2 The Statement of Changes in Equity of Kandy Tea plc for the year ended 31 December 2017 is being prepared and is shown on page 11 of the Question Paper.

You are the accountant responsible for preparing the Statement of Changes in Equity for Kandy Tea plc.

Required

(a) Complete, in the Question Paper, the Statement of Changes in Equity, to record the information shown below, for the year ended 31 December 2017.

You may show your workings in the space provided in the Question Paper.

(1) Balances at 1 January 2017:

£1 Ordinary shares - £750 million

Share premium - £50 million

Retained earnings - £17 million credit

General reserve - £11 million

Capital replacement reserve - £7 million

Total equity figure - to be calculated

(2) On 1 February 2017 a rights issue of 1 ordinary share of £1 for every 5 ordinary shares of £1 held took place. The issue was at a premium of 14 pence (£0.14) per share. The rights issue was fully subscribed.

(3) On 14 March 2017 the final dividend for 2016, of 2 pence (£0.02) per share, was paid to shareholders. Only the shareholders who held shares **before** 1 February 2017 were eligible for the dividend.

(4) On 12 April 2017 the balance on the Capital replacement reserve was transferred to Retained earnings.

(5) On 23 May 2017 property with a book value of £60 million was revalued upwards by 20% to reflect the market value.

(6) On 15 July 2017 an amount was transferred from the General reserve to a Foreign exchange reserve to cover falls in the currency. The company was awaiting payments of £125 million and decided to place 8% of this amount in a Foreign exchange reserve.

(7) On 13 August 2017 the balance on the General reserve was transferred to Retained earnings.

(8) On 24 September 2017 an interim dividend of 0.9 pence (£0.009) per share was paid to all shareholders.

(9) The loss for the year ended 31 December 2017 was £2.9 million.

(10) Complete the balances at 31 December 2017 and the Total equity at that date.

(21)

(b) State the difference between a revenue reserve and a capital reserve.

(2)

(c) Identify from the Statement of Changes in Equity:

(i) **two** revenue reserves

(2)

(ii) **two** capital reserves.

(2)

(d) Calculate the maximum that could be paid per share as a final dividend for 2017.

(4)

(e) Explain **three** reasons why a rights issue of shares may be made.

(6)

(f) Explain **three** roles or activities the auditor should carry out.

(6)

In February the Board of Kandy Tea plc considered an issue of preference shares, but decided to issue ordinary shares.

(g) Evaluate the decision to issue ordinary shares instead of preference shares, giving advantages and disadvantages of each type of share from the point of view of the company.

(12)

(Total for Question 2 = 55 marks)

TOTAL FOR SECTION A = 110 MARKS

Figures are in £ millions	£1 Ordinary share capital £m	Share premium £m	Retained earnings £m	General reserve £m	Foreign exchange reserve £m	Capital replacement reserve £m	Revaluation reserve £m	Total equity £m
(1) Balance at 1 January 2017								
(2)								
(3)								
(4)								
(5)								
(6)								
(7)								
(8)								
(9)								
(10) Balance at 31 December 2017								

Question Number	Answer	Mark
2 (a)	**AO1 (4), AO2 (17)** **AO1: Two marks for correct insertion of opening balances.** **Two marks for correct calculation of closing balances.** **AO2: Seventeen marks for correct calculation and insertion of figures into statement.** Workings for (2): (750m/5) **(1)**AO2 = 150 **(1)**AO2 (150 x 0.14)**(1)**AO2 = 21 **(1)**AO2 Workings for (3): (0.02 x 750m)**(1)**AO2 = (15) **(1)**AO2 Workings for (8): (900 x 0.009)**(1)**AO2 = (8.1)**(1)**AO2	**(21)**

2 (a) Figures are in £ millions	Ordinary Share £1 Capital £m	Share Premium £m	Retained Earnings £m	General Reserve £m	Foreign Exchange Reserve £m	Capital Replacement Reserve £m	Revaluation Reserve £m	Total Equity £m
(1) Balance at 1 January 2017	750	50	17	11		7		835 **(1all six)**AO1
(2) Rights Issue	150 **(2)**AO2	21 **(2)**AO2						171
(3) Final Dividend 2016			(15) **(2)**AO2					(15)
(4) Transfer			7 **(1)**AO2			(7) **(1)**AO2		--
(5) Revaluation							12 **(1)**AO2	12
(6) Transfer				(10) **(1)**AO2	10 **(1)** AO2			--
(7) Transfer			1 **(1)**AO2	(1) **(1)**AO2				--
(8) Interim Dividend 2017			(8.1) **(2)**AO2					(8.1)
(9) Loss for the year			(2.9) **(1)**AO2					(2.9)
(10) Balance at 31 December 2017	900	71 **(1of both)** AO1	(1) **(1of)**AO2	0	10	0	12 **(1of all four)** AO1	992 **(1of)** AO1

Question Number	Answer	Mark
2 (b)	**AO1 (2)** **A01: Two marks for stating a difference.** Revenue reserves are created from undistributed profits **(1)** AO1**.** Capital reserves are, for example created by issuing shares above par value **(1)** AO1**.** OR revenue reserves are available for redistribution as dividends **(1)** AO1. Capital reserves are not available for redistribution as dividends **(1)** AO1.	**(2)**

Question Number	Answer	Mark
2 (c)(i)	**AO1 (2)** **AO1: Two marks for correct identification of revenue reserves.** Any two from: Retained Earnings AO1 General Reserve AO1 Foreign Exchange Reserve AO1 Capital Replacement Reserve AO1	**(2)**

Question Number	Answer	Mark
2 (c)(ii)	**AO1 (2)** **AO1: Two marks for correct identification of capital reserves.** Share Premium AO1 Revaluation Reserve AO1	**(2)**

Question Number	Answer	Mark
2 (d)	**AO1 (4)** **AO1: Four marks for correct calculation of maximum payable per share** Maximum amount payable = $\frac{(-1)\textbf{(1of)}\ \text{AO2} + 10\ \textbf{(1of)}\ \text{AO2}}{900\ \textbf{(1of)}\ \text{AO2}}$ = 1 pence per share AO2 **(1of)**	**(4)**

Question Number	Answer	Mark
2 (e)	**AO1 (6)** **AO1: Three marks for correct identification of reason for a rights issue (one per point), and three marks for development (one per point).** The company may have a liquidity problem, AO1 so a share issue will bring in cash to solve this problem. AO1 The company may have a small statement of financial position/ may wish to make the statement of financial position look larger. AO1 A share issue will increase the size of the equity section. AO1 Shareholders are kept happy. AO1 If the company is doing well, then they have the chance for further investment in a successful company. Or, if they do not wish to take up the offer, they can sell the right/ offer is below market price. AO1 (maximum of 2 marks) A rights issue sees existing shareholders maintain control, AO1 whereas a public issue would see their control diluted. AO1 To finance investment AO1 for example acquisition of another company, or purchase of land. AO1	**(6)**

Question Number	Answer	Mark
2 (f)	**AO3 (6)** **AO3: Three marks for correct identification of auditor role (one per point), and three marks for development (one per point).** Check that the financial statements are free from material misstatements/present a true and fair view AO3 and express their opinion on this matter. AO3 Auditors should plan an audit so they have a reasonable expectation AO3 of detecting material misstatements caused by fraud. AO3 Auditors may be asked to report on findings concerning a company's compliance AO3 with the UK Corporate Governance Code. AO3 Test systems and controls AO3 to eliminate or minimise the risk of fraud. AO3 Auditors should ensure that the financial statements, e.g. Statement of Comprehensive Income, AO3 comply with International Accounting Standards or Generally Accepted Accounting Principles. AO3 Auditors should state whether the financial statements have been prepared on the basis of the business AO3 being a going concern or not being a going concern. AO3 To ensure that the Director's Report is included with the financial statements AO3 and that the contents are factual, correct and disclose all material points. AO3	**(6)**

Question Number	Indicative Content	Mark
2 (g)	**AO1 (1), AO2 (1), AO3 (4), AO4 (6)** <u>Ordinary shares</u> Ordinary shares would see an inflow of capital that will help the company's liquidity position and therefore help with the future running of the company. Ordinary shares would allow existing shareholders the right to buy more shares in the company. This would ensure there is no dilution of control if they take up the rights. However, ordinary shares could be purchased on issue by outside parties if existing shareholders do not take up their right to buy the newly issued shares. Outside parties could buy these new shares when second-hand, if they are offered on the open market. Outside parties gaining some control of the company could be to the benefit or detriment of the company. Ordinary shares only have to pay a dividend when the company is in a financial position to do so. This would help the company regarding liquidity, cash flow, and maybe stop revenue reserves being drained. It would appear that Kandy Tea plc is not in a healthy financial position – it made a trading loss this year. There is little in the revenue reserves that could be used to finance a large dividend payment. Ordinary shares decrease the gearing ratio and that may make borrowing easier. This would help the company's liquidity position, if it is having problems borrowing, or with liquidity. Decreasing the gearing ratio also reduces risk to company. It is not possible to state the gearing ratio of Kandy Tea plc as no information is given about LT liabilities. <u>Preference shares</u> Preference shares would see an inflow of capital that will help the company's liquidity position and therefore may help with the running of the company. If the company is finding it difficult to raise finance, it may find preference shares are more likely to be taken up by investors than ordinary shares, who may see a potentially larger return. Preference shares would see the holders expecting a regular payment, probably twice a year, at a fixed rate of interest. This should be paid, even if the company is in a poor financial position. If dividends are not paid, the missed dividend may be carried over to a future period i.e. the dividends may be cumulative. Kandy Tea plc appears to be in a position where they would not want a regular payment of dividends to have to be made. Preference shares increase the gearing ratio that may make future borrowing more difficult for the company. Decision Good decision by the board to issue ordinary shares.	**(12)**

Level	Mark	Descriptor
	0	A completely incorrect response.
Level 1	1-3	Isolated elements of knowledge and understanding recall based. Weak or no relevant application to the scenario set. Generic assertions may be present.
Level 2	4 - 6	Elements of knowledge and understanding, which are applied to the scenario. Chains of reasoning are present, but may be incomplete or invalid. A generic or superficial assessment is present.
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Level 4	10 - 12	Accurate and thorough knowledge and understanding, supported throughout by relevant and effective application to the scenario. A coherent and logical chain of reasoning, showing causes and effects. Assessment is balanced, wide ranging and well contextualised using financial and non-financial information and makes informed recommendations and decisions.

SECTION B

Answer THREE questions from this section.

3 You have recently been appointed as the accountant for Icarus Limited. The company started trading on 1 January 2016, producing batteries for mobile phones. You notice that the financial statements for the year ended 31 December 2016 have been prepared using marginal costing for inventory valuation. After discussion with the Board, it is agreed that the financial statements for 31 December 2017 are to be drawn up using absorption costing.

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

	£
Direct labour	2 693 600
Direct materials	1 202 500
Semi-variable costs	1 106 300
Fixed overheads	1 827 800
Revenue	8 826 300

The semi-variable costs include a fixed element of £288 600

Production 962 000 units

Sales 934 000 units

Closing inventory £137 200

Required

(a) Calculate the value of the closing inventory at 31 December 2016 using absorption costing.

(8)

(b) Calculate the increase or decrease in profit for the year ended 31 December 2016 using absorption costing instead of marginal costing for inventory valuation.

(4)

Icarus Limited recorded actual **monthly** production and sales on a **quarterly (three monthly)** basis for 2017.

2017	Production **per month** (units)	Sales **per month** (units)
Quarter 1 : Jan, Feb, March	90 000	85 000
Quarter 2 : April, May, June	95 000	92 000
Quarter 3 : July, Aug, Sept	88 000	91 000
Quarter 4 : Oct, Nov, Dec	86 000	90 000

(c) Calculate the units in inventory at 31 December 2017.

(4)

For the year ended 31 December 2017, all costs and revenues per unit remain the same as those in the year ended 31 December 2016.

(d) Calculate, using absorption costing, the profit or loss for the year ended 31 December 2017.

(8)

A director commented, "I think absorption costing is better than marginal costing, as it will **always** give a higher profit".

(e) Evaluate the statement made by the director.

(6)

(Total for Question 3 = 30 marks)

Question Number	Answer	Mark
3 (a)	**AO2 (8)** **AO2: Eight marks for correct calculation of value of closing inventory.**	**(8)**

Units in closing inventory (962 000 - 934 000) = **(1)** AO2 28 000 units **(1)** AO2

Direct Labour	2 693 600		
Direct Materials	1 202 500		
Semi- variable costs	1 106 300		
Fixed overheads	1 827 800		
Total costs	6 830 200	**(1of)** AO2	
Absorption cost per unit	6 830 200 / 962 000	**(1of)** AO2 **(1)** AO2 =	£7.10 **(1of)** AO2
Value of closing inventory	(28 000 x £7.10)	**(1of)** AO2	=£198 800 **(1of)** AO2

Question Number	Answer	Mark
3 (b)	**AO3 (4)** **AO3: Four marks for correct calculation of increase in profit.**	**(4)**

Increase in Inventory value (198 800 of - 137 200) **(1)** AO3 = £61 600 **(1of)** AO3

So increase (**1of**) AO3 in profit = £61 600 **(1of)** AO3

Question Number	Answer	Mark
3 (c)	**AO1 (4)** **AO1: Four marks for correct calculation of units in inventory.**	**(4)**

2017	Quarterly production	Quarterly sales
Quarter 1 : Jan – March	270 000	255 000
Quarter 2 : April – June	285 000	276 000
Quarter 3 : July – Sept	264 000	273 000
Quarter 4 : Oct - Dec	258 000	270 000
Total	1 077 000 **(1)** AO1	1 074 000 **(1)** AO1

Inventory increases by 3 000 units **(1of)** AO1

Inventory at 31 December 2017 = 28 000 of + 3 000 of = 31 000 units **(1of)** AO1

Question Number	Answer	Mark
3 (d)	**AO1 (1), A02 (4), A03 (3)** **AO1: One mark for correct inclusion of opening inventory.** **AO2: Four marks for correct calculation of production cost and closing inventory.** **AO3: Three marks for correct calculation of revenue and profit.**	**(8)**

Revenue per unit = $\frac{8\ 826\ 300}{934\ 000}$ = £9.45 per unit **(1)** AO3

Revenue (£9.45 of x 1 074 000 of)		10 149 300 **(1of)** AO3
Opening Inventory	198 800 **(1of)** AO1	
Plus Production cost (1 077 000 x £7.10) **(1of)** AO2	7 646 700 **(1of)** AO2	
Less Closing Inventory (31 000 x £7.10) **(1of)** AO2	220 100 **(1of)** AO2	
= Cost of Sales		7 625 400
Profit		2 523 900 **(1of)** AO3

Question Number	Indicative Content	Mark
3 (e)	**A04 (6)** For the statement In the first year of trading, profit will **always** be higher using absorption costing, as long as there is a closing inventory. This is because some of the overheads for year 1 will be carried forward into year 2. Against the statement If there is no inventory at the end of year 1, then marginal costing and absorption costing will give the same value for profit. For all other years, the profit may be larger or smaller using absorption costing. This will depend upon the relative size and value of the opening and closing inventories. Decision The statement is incorrect. Absorption cost may sometimes give a greater profit, but there are times when it does not.	**(6)**

Level	Mark	Descriptor
	0	A completely incorrect response.
Level 1	1-2	Isolated elements of knowledge and understanding which are recall based. Generic assertions may be present. Weak or no relevant application to the scenario set.
Level 2	3-4	Elements of knowledge and understanding, which are applied to the scenario. Some analysis is present, with developed chains of reasoning, showing causes and/or effects applied to the scenario, although these may be incomplete or invalid. An attempt at an evaluation is presented, using financial and perhaps non-financial information, with a decision.
Level 3	5-6	Accurate and thorough knowledge and understanding. Application to the scenario is relevant and effective. A coherent and logical chain of reasoning, showing causes and effects is present. Evaluation is balanced and wide ranging, using financial and perhaps non-financial information and an appropriate decision is made.

4 This table shows the Statement of Profit or Loss and Other Comprehensive Income and notes to the financial statements of Paola Products plc for the year ended 31 December 2017. The Statement of Profit or Loss and Other Comprehensive Income has been drawn up in accordance with International Accounting Standard (IAS) 1.

Statement of Profit or Loss and Other Comprehensive Income for Paola Products plc for year ended 31 December 2017		**Notes** **Cost of sales**	
	£	Opening inventory	3 764
		Direct materials	160 480
Revenue	1 183 693	Less discount received	(4 012)
		Factory depreciation	29 500
Cost of sales	(408 549)	Machinery depreciation	24 000
		Factory power	14 270
Gross profit	775 144	Machinery maintenance	18 970
		Production staff	165 432
Other income	10 000	Less closing inventory	(3 855)
			408 549
Distribution costs	(449 716)		
		Distribution costs	
Administrative expenses	(132 928)	Commission on sales	52 750
		Fuel	17 783
Financial cost	(34 500)	Motor lorries depreciation	27 610
		Promotions and advertising	35 000
Profit on ordinary activities before tax	168 000	Rent on warehouse premises	147 888
		Running cost of lorries	13 750
Corporation tax	(36 000)	Shop staff wages	98 590
		Transport staff wages	56 345
Profit on ordinary activities after tax	132 000		449 716

		Administrative expenses	
		Bad debts written off	3 850
		Decrease in allowance for doubtful debts	(3 000)
		Discount allowed	23 541
		Office stationery	1 579
		Accountancy staff wages	34 568
		Office staff wages	72 390
			132 928
		Financial cost	
		Interest on debenture	34 500

Required

(a) (i) Calculate the percentage of discount received on purchases of direct materials.

(2)

Machines are bought for £11 000 each and last for seven years before being sold for £500 each.

The machines are depreciated using straight line depreciation.

(ii) Calculate the number of machines Paola Products plc owns.

(5)

(iii) State **two** reasons that may explain the difference between the value of opening inventory and the value of closing inventory.

(2)

The cost of renting the warehouse is £26 per square metre per year.

(iv) Calculate the size of the warehouse in square metres.

(1)

(v) State **two** actions that may be taken in the future to decrease the amount of bad debts written off.

(2)

(vi) State **two** reasons that may explain the change in the amount of the allowance for doubtful debts.

(2)

The interest rate on the debenture is 5.75% per year.

(vii) Calculate the value of the debenture.

(3)

The Other Income is a gain made by buying and selling shares in another company through the stock exchange. Paola Products plc bought £50 000 worth of shares at a price of £1.25 per share. All the shares were sold.

(viii) Calculate the price of each share at the time of sale by Paola Products plc.

(4)

No corporation tax is due on the first £24 000 of profit.

(ix) Calculate the rate of corporation tax charged on profit over £24 000 per year.

(3)

International Accounting Standard 1 (IAS1) recommends costs to be placed under the headings of cost of sales, distribution costs, administrative expenses and financial cost.

(b) Evaluate the IAS recommendation.

(6)

(Total for Question 4 = 30 marks)

Question Number	Answer	Mark
4 (a)(i)	**A02 (2)** **AO2: Two marks for correct calculation of percentage of discount received.** $\frac{4\ 012}{160\ 480}$ x 100 **(1)** AO2 = 2.5% **(1)** AO2	**(2)**

Question Number	Answer	Mark
4 (a)(ii)	**A01 (1), A02 (4)** **AO1: One mark for correct calculation of total depreciation on each machine.** **AO2: Four marks for correct calculation of number of machines.** Total depreciation per machine = 11 000 - £500 = £10 500 **(1)** AO1 Depreciation per year = $\frac{£10\ 500}{7}$ **(1of)** AO2 = 1 500 per year **(1of)** AO2 Number of machines = $\frac{24\ 000}{£1\ 500}$ **(1)** AO2 = 16 machines **(1of)**AO2 of	**(5)**

Question Number	Answer	Mark
4 (a)(iii)	**A01 (2)** **AO1: Two marks for correct reasons for inventory increasing.** Company are having difficulty selling inventory **(1)** AO1 Company decided to hold a larger inventory **(1)** AO1 Inflation **(1)** AO1	**(2)**

Question Number	Answer	Mark
4 (a)(iv)	**A02 (1)** **AO2: One mark for correct calculation of size of warehouse.** £147 888 / £26 = 5 688 square metres **(1)** AO2	**(1)**

Question Number	Answer	Mark
4 (a)(v)	**A02 (2)** **AO1: Two marks for correct action to reduce bad debts.** Stop selling on credit **(1)** AO1 Take firmer action with credit control e.g. be firmer chasing up debts **(1)** AO1	**(2)**

Question Number	Answer	Mark
4 (a)(vi)	**A02 (2)** **AO2: Two marks for correct reasons for reducing provision for bad debts.** Less of the year end trade receivables are thought to be possibly bad **(1)** AO2 Provision is a fixed percentage of year-end trade receivables, and trade receivables at the year-end are lower than last year **(1)** AO2	**(2)**

Question Number	Answer	Mark
4 (a)(vii)	**A02 (3)** **AO2: Three marks for correct calculation of percentage of interest on debenture.** X x 5.75% = £34 500 So X = £34 500 **(1)** AO2 = £600 000 **(1)** AO2 5.75% **(1)** AO2	**(3)**

Question Number	Answer	Mark
4 (a)(viii)	**A02 (4)** **AO2: Four marks for correct calculation of selling price of share.** £50 000 = 40 000 shares **(1)** AO3 £1.25 £50 000 + £10 000 Profit = Sold for £60 000 **(1)** AO3 £60 000 **(1)** AO3 = £1.50 per share **(1)** AO3 40 000 shares	**(4)**

Question Number	Answer	Mark
4 (a)(ix)	**A03 (3)** **AO3: Three marks for correct calculation of percentage of corporation tax.** £168 000 - £24 000 = £144 000 **(1)** AO3 £36 000 x 100 **(1)** AO3 = 25% **(1)** AO3 £144 000	**(3)**

Question Number	Indicative Content	Mark
4 (b)	**AO4 (6)** For decision Allows readers of financial statements to understand a given, uniform presentation. Allows readers of financial statements to compare companies. Enables companies to see how various sections of the business are performing i.e. production, distribution, and administration. The subdivisions may be helpful in determining internal decision making e.g. price setting, budget preparation. Against decision May add to the complexity of producing and reading financial statements. There are some items/expenses that may be placed in more than one section, which may make comparisons invalid. Decision Probably a good recommendation to divide up expenses into the given sub-headings.	**(6)**

Level	Mark	Descriptor
	0	A completely incorrect response.
Level 1	1-2	Isolated elements of knowledge and understanding which are recall based. Generic assertions may be present. Weak or no relevant application to the scenario set.
Level 2	3-4	Elements of knowledge and understanding, which are applied to the scenario. Some analysis is present, with developed chains of reasoning, showing causes and/or effects applied to the scenario, although these may be incomplete or invalid. An attempt at an evaluation is presented, using financial and perhaps non-financial information, with a decision.

Level 3	5-6	Accurate and thorough knowledge and understanding. Application to the scenario is relevant and effective. A coherent and logical chain of reasoning, showing causes and effects is present. Evaluation is balanced and wide ranging, using financial and perhaps non-financial information and an appropriate decision is made.

Question Number	Answer	Mark
5 (a)(i)	**A02 (2), A03 (4)** **AO2: Two marks for correct insertion of debenture and reserves and correct calculation of return on capital employed.** **AO3: Four marks for correct calculation of net profit before interest and tax, and value of share capital.**	**(6)**

Return on Capital employed = $\frac{\text{Net profit before interest and tax}}{\text{Capital employed}} \times 100$

= $\frac{\text{£412 000 } \mathbf{(1)} \text{ AO3 + £96 000 } \mathbf{(1)} \text{ AO3}}{\text{(£6 000 000 } \mathbf{(1)} \text{ AO3 + £2 000 000 } \mathbf{(1)} \text{ AO3 + £1 200 000 + £800 000 } \mathbf{(1)} \text{ AO2 both)}}$

= $\frac{\text{£508 000}}{\text{£10 000 000}} \times 100$ = 5.08% **(1)** AO2

Question Number	Answer	Mark
5 (a)(ii)	**A02 (2), A03 (3)** **AO2: Two marks for correct calculation of ordinary shares issued and earnings per ordinary share.** **AO3: Three marks for correct calculation of net profit after tax and preference dividends.**	**(5)**

Earnings per ordinary share = $\frac{\text{Net profit after tax – preference dividend}}{\text{Issued ordinary shares}}$

= $\frac{\text{£412 000 } \mathbf{(1)} \text{ AO3 - £92 000 } \mathbf{(1)} \text{ AO3 - £120 000 } \mathbf{(1)} \text{ AO3}}{\text{8 000 000 } \mathbf{(1)} \text{ AO2}}$ = 2.5 pence per share **(1)** AO2

5 You are the accountant for Yau Tong Marketing plc and have to report on the financial statements of the company to the Board of Directors meeting.

Information concerning the performance of the company for the financial year ended 31 December 2017 is as follows:

Issued share capital	8 million £0.75 Ordinary shares 4 million 6% Redeemable preference shares of £0.50
Profit for the year before tax	£412 000
Tax on profit for the year	£92 000
8% Debenture 2022	£1 200 000
Reserves	£800 000
Interim ordinary dividend paid for year	£40 000
Final ordinary dividend paid for year	£140 000
Market price per share	£ 0.90

Required

(a) Calculate, for the year ended 31 December 2017, the:

(i) return on capital employed

(6)

(ii) earnings per ordinary share

(5)

(iii) dividend per share

(4)

(iv) dividend cover

(3)

(v) price/earnings ratio

(3)

(vi) dividend yield.

(3)

At a Board meeting, the Chief Executive stated, "Last year, the dividend per share was 2.5 pence per share. It is important that the dividend per share increases every year".

(b) Evaluate the statement made by the Chief Executive.

(6)

(Total for Question 5 = 30 marks)

Level 3	5-6	Accurate and thorough knowledge and understanding. Application to the scenario is relevant and effective. A coherent and logical chain of reasoning, showing causes and effects is present. Evaluation is balanced and wide ranging, using financial and perhaps non-financial information and an appropriate decision is made.

Question Number	Answer	Mark
5 (a)(i)	**A02 (2), A03 (4)** **AO2: Two marks for correct insertion of debenture and reserves and correct calculation of return on capital employed.** **AO3: Four marks for correct calculation of net profit before interest and tax, and value of share capital.**	**(6)**

Return on Capital employed = $\frac{\text{Net profit before interest and tax}}{\text{Capital employed}} \times 100$

= $\frac{\text{£412 000 } \mathbf{(1)} \text{ AO3 + £96 000 } \mathbf{(1)} \text{ AO3}}{\text{(£6 000 000 } \mathbf{(1)} \text{ AO3 + £2 000 000 } \mathbf{(1)} \text{ AO3 + £1 200 000 + £800 000 } \mathbf{(1)} \text{ AO2 both)}}$

= $\frac{\text{£508 000}}{\text{£10 000 000}} \times 100$ = 5.08% **(1)** AO2

Question Number	Answer	Mark
5 (a)(ii)	**A02 (2), A03 (3)** **AO2: Two marks for correct calculation of ordinary shares issued and earnings per ordinary share.** **AO3: Three marks for correct calculation of net profit after tax and preference dividends.**	**(5)**

Earnings per ordinary share = $\frac{\text{Net profit after tax – preference dividend}}{\text{Issued ordinary shares}}$

= $\frac{\text{£412 000 } \mathbf{(1)} \text{ AO3 - £92 000 } \mathbf{(1)} \text{ AO3 - £120 000 } \mathbf{(1)} \text{ AO3}}{\text{8 000 000 } \mathbf{(1)} \text{ AO2}}$ = 2.5 pence per share **(1)** AO2

Question Number	Answer	Mark
5 (a)(iii)	**AO2 (4)** **AO2: Four marks for correct for correct calculation of dividend paid per ordinary share.** Dividend paid per share = Total ordinary dividend / Issued ordinary shares = £40 000 **(1)** AO2 + £140 000 **(1)** AO2 / 8 000 000 **(1of)** AO2 = 2.25p per share **(1of)** AO2	**(4)**

Question Number	Answer	Mark
5 (a)(iv)	**AO1 (1), AO2 (2)** **AO1: One mark for correct insertion of total ordinary dividend.** **AO2: Two marks for correct for correct insertion of net profit after tax and preference dividends and calculation of dividend cover.** Dividend cover = Net profit after tax – preference dividend / Total ordinary dividend = £200 000 **(1of)** AO2 / £180 000 **(1)** AO1 = 1.11 times **(1of)** AO2	**(3)**

Question Number	Answer	Mark
5 (a)(v)	**AO1 (2), AO2 (1)** **AO1: Two marks for correct insertion of market price of share and earnings per share.** **AO2: One mark for correct calculation of price / earnings ratio.** Price/earnings ratio = Market price of share / Earnings per share = 90p **(1)** AO1 / 2.5p **(1of)** AO1 = 36 times **(1of)** AO2	**(3)**

Question Number	Answer	Mark
5 (a)(vi)	**A01 (2), A02 (1)** **AO1: Two marks for correct insertion of market price of share and dividend per share.** **AO2: One mark for correct calculation of dividend yield.** Dividend yield = Dividend per share / Market price of share x100 = 2.25 p **(1of)** AO1 / 90p **(1)** AO1 x 100 = 2.5% **(1of)** AO2	**(3)**

Question Number	Indicative Content	Mark
5 (b)	**AO4 (6)** Agree with statement Ideally directors would like to reward the shareholders with an ever-increasing dividend per share each year. This would keep shareholders happy. This would probably keep directors in their posts, including when they come up for re-election by shareholders. This may also signify that the company is continually performing increasingly well. Against the statement Directors should only pay what they feel is the appropriate amount in dividends. This may be less than they paid in the previous year. This may be because profits are down in a year, and directors wish to be cautious. It may be that if dividends are to increase in a year, they are greater than the amount in revenue reserves. Or, it may be that dividends are getting too large, and the shareholders returns are starting to be unrealistically high, given the financial position of the company. Or, it may be that the directors wish to keep some funds in reserve in case of a future downturn, or for an investment opportunity, or to replace non-current assets etc. Decision The statement is unrealistic.	**(6)**

Level	Mark	Descriptor
	0	A completely incorrect response.
Level 1	1-2	Isolated elements of knowledge and understanding which are recall based. Generic assertions may be present. Weak or no relevant application to the scenario set.
Level 2	3-4	Elements of knowledge and understanding, which are applied to the scenario. Some analysis is present, with developed chains of reasoning, showing causes and/or effects applied to the scenario, although these may be incomplete or invalid. An attempt at an evaluation is presented, using financial and perhaps non-financial information, with a decision.

Level 3	5-6	Accurate and thorough knowledge and understanding. Application to the scenario is relevant and effective. A coherent and logical chain of reasoning, showing causes and effects is present. Evaluation is balanced and wide ranging, using financial and perhaps non-financial information and an appropriate decision is made.

Question Number	Answer	Mark
6 (a)	**AO1 (3), AO2 (6)** **AO1: Three marks for calculation of rent, labour and total fixed costs.** **A02: Six marks for calculation of remaining fixed costs, total variable costs, contribution and break-even point.**	**(9)**

Fixed Costs	Rent (£1 290 x 4) = £5 160 **(1)**AO1 Labour (5 x £115 x 52) = £29 900 **(1)**AO1 Insurance = £510 Loan Interest (£250 x 12) = £3 000 Other FC (£65 x 12) = £780 **(1)**AO2 all three Total FC = £39 350 **(1of)**AO1
Variable Costs per unit	Direct materials = £0.32 Delivery costs = £0.02 Total VC = £0.34 **(1)**AO2
Contribution per unit	(£1.99 - £0.34) = £1.65 **(1of)**AO2
Break-even point	39 350 **(1of)**AO2 1.65 **(1of)**AO2
	= 23 849 units **(1of)**AO2

6 Hasana Kwemoi will start a business producing soft toys, on 1 April 2018. She has yet to decide whether to produce the toys in a small factory, or use workers to produce the toys at home.

The following information is available for the factory.

Rent of factory £1 290 per quarter (three-month period).

Direct materials for production £0.32 per toy.

Labour to be paid a **fixed** rate of £115 per week, working a 40-hour week.

Insurance per year £510

Loan interest £250 a month.

Delivery costs £0.02 per toy.

Other fixed costs £65 a month.

All production will be sold, selling at £1.99 per toy.

Each worker can produce 3 toys per hour and 5 workers are to be employed.

Production is over a full year of 52 weeks.

Required

(a) Calculate the number of toys to be produced and sold in the year ended 31 March 2019 to break-even if the toys are produced in the factory.

(9)

(b) Calculate the expected profit or loss by Hasana in the year ended 31 March 2019 if the toys are produced in the factory.

(3)

The following information is available for production using workers at home.

Hasana would run the business from a small office and rent would be £425 per quarter.

Direct materials for production £0.32 per toy.

Labour would be paid a rate of £0.75 per toy produced.

Insurance would be £220 per year less than the factory.

Loan interest £125 a month.

Delivery costs £0.11 per toy.

Other fixed costs would be £25 a month less than the factory.

A motor van would have to be purchased for £5 000. This would last 8 years before being sold for £400.

All production will be sold at a selling price of £1.49 per toy.

Each worker would produce 20 toys a day, working for 5 days a week and 7 workers are to be employed.

Production is over a full year of 52 weeks.

Required

(c) Calculate the number of toys to be produced and sold in the year ended 31 March 2019 to break-even using workers to produce toys at home.

(9)

(d) Calculate the expected profit or loss by Hasana in the year ended 31 March 2019 using workers to produce toys at home.

(3)

(e) Evaluate the **two** possible production options for Hasana.

(6)

(Total for Question 6 = 30 marks)

TOTAL FOR SECTION B = 90 MARKS
TOTAL FOR PAPER = 200 MARKS

Level 3	5-6	Accurate and thorough knowledge and understanding. Application to the scenario is relevant and effective. A coherent and logical chain of reasoning, showing causes and effects is present. Evaluation is balanced and wide ranging, using financial and perhaps non-financial information and an appropriate decision is made.

Question Number	Answer	Mark
6 (a)	**AO1 (3), AO2 (6)** **AO1: Three marks for calculation of rent, labour and total fixed costs.** **A02: Six marks for calculation of remaining fixed costs, total variable costs, contribution and break-even point.**	**(9)**

Fixed Costs	Rent (£1 290 x 4) = £5 160 **(1)**AO1 Labour (5 x £115 x 52) = £29 900 **(1)**AO1 Insurance = £510 Loan Interest (£250 x 12) = £3 000 Other FC (£65 x 12) = £780 **(1)**AO2 all three Total FC = £39 350 **(1of)**AO1
Variable Costs per unit	Direct materials = £0.32 Delivery costs = £0.02 Total VC = £0.34 **(1)**AO2
Contribution per unit	(£1.99 - £0.34) = £1.65 **(1of)**AO2
Break-even point	39 350 **(1of)**AO2 1.65 **(1of)**AO2
	= 23 849 units **(1of)**AO2

Question Number	Answer	Mark
6 (b)	**AO3 (3)** **AO3: Three marks for calculation of profit.**	**(3)**

Sales	31 200 x £1.99 = £62 088 **(1)**AO3
Less Fixed Costs	= (£39 350) **of**
Less Variable Costs	(31 200 x £0.34) = (£10 608) **(1of)**AO3 both
= Profit	= £12 130 **(1of)** AO3

Question Number	Answer	Mark
6 (c)	**AO1(2), AO2 (6), AO3 (1)** **AO1: Two marks for calculation of rent and total fixed costs.** **AO2: Six marks for calculation of three fixed costs, total variable costs, contribution and break-even point.** **AO3: One mark for correct calculation of depreciation.**	**(9)**

Fixed Costs	Rent (£425 x 4) = £1 700 **(1)**AO1 Insurance = £290 Loan Interest (£125 x 12) = £1 500 Other FC (£40 x 12) = £480 **(1)**AO2 all three Depreciation (5 000 – 400)/8 = £575 **(1)**AO3 Total FC = £4 545 **(1of)**AO1
Variable Costs per unit	Direct materials = £0.32 Delivery costs = £0.11 Direct labour = £0.75 Total VC = £1.18 **(1)**AO2
Contribution per unit	(£1.49 - £1.18) = £0.31 **(1of)**AO2
Break-even point	4 545 **(1of)**AO2 £0.31 **(1of)**AO2
	= 14 662 units **(1of)**AO2

Question Number	Answer	Mark
6 (d)	**AO3 (3)** **AO3: Three marks for calculation of profit.**	**(3)**

Sales	36 400 x £1.49 = £54 236 **(1)**AO3
Less Fixed Costs	= (£4 545) **of**
Less Variable Costs	(36 400 x £1.18) = (£42 952) **(1of)**AO3 both
= Profit	= £6 739 **(1of)**AO3

Question Number	Indicative Content	Mark
6 (e)	**A04 (6)** Own figure rule applies Producing in a factory Profit is greater at £12 130 compared to £6 739 using home workers. This is higher by £5 391 Output is 31 200 units with labour paid £0.95 per toy. Perhaps it is possible to reduce break-even point by paying labour for every unit produced i.e. make labour a variable cost. Factory premises need to be found, which may be difficult. Producing using home workers Break-even point is less at 14 662 units compared to 23 849 units producing in the factory. This is lower by 9 187 units. Output is 36 400 units with labour paid £0.75 per toy. Costs are lower, and the selling price is lower, but is it possible to increase the selling price? Less capital required to start up the business. Delivering parts and finished products to and from home workers may not be environmentally friendly, Production target may be more difficult to achieve as workers are working unsupervised. Other points Figures are all predictions and may not be as expected. Decision Should produce using the factory, as profit is more important than break-even point.	**(6)**

Level	Mark	Descriptor
	0	A completely incorrect response.
Level 1	1-2	Isolated elements of knowledge and understanding which are recall based. Generic assertions may be present. Weak or no relevant application to the scenario set.

Level 2	3-4	Elements of knowledge and understanding, which are applied to the scenario. Some analysis is present, with developed chains of reasoning, showing causes and/or effects applied to the scenario, although these may be incomplete or invalid. An attempt at an evaluation is presented, using financial and perhaps non-financial information, with a decision.
Level 3	5-6	Accurate and thorough knowledge and understanding. Application to the scenario is relevant and effective. A coherent and logical chain of reasoning, showing causes and effects is present. Evaluation is balanced and wide ranging, using financial and perhaps non-financial information and an appropriate decision is made.