



Mark Scheme (Results)

January 2023

Pearson Edexcel International Advanced Level
In Accounting (WAC12)
Paper 01 Corporate and Management
Accounting

Edexcel and BTEC Qualifications

Edexcel and BTEC qualifications are awarded by Pearson, the UK's largest awarding body. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers. For further information visit our qualifications websites at www.edexcel.com or www.btec.co.uk. Alternatively, you can get in touch with us using the details on our contact us page at www.edexcel.com/contactus.

Pearson: helping people progress, everywhere

Pearson aspires to be the world's leading learning company. Our aim is to help everyone progress in their lives through education. We believe in every kind of learning, for all kinds of people, wherever they are in the world. We've been involved in education for over 150 years, and by working across 70 countries, in 100 languages, we have built an international reputation for our commitment to high standards and raising achievement through innovation in education. Find out more about how we can help you and your students at: www.pearson.com/uk

January 2023

Question Paper Log number P72450A

Publications Code WAC12_01_2301_MS

All the material in this publication is copyright

© Pearson Education Ltd 2023

General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.
- Mark schemes will indicate within the table where, and which strands of QWC, are being assessed. The strands are as follows:
 - (i) ensure that text is legible and that spelling, punctuation and grammar are accurate so that the meaning is clear
 - (ii) select and use a form and style of writing appropriate to purpose and to complex subject matter
 - (iii) organise information clearly and coherently, using specialist vocabulary when appropriate

Q1.

(a) AO1 (2)

AO1: One mark for each two correct figures for aluminium produced.

(2)

a) Ore Production	Alkaran	Banitas	Cabaid	Dalamora
	kgs	kgs	kgs	kgs
Ore mined	12000000	80000000	160 000 000	20000000
Aluminium produced	3000000	20000000	40000000	5000000
	both	(1)AO1	both	(1)AO1

(b) AO1 (5) AO2 (4)

AO1 : One mark for salaries, one mark for each two head office figures, one mark for each two total fixed costs.

AO2: One mark for each correct depreciation figure.

b) Fixed costs	Alkaran		Banitas		Cabaid		Dalamora	
	£		£		£		£	
Salaries	150000		360000		420000		280000	(1)AO1
Head Office Overheads	200000		600000	(1)AO1	800000		400000	(1)AO1
Depreciation	160000	(1)AO2	400000	(1)AO2	480000	(1)AO2	280000	(1)AO2
Total Fixed costs	510000		1360000	(1o/f)AO1	1700000		960000	(1o/f)AO1
							9marks	

(c) AO1 (8) AO2 (4) AO3 (4)

AO1: One mark for all Other direct materials, all direct labour, all direct power, all fixed costs and one mark for each total costs.

AO2: One mark for sales revenue for each mine.

AO3: One mark for each profit or loss for each mine.

c)	Alkaran		Banitas		Cabaid		Dalamora	
	£		£		£		£	
Sales Revenue	6600000	(1o/f)AO2	4400000	(1o/f)AO2	8800000	(1o/f)AO2	11000000	(1o/f)AO2
Other direct materials	750000		4800000		9600000		1150000	(1)AO1
Direct labour	3510000		2320000		5040000		6000000	(1)AO1
Direct power	1800000		8000000		2000000		2700000	(1)AO1
Fixed costs	510000		1360000		1700000		960000	(1o/f)

								AO1
Total Costs	657000 0	(1o/f) AO1	3736000 0	(1o/f) AO1	8170000 0	(1o/f) AO1	10810000	(1o/f) AO1
Profit (Loss)	30000	(1o/f) AO3	6640000	(1o/f) AO3	6300000	(1o/f) AO3	190000	(1o/f) AO3
								16 marks

(d) AO1 (1) AO2 (13) AO1 (2)

AO1: One mark for sales revenue for all mines.

AO2: One mark for each mine for each of other direct materials, direct labour and direct power and one mark for all total direct costs.

AO3: One mark for each two correct contribution figures.

d) Per kilogram	Alkaran £		Banita s £		Cabaid £		Dalamor a £	
Sales Revenue	2.00		2.00		2.00		2.00	(1) AO1
Other direct materials	0.25	(1o/f) AO2	0.24	(1o/f) AO2	0.24	(1o/f) AO2	0.23	(1o/f) AO2
Direct labour	1.17	(1o/f) AO2	1.16	(1o/f) AO2	1.26	(1o/f) AO2	1.20	(1o/f) AO2
Direct power	<u>0.60</u>	(1o/f) AO2	<u>0.40</u>	(1o/f) AO2	<u>0.50</u>	(1o/f) AO2	<u>0.54</u>	(1o/f) AO2
Total Direct Costs	2.02		1.80		2.00		1.97	(1o/f) AO2
Contribution	-0.02		0.20	(1o/f) AO3	0.00		0.03	(1o/f) AO3
							16 marks	

e) AO1 (1) AO2 (1) AO3 (4) AO4 (6)

Own figure rule applies

Alkaran

Will be making a negative contribution of 2p per kilogram. Should stop production in short term.

Would make a loss of £570 000 next year. (2023)

Banitas

Will be making a positive contribution of 20p per kilogram. Should continue in the short term and the long term. Would make a profit of £2 640 000 next year (2023)

Cabaid

Not making a positive or negative contribution. Maybe continue (or stop) in the short term but stop in the long term. Would make a loss of £1 700 000 next year. (2023)

Dalamora

Will be making a positive contribution of 3p per kilogram. Should continue in the short term but probably not in the long term. Makes a loss of £810 000 next year. (2023)

Other points

How accurate are the predictions concerning the market price of aluminium? Perhaps they have underestimated the market price, which may enable more mines to stay open.

Is the market price going to stay at this lower level in the long term? If the lower price level is only a short-term phase, then maybe more mines could stay open

Some of the Head Office costs will probably have to be reapportioned at a higher level to the mines that are remaining open. This could result in these mines having to close.

Is it possible for the mines to reduce their costs, in order to remain in production?

If Alkaran closes in the short term, what effect will this have?

Will this reduction in production result in a rise in the price of aluminium?

Will customers buy more from the other mines? If so, how will this affect their costs and revenues?

Conclusion

Decision concerning each mine should be made using the contribution theory as applied to own figures for each mine and other relevant information.

Level	Mark	Descriptor
	0	A completely incorrect response.
Level 1	1- 3	Isolated elements of knowledge and understanding which are 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 may be 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 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 maybe 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 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 maybe non-financial information and makes an informed decision.

12 marks

Total for Question 1 - 55 marks

Q2

(a)

AO1 (6) AO2 (12) AO3 (4)

AO1: Two marks for column headings, one mark for all entries of opening balances, transfer from retained earnings, to foreign exchange reserve and entry of profit for the year in retained earnings.

AO2: One mark each for year start total equity, final dividend for 2021, revaluation entry, transfer from general reserve, to retained earnings, year-end total of retained earnings, all other year end totals, first three entries for the year in total equity, next two entries in total equity, and year-end total of total equity.

Two marks for interim dividend entry.

AO3: Four marks for entries for share redemption.

Working for calculation of interim dividend;

$(550 \text{ million shares} \times 0.45 \text{ pence}) (1) \text{AO2} = \text{£}2.475 \text{ million } (\text{£}2\,475\,000) (1) \text{AO2}$

Figures are in £ mills	Ordinary Share £1 Capital £	Share Premium £	Retained Earnings £	General Reserve £	Foreign Exchange Reserve £	A Revaluation Reserve (1)AO1 £	B Capital Redemption Reserve (1)AO1 £	Total Equity £
(i) Bal at 1Jan 2022	600	180	116	4	3 (1)AO1 All 5			903 (1o/f)AO2
(ii)			(2) (1)AO1		2 (1)AO1			----
(iii)			(13.8) (1)AO2					(13.8)
(iv)						9.6 (1)AO2		9.6
(v)	(50) (1)AO3	(15) (1)AO3	(65) (1)AO3				65 (1)AO3	(65) (1o/f)AO2 All 4
(vi)			4 (1o/f)AO2	(4) (1o/f)AO2				----
(vii)			(2.475) (2)AO2					(2.475)
(viii)			11 (1)AO1					11 (1o/f)AO1 All 3
Bal at 31 Dec 2022	550	165	47.725 (1o/f)AO2	----	5	9.6	65 (1o/f)AO2 All 6	842.325 (1o/f)AO1

(b)

(i) AO1 (2)

AO1 : One mark each for journal entries for revaluation of property.

<u>The Journal</u>				
Date	Details	Debit	Credit	
		£m	£m	
12 March	Property	9.6		(1o/f)AO1
	Revaluation reserve		9.6	(1o/f)AO1

(ii) A02 (4) A03 (1)

A02: One mark each for entries for ordinary share capital, share premium, retained earnings, and capital redemption reserve.

A03: One mark for bank entry

<u>The Journal</u>				
Date	Details	Debit	Credit	
		£m	£m	
15 May	Ordinary share capital	50		(1o/f)A02
	Share premium	15		(1o/f)A02
	Bank		65	(1o/f)A03
15 May	Retained earnings	65		(1o/f)A02
	Capital redemption reserve		65	(1o/f)A02

(iii) A02 (2)

A02 : One mark each for entry for profit and loss reserve and retained earnings.

<u>The Journal</u>				
Date	Details	Debit	Credit	
		£m	£m	
31Dec	Statement of Profit or loss	11		(1)A02
	Retained earnings		11	(1)A02

(c) A01 (3)

A01: One mark for each use of share premium account

Answers may include:

Write off any preliminary expenses on the formation of the company or a share issue (1) A01

Pay any premium on the redemption of shares or debentures (1) A01

For the issue of Bonus Shares (1) A01

(d)

(i) A01 (3)

A01: One mark for each important part of the definition.

A provision is a liability (1) A01 that is of uncertain timing (1) A01 or amount. (1) A01

Or

A provision is when an amount is set aside in the books to cover a future liability. (1) A01

For example, this could be for irrecoverable debts which is when funds are set aside in case a debtor or trade receivables will not pay the amount due. (1) A01

This follows the concept of prudence. (1) A01

(ii) A02 (3) A03 (1)

AO2: One mark each for entries for opening balance, figure transferred to profit and loss account if debit entry, and closing balance.

AO3: One mark detailing profit and loss account in correct place.

Allowance for Irrecoverable Debts Account					
		£			£
31 Dec 2022	Statement of Profit or Loss(1)AO3	1 800 (1o/f)AO2	1 Jan 2022	Balance b/d	14 400 (1)AO2
31 Dec 2022	Balance c/d	12 600 (1)AO2			
		<u>14 400</u>			<u>14 400</u>
			1 Jan 2023	Balance b/d	12 600

(4)

(iii)AO1 (2)

AO1: One mark for each named provision account to a maximum of two.

Examples may include:

Provision for depreciation. (1) AO1

Provision for legal fees. (1) AO1

Provision for compensation payable. (1) AO1

Provision for taxation payable. (1) AO1

e) AO1 (1) AO2 (1) AO3 (4) AO4 (6)

Case for good performance when viewed by shareholder

There was a profit made for the year and this increased retained earnings by £11 million.

Shareholders received a final dividend from 2021 and an interim dividend for 2022.

Sohail would have received for his final dividend, 30 million shares x 2.3 pence = £690 000

Sohail would have received for his interim dividend,

$$27.5 \text{ million shares} \times 0.45\text{p} = \text{£}123\,750$$

Total dividend received in year = £813 750 approximately a return of 2.8%

Sohail would have also received £3 250 000 when his shares were redeemed.

Case for poor performance when viewed by shareholder

Sohail had 2.5 million shares redeemed. This was 8.33% of his shareholding. He may not have been happy with this, as the share is paying quite good dividends and giving a fairly healthy return.

When looking at the statement of financial position, Sohail now holds shares in a company that is smaller than at the start of the year. The total equity of the company has fallen by about £60 million over the year.

Conclusion

Sohail may be pleased with the returns he is getting on his shares through dividends,

However he may not be pleased with having 8.33% of his shareholding redeemed.

No information is given about the value of the share price at the start or finish of the year.

Level	Mark	Descriptor
	0	A completely incorrect response.
Level 1	1- 3	Isolated elements of knowledge and understanding which are 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 may be 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 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 maybe 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 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 maybe non-financial information and makes an informed decision.

12 marks

Total for Question 2 - 55 marks

Q3.

(a) AO1 (2) AO2 (1) AO3 (3)

AO1: Two marks for calculating the interest/return for sources.

AO2: One mark for totalling interest/returns.

AO3: Three marks for calculating the weighted average cost of capital.

Option B	£	Interest Rate/ Expected return	Interest/ return		
Debenture	8000000	13%	1040000	both	
Bank Loan	20000000	10%	2000000	(1)AO1	
Preference Shares	5000000	5%	250000	both	
Ordinary Shares	7000000	3%	210000	(1)AO1	
Government grant	10000000	0%	0	both	
Total	50000000		3500000	(1o/f)AO2	
Weighted Average Cost of capital	=	$\frac{3500000 \times 100}{50000000}$	(1o/f)AO3 (1)AO3	= 7%	(1o/f)AO3

(6)

(b) AO3 (2)

AO3: One mark for correct choice and one mark for correct reason

Windgreen plc should select Option B, a range of sources, (1o/f)AO3 because it has a lower (o/f) WACC. (1)AO3

2 marks

(c) AO1 (2)

AO1: One mark for point made and one mark for development.

The government is encouraging production of electricity using wind power as it is environmentally friendly(1)AO1 and does not involve the use of fossil fuels.(1)AO1

2 marks

(d) (i) AO2 (11) AO3 (2)

AO2: Two mark for calculating maintenance costs,

One mark for totalling costs for all years correctly.

One mark for calculating net cash flow for years 1 to 5

Seven marks for calculating discounted net cash flow from years 0 to 5 and the total.

AO3: One mark each for correct calculation of revenue and rent.

Workings					
	Per hour	Hours	Days	Operating	
Revenue	£80	24	365	0.65	£455520
					(1)AO3
	Revenue	Rate	Rent		
Rent	455520	5.00%	22776	(1)AO3	
Insurance	5000				
Maintenance	Year 1	40000			
	Year 2	44000			

	Year 3	48400	(1)AO2		
	Year 4	53240			
	Year 5	58564	(1)AO2		

					Discounted	
			Net	Discount	Net cash	
Year	Revenue	Costs	Cash Flows	Factor 7%	flow	
0			-1250000	1	-1250000.00	(1)AO2
1	455520	67776	387744	0.935	362540.64	(1o/f)AO2
2	455520	71776	383744	0.873	335008.51	(1o/f)AO2
3	455520	76176	379344	0.816	309544.70	(1o/f)AO2
4	455520	81016	374504	0.763	285746.55	(1o/f)AO2
5	455520	86340	369180	0.713	263225.34	(1o/f)AO2
		(1o/f)AO2	(1o/f)AO2		306065.74	(1o/f)AO2

13 marks

(d)(ii) AO1 (1)

AO1 : One mark for correct calculation of net present value of 40 wind turbines. 1mark

Net present value of 40 machines = £306 065.74 o/f x 40 = £12 242 630(1o/f)AO1

(e) AO2 (1) AO3 (2) AO4 (3)

Own figure rule applies.

For the project

The NPV of the one wind turbine is positive, at £306 066 (o/f), at the end of year 5.

The NPV of the 40 wind turbines is positive, being £12 242 630 (o/f) at the end of year 5.

This method of generating electricity is environmentally friendly. It is a method that has an important role to play in the future as other methods of generating electricity may be banned, taxed heavily etc on environmental grounds.

Against the project

Most of the figures involved are estimates, not actual figures eg percentage of the year the turbines can generate electricity, maintenance costs etc. Figures for costs may be higher. Figures for revenues may be lower.

The net present value calculation does not include depreciation, only cash flows. What will be the depreciation figure for the 40 wind turbines each year? How long will the turbines last? Depreciation will mean the profit is lower than the cash flows each year.

The project has a large initial cost of £50 million and it may not be easy to raise these funds.

Other points

What figures will be given by other methods of project appraisal eg payback, average rate of return.

Conclusion

The NPV of the 40 wind turbines is positive, being £12 242 630 (o/f) at the end of year 5. The candidate may conclude in favour or against the project and should support their answer with relevant points.

Level	Mark	Descriptor
	0	A completely incorrect response.
Level 1	1-2	Isolated elements of knowledge and understanding that 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.

6 marks

Total for Question 3 = 30 marks

Q4.

(a) AO1 (5)

AO1 : Five marks for factors to be considered when valuing assets, one per asset.

Accept other possible answers.

<u>Item</u>	<u>Factor</u>	
Property	Market value of property	(1)AO1
Motor vehicles	Mileage of vehicles	(1)AO1
Inventory	Lowest of cost and net realisable value	(1)AO1
Trade receivables	Possibility of irrecoverable debts	(1)AO1
Patent	Length of time remaining on patent.	(1)AO1

(5)

(b)AO2 (6)

AO2 : Six marks for calculation of goodwill

Calculation of goodwill paid for HealthWave plc.

	£ million	
Book Value of company	233	(1)AO2
Property	+ 29	both
Plant	(2)	(1)AO2
Equipment	(3)	both
Fixtures and fittings	(6)	(1)AO2
Intangibles	+4	both
Inventory	+5	(1)AO2
Total	260	(1)AO2
Purchase price	300	
Goodwill	40	(1o/f)AO2

(6)

(c)

(i) **AO3 (5)**

AO3 : Five marks for calculation of balance due in cash per share.

Purchase price of Orion Pharma plc = £300 million

Number of shares in Orion Pharma plc = 120 million

Amount received by holder of one share = $\frac{\text{£300 million}}{120 \text{ million}}$ (1)AO3

= £2.50 per share (1)AO3

Amount paid in shares = $2 \times \text{£1.06} = \text{£2.12}$ (1)AO3

$$\text{Balance due in cash} = (£2.50 \text{ (o/f)} - £2.12 \text{ (o/f)}) = £0.38 \text{ per share (1 o/f)AO3}$$

(5)

(ii) **AO2 (2)**

AO2 : Two marks for calculation of total due in cash.

$$\text{Total amount of cash received} = 120 \text{ million} \times £0.38 \text{ (1 o/f)AO2}$$

$$= £45.6 \text{ million (1 o/f)AO2}$$

(2)

(d) **AO2 (4) AO3 (2)**

AO2 : Four marks for calculations and figures to be included in statement of financial position.

AO3 : Two marks for calculation of value of shares issued and share premium in purchase.

$$\text{Number of £0.50 shares in Health Wave plc issued for purchase} = 2 \times 120 \text{ million}$$

$$= 240 \text{ million}$$

$$\text{Value of shares issued in Health Wave plc for the purchase} = 240 \text{ million} \times £0.50$$

$$= £120 \text{ million (1)AO3}$$

$$\text{Value of share premium of shares issued for purchase} = 240 \text{ million} \times £0.56$$

$$= £134.4 \text{ million(1)AO3}$$

Equity section of Statement of Financial Position of Health Wave plc on 1 January 2023

	£m	
Ordinary shares of £0.50 each (£800m + £120m)	920	(1 o/f)AO2
Share premium (£200m + £134.4m)	334.4	(1 o/f)AO2
Retained earnings	71	(1)AO2
Total equity	1325.4	(1 o/f)AO2

(6)

(e)AO2 (1) AO3 (2) AO4 (3)

For purchase of Orion Pharma plc

Health Wave plc should enjoy benefits of horizontal integration as both companies are in same line of business, probably at the same stage of production.

Health Wave plc should enjoy economies of scale eg bulk buying of materials, chemicals etc at lower prices, resulting in greater profits. This would increase returns to shareholders in the form of dividends and lead to a rise in the share price.

Orion Pharma plc has large amounts of non-current assets. Property, plant and equipment is likely to maintain its value, especially if much of this is property. A large figure for intangibles on a pharmaceutical company's statement of financial position would indicate a high figure for patents of medicines etc

Orion Pharma plc has a high figure for retained earnings which would indicate they are trading profitably.

Against purchase of Orion Pharma plc

Health Wave shareholders will see a dilution of ownership and reduction in voting power as the company now has more shareholders.

A large figure, £40 million, is being paid for goodwill. This represents 13% of the purchase price.

Other factors

We do not know the market price of Orion Pharma plc shares at the time of the purchase. Shareholders are receiving £2.50 per share, which may be above or below the market price of the share.

Conclusion

Candidate may conclude that the takeover was an advantage or a disadvantage but must support their answer with valid reasons.

Level	Mark	Descriptor
	0	A completely incorrect response.
Level 1	1-2	Isolated elements of knowledge and understanding that 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.

6 marks

Total for Question 4 = 30 marks

Q5.

(a)(i) AO1 (5) AO2 (10) AO3 (1)

AO1: Five marks for correct calculation and insertion of direct costs, production, delivery and administration overheads, and totals of fixed costs and variable costs.

AO2: Ten marks for calculation of number of units sold, fixed costs for sales overheads, contribution, contribution per unit, and break-even point in units.

$$\text{Number of units sold} = \frac{\pounds 7\,125\,000(1)\text{AO2}}{\pounds 95 (1)\text{AO2}} = 75\,000 (1)\text{AO2}$$

	Fixed Costs	Variable costs
	£ (000)	£(000)
<u>Direct Costs</u>		
Labour		825
Material		1875
Royalties		225 (1)AO1 all three
<u>Overheads</u>		
Production	750	375 (1)AO1
Delivery	300	225
Administration	825	(1)AO1 both rows
Sales	600 (1)AO2	300 (1)AO3

Total	2475 (1o/f)AO1	3825 (1o/f)AO1
-------	----------------	----------------

$$\begin{aligned} \text{Contribution} &= \text{Sales revenue} - \text{Variable costs} \\ &= £7\,125\,000 - £3\,825\,000 \text{ o/f} = £3\,300\,000 \text{ (1o/f)AO2} \end{aligned}$$

$$\text{Contribution per unit} = \frac{£3\,300\,000 \text{ (1o/f)AO2}}{75\,000} = £44 \text{ per unit (1o/f)AO2}$$

$$\begin{aligned} \text{Break-even point in units} &= \frac{\text{Fixed costs}}{\text{Contribution per unit}} \\ &= \frac{£2\,475\,000 \text{ (1o/f)AO2}}{£44 \text{ (1o/f)AO2}} = 56\,250 \text{ units (1o/f)AO2} \end{aligned} \quad (16)$$

(ii) **AO2 (2)**

AO2: Two marks for correct calculation of break-even point in sales revenue.

$$\begin{aligned} \text{Break-even point in sales revenue} &= 56\,250 \text{ o/f units} \times £95 \text{ (1)AO2} \\ &= £5\,343\,750 \quad \text{(1o/f)AO2} \end{aligned} \quad (2)$$

(b)(i) **AO3 (3)**

AO3: Three marks for correct calculation of margin of safety in sales revenue.

Margin of safety in revenue = Actual sales revenue - Break-even sales revenue

$$\begin{aligned} &= £7\,125\,000 \text{ (1)AO3} - £5\,343\,750 \text{ (1o/f)AO3} \\ &= £1\,781\,250 \text{ (1o/f)AO3} \end{aligned} \quad (3)$$

(ii) **AO3 (3)**

AO3: Three marks for correct calculation of margin of safety as a percentage of sales.

Margin of safety as a percentage of sales = $\frac{\text{Margin of safety in sales revenue}}{\text{Actual sales revenue}}$

$$\begin{aligned} \text{Margin of safety as a percentage of sales} &= \frac{£1\,781\,250}{£7\,125\,000 \text{ (1)AO3}} \times 100 \text{ (1o/f)AO3} \\ &= 25\% \text{ (1o/f)AO3 (3)} \end{aligned}$$

(c) AO2(1) AO3(2) AO4 (3)
Own figure rule applies to all figures.

For the decision

Sales staff will be incentivised and motivated to sell more printers. This may make sales revenue increase.

Inflation may be high and staff need wages to keep up with inflation. This will improve the relationship between staff and Cherry-Avocado plc.

Cherry-Avocado plc may be able to absorb the increase in costs of £4 by raising the price of the printer from £95 to £99. A sales figure of £99 for an item would be quite usual, being known as psychological pricing.

Against the statement

At present, Cherry-Avocado plc make (£825 000/ 75 000) = £11 profit per printer. Profit per printer will fall to £7 per printer. To increase profit, staff will have to sell 117 858 printers (£825 000 / £7). This is an increase in sales of 42 858 which would probably be very difficult to achieve. It is likely that net profit for the company will fall.

Break-even point will rise. Contribution will fall to £40 per unit. To break-even, 61 875 units will need to be sold by Cherry-Avocado plc. This is an increase of 5 625 units.

If sales do not rise, the margin of safety will fall. The margin of safety in sales revenue will fall to £1 246 875 which is a fall of £534 375.

If the market is very competitive, it may not be possible to absorb the increase in cost by raising the price of the printer.

Conclusion

The success of the increase in sales commission paid to sales staff probably will depend upon the ability of Cherry-Avocado plc to pass on the increase in costs to the customer.

Level	Mark	Descriptor
	0	A completely incorrect response.
Level 1	1-2	Isolated elements of knowledge and understanding that 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.

		<p>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.</p> <p>An attempt at an evaluation is presented, using financial information, with a decision.</p>
Level 3	5-6	<p>Accurate and thorough knowledge and understanding. Application to the scenario is relevant and effective.</p> <p>A coherent and logical chain of reasoning, showing causes and effects is present.</p> <p>Evaluation is balanced and wide ranging, using financial information and an appropriate decision is made.</p>

6 marks

Total for Question 5 - 30 marks

Q6.

(a)

(i) AO1 (1) AO2 (2)

AO1: One mark for correct insertion of Net profit before interest and tax

AO2: One mark each for calculation of capital employed and return on capital employed.

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

$$\begin{aligned} \text{Capital employed} &= \text{Equity} && \text{£90 000 000} \\ & \text{Non-current liabilities} && \underline{\text{£70 000 000}} \\ & && \text{£160 000 000} \end{aligned}$$

$$\text{RoCE} = \frac{\text{£8 000 000}}{\text{£160 000 000}} (1) \text{AO1} \times 100 = 5\% (1\text{o}/\text{f}) \text{AO2}$$

(3)

(ii) AO2(4)

AO2: One mark each for calculation of interim and final dividend, insertion of total dividend and number of issued shares and calculation of total dividend paid per share.

$$\text{Dividend paid per share} = \frac{\text{Total ordinary dividend}}{\text{Issued ordinary shares}}$$

$$\begin{aligned} \text{Interim dividend} &= \text{£900000} \\ \text{Final dividend} &= (60\,000\,000 \times \text{£}0.03) = \underline{\text{£1 800 000}} (1) \text{AO2} \text{ both} \\ \text{Total dividend} &= \text{£2 700 000} \end{aligned}$$

$$= \frac{\text{£2 700 000}}{60\,000\,000} (1\text{o}/\text{f}) \text{AO2} = 4.5\text{p} (\text{£}0.045) \text{ per share } (1\text{o}/\text{f}) \text{AO2}$$

(4)

(iii) AO1(2) AO2 (1)

AO1: Two marks for correct insertion of dividend per share and market price of share.

AO2: One mark for correct calculation of dividend yield

$$\text{Dividend yield} = \frac{\text{Dividend per share}}{\text{Market price of share}} \times 100$$

$$= \frac{4.5\text{p (1o/f) AO1}}{180\text{p (1) AO1}} \times 100 = 2.5\% \text{ (1o/f) AO2}$$

(3)

(iv) **AO2 (1) AO3 (7)**

AO2: One mark for calculation of dividend cover.

AO3: Seven marks for calculation of interest paid, tax paid and the correct insertion into formula.

$$\text{Dividend cover} = \frac{\text{Net profit after interest and tax} - \text{preference dividends}}{\text{Total ordinary dividend}}$$

$$\text{Net profit before interest and tax} = \text{£8 000 000}$$

Interest payable

$$4.5\% \text{ Redeemable shares } (\text{£50 000 000} \times 4.5\%) = \text{£2 250 000 (1) AO3}$$

$$6\% \text{ Bank loan } (\text{£20 000 000} \times 6\%) = \text{£1 200 000(1) AO3}$$

$$\text{£3 450 000}$$

Tax calculation

No tax on first £100 000 of profit after interest

$$\text{Tax paid is } (\text{£4 550 000} - \text{£100 000}) \text{ (1o/f) AO3} = \text{£4 450 000} \times 20\% \text{ (1o/f) AO3}$$

$$= \text{£890 000 (1o/f) AO3}$$

$$\text{Dividend cover} = \frac{(\text{£8 000 000} - \text{£3 450 000} - \text{£890 000})}{\text{£2 700 000}}$$

$$= \frac{\text{£3 660 000}}{\text{£2 700 000 (1o/f) AO3}} \text{ (1o/f) AO3} = 1.36 \text{ times (1o/f) AO2}$$

(8)

(v) **AO2 (3)**

AO2: Three marks for correct calculation of earnings per ordinary share

$$\begin{aligned}
\text{Earnings per ordinary share} &= \frac{\text{Net profit after interest and tax} - \text{preference dividends}}{\text{Issued ordinary shares}} \\
&= \frac{\pounds 3\,660\,000(1\text{o/f}) \text{ AO2}}{60\,000\,000 (1) \text{ AO2}} \\
&= 6.1\text{p per share (1o/f) AO2}
\end{aligned}$$

(3)

(vi) **AO1(2)AO2 (1)**

AO1: Two marks correct insertion of market price of share and earnings per share.

AO2: One mark for calculation of price/earnings ratio

$$\begin{aligned}
\text{Price/earnings ratio} &= \frac{\text{Market price of share}}{\text{Earnings per share}} \\
&= \frac{180\text{p}_ (1) \text{ AO1}}{6.1\text{p (1o/f) AO1}} = 29.51 \text{ times (1o/f) AO2}
\end{aligned}$$

(3)

(b) AO2(1) AO3(2) AO4 (3)

For the statement

The return on capital employed (RoCE) is an important ratio for investors and potential investors. The ratio shows the return before interest and tax on every pound invested in the business.

The higher the RoCE the better the returns for every pound invested in the company. This would make the company look more attractive to investors.

Investment funds etc will study the ratios before investing in a company and they would like to see RoCE as high as possible.

Against the statement

There are other ratios which are very important to potential investors as well eg earnings per ordinary share, price/earnings ratio, dividend per share. These other ratios will also be studied and analysed by potential investors.

Some investors may not study the ratios, but may make an investment decision based on economic circumstances. For example the external factors that may affect the holiday industry such as exchange rates, the trade cycle, or pandemics.

Conclusion

Candidate may conclude that the return on capital employed ratio may or may not attract more shareholders but must support their answer with valid reasons.

Level	Mark	Descriptor
	0	A completely incorrect response.
Level 1	1-2	Isolated elements of knowledge and understanding that 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 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 information and an appropriate decision is made.

6 marks

Total for Question 6 - 30 marks

