Question 8 **30**

(a) Stock Valuation

Purchases in Units	Unit Cost	Purchases at cost in €
4,500	€5	22,500
3,600	€8	28,800
2,600	€7	18,200
10,700		69,500

Credit Sales				Cash Sales				Total Sales	
Units			€	Units			€	Units	€
1,100	@	€10	11,000	1,700	@	10	17,000	2,800	28,000
1,400	@	€11	15,400	1,200	@	11	13,200	2,600	28,600
1,600	@	€12	19,200	1,350	@	11	14,850	2,950	34,050
4,100			**45,600**	4,250			**45,050**	8,350	**90,650**

Closing Stock in Units
= Opening Stock 4,700 + Purchases 10,700 – Sales 8,350 = 7,050 units **[6]**

Closing Stock Valuation: (FIFO)	Units				€
	2,600	@	€7	=	18,200 **[2]**
	3,600	@	€8	=	28,800 **[2]**
	850	@	€5	=	4,250 **[3]**
	7,050				**51,250 [3]**

Trading account for the year ending 31/12/2020			€
Sales			90,650**[3]**
Less Cost of sales			
Opening Stock	23,500	**[3]**	
Add Purchases	69,500	**[3]**	
	93,000		
Less Closing Stock	51,250	**[3]**	(41,750)
Gross Profit		**[2]**	48,900

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(b) (i) Overhead absorption rates for each department.

	Manufacturing	**Assembly**	**Finishing**
Budgeted Overheads	€840,000	€389,400	€187,000
Direct Labour Hours	42,000	22,000	8,500
	€20.00 per DLH [2]	**€17.70 per DLH [2]**	**€22.00 per DLH [2]**

(ii) **Selling Price of Job Number 667**

		€		€	
Direct materials	(45 x 12.20)			549.00	**[2]**
Direct Labour					
Manufacturing	(24 x 19.00)	456.00	**[2]**		
Assembly	(8 x 16.00)	128.00	**[2]**		
Finishing	(2 x 18.50)	37.00	**[2]**	621.00	
Budgeted Overheads					
Manufacturing	(24 x 20.00)	480.00	**[3]**		
Assembly	(8 x 17.70)	141.60	**[3]**		
Finishing	(2 x 22.00)	44.00	**[3]**	665.60	
General Administration overhead	(34 x €6.00)			204.00	**[6]**
Total Cost Job 667	[80%]			2,039.60	**[3]**
Profit: [20% of Selling Price]				509.90	
Net Selling Price [100%]				2,549.50	**[2]**

(c) (i) **Under and over absorption of costs**

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	Dept A	**Dept B**	**Dept C**
	€234,000	€64,800	€88,400
	36,000	54,000	26,000

= **€ 6.50 per M.H [2] = €1.20 per L.H [2] = €3.40 per LH [2]**

(ii)

	Dept A		**Dept B**		**Dept C**		**Total**
	€		**€**		**€**		**€**
Actual overhead incurred	262,500	**[1]**	59,200	**[1]**	98,200	**[1]**	419,900
Absorbed overhead	253,500	**[1]**	60,000	**[1]**	96,560	**[1]**	410,060
Over/(Under) absorption	(9,000)		800		(1,640)		(9,840)

Actual Absorbed Overheads

Dept A: Actual machine hours x mac hr rate	= 39,000 x	€6.50	=	€253,500
Dept B: Actual labour hours x lab hr rate	= 50,000 x	€1.20	=	€60,000
Dept C: Actual labour hours x lab hr rate	= 28,400 x	€3.40	=	€96,560

[4]

1. In department A, the costs incurred were €9,000 more than expected/budgeted and therefore, profits are €9,000 less than expected.

2. In department B, the costs incurred were €800 less than expected/budgeted and therefore, profits are €800 greater than expected.

3. In department C, the costs incurred were €1,640 more than expected/budgeted and therefore, profits are €1,640, less than expected.

4. Overall, the costs incurred were €9,840 more than expected/budgeted and therefore, profits are €9,840 less than expected.

   Conroy Manufacturing Ltd have costed their products too low.

Question 9 Flexible Budgeting

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(a) (i)

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

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]	(121,000)	(209,000)
Fixed cost	8,000	8,000**[7]**

(ii)

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

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	(144,375)	(249,375)
Fixed cost	6,500	6,500**[7]**

(iii)

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

(b)

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Option 1

Flexible Budget 100 % Activity Level in Marginal Costing format		
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	(1,022,500)
Contribution		**[3]** 371,875
Less: fixed costs		
Production overheads	**[1]** 48,000	
Other overheads	**[1]** 6,500	
Administration	**[1]** 38,500	(93,000)
Profit		**[1]** 278,875

Option 2

Flexible Budget 115 % Activity Level in Marginal Costing format		
	€	€
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	(1,256,375)
Contribution		**[3]** 377,031.25
Less: fixed costs		
Production overheads	**[1]** 7,600	
Other overheads	**[1]** 6,175	
Administration	**[1]** 36,575	(50,350)
Profit		**[1]** 326,681.25

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.