

**GCE**

**Business Studies**

Unit **F296**: Business Production

Advanced GCE

**Mark Scheme for June 2016**

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This mark scheme is published as an aid to teachers and students, to indicate the requirements of the examination. It shows the basis on which marks were awarded by examiners. It does not indicate the details of the discussions which took place at an examiners' meeting before marking commenced.

All examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes should be read in conjunction with the published question papers and the report on the examination.

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## 1. Annotations

Abbreviations, annotations and conventions that are used in this Mark Scheme vary from paper to paper. The following annotations are available for this paper.

Annotation	Meaning
✓	Correct
✗	Incorrect
?	Not sure what the candidate is trying to say or it does not make sense. It can also be used with a level descriptor when considering BOD
BOD	Benefit of doubt given
L1, L2, L3, L4	Levels of response awarded at this point
OFR	Own figure rule
TV	Too vague
NAQ	Not answered the question
NUT	Not used the context (generic)
REP	Repetition. The candidate has merely restated what has already been said and so no further credit given.
SEEN	The page has been seen. This can be used on pages where no other annotation is appropriate and <b>MUST</b> be placed on each blank page

## 2. Subject-specific Marking Instructions

Highlighting is also available to highlight any particular points on the script.

Please ensure that, wherever possible, annotations are placed in the margins and not over the candidate's answer. This makes it very difficult to read when the paper is printed out in black & white.

**[Only the following questions should be annotated with ticks to show where marks have been awarded in the body of the text: Question\_\_\_\_\_ ]**

**IT IS VITAL THAT YOU SHOW AS MUCH ANNOTATION ON EACH PAGE AS POSSIBLE. IN PARTICULAR, WHERE LEVELS ARE REACHED.**

**EVERY PAGE, INCLUDING BLANK PAGES (use the SEEN annotation), MUST HAVE SOME ANNOTATION**

Question		Answer	Marks	Guidance	
				Content	Levels of response
1		<p>Economies of scale NOT achieved:</p> <p>Purchasing – DWCL order in regular small quantities, hence likely higher unit costs for raw materials (accept bulk buying)</p> <p>Marketing – might achieve some, but reasonable to argue that it WOULD if operated on a larger scale and sold more units</p> <p>Managerial – text specifically refers to lack of specialist managers that would enable EOS</p> <p>Risk-bearing – only produce plates, no spreading of risk through diversification/product range</p> <p>Financial – they are relatively small and unlikely to attract favourable loan terms</p> <p>Technical – very little utilisation of technology to judge. Could make an argument for this, but unlikely</p>	6	<p>The question is intended to draw out an understanding of why economies of scale are NOT being achieved.</p> <p>To achieve level 3 the answer must be contextual, ie CLEARLY relate to the NON-achievement of EOS at DWCL. Good understanding of EOS without the application scores level 2.</p> <p>Two EOSs must be analysed to reach top of level 3.</p> <p>Comments that will help the examiner to interpret the mark scheme/LoR.</p> <p>2 issues analysed = 6 marks            1 issue analysed = 5 marks            2 issues understood = 4 marks            1 issue understood = 3 marks            2 issues stated = 2 marks            1 issue stated = 1 mark</p> <p><b>Do not accept external EOS</b></p>	<p><b>Level 3: 6-5 marks</b>            Candidate demonstrates analytical skills when giving economies of scale.</p> <p><b>Level 2: 4-3 marks</b>            Candidate demonstrates understanding of economies of scale. No context required.</p> <p><b>Level 1: 2-1 marks</b>            Candidate demonstrates only theoretical knowledge of economies of scale.</p> <p><b>Default marks</b></p> <p>L3 – 6            L2 – 4            L1 – 2</p>

Question		Answer	Marks	Guidance	
				Content	Levels of response
2		<p>The main issues to focus on are:</p> <p>DWCL does not sell all of the tableware that it produces. This fundamentally makes BE difficult to use as the assumption is that everything produced IS sold.</p> <p>DWCL has ‘a rather ‘random’ pricing strategy’. BE assumes all goods produced are sold at the same price (hence the straight line graph). This is not the case.</p> <p>VC line would not be straight given the different clay/glaze prices that DWCL buys at.</p> <p>FC line would ‘step’ at various production intervals as staff need overtime/pay rise or more equipment is leased/bought as output rises.</p> <p>Given that DWCL doesn’t really have a clue about costs, it follows that BE would be wholly unreliable.</p> <p>On the plus side, BE can be indicative of desired output level, can give a genuine margin of safety and can be used for rudimentary profit calculations. In the context of DCWL, it is unbelievably ‘amateurish’ in its approach when faced with the American and Russian big opportunities.</p> <p>DWCL does produce one sort of product, which lends itself to BE analysis,</p>	13	<p>The focus must be on break-even and its RELIABILITY – NOT HOW IT IS USED. There are clearly a whole list of problems – with using BE in any firm – in this one, given DWCL’s haphazard nature it could be argued that it is of no practical use at all. The context is VITAL, relating all arguments to VCs, prices, FCs etc. The best answers will pick up on the wealth of evidence and formulate a coherent argument. Most will tend to the negative (fine).</p> <p>Only one piece of evidence of a particular skill is necessary to score the top mark in any level. The mark at the bottom of the level should only be used for a BOD answer.</p>	<p><b>Level 4: 13-9 marks</b> Candidate demonstrates evaluative skills when considering break-even as a decision making tool at DWCL.</p> <p><b>Level 3: 8-6 marks</b> Candidate demonstrates analytical skills when considering break-even as a decision making tool at DWCL.</p> <p><b>Level 2: 5-3 marks</b> Candidate demonstrates understanding of break-even as a decision making tool at tool. No context required.</p> <p><b>Level 1: 2-1 marks</b> Candidate demonstrates only theoretical knowledge of break-even.</p> <p><b><u>Default marks</u></b></p> <p>L4 – 11 L3 – 7 L2 – 4 L1 – 2</p>

Question		Answer	Marks	Guidance	
				Content	Levels of response
3		<p>Advantages of work study include:</p> <p>Can be motivating for employees if they work hard and feel their work is measured and 'valued'.</p> <p>Can yield highly useful data that Wendy can use to evaluate efficiency at DWCL – in terms of movement, logistics, orders, production systems and techniques etc.</p> <p>Depends entirely on exactly how and where it is done.</p>	6	<p><b>One advantage ONLY.</b></p> <p>The emphasis is on why WS is good, not bad.</p> <p>Can be implied knowledge of WS</p> <p>To access level 3 it is essential that the answer is clearly related to this particular case, eg it is chaotic and desperately needs some form of measurement and subsequent action to improve efficiency.</p> <p>It is likely that one advantage will run into another, for example the huge potential gains for LRG can run into gains for the employees in terms of motivation, pay, working conditions etc. There is a lot here to analyse.</p> <p>Disadvantages can only be awarded level 1.</p>	<p><b>Level 3: 6-5 marks</b> Candidate demonstrates analytical skills when considering advantage to LRG of work study at DWCL.</p> <p><b>Level 2: 4-3 marks</b> Candidate demonstrates understanding of advantage of work study. No context required.</p> <p><b>Level 1: 2-1 marks</b> Candidate demonstrates only theoretical knowledge of work study.</p> <p><b><u>Default marks</u></b></p> <p>L3 – 6 L2 – 4 L1 – 2</p>

Question		Answer	Marks	Guidance	
				Content	Levels of response
4		<p>Lean production is a Japanese approach to management that focuses on cutting out waste, whilst ensuring quality. This approach can be applied to all aspects of a business – from design, through production to distribution.</p> <p>Lean production aims to cut costs by making the business more efficient and responsive to market needs.</p> <p>This approach sets out to cut out all activities that do not add value to the production process, such as holding of stock, repairing faulty product and unnecessary movement of people and product around the plant.</p> <p>It includes:</p> <p>Just in time production (JIT)</p> <p>Cell production</p> <p>Kaizen (Continuous improvement)</p> <p>Quality Circles</p> <p>Total Quality Management (TQM) and zero defect production</p> <p>Time based management</p> <p>All of the above are applicable to the DWCL case – LRG could deploy one, some or all measures.</p>	13	<p>A DISCUSSION of one or more lean production techniques and WHY it would be of benefit in THIS case.</p> <p>In DWCL's case, there is clearly a case for any of these:</p> <p>JIT – already orders in small quantities, but no evidence of how customers are dealt with. Lots of waste, so going for zero stock (ie JIT) seems a viable plan.</p> <p>Cell production – no clarity on what method used currently but says 'Systems more appropriate to very small scale production', ie job? batch? why not cell?</p> <p>Kaizen – clear need for change in philosophy if there is chaos and so much waste.</p> <p>QC – feasible to get all workers at all levels involved in QCs to motivate, improve quality etc.</p> <p>TQM – 'root and branch' approach to quality perfectly feasible at DWCL.</p> <p>All points have clear benefits and costs (financial, morale and otherwise) given the difficulties at DWCL.</p>	<p><b>Level 4: 13-9 marks</b> Candidate demonstrates evaluative skills when considering lean production techniques at DWCL.</p> <p><b>Level 3: 8-6 marks</b> Candidate demonstrates analytical skills when considering lean production techniques at DWCL.</p> <p><b>Level 2: 5-3 marks</b> Candidate demonstrates understanding of how to implement lean production techniques. No context required.</p> <p><b>Level 1: 2-1 marks</b> Candidate demonstrates only theoretical knowledge of lean production.</p> <p><b><u>Default marks</u></b></p> <p>L4 – 11 L3 – 7 L2 – 4 L1 – 2</p>

Question			Answer	Marks	Guidance	
					Content	Levels of response
					<p>Level 3 involves analysis of the lean production solutions, but level 4 needs evaluation of to what extent lean production would work and which take priority.</p> <p>No marks awarded for job, batch, flow answers. MUST clearly be from the lean 'list'.</p> <p>Only one piece of evidence of a particular skill is necessary to score the top mark in any level. The mark at the bottom of the level should only be used for a BOD answer.</p>	
5		<p>Direct costs of production are(<math>\pounds 9.50 \times 900 = \pounds 8,550</math>) +  <math>\pounds 7,950 = \pounds 16,500</math></p> <p>Contribution = revenue per unit-direct cost  Offer price of <math>\pounds 19 \times 900 = \pounds 17,100</math> (1)  Direct costs = <math>\pounds 16,500</math> (1)  Total Contribution = <math>\pounds 17,100 - \pounds 16,500 = \pounds 600</math> (1)  Contribution per unit = <math>\pounds 600/900 = 67\text{p}</math> (1)</p> <p>ALTERNATIVE APPROACHES POSSIBLE  Eg calculation of costs per set only <math>\pounds 18.33</math> (2)</p> <p>Rev – DC = <math>\pounds 19 - \pounds 9.50 = \pounds 9.50</math> (1)</p>	4	<p>4 marks for 67p (accept 66.67p)</p> <p>3 marks for <math>\pounds 600</math></p>		



Question		Answer	Marks	Guidance	
				Content	Levels of response
*6		<p>The issues clearly fall into the four main categories:</p> <p><b>Financial</b> The offer – numerical approach – A contribution of 67p per set (£600 total) is tiny. But, it is still a positive figure, so long as the new kiln does not need to be purchased (£25,000). If it suddenly did, then this does become only viable as a long term expansion argument. So – ‘why not?’ There is also the consideration of not getting the usual £28 per set – lost revenue, potential marketing issue to other customers etc. From a purely financial point of view – this can be looked at as short term (£600) gain v long term risk with potential massive gain. Also, it is worth considering the £2m lost investment form LRG who, presumably, would not be in the picture any more. It is reasonable to argue you could do both LRG and the Russian offer somehow. Sources of finance is a big issue, as is cash flow. DWCL is not very profitable (yet sales are strong).</p> <p><b>Production</b> Huge impact in terms of how DWCL will have to change its use of technology, production methods, layout, relocation, stock control, quality control etc. The question is to do with scale of production – so massive EOS potentially – but WHAT scale? How reliable is the Russian in terms of securing future orders? And how many?</p> <p><b>Human Resources</b> Implications of retraining, relocation, recruitment (even redundancy). DWCL seems to have been stuck in its ways. Maybe the staff will react badly to change, maybe they will</p>	18	<p>Essential – can the Russian be relied on for future orders? There is a huge element of risk here and a sensible answer would be ‘do the order, if possible, and then wait!’</p> <p>EVALUATION marks (level 4) is awarded to candidates who compare and contrast these issues, demonstrating prioritisation – which issues really are critical? Which are not? How do they fit with the firms objectives (which it does not appear to have)?</p> <p>An answer which only includes <b>or</b> does not include production should only be awarded the lowest mark in the appropriate level.</p> <p>A one-sided argument cannot achieve a L4 mark.</p> <p>Poor QWC cannot prevent a candidate from accessing any level, but within any individual level</p>	<p><b>Level 4: 18-13 marks</b> Candidate demonstrates evaluative skills when considering the expansion.</p> <p>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.</p> <p><b>Level 3: 12-7 marks</b> Candidate demonstrates analytical skills when considering the expansion.</p> <p>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.</p> <p><b>Level 2: 6-3 marks</b> Candidate demonstrates understanding of the issues</p>

Question			Answer	Marks	Guidance	
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			<p>welcome a change to the chaos. Clear issue of managing change and morale.</p> <p>Marketing There will be an implication in terms of what DWCL can now produce for other customers. A new kiln/glazes might mean better quality and a change to pricing, new markets etc.</p>		<p>QWC can affect, by up to 2 marks, the final mark given.</p>	<p>involved in the expansion. No context required.</p> <p>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.</p> <p><b>Level 1: 2-1 marks</b> Candidate offers relevant knowledge only.</p> <p>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.</p> <p><b><u>Default marks</u></b></p> <p>L4 – 16 L3 – 10 L2 – 5 L1 – 2</p>

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