

# **Business Studies**

Advanced GCE

Unit **F296**: Business Production

## **Mark Scheme for January 2011**

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Question Number	Expected Answer	Max Mark	Rationale
1	<p><b>Analyse one external economy of scale which Mihail's business might experience.</b></p> <p>NB MUST be EXTERNAL EOS (not INTERNAL) and MUST BE LINKED TO OTHER FIRMS – NOT SIMPLY MIHAIL EXPANDING.            External economies of scale come from being grouped near similar businesses and deriving a number of cost saving advantages/efficiencies. With Mihail's this means the economies of being within 70km of three other olive farms and their oil production. The gains are:</p> <ul style="list-style-type: none"> <li>• purchasing economies (interestingly normally viewed as an INTERNAL EOS) as they buy collectively from suppliers of olives</li> <li>• sharing of manufacturing know-how and ideas</li> <li>• sharing of (and maybe training?) labour</li> <li>• government investment in infrastructure</li> </ul> <p><b>L3</b> Candidate demonstrates analytical skills when considering the external EOS which Mihail's business might experience. <b>(5-6)</b></p> <p><b>L2</b> Candidate demonstrates knowledge and understanding of the external EOS. No context required. <b>(3-4)</b></p> <p><b>L1</b> Candidate offers only theoretical knowledge of external EOS. <b>(1-2)</b></p>	<b>[6]</b>	

Question Number	Expected Answer	Max Mark	Rationale
2	<p><b>Discuss whether value analysis might be useful for Mihail's business.</b></p> <p>Value analysis involves looking at the three facets of a product – its cost, function and aesthetics. These comprise its value and each is prioritised in different ways for different products – the aim being to improve the 'value' by either cutting cost and/or enhancing function/aesthetics.</p> <p>At Mihail's the focus is likely to be on the Premium Extra Virgin Olive Oil, although it is reasonable to write about the other products. Currently Mihail has 'an award winning product', ie an excellent quality olive oil, but it is poorly packaged in terms of bottle and label. A VA study would look at these design features and consider what the customer 'values' most – then recommend changes in terms of prioritisation of cost, aesthetics and function. There is much to discuss in terms of what people want when buying olive oil (are they impressed by fancy packaging?) and that there is a difference when selling 'premium' as opposed to 'standard'. What would be the impact on the cost of production? And would this be passed on to the customer in the form of a higher price? How price elastic is demand?</p> <p><b>L4</b> Candidate demonstrates evaluative skills when considering the usefulness of value analysis to Mihail's business. This will probably involve some prioritisation of the factors. <b>(9-13)</b></p> <p><b>L3</b> Candidate demonstrates analytical skills when considering the usefulness of value analysis to Mihail's business <b>(6-8)</b></p> <p><b>L2</b> Candidate shows knowledge and understanding of value analysis. No context required. <b>(3-5)</b></p> <p><b>L1</b> Candidate offers theoretical knowledge only <b>(1-2)</b></p>	[13]	



Question Number	Expected Answer	Max Mark	Rationale
4	<p><b>Analyse two possible disadvantages of using break-even analysis when Mihail is making output decisions.</b></p> <p>Break even is a useful tool for enabling a business to predict and produce the quantity of production which would ensure that revenue covers costs. This works on the basis of a contribution to fixed costs and can be used to calculate margin of safety and adapted to calculate an appropriate selling price, a desired level of profit and so on.</p> <p>At Mihail's the tool has some use as it enables output, price and target profit calculations, but there are a number of issues - all of which at Mihail's are open to question:</p> <ul style="list-style-type: none"> <li>• all units produced are then sold – this is not entirely true – there is left over stock</li> <li>• his selling price varies according to outlet and location – and even on a 'whim'</li> <li>• his variable costs change (bottles) and olive prices depending on various factors</li> <li>• fixed costs could vary if he adds a new machine</li> <li>• it is only reliable if the way he has apportioned costs is sound – is it? <b>A minor change to labour costs changes break even point considerably</b></li> </ul> <p>We have no information for 'standard' oil, but it is reasonable to broaden the argument to this product. All in all, break even is only as useful as the numbers put into it – and these are clearly open to question. Therefore, a good answer is that the tool is, at best, a 'guide'.</p> <p><b>L3</b> Candidate demonstrates analytical skills when considering break-even <b>(5-6)</b></p> <p><b>L2</b> Candidate shows knowledge and understanding of break-even. No context required. <b>(3-4)</b></p> <p><b>L1</b> Candidate offers only theoretical knowledge of break-even. <b>(1-2)</b></p>	<b>[6]</b>	

Question Number	Expected Answer	Max Mark	Rationale
5	<p><b>Evaluate the likely effectiveness of Mihail's method of quality control.</b></p> <p>There are clearly a number of issues with Mihail's rather haphazard method of quality control (if indeed it is one!). It is too late in the process to correct any fault which occurs early on. Olive oil production involves a number of chemical processes, any of which could 'go wrong'. How does Mihail know where the fault actually is if he only tests at the end? There are a number of associated costs here with waste/reworking. Ideally, there needs to be some form of concurrent QC. There is also too little QC. One bottle a day, given the quantity of production does not appear to be much. Should both types of oil be sampled? And oil from each of the suppliers? Also, the quality of testing is not very scientific – 'considered opinion' is very subjective indeed. There is also the fact that testing done in this way damages a finished product and presumably makes it unsellable. Testing earlier, before bottling, might get round this.</p> <p><b>L4</b> Candidate demonstrates evaluative skills when considering quality control in relation to Mihail's business <b>(9-13)</b></p> <p><b>L3</b> Candidate demonstrates analytical skills when considering quality control in relation to Mihail's business <b>(6-8)</b></p> <p><b>L2</b> Candidate shows knowledge and understanding of quality control. No context required. <b>(3-5)</b></p> <p><b>L1</b> Candidate offers only theoretical knowledge of quality control. <b>(1-2)</b></p>	[13]	

Question Number	Expected Answer	Max Mark	Rationale
6	<p><b>Considering production and other issues, should Mihail accept the German supermarket offer? Justify your view. (18)</b></p> <p>Batch production is generally appropriate when production is on a small to medium scale and there is a requirement to produce a set quantity, maybe due to factors of time of product design. It can utilise technology to an extent, some specialisation of labour and gains EOS to a degree.</p> <p>At Mihail's it is clear that batch production is the tried and tested method. It is appropriate as there are two types of oil to manufacture and four to bottle. It makes sense to bottle them in large batches (multiples of 48?) and then clean and re-adjust the equipment for the next oil.</p> <p>If the German supermarket order is taken then it has massive implications for Mihail's, not the least of which is investment in a flow production line. The bottling of olive oil and the relatively simple production process lends itself to flow production, although the workforce would have to be retrained and got 'on-side'. The capital cost is potentially huge and it may affect quality (very important) and variety. Even specialising in Premium might pay off. Indeed it might pay to not actually produce at all, simply to bottle. The technological, purchasing and other economies of scale gains are potentially vast.</p> <p><b>Nb An answer which <u>only</u> includes or DOES NOT include production issues should only be awarded the lowest mark in the appropriate level.</b></p> <p><b>L4</b> Candidate demonstrates evaluative skills when considering whether Mihail should accept the German supermarket offer. <b>(13-18)</b></p> <p><b>L3</b> Candidate demonstrates analytical skills when considering whether Mihail should accept the German supermarket offer. <b>(7-12)</b></p> <p><b>L2</b> Candidate shows knowledge and understanding of production and other issues. No context required. <b>(3-6)</b></p> <p><b>L1</b> Candidate offers theoretical knowledge only of production. <b>(1-2)</b></p>		<p><b>A one sided argument <u>cannot</u> achieve a Level 4 mark.</b></p>

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