Cambridge Assessment International Education

Cambridge IGCSE™

BUSINESS STUDIES **0450/23**

Paper 2 Case Study **October/November 2021**

MARK SCHEME

Maximum Mark: 80

Published

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 International will not enter into discussions about these mark schemes.

Cambridge International is publishing the mark schemes for the October/November 2021 series for most Cambridge IGCSE™, Cambridge International A and AS Level components and some Cambridge O Level components.

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Generic Marking Principles

These general marking principles must be applied by all examiners when marking candidate answers. They should be applied alongside the specific content of the mark scheme or generic level descriptors for a question. Each question paper and mark scheme will also comply with these marking principles.

GENERIC MARKING PRINCIPLE 1:

Marks must be awarded in line with:

- the specific content of the mark scheme or the generic level descriptors for the question
- the specific skills defined in the mark scheme or in the generic level descriptors for the question
- the standard of response required by a candidate as exemplified by the standardisation scripts.

GENERIC MARKING PRINCIPLE 2:

Marks awarded are always **whole marks** (not half marks, or other fractions).

GENERIC MARKING PRINCIPLE 3:

Marks must be awarded **positively**:

- marks are awarded for correct/valid answers, as defined in the mark scheme. However, credit is given for valid answers which go beyond the scope of the syllabus and mark scheme, referring to your Team Leader as appropriate
- marks are awarded when candidates clearly demonstrate what they know and can do
- marks are not deducted for errors
- marks are not deducted for omissions
- answers should only be judged on the quality of spelling, punctuation and grammar when these features are specifically assessed by the question as indicated by the mark scheme. The meaning, however, should be unambiguous.

GENERIC MARKING PRINCIPLE 4:

Rules must be applied consistently, e.g. in situations where candidates have not followed instructions or in the application of generic level descriptors.

GENERIC MARKING PRINCIPLE 5:

Marks should be awarded using the full range of marks defined in the mark scheme for the question (however; the use of the full mark range may be limited according to the quality of the candidate responses seen).

GENERIC MARKING PRINCIPLE 6:

Marks awarded are based solely on the requirements as defined in the mark scheme. Marks should not be awarded with grade thresholds or grade descriptors in mind.

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Social Science-Specific Marking Principles (for point-based marking)

1 Components using point-based marking:

- Point marking is often used to reward knowledge, understanding and application of skills. We give credit where the candidate's answer shows relevant knowledge, understanding and application of skills in answering the question. We do not give credit where the answer shows confusion.

From this it follows that we:

a DO credit answers which are worded differently from the mark scheme if they clearly convey the same meaning (unless the mark scheme requires a specific term)

b DO credit alternative answers/examples which are not written in the mark scheme if they are correct

c DO credit answers where candidates give more than one correct answer in one prompt/numbered/scaffolded space where extended writing is required rather than list-type answers. For example, questions that require *n* reasons (e.g. State two reasons …).

d DO NOT credit answers simply for using a 'key term' unless that is all that is required. (Check for evidence it is understood and not used wrongly.)

e DO NOT credit answers which are obviously self-contradicting or trying to cover all possibilities

f DO NOT give further credit for what is effectively repetition of a correct point already credited unless the language itself is being tested. This applies equally to 'mirror statements' (i.e. polluted/not polluted).

g DO NOT require spellings to be correct, unless this is part of the test. However spellings of syllabus terms must allow for clear and unambiguous separation from other syllabus terms with which they may be confused (e.g. Corrasion/Corrosion)

2 Presentation of mark scheme:

- Slashes (/) or the word 'or' separate alternative ways of making the same point.
- Semi colons (;) bullet points (•) or figures in brackets (1) separate different points.
- Content in the answer column in brackets is for examiner information/context to clarify the marking but is not required to earn the mark (except Accounting syllabuses where they indicate negative numbers).

3 Calculation questions:

- The mark scheme will show the steps in the most likely correct method(s), the mark for each step, the correct answer(s) and the mark for each answer
- If working/explanation is considered essential for full credit, this will be indicated in the question paper and in the mark scheme. In all other instances, the correct answer to a calculation should be given full credit, even if no supporting working is shown.
- Where the candidate uses a valid method which is not covered by the mark scheme, award equivalent marks for reaching equivalent stages.
- Where an answer makes use of a candidate's own incorrect figure from previous working, the 'own figure rule' applies: full marks will be given if a correct and complete method is used. Further guidance will be included in the mark scheme where necessary and any exceptions to this general principle will be noted.

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4 Annotation:

- For point marking, ticks can be used to indicate correct answers and crosses can be used to indicate wrong answers. There is no direct relationship between ticks and marks. Ticks have no defined meaning for levels of response marking.
- For levels of response marking, the level awarded should be annotated on the script.
- Other annotations will be used by examiners as agreed during standardisation, and the meaning will be understood by all examiners who marked that paper.

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Question	Answer	Marks
1(a)	**Explain how the following <u>four</u> users of MA's accounts might use the financial data in Appendix 1 to help make decisions:** • **Shareholders** • **Suppliers** • **Employees** • **Banks** Award 1 mark for each relevant way the data in Appendix 1 might help make decisions (maximum of four marks). Award a maximum of 1 additional mark for each explanation of **how the data in Appendix 1** helps makes decisions. • Shareholders – to decide whether to keep or sell existing shares – sufficient ROCE of 5% for return on investment • Suppliers – to decide whether to keep supplying to MA – current ratio of 2 means MA is not likely to default on payments • Employees – to decide whether to remain working for MA or leave / whether to ask for a pay rise – $20 million profit so may receive a wage increase • Banks – to decide whether to give loan to MA / decide if likely a loan will be repaid – revenue $100 million is likely to be sufficient to repay a loan For example: Employees will have to decide whether they are likely to receive a wage increase and therefore not leave (1) the profit of $20 million makes this likely (App) **Application** might include: revenue $100 million; profit $20 million; profit margin 20%; ROCE 5%; current ratio 2.	**8**

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>1(b)</td><td>

Consider the following <u>three</u> characteristics that may be required for entrepreneurs opening a shop located at the airport. Which is the most important characteristic for an entrepreneur to be successful? Justify your answer.

- **Risk taker**
- **Creative**
- **Optimistic**

<table>
<tr><th>Level</th><th>Description</th><th>Marks</th></tr>
<tr><td>3</td><td>Sound application of knowledge and understanding of relevant business concepts using appropriate terminology.

Detailed discussion of at least two characteristics.

Well-justified conclusion.

Candidates discussing all three characteristics in detail, in context and with a well-justified conclusion including why the alternative characteristics were rejected should be rewarded with the top marks in the band.</td><td>9–12</td></tr>
<tr><td>2</td><td>Sound application of knowledge and understanding of relevant business concepts using appropriate terminology.

Detailed discussion of at least one characteristic.

Judgement with some justification / some evaluation of choices made.

Candidates discussing two or more characteristics in detail and applying them to the case should be rewarded with the top marks in the band.</td><td>5–8</td></tr>
<tr><td>1</td><td>Limited application of knowledge and understanding of relevant business concepts.

Limited ability to discuss the characteristics with little/no explanation.

Simple judgement with limited justification / limited evaluation of choices made.

Candidates outlining all three characteristics in context should be rewarded with the top marks in the band.</td><td>1–4</td></tr>
<tr><td>0</td><td>No creditable response.</td><td>0</td></tr>
</table>

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

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>1(b)</td><td>Relevant points might include:
<table>
<tr><td>Characteristic</td><td>How it helps an entrepreneur be successful</td></tr>
<tr><td>Risk taker</td><td>• Make decisions about which locally produced products might sell well in the airport
• Make decisions about which food to serve if setting up a restaurant in the airport
• Willing to risk losing their investment in the business
• If the wrong decisions are made, then the capital they invested in the shop may be lost</td></tr>
<tr><td>Creative</td><td>• Has new ideas about which products to sell and how to attract customers to the shop
• Makes food dishes attractive to appeal to customers
• Makes the shop appear different to competitor’s shops in the airport</td></tr>
<tr><td>Optimistic</td><td>• Will need a positive attitude to overcome difficulties when opening a new shop to sell to passengers at the airport – if revenue is low when first starting up then they will need to keep positive and keep trading
• Important for your employees to see you are hopeful about the future success of the shop – keep a positive approach with passengers to increase sales and make the shop successful</td></tr>
<tr><td>Conclusion</td><td>• Risk taking is most important because there are existing competitors in the airport which risks the failure of the new business selling food if their customers go to other food shops. Being creative is less important as the new business can still be successful selling existing products. Being optimistic is only important if the new business goes through difficult times with lower sales.
• Being creative is most important as there will be more competitors/shops at the airport and therefore there is more competition. Entrepreneurs will need to find creative ways to attract customers to their gift shops rather than going to competing shops.
• Being optimistic is most important because if the entrepreneur is not optimistic then employees may not be optimistic either and this may put off passengers from shopping at their store.</td></tr>
</table></td><td></td></tr>
</table>

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<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>2(a)</td><td>
Explain <u>two</u> methods that could be used to measure the size of MA's airport business.

Award 1 mark for each relevant method of measuring the size of airports (maximum 2).

Award a maximum of 3 additional marks for each explanation of the method of measuring the size of an airport – one of which must be applied to this context.

Relevant answers might include:

<table>
<tr><td>Methods of measuring size</td><td>Relevant points might include:</td></tr>
<tr><td>Number of people employed</td><td>• Easy to calculate and compare with other airports
• Workers may be full-time or part-time and this may distort the comparison</td></tr>
<tr><td>Capital employed</td><td>• Easy to calculate the value of the assets in the business
• However, may be similar to number of employees, it may be capital or labour intensive and therefore difficult to compare the size of the airports</td></tr>
<tr><td>Value of sales</td><td>• Often used when comparing the sales of different retail outlets
• Can be misleading when comparing businesses that provide/sell very different services/products</td></tr>
<tr><td>Value of output</td><td>• Easy way to compare manufacturing industries but more difficult with service sector businesses
• Can be measured by the number of flights but this may not be accurate as there may be many small aeroplanes carrying few passengers and other airports may have a few large aeroplanes carrying many passengers
• However, may have many different types of services – difficult to compare an airport with shipments of goods and others with only passengers
• Value of output may be high, but the number of flights could be low and therefore not an accurate measure</td></tr>
</table>
</td><td>8</td></tr>
</table>

Question	Answer	Marks
2(a)	For example: Number of employees (1) as it's easy to calculate how many people work at an airport (1). However, 50% of the employees at MA are part-time (App). This may not be true at other airports where employees may be full-time and therefore these airports appear to be smaller because they have fewer employees (1) **Application** might include: 50% full-time; 50% part-time; retail outlets; sell gifts and food; cleaning airport and cleaning aeroplanes; revenue $100 million; passengers; tourists or business passengers; security equipment as airport assets.	

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

Consider how the motivation theories of Taylor and Herzberg could help MA to improve the motivation of the cleaners who work at the airport. Which theory is likely to be more useful to MA? Justify your answer.

<table>
<tr><th>Level</th><th>Description</th><th>Marks</th></tr>
<tr><td>3</td><td>Sound application of knowledge and understanding of relevant business concepts using appropriate terminology.

Detailed discussion of both theories.

Well-justified recommendation.

Candidates discussing both theories in detail, in context and with a well-justified recommendation including why the alternative theory was rejected should be rewarded with the top marks in the band.</td><td>9–12</td></tr>
<tr><td>2</td><td>Sound application of knowledge and understanding of relevant business concepts using appropriate terminology.

Detailed discussion of at least one theory.

Judgement with some justification / some evaluation of choices made.

Candidates discussing of at least one theory in detail and applying it to the case should be rewarded with the top marks in the band.</td><td>5–8</td></tr>
<tr><td>1</td><td>Limited application of knowledge and understanding of relevant business concepts.

Limited ability to discuss theories with little/no explanation.

Simple judgement with limited justification / limited evaluation of choices made.

Candidates outlining both theories in context should be rewarded with the top marks in the band.</td><td>1–4</td></tr>
<tr><td>0</td><td>No creditable response.</td><td>0</td></tr>
</table>

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

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>2(b)</td><td>Relevant points might include:
<table>
<tr><td>Motivation theory</td><td>How it could help managers motivate airport cleaners</td></tr>
<tr><td>Taylor</td><td>‘Money is the main motivator for employees’ – based on workers in factories – manual workers – therefore increase wage rates and motivation will increase – as cleaners at the airport are manual staff cleaning aeroplanes in between flights – these employees may therefore respond well to an increase in wage rates</td></tr>
<tr><td>Herzberg</td><td>Hygiene factors include good working conditions – needed to stop demotivation but they will not motivate employees – need to have achievement recognised, encourage personal growth, promotional opportunities
– the work itself needs to be interesting – some airport cleaners of aeroplanes may like to have recognition of achievement by managers and opportunities for promotion encouraged</td></tr>
<tr><td>Recommendation</td><td>• As cleaning employees are low skilled jobs then Taylor’s theory might be the best one to use. It suggests that increasing the pay of cleaners should increase motivation and encourage them to clean each aeroplane faster. This will increase efficiency, as more aeroplanes would be cleaned in the same amount of time. Herzberg is less suitable as these employees are less likely to gain promotion because they are low-skilled, and it will be difficult to make the job more interesting.
• Herzberg may be more important as working conditions for cleaners are poor and may be acting as a demotivator. Herzberg’s theory suggests that if working conditions are improved then other factors may then act as motivators. Factors such as praising the cleaners and giving them more responsibility may then act to increase their motivation.</td></tr>
</table></td><td></td></tr>
</table>

Question	Answer	Marks
3(a)	**Explain <u>two</u> benefits to MA of using the new technology outlined in Appendix 2.** Award 1 mark for each relevant benefit to MA of using the new technology (maximum of 2 marks). Award a maximum of 3 additional marks for **each** explanation of how technology has benefited MA – **one of which must be applied to this context.** Relevant benefits might include: • Quicker to update information more easily / improved communication – mobile phone app allows employees to respond to problems in a specific area more quickly – improved efficiency of airport employees • Security scanning is quicker – improved customer satisfaction – improved reputation of the airport • Reduces labour costs – as reduces the number of employees required – new scanners at airport security requires fewer security employees – reduce cash outflow – less working capital required • Improved tracking of aeroplanes / increase in the number of flights / increased number of passengers – allows more flights to take off and land – increased amount of fees – leading to higher revenue For example: Reduces labour costs (1) – by having new scanners at airport security means there will be fewer security employees required (App). This can reduce cash outflow for MA (1) and mean less working capital is required (1). **Application** might include: mobile phone technology; automated security scanning technology; air traffic control technology; tracking of aeroplanes take-off and landing; check-in of passengers; 50% full-time; 50% part-time; retail outlets in airport; cleaning airport and cleaning aeroplanes; revenue $100 million; passengers; tourists or business passengers.	**8**

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>3(b)</td><td>
Consider the advantages and disadvantages of the following <u>three</u> methods of market research. Which would be the best method for MA to use to find out which shops passengers would use at the airport? Justify your answer.
• Online survey
• Sales data from existing shops at the airport
• Interviews at the airport
<table>
<tr><th>Level</th><th>Description</th><th>Marks</th></tr>
<tr><td>3</td><td>Sound application of knowledge and understanding of relevant business concepts using appropriate terminology.

Detailed discussion of two or more methods of market research.

Well-justified recommendation.

Candidates discussing all three methods of market research in detail, in context and with a well-justified recommendation including why the alternative methods of market research were rejected should be rewarded with the top marks in the band.</td><td>9–12</td></tr>
<tr><td>2</td><td>Sound application of knowledge and understanding of relevant business concepts using appropriate terminology.

Detailed discussion of at least one method of market research.

Judgement with some justification / some evaluation of choices made.

Candidates discussing two or more methods of market research in detail and applying them to the case should be rewarded with the top marks in the band.</td><td>5–8</td></tr>
<tr><td>1</td><td>Limited application of knowledge and understanding of relevant business concepts.

Limited ability to discuss methods of market research with little/no explanation.

Simple judgement with limited justification / limited evaluation of choices made.

Candidates outlining the three methods of market research in context should be rewarded with the top marks in the band.</td><td>1–4</td></tr>
<tr><td>0</td><td>No creditable response.</td><td>0</td></tr>
</table>
</td><td>12</td></tr>
</table>

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>3(b)</td><td>Relevant points might include:
<table>
<tr><th></th><th>Advantages</th><th>Disadvantages</th></tr>
<tr><td>Online survey</td><td>• Faster with quicker replies than other forms of survey about food purchased at the airport
• Cheaper than interviews
• Convenient for participants making them more likely to complete the survey
• Data can be quickly analysed using IT tools</td><td>• No interviewer to explain questions if not understood
• No interviewer to ask follow-up questions
• May have inaccurate answers if participant didn’t take the survey about purchases seriously when waiting for flights</td></tr>
<tr><td>Sales data from existing shops at the airport</td><td>• Much cheaper way of gathering information about sales of gifts shops than primary market research as it already exists
• Sales data are likely to be accurate data as it has been gathered from the gift shops themselves
• Quicker to gather the information</td><td>• May be out-of-date as it refers to past data
• No guarantee that trends of past food sales will continue in the future
• Not qualitative data – so does not gain information on customer wants in the future for shops in the airport</td></tr>
<tr><td>Interviews at the airport</td><td>• Interviewer can explain the questions so results may be more accurate
• Interviewer can ask further questions to gain more in-depth answers from business passengers</td><td>• Interviewer bias – they can influence the tourists in their answers
• Expensive to carry out – in terms of time and money
• Limited number of people questioned at the airport compared to online surveys</td></tr>
</table></td><td></td></tr>
</table>

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Question	Answer		Marks
3(b)	Recommendation	• As MA wants to find out specific information about passenger wants it might be better to conduct an online survey. This will allow a larger sample of passengers to be asked than interviews and a broader range of answers from **business passengers and tourists** may be gathered. Sales data will be out-of-date, and interviews are too expensive. • Sales data is best if the cost of gathering market research is most important. This will be much cheaper than the two alternative methods as the data already exists and the **gift shops** in the airport simply need to be asked for the information. • In depth detailed opinions will be gained from interviews and this may be the best method as only information on the main types of shops **business passengers and tourists** want is required and will be gathered.	

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>4(a)</td><td>
Explain <u>four</u> factors that might affect the source of finance a business decides to use.

Award 1 mark for each relevant factor (maximum of four factors).

Award a maximum of 1 additional mark for each explanation of the factor that will affect the choice of the source of finance for a business.

Relevant factors might include:

<table>
<tr><th>Relevant factors</th><th>Ways the factor will affect the choice of source of finance</th></tr>
<tr><td>Size and legal form of business</td><td>• An incorporated business can issue new shares whereas an unincorporated business cannot
• Large businesses can access sources of finance that small businesses cannot such as some specialist banks</td></tr>
<tr><td>Amount required</td><td>• A large amount may only be available as a bank loan rather than as an overdraft</td></tr>
<tr><td>Length of time</td><td>• If the finance required is for the short-term then only short-term sources should be considered such as trade credit or overdraft</td></tr>
<tr><td>Existing loans</td><td>• If the business already has loans, then it may be difficult to take out further loans – may need to find alternative sources of finance such as selling assets</td></tr>
<tr><td>Purpose for using the finance</td><td>• If the purpose is for expansion so long-term sources should be used as the business has a longer time to earn the revenue to repay the amount borrowed</td></tr>
<tr><td>Control</td><td>• The original owners may not want to lose control of the business. If shares are sold to other people or partners are added to a partnership, then more people will be investing in the business and the original owners may lose control.</td></tr>
</table>
For example:

The purpose for using the finance. (1) If the finance is required for expansion then a long-term source, such as a bank loan should be chosen (1).
</td><td>8</td></tr>
</table>

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>4(b)</td><td>Consider the opportunities and threats to MA due to increased globalisation. Do you think globalisation will help MA to increase profits? Justify your answer.
<table>
<tr><th>Level</th><th>Description</th><th>Marks</th></tr>
<tr><td>3</td><td>Sound application of knowledge and understanding of relevant business concepts using appropriate terminology.

Detailed discussion of both opportunities and threats.

Well-justified conclusion.

Candidates discussing both opportunities and threats in detail, in context and with a well-justified conclusion including why the alternative position was rejected should be rewarded with the top marks in the band.</td><td>9–12</td></tr>
<tr><td>2</td><td>Sound application of knowledge and understanding of relevant business concepts using appropriate terminology.

Detailed discussion of opportunities or threats.

Judgement with some justification / some evaluation of choices made.

Candidates discussing opportunities or threats in detail and applying them to the case should be rewarded with the top marks in the band.</td><td>5–8</td></tr>
<tr><td>1</td><td>Limited application of knowledge and understanding of relevant business concepts.

Limited ability to discuss opportunities and threats with little/no explanation.

Simple judgement with limited justification / limited evaluation of choices made.

Candidates outlining both opportunities and threats in context should be rewarded with the top marks in the band.</td><td>1–4</td></tr>
<tr><td>0</td><td>No creditable response.</td><td>0</td></tr>
</table></td><td>12</td></tr>
</table>

Question	Answer	Marks
4(b)	Relevant points might include:	

Opportunities	• More **tourists** may come through the airport leading to increased revenue for MA • MA could increase **cargo flights** which may also increase revenue as there will be increased shipment of goods due to increased globalisation • Imports will increase leading to higher number of **cargo flights** • More **business passengers** might pass through the **airport** if more trade is carried out in country Z
Threats	• Some airlines may start to use other **airports** if easier and cheaper to use • If foreign products are cheaper than those from country Z, then the amount of **cargo flights** might decrease • Large **international airlines** could put pressure on MA to lower its charges and hence it would reduce its revenue • Employees are not well motivated at MA and may be attracted to work at other **airports** in country Z or abroad
Conclusion	• More choice and lower prices are generally the result of globalisation and will help MA to increase its profit. If the products produced in country Z are more competitive with products from other countries, then revenue from **cargo flights** will increase and possibly lead to higher profit. The threats will have less effect on profit as there are probably fewer **airports** that passengers may use as an alternative to MA. • The threats of globalisation will have the largest effect on MA as **tourists** from abroad may travel to other countries rather than country Z. Therefore, passenger numbers will fall resulting in MA having reduced income from sales and profit.

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