

2011 Accounting

Advanced Higher – Solutions

Finalised Marking Instructions

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2011 ADVANCED HIGHER ACCOUNTING

MARKING CONVENTIONS

CONVENTION	EXPLANATION	MARK(S) ON CANDIDATES PAPER
Extraneous	Items entered which should not be in the answer	-1E
Consequential	If a figure in a question is wrong, any further calculations are awarded marks if correct, as a consequence of using that figure	С
Nomenclature	The details in an account are wrong/ missing	-1N
Dates	The date of an entry is wrong/missing	-1D
Complete Reversal	All the ledger entries are made the wrong way round The question is marked as if correct and then the total mark is divided by 2	R eg Total Mark = 12 Divided by 2 Mark awarded = 6
Plus/Minus Rule	If an entry is shown correctly it is awarded the mark (+) If the same entry then appears in another part of the question the mark is deducted (-) ie no mark is gained and there is no penalty	eg Correct entry £60,000 Sales in the Trading Account – Mark awarded 1 (+-) Wrong entry £60,000 Sales also entered in the Balance Sheet – Mark deducted -1 (+-)
Penalty	 The answers given are more than required (4 given instead of 3) and one of them is wrong A heading is wrong/missing from a final account The answer is correct but not given in the format requested ie the question asks for an account or a statement and a list is given 	-1P

GENERAL INSTRUCTIONS

- 1 Assess pencil figures and working. If the script is predominantly in pencil refer to the Principal Examiner.
- 2 A maximum of 10% of marks gained on any individual question may be deducted for untidy work and poor style. This penalty should only be applied in exceptional circumstances.
- 3 Work which has been deleted gains no marks, even if correct. Exceptional cases may be drawn to the attention of the Principal Examiner.
- 4 Consequential errors MUST NOT be penalised, subject to the marking instructions for each question.
- 5 Mark workings whether or not they are incorporated into the final answer. Deduct a penalty of -1 mark per question for working which is not incorporated in the final answer.
- 6 Incorrect figures, supported by adequate workings award marks for any correct operations performed.
- 7 Incorrect figures, not supported by adequate workings lose awards, unless the marking instructions specify otherwise. If arithmetic error lose 1 mark.
- 8 EXTRANEOUS ITEMS see instructions for specific questions.
- 9 If right and wrong give value of award where figure is correct, deduct value of award where figure is wrong (cross reference +/- against relevant figures).
- 10 Indicate awards given for each item next to the appropriate figure eg £1500¹

In essay type questions indicate the marks awarded beside the point made by the candidate – NOT IN THE MARGIN.

Sub-totals for each section should be indicated and encircled 5/6

Final totals should be clearly indicated and easy to check, eg Q1 = 42/50.

(a)	(i)		Year 1		Year 2	
		PROFITABILITY/PERFORMANCE RAT	rios			
		MARK-UP %	300 × 100	_ 1	460 × 100	1
		Gross Profit × 100 Cost of goods sold	(600 – 300)		(1,050 – 460)	
		<u> </u>	= 100%		= 77.97%	
		GROSS PROFIT %	300 × 100	_ 1	460 × 100	1
		<u>Gross Profit × 100</u> Turnover	600		1,050	
			= 50%		= 43.81%	
		NET PROFIT %	120 × 100	_ 1	253 × 100	1
		<u>Net Profit before tax × 100</u> Turnover	600		1,050	
			= 20%		= 24.1%	
		RETURN ON CAPITAL EMPLOYED %	90 × 100	_ 1	174 × 100	1
		<u>Net Profit after tax \times 100 (FA + Net CA – LTL)</u>	(550 + 36)		(1120 + 197) – 200	
		(,	= 15.36%		= 15.58%	
					3 × 2 = 6 r	nax

(ii) **EFFICIENCY RATIOS**

Rate of Stock Turnover	600 - 300	1	1,050 – 460	1
Cost of goods sold	50		108	
Average Stock				
	= 6 times		= 5.46 times	
	(000 400)		(400 050)	
Expenses Ratio %	(300 - 120) ×100	1	(460 - 253) ×100	1
Expenses × 100	600		1,050	
Turnover				
	= 30%		= 19.71%	
Debtors collection period	66 × 365	1	169 x 365	1
Average Debtors x 365	600	-	1 050	-
Crodit Salas	500		1,000	
Cieuli Jaies	41 dovo		EQ dava	
	= 41 days		= 59 days	

	Creditors payment period Average Creditors × 365 Credit Purchases	40 × 365 (600 – 300)	_ 1 _	40 × 365 (1,050 – 460)	_ 1
		= 49 days		= 25 days	
	Turnover: Fixed Assets	<u> </u>	_ 1 _	1,050 1,120	_ 1
	Fixed Assels	= 1.09:1		= 0.94:1	
				4 × 2 = 8	8 max
(iii)	LIQUIDITY RATIOS				
	Current Ratios	<u> </u>	_ 1 _	<u>307</u> 110	_ 1
		= 1.45:1		= 2.79:1	
	Acid Test Ratios Current Assets – Stock Current Liabilities	<u>116 – 50</u> 80	_ 1 _	<u>307 – 108</u> 110	_ 1
		= 0.83:1		= 1.81:1	
				2 × 2 = 4	l max (18)

(b) COMMENTS ON PERFORMANCE

PROFITABILITY RATIOS

Minimum of 1 ratio, maximum of 6 marks

	Year 1	Year 2
Mark-up	100%	77.97%
Gross Profit %	50%	43.81%
Net Profit %	20%	24.10%
ROCE	15.36%	15.58%

Mark-up and Gross Profit Percentages

- In Year 2 ABC decreased their mark-up by almost 23% and as expected this did result in a decrease in the Gross Profit percentage of 6%. (2)
- This decrease was much less than the decrease in mark-up percentage (2) and may mean that ABC had been able to reduce the cost of goods sold by negotiating quantity or bulk buying discounts. (2)
- Increase in sales may be due to either lower Selling price (2) or higher cost prices. (2)

Net Profit Percentages

• The Net Profit % has increased in Year 2 meaning that ABC has been more efficient (1) at controlling its expenses (1) evidenced by fall in expenses ratio. (1)

Return on Capital Employed

- The Capital Employed measures the return the investors received from ABC compared with other sources of investment. (1) It is better than returns from banks etc. (1)
- ABC's capital employment significantly increased, but the return on capital employed has remained virtually unchanged. (1) Increase in Net Profit has been matched by increase in Share Capital/fixed Assets. (1)

EFFICIENCY

Minimum of 1 ratios, maximum of 8 marks

	Year 1	Year 2
Rate of stock turnover	6 times	5.46 times
Expenses Ratio	30%	19.71%
Debtors Collection Period	41 days	59 days
Creditors Payment Period	49 days	25 days
Turnover/Fixed assets	1.09:1	0.94:1

Rate of Stock Turnover

- Despite the reduction in the Mark-up the Rate of Stock turnover is lower than that in Year 1.
 (2)
- The stock at the end of the year has almost doubled. (2)
- It would be expected that lower prices would result in an increase in rate of stock turnover.
 (2)
- However this has not occurred as the RST has decreased slightly in year 2. (2)

Expenses Ratio

• ABC has been more efficient in controlling expenses in Year 2 with a reduction of more than 10%. (2)

Debtors Collection Period

- During Year 2 they have been less efficient at controlling their debtors, allowing debtors significantly longer to pay for their goods. (2) Despite the reduction in the mark-up this may have been the only way that they were able to increase their Sales Turnover. (2)
- ABC should be concerned about the length of time they are allowing their debtors to pay as this could result in bad debts occurring and may cause cash flow problems. (2)

Creditors Payment Period

- ABC is more efficient at paying off their creditors. (2)
- This would mean that they would have no trouble gaining credit from their suppliers. (2)
- They need to take care because by allowing their debtors longer to pay and with them paying off their creditors more quickly they might run into cash flow problems. (2)
- This has not happened as they have gone from an overdraft situation to a positive balance in Year 2. (2)
- This increase in bank balance may have arisen from the issue of shares and not from trading activities. (2)

Turnover/Fixed Assets

Reduction is due to increase in sales not matching large investment in Fixed Assets. (2)

LIQUIDITY

	Year 1	Year 2
Current Ratio	1.45:1	2.8:1
Acid Test Ratio	0.83:1	1.81:1

Current Ratio

- In both years the current ratio is acceptable. (1) It has increased in Year 2 probably as a result of the change in the bank figure from an overdraft to a positive balance. (2)
- However this ratio could also have increased because of the huge increase in the stock held and debtors. (2)
- Possible to consider it too high in Year 2 (1) due to too much tied up in stock/debtors (1)

Acid Test Ratio

- In Year 2 the Acid Test ratio has improved. (1)
- However, this could be the result of the increase in the debtors figure (1) and the reduction in the bank overdraft. (1)
- These ratios show company is more liquid. (1)

(18)

(-)	(-)						
		45,000					
		700,000					
		= 6.43p per share					
		_6.43p (1) × 100					
		5 (1)					
		= £1.28	2				
	(ii)	Earnings per share					
		(NP after tax – Preference Dividend)					
		Number of Ordinary Shares					
		$(174 - 48)^{(1)}$					
		700(1)	-				
		= 18p	2				
	(iii)	Price Earnings Ratio					
		Market price per share					
		Earnings per share					
		128 ⁽¹⁾					
			•				
		= 7.11 times	2				
	(iv)	Dividend Cover					
		Net Profit after tax – Preference Divide	ends				
		Dividend on Ordinary Shares					
		$(174 - 48)^{(1)}$					
			0				
		= 2.8 times	2			(8)	
(d)	(i)		Year 1		Year 2		
. ,		Capital Goaring Patio					
		Capital Gearing Ratio					
		Debentures + Preference Shares	250	1	(300 + 200)	1	
		Ordinary Shares	300	1	700	1	
			= 0.83:1		= 0.71:1		

(ii) An increase in the Gearing Ratio would mean that a greater proportion of the profit would be distributed to the preference shareholders and debenture holders leaving lower dividends for the Ordinary Shareholders. (2) In years of high profits Ordinary Shareholders would receive higher dividends whereas in years of low profits Ordinary Shareholders would receive lower dividends. (2)

(6) (50 marks)

Part A

(a) **REALISATION ACCOUNT**

	Dr	Cr	Balance		
Premises	50,000)	50,000	Dr	
Furniture	12,500		62,500	Dr	
Motor Vehicles	24,000	>	86,500	Dr	1
Stocks	36,000		122,500	Dr	
Debtors	18,000	J	140,500	Dr	
Capital Wilson – Premises	-	48,000	92,500	Dr	1
Bank – Furniture		9,375	83,125	Dr	1
Capital Kepple – Motor Vehicles		4,000	79,125	Dr	4
Bank – Motor Vehicles		17,500	∫ 61,625	Dr	I
Bank – Stock		45,000	16,625	Dr	1
Debtors		16,200	425	Dr	1
Discount Received		2,000	1,575	Cr	1
Realisation Expenses	675		900	Cr	1
Share of Profits on realisation					
Wilson 3/6	450		450	Cr	1
Kepple 2/6	300		150	Cr	1
Bettie 1/6	150		0	Cr	1
					(11)

(b) CAPITAL ACCOUNT – BETTIE

	Dr	Cr	Balance		
Balance		15,000	15,000	Cr	
Current Account	1,100		13,900	Cr	1
Share of realisation profit		150	14,050	Cr	1
Bank	14,050		0		1
					(3)

(c) BANK ACCOUNT

DANK ACCOUNT						
	Dr		Cr	Balance		
Balance		12,600~	Ŋ	12,600	Dr	
Realisation A/c (Furniture	e)	9,375		21,975	Dr	
Realisation (Motor Vehic	les)	17,500	>	39,475	Dr	
Realisation (Debtors)		16,200		55,675	Dr	
Realisation (Stock)		45,000	J	100,675	Dr	1
Loan – Wilson			36,000	64,675	Dr	1
Creditors			13,000	51,675	Dr	1
Realisation Expenses			675	51,000	Dr	1
Capital – Wilson			4,450	46,550	Dr	1
Capital – Kepple			32,500	14,050	Dr	1
Capital – Bettie			14,050	0	Dr	
-						(6)

Part B

BUTLER PLC Reconciliation of cash flows from operating activities and operating profit

	£000	£000		
Net profit before Interest and Tax		135	4	
Add Depreciation for the year Less Profit on sale of Premises Add Loss on sale of fixtures and fittings Less Profit on sale of Motor Vehicles	80 -90 13 -10	-7	2 2 3 3	
Changes in Working Capital				
Stock Debtors Creditors	-10 20 20	30	2 2 2	
Net cash inflow from operating activities		158		(40

(20) (40 marks)

WORKING NOTES

	£			£	
Unappropriated Profit Year 5	60	1	Cash from sale of premises	165	1
Add Dividends	15	1	Less disposal value	75	1
Corporation Tax	30	1			
Debenture Interest (25 + 15 – 10)	30	1			
			Profit on sale of premises	90	(2)
	135	(4)			
	£			£	
Motor Vehicles sold	35	1	Disposal of fixtures and fittings	50	1
Less Depreciation	30	1	Less Depreciation	15	1
NBV	5		Net Book Value	35	
Cash Received	15	1	Compare cash received	22	1
Profit on sale of Vehicles	10	(3)	-	13	(3)

Part A

Riverside/Lakeside Consolidated Balance Sheet at 30 June Year 2

	£000	£000	£000	
Fixed Assets				
Goodwill			624	4
Tangible			5,700	1
Current Assets				
Stock $(600 + 225)^1 - 18^1$)		807		2
Debtors $(900 + 375)^1 - 60^1)$		1215		2
Bank		1050		1
Cash in transit		15		1
		3,087		
Creditors: due in one year				
Creditors $(525 + 180)^1 - 45^1$)	660			2
Accrued charges	1,395	2,055	1,032	1
5	<u>.</u>		7,356	
			. <u> </u>	
Capital and Reserves				
Ordinary Shares			5,250	1
Consolidated Reserve			1,446	4
			,	
Minority Interest			660	1
,			7.356	
			,	(20)

WORKING NOTES

Group Structure	Goodwill Calculation	
	Coodwin Galediation	
Percentage stake = 1,260,000/2,100,000	Cost of investment Net Assets acquired 60% ¹ × £1,2	£1,500.000 1 200,000 ¹ 720,000 2
= 00%	Goodwill written off CZ80 000/F	£760,000
(Mark awarded in the Goodwill Calculation)	Goodwill written off £780,000/5	156,000 1
	Written down value	624,000 (4)
Minority Interest Calculation	Unrealised Profits	Post Acquisition profits
40% × £1,650,000 (1) = £660,000	20% × £90,000 = £18,000 (Mark awarded in Consolidated reserves)	1650 – 1200 = 450 60% × £450,000 (Mark awarded in Consolidated Reserve)
Consolidated Reserves		
Riverside Reserves Goodwill written of £780,000/5 Unrealised Profits Share of post acquisition profits	£1,350,0001(£156,000)1(£18,000)1£270,0001£1,446,000(4)	

Part B

BANK ACC	COUNT	Dr	Cr	Balance	
Mar 1	Application and allotment (application)	80,000*		80,000	
Jun 1	Application and allotment (allotment)	85,000		165,000	1
Sept 1	First Call (148,000 × 0.4)	59,200		224,200	1
Dec 1	Friar (reissue) (2,000 × 1.2)	2,400±±		226,600	
APPLICAT	ION AND ALLOTMENT ACCOUNT	Dr	Cr	Balance	
Mar 1	Bank (200,000 × 0.4)		80,000*	80,000	1
Jun 1	Bank (£105,000 – £20,000)		85,000	165,000	1
Sept 1	Ordinary Share Capital	90,000		75,000	1
Jun 1	Share Premium	75,000		0	1
			-		
SHARE PR		Dr	Cr	Balance	
Jun 1	Application and Allotment		75,000	75,000	1
Dec 1	Forfeitied shares		1,600	76,600	1
					1
FIRST AND FINAL CALL ACCOUNT		Dr	Cr	Balance	
Sept 1	Ordinary Share Capital (150,000 × 0.4)	60,000**		60,000	
Sept 1	Bank (148,000 × 0.4)		59,200	800	1
Oct 15	Forfeiture of shares		800	0	1
				D 1	
ORDINARY	Y SHARE CAPITAL ACCOUNT	Dr	Cr	Balance	4
Jun 1	Application and Allotment		90,000	90,000	1
Sept 1	First and Final Call		60,000**	150,000	1
Oct 15	Forfeiture of shares	2,000≠		148,000	1
Dec 1	Jane Friar		2,000±	150,000	
		D		Delever	
FORFEITE	D SHARES ACCOUNT	Dr		Balance	4
Oct 15	Grainary Share Capital	000	2,000≠	2,000	1
OCT 15	FIRST and Final Call	800	400	1,200	1
		4.000	400	1,600	1
Dec 1	Snare Premium	1,600	1	0	1
		D		Delerse	
	AR'S AULUUNI			Balance	4
	Diginary Share Capital	∠,000±	2 400	2,000	1
Dec 1	Bank (2,000 × £1.20)		2,400±±	400	1

*one mark if both entries correct **one mark if both entries correct ≠ one mark if both entries correct ± one mark if both entries correct ±± one mark if both entries correct

Dec 1

Forfeited Shares (premium)

(20) (40 marks)

1

0

400

(a) Procedures followed by the Accounting Standards Board to introduce a new Accounting Standard are:

- ABS identifies topic that then becomes the subject of FRSs either from their own research or from submissions made by interested parties. (2)
- Research carried out by ASB into the topic and consultation takes place with relevant bodies. (2)
- Research includes looking at what happens in the United Kingdom, Republic of Ireland and overseas. (2)
- Discussion draft may be produced and circulated to any parties who have registered their interest if matter requires additional discussion and consideration. (2)
- After discussion a FRED (Financial Reporting Exposure Draft) produced setting out proposals for comment by interested parties. (2)
- Feedback received is used to refine FRED. (2)
- FRED may be modified in light of suggestions. (2)
- Once satisfactory FRS is issued and is put into practice by accountants; its effectiveness is monitored. (2)
- A review will take place as necessary and further modifications made and revised standards issued. (2)

2 marks each point, max 10

(b) (i) FRS 10 Goodwill and Intangible Assets

The main points contained in FRS 10 Goodwill and Intangible Assets are:

- FRS 10 sets out the principles of accounting for goodwill and intangible assets. It replaced SSAP 22 after 23 December 1998. (2)
- Goodwill is defined as the difference between the cost of acquiring a business and the total of the fair value of the business's identifiable assets and liabilities. (2)
- Intangible assets are assets owned by the business which contributes to the future economic benefit of the business. (2)
- Intangible assets can range from those which can be readily identified and measured separately from goodwill. Some will have an infinite life and will not be written off. (2)
- Goodwill is to be capitalised (2) and written off the profit and loss account (2) over its useful economical life which will not exceed 20 years. (2)
- Enough information must be given to all users of financial statements to determine the impact goodwill and intangible assets will have on the financial. (2)
- FRS 10 applies to all financial statements which are intended to give a true and fair view of a business's financial positions and profit and loss for a period. (2)
- Negative goodwill should appear in Balance sheet under goodwill heading. (2)
- Internally generated goodwill is not recognised in accounts. (2)

2 marks each point, max 10

(ii) FRS 15 Tangible Fixed Assets

The main points contained in FRS 15 Tangible Fixed Assets are:

- Sets out the principles of accounting for tangible fixed assets with the exception of investment properties. (2)
- Object to ensure that tangible assets are accounted for on a consistent basis. (2)
- The statement provides a choice as to whether tangible fixed assets are stated at cost or at a revalued amount. (2)

Statement defines cost ie all costs incurred in bringing asset to readiness

- If some of the business adopts a revaluation policy then all assets of a similar nature must be revalued. (2)
- Many of the requirements of SSAP 12 Accounting for Depreciation are contained in FRS 15 (2) eg depreciate in consistent manner.
- FRS 15 acknowledges that in some cases no depreciation will be charged because it is immaterial. If this is the case then FRS 15 states that the estimated life of the asset will be longer than 50 years. (2)
- The standard requires that an Annual Impairment review must be carried out to ensure that the asset is not overstated. (2)
- FRS 15 became effective for accounting period on or after 23 March. (2)

2 marks each point, max 10

(iii) FRS 18 Accounting Policies

Mandatory for accounting periods ending on or after 22 June 2001 and supersedes SSAP 2 Disclosure of accounting policies. (2)

FRS 18 deals primarily with the selection, application and disclosure of accounting policies. (2)

Its objective is to ensure that for all material items:

- the accounting policies should be consistent with FRS Accounting standards
- an entity adopts the accounting policies most appropriate to its particular circumstances for the purpose of giving a true and fair view. (2)

The business should judge the appropriateness of accounting policies and in particular circumstances against the objectives of:

- relevance
- reliability
- comparability and
- understandability. (2)

- The policies chosen may reflect how the effects of transactions and other events are to be reflected in its financial statement through recognising, selecting the measurement basis for and presenting assets, liabilities, gains, losses and changes to shareholders. (2)
- The accounting policies adopted are reviewed regularly. (2)
- Sufficient information must be disclosed in financial statements to allow users to understand them and how they have been implemented. (2)
- Measurement bases are historic costs and current value bases. It is a change in policy if the method of measurement changes. (2)
- Estimation techniques include rates of depreciation, and methods of calculating bad debt reserves. It is not a change in accounting policy if an estimation technique is changed to a more accurate technique. (2)
- The accounting policies adopted are reviewed regularly to ensure that they remain appropriate, and are changed when a new policy becomes more appropriate to the entry's particular circumstances. (2)
- Sufficient information is disclosed in the financial Statements to enable users to understand the accounting policies and how they have been implemented. (2)

2 marks each point, max 10 (30 marks)

The published accounts are usually kept short and simple and any other details and breakdown of figures that are required by the Companies Act are shown in the accompanying notes to the accounts.

(a) (i) Deviation from Accounting Standards

- If the plc has not followed the Accounting Standards an explanation must be included in the notes. (2)
- Shareholders/stakeholders made aware of reasons why the plc is not following accounting standards and can take appropriate action. (2)
- Shareholders/stakeholders can take this information into consideration when making decisions regarding the purchase/sale of shares in the plc. (2)

(ii) Sources of Turnover

- Turnover can be broken down to show the type of product sold or the geographical area in which they sell their products. (2)
- Information usually shown would be the Turnover and the Profit per product/ area. (2)
- Useful for shareholder/stakeholders in assessing how successful the plc is in selling their product. (2)
- They can see the areas where the business sells and can decide whether or not the plc is targeting the correct marketing and being led well by management. (2)

(iii) Details of fixed assets

Fixed assets

This session gives details of:

- cost or valuation at beginning and end of year (2)
- depreciation at beginning and end of year (2)
- changes during the year. (2)

(iv) Directors' emoluments

This section shows:

- total of directors' salaries, fees and bonuses (2)
- allowances which are taxed (2)
- benefits in kind. (2)
- Information allows shareholders/stakeholders to compare dividends declared with the salaries, fees and bonuses given to Directors (2)
- Decide whether profit earned is being fairly shared. (2)

4 marks for each section, max 16

(b) A Social Audit is the process by which, an organisation or agency assesses and demonstrates its social, community and environmental benefits and limitations. (2)

It is a way to measure the extent to which an organisation lives up to the shared values and objectives it has committed itself to promote. (2)

Before a social audit can be successfully carried out the organisation must:

- be clear about what it is trying to do both internally and externally (2)
- have a plan which sets out how its objectives are going to be achieved (2)
- have decided how it is going to record and measure how successful it is about achieving its objectives. (2)

Social Accounting is used by businesses to report on how their business affects society as a whole. (2)

A business will carry out a social audit for the following reasons:

- Internal audit carried out by the organisation to assess the social and environmental impact of their business. (2)
- To ensure that the organisation has clear environmental policies. (2)
- To ensure that its activities comply with any environmental policies. (2)
- To allow the organisation to determine what its social objectives should be. (2)
- To determine how their business impacts on the environment. (2)
- Used to produce a measure of the social responsibility of an organisation. (2)
- Used to determine how well the firm has taken account of the stakeholders' views and concerns. (2)
- To determine whether the organisation is meeting its social and environmental objectives. (2)

2 marks per point, max 14 (30 marks)

(a)		Budget					
• •		Per Ünit/Kg		Fixed		Kg/Hours	Budget Units
	Raw Materials	£6.00				16,000.00	80,000
	Direct labour	£10.00				10,000.00	
	Direct Expenses	£0.15	2				
	Maintenance	£0.25	2	£10,000	1		
	Miscellaneous Expenses	£0.15	2	£48,000	1		

Flexible Budget Statement for Month 4

Level of Production Units	75% 90,000	80% 96,000	85% 102,000	100% 120,000		
Raw Materials	£108,000	£115,200	£122,400		3	
Direct labour	£112,500	£120,000	£127,500		3	
Direct Expenses	£13,500	£14,400	£15,300		1	for line
Maintenance	£32,500	£34,000	£35,500		3	
Rent, Rates and Insurance	£6,000	£6,000	£6,000		1	for line
Heating and Lighting	£2,000	£2,000	£2,000		1	for line
Office Salaries	£25,000	£25,000	£25,000		1	for line
Miscellaneous Expenses	£61,500	£62,400	£63,300		3	
	£361,000	£379,000	£397,000			

(24)

(b) Performance Report for Month 4

			Budgeted Costs	Actual Costs	Variance	F/A	
	Raw Direc Direc Main Rent Heat Offic Misc	Materials et labour et Expenses atenance a, Rates and Insurance and Lighting e Salaries ellaneous Expenses	£108,000 £112,500 £32,500 £6,000 £2,000 £25,000 £61,500 £361,000	£122,500 £108,000 £13,500 £30,800 £5,950 £2,100 £25,000 £63,000	-£14,500 £4,500 £1,700 £50 -£100 £0 -£1,500	Adverse Favourable Favourable Favourable Adverse Adverse	2 2 3 2 2 2 3 (18)
(c)	(i) (ii) (iii) (iv)	Price Variance Usage Variance Rate Variance Efficiency Variance	AQ(SP-AP) SP(SQ-AQ) AH(SR-AR) SR(SH-AH)	17,500(6-7) 6(18,000-17,500) 12,000(10-9) 10(11,250-12,000)	-£17,500 £3,000 £12,000 -£7,500	Adverse Favourable Favourable Adverse	2 2 2 2 (8)

(50 marks)

PART A

(a) PROJECT 1

Year	Net Cash In	Factor (10%)	NPV	
1	£24,000	0.909	£21,816	1
2	£13,000	0.826	£10,738	2
3	£10,000	0.751	£7,510	1
4	£3,000	0.683	£2,049	2
			£42,113	
		Less Initial Costs	£41,000	1
	Ne	et Present Value	£1,113	
PROJECT 2				
Year	Net Cash In	Factor (10%)	NPV	
1	£15,000	0.909	£13,635	1
2	£14,000	0.826	£11,564	1
3	£13,000	0.751	£9,763	1
4	£13,000	0.683	£8,879	2
			£43,841	
		Less Initial Costs	£41,000	1
	Ne	et Present Value	£2,841	(13)

(b) Internal Rate of Return

Positive rate + (positive NPV/(Positive NPV + Negative NPV)) × Range of rates

PROJECT 1	PROJECT 2	
2 1 10% + (1113/(1113 + 179)) × 2%	2 1 10% + (2841/(2841 + 608)) × 4%	
11.72%	13.29%	6

(c) Accept Project 2

1 (20)

PART B

(a)	(i)	Make XT3		Buy XT3				
		Total Cost	£20,000 1	Cost of XT3 Fixed Costs	£25,000 £2,000 £27,000	1 1		
		Cost Increas	se/Profit Reduction	£7,000		1		
	(ii)	Total Cost	£20,000	Cost of XT3 Rent	£25,000 -£8,000 £17,000	2		
		Cost Reduct	tion/Profit Increase	£3,000		1		
	(iii)	Total Cost	£20,000	Cost of XT3 Fixed Costs Contribution from Novo	£25,000 £20,000 -£24,000 £21,000	1 2		
		Cost Increas	se/Profit Reduction	£1,000		1	11	
(b)	Novo)						
	Profit required Fixed costs Increased cost of XT3 Contribution required Contribution per unit of Novo (20-12)			£10,000 £20,000 £5,000 £35,000 £8.00		1 1 1		
	Unit	sales (35000/	(8)	4,375		1	5	
(c)	Cont Maxi	ribution requir mum producti	ed on (units)	£35,000 4,000				
	Cont (£35	ribution per ur ,000/4,000 uni	nit required its)	£8.75		2		
	Selli	ng price requ	iired (12 + 8.75)	£20.75		2	4	(20)
							(40 r	narks)

PART A

(a) Contract Account for the Year to 31 December Year 1: Contract A

Revenues/Value Produced	(000)			
Work completed, not certified Value of work certified complete		_	£20 £480 £500	1 1	
Costs					
Kits Shipping	£145 £5				
Materials		£150	1		
Purchased Issued from stores	£50 £10				
Less Transfer to B	£60 £5	1		1	
Less Closing Stock	£55 £5_	£50		1	
Wages (100 + 15)	—	£200 £115		1	
Direct Expenses (40-3) Depreciation (60-50)		£37 £10		1 1	
Sub contracting	£30	£40		1	
Overheads $((200 + 30) \times 10\%)$	£10	£40 £23	£425	2	
Notional Profit			£75		
Transferred to Profit and Loss Profit retained/carried forward		£60 £15	£75	2 1	16
(i) Cash paid by clients (480 ×	85%)		£408	2	
(ii) Retentions are allowed as a disputes and other unforesee	cash guarantee	e against 'sr	nagging',	2	
				-	4

(20)

PART B

(a) (i) Equivalent Production Statement for April Year 3

	Units	%	Materials	%	Labour	%	Overheads	
Good Output	11000	100%	11000	100%	11000	100%	11000	
Normal Loss	600							
Work in Progress	700	90%	630	75%	525	50%	350	3
Abnormal Loss	450	100%	450	100%	450	100%	450	1
Equivalent Units Produced		12080		11975		11800		

(ii) Cost per Equivalent Unit Produced in April Year 3

	Materials	Labour	Overheads	
Cost for Month	£103,200	£67,482	£46,000	2
Work in Progress	£6,720	£4,368	£1,200	1
Less Scrap Value of Normal Loss	-£1,200			1
	£108,720	£71,850	£47,200	
Equivalent Units Produced	12,080	11,975	11,800	1
Cost Per Equivalent Unit	£9	£6	£4	

Total Cost per Unit (9 + 6 + 4) $figure{1}{\pm 19}$

		£10,220
	Overheads (350×4)	£1,400
	Labour (525 × 6)	£3,150
(iii)	Materials (630 × 9)	£5,670

(b) Mixing Process Account for April Year 3

Inputs Work in Progress b/f Materials Labour Overhead	750 12,000	£8.60	£12,288 £103,200 £67,482 £46,000 £228,970	1 1
Outputs Normal Loss Good Output Abnormal Loss Work in Progress*	600 11,000 450 700	£2.00 £19.00 £19.00	£1,200 £209,000 £8,550 £10,220 £228,970	1 3 1

3

7 (20) (40 marks)

1

13

(a) Activity Based Costing

- Relates specific costs to the area of activity that generates the cost.
- Areas of activities are identified and costs are 'pooled' for each.
- To give a total cost of each activity.
- Cost drivers are identified for each area of activity.
- Cost drivers are the particular undertakings which give rise to costs.
- Examples of Activities and Drivers. Activity (Cost Pool) Driver Material acquisition No of orders placed with suppliers No of material movements Material handling Production line set up No of set ups for production runs Maintenance Maintenance hours logged Quality control No of inspections Machine costs Machine hours No of orders despatched Despatch
- An absorption rate is calculated for each driver by dividing the total cost of the pool by the driver.
- Overheads are charged to production based upon the absorption rates per driver.
- Pool costs are aggregated for each production run.
- Aggregate cost is divided by output to ascertain cost per unit.

Conventional Absorption Costing

- Total overhead cost may be divided by output to give cost per unit.
- Or absorbed by production using a rate per direct labour hour, percentage of material cost, etc.
- Costs may be gathered for cost centres (eg departments).
- Some overheads will be allotted to departments using time sheets or invoices.
- Others will be apportioned on a basis related to the cost (eg rent and rates by floor area or supervision by number of employees).
- Total overhead is ascertained for each department.
- An absorption rate is obtained for each department using a basis such as direct labour hours or direct machine hours.
- Cost per unit is calculated by aggregating all costs absorbed.
- Service cost centre costs have to re-apportioned to production cost centres

Award 2 marks for each correct point

(b) For ABC

- Costs are related directly to the activities which cause the costs.
- All overhead costs are included production, administration, selling and distribution.
- Costs can be traced.
- To procedures undertaken, customers, management and products.
- Suited to large multi-product organisations/complex organisations
- Non-production overheads are more significant than in the past.
- ABC is more suited to non-manufacturing concerns.
- More up-to date. (1)

Against ABC

- No (or negative) cost benefit to small firms.
- Although precise in nature ABC is not always necessary for good decision making.
- Not useful to single product companies.
- Not compatible with the requirements of financial statements where administration and selling/distribution costs must be excluded from product costs.

Award 2 marks for each correct point

10 (30 marks)

- (a) (i) Costs may be classified as:
 - Direct and Indirect (Overheads)
 - Fixed and Variable
 - Product and Period.

Direct Costs

- Can be traced to the product and is incurred for the manufacture of that product.
- Effectively form part of the product.
- Usually vary directly with the output of the product.
- Are usually variable.
- Are charged directly to the product.
- Are usually Product Costs.
- Make up the prime cost.

Overheads

- Necessary costs which cannot be identified with one particular product.
- Need to be 'shared out' between products.
- May be manufacturing (or production) costs, administration expenses, selling/ distribution expenses or research/development costs.
- Are often fixed, but may be semi-variable (ie with both fixed and variable components).
- Are often Period Costs (ie incurred over time rather than relative to output).
- Are charged to production using a variety of methods.

Accept correct points listed under Fixed and Variable or Product and Period Costs. Do not accept the same point twice.

- (ii) Some difficulties:
 - Labour costs are often time based and do not vary with output. (Especially in an automated situation where the machine operator has little or no contact with the finished product)
 - In both instances labour may be treated as direct by one organisation and indirect by another.
 - Depending upon how it is metered powered may be treated as either direct or indirect.
 - Supervisory staff working entirely on one product may be considered as either direct or indirect.
 - In short term all costs may be fixed while in long term all may be variable

Award 2 marks for each correct point

(b) (i) The companies will use different costing methods because:

- The nature of the work undertaken by each is completely different.
- A bus company will provide exactly the same service throughout the contract period.
- Costs will be accrued and revenue earned on a relatively uniform basis throughout the contract.
- Apart from a possible subsidy element, bus service revenue will be dependent upon passenger uptake
- and the fares set after the service is costed.
- Fares may be reviewed throughout the contract period as costs rise.
- Profits can be confirmed annually and transferred to the main profit and loss account.
- A building company will not finally hand over its 'product' until completion.
- There is likely to be a fixed contract price.
- Costs are incurred to establish the site and continue to accrue at varying rates throughout the contract period.
- Revenues will be earned in stages as part of the work completed.
- The value place upon completed stages is dependent upon satisfactory inspection.
- Payments received will be subject to a retention.
- The value of work in progress on the contract will have a value reflected in the contractor's annual balance sheet.
- Annual profits reported on the contract are provisional (being reduced by formula) and cannot be confirmed until the contract is complete.
- (ii) A bus company will use service costing.
 - All costs associated with the service will be gathered.
 - The total distance travelled and the number of passengers carried will be used to determine the total passenger/miles achieved.
 - This allows the calculation of the cost per passenger/mile
 - which is used along with the desired profit margin to set the average fare per passenger/mile required to give the desired return.

Award 2 marks for each correct point

12 (30 marks)

[END OF MARKING INSTRUCTIONS]