Cambridge International Examinations
Cambridge International General Certificate of Secondary Education

BUSINESS STUDIES **0450/22**

Paper 2 Case Study **May/June 2017**

MARK SCHEME

Maximum Mark: 80

Published

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Question	Answer	Marks
1(a)	**Identify two financial statements the directors will need to see before expanding CC. Explain why they will want to see each of these statements.** Knowledge [2 × 1] – award one mark for each financial statement Analysis [2 × 1] – award one mark for a relevant explanation for each financial statement Application [2 × 2] – award two application marks for each financial statement Award one mark for each relevant named financial statement (max 2) and one mark for explanation of why the directors will want to view these statements before expanding. Examples might include: • income statement/Profit and loss account – to assess profitability/availability of retained profit/ need for loan/ability to repay loan • balance sheet/Statement of financial position – assess liquidity position/ assets for security against loan/assess value of assets that could be sold • cash flow forecast/statement – shows cash position/ability to cover expenses of expansion/liquidity position/ability to repay loans Award a maximum of three additional marks for each explanation – 2 of which must be applied to this context – of the financial statement. Indicative response: Balance sheet (k) to see if the business will be able to borrow $500 000 (app). The balance sheet will show the liabilities of the company and will show if the bank is likely to give CC a loan for the purchase of the new automated equipment (app). The directors will want to see if there are sufficient assets to be used as security for the loan (an). Possible application marks: Already operating in a niche market; high quality ingredients; chocolates/high quality chocolates/luxury chocolates; hand-made chocolates; factory; private limited company; set up 15 years ago in country X; labour-intensive production techniques; 100 production workers; on-the-job training for new workers; developing a new brand of chocolate bar; targeted at the mass market; purchase a new automated production line; output is expected to be high; borrow $500 000. There may be other examples in context that have not been included here.	**8**

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>1(b)</td><td>
Consider the following three factors that affect CC when importing all of its ingredients. Which is the most important factor when deciding whether to import ingredients? Justify your answer.

Relevant points might include:
<table>
<tr><td>Exchange rate</td><td>May fluctuate and this will affect the import prices of ingredients – affects costs – difficult to plan for – may result in having much higher costs than budget.
Exchange rate is already low – higher cost of imported ingredients – raise prices – lower sales - reduce profit.
If exchange rate increased/high – lower cost of imported ingredients – lower prices – increase sales – increase profit.</td></tr>
<tr><td>Import tariffs</td><td>Increased cost of imported materials – need to raise prices of finished chocolates or reduce profit.

Note: Do not award fixed quantity i.e. quota</td></tr>
<tr><td>Delivery time</td><td>Perishable ingredients – need for quick delivery – urgent orders may need quick delivery.
Delivery may be slow – may cause production delays – reduced sales/customer demand not fully met.
If delays in delivery – may need to buy locally produced ingredients – lower quality – lose reputation/lose brand image.

Note: Do not award if only about delivery time to the customer.</td></tr>
</table>
Knowledge/Analysis/Evaluation – award up to 10 marks using the levels-based mark scheme below.
<table>
<tr><td></td><td>Knowledge/Analysis/ Evaluation</td></tr>
<tr><td>Level 3</td><td>At least 2 × Level 2 +
9–10 marks for well justified conclusion of the most important factor and why it is more important than the other two factors.

7–8 marks for limited conclusion of the most important factor.</td></tr>
<tr><td>Level 2</td><td>4–6 marks
Detailed discussion of each factor.</td></tr>
<tr><td>Level 1</td><td>1–3 marks
Outline of each factor.</td></tr>
</table>
Level 1 – 1 mark for each L1 statement (max of 3 marks) e.g. A tariff will increase the cost the company pays for imported raw materials.

Level 2 – 1 × L2 explanation can gain 4 marks and a further mark can be awarded for each additional L2 explanation (max 6 marks) e.g. Exchange rate fluctuations will affect the cost of imported ingredients. If the exchange rate appreciates then import prices will be lower and costs will be less or if the exchange rate depreciates then import costs will rise. (L2)
</td><td>12</td></tr>
</table>

Question	Answer	Marks
	Level 3 – For L3 to be awarded there needs to be at least two L2 marks awarded and then a conclusion which justifies which is the most important factor. **Award up to 2 additional marks for relevant application.** Possible application marks: chocolates/high quality chocolates/luxury chocolates; hand-made chocolates; country X already has a low exchange rate; located in country X; fillings made with luxury ingredients; batch production; 100 production workers; skilled workers in factory; employed at CC since it started; objective of expansion; developing a new brand of chocolate bar; targeted at the mass market; reduce variable costs by using lower quality ingredients; purchase a new automated production line; output is expected to be high; borrow $500 000. There may be other examples in context that have not been included here.	

Question	Answer	Marks
2(a)	**Identify and explain two reasons why on-the-job training is important for new employees at CC.** Knowledge [2 × 1] – award one mark for each relevant reason Analysis [2 × 1] – award one mark for a relevant explanation for each reason Application [2 × 2] – award two application marks for each reason Award one mark for each relevant reason (max 2), such as: • ensure they are correctly trained for CC methods – less likely to make mistakes/ maintains high quality chocolates • efficient at their jobs – increase output/know how to do the job correctly • build relationships with existing employees – settle in quicker and happier in new job/easier to ask for help if unsure/more quickly effective in the new job • new employees are quickly able to contribute to production – can produce chocolates while training so output higher • easier and quicker to arrange - cheaper than off-the-job training • less likely to have accidents if correctly trained- employees less likely to be absent from work through injury **Note:** Do not award induction training or just a simple definition of off-the-job training Award a maximum of three additional marks for each explanation – 2 of which must be applied to this context – of the reason Indicative response: On-the-job training will ensure the new employees are trained correctly (k) in how to make the hand-made chocolates (app). As the chocolates are luxury products using expensive fillings then they must not be wasted (app). If trained correctly then the new employees will carry out their jobs effectively and chocolates will not be faulty and thrown away (an). Possible application marks: Chocolates/high quality chocolates/luxury chocolates; hand-made chocolates; private limited company; labour-intensive production techniques; batch production; 100 production workers; skilled workers in the factory; employed at CC since it started/for 15 years; objective of expansion; developing a new brand of chocolate bar; targeted at the mass market; purchase a new automated production line; output is expected to be high. There may be other examples in context that have not been included here.	**8**

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>2(b)</td><td>

Consider how the following <u>three</u> stakeholders will be affected by the introduction of a new automated production line at CC. Which stakeholder will be most affected by this decision? Justify your answer.

Relevant points might include:

<table>
<tr><th></th><th>Positively affected</th><th>Negatively affected</th></tr>
<tr><td>Employees</td><td>• Increased output – higher wages
• Training provided – increases skills of workers – increased job satisfaction
• New jobs – higher wages
• Easier/less strenuous job</td><td>• Some may lose their jobs
• Different job – may not like it
• If lose job then lower standard of living – cannot buy as many goods and services</td></tr>
<tr><td>Shareholders</td><td>• Increased profit in long run
• Share price increased</td><td>• Reduced dividends in the short run</td></tr>
<tr><td>Bank</td><td>• Expansion of business – more likely to repay loans/overdrafts
• May need additional loans
• Bank makes a profit from interest paid on the loan</td><td>• Investment may take time for increased revenue – delay in repaying loan
• If fails the bank loan may not be repaid – bank loses money</td></tr>
</table>

Knowledge/Analysis/Evaluation – award up to 10 marks using the levels-based mark scheme below.

<table>
<tr><th></th><th>Knowledge/Analysis/ Evaluation</th></tr>
<tr><td>Level 3</td><td>At least 2 × Level 2 +
9–10 marks for well justified conclusion as to which stakeholder will be affected the most by the new automated production line and why the others will be less affected.

7–8 marks for some limited judgement shown in conclusion as to which stakeholder will be affected the most by the automated production line.</td></tr>
<tr><td>Level 2</td><td>4–6 marks
Detailed discussion of the positive and/or negative effects on each stakeholder.</td></tr>
<tr><td>Level 1</td><td>1–3 marks
Outline of the effects on each stakeholder.</td></tr>
</table>

Level 1 – 1 mark for each L1 statement (max of 3 marks) e.g. Workers may be made redundant.

</td><td>**12**</td></tr>
</table>

Question	Answer	Marks
	Level 2 – 1 × L2 explanation can gain 4 marks and a further mark can be awarded for each additional L2 explanation (max 6 marks) e.g. Workers may be made redundant as the production line may not require as many workers. Those workers who keep their jobs may benefit by receiving higher wages as they will now be more productive. (L2) Level 3 – For L3 to be awarded there needs to be at least two L2 marks awarded and then a conclusion which justifies which stakeholder is affected the most. **Award up to 2 additional marks for relevant application.** Possible application marks: Chocolates/high quality chocolates/luxury chocolates; hand-made chocolates; most workers been with CC since it started/for 15 years; private limited company; set up 15 years ago in country X; on-the-job training for new workers; objective of expansion; developing a new brand of chocolate bar; targeted at the mass market; reduce variable costs by using lower quality ingredients; output is expected to be high; borrow $500 000. There may be other examples in context that have not been included here.	

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>3(a)</td><td>
Identify and explain <u>one</u> advantage and <u>one</u> disadvantage to CC if it changes to a public limited company.

Knowledge [2 × 1] – award one mark for each relevant advantage /disadvantage
Analysis [2 × 1] – award one mark for a relevant explanation for each advantage/disadvantage
Application [2 × 2] – award two application marks for each advantage /disadvantage

Award one mark for each relevant advantage/disadvantage (max 1 each) and one additional mark for explaining why it is an advantage/disadvantage.

Answers are likely to include:
<table>
<tr><td>Advantage</td><td>• No restriction on who can buy shares/shares sold to the public
• Increased share capital issued to purchase fixed assets/increased capital raised
• Easier to obtain bank loan/attract suppliers/perceived as less risky and higher status</td></tr>
<tr><td>Disadvantage</td><td>• Accounts published/less privacy
• Easier to be taken over/original owners lose control
• More legal formalities/expensive and time consuming to convert to plc. and issue shares to the public
• More regulations and controls over plc.</td></tr>
</table>
Award a maximum of three additional marks for each explanation – 2 of which must be applied to this context - of the advantage/disadvantage.

Indicative response:
A public limited company can issue new shares to the public (k) this will allow it to raise the additional $500 000 needed for the expansion (app). This is a cheaper way to raise this necessary capital for the expansion as interest will not need to be paid on the finance (an). As the finance can be used for expansion of the automated production line then the higher profit from the increased output may not lead to reduced dividends for the shareholders (app).

Award up to 4 additional marks for relevant application.

Possible application marks:

Chocolates/high quality chocolates/luxury chocolates; hand-made chocolates; private limited company; set up 15 years ago in country X; batch production; objective of expansion; developing a new brand of chocolate bar; targeted at the mass market; purchase a new automated production line; output is expected to be high; borrow $500 000.

There may be other examples in context that have not been included here.
</td><td>8</td></tr>
</table>

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>3(b)</td><td>
Refer to Appendix 2 and other information in the case.
Draw on the graph below the break-even output of Fizz Bomm if the variable cost is reduced to $0.60.
Do you think this would be the best way for CC to gain the highest profit for Fizz Bomm? Justify your answer

Relevant points might include:
<table>
<tr><td>Lower variable cost to $0.60</td><td>• New TC line correctly drawn on the graph (L2)
• B/E identified at 40 000 (L2) and 20 000 (L2)
• Profit increases from $12 000 (L2) to $32 000 (L2)
• Cheaper ingredients – may be poorer quality chocolates – fewer sales than predicted</td></tr>
</table>
Knowledge/Analysis/Evaluation – award up to 10 marks using the levels-based mark scheme below.
<table>
<tr><td></td><td>Knowledge/Analysis/ Evaluation</td></tr>
<tr><td>Level 3</td><td>Must have 2 × L2 – correct TC line plotted onto the graph and/or break-even output(s) and/or profit(s) correctly.

9–10 marks for well justified conclusion as to the best way to increase profit to choose compared to other ways.

7–8 marks for some limited judgement shown in conclusion as to the best way to increase profit.</td></tr>
<tr><td>Level 2</td><td>4–6 marks
Correct new TC line drawn on the graph and/or correct break-even output(s) identified, and/or profit(s) correctly calculated
and/or
Explanation of the effects of lower variable cost and/or alternative way to increase profit even if no correct answer on break – even graph.</td></tr>
<tr><td>Level 1</td><td>1–3 marks (No correct answer on break – even graph)
Outline of effects of lowering variable cost and /or alternative way to increase profit such as increase price.</td></tr>
</table>
Level 1 – 1 mark for each L1 statement (max of 3 marks) e.g. Lowering the variable cost will lead to higher profit.

Level 2 – 1 × L2 explanation can gain 4 marks and a further mark can be awarded for each additional L2 explanation (max 6 marks) e.g. The new break-even output is 20 000. (L2)
</td><td>12</td></tr>
</table>

Question	Answer	Marks
	Level 3 – For L3 to be awarded there needs to be at least two L2 marks awarded and then a recommendation which justifies which is the best way to choose to increase profit. **Award up to 2 additional marks for relevant application in the conclusion.** Possible application marks: high quality chocolates/luxury chocolates; hand-made chocolates; fillings made with luxury ingredients; sold to specialist sweet shops; objective of expansion; developing a new brand of chocolate bar; targeted at the mass market; reduce variable costs by using lower quality ingredients; purchase a new automated production line; output is expected to be high; borrow $500 000. There may be other examples in context that have not been included here.	

Question	Answer	Marks
4(a)	**Fizz Bomm is in the development stage of the product life cycle.** **Identify and explain four other stages of Fizz Bomm's product life cycle** Award one mark for **each correctly named stage** (max 4) plus one additional mark for development indicating the **characteristics of the stage**: • Introduction – low sales because the chocolate bar is new/loss made due to high development costs/ new into the market • Growth – sales start to rise rapidly/profits start to be made after development costs covered • Maturity – sales increase more slowly/ increasing competition/profits at their highest as sales growth is high • Saturation – sales remain high but stable/profits fall as sales are static and prices have been reduced • Decline – sales fall as new chocolate bars become available/profits fall as sales fall **Note:** Do not reward 'Extension of the product life cycle' as a stage. Indicative response: Introduction (1) as the new chocolate bar is to be launched onto the market and will have low sales to start with. (1)	**8**

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>4(b)</td><td>

Consider the suitability of the three elements of the marketing mix outlined for Fizz Bomm in Appendix 3. Recommend whether any of these elements should be changed. Justify your answer.

Relevant points might include:

<table>
<tr><td>Price</td><td>• competitive market so penetration pricing will allow new chocolate bar to enter the market
• will get established in the market – build up customer loyalty
• longer term use competitive pricing as might be better in a competitive market</td></tr>
<tr><td>Promotion</td><td>• if aimed at children – should be seen by target in children’s magazines
• but coupon unlikely to be effective for children
• competitors advertise on TV
• TV more suitable for the mass market</td></tr>
<tr><td>Place</td><td>• keep selling in specialist sweet shops but less appropriate for mass market so may not be successful
• competitors ‘place’ more suitable for mass market – CC less successful/fewer sales if do not change ‘place’</td></tr>
</table>

Knowledge/Analysis/Evaluation – award up to 10 marks using the levels-based mark scheme below.

<table>
<tr><td></td><td>Knowledge/Analysis/ Evaluation</td></tr>
<tr><td>Level 3</td><td>At least 2 × Level 2 +
9–10 marks for well justified recommendation as to whether to change the elements of the marketing mix.

7–8 marks for some limited judgement shown in recommendation as to whether to change the elements of the marketing mix.</td></tr>
<tr><td>Level 2</td><td>4–6 marks
Detailed discussion of relevance of each element of the marketing mix.</td></tr>
<tr><td>Level 1</td><td>1–3 marks
Outline of each element of the marketing mix</td></tr>
</table>

Level 1 – 1 mark for each L1 statement (max of 3 marks) e.g. As it is in a competitive market the pricing strategy should be penetration pricing when the new chocolate bar is launched.

</td><td>**12**</td></tr>
</table>

Question	Answer	Marks
	Level 2 – 1 × L2 explanation can gain 4 marks and a further mark can be awarded for each additional L2 explanation (max 6 marks) e.g. As it is in a competitive market the pricing strategy should be penetration pricing when the new chocolate bar is launched. However, when the product moves to the growth stage of the life cycle then competitive pricing should be used to maintain brand loyalty and to stay competitive with all the other brands of chocolate bar. (L2 plus application for referring to the new chocolate bar) Level 3 – For L3 to be awarded there needs to be at least two L2 marks awarded and then a conclusion which justifies whether to change the elements of the marketing mix. **Award up to 2 additional marks for relevant application.** Possible application marks: penetration pricing; advertising in children's magazines; discount coupons in the magazines; competitors only advertise on TV; distribute through speciality sweet (candy) shops; competitors distribute through wholesalers and supermarkets; chocolates/high quality chocolates/luxury chocolates; hand-made chocolates; developing a new brand of chocolate bar; lots of competitors in the mass market; output is expected to be high. There may be other examples in context that have not been included here.	