This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners’ meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

Cambridge will not enter into discussions about these mark schemes.

Cambridge is publishing the mark schemes for the October/November 2013 series for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level components and some Ordinary Level components.
1 (a) Joe Brown
Departmental income statement for the year ended 31 December 2012

<table>
<thead>
<tr>
<th></th>
<th>Fuel</th>
<th>Car wash</th>
<th>Café</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenue</strong></td>
<td>$735,600</td>
<td>$30,650</td>
<td>$61,300</td>
</tr>
<tr>
<td><strong>Opening inventory</strong></td>
<td>$38,700</td>
<td>$3,650</td>
<td>$4,725</td>
</tr>
<tr>
<td><strong>Add Purchases</strong></td>
<td>$454,320</td>
<td>$7,240</td>
<td>$9,620 (1) mark all 3</td>
</tr>
<tr>
<td><strong>Less Closing inventory</strong></td>
<td>$39,760</td>
<td>$2,480</td>
<td>$4,820 (1) mark all 3</td>
</tr>
<tr>
<td><strong>Cost of goods sold</strong></td>
<td>$453,260</td>
<td>$8,410</td>
<td>$9,525</td>
</tr>
<tr>
<td><strong>Wages</strong></td>
<td>$36,000</td>
<td>$3,000</td>
<td>$12,000 (1) mark all 3</td>
</tr>
<tr>
<td></td>
<td><strong>489,260</strong></td>
<td><strong>11,410</strong></td>
<td><strong>21,525</strong></td>
</tr>
<tr>
<td><strong>Gross Profit</strong></td>
<td>$246,340</td>
<td>$19,240</td>
<td>$39,775</td>
</tr>
</tbody>
</table>

**Less expenses**

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rent</td>
<td>$33,664 (1)</td>
<td>$8,416 (1)</td>
</tr>
<tr>
<td>Electricity</td>
<td>$12,200 (1)</td>
<td>$3,050 (1)</td>
</tr>
<tr>
<td>Administration</td>
<td>$12,084 (1)</td>
<td>$1,007 (1)</td>
</tr>
<tr>
<td>Other expenses</td>
<td>$48,020 (1)</td>
<td>$2,001 (1)</td>
</tr>
<tr>
<td>Depreciation</td>
<td>$12,000 (1)</td>
<td>$2,070 (1)</td>
</tr>
<tr>
<td></td>
<td><strong>117,968</strong></td>
<td><strong>16,544</strong></td>
</tr>
<tr>
<td><strong>Profit for the year</strong></td>
<td><strong>128,372</strong></td>
<td><strong>2,696</strong></td>
</tr>
</tbody>
</table>

[18]

(b) Fixed costs will be reallocated
- Alternative uses of the vacant space
- Customers making additional purchases when having car washed
- Loss of business and goodwill
- Staff redundancies
- Disposal of closing inventory
- Sale of equipment
- Decrease in profit/revenue
- Closure costs

(1) + (1) for development × 3 points [6]

(c) Interest is only charged on overdraft if used. Loan interest is for the whole agreed period.
- Loans are for an agreed period
- Overdrafts can be called in at any time
- Loans are normally at fixed interest but overdraft interest can fluctuate
- Overdrafts have a higher rate of interest than a loan
- Overdraft balance may vary from day to day
- Loans are usually for a longer period than overdrafts
- Loans would be taken out for non-current asset purchase but overdrafts are normally for running expenses in periods of shortage of working capital
- Loans are for a larger value whereas an overdraft is for a smaller sum
- Overdraft is short term borrowing whereas a loan is long term borrowing
- Loans are usually non-current liabilities and overdrafts are current liabilities.

(1) + (1) for development × 3 points [6]

[Total: 30]
2 (a) Current accounts

<table>
<thead>
<tr>
<th></th>
<th>Alec</th>
<th>Jean</th>
<th>Alec</th>
<th>Jean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance</td>
<td>$2,900</td>
<td>(1)</td>
<td>Balance</td>
<td>$3,100</td>
</tr>
<tr>
<td>Drawings</td>
<td>$20,000</td>
<td>(1)</td>
<td>Interest on capital</td>
<td>$4,500</td>
</tr>
<tr>
<td></td>
<td>$1,600</td>
<td>(1)</td>
<td>Salaries</td>
<td>$14,000</td>
</tr>
<tr>
<td>Balance c/d</td>
<td>$3,000</td>
<td>(1)</td>
<td>Share of profit</td>
<td>$9,000</td>
</tr>
<tr>
<td></td>
<td>$27,500</td>
<td>(1)</td>
<td></td>
<td>$27,500</td>
</tr>
<tr>
<td></td>
<td>$24,100</td>
<td>(1)</td>
<td></td>
<td>$24,100</td>
</tr>
<tr>
<td></td>
<td>$3,000</td>
<td>(1)</td>
<td></td>
<td>$340</td>
</tr>
<tr>
<td></td>
<td>$3,000</td>
<td>(1)</td>
<td></td>
<td>$340</td>
</tr>
</tbody>
</table>

**Marker Note:**
- Drawings and Salaries – 1 mark for both figures.
- Share of profit must be in ratio of 3:2 for (of).

[10]

(b) Calculation of profit for the year ended 31 May 2013 before appropriation.

\[
\begin{align*}
\text{Share of profit} & \quad 15,000 \quad (1\text{of}) \text{ from (a)} \\
\text{Salary} & \quad 26,000 \quad (1) \\
\text{Interest on capital} & \quad 7,500 \quad (1\text{of})
\end{align*}
\]

\[48,500\]

LESS

\[
\begin{align*}
\text{Interest on drawings} & \quad 3,360 \quad (1\text{of}) \\
\text{Profit for the year} & \quad 45,140 \quad (2\text{cf/1of})
\end{align*}
\]

An anchor figure must be present for any marks to be awarded. [6]

(c) Goodwill is an intangible asset (1). It arises from the location (1) reputation (1) and customer loyalty (1). It represents the value of the business in excess of (1) the book value of its net assets (1). [4]

(d) Capital accounts

<table>
<thead>
<tr>
<th></th>
<th>Alec</th>
<th>Jean</th>
<th>Chris</th>
<th>Alec</th>
<th>Jean</th>
<th>Chris</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goodwill</td>
<td>$18,000</td>
<td>(1)</td>
<td>$12,000</td>
<td>(1)</td>
<td>$6,000</td>
<td>(1)</td>
</tr>
<tr>
<td>Balance c/d</td>
<td>$93,600</td>
<td></td>
<td>$62,400</td>
<td></td>
<td>$48,000</td>
<td></td>
</tr>
<tr>
<td>Goodwill</td>
<td>$90,000</td>
<td></td>
<td>$60,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>$21,600</td>
<td>(1)</td>
<td>$14,400</td>
<td>(1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$36,000</td>
<td>(1)</td>
<td>$12,150</td>
<td>(1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$5,850</td>
<td>(1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$111,600</td>
<td></td>
<td>$74,400</td>
<td></td>
<td>$54,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$111,600</td>
<td></td>
<td>$74,400</td>
<td></td>
<td>$54,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$93,600</td>
<td></td>
<td>$62,400</td>
<td></td>
<td>$48,000</td>
<td>(2\text{cf/1of})</td>
</tr>
</tbody>
</table>

**Marker Note:**
- Award 0 marks for Balance b/d is not brought down. [10]

[Total: 30]
3 (a) (i) Calculate the weekly breakeven point in units.

Fixed cost $800 \times (3.50 + 1.00) = $3600
Contribution $35.00 - (13.50 + 1.50) = $20

Breakeven point = $3600 / $20 = 180 units (1cf) [3]

(ii) Calculate the weekly breakeven point in value.

180 units \times $35 = $6300
If contribution to sales ratio method is used allow answers between $6300 and $6320. [2]

(iii) Calculate the margin of safety in revenue.

800 - 180 = 620 \times $35 = $21,700 (1of)
Or
28,000 - 6300 = $21,700 (1of) [3]

(iv) Calculate the margin of safety as a percentage.

($21,700 / 800 \times 35) \times 100 = 77.5% (1of)
Allow 77% or 78% [2]

(b) Calculate the profit for the four weeks that Kirkton will be without the machine if they decide to lease a machine.

Revenue – 500 \times 4 \times $35 = 70,000 (1)
Variable production costs – 500 \times 4 \times $13.50 = 27,000 (1)
Fixed production costs – 800 \times 4 \times $3.50 = 11,200 (1)
Variable selling costs – 500 \times 4 \times $1.50 = 3,000 (1)
Fixed selling costs = 800 \times 4 \times $1.00 = 3,200 (1)
Machine lease costs – 4 \times $2000 = 8,000 (1)
Training costs = 3,000 (1)
Profit = 14,600 (2cf / 1of) [9]

(c) Calculate the profit for the four weeks if Kirkton decide to buy the Kirks from the competitor.

Revenue – 800 \times 4 \times $35 = 112,000 (1)
Purchase price – 800 \times 4 \times $26.25 = 84,000 (1)
Fixed production costs – 800 \times 4 \times $3.50 = 11,200 (1)
Variable selling costs – 800 \times 4 \times $1.50 = 4,800 (1)
Fixed selling costs – 800 \times 4 \times $1.00 = 3,200 (1)
Delivery costs – 4 \times $400 = 1,600 (1)
Profit = 7,200 (1cf) [7]

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(d) State two advantages if Kirkton decides to buy the Kirks from the competitor rather than lease the machine.

- The full quota of 800 units will be available for customers (1)
- Kirkton’s business reputation will be maintained (1)
- No training costs (1)

Do not allow references to delivery charge. [2]

(e) State two disadvantages if Kirkton decides to buy the Kirks from the competitor.

- The product quality may not be the equivalent of the company’s own quality (1)
- The competitor may not deliver on time (1)
- The competitor may increase the price (1)
- Kirkton will have to continue to pay wages (1)
- Competitive advantage (1)
- Kirkton will make a lower profit (1of)

Do not allow references to delivery charge. [2]

[Total: 30]