Question 8

(a)

58

		€	€	€ per unit
Sales	(16,000 units)		480,000	30.00
Less Variable Costs				
Direct materials		120,000		
Direct wages		110,000		
Factory overhead		20,000		
Administration overhead		40,000	(290,000)	(18.125)
Contribution			190,000	11.875
Less Fixed Costs				
Factory overhead		40,000		
Administration overhead		65,000	(105,000)	
Net Profit			85,000	

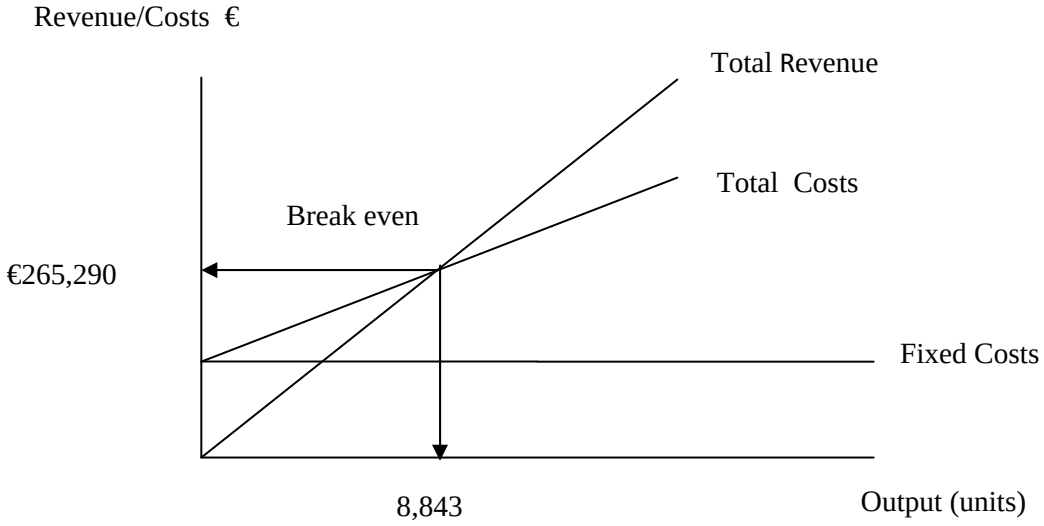
(i)

Break even point Fixed Costs / CPU = 105,000 **[3]** / 11.875 **[4]** = **[3] 8,843 units**

Margin of safety Sales – Break even point

[2] 16,000 – 8,843 **[2]** = **[2] 7,157 units**

(ii) Break even chart [8]



(iii) Profit from reduced selling price

		€
Sales	(19,000 x 28.50)	541,500 **[3]**
Less Variable costs	(19,000 x 18.125)	(344,375) **[3]**
Contribution		197,125
Less Fixed costs	(105,000 + 5,000)	(110,000) **[3]**
Profit		87,125 **[1]**

(iv) **Fixed Costs** / **Contribution – 20% of S.P.** = **[2]** 105,000 / **[4]** 7.875 – 5.2 **[4]** = **[2] 39,253 units**

(v) The profit they would make from Selling Price of €34

Sales	(17,000 x 34)	578,000 **[2]**
Less Variable costs	(17,000 x 18.125 + 1.70 +1)	(354,025) **[6]**
Contribution		223,975
Less Fixed Costs		(105,000) **[2]**
Profit		118,975 **[2]**

(b) **22**

(i)

Absorption Costing

Sales	(9,000 x 4)		36,000 **[1]**
Less production Cost (10,000 units)			
Direct Materials	(10,000 x €0.60)	6,000 **[1]**	
Direct Labour	(10,000 x €0.50)	5,000 **[1]**	
Variable Overhead	(10,000 x €0.40)	4,000 **[1]**	
Fixed Overhead		4,000 **[1]**	
		19,000	
Less Closing Stock (1/10 x 19,000)		(1,900) **[1]**	(17,100)
Profit			**18,900**

Marginal Costing

Sales	(9,000 x 4)		36,000 **[1]**
Less Production Cost (10,000 units)			
Direct Materials	(10,000 x 0.60)	6,000 **[1]**	
Direct Labour	(10,000 x 0.50)	5,000 **[1]**	
Variable Overhead	(10,000 x 0.40)	4,000 **[1]**	
		15,000	
Less Closing Stock (1/10 x 15,000)		(1,500) **[1]**	(13,500)
Contribution **[1]**			22,500
Less Fixed overheads			(4,000) **[1]**
Profit			**18,500**

(ii)

[6]

There is a difference in the profit figures because closing stock is valued differently.
Closing stock under marginal costing is valued lower than under absorption costing.
When costing a product, marginal costing does not include fixed costs whereas in absorption costing the fixed costs are included. Therefore a share of fixed costs is included in the value of stock under absorption costing and not included under marginal costing.
Under absorption costing, closing stock is valued at a 1/10 of the production cost of €19,000
Under marginal costing, closing stock is valued at a 1/10 of the variable cost of €15,000

Closing Stock – Absorption Costing	1,900	
Closing Stock – Marginal Costing	(1,500)	
Difference		400

The profit difference is 18,900 – 18,500 = **400**

[3]

Absorption costing should be used as it agrees with standard accounting practice and concepts and also matches costs with revenues.