

# **Business Studies**

Advanced GCE F296

Business Production

## **Mark Scheme for June 2010**

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Question Number	Expected Answer	Max Mark	Rationale
1	<p><b>Refer to Fig 2.</b> <i>One mark for each correct answer</i></p> <p>(i) <b>What is the re-order quantity on Sunday morning?</b> 450 units (1)</p> <p>(ii) <b>Which day had most unsold stock at the end of the day?</b> Monday (1)</p> <p>(iii) <b>Which day had the lowest salad sales?</b> Thursday (1)</p> <p>(iv) <b>On how many days was some of the buffer stock was used?</b> 3 (1)</p>	[4]	

Question Number	Expected Answer	Max Mark	Rationale
2	<p><b>Evaluate likely factors which will determine the Edelweiss Mountain Restaurant's (EMR) stock levels of food and drink.</b></p> <p><b>MAY INCLUDE MORE THAN SALAD, EG NON-PERISHABLES</b></p> <p>Stock levels would be affected by many factors; one of the principal ones being EMR's suppliers. It might be difficult for suppliers to get hold of large quantities of (particularly) salad quickly. This is because salad will not be grown locally in winter and a relatively remote mountain base station is difficult to get supplies to. Thus, there will almost certainly be natural shortages unless planned for well in advance. However, EMR is likely to plan ahead in terms of ensuring supply, but seems to have problems predicting demand. There must be many factors affecting demand and, from the stock control chart, it is clear that it fluctuates wildly and thus has the biggest effect on stock levels on any given day. Demand, in turn, is affected by factors such as advertising, trends (salad and pasta is currently in vogue), weather etc. It is obvious that demand for food and drink is a 'derived demand' situation and is dependent, largely, on skiing demand.</p> <p>There are additional supply/logistical difficulties, such as access to the mountain (ski lift technological problems/road impassability). Lead time will be important, but different for different items – as will perishability. One of the biggest factors facing EMR is its storage capacity and the huge cost of refrigerating so much food. While it is no bigger than a 'normal' restaurant, the demand (at peak times) is colossal and this means that storage and storage systems need to be capacious and slick.</p> <p><b>Level 4</b> Candidate demonstrates evaluative skills when considering the factors. Complex ideas have been expressed clearly and fluently using a style of writing appropriate to the complex subject matter. (13-9)</p>	<b>[13]</b>	

Question Number	Expected Answer	Max Mark	Rationale
2 continued	<p><b>Level 3</b> Candidate demonstrates analytical skills when considering the factors. Relatively straight forward ideas have been expressed with some clarity and fluency. Arguments are generally relevant, though may stray from the point of the question. (8-6)</p> <p><b>Level 2</b> Candidate is able to apply relevant suggestions to knowledge of factors. Some simple ideas have been expressed in an appropriate context. (5-3)</p> <p><b>Level 1</b> Candidate offers relevant theoretical knowledge only. Some simple ideas have been expressed. (2-1)</p>		

Question Number	Expected Answer	Max Mark	Rationale
3	<p><b>Analyse possible benefits to EMR of using Gantt charts to plan its production schedules.</b></p> <p>Gantt charts are essentially a tool that enable an organisation to schedule and sequence a series of related/unrelated activities. EMR can, therefore, use Gantt charts to organise their workforce. In the restaurant, this means ensuring that the salad bar is ready on time, but that the labour needed is not being used elsewhere. EMR will, therefore, not have a situation where the same staff are needed in two places at once and that, in the limited time available before customers arrive, everything is prepared with time to spare – by the desired time of 9:45. Gantt charts thus have the advantage of:</p> <ul style="list-style-type: none"> <li>• enabling scheduling/sequencing</li> <li>• being an effective visual aid</li> <li>• enabling better utilisation of resources</li> <li>• ease of understanding/more obvious than, say, CPA</li> <li>• allowing identification of logistical problems</li> </ul> <p><b>Level 3</b> Candidate demonstrate analytical skills when considering benefits (6-5)</p> <p><b>Level 2</b> Candidate is able to apply relevant suggestions to knowledge of benefits (4-3)</p> <p><b>Level 1</b> Candidate offers relevant theoretical knowledge only (2-1)</p>	<b>[13]</b>	

Question Number	Expected Answer	Max Mark	Rationale
4	<p><b>EMR has calculated that it operated at an <u>average</u> of 70% capacity throughout the 2009/10 ski season. Discuss the advantages and disadvantages to EMR of this level of capacity utilisation.</b></p> <p>Key to this question is the fact that they are not at 100% and that is no bad thing. By not operating at the limit of capacity, firms are not over-stretched. EMR's 70% means that they are achieving a relatively high usage of their equipment and staff and this does not seem to be a problem. Indeed, by the very nature of a mountain restaurant, demand would be seasonal and a CU of 100% would be impossible and undesirable. However, it would be instructive to look at the CU on a weekly basis as it seems that busy times, eg February half term, would see resources stretched to the limit (70% must be the product of some very low CU and some nearing 100% at its peak) and the difficulties in terms of staffing, maintenance, supply and other logistical issues that this would create. Spare capacity is important so that extra (unpredicted) demand can be satisfied and there can be a degree of flexibility with the resources, eg staffing can rotated and trained, supplies can be replenished, maintenance completed etc. However, it all depends on the pattern of trading and, given the nature of the demand for skiing in terms of times of the day and weeks of the year, there is little chance that it is even and consistent. Much, therefore, depends on how well EMR has planned ahead and is aware of the patterns – one would expect the management to know what they are doing! Idle resources, a lack of economies of scale (eg using industrial size catering equipment like a pizza oven to cook one pizza is not a good use of resources) all impact on costs and profit.</p> <p><b>Level 4</b> Candidate demonstrates evaluative skills when considering the implications. Complex ideas have been expressed clearly and fluently using a style of writing appropriate to the complex subject matter (13-9)</p>		

Question Number	Expected Answer	Max Mark	Rationale
4 continued	<p><b>Level 3</b> Candidate demonstrate analytical skills when considering the implications. Relatively straight forward ideas have been expressed with some clarity and fluency. Arguments are generally relevant, though may stray from the point of the question. (8-6)</p> <p><b>Level 2</b> Candidate is able to apply relevant suggestions to knowledge of implications. Some simple ideas have been expressed in an appropriate context. (5-3)</p> <p><b>Level 1</b> Candidate offers relevant theoretical knowledge only. Some simple ideas have been expressed. (2-1)</p>	<b>[13]</b>	

Question Number	Expected Answer	Max Mark	Rationale
5	<p>Analyse <u>two</u> internal economies of scale which EMR might gain as a result of expanding its scale of operations.</p> <ul style="list-style-type: none"> <li>• Purchasing</li> <li>• Technological</li> <li>• Managerial</li> <li>• Marketing</li> <li>• Financial</li> <li>• Risk Bearing</li> </ul> <p>EMR stands to gain from a number of economies of scale. <b>Purchasing</b> economies - they can order, for example, salad in larger bulk and secure a discount. This is now feasible if its planned expansion occurs and output is somewhere near doubled - suppliers are bound to look favourably on bigger orders that in turn enable them to achieve various EOS. <b>Technological</b> economies could occur with the sharing of equipment – from tracked vehicles to supply them to a joint website. <b>Managerial</b> economies might arise from having, say, a human resources director to cover both – something EMR might not have otherwise had. Ditto, Marketing managers, accounts and so on. <b>Marketing</b> economies could occur with a joint website and other joint marketing initiatives that ensure the customers view both restaurants ‘together’ and it is feasible that <b>Financial</b> economies could occur in terms of seeking finance as a bigger organisation.</p> <p><b>Level 3</b> Candidate demonstrate analytical skills when considering economies of scale (6-5)</p> <p><b>Level 2</b> Candidate is able to apply relevant suggestions to knowledge of economies of scale (4-3)</p> <p><b>Level 1</b> Candidate offers relevant theoretical knowledge only (2-1)</p>	<b>[6]</b>	

Question Number	Expected Answer	Max Mark	Rationale
6*	<p><b>Considering production, and other issues, should EMR invest in the second restaurant? Justify your view.</b></p> <p><b>LINK TO MKTG/HR/FIN BUT NOT A HOLISTIC QUESTION</b></p> <p>Supply is an issue. As with the EMR, supply might well be difficult. If enough quantities of food and drink cannot be transported to altitude then the operation is a 'non-starter' as the service will depend on daily deliveries. This will need a lift system or road. In a sense, this is more important than any other issue, short of the feasibility of the initial construction, as it is essential and not simply a one-off cost or logistical issue - any technical lift failure or heavy snowfall will grind the entire operation to a halt, although non-perishable buffer stock may be kept.</p> <p>Demand is also a big issue. Will the new mountain area be in demand and is it big enough to warrant being catered for? What is the break even point? What is the nature of demand? There are some issues here that will mean demand may exist, but that it is different in some way – maybe the slopes are easier for skiing and attract a higher proportion of children/families – therefore different food and drink needs to be considered. Also, will it cannibalise the sales of the original mountain restaurant – or maybe this is a good thing to relieve some of the peak time pressure.</p> <p>There are many environmental/locational factors to consider. Topography, access, waste disposal, visual impact and so on. Presumably there are strict controls on development at this altitude and, whilst EMR may have permission from the Kreiss, we don't know exactly for what.</p> <p>There will also be some thought given to operations management and scheduling, production of food, storage and so on. Can systems be replicated in the new venture? Should they be? Can technology be deployed in the same way? One would assume that 'a mountain restaurant is a mountain restaurant' and that much can be replicated – but not if the scale and layout is wildly different.</p> <p>Consideration must also be given to human resources in terms of recruitment, training, use of existing staff, payment, hours etc.</p>		

Question Number	Expected Answer	Max Mark	Rationale
6* continued	<p>Clearly the problem has many production related issues, but there is much more to discuss than this – and this can go beyond simply the four functional areas. Presumably much depends on business objectives and to what EMR takes a long term view.</p> <p><b>NB An answer which only includes, or does not include production issues, shall only be awarded the lowest mark in the appropriate level</b></p> <p><b>Level 4</b> Candidate demonstrates evaluative skills when considering the decision and its implications. Prioritisation of factors is important. Complex ideas have been expressed clearly and fluently using a style of writing appropriate to the complex subject matter. Sentences and paragraphs, consistently relevant, have been well structured, using appropriate technical terminology. There may be few, if any, errors of spelling, punctuation and grammar. (18-13)</p> <p><b>Level 3</b> Candidate demonstrate analytical skills when considering the decision and its implications. Relatively straight forward ideas have been expressed with some clarity and fluency. Arguments are generally relevant, though may stray from the point of the question. There will be some errors of spelling, punctuation and grammar, but these are unlikely to be intrusive or obscure meaning. (12-7)</p> <p><b>Level 2</b> Candidate is able to apply relevant suggestions to knowledge of implications. Some simple ideas have been expressed in an appropriate context. There are likely to be some errors of spelling, punctuation and grammar of which some may be noticeable and intrusive. (6-3)</p>		

Question Number	Expected Answer	Max Mark	Rationale
6* continued	<b>Level 1</b> Candidate offers relevant theoretical knowledge only. Some simple ideas have been expressed. There will be some errors of spelling, punctuation and grammar which will be noticeable and intrusive. Writing may also lack legibility. (2-1)	<b>[18]</b>	

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