

**PAPER 2**  
**SECTION A**  
**Question 1**

(a)	Proposal A £000	Proposal B £000
	<u>Cost of Capital</u>	
	Ordinary shares	50 <b>1 Mark</b>
	Preference Shares	15
	Debentures	<u>15</u> <b>1 Mark</b>
	<u>90</u>	<u>80</u>
	Weighted Average Cost	8% <b>1 Mark</b>

- (b) Proposal A is lowly geared, Proposal B is highly geared. **1 Mark**  
 Ordinary shareholders have last claim on profit. **1 Mark**. First £30k of appropriated profit in Proposal B will be paid to Preference shareholders and Debenture holders compared to only £15k in Proposal A. **1 Mark**.  
 Proposal B Ordinary shareholders are at greater risk. **1 Mark**  
 Ordinary shareholders may receive no profits in a recession with Proposal B. **1 Mark**.

(c) Option 1

Year	Income £000	Costs £000	Net £000	Factor £000	NPV £000	
0			800	1.000	(800)	
1	420	200	220	0.909	200.0	<b>1 Mark</b>
2	420	210	210	0.826	173.5	<b>1 Mark</b>
3	437	220	217	0.751	163.0	<b>1 Mark</b>
4	454	230	224	0.683	153.0	<b>1 Mark</b>
5	471	240	231	0.621	143.5	<b>1 Mark</b>
5	200	0	200	0.621	<u>124.2</u>	
	<b>(1)</b>	<b>(1)</b>		NPV	<u>157.2</u>	<b>1 Mark</b>

**OF**

**Component marks if alternative method for 3 correct in column**

Option 2

Year	Income £000	Costs £000	Net £000	Factor £000	NPV £000	
0			800	1.000	(800)	
1	368	250	118	0.909	107.3	<b>1 Mark</b>
2	368	260	108	0.826	89.2	<b>1 Mark</b>
3	389	270	119	0.751	89.4	<b>1 Mark</b>
4	410	280	130	0.683	88.8	<b>1 Mark</b>
5	431	290	141	0.621	87.6	<b>1 Mark</b>
5	200	0	200	0.621	<u>124.2</u>	<b>1 Mark</b>
	<b>(1)</b>	<b>(1)</b>		NPV	<u>(213.5)</u>	

**Component marks if alternative method for 3 correct in column**

- (d) Option 2 should not be considered as it does not achieve the IRR. **1 Mark OF**  
 Option 1 returns considerably in excess of the IRR **1 Mark OF**

Option 1 should be recommended. **1 Mark OF**

**Question 2**

(a) Allocation - whole cost items **charged direct to a cost unit or centre.** **1 Mark**

Apportionment - cost items or cost centre costs divided between several other cost centres in a **'fair' proportion based upon the estimated benefit received.** **1 Mark**

(b)

	TOTAL OVERHEAD					
	Machining £	Assembly £	Finishing £	Stores £	Admin £	
Indirect	4 800	4 250	3 800	1 600	5 800	
Rent	8 400	6 000	4 800	2 400	2 400	<b>2 Mark</b>
Plant Ins	4 000	1 200	2 000	800	2 000	<b>2 Mark</b>
Plant Depr	20 000	6 000	10 000	4 000	10 000	<b>2 Mark</b>
Energy	4 800	1 800	2 400	1 200	1 800	<b>2 Mark</b>
Supervision	<u>16 000</u>	<u>24 000</u>	<u>10 000</u>	<u>2 000</u>	<u>8 000</u>	<b>2 Mark</b>
	58 000	43 250	33 000	12 000	30 000	

(c) Re-allocation:

Stores	5 000	4 000	3 000	<b>1 Mark OF</b>
Admin	<u>12 000</u>	<u>9 000</u>	<u>9 000</u>	<b>1 Mark OF</b>
	75 000	56 250	45 000	

Divided By:

Machine Hrs	7 500		<b>1 Mark</b>
Labour Hrs		22 500	<b>1 Mark</b>

Equals	£10 per hour	£2.5 per hour	£5 per hour	<b>2 Marks OF</b>
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(d)

		<u>Quotation For Job 638</u>			
			£	£	
Raw Material	50 metres of tube @ £8		400		
	20 metres of tube @ £6.50		<u>130</u>		
				530	<b>2 Marks</b>
Direct Labour	Machining 20 hrs @ £8		160 <b>(1)</b>		
	Assembly 25 hrs @ £6		150 <b>(1)</b>		
	Finishing 15 hrs @ £7		<u>105</u>		
				415	<b>2 Mark</b>
Overheads	Machining 10 hrs @ £10		100 <b>OF</b>		
	Assembly 25 hrs @ £2.5		62.5 <b>OF</b>		

	Finishing 15 hrs @ £5	<u>75</u> <b>OF</b>		237.5 <b>1 Mark OF</b>
				1 182.5
<b>OF</b>	20% Mark Up			236.5_ <b>1 Mark</b>
<b>OF</b>	Total Price			<u>1 419</u> <b>1 Mark</b>

**Question 3**

Cash Budget for the six months ended 30 September 2 002 **1 Mark**

	April	May	June	July	Aug	Sept	
	£	£	£	£	£	£	
<u>Receipts</u>							
Capital		5 000					<b>1 Mark</b>
Sales	<u>9 000</u>	<u>12 000</u>	<u>15 000</u>	<u>24 000</u>	<u>30 000</u>	<u>12 000</u>	<b>4 Marks</b>
	14 000	12 000	15 000	24 000	30 000	12 000	
<u>Payments</u>							
Purchases	6 000	4 000	5 000	8 000	10 000	1 000	<b>1 Mark</b>
Staff wages	700	700	1 400	2 100	2 100	1 400	<b>1 Mark</b>
Shop Rental	5 000			5 000			<b>1 Mark</b>
Equipment	8 000						<b>1 Mark</b>
Services		900	900	900	900	900	<b>1 Mark</b>
Drawings	<u>1 000</u>	<u>1 000</u>	<u>2 000</u>	<u>2 000</u>	<u>5 000</u>	<u>5 000</u>	<b>2 Mark</b>
	20 700	6 600	9 300	18 000	18 000	8 300	
<b>OF</b>	Closing Balance	(6 700)	(1 300)	4 400	10 400	22 400	26 100 <b>1 Mark</b>

(b)

Trading, Profit and Loss Account for the six months ended 30 September 2002

	£	£	
Sales		102 000	<b>1 Mark</b>
Less			
Cost of Sales		<u>34 000</u>	
Gross Profit		68 000	<b>1 Mark</b>
Less			
Staff Wages	8 400		<b>1 Mark</b>
Shop Rental	10 000		<b>1 Mark</b>
Equipment depreciation	1 600		<b>1 Mark</b>
Services and administration	<u>5 400</u>		<b>1 Mark</b>
		<u>25 400</u>	
Net Profit		<u>42 600</u>	

(c)

i) Working capital - current assets - current liabilities **1 Mark**

capital to facilitate day to day operations **1 Mark**

ii) Profit is an important source of funds **1 Mark**

Working capital can be increased/ decreased by movement in the level of creditors,

debtors and stock. **1 Mark**

Capital purchases or repayments can significantly change the levels of working capital. **1 Mark**

**SECTION B**

**Question 4**

(a)

Variable costs - costs which rise as the volume of activity increases. **Up to 2 Marks**

Fixed costs - costs which remain constant regardless of the volume of activity. **Up to 2 Marks**

Material/labour not variable - e.g. labour machine set up costs **1 Mark**

Overheads not fixed - e.g. any semi fixed cost - supervision, telephone **1 Mark**

(b)

	Variable £	Fixed £	
Materials	7 per unit <b>(1)</b>	5 000 <b>(1)</b>	<b>2 Marks</b>
Labour	8 per unit <b>(1)</b>	15 000 <b>(1)</b>	<b>2 Marks</b>
Overheads	<u>10 per unit <b>(1)</b></u>	<u>21 000 <b>(1)</b></u>	<b>2 Marks</b>
Total	<u>25 per unit</u>	<u>41 000</u>	

$$\frac{\text{Fixed Cost (1)}}{\text{Contribution}} = \frac{\text{£41 000 (1) OF}}{\text{£30 - £25 (1) OF}} = 8\,200 \text{ units } \mathbf{3 \text{ Marks OF}}$$

**Question 5**

(a)

Attributes - continuous or repetitive - MASS PRODUCTION.  
costs charged to process  
costs averaged over units

**Up to 2 Marks per attribute X 2**

(b)

		EQUIVALENT UNITS			
Inputs	Ltrs	Ltrs	Mat	Lab	Over
	10 000	Completed	8 500	8 500	8 500 <b>(1)</b>
		Normal Loss	800	0	0
		Abn'l Loss	200	200	200 <b>(1)</b>
		Closing Stock	<u>500</u>	<u>500</u>	<u>400</u> <b>(1)</b>
	10 000		<u>10 000</u>	<u>9 200</u>	<u>9 100</u> <b>(1)</b>
		COST	£	£	£

Inputs	18 400	9 100	18 000	<b>(1)</b>
Cost Per Equiv Unit	2	1	2	<b>5 Marks</b>
EVALUATION	£	£	£	
Completed	17 000	8 500	17 000	<b>3 Marks OF</b>
Normal Loss	0	0	0	
Abn'l Loss	400	200	400	
Closing Stock	<u>1 000</u>	<u>400</u>	<u>600</u>	<b>3 Mark OF</b>
	<u>18 400</u>	<u>9 100</u>	<u>18 000</u>	

## Question 6

(a)

Productivity - Relationship between inputs and outputs. **1 Mark**

Judgement related to a benchmark yardstick e.g previous production

level/costs to establish variations in productivity level. **Up to 2**

**Marks**

Value for money - 'Value' is less objective than clear production inputs. **1 Mark**

Often subjective as to criteria used to establish judgement

**Up to 2 Marks**

(b) Original cost per item.  $8 \text{ staff} \times 8 \text{ hours} \times \text{£}5 = \frac{\text{£}320}{160 \text{ units}} = \text{£}2 \text{ per unit}$  **1 Mark**

i)  $6 \text{ staff} \times 8 \text{ hours} \times \text{£}5 = \frac{\text{£}240}{100 \text{ units}} = \text{£}2.40 \text{ per unit}$  **1 Mark**

Reduced productivity **1 Mark OF**

ii)  $10 \text{ staff} \times 8 \text{ hours} \times \text{£}5 = \frac{\text{£}400}{220 \text{ units}} = \text{£}1.82 \text{ per unit}$  **1 Mark**

Increased productivity **1 Mark OF**

iii)  $(100 \times \text{£}2.5) + (100 \times \text{£}2.0) = \frac{\text{£}450}{200 \text{ units}} = \text{£}2.25 \text{ per unit}$  **1 Mark**

Reduced productivity **1 Mark OF**

iv)  $(8 \text{ staff} \times 8 \text{ hours} \times \text{£}5) + (200 \times \text{£}0.1) = \frac{\text{£}340}{200} = \text{£}1.70 \text{ per unit}$  **1 Mark**

Increased productivity **1 Mark OF**

## SECTION C

### Question 7

(a) Recognises the difference in behaviour between fixed and variable costs. Designed to change with such variations.

Often used retrospectively at end of a period to compare actual results achieved with

what results should have been under the circumstances.

To operate behaviour pattern of all costs must be identified.

**Up to 2 Marks per point.**

- (b) Used in budgetary control.  
Factor which limits the activity of an entity.  
Examples e.g raw materials, skilled labour, sales.  
Factor requires maximisation by achieving greatest contribution per unit of the factor.

**Up to 2 Marks per point.**

- (c) Used in standard costing  
Perfect operating conditions.  
Pinpoints areas of potential large savings.  
Often poor motivational implications.  
Alternative to attainable or current standards.

**Up to 2 Marks per point**

- (d) Used in standard costing  
Standard cost is an average cost.  
Actual results will probably differ from average.  
Only exceptions outside tolerance range reported.

**Up to 2 Marks per point**

### Question 8

<u>Marginal costing</u>	<u>Absorption costing</u>
1.Variable costs are charged to units allotted	1.Variable and fixed costs to cost units total overheads are absorbed according to activity.
2.,Fixed costs attributable to periods of time and not to units.	2.Overheads not attributable to Period of time but to units.
3.Fixed costs written off in full against period of time.	3.Overheads can be carried forward to the next period in the value of each unit.

**2 Mark for each section above      MAX 9**

- (b) If the company operated marginal costing all finished goods would contain only variable costs **1 Mark** and therefore all fixed costs would be attributable to the period.

**1 Mark.** If absorption costing had been used, the closing stock would have all fixed costs absorbed into the unit value **1 Mark**. As stock levels have risen, a proportion of the fixed costs of the current period would be carried forward **1 Mark** to the next accounting period and therefore the profit of the current accounting period would be greater. **2 Mark      MAX 5**

- (c) Make or buy decisions.  
Special or additional orders.  
Maximising income from limiting factors.  
Contribution from products or activities.

**Up to 2 Marks per item      MAX 6**