(a) Prepare a Production Budget (in units).

| Production Budget | Basic | Superior |
| :---: | :---: | :---: |
| Budgeted Sales (in units) | 12,800 (3) | 7,300 (3) |
| Add Closing Stock (70\% of Opening Stock) | 490 (3) | 315 (3) |
|  | 13,290 | 7,615 |
| Less Opening Stock | (700)(2) | (450)(2) |
| Budgeted Production (in units) | 12,590 | 7,165 |

(b) Prepare a Raw Materials Purchases Budget (in units and $€$ ).

| Raw Materials Purchases Budget | Mat. A |  | Mat. B |
| :---: | :---: | :---: | :---: |
| Required for Production: |  |  |  |
| Basic $\quad\left[{ }^{\bullet} 12,590 \times 5 \mathrm{kgs}\right]$ | 62,950 (2) | [ $\left.{ }^{\bullet} 12,590 \times 4 \mathrm{kgs}\right]$ | 50,360 (2) |
| Superior $\quad\left[{ }^{\circ} 7,165 \times 3 \mathrm{kgs}\right]$ | 21,495 (2) | [ $\left.{ }^{\bullet} 7,165 \times 7 \mathrm{kgs}\right]$ | 50,155 (2) |
|  | 84,445 |  | 100,515 |
| $\underline{\text { Add }}$ Closing Stock ( $70 \%$ of Opening Stock) | 5,600 (2) |  | 4,200 (2) |
|  | 90,045 |  | 104,715 |
| Less Opening Stock | $(8,000)(2)$ |  | $(6,000)(2)$ |
| Required Purchases of Raw Materials (in kgs) | 82,045 |  | 98,715 |
| Purchase Price | $€ 3.00$ (2) |  | $€ 6.00$ (2) |
| Purchases (in $€$ ) | €246,135 |  | €592,290 |

- Allow full marks for student's own figure if consistent with previous work.
(c) Prepare a Production Cost/Manufacturing Budget.

| Production Cost / Manufacturing Budget |  |  | € | $€$ |
| :---: | :---: | :---: | :---: | :---: |
| Direct Materials |  |  |  |  |
| Opening Stock of Raw Materials | Material A | A $[8,000 \times € 2.70]$ | 21,600 (2) |  |
|  | Material B | B [6,000 $\times € 5 \cdot 50]$ | 33,000 (2) | 54,600 |
| Purchase of Raw Materials | Material A <br> Material B |  | -246,135 (1) |  |
|  |  |  | - 592,290 (1) | 838,425 |
|  |  |  |  | 893,025 |
| Less |  |  |  |  |
| Closing Stock of Raw Materials | Material A | A $\quad\left[{ }^{5}, 600 \times € 3 \cdot 00\right]$ | 16,800 (2) |  |
|  | Material B | [ $\left.{ }^{\bullet} 4,200 \times € 6 \cdot 00\right]$ | 25,200 (2) | $(42,000)$ |
|  |  |  |  | 851,025 |
| Cost of Labour | Basic <br> Superior | [ $\left.{ }^{1} 12,590 \times 6 \mathrm{hrs} \times € 14 \cdot 00\right] 1,057,560$ (2) |  |  |
|  |  | [ $\left.{ }^{\circ} 7,165 \times 8 \mathrm{hrs} \times € 14.00\right]$ | 802,480 (2) | 1,860,040 |
| Variable Overheads | Basic Superior | $\begin{array}{r} {[\bullet 12,590 \times 6 \mathrm{hrs} \times € 6 \cdot 50]} \\ {[\bullet 7,165 \times 8 \mathrm{hrs} \times € 6 \cdot 50]} \end{array}$ | 491,010 (2) |  |
|  |  |  | 372,580 (2) | 863,590 |
| Fixed Overheads |  |  |  | 278,500 (2) |
| Cost of Manufacture |  |  |  | 3,853,155 (4) |

- Allow full marks for student's own figure if consistent with previous work.
- Accept correct figure only.
(d) Calculate the unit cost of budgeted closing stock of both products.

| Budgeted Closing Stock per Unit |  | € |  | $€$ <br> Superior |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Basic |  |  |
| Material A | [ $5 \mathrm{kgs} \times € 3 \cdot 00$ ] | $15 \cdot 00$ (1) | [ $3 \mathrm{kgs} \times € 3 \cdot 00]$ | 9.00 (1) |
| Material B | [ $4 \mathrm{kgs} \times € 6.00$ ] | 24.00 (1) | [ $7 \mathrm{kgs} \times € 6.00]$ | 42.00 (1) |
| Direct Labour | [ $6 \mathrm{hrs} \times € 14.00$ ] | 84.00 (1) | [ $8 \mathrm{hrs} \times 14.00$ ] | 112.00 (1) |
| Variable Overheads | [ $6 \mathrm{hrs} \times € 6 \cdot 50$ ] | 39.00 (1) | [ $8 \mathrm{hrs} \times € 6 \cdot 50$ ] | 51.00 (1) |
| Fixed Overheads | W1 [6 hrs $\left.\times{ }^{\bullet} € 2 \cdot 10\right]$ | $12 \cdot 60$ (1) | [ $8 \mathrm{hrs} \times$ ® $€ 2 \cdot 10$ ] | $16 \cdot 80$ (1) |
| Cost per Unit |  | 174.60 (1) |  | ${ }^{\bullet \bullet} 230 \cdot 80$ (1) |

- Allow full marks for student's own figure if consistent with previous work.
- Accept correct figure only.


## Working

W1 Fixed overheads per direct labour hour

$$
\begin{aligned}
& =\frac{278,500}{(\bullet 12,590 \times 6 \mathrm{hrs})+(\bullet 7,165 \times 8 \mathrm{hrs})} \\
& =\quad \frac{278,500}{132,860} \\
& =\quad 2 \cdot 096191 \ldots \\
& =\quad{ }^{\bullet} € 2 \cdot 10(2)
\end{aligned}
$$

- Allow full marks for student's own figure if consistent with previous work.
- Deduct 1 mark if figure not rounded to two decimal places.
(e) State and explain two reasons for product costing.

Any 2: $(2 \times 3)$

- establishes the selling price (2) for tendering purposes (1) //
- controls costs (2) by comparing budgeted costs with actual costs (1) //
- helps with planning (2) and decision-making (1) //
- finds the value of closing stock (2) in order to prepare final accounts (1) // etc.
** Figures in brackets show the breakdown of marks if answer incomplete.
** Accept student's own wording if equivalent meaning conveyed.
** Accept other appropriate material.

