Published

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

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1 (a)

Bayliss Limited
Income statement for the year ended 31 December 2015

<table>
<thead>
<tr>
<th></th>
<th>$000</th>
<th>$000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>984</td>
<td></td>
</tr>
<tr>
<td>Cost of sales</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opening inventory</td>
<td>98</td>
<td></td>
</tr>
<tr>
<td>Purchases</td>
<td>480</td>
<td></td>
</tr>
<tr>
<td>Closing inventory</td>
<td>(105)</td>
<td>473</td>
</tr>
<tr>
<td>Gross profit for the year</td>
<td>511</td>
<td>(1)</td>
</tr>
<tr>
<td>Administrative expenses</td>
<td>229</td>
<td>(4)</td>
</tr>
<tr>
<td>Distribution costs</td>
<td>197</td>
<td>426</td>
</tr>
<tr>
<td>Profit from operations</td>
<td>85</td>
<td></td>
</tr>
<tr>
<td>Finance costs (13 + 1)</td>
<td>14</td>
<td>(1)</td>
</tr>
<tr>
<td>Profit for the year</td>
<td>71</td>
<td>(1of)</td>
</tr>
</tbody>
</table>

\[ W1 \quad 205 + 3 (1) + 11 (1) + 9 (1) + 1 (1) = 229 \]

If administrative expenses are not shown as one combined figure '0' marks for profit for the year.

[7]

(b)

Bayliss Limited
Statement of changes in equity for the year ended 31 December 2015

<table>
<thead>
<tr>
<th></th>
<th>Share capital $000</th>
<th>Share premium $000</th>
<th>Revaluation reserve $000</th>
<th>General reserve $000</th>
<th>Retained earnings $000</th>
<th>Total $000</th>
</tr>
</thead>
<tbody>
<tr>
<td>At 1 January 2015</td>
<td>140</td>
<td>3</td>
<td>–</td>
<td>21</td>
<td>61</td>
<td>225</td>
</tr>
<tr>
<td>Bonus shares</td>
<td>7</td>
<td>(3)</td>
<td>(4)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dividends paid</td>
<td></td>
<td></td>
<td>(10)</td>
<td>(10)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profit for the year</td>
<td></td>
<td></td>
<td></td>
<td>71</td>
<td>71</td>
<td></td>
</tr>
<tr>
<td>Revaluation</td>
<td></td>
<td></td>
<td></td>
<td>15</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>At 31 December 2015</td>
<td>147</td>
<td>–</td>
<td>15</td>
<td>17</td>
<td>122</td>
<td>301</td>
</tr>
</tbody>
</table>

Award 1 mark for bonus share row, dividends, profit (own figure), revaluation and closing rows (own figure).

[5]
Bayliss Limited
Statement of financial position at 31 December 2015

<table>
<thead>
<tr>
<th></th>
<th>$000</th>
<th>$000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-current assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land and buildings (200 – 24)</td>
<td>176</td>
<td>(1)</td>
</tr>
<tr>
<td>Plant and machinery</td>
<td>99</td>
<td>(1)</td>
</tr>
<tr>
<td></td>
<td>275</td>
<td></td>
</tr>
<tr>
<td><strong>Current assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inventory</td>
<td>105</td>
<td></td>
</tr>
<tr>
<td>Trade receivables (109 – 9 (1) – 3 (1) of)</td>
<td>97</td>
<td></td>
</tr>
<tr>
<td>Other receivables</td>
<td>3</td>
<td>205</td>
</tr>
<tr>
<td>Total assets</td>
<td>480</td>
<td></td>
</tr>
<tr>
<td><strong>Equity and liabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Equity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share capital</td>
<td>147</td>
<td></td>
</tr>
<tr>
<td>Revaluation reserve</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>General reserve</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Retained earnings</td>
<td>122</td>
<td>301</td>
</tr>
<tr>
<td><strong>Non-current liabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5% debentures (2017)</td>
<td>80</td>
<td>(1)</td>
</tr>
<tr>
<td><strong>Current liabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade payables</td>
<td>59</td>
<td></td>
</tr>
<tr>
<td>Other payables (7 + 1 (1))</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>32</td>
<td>99</td>
</tr>
<tr>
<td>Total equity and liabilities</td>
<td>480</td>
<td></td>
</tr>
</tbody>
</table>

[6]
(d) (i) Ordinary shares

Dividends paid to ordinary shareholders do not affect profit (1) they reduce retained earnings (1) in the statement of changes in equity (1). Does not appear in the income statement (1).

Debenture
Interest paid to debenture holders is charged to the income statement (1) reducing the profit for the year (1).

Max 2 marks for each option. Overall max 4 marks. [4]

(ii) Decision (1)

Interest on the debentures must be paid whether the company makes a profit or a loss (1).

Ordinary share dividends are paid at the discretion of the directors (1).

Debentures are a non-current liability (1) and weaken the statement of financial position and increase gearing (1) whereas ordinary shares are part of the permanent capital of the company (1).

Reasons Max 2 marks [3]

(e) Capital reserves are not normally created by transfer from profits (1). They usually represent gains that have not been realised (1). Capital reserves cannot be used to pay dividends (1).
Max 2 marks

Revenue reserves are created by transfer from profits (1). They may be created for a specific purpose (1), or simply to strengthen the financial position of the company (1). Revenue reserves may be used to pay dividends (1).
Max 2 marks [4]

(f) Revaluation reserve, share premium.
Max one mark.

[Total: 30]
2 (a) (i) Current ratio

\[
\frac{42 + 39 + 2 + 1}{29 + 8 + 10} = 1.79 : 1
\]

(ii) Liquid (acid test) ratio

\[
\frac{39 + 2 + 1}{29 + 8 + 10} = 0.89 : 1
\]

(iii) Trade receivable turnover (days)

\[
\frac{39}{156} \times 365 = 91.25 = 92 \text{ days (1)}
\]

(iv) Trade payable turnover (days)

\[
\frac{29}{88} \times 365 = 120.28 = 121 \text{ days (1)}
\]

(v) Inventory turnover (days)

\[
\frac{((42 + 34) / 2) / 80}{365} = 173.38 = 174 \text{ days (1)}
\]

(b) Trade receivables are taking three months to settle accounts owing indicating poor credit control.

As a result, the company are taking over four months to pay suppliers, which may lead to supplies being stopped.

Inventory is taking an average of almost six months to be sold.

Whilst the current ratio is acceptable at 1.79:1, much of the current asset figure is made up of inventory, leading to a liquid (acid test) ratio of less than 1 : 1. Overall, the company’s liquidity is cause for concern.

Max 1 mark own figure for each relevant comment to a max of 3 marks, plus 1 mark for conclusion. [4]

(c) Only relevant when comparing like with like (1) (same industry, same size business etc.) (1)

Uses historical data (1), therefore gives no indication of future performance (1)

Only concerned with financial data (1), ignores non-financial aspects such as staff morale, quality of management etc (1)

Does not provide causes / reasons for changes (1) – therefore must deduce reasons (1)

1 mark for stating limitation plus 1 mark for development.

Max 6 marks

[Total: 15]
3  (a)  

Realisation Account

\[
\begin{array}{ccc}
\text{\$} & \text{\$} \\
\text{Non-current assets} & 70000 & \text{Trade payables} & 26000 \\
\text{Current assets} & 30000 & \text{Land and building} & 70000 \\
\text{Bank trade payables} & 24500 (1) & \text{Yuan – motor vehicle} & 3000 (1) \\
\text{Dissolution costs} & 1700 (1) & \text{Bank – motor vehicle} & 3500 \\
\text{Share of profit on sale:} & & \text{Bank – trade receivables} & 15000 (1) \\
\text{Wang – capital account} & 2200 & \text{Bank – inventory} & 12000 \\
\text{Yuan – capital account} & 1100 (1) of &  & 129500 \\
\end{array}
\]

\[129500\]

(b)  

\[
\begin{array}{ccc}
\text{W} & \text{Y} \\
\text{Capital accounts} & 40000 & 25000 (1) both \\
\text{Current accounts} & (10000) (1) & 13000 (1) \\
\text{Share of profit} & 2200 & 1100 (1) both OF \\
\text{Motor vehicle} & (3000) (1) & \\
\text{Amount due to each partner} & 32200 (1) OF & 36100 (1) OF \\
\end{array}
\]

(c)  They may have drawn more than the profits earned (1) Partnership may have sustained losses. (1)

(d)  They will need to keep their investments separate to distinguish between individual partners. (1)

To calculate interest on capital. (1)

Max 1 mark

[Total: 15]
4 (a) The answer may be any one of the following:
the point at which a product makes neither a profit or a loss
total costs equal total revenue
total contribution equals fixed costs.
Max 1 mark

(b) $ per unit
Sales revenue 2.00
Less variable costs 0.75
Contribution 1.25 (1)

(i) Fixed costs $50 000 (1) = 40 000 units (1of)
Contribution per unit $1.25

(ii) 40 000 × $2 = $80 000 (1of)
(c) Plots for lines: 
- Units 000 $000
  - Fixed costs
    - 0 50
    - 100 50
  - Sales revenue
    - 0 0
    - 100 200 (100 units × $2)
  - Total costs
    - 0 50 (0 + 50)
    - 100 125 (100 units × $0.75 + 50)

Break-even chart product X

Chart:
- Labels on axis and lines (1 mark)
- Lines drawn correctly (1 mark) and labelled correctly (1 mark)
- Break-even point identified and labelled (1 mark) [4]

(d) Budgeted units less actual units at break-even point in units

100,000 units – 40,000 units (1of) = 60,000 units (1of)

Margin of safety (in percentage)

(60,000 (1of) /100,000) × 100 = 60% (1of) [4]
(e) 

<table>
<thead>
<tr>
<th></th>
<th>Y</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selling price</td>
<td>$23.00</td>
<td>$18.00</td>
</tr>
<tr>
<td>Less variable costs</td>
<td>$13.50</td>
<td>$10.50</td>
</tr>
<tr>
<td>Contribution</td>
<td>$9.50 (1)</td>
<td>$7.50 (1)</td>
</tr>
</tbody>
</table>

(2)

(f) $83,000 – $60,000 = $23,000 (1 of)

(1)

(g) 

<table>
<thead>
<tr>
<th></th>
<th>Y</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contribution</td>
<td>$9.50</td>
<td>$7.50</td>
</tr>
<tr>
<td>+ Limiting factor</td>
<td>2hrs</td>
<td>1hr</td>
</tr>
<tr>
<td>Contribution per limiting factor</td>
<td>$4.75 (1) both</td>
<td>$7.50 (1) both</td>
</tr>
<tr>
<td>Rank</td>
<td>2 (1) both</td>
<td>1 (1) both</td>
</tr>
</tbody>
</table>

Z is made first.
6,000 units of Z and 2,000 units of Y can be made in 10,000 labour hours.

Revised profit = ($7.50 × 6,000 (1 of) + $9.50 × 2,000 (1 of)) – $60,000 = $4,000 (1 OF) [5]

(h) Overtime

Disadvantages Advantages

Workers may refuse Will meet demand
Reduce contribution Rahel knows ability of workers
Possibility of lower quality Rahel knows quality of work
Additional other costs

Buy-in

Doesn’t know quality / reliability of supplier Will meet demand
May be more expensive May obtain better price
May allow competition into market

1 mark for decision and 4 marks for justification [5]
(i) Advantage

Good for short term decision (1) because it only considers variable costs (1)
Good for special orders (1) enables accurate price to be set (1)
Make or buy (1) enables comparison (1)

(Max 1) (1 mark for stating and 1 for development)

Disadvantage

Inaccurate / harder to calculate / time consuming (1) because it is difficult to split costs into fixed and variable (1)
Not useful for financial statements (1) because the inventory value would be understated (1)

Max 1 mark for stating and 1 for development

[4]

[Total: 30]