

2011 Accounting

Higher - Solutions

Finalised Marking Instructions

© Scottish Qualifications Authority 2011

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 ✓

| | £000 | | £000 | |
|--|-----------|---------|-----------|-----|
| Sales | | | 65 | (1) |
| Less Cost of Sales | | | | |
| Opening Stock | 12 | | | |
| 1 1 | | | | |
| Add Purchases (30 – 5 + 4) | <u>29</u> | (2) (1) | | |
| | 41 | | | |
| less Closing Stock | <u>10</u> | / | <u>31</u> | |
| 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% x 10) | 1 | (1) | <u>28</u> | |
| PROFIT ON RESTAURANT ✓ | | | <u>6</u> | |
| | | | _ | (9) |

Income and Expenditure Account for year ended 31 December Year 11 ✓

| | £000 | | £000 | |
|---|-----------|-----|-----------|------|
| Income | | | | |
| Subscriptions | 54 | (5) | | |
| Hire of Lockers | 2 | (1) | | |
| Profit On Raffle (5 – 2) | 3 | (2) | | |
| Profit on Restaurant | <u>6</u> | (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% × 30) | 3 | (2) | | |
| Depreciation: Tennis Equipment (3 + 6 – 7) | 2 | (2) | | |
| Groundsman's Wages | <u>18</u> | (1) | <u>42</u> | |
| SURPLUS OF INCOME ✓ | | | 23 | |
| | | | | (22) |

Subscriptions

| Received | 70 | |
|------------------------|-----------|-----|
| Less Arrears – Year 10 | 2 | (1) |
| | 68 | |
| + in advance – Year 10 | 3 | (1) |
| | 71 | |
| + arrears – Year 11 | <u>5</u> | (1) |
| | 76 | |
| - in advance – Year 12 | 4 | (1) |
| | 72 | |
| - 25% capitalised | <u>18</u> | (1) |
| | <u>54</u> | (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) | 23 | (2) | | |
| , , | 40 | | | |
| Less Current Liabilities | | | | |
| Restaurant Purchases Creditors | 4 | (1) | | |
| Loan Interest accrued | 2 | (1) | | |
| Subs in advance | <u>4</u> | (1) | | |
| | <u>10</u> | | <u>30</u> | |
| | | | <u>173</u> | |
| Accumulated Fund | | | 72 | (3) |
| Add Surplus of Income | | | 23 | (1) |
| Add Subs capitalised | | | 18 | (2) |
| | | | 113 | . , |
| Loan (80 – 20) | | | 60 | (1) |
| , , | | | 173 | • • |
| | | | | (19) |

Calculation of Accumulated fund at 1 January Year 11

| <u>Assets</u> | £000 | <u>Liabilities</u> | £000 | |
|---------------------|------------|--------------------|-----------|--|
| Clubhouse | 100 | Subs in advance | 3 | |
| Clubhouse Fittings | 30 | Creditors | 5 | |
| Restaurant Fittings | 10 | Loan Interest due | 3 | |
| Tennis Equipment | 3 | Loan | 80 | |
| Restaurant Stocks | 12 | | | |
| Cash/Bank | 5 | | | |
| Electricity prepaid | 1 | | | |
| Subs in arrears | <u>2</u> | | | |
| | <u>163</u> | | <u>91</u> | |

Accumulated Fund: 163 - 91 = 72 (3)

(50)

Question 2

Evans and Jones

Manufacturing Account for year ended 31 December Year 2 ✓

| | £000 | | £000 | | |
|---|------------|-----|------------|-----|------|
| Raw Materials | | | | | |
| Opening Stock: Raw Materials | 30 | (1) | | | |
| Add Purchases | <u>200</u> | (1) | | | |
| | 230 | | | | |
| Carriage on Raw Materials | <u>5</u> | (1) | | | |
| | 235 | | | | |
| Less Closing Stock | <u>35</u> | (1) | | | |
| COST OF RAW MATERIALS CONSUMED ✓ | | | 200 | | |
| | | | | | |
| Add Direct Costs | | | | | |
| Direct Wages (50% x 300) | 150 | (1) | | | |
| Royalties | 30 | (1) | <u>180</u> | | |
| PRIME COST ✓ | | | 380 | | (6) |
| | | | | | |
| Add Factory Overheads | | | | | |
| Depreciation: Plant and Machinery 20% × (60 – 25) | 7 | (2) | | | |
| Indirect Factory Wages (30% x 300) | 90 | (1) | | | |
| Factory Insurance (2/3 x (12 – 3)) | 6 | (2) | | | |
| Electricity $(3/4 \times (20 + 4))$ | <u>18</u> | (2) | <u>121</u> | | |
| | | | 501 | | |
| | | | | (4) | |
| Add Work-in-Progress at start | | | <u>10</u> | (1) | |
| | | | 511 | | |
| Less Work-in Progress at end | | | <u>15</u> | (1) | |
| COST OF GOODS MANUFACTURED ✓ | | | 496 | | |
| Profit on Manufacturing ✓ | | | <u>56</u> | (2) | |
| MARKET VALUE OF GOODS MANUFACTURED ✓ | | | <u>552</u> | (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 | 6 | (1) | | | |
| | 598 | | | | |
| Less Closing Stock: Finished Goods | <u>45</u> | (1) | | | |
| COST OF SALES | | | <u>553</u> | | (6) |
| GROSS PROFIT ✓ | | | 147 | | |
| Add Profit on Manufacturing | | | <u>56</u> | (2) | |
| | | | 203 | | |
| | | | | | |
| <u>Less Expenses</u> | | | | | |
| Insurance (1/3 × 9) | 3 | (1) | | | |
| Electricity (1/4 × 24) | 6 | (1) | | | |
| Office and Selling Expenses | 11 | (1) | | | |
| Office Wages (20% x 300) | 60 | (1) | | | |
| Interest on Overdraft | 2 | (1) | | | |
| Increase in Provision for Bad Debts (3 – 2) | <u>1</u> | (2) | <u>83</u> | | |
| NET PROFIT ✓ | | | 120 | | (9) |
| Less Appropriations | | | | | |
| Add Interest on Drawings | | | | | |
| Evans | 1 | (1) | | | |
| Jones | 2 | (1) | <u>3</u> | | |
| | | | 123 | | |
| Less Interest on Capital | | | | | |
| Evans | 2 | (1) | | | |
| Jones | 3 | (1) | <u>5</u> | | |
| | | | 118 | | |
| Less Salary – Evans | | | <u>8</u> | (1) | |
| RESIDUAL PROFIT | | | 110 | | |
| | | | | | |
| Share of Profit | | | | | |
| Evans (2/5 x 110) | 44 | (2) | | | |
| Jones (3/5 x 110) | <u>66</u> | ν <u> </u> | 110 | | (7) |

(40)

PART A

| (a) | (i) | Net Profit | 25% × 80,000 | 0 = 20,000 | (1) | |
|-----|-------|-------------------------------|----------------|-------------------------------------|-----|------|
| | (ii) | Gross Profit Ratio | Gross Profit | = Net Profit + Expenses | | |
| | | | | = 20,000 + 16,000 = 36,000 1 | | |
| | | | Gross Profit F | Ratio = 36/80 × 100 = 45% 1 | (2) | |
| | (iii) | Mark-up Ratio | Gross Profit/0 | Cost of Sales × 100 | | |
| | | | 36/44 × 100 = | = 81.8% 1 | (2) | |
| | (iv) | Rate of Stock Turnover | Cost of Sales | /Average Stock | | |
| | | rumover | 44/11 = 4 tim | es 2 | (2) | |
| | (v) | Expenses Ratio | Expenses/Sa | les × 100 | | |
| | | | 16/80 × 100 = | = 20% 2 | (2) | |
| | (vi) | Debtors' Collection Period | Average Deb | tors/Credit Sales × 365 | | |
| | | renou | Credit Sales | = 75% × 80 = 60 1 | | |
| | | | 6/60 × 365 = | 36.5 (days) 2 | (3) | |
| | (vii) | Return on Capital Employed | Net Profit/Ca | pital × 100 | | |
| | | Еттрюуси | 20/50 × 100 = | = 40% 2 | (2) | (14) |

Question 3 (continued)

(b) (i) Cost of Sales ROST = COS/Average Stock COS/15 = 6 $COS = 15 \times 6 = £90,000 2$ (2) (ii) Gross Profit = 40% x Sales Sales Cost of Sales = 60% x Sales £90,000 \times 100/60 Sales = £150,000 **2** (2) (iii) **Gross Profit** Gross Profit = $40\% \times £150,000 = £60,000$ 150,000 - 90,000 = £60,000(1) (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 = £19,000 2Purchases = 90,000 - 11,000 + 19,000 = £98,000 2 (4) (v) **Net Profit** Gross Profit – Expenses = Net Profit $60,000 - (18\% \times 150) = £33,000 2$ (2) (11)

(c) Ways of reducing Gross Profit Ratio:

Decrease in Selling Price 2 (2)

PART B

(a) Calculation of Total Depreciation

| Asset | Year 1 | Year 2 | Year 3 | Total |
|----------------|-------------------------|-------------------|-------------------------|--------|
| Motor Vehicles | 9/12 × 20% × £15,000 | 20% × £15,000 | 6/12 × 20% × £15,000 | |
| | £2,250 (2) | £3,000 (1) | £1,500 (2) | £6,750 |

OR

$$3000 (1) + 3000 (1) + 750 (3) = £6,750$$

Plant/Machinery nil
$$6/12 \times 10\%$$
 $9/12 \times 10\%$ $\times £20,000$ $\times (£20,000 - £1,000)$ $£1,000$ $£1,425$ (9)

(b) Profit/Loss on sale of Motor Vehicles

(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

(10)

(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. (1)

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

(10)

PART A

| | <u>January</u> | <u>February</u> | <u>March</u> | <u>April</u> | <u>May</u> | <u>June</u> |
|------------------|----------------|-----------------|--------------|--------------|------------|-------------|
| 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 | s (one month) | 19 | | | | |

Cash Budget for the 3 months March to May Year 3

| Cash Budget for | ine o moi | 11113 1 | viai Cii to ii | nay i | Cai J | |
|-----------------|--------------|---------|----------------|-------|------------|------|
| | <u>March</u> | | <u>April</u> | | <u>May</u> | |
| Opening Balance | 50,000 | (1) | 73,682 | | 123,465 | |
| | | | | | | |
| <u>Receipts</u> | | | | | | |
| 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) | | |
| Total Receipts | 71,682 | | 101,583 | | 37,734 | |
| | | | | | | |
| <u>Payments</u> | | | | | | |
| 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) | <u> </u> | (11) | | (14) |
| | | (/ | | (/ | | () |

(39)

PART B

| RECEIPTS | | | | ISSUE | S | | E | BALANC | E | | | |
|----------|-------|---------------------|--------|-------|-----|---------------------|--------|--------|-------|---------------------|--------|---|
| Date | Qty | Cost Per Unit | Total | | Qty | Cost Per 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 | 1 |

11

(50)

PART A

Total for Part A (20)

2

 $3,250 \times £8 = £26,000$ Loss (1)

PART B

| (a) (i) | | | Proc | ocess 3 Account | | | | | | |
|------------|-----------|-----|---------|-----------------|---------------|-----------|---|----------------|---------|----|
| | QTY | CPU | £ | | | 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 | £5.50 4 | 1,650 | |
| Labour | | | 3,000 | 1 | Stock | 3,250 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) | | | <u>Abnorn</u> | nal | 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 kgs =
$$30 \times £5.50 = £165$$

$$(Margin = 25\% = 1/4 - Mark-up = 1/3)$$
Mark-up therefore = $1/3 \times £165 =$

$$\underbrace{£55}$$
Selling Price
$$\underbrace{£220}$$
Total for Part B (20)

Total (40)

<u>Alternative Solution – Question 7 PART B</u>

(a) (i)
Process 3 Account

| DR | | | CR | | | | Balance | | | | | | |
|------------------|---------|----|--------|---|-------|---|---------|---|--------|---|---------|---|--------|
| | Q (kgs) | Р | £ | Q | (kgs) | | Р | | £ | | Q (kgs) | Ρ | £ |
| 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 Overhe | ead | | 950 | 1 | | | | | | | | | 19,950 |
| Fixed Overhead | | | 1,000 | 1 | | | | | | | | | 20,950 |
| Normal Loss | | | | | 200 | | £4 | | 800 | 1 | | | 20,150 |
| Work-in Progres | SS | | | | 250 | | | | 625 | 1 | | | 19,525 |
| Abnormal Loss | | | | | 300 | 1 | £5.50 | 2 | 1,650 | | | | 17,875 |
| Transfer to Stoo | k | | | | 3250 | | £5.50 | 2 | 17,875 | | | | £0 |

Unit Cost

£19,525/3550 = £5.50 **12**

(ii) Abnormal Loss Account

| | DR | | CR | | | Balance | | | |
|-----------------|-----------|-------|---------|----|----------------|---------|---|-------|---|
| | Q (kgs) P | £ | Q (kgs) | Р | £ | Q (kgs) | Р | £ | |
| Process 3 | 300 £5.50 | 1,650 | 1 | | | | | 1,650 | |
| Bank | | | 300 | £4 | 1,200 2 | | | 450 | |
| Profit and Loss | | | | | 450 1 | | | 0 | 4 |

(b) Total Cost of 30 kgs =
$$30 \times £5.50 = £165$$
 1

(Margin = $25\% = 1/4 - \text{Mark-up} = 1/3$)

Mark-up therefore = $1/3 \times £165 =$

Selling Price

255

£220

4

Total for Part B (20)

Total (40)

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

> Contribution per unit

 $Y = 6.000 \times 2 =$ 12,000 1 $Z = 4,500 \times 4 =$ 18,000 1

30,000 machine hours 2

5

3

10

<u>12</u>

(ii) **Product Y Product Z** £ £ £ £ 1 Selling Price 50 **7**0 Variable Costs: 1 Less Materials 10 1 6 Labour 20 -40 Overheads <u>6</u> <u>36</u> <u>12</u> 1 <u>58</u>

Product Y Product Z Total 1 1 Total £14 \times 6,000 = Contribution £12 \times 4,500 = £84,000 £54,000 £138,000 **Fixed Costs** 50,000

<u>14</u>

Less **Total Profit** £88,000

ALTERNATIVE

Total Υ Ζ 300,000 315,000 Sales Materials 60,000 -27,000 12,000 180,000 Labour 54,000 261,000 Overheads 36,000 216,000 84,000 54,000 138,000 1 1 **Fixed Costs** 50,000 1 **Profit** 88,000

Page 17

| (b) (i) | No of hours at full | 30,000 | × 100 = | 40,000 | machine hours | 2 |
|---------|---------------------|--------|---------|--------|---------------|---|
| | Capacity = | 75 | | | | |

| (ii) | Contribution per Machine Hour = | $\frac{\text{Product Y}}{\frac{£14}{2}}$ | <u>Product Z</u> 2 <u>£1</u> | | | |
|------|---|--|------------------------------|---------------|---|---|
| | = | £7 | £ | 23 | | |
| | Order of priority | First | Second | 1 | | |
| | Total Machine Hours available: Less: Hours allocated to Y | | | 40,000 | | |
| | (8,000 × 2) | | | <u>16,000</u> | | |
| | Available for Z | | | <u>24,000</u> | 2 | |
| | Number of units to be produced: | 16,000 1 | 24,00 | 0 <u>0</u> 1 | | |
| | = | 8,000 | units 6,00 | 00 units | 9 | 1 |
| | | | | | | |

| (iii) | | Product Y | | Product Z | | <u>Total</u> | | |
|----------|-----------------------|------------------|---|------------------|---|--------------|---|---|
| | Total Contribution | £14 × 8,000 | 1 | £12 × 6,000 | 1 | | | |
| | | £112,000 | | £72,000 | | £184,000 | | |
| (iv) Les | s Fixed Costs | | | | | 60,000 | 2 | |
| | Maximum Profit | | | | | £124,000 | | 4 |

15

ALTERNATIVE

| | Υ | | | 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 =

 $\frac{40,000}{5}$ **2** 140% × 40,000 = 56,000 machine hours **2**

| Product A: | £ | | £ | |
|-----------------------|---|----------|---|-----------|
| Selling Price | | | | £60 |
| Materials | | 6) | 1 | |
| Labour | | 30 🗸 | | |
| Variable Overheads | | <u>9</u> | 1 | <u>45</u> |
| Contribution per unit | | | | £15 |

Contribution per Machine Hour = $\frac{£15}{3}$ = £5 **1**

Order of Priority: Y, A, Z

| | | Product Y | | Product A | | Product Z | | <u>Total</u> | | |
|------|--|--------------------|---|--------------------|---|--------------------|---|--------------------|---|----|
| | Machine Hours Allocated | <u>16,000</u> 2 | | <u>21,000</u> 3 | | <u>19,000</u> 4 | | 56,000 | | |
| | Quantity to be produced: | 8,000 × £14 | 1 | 7,000 × £15 | 2 | 4,750 × £12 | 2 | | | |
| Less | Total Contribution: Fixed Costs Maximum Profit | £112,000 | 1 | £105,000 | 1 | £57,000 | 1 | £274,000 90,000 | 2 | 40 |
| | for Year 3 | | | | | | | £184,000 | | 13 |

Total (40)

15

ALTERNATIVE

| | Υ | | Α | | | Z | | | TOTAL | |
|-----------|---------|---------|---------|---------|---|---------|---------|---|---------|---|
| Sales | | 400,000 | 40.000 | 420,000 | | | 332,500 | | | |
| Materials | 80,000 | | 42,000 | | | 28,500 | | | | |
| Labour | 160,000 | | 210,000 | | | 190,000 | | | | |
| Overheads | 48,000 | 288,000 | 63,000 | 315,000 | | 57,000 | 275,500 | | | |
| | | 112,000 | 1 | 105,000 | 1 | | 57,000 | 1 | 274,000 | |
| | | | | | | | | | 90,000 | 2 |
| | | | | | | | | | 184,000 | |
| | | | | | | | | | | 5 |

Page 19

| (a) | Allocation – takes place when the control particular department 1 it is a cost w | | | | |
|-----|--|----------------------------|--|---------|------|
| | department 1 and the department is has incurred 1 eg indirect materials | charg | • | (Max 2) | |
| | Apportionment – takes place when identified with a particular department with its share of the total overhead unaccording to floor area occupied by | nt 1 . E ising a | Each department is charged n equitable basis 1 eg Rent | (Max 2) | |
| | Cost Centre – any part of a business and to which costs can be charged machine or person 1. Cost centres a charging on to products which use the | (Max 2) | (6) | | |
| (b) | (Rate Per) Direct Labour Hour = | 1 | Overhead Cost No of Direct Labour hours | 1 | |
| | (Rate Per) Machine Hour = | 1 | Overhead Cost No Of Machine Hours | 1 | |
| | (Rate Per) Unit Produced = | 1 | Overhead Cost No of Units Produced | 1 | |
| | Percentage of Prime Cost = | 1 | Overhead Cost × 100 Prime Cost | 1 | |
| | Percentage of Direct Material Cost = | = 1 | Overhead Cost × 100 Direct Material Cost | 1 | |
| | Percentage of Direct Labour Cost = | 1 | Overhead Cost × 100 Direct Labour Costs | 1 | |
| | | | Any 2 for 2 Marks Each | (Max 4) | (4) |
| | | | | | (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 (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)

[END OF MARKING INSTRUCTIONS]