

Q.9 Flexible Budgeting

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(a) (i)

Production overheads	Units	Total Cost
	€	€
High	36,000	186,600
Low	<u>24,000</u>	<u>134,400</u>
Difference	<u>12,000</u>	<u>52,200</u>

The variable cost of 12,000 units is 52,200 therefore the variable cost per unit is €4.35 [7]

Total production overhead cost	132,400	158,500	184,600
Less variable costs [units × €4.35]	<u>(104,400)</u>	<u>(130,500)</u>	<u>(156,600)</u>
Therefore, fixed cost	28,000	28,000	28,000 [7]

(ii)

Other overheads	Units	Total Cost
	€	€
High	36,000	250,800
Low	<u>24,000</u>	<u>169,200</u>
Difference	<u>12,000</u>	<u>81,600</u>

The variable cost of 12,000 units is 81,600 therefore the variable cost per unit is €6.80 [7]

Total production overhead cost	169,200	210,000	250,800
Less variable costs [units × €6.80]	<u>(163,200)</u>	<u>(204,000)</u>	<u>(244,800)</u>
Therefore, fixed cost	6,000	6,000	6,000 [7]

(iii)

Flexible Budget 95 % Activity Level in Marginal Costing format		
	€	€
Sales		1,083,500 [2]
Less: variable costs		
Direct materials [38,000 × 4.50]	171,000 [1]	
Direct labour [38,000 × 5.20]	197,600 [1]	
Production overheads [38,000 × 4.35]	165,300 [1]	
Other overhead costs [38,000 × 6.80]	<u>258,400 [1]</u>	<u>(792,300)</u>
Contribution		291,200 [2]
Less: fixed costs		
Production overheads	28,000 [1]	
Other overheads	6,000 [1]	
Administration	<u>40,500 [1]</u>	<u>(74,500)</u>
Profit		<u>216,700 [4]</u>

(b) (i)

Option 1		
Flexible Budget in Marginal Costing format	€	€
Sales		1,105,625 [2]
Less: variable costs		
Direct materials [40,000 × 4.50]	180,000 [1]	
Direct labour [40,000 × 5.20]	208,000 [1]	
Production overheads [40,000 × 3.75]	150,000 [1]	
Other overhead costs [40,000 × 6.80]	<u>272,000 [1]</u>	<u>(810,000)</u>
Contribution		295,625 [2]
Less: fixed costs		
Production overheads	28,000 [1]	
Other overheads	6,000 [1]	
Administration	<u>40,500 [1]</u>	<u>(74,500)</u>
Profit		<u><u>221,125 [4]</u></u>

Option 2		
Flexible Budget in Marginal Costing format	44,000 units	
	€	€
Sales		1,232,425 [2]
Less: variable costs		
Direct materials [44,000 × 4.50]	198,000 [1]	
Direct labour [44,000 × 5.20]	228,800 [1]	
Production overheads [44,000 × 4.35]	191,400 [1]	
Other overhead costs [44,000 × 6.80]	<u>299,200 [1]</u>	<u>(917,400)</u>
Contribution		315,025 [2]
Less: fixed costs		
Production overheads	25,760 [1]	
Other overheads	5,520 [1]	
Administration	<u>37,260 [1]</u>	<u>(68,540)</u>
Profit		<u>246,485 [4]</u>

(ii)

Option 2 should be chosen [2]