

Cambridge IGCSE™

| BUSINESS STUDIES | | 0450/22 |
|--------------------|-----------|------------|
| Paper 2 Case Study | | March 2020 |
| 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.

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Cambridge IGCSE – Mark Scheme PUBLISHED

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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| Question | | Answer | | Marks |
|--|--|---|------------|-------|
| 1(a) | Explain <u>four</u> reasons why a person may set up their own business. | | | 8 |
| | Award one mark for each relevant reason (maximum of four). Relevant reasons might include: | | | |
| Made redundant – need to provide an income as lost job To be own boss – independence from instructions from others/employ Able to decide how to spend time – flexible working hours/choose who to take time off To make a profit – as may receive a higher income than working for another business Gap in the market identified/able to put own ideas into practice/can | | | cing for | |
| | make | use of personal skills and interests/be creative/ethical pain recognition and status – to become well known and r | orinciples | |
| | example: Redundar | naximum of one additional mark for each explanation. For each explanation in the formula is the formula in the formula in the formula in the formula in the formula is the formula in the | | |
| 1(b) | time emp | ne benefits to BW of employing part-time employees loyees. Do you think Bob should continue to employemployees? Justify your answer. | | 12 |
| | Level | Description | Marks | |
| | 3 | Sound application of knowledge and understanding of relevant business concepts using appropriate terminology. | 9–12 | |
| | | Detailed discussion of the two alternatives. | | |
| | | Well-justified conclusion. | | |
| | | Candidates discussing the two alternatives in detail, in context and with well-justified conclusion including why the alternative was rejected should be rewarded with the top marks in the band. | | |
| | 2 | Sound application of knowledge and understanding of relevant business concepts using appropriate terminology. | 5–8 | |
| | | Detailed discussion of at least one alternative. | | |
| | | Judgement with some justification/some evaluation of choice made. | | |
| | | Candidates discussing the two alternatives in detail and applying it to the case should be rewarded with the top marks in the band. | | |

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| Question | Answer | | |
|----------|---|---|---|
| 1(b) | of relevant busing Limited ability to explanation. Simple judgement evaluation of che Candidates outless | o discuss the alternatives with little/no | 1-4 |
| | 0 No Creditable R | Response | 0 |
| | Relevant points might inclu Advantages | | |
| | employee the two Easier to times concustome Easier to may be May red time employee | exible hours of work – increases motival part-time employees to increase the employee hours during leaning windows – allows for BW to mer demand effectively to recruit part-time employees – because more flexible and fit in with family comployees – as may only employ workers at busy times in the window washing ss/may be willing to accept a lower washing per month | busy neet se hours mitments ing full- s when |
| | employee product Reduce window tempora More co more m More lik skills ar allow pr reduces Easier t | kely to be trained and seek training – in civity of employees as clean windows to labour turnover – more likely to see the cleaning job as long-term rather than ary/lower recruitment costs committed to the cleaning business – leading to be suitable for promotion as gained experience if BW expands in the future of the communicate with than part-time emports for more hours a day | eads to ency ned more ure – may ants and |

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| Question | Answer | Marks |
|----------|---|-------|
| 1(b) | As the business is new and may not have a lot of customers then part-time employees might be cheaper in terms of wage costs than full-time employees and willing to only work at busy times – therefore saving BW costs. If BW is planning to expand in the future then full-time employees may be better as they will gain more skills and be suitable to take on more responsibility – helping Bob to cope and delegate some of his tasks managing the window cleaning business. Which would be more difficult to do with part-time employees. | |

| Question | Answer | Marks |
|----------|--|-------|
| 2(a) | Explain two reasons why Bob used sampling when carrying out a questionnaire. | 8 |
| | Award one mark for each relevant reason (maximum of two reasons). | |
| | Relevant reasons might include: To reduce the time taken to carry out the questionnaire – takes a lot of time to ask the whole population – sampling means reduced number of questionnaires have to be collated and analysed To reduce the cost of carrying out the questionnaire – reduced number of questionnaires printed – reduced postage/time taken by staff to carry out questionnaire More accurate or relevant information – as potential customers can be targetted – so answers only relate to potential customers and results are not influenced by answers from people not interested in the service Award a maximum of three additional marks for each explanation – one of which must be applied to this context – of the reasons for using sampling when carrying out a questionnaire. For example: To reduce costs for the business (1) because if the whole population is asked about cleaning windows this will be very expensive (App) therefore choosing a small number of people will be less expensive (1). This is important for a small business which will have other costs to pay (1). Application could include: window cleaning business; window washing service; busy home owners; increasing incomes for potential customers; | |
| | service; busy home owners; increasing incomes for potential customers; only has a few regular customers at the moment; need to decide the best ways to promote the business; confirm there is a high demand for these services. | |

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| Question | | Answer | | Marks |
|----------|---|---|-------|-------|
| 2(b) | Which mLeafAdve | the following three methods of promotion BW could lethod should Bob use? Justify your answer. lets ertise in local newspaper al media | use. | 12 |
| | Level | Description | Marks | |
| | 3 | Sound application of knowledge and understanding of relevant business concepts using appropriate terminology. Detailed discussion of at least two methods. | 9–12 | |
| | | Well-justified recommendation. | | |
| | | Candidates discussing the three methods in detail, in context and with well-justified recommendation including why the alternative methods were rejected should be rewarded with the top marks in the band. | | |
| | 2 | Sound application of knowledge and understanding of relevant business concepts using appropriate terminology. | 5–8 | |
| | | Detailed discussion of at least one method. | | |
| | | Judgement with some justification/some evaluation of choice made. | | |
| | | Candidates discussing two methods or more in detail and applying it to the case should be rewarded with the top marks in the band. | | |
| | 1 | Limited application of knowledge and understanding of relevant business concepts. | 1–4 | |
| | | Limited ability to discuss the methods with little/no explanation. | | |
| | | Simple judgement with limited justification/limited evaluation of choice made. | | |
| | | Candidates outlining the three methods in context should be rewarded with the top marks in the band. | | |
| | 0 | No Creditable Response | 0 | |

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| Question | | Answer | Marks |
|----------|---------------------------|---|-------|
| 2(b) | Relevant points might inc | clude: | |
| | Leaflets | Cheap method of advertising – low printing costs Handed out in the streets to a wide range of people and can be delivered to households and offices where windows may require cleaning – giving a wide distribution to potential customers Could contain promotion, e.g. discount off first windows cleaned – increases the likelihood of attracting customers Can be kept for later use – provides reminder of contact details for customers – more likely to use the window cleaning business in the future However, home owners may not read the leaflets and just throw them away – waste of money and ineffective | |
| | Advertisements • • • | Will reach the target market of home owners in the local area – targeted advertising Relatively cheap to place advertisements compared to national advertising – reduces advertising costs as only targeting local home owners/too expensive for a new business Information/discount coupons can be cut out and kept for later use – reminds potential customers of contact details for the cleaning service A lot of information about cleaning services can be included in the advertisement – may encourage more customers if persuaded by the additional information However, only black and white so may not be as attractive – not eye-catching Many younger households do not read newspapers and so may not see the advertising | |

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| Question | | Answer | Marks |
|----------|----------------|---|-------|
| 2(b) | Social Media | Can be free with no cost – unless paid for advertising – seen by many younger consumers although may not be home owners Reputation of the cleaning business helps encourage new customers – spread quickly as easier to share Allows video and audio to be added – makes the advertisement more attractive – may be more likely to persuade customers to have their windows cleaned Advertising can be carried out across the local area and not national area – so more targeted on potential customers However, limited number of family and friends of the small number of current regular customers – restricting sales Customers may not trust posts on social media – may think they are fake | |
| | Recommendation | As the business is new then it will need to keep marketing costs low and therefore leaflets might be the best method to use as they are low cost. They can be put through the doors of prospective customers and may be more effective in directly targeting these customers. These customers may not read local newspapers and social media may not reach them. Advertising in local newspapers is likely to reach the target market in the local area as the business is a service and is only aimed at the local population. Social media may be less effective as it will reach a wide range of people who may not all live locally to BW. Social media is the cheapest of the three methods and can easily be seen by many home owners. This will be especially effective if regular customers put favourable posts about BW cleaning services. This will not need BW to do anything or spend money printing leaflets or paying for advertising. | |

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| Question | Answer | Marks |
|----------|---|-------|
| 3(a) | Explain two reasons why working capital is important to BW. | 8 |
| | Award one mark for each relevant reason (maximum of two). | |
| | Relevant reasons might include: Needed to pay for day-to-day expenses – if lack of working capital then may not be able to pay wages – not able to supply services as workers will not work if not paid Not able to buy supplies of cleaning materials – not able to satisfy customer needs – gain poor reputation with customers as being unreliable So the business does not lack liquidity – to avoid cash flow problems – so does not become insolvent/cease trading/not survive Holding too high a level of inventories – not good use of cash if working capital too high – other opportunities to gain profit are missed Award a maximum of three additional marks for each explanation – one of which must be applied to this context – of the reasons why working capital is important to BW. For example: Needed to pay day-to-day expenses (1) as BW will need to buy cleaning materials to carry out the services (App). If there is insufficient working capital then it will be difficult for BW to continue trading (1) because without wages paid cleaning materials available BW cannot continue operating (1). | |
| | Application could include: window cleaning business; window washing service; cleaning materials; busy home owners; only has a few regular customers at the moment; wages \$300 per month; lease van at cost of \$150 per month; new business. | |

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| Question | | Answer | | Marks |
|----------|---|---|-------|-------|
| 3(b) | Consider the three main styles of leadership Bob could use in his business. Which leadership style do you think he should use? Justify your answer. | | | 12 |
| | Level | Description | Marks | |
| | 3 | Sound application of knowledge and understanding of relevant business concepts using appropriate terminology. | 9–12 | |
| | | Detailed discussion of two or more leadership styles. | | |
| | | Well-justified recommendation. | | |
| | | Candidates discussing the three leadership styles in detail, in context and with well-justified recommendation including why the alternative styes were rejected should be rewarded with the top marks in the band. | | |
| | 2 | Sound application of knowledge and understanding of relevant business concepts using appropriate terminology. | 5–8 | |
| | | Detailed discussion of at least one leadership style. | | |
| | | Judgement with some justification/some evaluation of choice made. | | |
| | | Candidates discussing two or more leadership styles in detail and applying it to the case should be rewarded with the top marks in the band. | | |
| | 1 | Limited application of knowledge and understanding of relevant business concepts. Limited ability to discuss the leadership styles with little/no explanation. | 1–4 | |
| | | Simple judgement with limited justification/limited evaluation of choice made. | | |
| | | Candidates outlining the three leadership styles in context should be rewarded with the top marks in the band. | | |
| | 0 | No Creditable Response | 0 | |

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| Question | Answer | Marks |
|----------|---|-------|
| 3(b) | Relevant points might include: | |
| | The manager expects to be in charge and have all orders followed – such as which cleaning materials should be used Manager keeps himself separate from the two part-time employees Bob will make all the decisions and keep information to himself – employee 2 likes to be told what to do Communication is one-way with employees having no opportunity to comment or take part in any decisions about the cleaning services which can be demotivating Decision making is quick | |
| | Gets employees involved in decision-making — and employee 1 is happy to be asked what he thinks Information about future plans of the window cleaning business shared with employees and discussed before owner makes the final decision Communication is both downward and upward allowing the experience of both part-time employees to be considered by the owner, leading to possibly better decisions being made Motivating for employees as they feel more involved in the business — less likely to leave May be time consuming to ask employees — reducing the work carried out by the two employees Unpopular decisions may need to be made and employee ideas ignored | |
| | Main objectives of the new business shared with employees but then they are left to organise their own work and take decisions without any interference which can be motivating Communication can be difficult as the leader has little involvement in the decisions being made Employees can be motivated as are valued and trusted in to make the decisions Employees can be creative with fresh ideas about how to wash windows more quickly Not suitable if a clear direction is needed and consistent approach to customers | |

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| Question | | Answer | Marks |
|----------|----------------|--|-------|
| 3(b) | Recommendation | Autocratic might be best so that Bob gives clear instructions to be followed by his two part-time employees. They may not be there all the time or working together and mistakes may be made if decisions are left to these two people. They will not have all the information about the business and what the future plans are. Democratic might be suitable as there are only two employees and Bob may have a close working relationship with them. This may make autocratic less likely to be used as it may require Bob to keep his distance from his employees and this would not make for a good working relationship in the business. Laissez-faire is not suitable as consistent customer service is required to maintain a good reputation for cleaning windows and for the business to gain more customers. | |

| Question | Answer | Marks |
|----------|---|-------|
| 4(a)(i) | Calculate the break-even level of output for BW using the information in Appendix 2. | 2 |
| | Two marks for correct calculation. One mark for correct method/formula but wrong answer. | |
| | Break-even output = $\frac{\text{Fixed Cost}}{\text{Price} - \text{Variable cost per unit}} $ (1) | |
| | \$1250 ÷ (\$11–\$1)(1) = 125 (1) | |
| | Note: If answer is only 125 with no working then award two marks. | |
| 4(a)(ii) | Calculate the margin of safety for BW using the information in Appendix 2. | 2 |
| | Two marks for correct calculation. One mark for correct method but wrong answer. OFR applies. | |
| | Margin of safety = Actual output – break-even output (1) 225 – 125 (1) = 100 (1) | |
| | Note: If answer is only 100 with no working then award two marks. | |

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| Question | Answer | | | Marks |
|-----------|---|---|-----------|-------|
| 4(a)(iii) | Identify four ways break-even analysis can be useful to a business. Award one mark for each way (maximum of four) Predicts how many sales the business needs to make to break-even Predicts how much sales could fall by and still make a profit Shows potential profit/loss for the business at different levels of output Shows possible effect of change in price on the break-even level of output/profit Shows possible effect of change in costs on the break-even level of output/profit May be useful to show to the bank manager to indicate a profit is predicted and therefore more likely to gain a bank loan | | | |
| | | | | |
| 4(b) | | the following <u>three</u> options for BW. Which option sloting improve BW's reputation? Justify your answer. | nould Bob | 12 |
| | Option 2: | Use cleaning products that contain chemicals. Use bottles that can be refilled with cleaning produ Purchase a new window washing machine. | cts. | |
| | Level | Description | Marks | |
| | 3 | Sound application of knowledge and understanding of relevant business concepts using appropriate terminology. | 9–12 | |
| | | Detailed discussion of two or more options. | | |
| | | Well-justified recommendation. | | |
| | | Candidates discussing all three options in detail, in context and with well-justified recommendation including why the alternative options were rejected should be rewarded with the top marks in the band. | | |
| | 2 | Sound application of knowledge and understanding of relevant business concepts using appropriate terminology. | 5–8 | |
| | | Detailed discussion of at least one option. | | |
| | | Judgement with some justification/some evaluation of choice made. | | |
| | | Candidates discussing two or more options in detail and applying it to the case should be rewarded with the top marks in the band. | | |

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| Question | Answer | | | | Marks |
|----------|--|-----------------------|--|--|-------|
| 4(b) | 1 | | pplication of knowledge and understanding t business concepts. | 1–4 | |
| | | Limited ab explanatio | oility to discuss each option with little/no | | |
| | | | Igement with limited justification/limited of choice made. | | |
| | | | es outlining all three options in context rewarded with the top marks in the band. | | |
| | 0 | No Credita | able Response | 0 | |
| | Relevant | ooints might | include: | | |
| | Option 1 Use cleaning products that contain chemicals | | Faster to clean windows – more efficient/improved customer satisfaction More efficient by 50 per cent if using the chemicals so more windows washed perpossibly increasing profit However, bad reputation from using chemicals as not environmentally friendly and president groups may campaign against them – and legal at the moment, the law may change future so may have to change later anywer. | emicals ssure although ge in the | |
| | Option 2 Use bottles that can be refilled with cleaning products | | Slightly higher transport cost of taking the containers to be refilled as would need at than one – but may be the cleaning proceed than one – but may be the cleaning proceed the cleaning proceed that it is a specific solution of the cleaning proceed that it is a particle of the cleaning proceed that it is a particle of the cleaning proceed to the cleaning that it is a specific solution of the cleaning that it is a specific solution | more ducts are reviously ich were ners | |
| | Option 3 Purchase window window window window window window with the second sec | vashing | High cost of purchase – \$1000 – difficul finance as a new business Ethical and may encourage more custor the local area with increasing income BW Reduces the amount of water required twindows – may save money Improved reputation with the local commas they may benefit from less wastage of – as the machine recycles the water | mers in to use to clean munity – | |

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| Question | | Answer | Marks |
|----------|----------------|---|-------|
| 4(b) | Recommendation | Choose Option 1 as although costs may be slightly higher the increased efficiency and cleaning more windows per hour increases reputation for a fast service. Customers may not know about the new machine or bottles being refilled and therefore this may not improve BW's reputation. Choose Option 2 as plastic bottles would not need to go to waste and this can be a USP in advertising if other window washing businesses do not use these, hence improving BW's reputation. It is also a lot cheaper than paying \$1000 for a new machine. Choose Option 3 as it may be better in the long term as water is important and BW will not be wasting it. It also means that BW can wash windows without having to gain water from the house if the owners are out. This may increase efficiency and improve the reputation for being careful with the scarce resource of water. BW's reputation will not be enhanced as much if it refills bottles, as this may not be noticed by customers and they may not be aware of the chemicals being used. | |

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