## Question 8 - Solution

(a)

## (i) <br> 

|  |  |  | Production |  | Service |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Overhead | Basis | Total | Dept 1 | Dept 2 | Dept A | Dept B |
| Dep of Equipment | Book value [1] | 16,000 | 6,000[1] | 4,000[1] | 2,000[1] | 4,000[1] |
| Dep of Factory | Floor area [1] | 20,000 | 6,000[1] | 8,000[1] | 4,000[1] | 2,000[1] |
| Factory heating | Volume [1] | 9,600 | 2,400[1] | 4,800[1] | 1,600[1] | 800[1] |
| Factory cleaning | Floor area [1] | 2,000 | 600[1] | 800[1] | 400[1] | 200[1] |
| Canteen | No. employees[1] | 10,800 | 3,600[1] | 3,600[1] | 1,800[1] | 1,800[1] |
|  |  | 58,400 | 18,600[1] | 21,200[1] | 9,800[1] | 8,800[1] |

(ii)


|  | Production |  |  | Service |
| :--- | :--- | :--- | ---: | ---: |
|  | Dept 1 | Dept 2 | Dept A | Dept B |
| Total Cost | 18,600 | 21,200 | 9,800 | 8,800 |
| Apportion Dept A to Production | $7,350[2]$ | $2,450[2]$ | $(9,800)$ | $(8,800)$ |
| Apportion Dept B to Production | $6,600[2]$ | $2,200[2]$ |  | $(8,85$ |

(iii)


## Machine hour absorption rate

Dept 1
$\frac{32,550}{3,000}=€ 10.85$ per machine hour [4]
Dept 2
$\underline{25,850}=$ €25.85 per machine hour [4] 1,000
(iv) 2

## Re-apportionment:

This is the term used where Service Department costs are re-apportioned between production departments because overheads can only be recovered by being included as part of the cost of production.
(v)


## Over-absorption:

Over-absorption is when costs are over recovered - budgeted costs are greater than actual costs. The cost of fuel/power reduced
(b)
${ }^{6} 15$

| Purchases in units |  | Cost | Purchases at cost |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 3,200 |  | @ € 5 | 16,000 |  |  |
| 2,100 |  | @ €7 | 14,700 |  |  |
| 2,000 |  | @ €8 | 16,000 |  |  |
| 1,400 |  | @ €9 | 12,600 |  |  |
| 8,700 Total |  |  | €59,300 |  |  |
| Credit Sales | Credit Sales | Cash Sales | Cash Sales | Total Sales | Total sales |
| Units | € | Units | € | Units | € |
| 800 @ 10 | 8,000 | 1,000 @ 11 | 11,000 | 1,800 | 19,000 |
| 1,000 @ 11 | 11,000 | 1,200@ 10 | 12,000 | 2,200 | 23,000 |
| 1,200 @ 11 | 13,200 | 1,200@ 12 | 14,400 | 2,400 | 27,600 |
| 1,100 @ 13 | 14,300 | 1,000 @ 13 | 13,000 | 2,100 | $\underline{27.300}$ |
| 4,100 | 46,500 | 4,400 | 50,400 | 8,500 | 96,900 |

Closing Stock in Units $=$ Opening Stock 3,500 + Purchases 8,700 - Sales 8,500 $=\mathbf{3 , 7 0 0}$ units [5]

| Closing Stock in € | $1,400 @ € 9$ | $=$ | $12,600[2]$ |
| :--- | :--- | :--- | :--- |
| $2,000 @ € 8$ | $=$ | $16,000[2]$ |  |
|  | $\underline{300 @ € 7}$ | $=$ | $\underline{2,100}[2]$ |
|  | $\underline{\underline{3,700}}$ |  | $\underline{0,700}[4]$ |

(ii)


## Trading account for the year ending 31/12/2006

|  | $€$ | $€$ |
| :--- | :---: | :---: |
| Sales |  | $96,900[3]$ |
| Less cost of Sales |  |  |
| $\quad$ Opening Stock | $17,500[2]$ |  |
| $\quad$ Purchases | $\underline{59,300}[3]$ |  |
| $\quad$ Closing Stock | $\underline{30,700}[2]$ | $\underline{(46,100)}$ |
| Gross Profit |  | $\underline{50,800}[4]$ |

