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Cambridge is publishing the mark schemes for the October/November 2016 series for most Cambridge IGCSE®, Cambridge International A and AS Level components and some Cambridge O Level components.
1 (a) International Dancing
Income and Expenditure Account for the year ended 31 December 2015

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual subscriptions</td>
<td>$106,500</td>
</tr>
<tr>
<td>Profit on sale of CDs</td>
<td>$3,300</td>
</tr>
<tr>
<td>Less expenses</td>
<td></td>
</tr>
<tr>
<td>Rent</td>
<td>$15,000</td>
</tr>
<tr>
<td>Staff costs</td>
<td>$61,000</td>
</tr>
<tr>
<td>Insurance and administration</td>
<td>$3,950</td>
</tr>
<tr>
<td>CDs for club use</td>
<td>$4,000</td>
</tr>
<tr>
<td>Depreciation</td>
<td>$7,600</td>
</tr>
<tr>
<td>Surplus of income over expenditure</td>
<td>$18,250</td>
</tr>
</tbody>
</table>

[Total: 9]

(b) (i) $13,500 + (105,500 – 98,500 + 5,800) = $26,300

(ii) $142,000
- Bank balance: $13,150
- Life membership fees: $50,000
- Bank loan needed: $78,850

[Total: 2]

(c) $15,000
- Bank balance: ($7,885)
- Life membership fees: $5,000
- Bank loan needed: $2,115

[Total: 4]

(d) Advantages
- Purchases of premises seems to be cheaper than renting in long-term.
- Potential investment which could be sold in the future.
- Club may be able to rent out room(s) to other community groups, etc. to bring in income
- No worries about rent rises

(1) mark × 3 points. Max 3

Disadvantages
- Club will responsible for maintenance
- Club will bear the running cost of the building
- Club will need to pay off the loan / interest
- Are projections of life membership income achievable?

(1) mark × 3 points. Max 3

Recommendation (1)

[Total: 25]
2 (a) A statement of cash flows is based on summarised historical data (1) for a period and provides a link between the cash and cash equivalents balance at the start of the year and the balance at the end of the year (1) whereas a cash budget is based on predetermined or expected data for a future period (1). Max 2

(b) Statement of Cash Flows for Hank Limited for the year ended 31 March 2016

<table>
<thead>
<tr>
<th>Activity</th>
<th>$</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit from operations</td>
<td>30 000</td>
<td>#</td>
</tr>
<tr>
<td>Add depreciation</td>
<td>12 000</td>
<td></td>
</tr>
<tr>
<td>Less profit on sale of non-current assets</td>
<td>(3 000)</td>
<td>(1) both</td>
</tr>
<tr>
<td>Less increase in inventories</td>
<td>(26 000)</td>
<td></td>
</tr>
<tr>
<td>Less increase in trade receivables</td>
<td>(14 000)</td>
<td></td>
</tr>
<tr>
<td>Less decrease in trade payables</td>
<td>(7 000)</td>
<td></td>
</tr>
<tr>
<td>Cash from operations</td>
<td>(8 000)</td>
<td></td>
</tr>
<tr>
<td>Less interest paid</td>
<td>(9 000)</td>
<td></td>
</tr>
<tr>
<td>Less taxation paid</td>
<td>(18 000)</td>
<td>(1) both</td>
</tr>
<tr>
<td>Net cash from operating activities</td>
<td>(35 000)</td>
<td></td>
</tr>
<tr>
<td>Investing activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Add proceeds from sale of non-current assets</td>
<td>8 000</td>
<td>(1)</td>
</tr>
<tr>
<td>Less purchase of non-current assets</td>
<td>(52 000)</td>
<td>(1)</td>
</tr>
<tr>
<td>Net cash used in investing activities</td>
<td>(44 000)</td>
<td></td>
</tr>
<tr>
<td>Financing activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Add receipts from share issue</td>
<td>45 000</td>
<td>(1)</td>
</tr>
<tr>
<td>Less dividends paid</td>
<td>(25 000)</td>
<td>(1)</td>
</tr>
<tr>
<td>Add increase in loan</td>
<td>22 000</td>
<td>(1)</td>
</tr>
<tr>
<td>Net cash from financing activities</td>
<td>42 000</td>
<td>(1) both</td>
</tr>
<tr>
<td>Net decrease in cash and cash equivalents</td>
<td>(37 000)</td>
<td># (1) both</td>
</tr>
<tr>
<td>Cash and cash equivalents at the start of the year</td>
<td>14 000</td>
<td>(1) both</td>
</tr>
<tr>
<td>Cash and cash equivalents at the end of the year</td>
<td>(23 000)</td>
<td></td>
</tr>
</tbody>
</table>

(c) Hank Limited has a weak cash position as there has been a decrease in cash over the period of $37 000 (1).

This can partly be explained by the purchase of non-current assets $52 000 (1) and the dividends paid of $25 000 (1) however the net cash from operations is also negative $35 000 (1) of mainly due to negative movements in working capital totally $47 000 (1). Altogether despite making a profit from operations, increasing the loan and issuing more shares (1) the net movement in cash and cash equivalents has been a decrease, therefore the business is in a weak cash position (1). It cannot continually keep issuing shares or taking out loans and the movements in working capital need reviewing (1). Max 4
(d) Note to the financial statements on non-current assets.
Schedule of non-current assets.

<table>
<thead>
<tr>
<th></th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-current assets</td>
<td></td>
</tr>
<tr>
<td>Cost at 1 April 2015</td>
<td>272,000</td>
</tr>
<tr>
<td>Additions</td>
<td>52,000</td>
</tr>
<tr>
<td>Disposals</td>
<td>(24,000)</td>
</tr>
<tr>
<td>Cost at 31 March 2016</td>
<td>300,000</td>
</tr>
<tr>
<td>Depreciation at 1 April 2015</td>
<td>48,000</td>
</tr>
<tr>
<td>Charge</td>
<td>12,000</td>
</tr>
<tr>
<td>Disposals</td>
<td>(19,000)</td>
</tr>
<tr>
<td>Depreciation 31 March 2016</td>
<td>41,000</td>
</tr>
<tr>
<td>Net book value at 31 March 2016</td>
<td>259,000</td>
</tr>
<tr>
<td>Net book value at 1 April 2015</td>
<td>224,000</td>
</tr>
</tbody>
</table>

W1 12,000 × 25 = 300,000 [5]

(e) The directors should apply the international standards (1)
So that the information contained within the published accounts is useful and aids making economic decisions (1) is comparable (1), consistent (1), understandable (1), relevant (1) and reliable (1).

Or if international standards are not complied with the external auditor (1) will qualify (1) the audit report as the financial statements do not show a true and fair view (1)

Advice 1 mark
Max 3 for justification [4]

[Total: 25]
3 (a)  
(i) Profit for the year  
Alpha plc  
Profit margin  
(160 000 / 1 000 000) (1)  
16% (1)OF  
(ii) Finance charges  
Profit from operations  
Alpha plc  
Income gearing  
(16 000 (1) / 176 000)  
9.09% (1)OF  
(iii) Number of ordinary shares  
Alpha plc  
Earnings per share  
(160 000 (1) / 400 000)  
$0.40 (1)OF  
(iv) Price/earnings ratio  
(1.20 / 0.40) (1)OF  
3 (1)OF  
(v) Market value of one share  
Alpha plc  
Dividend per share  
$0.07 (1)OF  
Dividend yield  
(0.07 (1) / 1.20)  
5.83% (1)OF  
(vi) Total dividend paid  
Alpha plc  
$28 000 (1)OF  
(vii) Dividend cover  
(160 000 / 28 000 (1)  
5.71 times (1)OF  
[14]

(b)  
(i) Profit margin  
Alpha plc has a higher selling price/better GP margin and better control over expenses  
(ii) Income gearing  
Beta plc has a lower profit available to pay interest.  
(iii) Earnings per share  
Alpha plc has a higher profit in relation to issued shares.  
(iv) Price earnings ratio  
Investors have more confidence in Alpha plc’s prospects  
(v) Dividend yield  
Beta plc pays a higher total dividend in relation to the market price.  
(vi) Market value of one share  
Alpha plc may have greater net assets  
Alpha plc is considered to have better prospects  
There is more demand for Alpha plc’s shares  
One suitable comment per point for (1) of each  
[6]

(c)  
Alpha plc has better dividend cover (1)OF and carries less risk. (1)  
Alpha plc is a more profitable company. (1)  
Alpha plc pays a higher dividend per share (1) even though Beta plc pays a higher dividend in total. (1)  
Alpha plc has higher earnings per share (1), lower income gearing (1), lower dividend yield (1) and lower price earnings ratio. (1)  
Decision would depend on the issue price in relation to the market value. (1)  
Decision. (1)  

All marks to be on OF basis  
Max 5  
[5]

[Total: 25]
4 (a) An offer of an issue of shares to existing shareholders (1) based on their existing holding (1) at a price which is usually favourable to the purchaser (1). It is cheaper than offering to the public (1). Max 3. [3]

(b) Scrumpton plc – statement of changes in equity for the year ended 30 September 2017.

<table>
<thead>
<tr>
<th>Share Capital</th>
<th>Share Premium</th>
<th>Retained Earnings</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Balance b/d</td>
<td>1 200 000</td>
<td>300 000</td>
<td>1 625 000</td>
</tr>
<tr>
<td>Share issue</td>
<td>300 000</td>
<td>60 000</td>
<td>360 000</td>
</tr>
<tr>
<td>Profit</td>
<td></td>
<td>57 500</td>
<td>57 500</td>
</tr>
<tr>
<td>Dividends</td>
<td></td>
<td>(24 000)</td>
<td>(24 000)</td>
</tr>
<tr>
<td></td>
<td>1 500 000</td>
<td>360 000</td>
<td>2 018 500</td>
</tr>
</tbody>
</table>

Profit: $167 500 – $20 000 (1) – $67 500 (1) – $15 000 (1) – $7 500 (1) = $57 500 (1) of [10]

(c) The proposed dividend is not a liability at the statement date and is therefore accounted for in the next period (1). It is disclosed by way of a note in the accounts for the current year (1). [2]

(d) (i) Adjusting event is one which requires the accounts of the year to be adjusted (1) as a result of the conditions of the event existing at the statement of financial position date (1).

A non-adjusting event does not require the statements to be adjusted but a note is added (1) as the conditions leading to the event were not present at the statement of financial position date (1). [4]

(ii) The bankruptcy is an adjusting event since the condition existed at the statement date (1) and therefore the trade receivables should be adjusted (1). [2]

(e) The carrying amount of the plant is $100 000 (1). Recoverable amount is the higher of net selling price and value in use (1).

The recoverable amount is therefore $70 000 (1). Profit reduced by $30 000 (1). [4]

[Total: 25]
5 (a) Standard costing sets predetermined costs and revenues to be achieved under normal operating situations.
Comparison between actual and pre-determined expected cost (1).
Periodic recording of differences – variances (1).
Max 2

(b) (i) Material price variance
\[ 15\,768 - 15\,330 = 438 \] (1) (A) (1)
(ii) Material usage variance
\[ 15\,330 - 15\,750 = 420 \] (1) (F) (1)
(iii) Labour rate variance
\[ 8492 - 8878 = 386 \] (1) (F) (1)
(iv) Labour efficiency variance
\[ 8878 - 8625 = 253 \] (1) (A) (1)
1 mark for figure and 1 for direction [8]

(c) Favourable – use of better quality materials (2)
use of a more qualified labour force (2)
use of better machinery / tools (2).
Adverse – use of poorer materials (2)
use of a less qualified labour force (2)
use of poorer machinery / tools (2)
loss / write-off of materials (2).
Identification (1) + development (1). Max 4 Favourable and 4 Adverse [8]

(d) $ 44,100 (1)
Deduct:
\begin{align*}
\text{Materials} & \quad 15,768 \\
\text{Labour} & \quad 8,492 \\
\text{Overheads} & \quad 11,550 \text{ (2)} (35,810) \\
\text{Profit} & \quad 8,290 \text{ (1)} \text{ OF} \end{align*}
Overheads 10,500 (1) X 1.1 = 11,550 (1) \text{ OF} [4]

(e) Each recommendation (1).
Provide training to his workforce to improve efficiency (1)
Look for cheaper supplies of material of the same quality (1)
Control overheads by streamlining procedures (1)
Max 3 [3]

[Total: 25]
6 (a) Product X

<table>
<thead>
<tr>
<th>Year</th>
<th>Inflow</th>
<th>Outflow</th>
<th>Net Cash Flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>$0</td>
<td>$(50,000)</td>
<td>$(50,000)</td>
</tr>
<tr>
<td>1</td>
<td>70,000</td>
<td>(41,000)</td>
<td>29,000</td>
</tr>
<tr>
<td>2</td>
<td>73,500</td>
<td>(53,000)</td>
<td>20,500</td>
</tr>
<tr>
<td>3</td>
<td>77,175</td>
<td>(55,100)</td>
<td>22,075</td>
</tr>
<tr>
<td>4</td>
<td>61,740</td>
<td>(46,280)</td>
<td>15,460</td>
</tr>
</tbody>
</table>

* (1) mark for each two correct answers. [8]

(b) Product X

<table>
<thead>
<tr>
<th>Year</th>
<th>NCF</th>
<th>DF</th>
<th>Present Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>$(50,000)</td>
<td>1.00</td>
<td>$(50,000)</td>
</tr>
<tr>
<td>1</td>
<td>29,000</td>
<td>0.909</td>
<td>26,361</td>
</tr>
<tr>
<td>2</td>
<td>20,500</td>
<td>0.826</td>
<td>16,933</td>
</tr>
<tr>
<td>3</td>
<td>22,075</td>
<td>0.751</td>
<td>16,578</td>
</tr>
<tr>
<td>4</td>
<td>15,460</td>
<td>0.683</td>
<td>10,559</td>
</tr>
</tbody>
</table>

Net Present Value (1) $20,431 (1) OF [7]

(c) Based on NPV, Alexander should choose Product Y (1)OF because it yields a higher NPV (1)OF. [2]

(d) Advantages – time value of money used (1), easy to understand (1), greater importance given to earlier cash flows (1). Max 1.
Disadvantages – difficult to predict cash flow (1), length of project difficult to predict (1), cost of capital may change during project (1). Max 1. [2]

(e) Simple to understand and use (1). Encourages caution (1). Does not consider the time value of money (1). Ignores cash flows after the initial investment has been recovered (1). Max 3 [3]

(f) Effect on environment (1)
Current economic conditions (1)
Political stability / government (1)
Technological change (1)
Trend / fashion (1)
Customer loyalty (1)
Max 3 [3]

[Total: 25]