

Question 8

80

(a)

Overhead		Basis	Total	Prod 1		Prod 2		Service A		Service B	
Indirect materials		Given	380,000	245,000		135,000					
Indirect labour		Given	400,000	280,000		120,000					
Machine maintenance	[1]	Machine hours	12,000	7,200	[1]	4,800	[1]				
Dep. – buildings	[1]	Book value	30,000	15,000	[1]	7,500	[1]	5,000	[1]	2,500	[1]
Factory L & H	[1]	Volume	18,000	9,000	[1]	4,500	[1]	3,000	[1]	1,500	[1]
Factory cleaning	[1]	Floor area	8,000	3,200	[1]	2,400	[1]	1,600	[1]	800	[1]
Canteen	[1]	No. of employees	<u>5,600</u>	<u>3,200</u>	[1]	<u>1,600</u>	[1]	<u>800</u>	[1]	<u>-----</u>	
			<u>853,600</u>	<u>562,600</u>	[1]	<u>275,800</u>	[1]	<u>10,400</u>	[1]	<u>4,800</u>	[1]

(b)

	Production 1		Production 2		Service A	Service B
Overhead costs	562,600		275,800		10,400	4,800
Apportion Service A [70%/30%]	7,280	[2]	3,120	[2]	(10,400)	
Apportion Service B [60%/40%]	<u>2,880</u>	[2]	<u>1,920</u>	[2]		(4,800)
	<u>572,760</u>		<u>280,840</u>			

(c)

Overhead Rate Production 1 - (Machine Hours)

$$\frac{572,760}{30,000 \text{ hours}} = \text{€}19.09 \text{ per machine hour [6]}$$

Overhead Rate Production 2 - (Labour Hours)

$$\frac{280,840}{45,000 \text{ hours}} = \text{€}6.24 \text{ per labour hour [6]}$$

(d)

Selling price of Job 650	€	
Direct materials (7,500 + 2,800)	10,300.00	[4]
Direct labour (4,000 + 3,900)	<u>7,900.00</u>	[4]
Prime cost	18,200.00	
Overheads		
Production 1 (120 machine hours × €19.09)	2,290.80	[4]
Production 2 (100 labour hours × €6.24)	<u>624.00</u>	[4]
Cost of Job 650	21,114.80	
Margin of 20%	<u>5,278.70</u>	[2]
Selling price of Job 650	<u>26,393.50</u>	[6]

(e) [10]

(i) **Re apportionment of costs**

This is the term used where service department costs are reapportioned/divided between production departments because overheads can only be recovered by being included in the cost of production.

(ii)

Absorption rates

Per labour hour

Per machine hour

Per unit

Percentage of prime cost

Overhead absorption rates are based on budgeted rather than actual costs because actual costs may not be known until the end of the year and the business cannot wait until then to decide the cost of the product as they need to decide on the selling price to charge for tendering purposes.