



National
Qualifications

Accounting Assignment Marking Instructions

General Marking Principles for the assignment

This information is provided to help you understand the general principles you must apply when marking candidate responses to this assignment. These principles must be read in conjunction with the detailed marking instructions, which identify the key features required in candidate responses.

- (a) Marks for each candidate response must always be assigned in line with these General Marking Principles and the Detailed Marking Instructions for this assessment.
- (b) Marking should always be positive. This means that, for each candidate response, marks are accumulated for the demonstration of relevant skills, knowledge and understanding: they are not deducted from a maximum on the basis of errors or omissions.

Treatment of errors

Guidance on the treatment of errors such as extraneous items, arithmetical errors and consequential errors will be provided in the Detailed Marking Instructions.

Layouts

Layouts in the Detailed Marking Instructions are provided for illustrative purposes only. Candidates should not be penalised for using appropriate alternative layouts.

Consequential errors

Consequential errors will be taken into account and candidates will receive credit for following the correct accounting processes and spreadsheet formula.

Formulae

It is possible for candidates to use a variety of different formulae to resolve the problem and provide the information needed in the spreadsheet. Marks will be awarded where a formulae has been used that provides the correct answer, the formulae provided in the marking instructions is not the only correct answer.

Printouts

Candidates are clearly directed, within the instructions, as to the printing requirements. Where a printout for a task is missing, marks will be awarded on any available alternative printout.

International Accounting Standards

With the introduction of the new Higher Accounting specification revised IAS terminology will be used in the preparation of financial statements. However candidates using the traditional approach and terminology in these questions will be rewarded. In addition centres need to be aware of the requirements of IAS 1 which specifies the presentation of accounts and the changes in the treatment of proposed dividends.

In order to make this new specification relevant and current the preparation of an appropriation account will, in future, be replaced by a statement of changes in equity. Only dividends that have been approved will be included in final accounts, with any proposed dividends no longer being shown in the statements. The Detailed Marking Instructions which follow show the new terminology with the current terminology in brackets.

TASK 1 SOLUTION

Three Tiers Ltd

Manufacturing Account for year ended 31 December 2014 ✓

	£000	£000		
Opening Inventory (Stock) of Raw Materials		5	A	
Add Purchases of Raw Materials (252-5)		247	B	
Add Carriage on Raw Materials		2	B	1 mark
		254		
Less Closing Inventory (Stock) of Raw Materials		4	A	1 mark
COST OF RAW MATERIALS ✓ (CONSUMED)		250		
Direct Manufacturing Wages (160 x 70%)		112	C	
Royalties		8	D	
PRIME COST ✓		370		
Factory Overheads				
Indirect Wages (160 x 20%)	32		C	1 mark
Factory Supervision Salaries	28		D	
Factory Power	20		D	
Factory heat and light	15		D	1 mark
Depreciation (240-100 x 20%)	28		E	1 mark
Factory Rent (40+10) x 3/5	30		F	1 mark
Insurance (18-2=16) x 7/8	14	167	G	1 mark
		537		
Add Opening Work-in-Progress	16		H	
Less Closing Work-in-Progress	10	6	H	1 mark
FACTORY COST OF PRODUCTION ✓		543	J	
MANUFACTURING PROFIT ✓		57	J	
Wholesale/Market Value		600	J	1 mark

Three Tiers Ltd

Income Statement (Trading Account) for year ended 31 December 2014 ✓

	£000	£000		
Sales Revenue (Sales) (716+10)		726	K	
Less Cost of Goods Sold				
Opening Inventory (Stock) of Finished Goods	50		L	
Add Wholesale/Market Value of Finished Goods	600		K	
Purchases of Finished Goods (50+5)	55		M	
Less Purchases Returns (Finished Goods)	5		M	1 mark
		700		
Less Closing Inventory (Stock) of Finished Goods	40		L	1 mark
	660			
Warehouse wages (160 x 10%)	16	676	N	1 mark
GROSS PROFIT ✓ 1 mark*		50	K	1 mark

(TOTAL 14 MARKS)

- If candidates make an arithmetical error in either statement they will lose their 'Profit Award' in that statement.
- Award 1 mark for all labels and headings indicated by "✓" - Indicated by H/L 1
- 1 mark can only be awarded where the last letter appears in the solution assuming all items are correct up to that point.

Task 2

Three Tiers Ltd currently recovers overheads on a factory-wide basis, based on prime cost. Mr Brean estimates that all costs for 2015 (both direct and indirect) will remain exactly the same as in 2014.

- (a) Using the relevant information from your answer to Task 1, calculate the factory-wide overhead recovery rate (to 2 decimal places) for 2015.

Three Tiers Ltd has 3 production departments: Mixing, Baking and Decorating and one service department: Cleaning. Mr Brean is thinking about introducing departmental overhead recovery rates for 2015 and provides you with the following information:

	Mixing	Baking	Decorating	Cleaning	Totals
Labour Hours	1,000	300	3,000	700	5,000
No of Workers	4	2	7	1	14
Value of Machinery	£180,000	£80,000	£20,000	-	£280,000
Machine Hours	3,000	2,000	1,000	-	6,000
Area (m ²)	60	40	35	15	150
Indirect Wages	£13,000	£7,000	£8,000	£4,000	£32,000
Kilowatt Hours (Kw Hrs)	4,000	8,000	2,000	2,000	16,000
Direct Materials	£100,000	£75,000	£75,000	-	£250,000

- (b) Using the spreadsheet template provided (filename: HAT20A) and the relevant information from Task 1, prepare an overhead analysis statement for 2015.
- (c) Re-apportion the Service Department total overheads to the Production Departments on the basis of number of workers.
- (d) Production cost centre overheads are recovered as follows:
- Mixing - machine hours
 - Baking - machine hours
 - Decorating - labour hours

Calculate the overhead recovery rate for each Production cost centre.

- (e) From the following information, calculate the cost of Job 227, using the departmental overhead recovery rates calculated in (d) above. Three Tiers Ltd will continue to have a profit margin of 20%:

	Mixing	Baking	Decorating
Direct Materials	£800	£100	£300
Machine Hours	12	8	6
Labour Hour Rate	£16	£16	£20
Labour Hours	15	5	24

- (f) If at the end of 2015 the actual figures are as follows:

	Mixing	Baking	Decorating
Total Overheads	£80,000	£50,000	£40,000
Machine Hours	3,100	2,050	2,200
Labour Hours	2,750	2,690	2,800

Calculate the amount of overhead over-absorbed or under-absorbed in each department.

On completion of all tasks print out one copy of your spreadsheet in value view and one copy in formulae view.

File HAT2OA for use with Task 2

	A	B	C	D	E	F	G	H
1	(a)							
2	Overheads			d				
3	Prime Cost			d				
4	Factory Wide Absorption Rate			f				
5								
6								
7	Cost Centre Information							
8			Mixing	Baking	Decorating	Cleaning	Total	
9	Labour Hours		1,000	300	3,000	700	5,000	
10	No of Workers		4	2	7	1	14	
11	Value of Machinery		£180,000	£80,000	£20,000	£0	£280,000	
12	Machine Hours		3,000	2,000	1,000	0	6,000	
13	Area (m ²)		60	40	35	15	150	
14	Indirect Wages		£13,000	£7,000	£8,000	£4,000	£32,000	
15	Kilowatt Hours (Kw Hrs)		4,000	8,000	2,000	2,000	16,000	
16	Direct Materials		£100,000	£75,000	£75,000	£0	£250,000	
17								
18	(b) and (c)							
19	Overhead Analysis Statement							
20	Name of Overhead	Basis of Apportionment	Rate	Total	Mixing	Baking	Decorating	Cleaning
21	Indirect Wages	d		d	d	d	d	d
22	d	d	f	d	f	f	f	f
23	d	d	f	d	f	f	f	f

24	d	d	f	d	f	f	f	f
25	d	d	f	d	f	f	f	f
26	d	d	f	d	f	f	f	f
27	d	d	f	d	f	f	f	f
28	Total Departmental Overheads			f	f	f	f	f
29	Service Centre Overheads re-apportioned							
30	Cleaning	d	f	f	f	f	f	
31	Total Production Cost Centre Overheads				f	f	f	
32	(d)							
33	Departmental Recovery Rates				f	f	f	
34					Per machine hour	Per machine hour	Per labour hour	
35	(e)							
36	JOB 227 DATA				Mixing	Baking	Decorating	Total
37	Labour Hours				d	d	d	
38	Machine Hours				d	d	d	
39	Labour Hour Rate				d	d	d	
40	JOB COST STATEMENT							
41	Direct Materials				d	d	d	f
42	Direct Labour				f	f	f	f
43	Prime Cost							f
44	Overheads				f	f	f	f
45	Total Cost							f
46	Profit Margin							f

47	Selling Price				f
48	(f)	Mixing	Baking	Decorating	
49	Actual Overheads	d	d	d	
50	Machine Hours	d	d	d	
51	Labour Hours	d	d	d	
52	Overheads Absorbed	f	f	f	
53	Overheads under or over absorbed	f	f	f	
54	State whether overheads are under absorbed or over absorbed	d	d	d	

TASK 2 SOLUTION

(a)

Overheads	£167,000				
Prime Cost	£370,000				
Factory Wide Absorption Rate	45.14%	accept	0.45	With £	1 Mark

Cost Centre Information

	Mixing	Baking	Decorating	Cleaning	Total
Labour Hours	1,000	300	3,000	700	5,000
No of Workers	4	2	7	1	14
Value of Machinery	£180,000	£80,000	£20,000	£0	£280,000
Machine Hours	3,000	2,000	1,000	0	6,000
Area (m2)	60	40	35	15	150
Indirect Wages	£13,000	£7,000	£8,000	£4,000	£32,000
Kilowatt Hours (Kw Hours)	4,000	8,000	2,000	2,000	16,000
Direct Materials	£100,000	£75,000	£75,000	£0	£250,000

(b) and (c)

Overhead Analysis Statement

Name of Overhead	Basis of Apportionment	Rate	Total	Mixing	Baking	Decorating	Cleaning
Indirect Wages	Allocated		£32,000	£13,000	£7,000	£8,000	£4,000
Supervision Salaries	No of Employees	2000	28000	8000	4000	14000	2000
Heat and Light	Area	100	15000	6000	4000	3500	1500
Machinery Insurance	Value of Machinery	0.05	14000	9000	4000	1000	0
Factory Power	Kilowatt Hours (Kw Hours)	1.25	20000	5000	10000	2500	2500
Rent	Area (m2)	200	30000	12000	8000	7000	3000
Depreciation of Machinery	Value of Machinery	0.1	28000	18000	8000	2000	0
Total Departmental Overheads			£167,000	£71,000	£45,000	£38,000	£13,000
Service Centre Overheads Re-apportioned							
Cleaning	No of Employees	1000		4000	2000	7000	
Total Production Cost Centre				£75,000	£47,000	£45,000	

(d)
Departmental Recovery Rates

	£25.00	£23.50	£15
	Per Machine Hour	Per Machine Hour	Per Labour Hour

(e)
JOB 227 DATA

	Mixing	Baking	Decorating	Total
Labour Hours	15	5	24	
Machine Hours	12	8	6	
Labour Hour Rate	£16	£16	£20	

JOB COST STATEMENT

Direct Materials	£800	£100	£300	£1,200	1 Mark
Direct Labour	£240	£80	£480	£800	2 Marks
Prime Cost				£2,000	
Overheads	£300	£188	£360	£848	1 Mark
Total Cost				£2,848	
Profit Margin				£712	1 Mark
Selling Price				£3,560	

(f)
Actual Overheads
Machine Hours
Labour Hours

	Mixing	Baking	Decorating
Actual Overheads	£80,000	£50,000	£40,000
Machine Hours	3,100	2,050	2,200
Labour Hours	2,750	2,690	2,800

Overheads Absorbed
Overheads over or under absorbed

Overheads Absorbed	£77,500	£48,175	£42,000	1 Mark
Overheads over or under absorbed	-£2,500	-£1,825	£2,000	
	Under	Under	Over	1 Mark each inc over/ under

State whether overheads are over absorbed or under absorbed

TASK 2 SOLUTION

(a)		
Overheads		167
Prime Cost		370
Factory Wide Absorption Rate		= $(D2/D3)$

(b) and (c)

Overhead Analysis Statement

Name of Overhead	Basis of Apportionment	Rate	Total	Mixing	Baking	Decorating	Cleaning	
Indirect Wages	Allocated		32000	13000	7000	8000	4000	1 Mark
Factory Supervision Salaries	=A10	= $D22/G10$	28000	= $C10*\$C\22	= $D10*\$C\22	= $E10*\$C\22	= $F10*\$C\22	1 Mark
Factory Power	=A15	= $D23/G15$	20000	= $C15*\$C\23	= $D15*\$C\23	= $E15*\$C\23	= $F15*\$C\23	1 Mark
Factory Heat and Light	=A13	= $D24/G13$	15000	= $C13*\$C\24	= $D13*\$C\24	= $E13*\$C\24	= $F13*\$C\24	1 Mark
Depreciation	=A11	= $D25/G11$	28000	= $C11*\$C\25	= $D11*\$C\25	= $E11*\$C\25	= $F11*\$C\25	1 Mark
Factory Rent	=A13	= $D26/G13$	30000	= $C13*\$C\26	= $D13*\$C\26	= $E13*\$C\26	= $F13*\$C\26	1 Mark
Insurance	=A11	= $D27/G11$	14000	= $C11*\$C\27	= $D11*\$C\27	= $E11*\$C\27	= $F11*\$C\27	1 Mark
Total Departmental Overheads			= $SUM(D21:D27)$	= $SUM(E21:E27)$	= $SUM(F21:F27)$	= $SUM(G21:G27)$	= $SUM(H21:H27)$	
Service Centre Overheads Re-apportioned								
Cleaning	=A10	= $D30/(G10-F10)$	=H28	= $C10*\$C\30	= $D10*\$C\30	= $E10*\$C\30		1 Mark
Total Production Cost Centre				= $E28+E30$	= $F28+F30$	= $G28+G30$		

(d) Departmental Recovery Rates

	= $E31/C12$	= $F31/D12^*$	= $G31/E9^{**}$	
Per Machine Hour		Per Machine Hour	Per Labour Hour	1 Mark both* 1 mark**

(e)

JOB 227 DATA

Labour Hours
Machine Hours
Labour Hour Rate

Mixing	Baking	Decorating	Total
15	5	24	
12	8	6	
16	16	20	

JOB COST STATEMENT

Direct Materials	800	100	300	=SUM(E41:G41)
Direct Labour	=E37*E39	=F37*F39	=G37*G39	=SUM(E42:G42)
Prime Cost				=H41+H42
Overheads	=E33*E38	=F33*F38	=G33*G37	=SUM(E44:G44)
Total Cost				=H43+H44
Profit Margin				=H47-H45
Selling Price				=H45/80*100

(f)

Actual Overheads
Machine Hours
Labour Hours

Mixing	Baking	Decorating
80000	50000	40000
3100	2050	2200
2750	2690	2800

Overheads Absorbed
Overheads over or under absorbed
State whether overheads are over absorbed or under absorbed

=E50*E33	=F50*F53	=G51*G33
=E49-E52	=F49-F52	=G52-G49
Under	Under	Over

TASK 3 - SOLUTION

(a)	3-tier Traditional	3-tier Contemporary	3-tier Simplicity	
Selling Price	£480	£432	£350	
Variable Cost per unit	(£120+£80) = £200	(£140+£32) = £172	(£100+£50) = £150	1 Mark per line
Contribution per unit	£280	£260	£200	
Contribution from each Product	(£280 x 400) = £112,000	(£260 x 200) = £52,000	(£200 x 400) = £80,000	1 Mark per line
Total Contribution	£244,000			
Fixed Costs/Overheads (2015)	£167,000			
Expected Profit	£77,000			1 Mark

(b)
80% = 6,000 machine hours 100% = 7,500 machine hours 1 Mark

(c)	£280/8 hours	£260/4 hours	£200/5 hours	
Contribution per machine hour	£35	£65	£40	
Order of priority	3	1	2	1 Mark

Additional 1,500 machine hours or additional 375 units or total of 575 units will be allocated to 3-tier Contemporary 1 Mark

Original Contribution		£244,000	
Additional Contribution	375 units x £260		
	1500 hours x £65	£97,500	
		£341,500	
Less Fixed Costs/Overheads		£167,000	
Total Profit at Full Machine Capacity		£174,500	1 Mark

(d) Option A

	3-tier Traditional	3-tier Contemporary	3-tier Simplicity
Selling Price			£340
Variable Cost per unit			(£70+£50) = £120
Contribution per unit			£220
Contribution from each Product	£112,000 ✓	£52,000 ✓	(£220 × 700) = £154,000 1 Mark
Total Contribution		£318,000	
Less Fixed Costs £167,000+£5,000		£172,000 ✓	
Profit from Option A		£146,000 1 Mark	

Option B

Selling Price	£480		
Variable Cost per unit	(£120+£80) = £200		
Contribution per unit	£280		
Contribution from each Product	(£280 × 300*) = £84,000	£52,000 ✓	£80,000 ✓
	* Reduced output		
Special Order	↑ 2 Marks	£412 (£140+£32) = £172	
		£240 (£240 × 575) £138,000 ✓	1 Mark
Total Contribution		£354,000 ✓	
Less Fixed Costs		£167,000 ✓	
Less Delivery Costs		£1,500 ✓	
Profit from Option B		£185,500 1 Mark	

(d) REPORT

Additional hours at full machine capacity should be used to implement **Option B** as this gives the highest profit.

1 Mark

Benefits of using departmental overhead recovery rates instead of factory wide include:

Each cost centre/department can apply the most relevant overhead absorption rate
Departmental overhead recovery rate lead to a more accurate measurement of overhead costs
Rising costs and inefficiencies are more easily detected when departmental rates are used

2 Marks

(for outlining any 2
benefits of
departmental
overhead recovery
rates)

[END OF MARKING INSTRUCTIONS]