

Question 9 Flexible Budgeting

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(a) (i)

Production overheads	Units	Total Cost
		€
High	47,500	217,000
Low	<u>27,500</u>	<u>129,000</u>
Difference	<u>20,000</u>	<u>88,000</u>

The variable cost of 20,000 units is 88,000 therefore the variable cost per unit is €4.40 [7]

Total production overhead cost	129,000	217,000
Less variable costs [units × €4.40]	<u>(121,000)</u>	<u>(209,000)</u>
Fixed cost	8,000	8,000[7]

(ii)

Other overheads	Units	Total Cost
		€
High	47,500	255,875
Low	<u>27,500</u>	<u>150,875</u>
Difference	<u>20,000</u>	<u>105,000</u>

The variable cost of 20,000 units is 105,000 therefore the variable cost per unit is €5.25 [7]

Total production overhead cost	150,875	255,875
Less variable costs [units × €5.25]	<u>(144,375)</u>	<u>(249,375)</u>
Fixed cost	6,500	6,500[7]

(iii)

<b>Flexible Budget 90 % Activity Level in Marginal Costing format</b>		
	€	€
Sales		<b>[1]1,295,312.50</b>
Less: variable costs		
Direct materials [45,000 × 5.50]	<b>[1]247,500</b>	
Direct labour [45,000 × 6.70]	<b>[1]301,500</b>	
Production overheads [45,000 × 4.4]	<b>[1]198,000</b>	
Other overhead costs [45,000 × 5.25]	<b>[1]236,250</b>	<u>(983,250)</u>
Contribution		<b>[3]312,062.5</b>
Less: fixed costs		
Production overheads	<b>[2]8,000</b>	
Other overheads	<b>[2]6,500</b>	
Administration	<b>[2]38,500</b>	<u>(53,000)</u>
Profit		<u><b>259,062.50 [2]</b></u>

(b)

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Option 1

<b>Flexible Budget 100 % Activity Level in Marginal Costing format</b>		
Option 1	€	€
Sales		[1]1,394,375
Less: variable costs		
Direct materials [50,000 × 5.50]	[1]275,000	
Direct labour [50,000 × 6.70]	[1]335,000	
Production overheads [50,000 × 3]	[1] 150,000	
Other overhead costs [50,000 × 5.25]	[1] 262,500	<u>(1,022,500)</u>
Contribution		[3] 371,875
Less: fixed costs		
Production overheads	[1] 48,000	
Other overheads	[1] 6,500	
Administration	[1] <u>38,500</u>	<u>(93,000)</u>
Profit		[1] <u>278,875</u>

Option 2

<b>Flexible Budget 115 % Activity Level in Marginal Costing format</b>		
	€	€
Sales		[1] 1,633,406.25
Less: variable costs		
Direct materials [57,500× 5.50]	[1] 316,250	
Direct labour [57,500 × 6.70]	[1] 385,250	
Production overheads [57,500 × 4.4]	[1] 253,000	
Other overhead costs [57,500 × 5.25]	[1] 301,875	<u>(1,256,375)</u>
Contribution		[3] 377,031.25
Less: fixed costs		
Production overheads	[1] 7,600	
Other overheads	[1] 6,175	
Administration	[1] <u>36,575</u>	<u>(50,350)</u>
Profit		[1] <u>326,681.25</u>

Choose option 2 because the profit is €47,806.25 higher than in option 1. [2]

(c)

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(i) What is meant by the term sensitivity analysis.

Sensitivity Analysis is also known as 'what if' analysis. It is a technique used by management accountants to show the effect on profit brought about by changes in the following:

1. Selling price
2. Sales volume
3. Variable costs
4. Fixed costs

The examples in part (b) of the question are examples of sensitivity analysis.

(ii) Outline why Henry Ltd would prepare a flexible budget.

1. To show management the cost levels at different levels of production. It is misleading to compare the budgeted costs at one level of activity with the actual costs at a different level of activity.
2. To compare actual costs and budgeted costs at the same level of activity, in order to determine if actual costs exceeded or were less than budgeted costs.
3. To compare budgeted costs and actual costs in order to identify variances. This allows corrective action to be taken.
4. To help in controlling costs or planning production levels.