

Cambridge IGCSE™

BUSINESS STUDIES		0450/22
Paper 2 Case Study	F	ebruary/March 2024
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 February/March 2024 series for most Cambridge IGCSE, Cambridge International A and AS Level components, and some Cambridge O Level components.

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 descriptions 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.

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.

0450/7115/0086 Business Studies - Paper 2 Annotations

Annotation	Description	Use
Tick	Tick	Indicates a point which is relevant and rewardable (used in part (a) questions).
Cross	Cross	Indicates a point which is inaccurate/irrelevant and not rewardable.
BOD	Benefit of doubt	Used when the benefit of the doubt is given in order to reward a response.
TV	Too vague	Used when parts of the answer are considered to be too vague.
REP	Repetition	Indicates where content has been repeated.
NAQ	Not answered question	Used when the answer or parts of the answer are not answering the question asked.
APP	Application	Indicates appropriate reference to the information in the context.
OFR	Own figure rule	If a mistake is made in a calculation, and the incorrect figure that results from the mistake is used for subsequent calculations.
SEEN	Noted but no credit given	Indicates that content has been recognised but not rewarded.
L1	Level 1	Used in part (b) questions to indicate where a response includes limited knowledge and understanding.
L2	Level 2	Used in part (b) questions to indicate where a response has a more detailed discussion and contains some evidence of justification.
L3	Level 3	Used in part (b) questions to indicate where a response includes a well-justified recommendation.

Question	Answer	Marks
1(a)	Explain <u>four</u> reasons why governments support the start-up of new businesses.	8
	Award 1 mark for each relevant reason (max 4).	
	Award a maximum of 1 additional mark for each explanation.	
	There are no application marks available for this question.	
	 Relevant reasons might include: To reduce unemployment – new businesses may create jobs To increase competition – encourages businesses to be efficient (when competing with other businesses) To provide benefits for society – some start-up businesses may create social enterprises To provide specialist goods and services not provided by larger businesses – satisfies demand for niche products To increase output – increasing GDP To increase the variety of goods and services available to consumers To increase tax revenue May grow into larger businesses / larger businesses were small when they started 	
	For example: To reduce unemployment (1) by providing jobs/employment which may increase economic growth in the country (1).	

Question		Answer		Marks
1(b)	affected employm effect on Incre Addi	opendix 1 and other information, consider how AF by the following three changes in legal controls of the following three changes in legal controls of the legal control will have AF? Justify your answer. The legal minimum wage the following the legal makes in the legal minimum wage the legal minimum wage the legal makes are the legal makes and legal makes are legal to the legal work a maximum of 50 hours each legal makes.	ver ve the most	12
	Level	Description	Marks	
		Sound application of knowledge and understanding of relevant business concepts using appropriate terminology. Detailed discussion of two or more legal controls.		
	3	Well-justified conclusion. Candidates discussing the three legal controls in detail, in context and with a well-justified conclusion, including why the alternative legal controls were rejected, should be rewarded with the top marks in the band.	9–12	
	2	Sound application of knowledge and understanding of relevant business concepts using appropriate terminology. Detailed discussion of at least one legal control. Judgement with some justification / some evaluation of choice made. Candidates discussing two or more legal controls in detail and applying this to the case should be rewarded with the top marks in the band.	5–8	
	1	Limited application of knowledge and understanding of relevant business concepts. Limited ability to discuss the legal controls with little/no explanation. Simple judgement with limited justification / limited evaluation of choice made. Candidates outlining the three legal controls in context should be rewarded with the top marks in the band.	1–4	
	0	No Creditable Response	0	

Question		Answer	Marks
1(b)	Relevant points m	night include:	
	Increase in the legal minimum wage	 If wages increase it may improve motivation Increased costs if pay the 10 workers higher pay Already pay above minimum wage so may not have to increase pay – costs may not change Alternative employers may attract the workers away from AF if it does not increase their pay to keep the differential – higher recruitment costs Increase in potential customers due to increase in disposable income leading to more sales of AF's meals 	
	Additional health and safety regulations	 Increased costs of training production employees in the factory producing food – less likely to have accidents so less time off work through injury – more output/fewer errors Workers feel safer so become more motivated – positive impact on output/efficiency Additional safety equipment may be required – increased cost for AF 	
	Employees can only work a maximum of 50 hours each week	 May need to employ more than 10 skilled production employees during busy times or fewer customers accepted as each employee can only work a maximum of 50 hours a week – possible impact on ability to meet demand and may lose sales Workers may be less tired, so work is more efficient/ more motivated / fewer errors Lower wages for employees if regularly paid extra for the additional hours worked – reduced motivation May lead to customer orders being delayed – decline in reputation – possibly fewer sales Workers may have to work faster in busy periods to meet demand in less time. Potential for errors / increased productivity 	

Question		Answer	Marks
1(b)	Conclusion	 Relevant points might include: The increase in the minimum wage will have the most effect on AF because it is likely to increase the total wage costs for AF which may reduce profit. This will reduce the return on the investment for the partners. Training is not likely to cost much, and it is a one-off payment whereas increases in wage costs will be constant. The maximum of 50 hours will not have much effect as AF can just employ a few more workers and AF will not have to make extra payments to AF's existing employees. The additional health and safety regulations will have the most effect on AF because this will require additional equipment to be purchased. AF already wants to increase the output of meals at the factory, and it will increase the amount AF needs to borrow to finance this expansion. Employees can only work a maximum of 50 hours each week will have the most effect on AF because AF will need to employ more than 10 production employees or AF will not be able to meet the increased demand for AF's products and therefore may lose the potential increase in revenue. 	

Question	Answer	Marks
2(a)	Explain two benefits to AF of segmenting its market.	8
	Award 1 mark for each benefit (max 2).	
	Award a maximum of 3 additional marks for each explanation of the benefit of segmenting the market – one of which must be applied to this context .	
	 Relevant benefits might include: May be able to increase sales – by catering to the needs of specific market segments – ensuring the goods or services produced are exactly what the consumer wants Identifying a gap in the market for a particular product – may meet customer demand that is not currently being satisfied by existing larger businesses – allowing demand to be satisfied that is currently not being met May make the business more competitive with larger businesses in that market – by serving a niche part of the market – enabling the smaller business to survive May be able to charge a higher price from segmenting the market – as it may target a niche market – as often few competitors are selling the specific products in this segment / may lead to higher revenue May make marketing expenditure more effective – target specific market segment – therefore may be more cost effective / not waste scarce resources 	
	For example: May be able to charge a higher price (1) as it may target a niche market with fewer competitors (1) for the meals (app) which may lead to higher revenue (1).	
	Application could include: meals; restaurants; workers from another country; food recipes; 90% ingredients imported; partnership; 100 000 workers; produced in own kitchen; new technology may be installed in factory; high demand for AF's food; no other businesses producing similar high-quality food; 60% / 60 000 of target market are high-income employees.	

Question	Answer			Marks		
2(b)	Using Appendix 2 and other information, consider each of the following elements of the marketing mix for AF's new meal. Would this be a suitable marketing mix for the new meal? Justify your answer. • Price – using penetration pricing • Place – selling to food retailers in Main City • Advertising – using social media					
	Level	Level Description				
		Sound application of knowledge and understanding of relevant business concepts using appropriate terminology. Detailed discussion of two or more elements.				
	3	Well-justified conclusion.	9–12			
		Candidates discussing the three elements in detail, in context and with a well-justified conclusion of why this would or would not be a suitable marketing mix, should be rewarded with the top marks in the band.				
		Sound application of knowledge and understanding of relevant business concepts using appropriate terminology.				
	2	Detailed discussion of at least one element. Judgement with some justification / some evaluation of choice made.	5–8			
		Candidates discussing two or more elements in detail and applying this to the case should be rewarded with the top marks in the band.				
		Limited application of knowledge and understanding of relevant business concepts.				
	1	Limited ability to discuss the elements with little/no explanation.	1–4			
		Simple judgement with limited justification / limited evaluation of conclusion made.				
		Candidates outlining the three elements in context should be rewarded with the top marks in the band.				
	0	No Creditable Response	0			

Question	Answer			
2(b)	Relevant points might include:			
	Price – using penetration pricing should attract customers to try the new meal when it is first entering the market by setting low prices – increasing sales/revenue Customers may think the new meal is low quality – therefore may damage AF's reputation May not make a profit on each meal if price is set lower than the unit cost of the meal – as quality of its meals is high and imported ingredients are more expensive than if purchased locally May not need to set a very low price as target market are people from country A working in country X – 60% earn a high income / 60 000 high-income earners – and no competition for these meals means customers would probably buy the new meal at a higher price May be better to use an alternative pricing method – such as skimming or cost-plus – high-quality product sold in a niche market			
	The new meal sold through food retailers will be available to many people who visit food retail outlets and would see AF's products – reaching a wider market than just people from country A – increasing awareness and possibly sales Food retail outlets could have a point-of-sale display encouraging people to buy the new meal who may not be aware of AF's meals – increasing accessibility to a wider market than just people from country A – possibly leading to higher sales Selling through food retail outlets is likely to require the price paid to AF to be lower – reducing the profit margin for AF on the meals Food retail outlets also sell other meals produced by other food manufacturers and customers may not switch to AF's meals but stay loyal to their existing food producer Food retail outlets may not be visited by people from country A – unless these retailers are located near to where people from country A live – may not be an effective place to distribute the new meal Alternative channels of distribution may be discussed such as remain using their own street market stalls in Main City			

Question		Answer	Marks
2(b)	Advertising – using social media	Advertise on social media so will be seen by a large number of people — raising awareness of the new meal Can target 100 000 people from country A who are working in country X — advertising focused on target market so more effective advertising Can use the language/culture of country A to advertise the new meals — making it more accessible and appealing to the target market Low or no cost to advertise — may not need to pay for adverts to be designed / design own adverts to post Direct interaction with customers to answer questions / post favourable comments — satisfied customers can quickly advertise the new meal for AF — increasing sales / encouraging customers to try the new meal Can encourage existing AF customers to post favourable comments about the new meal encouraging other people to try the new meal Not all customers may use social media — so do not see the advertising and not aware of the new meal There may be negative comments posted — difficult to counter negative publicity and may reduce reputation for high-quality meals Alternative methods of advertising may be better such as leaflets, posters, newspapers, billboards	

Question		Answer	Marks
2(b)	Conclusion	 The marketing mix will be effective as the price will be low to attract new and existing customers to try the new meal. Selling through food retailers will mean a wider market of people, that includes those who do not come from country A, will be able to see and purchase the new meal and advertising on social media will also widen the market for the new meal as more people can be reached than advertising on TV or in newspapers. Social media is low-cost advertising for a partnership as AF is unlikely to have a large marketing budget and it is an effective way to reach existing customers as well as new ones. The marketing mix chosen should make the launch of this new meal a success. The marketing mix is likely to be successful but using penetration pricing is not the best pricing method to choose because price could be set higher to appeal to the target market, as 60% earn a high income. A low price may make customers think the product is low quality and then they may not try the new meal even if they already buy AF's products. It also reduces the revenue earned from sales so price skimming might be a better pricing method to choose as this will lead to customers thinking the meal is of a high quality and, as it is new, may be willing to pay this high price. 	

Question	Answer	Marks
3(a)	Explain <u>two</u> ways an appreciation in the exchange rate of country X might affect AF.	8
	Award 1 mark for each way (max 2).	
	Award a maximum of 3 additional marks for each explanation of the way an appreciation of the exchange rate might affect AF – one of which must be applied to this context.	
	 Relevant ways might include: Decreases the cost of imports – enabling price to be reduced – making AF's products more competitive so sales/revenue may rise May increase spending on AF's meals – lower prices of imported consumer products may mean a lower proportion of income spent on essentials – leaving more income to be spent on other products AF may become more competitive – other restaurants do not import their ingredients – they will not be affected by lower import costs, so competitors' prices are unlikely to fall Profit margin may increase due to lower raw material costs – lowering cost of production – profit may increase 	
	For example: Lower cost of imported raw materials (1) leads to a reduction in the total cost of producing meals (app) which may lead to lower prices being charged to customers (1) increasing sales for AF (1).	
	Application could include: meals; restaurants; workers from another country; food recipes; 90% ingredients imported; partnership; 100 000 workers; produced in own kitchen; new technology may be installed in factory; high demand for AF's food; no other businesses producing similar high-quality food.	

Question		Answer		Marks	
3(b)	Consider the following two ways AF could increase output in its factory. Which would be the best way to use? Justify your answer.			12	
	 Investing in new technology Buying more of their existing equipment 				
	Level	Description	Marks		
		Sound application of knowledge and understanding of relevant business concepts using appropriate terminology.			
		Detailed discussion of both options.			
	3	Well-justified recommendation.	9–12		
		Candidates discussing both options in detail, in context and with a well-justified recommendation, including why the alternative option was rejected, should be rewarded with the top marks in the band.			
		Sound application of knowledge and understanding of relevant business concepts using appropriate terminology.			
		Detailed discussion of at least one option.			
	2	Judgement with some justification / some evaluation of choice made.	5–8		
		Candidates discussing in detail at least one option and applying it to the case should be rewarded with the top marks in the band.			
		Limited application of knowledge and understanding of relevant business concepts.			
	1	Limited ability to discuss the options with little/no explanation.	1–4		
		Simple judgement with limited justification / limited evaluation of choice made.	1-4		
		Candidates outlining both options in context should be rewarded with the top marks in the band.			
	0	No Creditable Response	0		

Question		Answer		Marks
Question 3(b)	Relevant points mig		Disadvantages • The traditional recipes from country A may not be suitable to produce using new technology – may lose the authentic taste – reduces demand/sales/ revenue	Marks
	Investing in new technology	new technology – possibly greater job satisfaction for employees / boring jobs may be removed Better high-quality food products are produced – as new technology accurately regulates the mixing of ingredients Information is available to the manager – new technology gives constant monitoring of the production processes May reduce labour costs – if fewer production employees needed	 Expensive to purchase the new technology – may require additional finance of \$50 000 such as a bank loan – increased costs from interest paid on loan New technology is changing all the time – so the investment may become obsolete/out-of-date – may need replacing quite regularly Employees may lose motivation when using the new technology to produce the traditional food – as work methods may need to change Some employees may need to be made redundant – lowers motivation of existing employees – lower quality / increased absenteeism Employees need training which will also increase costs 	

Question	Answer			Marks
3(b)		Advantages	Disadvantages	
	Buying more of their existing equipment	 Maintain the traditional taste of the food – therefore maintain sales Little or no training needed as employees already know how to use the existing equipment – stops costs increasing Much cheaper to purchase – as cost is \$25 000 – less need to take out a bank loan – may not need to make interest payments If need to recruit new employees, then may be able to use on-the-job training – which may be cheaper than off-the-job training that may be required if new technology had been purchased 	 May not be as efficient as new technology – so output may not increase as quickly – unit costs may not fall as far as if new technology had been used May not be sufficient space so requires a change in the layout of the factory which could slow down production May need more labour to be employed to produce the traditional meals – increasing wage costs 	
	Recommendation	it will increase product the unit cost of meal its profitability or allow further increase dema equipment should not not be as efficient as AF no competitive advit allows traditional tax A to be produced. If rintroduced this may af	chnology for its factory as tivity and therefore reduce Is. This will either increase Is as it may the purchased as it may the new technology giving Is. It is existing equipment as Is. It is existing equipment as Is. It is existing meals from country new technology was If ect the taste of the meals Is.	

Question	Answer	Marks
4(a)	Explain two advantages and two disadvantages for AF of using retained profit as a source of finance for the investment in the factory.	8
	Award 1 mark for each advantage/disadvantage (max 4).	
	Award a maximum of 1 additional mark for each explanation of the advantage/disadvantage of using retained profit as a source of finance which must be applied to this context.	
	Relevant advantages might include: • Does not have to be repaid – unlike if new technology was purchased using a bank loan	
	 Available straight away – no delay in investment for the two partners No interest to pay unlike a bank loan – may mean prices of food products may remain the same 	
	No collateral or security needed / no additional borrowing required	
	 Relevant disadvantages might include: May not have sufficient retained profit – as only been trading as a partnership for 2 years 	
	 Reduces payments to owners – so little return on the investment of the partners Not available for other uses in the business 	
	For example: AF may not have sufficient retained profit for the investment (1) as the partnership has only been trading for 2 years (app).	
	Application might include: meals; restaurants; workers from another country; food recipes; 90% ingredients imported; 2 years as a partnership; 100 000 workers; produced in own kitchen; new technology may be installed in factory; high demand for AF's food; no other businesses producing similar high-quality food; existing equipment; brother; 10 skilled production workers.	

Question		Answer		Marks
4(b)	Using Appendix 3 and other information, consider the advantages and disadvantages of the <u>two</u> new meals AF could choose to produce. Which meal should AF choose? Justify your answer using suitable calculations.			12
	Level	Description	Marks	
	3	Sound application of knowledge and understanding of relevant business concepts using appropriate terminology. Detailed discussion of both meals. Well-justified recommendation.	9–12	
		Candidates discussing both meals in detail, in context and with a well-justified recommendation, including why the alternative meal 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. Detailed discussion of at least one meal. Judgement with some justification / some evaluation of choice made. Candidates discussing at least one meal in detail	5–8	
		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 meals with little/no explanation. Simple judgement with limited justification / limited evaluation of choice made. Candidates outlining both meals in context should be rewarded with the top marks in the band	1–4	
	0	No Creditable Response	0	

Question		Answer		Marks
4(b)	Relevant points mig	Advantages • Price will be higher	Disadvantages • Higher fixed costs by	
	Meal 1	 by \$5 per meal Total cost will be lower at \$14 000 per month assuming forecast sales are accurate The gross profit is higher per month at \$12 000 The gross profit margin will be higher at 60% The impact of the appreciation in the exchange rate will be more beneficial for Meal 1 as it imports 90% of its ingredients as the variable cost per meal is higher Variable cost is 40% of price for Meal 1 and 60% for Meal 2 	\$4000 per month The profit per month will be lower at \$6000 The cost of the ingredients will be higher at \$4 per meal The profit margin will be lower at 30% Forecast sales are lower at 2000 per month	
	Meal 2	 Total revenue will be higher at \$25 000 per month Forecast sales are higher than Meal 1 at 5000 per month The profit margin will be higher at 32% 	 The gross profit per month will be lower at \$10 000 The gross profit margin will be lower at 40% The total cost will be higher at \$17 000 which is \$3000 more The break-even number of sales will be the same as Meal 1 at 1000 per month 	

Question	Answer		
4(b)	Recommendation	 Meal 1 is better as it has a higher gross profit margin which is likely to increase further after the appreciation in the exchange rate for country X leading to lower import costs for ingredients. The price is higher than Meal 2 which should not deter workers from another country as there are 60 000 high-income workers from country A working in country X and they are its target market. Meal 2 is better as it achieves a higher profit per month of \$8000 and has a higher profit margin by 2% than Meal 1. 	