## 2011 Accounting

## Higher - Solutions

## Finalised Marking Instructions

The information in this publication may be reproduced to support SQA qualifications only on a non-commercial basis. If it is to be used for any other purposes written permission must be obtained from SQA's NQ Delivery: Exam Operations Team.

Where the publication includes materials from sources other than SQA (secondary copyright), this material should only be reproduced for the purposes of examination or assessment. If it needs to be reproduced for any other purpose it is the centre's responsibility to obtain the necessary copyright clearance. SQA's NQ Delivery: Exam Operations Team may be able to direct you to the secondary sources.

These Marking Instructions have been prepared by Examination Teams for use by SQA Appointed Markers when marking External Course Assessments. This publication must not be reproduced for commercial or trade purposes.

## 2011 Accounting

Higher - Solutions

## Question 1

Restaurant Trading and Profit and Loss Account for year ending 31 December Year $11 \checkmark$

|  | $£ 000$ |  | $£ 000$ |  |
| :---: | :---: | :---: | :---: | :---: |
| Sales |  |  | 65 | (1) |
| Less Cost of Sales |  |  |  |  |
| Opening Stock | 12 | $\rangle$ |  |  |
| 11 |  | ) |  |  |
| Add Purchases (30-5+4) | $\underline{29}$ | (2) (1) |  |  |
|  | 41 | ) |  |  |
| less Closing Stock | $\underline{10}$ | ) | 31 |  |
| GROSS PROFIT |  | , | 34 |  |
| Less Expenses |  |  |  |  |
| Restaurant Staff Wages | 25 | (1) |  |  |
| Electricity ( $7+1$ (1)-2 (1)) $\times$ (1/3) (1) | 2 | (3) |  |  |
| Depreciation: Fittings ( $10 \% \times 10$ ) | 1 | (1) | 28 |  |
| PROFIT ON RESTAURANT $\checkmark$ |  |  | $\underline{6}$ |  |
|  |  |  |  | (9) |

Income and Expenditure Account for year ended 31 December Year $11 \checkmark$

|  | £000 |  | £000 |  |
| :---: | :---: | :---: | :---: | :---: |
| Income |  |  |  |  |
| Subscriptions | 54 | (5) |  |  |
| Hire of Lockers | 2 | (1) |  |  |
| Profit On Raffle (5-2) | 3 | (2) |  |  |
| Profit on Restaurant | $\underline{6}$ | (1) | 65 |  |
| Less Expenditure |  |  |  |  |
| Loss on Dance (7-9) | 2 | (2) |  |  |
| Secretary's Honorarium | 3 | (1) |  |  |
| Loan Interest (5-3 (1) + 2 (1)) | 4 | (2) |  |  |
| Electricity ( $7+1-2$ ) $\times(2 / 3)$ | 4 | (1) |  |  |
| Insurance | 2 | (1) |  |  |
| General Expenses | 4 | (1) |  |  |
| Depreciation: Clubhouse Fittings ( $10 \% \times 30$ ) | 3 | (2) |  |  |
| Depreciation: Tennis Equipment ( $3+6-7$ ) | 2 | (2) |  |  |
| Groundsman's Wages | $\underline{18}$ | (1) | $\underline{42}$ |  |
| SURPLUS OF INCOME $\downarrow$ |  |  | $\underline{23}$ |  |
|  |  |  |  | (22) |

## Subscriptions

| Received | 70 |  |
| :--- | ---: | ---: |
| Less Arrears - Year 10 | $\underline{2}$ | $(1)$ |
| + in advance - Year 10 | 68 | $\underline{3}$ |
| (1) |  |  |
| + arrears - Year 11 | 71 |  |
| - in advance - Year 12 | $\underline{5}$ | $(1)$ |
| $-25 \%$ capitalised | $\underline{4}$ | $(1)$ |
|  | $\underline{2}$ | $(1)$ |
|  | $\underline{54}$ | $(5)$ |

## Balance Sheet as at 31 December Year 11

|  | £000 |  | £000 |  |
| :---: | :---: | :---: | :---: | :---: |
| Fixed Assets |  |  |  |  |
| Clubhouse |  |  | 100 | (1) |
| Clubhouse Fittings (30-3) |  |  | 27 | (1) |
| Restaurant Fittings (10-1) |  |  | 9 | (1) |
| Tennis Equipment |  |  | 7 | (1) |
|  |  |  | 143 |  |
|  |  |  |  |  |
| Current Assets |  |  |  |  |
| Restaurant Stocks | 10 | (1) |  |  |
| Electricity Prepaid | 2 | (1) |  |  |
| Subs in arrears | 5 | (1) |  |  |
| Cash/Bank (5+149-131) | $\underline{23}$ | (2) |  |  |
|  | $\underline{40}$ |  |  |  |
| Less Current Liabilities |  |  |  |  |
| Restaurant Purchases Creditors | 4 | (1) |  |  |
| Loan Interest accrued | 2 | (1) |  |  |
| Subs in advance | $\underline{4}$ | (1) |  |  |
|  | $\underline{10}$ |  | 30 |  |
|  |  |  | $\underline{173}$ |  |
|  |  |  |  |  |
| Accumulated Fund |  |  | 72 | (3) |
| Add Surplus of Income |  |  | 23 | (1) |
| Add Subs capitalised |  |  | 18 | (2) |
|  |  |  | 113 |  |
|  |  |  |  |  |
| Loan (80-20) |  |  | 60 | (1) |
|  |  |  | $\underline{173}$ |  |
|  |  |  |  | (19) |

Calculation of Accumulated fund at 1 January Year 11

| Assets | $\mathbf{£ 0 0 0}$ |  | Liabilities | $\mathbf{£ 0 0 0}$ |  |
| :--- | ---: | :--- | :--- | ---: | ---: |
| Clubhouse | 100 |  | Subs in advance | 3 |  |
| Clubhouse Fittings | 30 |  | Creditors | 5 |  |
| Restaurant Fittings | 10 |  | Loan Interest due | 3 |  |
| Tennis Equipment | 3 |  | Loan | $\underline{80}$ |  |
| Restaurant Stocks | 12 |  |  |  |  |
| Cash/Bank | 5 |  |  |  |  |
| Electricity prepaid | 1 |  |  |  |  |
| Subs in arrears | $\underline{2}$ |  |  |  |  |
|  | $\underline{163}$ |  |  | $\underline{91}$ |  |

Accumulated Fund: $163-91=72$

## Question 2

## Evans and Jones

Manufacturing Account for year ended 31 December Year $2 \checkmark$

|  | £000 |  | £000 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Raw Materials |  |  |  |  |  |
| Opening Stock: Raw Materials | 30 | (1) |  |  |  |
| Add Purchases | 200 | (1) |  |  |  |
|  | 230 |  |  |  |  |
| Carriage on Raw Materials | 5 | (1) |  |  |  |
|  | 235 |  |  |  |  |
| Less Closing Stock | $\underline{35}$ | (1) |  |  |  |
| COST OF RAW MATERIALS CONSUMED $\downarrow$ |  |  | 200 |  |  |
|  |  |  |  |  |  |
| Add Direct Costs |  |  |  |  |  |
| Direct Wages ( $50 \% \times 300$ ) | 150 | (1) |  |  |  |
| Royalties | $\underline{30}$ | (1) | 180 |  |  |
| PRIME COST $\downarrow$ |  |  | 380 |  | (6) |
|  |  |  |  |  |  |
| Add Factory Overheads |  |  |  |  |  |
| Depreciation: Plant and Machinery 20\% $\times$ (60-25) | 7 | (2) |  |  |  |
| Indirect Factory Wages ( $30 \% \times 300$ ) | 90 | (1) |  |  |  |
| Factory Insurance (2/3 $\times(12-3)$ ) | 6 | (2) |  |  |  |
| Electricity $(3 / 4 \times(20+4))$ | 18 | (2) | 121 |  |  |
|  |  |  | 501 |  |  |
|  |  |  |  |  |  |
| Add Work-in-Progress at start |  |  | 10 | (1) |  |
|  |  |  | 511 |  |  |
| Less Work-in Progress at end |  |  | 15 | (1) |  |
| COST OF GOODS MANUFACTURED $\checkmark$ |  |  | 496 |  |  |
| Profit on Manufacturing $\checkmark$ |  |  | 56 | (2) |  |
| MARKET VALUE OF GOODS MANUFACTURED $\checkmark$ |  |  | $\underline{552}$ | (1) | (12) |

Trading and Profit and Loss and Appropriation Account for year ended 31 December Year $2 \checkmark$

|  | £000 |  | £000 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Sales |  | (1) | 700 |  |  |
| Stock of Finished Goods at start | 40 | (1) |  |  |  |
| Add Market Value | 552 | (2) |  |  |  |
| Warehouse Expenses | $\underline{6}$ | (1) |  |  |  |
|  | 598 |  |  |  |  |
| Less Closing Stock: Finished Goods | 45 | (1) |  |  |  |
| COST OF SALES |  |  | 553 |  | (6) |
| GROSS PROFIT $\checkmark$ |  |  | 147 |  |  |
| Add Profit on Manufacturing |  |  | 56 | (2) |  |
|  |  |  | 203 |  |  |
|  |  |  |  |  |  |
| Less Expenses |  |  |  |  |  |
| Insurance ( $1 / 3 \times 9$ ) | 3 | (1) |  |  |  |
| Electricity ( $1 / 4 \times 24$ ) | 6 | (1) |  |  |  |
| Office and Selling Expenses | 11 | (1) |  |  |  |
| Office Wages ( $20 \% \times 300$ ) | 60 | (1) |  |  |  |
| Interest on Overdraft | 2 | (1) |  |  |  |
| Increase in Provision for Bad Debts (3-2) | 1 | (2) | 83 |  |  |
| NET PROFIT $\checkmark$ |  |  | 120 |  | (9) |
|  |  |  |  |  |  |
| Less Appropriations |  |  |  |  |  |
| Add Interest on Drawings |  |  |  |  |  |
| Evans | 1 | (1) |  |  |  |
| Jones | 2 | (1) | $\underline{3}$ |  |  |
|  |  |  | 123 |  |  |
| Less Interest on Capital |  |  |  |  |  |
| Evans | 2 | (1) |  |  |  |
| Jones | 3 | (1) | $\underline{5}$ |  |  |
|  |  |  | 118 |  |  |
| Less Salary - Evans |  |  | $\underline{8}$ | (1) |  |
| RESIDUAL PROFIT |  |  | 110 |  |  |
|  |  |  |  |  |  |
| Share of Profit |  |  |  |  |  |
| Evans (2/5 $\times 110$ ) | 44 | (2) |  |  |  |
| Jones (3/5 × 110) | 66 |  | 110 |  | (7) |

## Question 3

## PART A

(a) (i) Net Profit
$25 \% \times 80,000=20,000$
(ii) Gross Profit Ratio

$$
\begin{align*}
\text { Gross Profit } & =\text { Net Profit }+ \text { Expenses }  \tag{1}\\
& =20,000+16,000=36,0001 \tag{2}
\end{align*}
$$

Gross Profit Ratio $=36 / 80 \times 100=45 \% 1$
(iii) Mark-up Ratio
Gross Profit/Cost of Sales $\times 100$ 1
$36 / 44 \times 100=81.8 \% 1$
(iv) Rate of Stock Turnover
Cost of Sales/Average Stock
44/11 = 4 times 2
(v) Expenses Ratio
Expenses/Sales $\times 100$
$16 / 80 \times 100=20 \% 2$

Average Debtors/Credit Sales $\times 365$
Credit Sales $=75 \% \times 80=601$
$6 / 60 \times 365=36.5$ (days) 2
(vii) Return on Capital Net Profit/Capital $\times 100$ Employed
$20 / 50 \times 100=40 \% 2$

## Question 3 (continued)

(b) (i) Cost of Sales ROST = COS/Average Stock

$$
\begin{align*}
& \operatorname{COS} / 15=6 \\
& \operatorname{COS}=15 \times 6=£ 90,0002 \tag{2}
\end{align*}
$$

(ii) Sales Gross Profit $=40 \% \times$ Sales

Cost of Sales $=60 \% \times$ Sales
$£ 90,000 \times 100 / 60$
Sales $=£ 150,0002$
(iii) Gross Profit

Gross Profit $=40 \% \times £ 150,000=£ 60,000$
Or
$150,000-90,000=£ 60,000$
(iv) Purchases Purchases + Opening Stock - Closing Stock = Cost of Sales

Average Stock $=15,000 \times 2=£ 30,000$
£30,000 - Opening Stock = Closing Stock
$30,000-11,000=£ 19,0002$

Purchases $=90,000-11,000+19,000=£ 98,0002$
(v) Net Profit

Gross Profit - Expenses $=$ Net Profit
$60,000-(18 \% \times 150)=£ 33,0002$
(c) Ways of reducing Gross Profit Ratio:

Decrease in Selling Price 2

## PART B

(a) Calculation of Total Depreciation

| Asset | Year 1 | Year 2 | Year 3 | Total |
| :--- | :--- | :--- | :--- | :--- |
| Motor Vehicles | $9 / 12 \times 20 \%$ <br>  <br>  <br> $\times £ 15,000$ | $20 \%$ | $\times £ 15,000$ | $\times £ 15,000$ |
|  | $£ 2,250(2)$ | $£ 3,000(1)$ | $£ 1,500(\mathbf{2 )}$ | $\underline{\mathbf{~ 6 ~ , 7 , 7 5 0}}$ |

## OR

$3000(\mathbf{1})+3000(1)+750(\mathbf{3})=£ 6,750$

Plant/Machinery nil

| $6 / 12 \times 10 \%$ | $9 / 12 \times 10 \%$ |
| :--- | :--- |
| $\times £ 20,000$ | $\times(£ 20,000-$ |
|  | $£ 1,000)$ |

£1,000 (2) £1,425 (2) £2,425
(9)
(b) Profit/Loss on sale of Motor Vehicles

Net Book Value $=£ 15,000-£ 6,750=£ 8,250$
(1) (1)

Selling Price - Net Book Value $=£ 7,000-£ 8,250=£ 1,250$ LOSS

## Question 4

(a) (i) Preference Shares

- First to receive any dividend
- Dividends are a fixed rate
- First to be repaid capital
- No voting rights at AGM
- Dividends can be cumulative
- Shares can be redeemable
- Less risky investment

1 mark per line to a maximum of 4
(ii) Bonus Issue (Scrip Issue)

Shares are allotted free (1)
Can be financed by share premium (1)
Bonus encourages loyalty (1)
(b) Capital Expenditure

Purchase of an asset for long term use eg Machinery, Buildings etc (1)

## Ordinary Shares

- Last to receive any dividend
- Dividends are at a variable rate
- Last to be repaid capital
- Voting rights at AGM
- Dividends not cumulative
- Shares are non-redeemable
- More risky investment


## Rights Issue

Shares are allotted for purchase (1)
At a discounted price (1)
Raises capital/finance (1)

## 4 marks

## Revenue Expenditure

Payment of any short term expense eg Wages, Rent etc (1)

Maximum - 2 marks

## Question 5

## (a) PROCEDURES FOR ADMISSION OF NEW PARTNER

- Revaluation of assets to show true value (1)
- Sharing of any profit or loss on revaluation among existing partners (1)
- Valuation of goodwill (1)
- Sharing of any goodwill among existing partners (1)
- Goodwill can be written off between the new partnership (1)
- Revision of the partnership agreement to include the financial (1) details of the new partner: capital, drawings, interest on each, salary, premium for goodwill, and the new profit sharing ratio (1 max)

Maximum - 4 marks

## (b) (i) Share Premium

This is the difference between the issue price and nominal value of a share where the issued price is higher (1)

The premium must be shown in the Balance Sheet as a reserve (1) which is not available for cash distribution (1)

The Premium must be used for:

- writing off preliminary and issue expenses
- making bonus issue of shares
- writing off discount on shares
- writing off premium paid on redemption of redeemable preference shares
- or premium on redemption of ordinary shares under certain circumstances (max 1)

Maximum - 3 marks

## (ii) Articles of Association

One of the 2 main legal documents to be lodged with the Registrar of Companies (1) when wishing to incorporate a limited company.

Deals with the internal regulations for the management of the proposed company. (1)

Subordinate to, and controlled by the Memorandum of Association.
Will state the way in which the company is to be administered with particular reference to:
( - matters relating to the raising of capital eg borrowing powers or share allotment

- directors' remuneration and powers
- dividends and reserves
- holding of meetings
- the rights of shareholders
(max 1)
Where a company does not have Articles of its own, the provisions of Table A of the companies Act becomes the Articles. (1)

Maximum - 3 marks

## Question 6

## PART A

|  | $\frac{\text { January }}{}$ | February | $\underline{\text { March }}$ |  | April | May | $\underline{\text { June }}$ |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- |
| Production | 2,500 | 2,400 | 1,800 | 2,300 | 1,900 | 1,600 |  |
| Sales | 2,510 | 2,460 | 1,750 | 2,340 | 1,930 | 1,640 |  |

Selling Price - £
Cash Customers 18
Credit Customers (one month) 19

Cash Budget for the 3 months March to May Year 3

|  | March |  | April | May |
| :---: | :---: | :---: | :---: | :---: |
| Opening Balance | 50,000 | (1) | 73,682 | 123,465 |

## Receipts

Cash Sales 12,600 (1) 16,848 (1) 13,896 (1)
Credit Sales:
1 Month
14022 (2) 9975
(2) 13338
(2)

2 Months
15060 (2) 14760
(2) 10500
(2)

Ordinary Shares
20,000 (1)
Share Premium
10,000 (2)
Bank Loan

|  |  |  |
| ---: | ---: | ---: |
| 60,000 | (1) |  |
| 71,682 | 101,583 | 37,734 |

## Payments

| Materials | 9,200 | (1) | 7,600 | (1) | 6,400 | (1) |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Labour | 9,000 | (1) | 11,500 | (1) | 9,500 | (1) |
| Overheads: |  |  |  |  |  |  |
| One-quarter | 1,800 | (1) | 2,300 | (1) | 1,900 | (1) |
| Three-quarters | 7,200 | (1) | 5,400 | (1) | 6,900 | (1) |
| Labour Bonus | 800 | (1) | - |  | 600 | (1) |
| Fixed Costs | 20,000 | 25,000 | (1) | 20,000 | (1) |  |
| Equipment |  |  |  |  | 80,000 | (1) |
| Loan Repayment |  |  |  | 5,250 | (2) |  |
| Total Payments | 48,000 | 51,800 | 130,550 |  |  |  |
| Closing Balance | 73,682 | 123,465 | 30,649 |  |  |  |
|  |  | (14) |  | (11) |  | (14) |

## PART B

|  | RECEIPTS |  |  |  | ISSUES |  |  |  | BALANCE |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Qty | Cost Per Unit | Total |  | Qty | Cost <br> Per <br> Unit | Total |  | Qty | Cost Per Unit | Total |  |
| May 1 |  |  |  |  |  |  |  |  | 500 | £4.00 | £2,000 | 1 |
| May 3 | 500 | £4.20 | £2,100 | 1 |  |  |  |  | 1,000 | £4.10 | £4,100 |  |
| May 8 |  |  |  |  | 600 | £4.10 | £2,460 | 2 | 400 | £4.10 | £1,640 |  |
| May 12 | 400 | £4.40 | £1,760 | 1 |  |  |  |  | 800 | £4.25 | £3,400 |  |
| May 15 |  |  |  |  | 200 | £4.40 | £880 | 2 | 600 | £4.20 | £2,520 |  |
| May 18 |  |  |  |  | 400 | £4.20 | £1,680 | 2 | 200 | £4.20 | £840 |  |
| May 20 | 1,000 | £4.14 | £4,140 | 1 |  |  |  |  | 1,200 | £4.15 | £4,980 |  |

## Question 7

## PART A

(1) (1)
(a) (i) Selling Price $=\mathrm{VC}+\mathrm{C}=£ 20+£ 10=£ 30$
(ii) Fixed Costs $=\mathrm{BEP} \times$ Contribution Per Unit

$$
\begin{aligned}
& (1) \\
= & 6,000 \text { units } \times £ 10 \\
= & £ 60,000
\end{aligned}
$$

(iii) Profit After Tax $=£ 20,000$
Profit Before Tax $=\frac{£ 20,000}{4} \times 5$
= £25,000 (2)
No of Extra Units to be sold $=\frac{£ 25,000}{£ 10(1)}(1)=2,500$ units
Number of units to be sold = BEP + Extra units
(1)
$=6,000+2,500=8,500$ units
Or $\frac{£ 25,000(1)+£ 60,000}{£ 10(1)}=8,500$ units

(b) (i)
(1) (1)
New Contribution $=£ 30-(£ 7+£ 7+£ 8)=£ 8$
New Fixed Costs $=110 \% \times £ 60,000=£ 66,000$ (1)
$B E P=£ 66,000=8,250$ units (2) £8
(ii) Margin of Safety at 9,000 units =
$9,000-8250=750$ units (1)
Sales Value $=750$ units $\times £ 30=£ 22,500$ (1)
(iii) Profit/Loss on sales of 5,000 units =
$8,250-5,000=3,250$ units (1)
$3,250 \times £ 8=£ 26,000$ Loss (1)

## PART B

(a) (i)

|  | QTY | U | £ |  |  | QTY |  | CPU | £ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Process 2 | 2,000 kgs | £5 | 10,000 | 1 | Normal Loss | 200 kgs |  | £4 | 800 | 1 |
| Materials | 2,000 kgs | £3 | 6,000 | 1 | Abnormal Loss | 300 kgs | 1 | $£ 5.5074$ | 1,650 |  |
| Labour |  |  | 3,000 | 1 | Stock | $3,250 \mathrm{kgs}$ |  | $£ 5.50$ | 17,875 |  |
| $V$ Overhead |  |  | 950 | 1 | WIP | 250 kgs |  |  | 625 | 1 |
| F Overhead |  |  | 1,000 | 1 |  |  |  |  |  |  |
|  |  |  | £20,950 |  |  |  |  |  | £20,950 | 12 |

Cost per unit: $20,950-800-625 / 3250+300=£ 5.50$
(ii) Abnormal Loss Account

|  | QTY | CPU | £ |  |  | QTY | CPU | £ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Process 3 | 300 kgs | £5.50 | 1,650 | 1 | Bank | 300 kgs | £4 | 1,200 | 2 |
|  |  |  |  |  | Profit \& Loss |  |  | 450 | 1 |
|  |  |  | £1,650 |  |  |  |  | £1,650 |  |

(b) Total Cost of $30 \mathrm{kgs}=30 \times £ 5.50=£ 165$
(Margin $=25 \%=1 / 4-$ Mark-up $=1 / 3$ )
Mark-up therefore $=1 / 3 \times £ 165=$
Selling Price $\quad \frac{£ 55}{£ 220}$
Total for Part B (20)
Total (40)
(a) (i)

## Process 3 Account

|  | $\begin{aligned} & \text { DR } \\ & \text { Q (kgs) } \end{aligned}$ | P | £ | $\begin{aligned} & \text { CR } \\ & \mathbf{Q} \text { (kgs) } \end{aligned}$ | P | £ | Balanc $\mathbf{Q}$ (kgs) |  | £ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Process 2 | 2000 | £5 | 10,000 | 1 |  |  | 2000 |  | 10,000 |
| Materials | 2000 | £3 | 6,000 | 1 |  |  | 4000 |  | 16,000 |
| Labour |  |  | 3,000 | 1 |  |  |  |  | 19,000 |
| Variable Overhead |  |  | 950 | 1 |  |  |  |  | 19,950 |
| Fixed Overhead |  |  | 1,000 | 1 |  |  |  |  | 20,950 |
| Normal Loss |  |  |  | 200 | £4 | 800 |  |  | 20,150 |
| Work-in Progress |  |  |  | 250 |  | 625 |  |  | 19,525 |
| Abnormal Loss |  |  |  | 300 | $1 £ 5.50$ | 2 1,650 |  |  | 17,875 |
| Transfer to Stock |  |  |  | 3250 | £5.50 | 2 17,875 |  |  | £ |

## Unit Cost

$£ 19,525 / 3550=£ 5.50$
(ii) Abnormal Loss Account

|  | $\begin{aligned} & \text { DR } \\ & \mathbf{Q} \text { (kgs) } P \end{aligned}$ | £ | $\begin{aligned} & \text { CR } \\ & \mathbf{Q} \text { (kgs) } \end{aligned}$ | P |  | £ | Balance Q (kgs) | P | £ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Process 3 | $300 £ 5.50$ | 1,650 | 1 |  |  |  |  |  | 1,650 |
| Bank |  |  | 300 |  | £4 | 1,200 |  |  | 450 |
| Profit and |  |  |  |  |  | 450 |  |  | 0 |

(b) Total Cost of $30 \mathrm{kgs}=30 \times £ 5.50=£ 165 \quad 1$
$($ Margin $=25 \%=1 / 4-$ Mark-up $=1 / 3)$
Mark-up therefore $=1 / 3 \times £ 165=7 \quad \frac{£ 55}{£ 220} \quad 3$
Selling Price

## Question 8

(a) (i) Total machine hours at current production level:

$$
\begin{aligned}
& Y=6,000 \times 2= \\
& Z=4,500 \times 4=
\end{aligned}
$$

(ii)

|  |  |
| :--- | :--- |
| Less | Selling Price |
|  | Variable Costs: |
|  | Materials |
|  | Labour |
|  | Overheads |
| Contribution |  |
| per unit |  |

Product $Y$
£ £

## Product $\mathbf{Z}$

£ £
1

 $\underline{58}$ 125 5

## Product $Y$

Product Z
Total


## ALTERNATIVE


(b) (i)
No of hours at full
Capacity =
$30,000 \times 100=$
40,000
machine hours
(ii)

Contribution per Machine Hour =

$$
=
$$

Order of priority
Total Machine Hours available:

## Product Y

$\left.\frac{£ 14}{2}\right)^{2}$
£7

First

Less: Hours allocated to Y
(8,000 $\times 2$ )
Available for Z
Number of units to be produced:
$\begin{array}{ll}\left.\frac{16,000}{2}\right)^{1} \\ 8,000 & \text { units }\end{array}$

## Product Y

$$
\begin{gathered}
£ 14 \times 8,000 \quad 1 \\
£ 112,000
\end{gathered}
$$

Total
Contribution

Fixed Costs
Maximum Profit
(iii)
(iv) Less
$\left.\frac{24,000}{4}\right)^{1}$
6,000 units

## Product Z

Total

$$
\begin{array}{r}
£ 12 \times 6,000 \\
£ 72,000
\end{array}
$$

£184,000 60,000 2 £124,000

Second 1

## Product Z

$\left(\frac{£ 12}{4}\right)^{2}$
£3
$\left(\frac{\mathfrak{z} 2}{4}\right)^{2}$
3

40,000
16,000
24,000
-
2

$$
\underline{\underline{£ 124,000}}
$$

## ALTERNATIVE

|  | Y |  |  | Z |  |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sales |  | 400,000 |  |  | 420,000 |  |  |  |
| Materials | 80,000 |  |  | 36,000 |  |  |  |  |
| Labour | 160,000 |  |  | 240,000 |  |  |  |  |
| Overheads | 48,000 | 288,000 |  | 72,000 | 348,000 |  |  |  |
|  |  | 112,000 | 1 |  | 72,000 | 1 | 184,000 |  |
|  |  |  |  |  | Fixed Costs |  | 60,000 | 2 |
|  |  |  |  |  | Profit |  | 124,000 |  |
|  |  |  |  |  |  |  |  | 4 |

(c) Machine hours now available:

Hours per machine $=$
$\frac{40,000}{5}=$
$2140 \% \times 40,000=56,000$ machine hours


| Order of Priority: Y, A, Z |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Product Y |  | Product A |  | Product Z |  | Total |  |
| Machine Hours |  |  |  |  |  |  |  |  |  |
|  | Allocated | 16,000 |  | 21,000 |  | 19,000 |  | 56,000 |  |
|  |  | 2 |  | 3 |  | 4 |  |  |  |
| Quantity to be |  |  |  |  |  |  |  |  |  |
|  | produced: | $\times £ 14$ |  | $\times £ 15$ |  | $\times £ 12$ |  |  |  |
|  | Total |  |  |  |  |  |  |  |  |
|  | Contribution: | £112,000 | 1 | £105,000 | 1 | £57,000 | 1 | £274,000 |  |
| Less | Fixed Costs |  |  |  |  |  |  | 90,000 | 2 |
|  | Maximum Profit for Year 3 |  |  |  |  |  |  | £184,000 | 13 |

## ALTERNATIVE



## Question 9

(a) Allocation - takes place when the overhead cost can be identified with a particular department $\mathbf{1}$ it is a cost which is unique to that particular department 1 and the department is charged with the actual overhead it has incurred $\mathbf{1}$ eg indirect materials 1.

Apportionment - takes place when the overhead cost cannot be identified with a particular department 1. Each department is charged with its share of the total overhead using an equitable basis 1 eg Rent according to floor area occupied by each department 1.

Cost Centre - any part of a business where production takes place 1 and to which costs can be charged 1 eg department, item of equipment, machine or person 1. Cost centres are used to collect overheads for charging on to products which use the cost centre 1.
(b) (Rate Per) Direct Labour Hour =

| (Rate Per) Machine Hour = | No Overhead Cost Machine Hours | 1 |
| :---: | :---: | :---: |
| $($ Rate Per) Unit Produced $=$ | Overhead Cost No of Units Produced | 1 |
| Percentage of Prime Cost $=$ | $\frac{\text { Overhead Cost }}{\text { Prime Cost }} \times 100$ | 1 |
| Percentage of Direct Material Cost $=1$ | $\underset{\text { Direct Material Cost }}{\text { Overhead Cost }} \times 100$ | 1 |
| Percentage of Direct Labour Cost $=1$ | $\underset{\text { Direct Labour Costs }}{\text { Overhead Cost } \times 100}$ | 1 |

Any 2 for 2 Marks Each
(Max 4)

## Question 10

## (a) Advantages

Use of formulae to calculate figures
Can show the effects of "what if" scenarios in, for example, Cash Budgets.
Changes to any data in the spreadsheet is updated automatically due to the use of formulae.
Accuracy, providing data and formulae are entered correctly.
Graphs and charts to make information clearer.
Use of multiple worksheets to link statements.
Use of templates from year to year.
Any 4 for 1 mark each - Max 4
(b) (i) Opportunity Cost

This arises when a firm is working at full capacity and proposes to introduce a new product. (1)

This would involve a reduction in the amount which could be made of an existing product. (1)

The opportunity cost represents the amount of contribution lost by making less of the existing product. (1)

The actual cost of making the new product will include the 'extra' or opportunity cost equal to the contribution lost. (1)

Max 3
(ii) Semi-Variable Cost

A semi-variable cost includes an element of both fixed and variable costs. (1)
Normally the fixed element is in the form of a standing charge (1) while the variable element depends on usage. (1)

Examples include bills for gas, electricity and the telephone. (1 max)
Max 3 (6)
(10)

