

4(a)	Using the data in Table 1.2, calculate the monthly revenue from the sales of the classic pie after the price increase.			
				Mark
	Correct new sales revenue \$ sign not required	$3500 \times \$3.60 = \$12\ 600$		4
	New quantity of sales	$5000 - 30\% = 5000 - 1500 = 3500$		3
	% change in QD	$20\% \times -1.5 = (-)30\%$		2
	Percentage change in price OR PED equation	$0.60/3.00 \times 100 = (+) 20\%$ Percentage change in Quantity demanded / Percentage change in price		1
	No creditable response			0
4(b)	Evaluate the usefulness to PPP of elasticity measures when deciding on the marketing mix for the new cheese pies in export markets.			
	Level	AO1 Knowledge and understanding 2 marks	AO2 Application 2 marks	AO3 Analysis 2 marks
	3			AO4 Evaluation 6 marks
				5–6 marks Developed evaluation in context - A developed judgement/conclusion is made in the business context. - Developed evaluative comments which balance some key arguments in the business context.
	2	2 marks Developed knowledge of relevant key term(s) and/or factor(s) is used to answer the question.	2 marks Developed application of relevant point(s) to the business context.	2 marks Developed analysis that identifies connections between causes, impacts and/or consequences.
	3–4 marks Developed evaluation - A developed judgement/conclusion is made. - Developed evaluative comments which balance some key arguments.			
	1	1 mark Limited knowledge of relevant key term(s) and/or factor(s) is used to answer the question.	1 mark Limited application of relevant point(s) to the business context.	1 mark Limited analysis that identifies connections between causes, impacts and/or consequences.
	1–2 marks Limited evaluation - A judgement/conclusion is made with limited supporting comment/evidence. - An attempt is made to balance the arguments.			
	0	0 marks No creditable response.	0 marks No creditable response.	0 marks No creditable response.

4(b)	Responses may include:
	AO1 Knowledge and understanding <i>Limited knowledge [K] will be demonstrated through knowledge of the concept of elasticity of demand <u>or</u> knowledge or marketing strategy.</i> <i>Developed knowledge [K] + [K] will be demonstrated through knowledge of the concept of elasticity of demand <u>and</u> knowledge of marketing strategy.</i>
	Knowledge of elasticity of demand Understanding of different elasticity concepts: - promotional elasticity measures responsiveness of demand to changes in promotional spending - price elasticity measures responsiveness of demand to a change in price - cross price elasticity measures the responsiveness of demand to a change in price of another product - income elasticity measures the responsiveness of demand to a change in income. - Understanding of inelastic - not responsive and elastic - responsive to change in price / promotion / income.
	Knowledge of marketing strategy - Marketing strategy includes market research and marketing mix to achieve marketing objectives within a budget. - Marketing mix consists of price, place, promotion and product

4(b)	AO2 Application Do not reward APP for quoting elasticities, need to show understanding of the figures. <i>Limited application, [APP] applies knowledge to PPP once.</i> <i>Developed application, [APP] + [APP] applies knowledge to PPP twice.</i> - Estimated PED for classic pies is -1.5, which is price elastic, as confirmed by the calculation in 3a, the 20% increase in price would lead to a 30% decrease in demand. - Estimated PED for premium pies is -0.4, which is price inelastic. The 25% increase in price only led to a 10% decrease in demand - OFR for PED calculations - YED for classic pies is -1.2 (inferior good) and for premium pies $+1.5$ (normal/luxury good) - Monthly sales revenue following price increases would decrease (by \$2400) for classic pies but increase (by \$3000) for premium pies. - Market research data may suggest whether the demand for the proposed new cheese pie will be price elastic or price inelastic in other countries in the region. - As real incomes are falling in other countries in the region, cheese pies may be more successful if seen as a 'budget' product.
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4(b)	AO2 Analysis <i>Limited analysis [AN] – candidate shows one link in the chain of analysis.</i> <i>Developed analysis [L2AN] – candidate shows two or more links in the chain of analysis.</i> - Knowledge of PED is useful to PPP in making decisions about pricing. For example, elastic PED would indicate that an increase in price would decrease revenue [AN] and therefore probably decrease profit [L2AN]. - Decreasing price, such as using a launch penetration price will increase quantity of cheese pies demanded and therefore increase revenue/encourage more customers to try the new product [AN] overall leading to a successful launch and loyal customers increasing profit [L2AN]. - As real incomes are falling, launching cheese pies as a 'budget' item should lead to higher sales due to negative YED. [AN] AO3 Evaluation <i>Limited evaluation [EVAL] – limited supported judgement and/or a weak attempt at evaluative comment.</i> <i>Developed evaluation [L2EVAL] – supported judgement and/or reasonable evaluative comment.</i> <i>Developed evaluation in context [L3EVAL] – supported judgement in context and/or reasonable evaluative comment in context.</i> - In a marketing strategy, PPP will also consider other factors e.g. promotional elasticity of demand and local tastes in different countries in the region. - As this is a new pie product being launched, existing elasticity data for other products may not be as useful - To what extent may a pan global strategy be suitable in this case? - A judgement about the usefulness of elasticity to marketing mix decisions. - A judgement about the most important factors influencing marketing strategy decisions. - A judgement about the limitations of elasticity calculations. - Measurement of elasticity is difficult and likely to be inaccurate due to large range of factors that will affect outcomes, particularly competitor decisions. Other things don't remain equal in markets. - Factors that the judgement could depend on including the degree of competitive rivalry in the market - Other elements of marketing strategy are important e.g. integrated marketing mix to ensure consistency in message communicated to potential customers and therefore attract sales. Accept all valid responses.
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4(a)	Using the data in Table 1.4, calculate the four period centred moving average for Quarter 1 2025. Responses may include: 4 period moving average = 8 period moving total / 8 (1 mark if no relevant calculation) Calculation of one or two relevant 4 period totals (1) $7 + 5.5 + 4.2 + 6.4 = 23.1$ AND/OR $5.5 + 4.2 + 6.4 + 7.6 = 23.7$ Calculation of relevant 4 period totals and relevant 8 period total OR calculation of relevant 8 period total (2 marks) 8 period total = $23.1 + 23.7 = 46.8$ (2) Centred quarterly moving average = $46.8 / 8$ (3) = 5.85 or $\\$5.85m$ (4) Other common answers: $23.1 / 4 = 5.775$ OR $23.7 / 4 = 5.925$ (2) Not using the correct sales volume figures. 4 consecutive quarterly sales volumes added together and divided by 4 = 1 mark e.g. $(6 + 7 + 5.5 + 4.2) / 4 = 22.7 / 4 = 5.675$ (1)																												
4(b)	Evaluate the usefulness of time series analysis to KTJ in making business decisions. <table border="1"> <thead> <tr> <th>Level</th><th>AO1 Knowledge and understanding 2 marks</th><th>AO2 Application 2 marks</th><th>AO3 Analysis 2 marks</th><th>AO4 Evaluation 6 marks</th></tr> </thead> <tbody> <tr> <td>3</td><td></td><td></td><td></td><td> 5–6 marks Developed evaluation in context - A developed judgement/conclusion is made in the business context. - Developed evaluative comments which balance some key arguments in the business context. </td></tr> <tr> <td>2</td><td> 2 marks Developed knowledge of relevant key term(s) and/or factor(s) is used to answer the question. </td><td> 2 marks Developed application of relevant point(s) to the business context. </td><td> 2 marks Developed analysis that identifies connections between causes, impacts and/or consequences. </td><td> 3–4 marks Developed evaluation - A developed judgement/conclusion is made. - Developed evaluative comments which balance some key arguments. </td></tr> <tr> <td>1</td><td> 1 mark Limited knowledge of relevant key term(s) and/or factor(s) is used to answer the question. </td><td> 1 mark Limited application of relevant point(s) to the business context. </td><td> 1 mark Limited analysis that identifies connections between causes, impacts and/or consequences. </td><td> 1–2 marks Limited evaluation - A judgement/conclusion is made with limited supporting comment/evidence. - An attempt is made to balance the arguments. </td></tr> <tr> <td>0</td><td> 0 marks No creditable response. </td><td> 0 marks No creditable response. </td><td> 0 marks No creditable response. </td><td> 0 marks No creditable response. </td></tr> </tbody> </table>				Level	AO1 Knowledge and understanding 2 marks	AO2 Application 2 marks	AO3 Analysis 2 marks	AO4 Evaluation 6 marks	3				5–6 marks Developed evaluation in context - A developed judgement/conclusion is made in the business context. - Developed evaluative comments which balance some key arguments in the business context.	2	2 marks Developed knowledge of relevant key term(s) and/or factor(s) is used to answer the question.	2 marks Developed application of relevant point(s) to the business context.	2 marks Developed analysis that identifies connections between causes, impacts and/or consequences.	3–4 marks Developed evaluation - A developed judgement/conclusion is made. - Developed evaluative comments which balance some key arguments.	1	1 mark Limited knowledge of relevant key term(s) and/or factor(s) is used to answer the question.	1 mark Limited application of relevant point(s) to the business context.	1 mark Limited analysis that identifies connections between causes, impacts and/or consequences.	1–2 marks Limited evaluation - A judgement/conclusion is made with limited supporting comment/evidence. - An attempt is made to balance the arguments.	0	0 marks No creditable response.	0 marks No creditable response.	0 marks No creditable response.	0 marks No creditable response.
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4(b)	Responses may include: AO1 Knowledge and understanding <i>Limited knowledge [K] will be demonstrated through knowledge of TSA.</i> <i>Developed knowledge [K] + [K] will be demonstrated through knowledge of TSA and its usefulness.</i> Examiner note: Do not reward comments that TSA is time consuming or calculations are complex or that workers require training. - Sales forecasting involves making a prediction of future sales. - Time series analysis is a method of forecasting based on extrapolation from past data. (maximum of 1 mark for definition of TSA / sales forecasting) - Benefits include: - Contribution to workforce planning. - Planning purchase of resources. - Greater accuracy in cash flow forecasting. - Aids operational decisions such as need to increase capacity. - Aids decisions about pricing. - Improves forecasting accuracy - Identifies both trend and seasonal variation. - Limitations - Based on historical data - Does not account for external changes AO2 Application <i>Limited application [APP] applies knowledge to KTJ once. Developed application [APP] [APP] applies knowledge to KTJ twice.</i> Application is making use of relevant case information not just repeating it. - Q3 is peak month for sales. - Juice is not produced in the US but is imported. - Helps plan fruit imports. - The US market is very competitive. - Fluctuations in country B's exchange rate.
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4(b)	AO3 Analysis <i>Limited analysis [AN] – candidate shows one link in the chain of analysis.</i> <i>Developed analysis [L2 AN] – candidate shows two or more links in the chain of analysis.</i> - Helps ensure efficient use of labour and machinery helping to control costs of product [AN] and therefore profit. [L2 AN] - Contributes to creating cash flow forecast which will help ensure that KTJ has sufficient finance in place to deal with future needs [AN] - Identifying the trend in sales growth will help set realistic marketing objectives in the marketing plan thus ensuring that resources are not wasted [AN] AO4 Evaluation <i>Limited evaluation [EVAL] – limited supported judgement and/or a weak attempt at evaluative comment. Developed evaluation [L2 EVAL] – supported judgement and/or reasonable evaluative comment.</i> <i>Developed evaluation in context [L3 EVAL] – supported judgement in context and/or reasonable evaluative comment in context.</i> - Using 4 period moving average fits the data well as there are clear seasonal variations ensuring that the technique is more likely to give reliable results. - Unexpected changes in the external environment such as entry of a new competitor will result in the predictions being incorrect and therefore less useful in making the best decisions. - TSA relies on future events behaving as in the past so may not be reliable as markets are dynamic - May be advisable to introduce an element of probability to the forecasts – what if analysis - Usefulness depends on stability of seasonal trends over time - Forecasts may be less reliable if market conditions change unexpectedly - Most effective when combined with other forecasting methods - More suitable for short-term operational planning than for long-term strategic decisions - Practical value depends on KTJ's capacity to adjust production and procurement in response to forecasts Accept all valid responses.
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