



Cambridge IGCSE™

BUSINESS STUDIES

0450/13

Paper 1 Short Answer and Data Response

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.

This document consists of **24** printed pages.

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.

PUBLISHED**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.

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.

Question	Answer	Marks	Notes
1(a)	<p>Define 'private limited company'</p> <p>Award 2 marks for a full definition. Award 1 mark for a partial definition.</p> <p>A business owned by shareholders, but they cannot sell shares to the public. [2]</p> <p>OR A business owned by shareholders, but they can only sell shares to friends or family. [2]</p> <p>OR Often a small to medium-sized business owned by shareholders who have limited liability. The company cannot sell its shares to the general public. [2]</p> <p>Partial definition e.g. have limited liability [1] OR can sell shares [1]</p>	2	
1(b)	<p>Define 'average cost'.</p> <p>Award 2 marks for a full definition. Award 1 mark for a partial definition.</p> <p>Total cost of production divided by total output [2]</p> <p>OR The cost of producing a single unit of output [2]</p> <p>Partial definition e.g. cost per unit [1]</p>	2	

Question	Answer	Marks	Notes
1(c)	<p>Outline <u>two</u> ways VDN could be ethical when producing its products.</p> <p>Award 1 mark for each relevant way.</p> <p>Award 1 mark for each relevant reference to this business.</p> <p>Points might include:</p> <ul style="list-style-type: none"> • Pay fair wages [k] to its 380 employees [app] • Source environmentally friendly products / buy local / recycle / reduce waste [k] in its factory [app] • Not use child labour / not buy from producers using child labour [k] when importing materials [app] • Pay suppliers a fair price [k] for pens/paper clips [app] • Pay suppliers on time [k] <p>Other appropriate responses should also be credited.</p>	4	<p>Note: To use words from the stem as application, the reference must be appropriate (i.e. make sense) in relation to the point being made.</p> <p>The following words are likely to be appropriate for this question:</p> <ul style="list-style-type: none"> • Factory • Office equipment or examples such as pens/paperclips • Import all its raw materials • 380 employees • Kaizen • Average cost <p>Other appropriate examples in context can still be credited.</p> <p>Do not award answers which outline legal factors such as pay minimum wage.</p>

Question	Answer	Marks	Notes
1(d)	<p>Explain <u>one</u> advantage and <u>one</u> disadvantage to VDN of introducing Kaizen.</p> <p>Award 1 mark for identification of each relevant advantage/disadvantage (max 2).</p> <p>Award 1 mark for each relevant reference made to this business (max 2).</p> <p>Award 1 mark for each relevant explanation (max 2).</p> <p>Points might include:</p> <p>Advantages:</p> <ul style="list-style-type: none"> • Increase productivity [k] which helps lower average costs [app] and could improve its profit margin [an] • Work in progress is reduced [k] reducing inventory costs [an] • Can reduce amount of space needed for production [k] decreasing rent costs [an] • Improved layout / combining of jobs [k] in the factory [app] can release some employees to do other jobs [an] • Help motivate employees (as involved in change) [k] leading to less absenteeism / higher productivity [an] of its 380 employees [app] <p>Disadvantages:</p> <ul style="list-style-type: none"> • Only designed to produce small changes / no radical changes [k] so will not gain any significant increase in output [an] of office equipment [app] • Over time it is difficult to identify (extra) improvements [k] which can demotivate employees [an] • Workers may need training [k] which increases costs [an] • Not all employees may want/able to implement Kaizen [k] • Meetings take time [k] which could decrease output [an] <p>Other appropriate responses should also be credited.</p>	6	<p>Note: To use words from the stem as application, the reference must be appropriate (i.e. make sense) in relation to the point being made.</p> <p>The following words are likely to be appropriate for this question:</p> <ul style="list-style-type: none"> • Factory • Office equipment or examples such as pens/ paperclips • 380 employees • Reduce average costs • Ethical (objective) <p>Other appropriate examples in context can still be credited.</p>

Question	Answer	Marks	Notes
1(e)	<p>Do you think off-the-job training is the best method for a large business to use when introducing new machinery? Justify your answer.</p> <p>Award up to 2 marks for identification of relevant points.</p> <p>Award up to 2 marks for relevant development of points.</p> <p>Award 2 marks for a justified decision as to whether off-the-job training is the best method of training for a large business to use when introducing new machinery.</p> <p>Points might include:</p> <p>Off-the-job</p> <ul style="list-style-type: none"> • Can focus on training [k] so less likely to make mistakes [an] • Access to up-to-date knowledge [k] • May have to pay more / high cost of specialists [k] • Business may not have the skills to train its workers [k] <p>On-the-job [k]</p> <ul style="list-style-type: none"> • Still work while training so output / production does not stop [an] • Cheaper than off-the-job [an] • Workers might not have the skills to train others (as its new machinery) [an] • Employees learn way the business want them to / can control what is taught [an] so standards are easier to maintain [an] • Slows down work of experienced worker [an] 	6	<p>This is a general question so there are no marks for application.</p> <p>To gain both evaluation marks response must clearly relate to a large business.</p>

Question	Answer	Marks	Notes
1(e)	<p>Other appropriate responses should also be credited.</p> <p>Justification might include:</p> <p>Off-the-job is helpful as workers can focus on training [k] so less likely to make mistakes [an]. This is likely to be better than on-the-job training [k] even though some output is still produced [an]. This is because existing employees may not have any knowledge of the new equipment so off-the-job training is worth the extra cost [eval] to make sure workers use machinery correctly and as a result avoid costly mistakes. [eval]</p>		

Question	Answer	Marks	Notes
2(a)	<p>Define ‘unemployment’</p> <p>Award 2 marks for a full definition. Award 1 mark for a partial definition.</p> <p>When people want to work but cannot find a job [2]</p> <p>OR The proportion or percentage of the population that are capable of working but are unable to find a job [2]</p> <p>Partial definition e.g. people have no job [1]</p>	2	
2(b)	<p>Identify <u>one</u> cash inflow and <u>one</u> cash outflow a business might have.</p> <p>Award 1 mark per cash inflow/outflow.</p> <p>Cash inflows might include:</p> <ul style="list-style-type: none"> • Money from cash/credit sales, sale of fixed assets, money received from bank loan / overdraft / other sources of finance <p>Cash outflows might include:</p> <ul style="list-style-type: none"> • Payments to employees, rent paid, interest payments, payments to suppliers, tax payments, dividend payments <p>Other appropriate responses should also be credited.</p>	2	Only award the first response given for cash inflow/outflow.

Question	Answer	Marks	Notes
2(c)	<p>Outline <u>one</u> advantage and <u>one</u> disadvantage to Asmaa of using a government grant as a source of finance</p> <p>Award 1 mark for each relevant advantage/disadvantage.</p> <p>Award 1 mark for each relevant reference to this business.</p> <p>Points might include:</p> <p>Advantages</p> <ul style="list-style-type: none"> • No need to repay [k] by the car repair business [app] • No finance cost / no interest to pay [k] which could help the cash-flow forecast [app] <p>Disadvantages:</p> <ul style="list-style-type: none"> • May not provide full amount needed [k] when she started 4 years ago [app] • May be restrictions about how it is used / cannot use the money how you want to [k] • Can take time to apply/obtain [k] <p>Other appropriate responses should also be credited.</p>	4	<p>Note: To use words from the stem as application, the reference must be appropriate (i.e. make sense) in relation to the point being made.</p> <p>The following words are likely to be appropriate for this question:</p> <ul style="list-style-type: none"> • Car repair • Small (business) • New/start-up (business) / when started 4 years ago • Cash-flow forecast / cash inflow <p>Other appropriate examples in context can still be credited.</p>

Question	Answer	Marks	Notes
2(d)	<p>Explain how the following changes might affect Asmaa’s cash-flow forecast</p> <p>Award 1 mark for identification of each relevant effect [max 2].</p> <p>Award 1 mark for each relevant reference made to this business [max 2].</p> <p>Award 1 mark for each relevant explanation [max 2].</p> <p>Points might include:</p> <p>Closure of competitors:</p> <ul style="list-style-type: none"> • Could increase customers/demand [k] for the car repair business [app] increasing cash inflows [an] • Could increase prices [k] which may lead to higher cash inflow [an] than \$40 000 in March [app] <p>Increase in minimum wage:</p> <ul style="list-style-type: none"> • May increase costs [k] to her 3 employees [app] which will increase cash outflow [an] • No effect [k] as may already pay them a higher amount [an] as she wants to keep them well-motivated [app] <p>Other appropriate responses should also be credited.</p>	6	<p>Note: To use words from the stem as application, the reference must be appropriate (i.e. make sense) in relation to the point being made.</p> <p>The following words are likely to be appropriate for this question:</p> <ul style="list-style-type: none"> • Car repair (business) • 3/full-time employees • Well-motivated / motivated employees • Correct use of information in table 2.1 <p>Other appropriate examples in context can still be credited.</p>

Question	Answer	Marks	Notes
2(e)	<p>Explain <u>two</u> non-financial methods a small tertiary sector business could use to keep its employees well-motivated. Justify which method should be chosen.</p> <p>Award up to 2 marks for identification of relevant points.</p> <p>Award up to 2 marks for relevant development of points.</p> <p>Award 2 marks for a justified decision as to which is the best method for a small tertiary sector business to use to keep its employees well-motivated.</p> <p>Points might include:</p> <ul style="list-style-type: none"> • Job rotation [k] as switching tasks can make work more interesting [an] • Job enrichment [k] as workers feel they have been given more responsibility / more important [an] • Delegation/empowerment [k] so workers feel more important/valued [an] • Praise [k] helps employees meet their esteem needs [an] • Employee of the month awards [k] recognition of hard work / outstanding service [an] • Provide opportunities for promotion [k] • Team working [k] <p>Other appropriate responses should also be credited.</p> <p>Justification might include:</p> <p>Praise [k] helps employees meet their esteem needs. [an] Another method is job rotation [k]. Switching between tasks can help keep the work interesting. [an] I think praise is the better option as the problem with job rotation is whether a small tertiary business may not have sufficient tasks to be able to rotate everyone [eval] whereas praise can easily be offered to everyone which can help keep everyone motivated rather than just a few. [eval]</p>	6	This is a general question so there are no marks for application.

Question	Answer	Marks	Notes
3(a)	<p>Define ‘economic growth’</p> <p>Award 2 marks for a full definition. Award 1 mark for a partial definition.</p> <p>When a country’s GDP increases more goods and services are produced than in the previous year [2]</p> <p>Partial definition e.g. an increase in a country’s spending [1]</p> <p>OR Increase in GDP [1]</p>	2	
3(b)	<p>Define ‘secondary market research’.</p> <p>Award 2 marks for a full definition. Award 1 mark for a partial definition.</p> <p>Uses information that has already been collected and is available for use by others [2]</p> <p>OR The collection of data from secondhand sources / data collected by other agencies / businesses [2]</p> <p>Partial definition e.g. information already collected [1]</p>	2	<p>Do not award desk research as this is an alternative name.</p> <p>Do not award examples as this does not define the term.</p> <p>Do not award answers that simply define market research e.g. information about the market / customer needs [0]</p>

Question	Answer	Marks	Notes
3(c)	<p>Outline how providing a good quality service could help Samuel's business increase added value.</p> <p>Award 1 mark for identification of each relevant point (max 2).</p> <p>Award 1 mark for each relevant reference made to this business (max 2).</p> <p>Points might include:</p> <ul style="list-style-type: none"> • Quality service can mean customers are willing to pay higher price [k] for a good plumber [app] which increases the gap between price and the cost of inputs [k] which can help him choose an appropriate pricing method [app] • Good quality can help boost reputation / brand image [k] which is important as it is a new business [app] so customers may be willing to pay a higher price for his services [k] and allow Samuel to take advantage of economic growth [app] <p>Other appropriate responses should also be credited.</p>	4	<p>Note: To use words from the stem as application, the reference must be appropriate (i.e. make sense) in relation to the point being made.</p> <p>The following words are likely to be appropriate for this question:</p> <ul style="list-style-type: none"> • Plumbing or related words such as bathrooms • Used all his savings / \$500 • New business • Sole trader • Pricing method • Economic growth <p>Other appropriate examples in context can still be credited.</p>

Question	Answer	Marks	Notes
3(d)	<p>Explain <u>two</u> possible disadvantages to Samuel of operating as a sole trader business.</p> <p>Award 1 mark for identification of each relevant disadvantage (max 2).</p> <p>Award 1 mark for each relevant reference made to this business (max 2).</p> <p>Award 1 mark for each relevant explanation (max 2).</p> <p>Points might include:</p> <ul style="list-style-type: none"> • Unlimited liability [k] so could lose his house as well as the \$500 [app] as his personal assets can be used to repay business debts [an] • Limited sources of finance [k] for his plumbing business [app] which could create cash flow problems / difficult to fund expansion [an] • Few / only has own skills [k] so may not be able to do all jobs on time / properly [an] so difficult to offer a good quality service [app] • Has all the responsibility / make decisions on own [k] • Business does not have a separate legal identity [k] so he would be personally liable for the debts of the business [an] • Has to work long hours / difficult to take holidays [k] • No one to share risks/losses with [k] <p>Other appropriate responses should also be credited.</p>	6	<p>Note: To use words from the stem as application, the reference must be appropriate (i.e. make sense) in relation to the point being made.</p> <p>The following words are likely to be appropriate for this question:</p> <ul style="list-style-type: none"> • Plumbing or related words such as bathrooms • Used all his savings / \$500 • New business • Quality service • Pricing method • Economic growth • Added value <p>Other appropriate examples in context can still be credited.</p>

Question	Answer	Marks	Notes
3(e)	<p>Do you think penetration pricing is a better method for a new business to use than cost-plus pricing? Justify your answer.</p> <p>Award up to 2 marks for identification of relevant points.</p> <p>Award up to 2 marks for relevant development of points.</p> <p>Award 2 marks for a justified decision as to whether it is always better for a new business to use penetration pricing rather than cost-plus pricing.</p> <p>Answers might include:</p> <p>Penetration pricing</p> <ul style="list-style-type: none"> • Setting a lower price than competitors should attract customers [k] leading to higher number of sales [an] • Help build up market share quickly / enter new market quickly [k] • Customers may get used to low prices and may not buy if prices increase [k] leading to fewer sales / damage reputation [an] • Might not be appropriate for a product which is being promoted as having high quality [k] which can damage image/reputation [an] <p>Cost-plus pricing</p> <ul style="list-style-type: none"> • Easy to apply [k] which could allow time for new business to focus on other issues [an] • Ensure costs are covered [k] so will make a profit per item [an] • Price may be (much) higher than competitors [k] making the business uncompetitive / leading to fewer sales [an] less revenue [an] • Little/no incentive to reduce costs [k] <p>Other appropriate responses should also be credited.</p>	6	<p>This is a general question so there are no marks for application.</p> <p>To gain both evaluation marks, response must clearly relate to a new business.</p>

Question	Answer	Marks	Notes
3(e)	<p>Justification might include:</p> <p>Setting a lower price than competitors using penetration pricing should attract customers [k] leading to more sales [an]. Cost-plus pricing could mean the price may be higher than competitors [k] could make the business uncompetitive [an]. Therefore, penetration pricing is better because a new business needs to gain customers - and by setting such a low price, more people might be able to afford it, improving the chances of the new business being successful. [eval] [eval]</p>		

Question	Answer	Marks	Notes
4(a)	<p>Define 'flow production'.</p> <p>Award 2 marks for a full definition. Award 1 mark for a partial definition.</p> <p>Where large quantities of a product are produced in a continuous process [2]</p> <p>OR The production of very large quantities of (identical) goods using a continuously moving process [2]</p> <p>Partial definition e.g. large quantities of a (standardised) product [1] OR large-scale production / large volumes / continuous production [1]</p>	2	
4(b)	<p>Calculate output per worker per week in 2020. Show your working.</p> <p>Award 2 marks for a correct answer.</p> <p>Award 1 mark for a correct method but incorrect answer.</p> <p>Correct answer: 1240 [2]</p> <p>Method e.g. total output/number of employees OR 310 000 / 250 [1]</p>	2	If correct answer given with no working shown award 2 marks.

Question	Answer	Marks	Notes
4(c)	<p>State <u>four</u> factors a business should consider when selecting an appropriate method of internal communication.</p> <p>Award 1 mark per factor.</p> <p>Four from:</p> <ul style="list-style-type: none"> • Who the message is to be sent to • Where/location of the sender/receiver • How many people does the message need to be sent to? • Mediums available • Amount of information to be sent • How important / urgent is the message / when the message needs to be sent / received • How sensitive/confidential is the information? • Whether feedback required • Whether a written record is required <p>Other appropriate responses should also be credited.</p>	4	<p>Award only the first four responses given.</p> <p>Do not award methods of internal communication as this does not answer the question.</p>

Question	Answer	Marks	Notes
4(d)	<p>Explain <u>one</u> reason why the following factors might be important to BEF when deciding whether to export to country Y.</p> <p>Award 1 mark for identification of each relevant reason (max 2).</p> <p>Award 1 mark for each relevant reference made to this business (max 2).</p> <p>Award 1 mark for each relevant explanation (max 2).</p> <p>Points might include:</p> <p>Import tariffs:</p> <ul style="list-style-type: none"> • Higher import prices / products become more expensive [k] leading to lower demand / so less competitive [an] when selling its toothpaste / shampoo [app] • Business may decide to maintain prices / not pass on price increase to customers [k] reducing profit margin [an] <p>Language:</p> <ul style="list-style-type: none"> • May need to translate/change wording on the packaging (so customers understand) [k] on some of its 310000 units [app] which increases costs [an] • Communication problems with retailer / agent in other country [k] leading to wrong orders / decisions being taken [an] especially as have a wide range [app] • Potentially fewer sales as customers may not understand what is written on the packaging [k] leading to less revenue [an] <p>Other appropriate responses should also be credited.</p>	6	<p>Note: To use words from the stem as application, the reference must be appropriate (i.e. make sense) in relation to the point being made.</p> <p>The following words are likely to be appropriate for this question:</p> <ul style="list-style-type: none"> • Toothpaste/shampoo • Wide range of products • 310000 units • Flow production • Correct use of data from Table 4.1 • Large business <p>Other appropriate examples in context can still be credited.</p>

Question	Answer	Marks	Notes
4(e)	<p>Do you think it is better for a large business to produce a wide range of products than a small range of products? Justify your answer.</p> <p>Award up to 2 marks for identification of relevant points.</p> <p>Award up to 2 marks for relevant development of points.</p> <p>Award 2 marks for a justified decision as to whether producing a wide range of products is likely to be better for a large business.</p> <p>Points might include:</p> <ul style="list-style-type: none"> • Attracts new customers / increase sales / wider customer base [k] increasing revenue [an] • Enhances brand image/reputation [k] leading to customer loyalty [an] • Spread risk [k] as do not have to rely on only one/few products to generate sales [an] • May need high levels of inventory [k] which can increase variable costs [an] • May need more storage space [k] which can increase fixed costs [an] • May have many competitors [k] so difficult to manage / respond to actions of other competitors [an] so may lose customers to rivals / market share (rather than gain) [an] • May have limited / not enough production capacity [k] so may have difficulty in meeting demand for all its products [an] • High cost of research and development [k] which increases cash outflows [an] <p>Other appropriate responses should also be credited.</p>	6	<p>This is a general question so there are no marks for application.</p> <p>To gain both evaluation marks response must clearly relate to a large business.</p>

Question	Answer	Marks	Notes
4(e)	<p>Justification might include:</p> <p>Having a wide range of products can help spread risk [k] as do not have to rely on only one/few products to generate sales [an]. However, a wide range may mean it has many competitors [k] so so may lose customers to other businesses [an]. Therefore, while having a wide range can help increase revenue more easily than having fewer products, it may only be successful if the business is able to manage a wide range of products effectively to be able to sell them. [eval] [eval]</p>		