

#### BUSINESS

9609/21 October/November 2019

Paper 2 Data Response MARK SCHEME Maximum Mark: 60

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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### **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.

Question		А	nswer		Marks			
1(a)(i)	Define the term 'fixed costs' (line 22).							
		Knowle	dge	Marks				
	A correct definition			2				
	A partial, vague or unfocus	ed defini	tion	1				
	No creditable content			0				
	Award one mark for each ele o does not change/stays t o as output changes/varie Exemplar	he same						
	Costs that don't vary (1)2Both elements, costs don't change a output changes							
	The cost doesn't change							
	Unchanging costs	1	Only one element					
	costs change with output	0	Confused with variable costs					

Question	Ans	wer			Marks	
1(a)(ii)	Explain the term 'channels of distrib Award one mark for each point of expla	-	line 3).		3	
	Ration	ale		Mark		
	C Example or some other way of she i.e. examples of intermediaries, ch		ood understanding,	1		
	B Stages/intermediaries/different wa businesses	iys of se	lling/chain of	1		
	A From producer to consumer/sell p	roducts	to consumers	1		
	<ul> <li>Content</li> <li>A chain of stages which a product or service goes through on the way from the producer to the consumer.</li> <li>Can be direct, using the internet, or through intermediaries such as a warehouse, agent or retailer.</li> </ul>					
	Exemplar Mark Rationale		Rationale			
	Different ways of selling (B mark) products to consumers (A mark) e.g. supplier to wholesaler to consumer (C mark)	3	Point from each categ	lory		
	A chain of intermediaries (B) a good passes through until it reaches the final buyer (A) e.g. wholesalers, retailers, direct (C)	3	Point from each categ	lory		
	Chain of businesses (B) that sell products to consumers (A)	2	Only two categories c	overed		
	The ways in which (B) producers sell to consumers (A)	2	Only two categories c	overed		
	Stages a product passes through (B)	1	A bit vague but BOD f 'stages'	or		
	Selling products to consumers (A)	1	Again a bit vague but A category	fits the		
	The production process	0	No understanding sho	wn		

Question	Answer		Marks				
1(b)(i)	Calculate the profit CE will make from production line B if it sorts, packages and sells 150 000 eggs in a month.						
	Rationale	Marks					
	Correct answer with or without correct working	4					
	Formulae or correct calculation of <b>two</b> from TVC or TFC or TR <b>OR</b> Correct calculation of TVC, TFC and TR	3					
	Formulae <b>and</b> correct calculation of <b>one</b> from TVC or TFC or TR <b>OR</b> Correct calculation of <b>two</b> from TVC, TFC or TR	2					
	Formulae or correct calculation of <b>one</b> from TVC or TFC or TR						
	No creditable content 0						
	NB Can award a mark for OFR where relevant						
	Profit = $(P \times Q) - ((VC \times Q) + FC))$ or TR – TC or TR – $(TVC + TFC)$						
	$\frac{150000}{6\text{per box}}$ = 25 000 boxes						
	25 000 × \$0.45 = \$11 250 (TVC)						
	<u>\$10 000</u> = \$5000 (TFC)						
	\$0.90 × 25 000 = \$22 500 (TR)						
	\$22 500 – (\$11 250 + \$5000) = \$6250						
	Correct answer is \$6250						
	NB Formulae can be implied through use of relevant figures						

### 9609/21

# Cambridge International AS/A Level – Mark Scheme PUBLISHED

Question	Answer						
1(b)(i)	Common incorrect answers						
	Answer	Mark	Rationale				
	22 500 – (11 250 + 10 000) = 1250 (OFR)	3	Correct calculation of TR and TVC but didn't divide FC/2 but under OFR rule mark for the final answer				
	Profit = TR-TC (1) = (0.90 × 150 000) - ((0.45 × 150 000) + 5000 (1)) = 62 500 (OFR)	3	Correct formula and calculation of TFC but didn't divide eggs/6 to arrive at boxes but under OFR rule mark for the final answer as this is the correct product of their calculation				
	22 500 – 16 250	3	Correct formula implied (1) Correct calculation of TR (1) and TC (1)				
	Profit = TR – TC (1) = (0.90 × 150 000) – ((0.45 × 150 000) + 10 000)) = 57 500 (OFR)	2	Correct formula but didn't divide FC/2 and didn't divide eggs/6 to arrive at boxes but under OFR rule mark for the final answer as this is the correct product of their calculation				
	28 500 – 25 300 = 3200 (OFR)	2	This is both production lines so 1 mark for correct (implied) formula and OFR for answer as this is the correct product of their calculation				
	Profit = TR – TC	1	Correct formula				
	$TR = P \times Q$	1	Correct formula for TR				
	62 500	0	No working to show how arrived at this answer				
	1250	0	No working to show how arrived at this answer				

Question		An	swer		Marks		
1(b)(ii)	Explain one problem of CE's allocation of fixed costs.						
	Level	Knowledge a	nd Application	Marks			
	2 (APP)	Explanation of a problem of a in context	allocating fixed costs for CE	2			
	1 (K)	Identification of a problem wi	th allocating fixed costs	1			
	0	No creditable content		0			
	<ul> <li>compared to \$0.15 per egg (B) – should both lines pay the same.</li> <li>Production line B has a much larger gross profit margin (50% compared for B to 32.5% for A) – paying the same fixed costs may make production line A seem unprofitable.</li> <li>Production line A would seem to have less processing (no sorting, bigger quantities) so should it need to pay the same as line B?</li> <li>We do not know how many eggs are processed by each line so it is difficult to know if the allocation is appropriate.</li> <li>We do not know how employees are paid, could be salaries, so line B has more employees so higher costs</li> </ul>						
	Identification of a problem (K) (1 mark) Explanation of a problem context (APP) (2 marks)						
	The two lines do not have the same level of output so allocation unfairMay be unfair if the two lines have different outputs but we don't know how many eggs each line produces						
		e might have higher fixed nan the other, e.g. salaries	Employees may be paid a sa and line B has more employ could have higher fixed cost	nployees so			
	One line than the	e could have less processes e other	Line A has less processing a don't have to sort into sizes that they have the same fixe as line B	so unfair			
	Not acc	curate	CE have not identified releva costs for each line, just divid fixed costs between the two	ed total			

Question	Answer						
1(c)	Analyse two ways in which CE adds value to its products.						
	Level	Knowledge and Application (4 marks)	Marks	Analysis (4 marks)	Marks		
	2b	Shows understanding of <b>two</b> ways in which CE adds value to its products in context	4	Good analysis of <b>two</b> ways in which CE adds value to its products in context	4		
	2a	Shows understanding of <b>one</b> way in which CE adds value to its products in context	3	Good analysis of <b>one</b> way in which CE adds value to its products in context	3		
	1b	Shows knowledge of <b>two</b> ways of adding value	2	Limited analysis of <b>two</b> ways in which CE adds value to its products	2		
	1a	Shows knowledge of <b>one</b> way of adding value	1	Limited analysis of one way in which CE adds value to its products	1		
	0	no cre	editable co	ontent	0		
	<ul> <li>Content</li> <li>Packaging (boxes and trays) – a cost for the firm, but has a double benefit to consumer market – protects and advertises.</li> <li>Sorting – consumers obviously see value in different sized eggs and therefore CE can probably have higher prices for large eggs and therefore gain more profit.</li> <li>Money back guarantee – little cost for the firm but builds up trust for the brand.</li> <li>Branding – food product so trust in the brand will be important.</li> <li>Convenience – availability through retailers for the consumer market – more likely to purchase than coming to the farm.</li> <li>Best before date – both in consumer and producer markets this will help to avoid wastage when purchased and again builds trust in the brand.</li> </ul>						

# Cambridge International AS/A Level – Mark Scheme PUBLISHED

Question	Answer					
1(c)	ARA					
	Example of a way (K)	Examples of application/context (APP)	Examples of possible analysis (AN + DEV)			
	Branding	CE has built a brand with a reputation for high quality eggs	customers are prepared to pay higher prices for a quality product (AN) which means that CE can charge a premium price for the eggs therefore increasing the added value resulting in higher profits (DEV)			
	Increase the price whilst keeping costs the same	The costs of production are the same for each box but CE could charge more for the larger eggs	as customers are getting more egg in the larger sizes they won't mind paying a higher price (AN). This is also a way of segmenting their market into those who will only pay a lower price compared to those who will pay a higher price therefore maximizing CE's revenue from each segment (DEV)			
	Decrease costs whilst keeping price the same	CE could use cheaper packaging for the eggs by e.g. using cheaper materials in the boxes and trays	This could damage their reputation for quality (AN) and customers may stop buying the eggs and buy those of CE's competitors instead, therefore reducing the revenue CE receives (DEV)			

Question	Answer						
1(d)	Evaluate the likely impact on the stakeholders of CE of the planned expansion.						
	Knowledge and Application (4 marks)	Marks	Analysis and Evaluation (7 marks)	Marks			
			Justified evaluation based on argument in context	7			
			Developed evaluation based on argument in context	6			
			An evaluative statement based on argument in context	5			
	Shows understanding of more than one stakeholder in context	4	Argument based on an impact of the planned expansion on <b>two</b> (or more) stakeholders of CE	4			
	Shows understanding of one stakeholder in context	3	Argument based on an impact of the planned expansion on <b>one</b> stakeholder of CE	3			
	Shows knowledge of more than one stakeholder	2	Limited analysis of an impact of expansion on <b>two</b> (or more) stakeholders	2			
	Shows knowledge of one stakeholder	1	Limited analysis of an impact of expansion on <b>one</b> stakeholder	1			
	<ul><li>more sales should outvoit of the retail market.</li><li>Employees – Expansio</li></ul>	veigh this o n is likely t ay get pro	fund the investment but the re cost. May depend on the mark o make the current employee moted to supervise the new p	tet growth s feel			

Question		Answer					
1(d)	<ul> <li>Consumers – More retail eggs may make CE's products more accessible, which is good for the customers. The extra investment may be recouped with higher prices, alternatively in the long run, economies of scale may lead to lower average costs/prices</li> <li>Local residents – more noise, pollution – might reduce house prices. More trucks picking up eggs?</li> <li>Business customers – Will the allocated fixed costs increase on Production Line A, increasing costs/prices on the eggs – alternatively there could be savings from economies of scale passed on to business customers.</li> <li>Shareholders – Might be asked to invest more to fund the expansion or the costs of the expansion could increase costs and reduce dividends.</li> <li>Competitors – CE's expansion will mean that they can supply more to the market which could reduce the demand for competitors' eggs.</li> <li>ARA</li> <li>An example of how an answer could develop and how it should be annotated.</li> </ul>						
	K     APP     AN     DEV     EVAL						
	Owner	Lian the owner	Needs a loan to finance the expansion	The new product line will require investment in more machinery and more employees. The employees will need to be trained. This might mean that Lian will need a bank loan, which will increase the costs and possibly reduce profit.	However, the profit from the new production line should outweigh the costs (EVAL) and allow greater distribution of the product thereby increasing market share and revenue (EVAL) so the owner will feel the greater impact from the expansion (EVAL)		

Question		Answer						
1(d)	ARA An example	of how an answ	ver could dev	elop and how it st	nould be annotated.			
	к	APP	AN	DEV	EVAL			
	Customer	CE have two types of customers – the industrial market and the consumer market and are to expand to retailers	Expanding to retailers will be more convenient for the customer.	Customers can get their eggs closer to home, which will cut down on travel time and cost as they no longer have to go to the farm but still can get high quality fresh eggs.	However the eggs may increase in price (EVAL) as the retailer will add a mark-up to the cost to them so customers may still travel to the farm to get the lower price (EVAL) therefore not as great an impact on the customer (EVAL)			

Question	Answ	er			Marks		
2(a)(i)	Define the term 'overdraft' (line 21).						
	Knowledge			Marks			
	A correct definition			2			
	A partial, vague or unfocused definition			1			
	No creditable content			0			
	<ul> <li>A banking facility which allows a person/business to go below zero in their account. In essence, money has been lent to the person/business. The amount borrowed is controlled by the overdraft holder – they take what they need as they need it – usually a short-term source of finance</li> <li>Award one mark for each element of a correct definition: <ul> <li>Short term source of finance</li> <li>Often high rates of interest</li> <li>Flexible (can be used when needed)</li> <li>Allows an account to go below zero</li> <li>Helps solve cash-flow problems</li> <li>Current liability</li> </ul> </li> </ul>						
	Exemplar	Mark	Rationale				
	A flexible (1) short term source of finance (1)	2	two elements				
	A business can take more money out of their bank account than they have in	2	two elements				
	it (1) to help with cash flow problems (1)						
		1	Only one element				
	(1) A person can take more money out of	1	Only one element Only one element				
	(1) A person can take more money out of their bank account than they have in it			an			

Question	Answer			Marks		
2(a)(ii)	Explain the term 'maturity in the product life cycle' (lines 10–11).					
	Award one mark for each point of explanation:					
	Rationale		Marks			
	C Example or some other way of showing good unders i.e. point to start extension strategy, sales start to de maturity stage					
	B Lack of growth, slow or no growth		1			
	A Sales at highest point/maximum sales/product life cy	/cle peak	is 1			
	has slowed or stopped. Sales may start to decline after this. The diagram below could get all 3 marks as it shows sales peaking in the maturity stage, sales growth slowing, then declining. Product life cycle					
	Answer	Mark	Rationale			
	Sales are at their highest (A) but growth starts to slowdown (B) and is followed by the decline stage (C)	3	A + B + C			
	Sales growth slows (B) and firms use extension strategies (C)	2	B + C			
	Stage of maximum sales (A) and then the product2Aenters the decline stage (C)					
	Sales are at their highest (A) but stop growing (B)	2	A + B			
	Point of peak sales (A)	1	A			

uestion		Answer								
2(b)(i)	Refer to Table 2.1 and any other relevant information. Calculate the value of $\underline{X}$ .									
		F	Rationale	Marks						
	Correct answer with c	or withou	ut correct working	2						
	Formula or correct ca	lculatior	n of current assets	1						
	No creditable content			0						
	Content									
	Working capital = CA -	- CL								
	\$18 000 = (11 000 + 20		(5000 + X)							
	Or (11 + 20) – (5 – X) =	= 8	Or $(11 + 20) - (5 - X) = 8$							
	Answer = \$8000 (accept 8)									
		cpt 0)								
	Common incorrect ans									
			Rationale							
	Common incorrect ans	wers	Rationale Correct answer even without \$							
	Common incorrect ans Answer	wers Mark								
	Common incorrect ans Answer 8000	Mark	Correct answer even without \$							
	Common incorrect ans Answer 8000 31 000	Mark	Correct answer even without \$ Correct calculation of current assets							
	Common incorrect ans Answer 8000 31 000 31 31 000 – X = 1800 =	Mark 2 1 1	Correct answer even without \$ Correct calculation of current assets Correct calculation of CA without '000' Wrong answer but correct calculation of							

Question	Answer								
2(b)(ii)	Explain two possible disadvantages to FF of decreasing working capital.								
	Level	Knowledge and Application							
	2b (APP + APP)	Explanation of two disadv	4						
	2a (APP)	Explanation of one disadv	antage in context	3					
	1b (K + K)	Identification of two disad	2						
	1a (K)	Identification of one disad	vantage	1					
	0	No creditable content		0					
	<ul> <li>has a limited shelf life</li> <li>FF's overdraft may start to increase and become a 'long-term' debt which is never paid off</li> <li>FF does not have any/many liquid assets – could get to the point where they may run out of cash and have to stop operations. For example unable to pay wages/salary – especially important because of the labour intensive nature of production</li> <li>Can be used as a measure of efficiency – shareholders may want the directors to explain why it is falling</li> <li>Decreasing the ability of FF to pay debts especially as customers are unlikely to pay for the flowers in advance and trade receivables may increase, again.</li> </ul>								
	Identification of a disadvantage	Explanation of a disadvantage	Explanation of a disadvantage in co	ntext					
	Unable to pay short term debts	If working capital falls then there may not be enough money to pay short term debt	such as suppliers of flowers which have t purchased in advanc customer paying for order	o be ce of a					
	Unable to pay employees	Employees may be paid weekly or in cash. Less working capital could mean the company cannot pay their employees	CE's employees are commission based of selling price of the flo Lower working capita mean that the compa cannot pay the commo owed to the employe	n the owers. al could any nissions					

Question			Answer			Marks	
2(c)	Analyse one advantage and one disadvantage to FF of using job production for its flower arrangements.						
	Level	Knowledge and Application (4 marks)	Marks	Analysis (4 marks)	Marks		
	2b	Shows understanding of <b>two</b> elements of job production in context	4	Good analysis of one disadvantage <b>and</b> one advantage of using job production in context	4		
	2a	Shows understanding of <b>one</b> element of job production in context	3	Good analysis of one disadvantage <b>or</b> one advantage of using job production in context	3		
	1b	Shows knowledge of <b>two</b> elements of job production	2	Limited analysis of one disadvantage <b>and</b> one advantage of using job production	2		
	1a	Shows knowledge of <b>one</b> element of job production	1	Limited analysis of one disadvantage <b>or</b> one advantage of using job production	1		
	0	No cr	0				
	<ul> <li>Content <ul> <li>Elements of job production:</li> <li>Unique</li> <li>Hand made</li> <li>Made to order/bespoke</li> <li>One at a time</li> <li>Each is finished before the next is started</li> <li>Often labour intensive</li> <li>Requires skilled labour</li> <li>Satisficing customer – Allows FF to charge higher prices and retain loyal customers</li> <li>Premium prices – FF can charge a higher price for customised flower arrangements</li> </ul> </li> </ul>						

Question	Answer						
2(c)	Must be advantage and disadvantage to FF						
	<ul> <li>Advantages <ul> <li>USP- already in a competitive market so specialist flower arrangements could give FF a USP</li> <li>Increased brand reputation- FF producing specialist flower arrangements which are ready in 24 hours which will be attractive to customers</li> </ul> </li> <li>Disadvantages <ul> <li>Lower productivity - increased costs of production/slower speed of production compared to batch production</li> <li>Labour intensive - higher labour costs</li> <li>Cost - Already got decreasing working capital, no cash and an overdraft - job production is more expensive than batch</li> <li>Difficult future recruitment - higher level of skills needed because of the specialist nature of job production</li> <li>Training - job production is highly skilled and any new employees would require specialist training, increasing costs</li> </ul> </li> <li>NB annotate advantages on the LHS and disadvantages on the RHS</li> </ul>						
	Advantage Example of an element (K)	Examples of application/context (APP) Examples of possible analysis (AN + DEV)					
	Made to customer order	Flowers are arranged according to customer internet order	Customer satisfaction (AN) if customers are satisfied with the product they will repeat order on other occasions which will increase customer loyalty, increase FF's revenue and lead to higher profit (DEV)				
	Disadvantage						
	Example of an element (K)	Examples of application/context (APP)	Examples of possible analysis (AN + DEV)				
	Expensive	Job production means that each worker does a flower arrangement each time so the process is labour intensive	leading to higher labour costs (AN). This will reduce FF's profits or could mean that they have to charge a high price and could reduce FF's competitiveness and market share (DEV)				

Question	Answer					
2(d)	Recommend non-financial motivators which FF could put in place to motivate the employees who make the low-price flower arrangements. Justify your recommendation.					
	Knowledge and Application (4 marks)	Marks	Analysis and Evaluation (7 marks)	Marks		
			Justified recommendation(s) based on argument in context	7		
			Developed recommendation(s) based on argument in context	6		
			An evaluative recommendation/ statement based on argument in context	5		
	Shows understanding of <b>two</b> non-financial motivators in context	4	Argument based on the use of <b>two</b> (or more) non- financial motivators in context	4		
	Shows understanding of <b>one</b> non-financial motivator in context	3	Argument based on the use of <b>one</b> non-financial motivator in context	3		
	Shows knowledge of <b>two</b> non-financial motivators	2	Limited analysis of the use of <b>two</b> (or more) non-financial motivators	2		
	Shows knowledge of <b>one</b> non-financial motivator	1	Limited analysis of the use of <b>one</b> non-financial motivator	2		
	<ul> <li>be successful and may by the new production p</li> <li>Induction – Not about ne be motivated by induction</li> <li>Opportunities for promo supervision opportunities</li> <li>Status – Will the worker superior to the others. production workers and</li> <li>Job re-design – the worker</li> </ul>	de-motivat process. ew workers on. tion – this es on the p rs who rem This could demotivat kers could	a lower skilled job, training is the if the skilled workers feel parts s, so the current workforce is may be a motivator is there a roduct production line have two effects – to motivate the batch production worke be involved in re-designing the tivate them and empower the	atronised unlikely to re more fee e the job rs he new		

Question	Answer						Marks
2(d)	<ul> <li>Team working – The job production process was working alone, but there may be motivation from working as a group on batch production. Link to Herzberg, Maslow etc.</li> <li>Empowerment – workers may be given some control over their working practices.</li> <li>Participation – Could workers be given some input into the decision making at the firm?</li> <li>Fringe benefits/perks – Increased holidays, perks etc. may make up for reduced commission form the lower price flowers.</li> <li>Team away days – Allows team bonding which could help improve job satisfaction</li> <li>Job enrichment/job enlargement/job rotation – Increase skills/empowerment/interest</li> </ul>						
	K	APP	AN	evelop and how it sho		/AL	
	Team away day	The low-price flower arrangements will be produce using batch production. This requires team work	So an away day could help with team bonding	This will increase loyalty to other members of the team. Employees will not want to let the team down so will work harder and less likely to take time off e.g. in sick days. Productivity will be higher and cost, therefore lower leading to higher profit.	Job rota more ef than a f away d (EVAL) becaus employ have be skills th higher f (EVAL) won't d the pro- or requi away fr job (EV	ation is ffective eam ay e the ee can etter rough training and isrupt duction ire time om the	
	ARA An example of how an answer could develop and how it should be annotated.						
	K	APP	AN	DEV		EVAL	
	Job rotation	There are 10 flower arrangements to be made so employees could rotate between each arrangement	Improving their skills		el vorker asily be nd is icular s		