**Question 14**

Wylie Ltd has four departments for which the following **estimates** have been made for June:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Dept 1** | **Dept 2** | **Dept 3** | **Dept 4** |
| Overheads Apportioned | £20,000 | £33,200 | £10,000 | £8,000 |
| Machine Hours | 40,000 | 5,000 | 1,000 | – |
| Labour Hours | 3,000 | 7,000 | 10,000 | 5,000 |
| Materials | £30,000 | £18,000 | £2,000 | – |

(a) **Re-apportion** the overheads of Department 4 to the other Departments, on the basis of labour hours. **3**

(b) **Calculate** the overhead recovery rate for each Department as follows:

Dept 1 — Machine Hours

Dept 2 — Percentage Material Costs

Dept 3 — Labour Hours **3**

At the end of June, the **actual** figures for each Department were as follows:

Dept 1 — 38,000 Machine Hours

Dept 2 — £20,000 Material Cost

Dept 3 — 12,000 Labour Hours

(c) **Calculate** for each Department the amount of overheads over-absorbed or   
under-absorbed, clearly indicating which. **6**

During June, the firm was asked to quote a price for a job (No 456) with the following data:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Dept 1** | **Dept 2** | **Dept 3** |  |
| Materials | £40 | £20 | £2 |  |
| Labour Hours | 3 | 6 | 5 |  |
| Labour Rate per hour | £8 | £7 | £6 |  |
| Machine Hours | 100 | 4 | 1 |  |
| Overheads | ? | ? | ? |  |

(d) **Calculate** the cost of Job 456 and the selling price, if Wylie has a profit margin of 20%

of the selling price. **6**

**Total marks (18)**

**Question 14 — solution**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **Dept 1** |  | **Dept 2** |  | **Dept 3** |  |  |
|  |  | **£** |  | **£** |  | **£** |  |  |
| (a) | Share of Dept 4 1,200 | | **(1)** | 2,800 | **(1)** | 4,000 | **(1)** | **3** |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| (b) | Recovery Rates | 21,200 |  | 36,000 | x | 100 14,000 |  |  |
|  |  | 40,000 |  | 18,000 |  | 10,000 |  |  |
|  |  |  |  |  |  |  |  |  |
|  | = | £0·53 | **(1)** | 200% | **(1)** | £1·40 | **(1)** | **3** |
|  |  |  |  |  |  |  |  |  |
| (c) | Over/under Absorption | **Dept 1** |  | **Dept 2** |  | **Dept 3** |  |  |
|  | Overhead Absorbed | = 53p x 38,000 | **(1)** | = 200% x 20,000 | **(1)** | = 12,000 x 1·40 | **(1)** |  |
|  |  | = 20,140 |  | = 40,000 |  | = 16,800 |  |  |
|  | Less Apportioned | = 21,200 |  | = 36,000 |  | = 14,000 |  |  |
|  |  | 1,060 under  **(1)** |  | 4,000 over  **(1)** |  | 2,800 over  **(1)** |  |  |
|  |  |  |  |  |  |  |  | **6** |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| (d) | **Job No 456** |  |  | |  |  |  |  |  |  |  |
|  |  | **Dept 1** |  | | **Dept 2** |  | **Dept 3** |  | **Totals** |  |  |
|  |  | **£** |  | | **£** |  | **£** |  | **£** |  |  |
|  | Material | 40 |  | | 20 |  | 2 |  | 62 | **(1)** |  |
|  | Labour | 24 |  | | 42 |  | 30 |  | 96 | **(1)** |  |
|  | Overheads | 53 | **(1)** | | 40 | **(1)** | 7 | **(1)** | 100 |  |  |
|  | Total Cost |  |  | |  |  |  |  | 258 |  |  |
|  | Profit Margin | (20% of selling price) | | | |  |  |  | 64·50 |  |  |
|  | Selling Price |  |  |  | |  |  |  | 322·50 | **(1)** | **6** |

**Total marks (18)**