MARK SCHEME for the May/June 2014 series

9706 ACCOUNTING

9706/42  Paper 4 (Problem Solving [Supplement]), maximum raw mark 120

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 May/June 2014 series for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level components and some Ordinary Level components.
1 (a) Income statement for year ended 31 December 2013

\[
\begin{align*}
\text{Sales} &\quad \$85\,000 + 20\,000 - 30\,000 = 75\,000 \\
\text{Opening inventory} &\quad 15\,000 \\
\text{Purchases} &\quad 30\,000 + 55\,000 - 25\,000 = 60\,000 \\
\text{Closing inventory} &\quad 30\,000 - 45\,000 \quad (1) \text{ both} \\
\text{Gross profit} &\quad 75\,000 - 30\,000 \quad (1) \text{ of} \\
\text{Expenses} &\quad 20\,500 \quad (1) \\
\text{Interest on loan} &\quad 2\,000 \quad (1) \text{ of} \\
\text{Profit for the year} &\quad 7\,500 \quad (1) \text{ of} \quad [9]
\end{align*}
\]

(b) Current account Tan

\[
\begin{align*}
\text{Balance b/d} &\quad 4\,000 \quad (1) \text{ of} \\
\text{Share of profit} &\quad 2\,500 \quad (1) \text{ of} \\
\text{Interest on loan} &\quad 2\,000 \quad (1) \text{ of} \\
\text{Drawings} &\quad 2\,000 \quad (1) \text{ of} \\
\text{Balance c/d} &\quad 1\,500 \quad (1) \text{ of} \\
\text{Balance b/d} &\quad 1\,500 \quad (1) \text{ of} \quad [4]
\end{align*}
\]

(c) Capital accounts

\[
\begin{align*}
\text{Ann} &\quad \text{Jan} &\quad \text{Tan} &\quad \text{Ann} &\quad \text{Jan} &\quad \text{Tan} \\
\text{Goodwill} &\quad 12 &\quad 6 \quad (1) \text{ row} &\quad \text{Gain on revaluation} &\quad 10 &\quad 10 \quad 10 \quad (1) \text{ row} \\
\text{Motor vehicle} &\quad 5 \quad (1) &\quad \text{Bal b/d} &\quad 40 &\quad 40 &\quad 30 \quad (1) \text{ row} \\
\text{Current Alc} &\quad 1.5 \quad (1) \text{ of} &\quad \text{Goodwill} &\quad 6 &\quad 6 &\quad 6 \quad (1) \text{ row} \\
\text{Bank} &\quad 67.5 \quad (1) \text{ of} &\quad \text{Loan} &\quad 30 \quad (2) &\quad \text{Bal c/d} &\quad 44 &\quad 50 &\quad 56 &\quad 56 &\quad 76 \quad (1) \text{ of} \quad 50(1) \text{ of} \quad [11]
\end{align*}
\]

(d) Dividend yield for XY limited

\[
\frac{[100\,000 \times 8\%]}{2\,(1)} \div 100\,000 \,(1) \times 100 = \frac{0.08}{2\,(1)} \times 100 = 4\% \quad (1) \text{ of} \quad [4]
\]

(e) Dividend cover for XY limited

\[
\frac{24\,000 \,(1)}{8\,000 \,(1) \text{ of}} = 3 \text{ times} \quad (1) \text{ of} \quad [3]
\]

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Option 1 will provide Tan with a return on his investment of 4% (1) of. He can buy 
$67,500 \div 2 \text{ share} = 33,750 \text{ shares (1) of which will give him income of} 
33,750 \times $0.08 = $2,700 (1) of.

Option 2 will provide him with no return until year 2 (1). This will be just over 2.9% (1) 
($2,000 \div 67,500) (1).

Option 3 will give a return of 5% (1) ($67,500 \times 5\% = $3,375) (1 of).

Option 1 may lead to both an increase in dividends in the future (1) and also possible capital 
growth in the value of the share (1). The company looks reasonably secure with a dividend 
cover of 3 times (1) The shareholder would have voting rights (1) but no management role 
(1). Dividends are not guaranteed but dependent on level of distributable profits. (1). Limited 
liability (1).

Option 2 is less secure (1) as his figures are only projections which may or may not happen 
(1). unlimited liability (1). He will be his own boss (1) but this comes with responsibilities (1) 
He can have all available profits but is also liable to all the losses (1).

Option 3 is a safe return (1) but no chance of any growth of income or capital (1). guaranteed 
return (1) fixed return (1).

2 marks per option (1) per advantage (1) per disadvantage.
(1) decision (0–2) justification. 

[Max 9]

[Total: 40]
2 (a) Bridlington PLC

Income statement for year ended 30 September 2013

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>936,011</td>
</tr>
<tr>
<td>Cost of sales</td>
<td>(484,263)</td>
</tr>
<tr>
<td>Gross profit</td>
<td>451,748</td>
</tr>
<tr>
<td>Distribution costs</td>
<td>(112,967)</td>
</tr>
<tr>
<td>Administrative expenses</td>
<td>(262,042)</td>
</tr>
<tr>
<td>Profit from operations</td>
<td>76,739</td>
</tr>
<tr>
<td>Tax</td>
<td>(16,730)</td>
</tr>
<tr>
<td>Profit for the year</td>
<td>60,009</td>
</tr>
</tbody>
</table>

Workings

Cost of sales: $177,838 + 479,352 – 172,927 (1) = 484,263 (1) of

Distribution costs:
- Trial balance: 108,376
- Prepayment: (2,760) (1)
- Loss: 212 (1)
- Depreciation: 7,139

Administrative expenses:
- Trial balance: 236,758
- Accrual: 4,525 (1)
- Provision: (1,296) (1)
- Loss: 638 (1)
- Depreciation: 21,417 (1) split

(b) Land Buildings Plant and Machinery Motor vehicle

<table>
<thead>
<tr>
<th>Cost</th>
<th>Balance 1/10/2012</th>
<th>Additions</th>
<th>Disposal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100,000</td>
<td>280,000</td>
<td>95,000</td>
</tr>
<tr>
<td></td>
<td>10,000 (1)</td>
<td></td>
<td>(16,000) (1)</td>
</tr>
</tbody>
</table>

Depreciation

<table>
<thead>
<tr>
<th>Charge</th>
<th>Balance 1/10/2012</th>
<th>Additions</th>
<th>Disposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero</td>
<td>78,400</td>
<td>66,500</td>
<td>44,578 (1) row</td>
</tr>
<tr>
<td>Zero</td>
<td>11,200 (1) of</td>
<td>10,500</td>
<td>6,856 (1) of</td>
</tr>
<tr>
<td>Zero</td>
<td>89,600</td>
<td>77,000</td>
<td>44,434</td>
</tr>
</tbody>
</table>

NBV at 30.09.13

<table>
<thead>
<tr>
<th>NBV at 30.09.13</th>
</tr>
</thead>
<tbody>
<tr>
<td>100,000</td>
</tr>
<tr>
<td>190,400</td>
</tr>
<tr>
<td>28,000</td>
</tr>
<tr>
<td>20,566 (1) of ro</td>
</tr>
<tr>
<td>100,000</td>
</tr>
<tr>
<td>201,600</td>
</tr>
<tr>
<td>28,500</td>
</tr>
<tr>
<td>36,422 (1) row</td>
</tr>
</tbody>
</table>
(c) **Assets**  

**Non-current assets**  
- Property, plant and equipment: \(338,966\)  

**Current assets**  
- Inventories: \(172,927\)  
- Trade and other receivables: \(135,672\)  
- Cash and cash equivalents: \(0\)  
- **Total assets**: \(647,565\)

**Equity and liabilities**  

**Equity**  
- Share capital: \(400,000\)  
- Share premium: \(40,000\)  
- Retained earnings: \(117,395\)  
- **Total equity**: \(557,395\)

**Current liabilities**  
- Trade and other payables: \(55,768\)  
- Tax liability: \(16,730\)  
- Bank overdraft: \(17,672\)  
- **Total liabilities**: \(90,170\)

**Total equity and liabilities**: \(647,565\)

**Working**  

Trade and other receivables:  
- Trade receivables from TB: \(138,450\)  
- Provision: \(5,538\)  
- Prepayment: \(2,760\)  
- **Total receivables**: \(135,672\)

Trade and other payables:  
- Trade payables from TB: \(51,243\)  
- Accrual: \(4,525\)  
- **Total payables**: \(55,768\)

(d) **Equity**  

- Share capital: \(495,000\)  
- Share premium: \(20,000\)  
- Revaluation reserve: \(100,000\)  
- Retained earnings: \(120,010\)  
- **Total equity**: \(735,010\)

**Working**  

- Share capital: \(400,000 + 50,000 (1) + 45,000 (1) = 495,000\)  
- Share premium: \(40,000 + 25,000 (1) - 45,000 (1) = 20,000\)  
- Retained earnings: \(117,395 + 2,615 = 120,010\)

**Total: 40**
3 (a)  

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue</th>
<th>Costs</th>
<th>Interest</th>
<th>Net cash</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>(200000)</td>
<td>(200000)</td>
<td>(200000)</td>
<td>(200000)</td>
</tr>
<tr>
<td>1</td>
<td>110000</td>
<td>(40000)</td>
<td>(20000)</td>
<td>50000</td>
</tr>
<tr>
<td>2</td>
<td>115500</td>
<td>(41200)</td>
<td>(20000)</td>
<td>54300</td>
</tr>
<tr>
<td>3</td>
<td>121275</td>
<td>(42436)</td>
<td>(20000)</td>
<td>58839</td>
</tr>
<tr>
<td>4</td>
<td>127339</td>
<td>(43709)</td>
<td>(20000)</td>
<td>63630</td>
</tr>
<tr>
<td>5</td>
<td>133706</td>
<td>(45020)</td>
<td>(20000)</td>
<td>68686</td>
</tr>
<tr>
<td>Total</td>
<td>407820</td>
<td>(212365)</td>
<td>(100000)</td>
<td>95455</td>
</tr>
</tbody>
</table>

(b)  

<table>
<thead>
<tr>
<th>Year</th>
<th>10% Factor</th>
<th>Net cash flow</th>
<th>Net present value</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1.000</td>
<td>(200000)</td>
<td>(200000)</td>
</tr>
<tr>
<td>1</td>
<td>0.909</td>
<td>50000</td>
<td>45450</td>
</tr>
<tr>
<td>2</td>
<td>0.826</td>
<td>54300</td>
<td>44852</td>
</tr>
<tr>
<td>3</td>
<td>0.751</td>
<td>58839</td>
<td>44188</td>
</tr>
<tr>
<td>4</td>
<td>0.683</td>
<td>63630</td>
<td>43459</td>
</tr>
<tr>
<td>5</td>
<td>0.621</td>
<td>68686</td>
<td>42654</td>
</tr>
<tr>
<td>Net present value (1)</td>
<td></td>
<td></td>
<td>20603 (1)</td>
</tr>
</tbody>
</table>

(c) $95455 (1) of / 5 (1) = $19091 (1) of  

\[
19091 / (200000 / 2) (1) \times 100 = 19.09\% (1) of
\]

(d)  

<table>
<thead>
<tr>
<th>Year</th>
<th>40% Factor</th>
<th>Net cash flow</th>
<th>Net present value</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1.000</td>
<td>200000</td>
<td>-200000 (1)</td>
</tr>
<tr>
<td>1</td>
<td>0.714</td>
<td>50000</td>
<td>35700</td>
</tr>
<tr>
<td>2</td>
<td>0.510</td>
<td>54300</td>
<td>27693</td>
</tr>
<tr>
<td>3</td>
<td>0.364</td>
<td>58839</td>
<td>21417 (1) of if 40% D.F used</td>
</tr>
<tr>
<td>4</td>
<td>0.260</td>
<td>63630</td>
<td>16544</td>
</tr>
<tr>
<td>5</td>
<td>0.186</td>
<td>68685</td>
<td>12775</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>-85870</td>
<td>(1) of</td>
</tr>
</tbody>
</table>

Internal rate of return 15.81%  

\[
10\% (1) + [30\% (1) \times \$20603 / (\$20603 + 85870) (1) of] = 15.81\% (1) of
\]

(e) Drake should invest in Project Sylvania (1), because the accounting rate of return is greater (1) of, the net present value is greater (1) of, and the internal rate of return is greater (1) of than Project Utopia.  

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(f) Interest would not be charged to the project (1), therefore the profits should be higher (1). This will result in a higher accounting rate of return (1).

ARR = 195 455 / 5 = 39 091 (1) of / 100 000 (1) = 39.09% (1) of.

(g) Preference shares fixed dividend (1) in priority to ordinary shareholders (1). Debenture secured on the asset (1). Interest charged may be at a lower rate than on the bank loan (1). Interest is charged before dividend is paid to ordinary and preference shareholders (1).

Sale of surplus non current assets (1) as long as this does not affect trading (1).

Venture capitalist could invest (1) but would require a return on his investment (1)

Accept other reasonable alternatives.  

[Max 4]

[Total: 40]