**Question 13**

Coltness Chemicals manufacture Product B in three separate processes. The details for Process 3 for the month of April are as follows:

|  |  |
| --- | --- |
| Transfer from Process 2 | 2,000 kgs @ £5 per kg |
| Materials | 2,000 kgs @ £3 per kg |
| Labour | 500 hours |
| Variable Overheads | £950 |
| Completed Units transferred to stores | 3,250 kgs |
| Closing Work-in-Progress | 250 kgs worth £625 |
| Labour Rate | £6 per hour |
| Fixed Overhead Absorption Rate | £2 per direct labour hour |
| Normal Loss | 5% of total input quantity |

All losses are sold for £4 per kg.

(a) Using the information shown above, **prepare:**

(i) an account for Process 3 for the month of April, showing quantities, cost   
and values **(9)**

(ii) an abnormal loss account for the month of April **(3)**

**12**

Coltness Chemicals have received an order for 30 kgs of Product B.

(b) **Calculate** the total selling price to give a profit margin of 25%. **3**

(c) **Explain** the following terms:

(i) AVCO **2**

(ii) piece rate **2**

(iii) limiting factor **2**

**Total marks (21)**

**Question 13 — solution**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1. (i) |  | **DR** |  |  | **CR** |  |  | **Bal** |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  | **Qty** | **£** | **£** | **Qty** | **£** | **£** | **Qty** | **£** | **£** |  |
| Process 2 | 2,000 kg | 5 | 10,000 |  |  |  | 2,000 |  | 10,000 | **(1)** |
| New Material | 2,000 kg | 3 | 6,000 |  |  |  | 4,000 |  | 16,000 | **(1)** |
| Labour |  |  | 3,000 |  |  |  |  |  | 19,000 | **(1)** |
| Variable Overhead |  |  | 950 |  |  |  |  |  | 19,950 | **(1)** |
| Fixed Overhead |  |  | 1,000 |  |  |  |  |  | 20,950 | **(1)** |
| Normal Loss |  |  |  | 200 kg | 4 | 800 | 3,800 |  | 20,150 | **(1)** |
| Work in Progress |  |  |  | 250 kg |  | 625 | 3,550 |  | 19,525 | **(1)** |
| Inventory |  |  |  | 3,250 kg | £5.50\* | 17,875 | 300 |  | 1,650 | **(1)** |
| Abnormal Loss |  |  |  | 300 kg | £5.50\* | 1,650^ | 0 |  | 0 | **(1)** |
| \* Mark for inventory and abnormal loss value | | | | |  |  |  |  |  |  |
| Abnormal Loss Account | |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| 1. (ii) |  | **DR** |  |  | **CR** |  |  | **Bal** |  |  |
|  | **Qty** | **£** | **£** | **Qty** | **£** | **£** | **Qty** | **£** | **£** |  |
| Process 3 | 300 kg | £5.50 | 1,650^ |  |  |  |  |  | 1,650^ | **(1)** |
| Bank |  |  |  | 300 kg | 4 | 1,200 | 0 |  | 450 | **(1)** |
| Profit and Loss |  |  |  |  |  | 450 |  |  | 0 | **(1)** |

|  |  |  |  |
| --- | --- | --- | --- |
| ^ mark for same value |  |  |  |

**12**

(b)

30 x 5.50 = 165 **(1)**

Profit margin = 55 **(1)**

**Selling price = 220 (1)**

**3**

(c)

1. **AVCO**

AVCO is a method of pricing issues of inventory and inventory valuation. **(1)**

Stores are issued using the average price, which has to be recalculated after each   
purchase **(1)**.The cost/quantity of the purchase is added to the value/quantity of the inventory in hand and the total is averaged by dividing by the new quantity. **(1)**

It overcomes the problem of over/understating the value of inventory/profit **(1)** and is relatively simple to operate **(1)**.It is accepted by the Inland Revenue **(1)**, although it leads to additional clerical work in calculating new averages. **(1)**

**(any two for a maximum of 2 marks)**

1. **Piece rate**

This is a method of paying workers according to the amount of work they produce. **(1)**

The method is suitable for the production of large quantities of identical products **(1)** and is sometimes used to supplement a low basic pay. **(1)**

It gives workers an incentive to work harder, as higher output = higher wages. **(1)** Quality of work may decline, with workers trying to maximise their wages. **(1)**

**(any two for a maximum of 2 marks)**

1. **Limiting factor**

Limiting factor is a scarce resource that limits the total production possible. **(1)**

Where a firm has a range of products, a decision has to be taken about the order of production, **(1)** based on the contribution per unit divided by the limiting factor **(1).** This can be machine hours; labour hours; availability of workers or material. **(max 1 mark for an example)**

The product with the highest contribution/limiting factor will be made first, to maximise profits. **(1)**

**(any two for a maximum of 2 marks)**

**6**

**Total marks (21)**