

# Examiners' Report Summer 2010

**Principal Learning** 

Manufacturing and Product Design MP301 Manufacturing Business Principles



Edexcel is one of the leading examining and awarding bodies in the UK and throughout the world. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers.

Through a network of UK and overseas offices, Edexcel's centres receive the support they need to help them deliver their education and training programmes to learners.

For further information, please call our Diploma Line on 0844 576 0028, or visit our website at <a href="https://www.edexcel.com">www.edexcel.com</a>.

If you have any subject specific questions about the content of this Mark Scheme that require the help of a subject specialist, you may find our Ask The Expert email service helpful.

Ask The Expert can be accessed online at the following link:

http://www.edexcel.com/Aboutus/contact-us/

Summer 2010

Publications Code DP024413

All the material in this publication is copyright

© Edexcel Ltd 2010

# Contents

1.	Level 3 Unit 1 Report	1
2.	Statistics	Х

## PRINCIPAL EXAMINER'S REPORT - LEVEL 3 UNIT 1

#### General comments

This paper provided a range of responses varying from generic descriptions of principles to comprehensive explanations of specific concepts and techniques. For example, lower ability candidates often gave brief descriptions of general principles such as roles/responsibilities, environmental issues, management duties and financial concepts; however, the specific requirements of the question were often missed. More able candidates were able to produce responses that were detailed, often with a range of factors being brought into their discussions or explanations. For the most able candidates these responses were specific to the question being asked. However even the more able candidates were unable to perform at this level across the whole paper and consequently achieve a high mark.

It is evident that some candidates either misread or misunderstood the questions being asked and need to develop appropriate exam techniques to help them identify the key responses required for each type of question.

The vast majority of the candidates attempted a wide range of questions across the paper. However, there was insufficient focus on the requirements of the more challenging questions with many candidates making a single statement of fact and discussing this rather than using a range of facts/reasons/justifications to demonstrate understanding. It was evident that many of the questions, particularly when considering environmental issues, generated responses that would be considered general knowledge and consequently achieved few marks.

A significant number of candidates left questions unanswered. Candidates should be encouraged to at least attempt every question as a few marks can often be achieved this way.

#### Question 1

This question required candidates to focus on key business functions. Most candidates provided responses although many appeared to be guesses and bore no resemblance to functions listed in the specification. In some cases only logistics was listed rather than logistics and distribution. As in previous papers, for the second business function, some candidates confused Sales and Marketing with Research/Design and Development.

## Question 2

This question required candidates to focus on a micro-enterprise. Most candidates answered some part of this correctly with many being able to state the usual number of employees.

#### Question 3

This question required candidates to focus on:

- a) a key business function and a key support function
- b) the impact of introducing a new product on a large scale manufacturer

Part a) most candidates were able to state a key business function although the understanding of key support functions was generally missing.

Part b) proved to be challenging, many candidates were able to state the implications of new machinery, retraining and some discussed QA/QC issues however the potential implication of a new production facility/line with premises issues and

1

associated logistics issues were not sufficiently explored by the majority of candidates.

#### Question 4

This question required candidates to compare separate sales and marketing roles with a combined role.

Although most candidates were able to give a response to this answer few were able to discuss the key features of each role and the differing markets that large and small scale manufacturers serve. Most responses focussed on the cost saving for the organisation by combining the role.

#### Question 5

This question required candidates to focus on entrepreneurship. The responses to this question, whilst comprehensive, mostly considered profits and the generation of new ideas. Some candidates did consider the development of iconic products and/or new technology with responses that discussed risk and sustainability for a manufacturing enterprise.

#### Question 6

This question required candidates to consider the effects on changing interest rates. Those candidates that understood the question, for the most, part, earned full marks. However many candidates confused interest rates with exchange rates.

#### Question 7

This question required candidates to consider why government might subsidise a car manufacturer. This question brought responses based around unemployment with few candidates considering the supply chain, maintaining competitiveness with foreign manufacturers also receiving government grants, future skills requirements, psychological effects etc.

#### **Question 8**

This question required candidates to focus how a manufacturing enterprise can improve its environmental credibility. A question that all candidates coped well with. Most candidates were able to give at least two reasons with explanation with more able candidates providing three correct responses.

#### **Question 9**

This question required candidates to focus on why a manufacturing enterprise would build a new production facility in an area of high unemployment. Although most candidates provided comprehensive responses few managed to go beyond explaining the need for employment and the ease of recruitment for the manufacturer. Only a few candidates managed to highlight more complex reasons such as the benefits to the environment due to reduced commuting or opportunities for expansion, access to grants etc.

#### Question 10

This question required candidates to focus on the need for a strategic plan. Few candidates demonstrated an understanding of the need or nature of a strategic plan. Those that were able to give substantial responses did consider finance, forecasts and issues such as staff training and R & D.

#### Question 11

This question required candidates to focus on why marketing can be considered a financial investment. All candidates were able to achieve marks with a range of responses. Generally candidates were able to state two reasons but struggled to find a third with significant repetition of answers.

#### **Question 12**

This question required candidates to consider variable costs and how indirect costs can be considered fixed costs.

Part a) Many candidates gave a good response being able to associate changes in sale/production to changing labour/material costs

Part b) Candidates struggled to make the association between indirect costs and fixed costs most were able to access some marks with weak explanations supported by examples of appropriate fixed costs.

#### Question 13

This question required candidates to discuss different lean manufacturing techniques. Response to this question varied. Many were generic with insufficient focus on the techniques, however more able candidates were able to produce definitions of techniques such as JIT, Kanban, Kaizan etc.

#### Question 14

This question required candidates to explain what is meant by cost benefit analysis. Many candidates did not answer this question and those that did gave brief responses.

#### **Ouestion 15**

This question required learners to complete a profit and loss account from given data and suggest how this is used to improve profitability.

Part a) was attempted by most candidates with the data being correctly entered in the table for the most part; however, the figures used were incorrectly determined in many cases with less able candidates not being able to determine the correct answer.

Part b) was not answered by most candidates with only one candidate being able to answer correctly.

#### Question 16

This question required candidates to determine the best product to be developed using the ROI and payback methods.

For Part a) many candidates could not complete this calculation correctly with only the more able candidates knowing the correct formula. Guesswork was frequently used to determine the preferred product.

Part b) was attempted poorly by most candidates, although those working at a higher level were able to perform the calculations correctly and determine the preferred product without resorting to guesswork.

Part c) was only correctly answered by candidates who had used the appropriate techniques in part a) and b). Nevertheless many candidates were able to demonstrate some understanding and achieve 1 mark.

The vast majority of the candidates attempted a wide range of questions across the paper. However, there was insufficient focus on the requirements of the more challenging questions with many candidates making a single statement of fact and discussing this rather than using a range of facts/reasons/justifications to demonstrate understanding. It was evident that many of the questions, particularly when considering environmental issues, generated responses that would be considered general knowledge and consequently achieved few marks.

A significant number of candidates left questions unanswered. Candidates should be encouraged to at least attempt every question as a few marks can often be achieved this way.

# 2. STATISTICS

# 2.1. Level 3 Unit 1 Manufacturing Business Principles

Grade	Max. Mark	Α*	Α	В	С	D	Ε	U
Raw boundary mark	90	78	69	60	51	42	33	0
Points score	14	12	10	8	6	4	2	0

# **Notes**

Maximum Mark (raw): the mark corresponding to the sum total of the marks shown on the Mark Scheme or Marking Grids.

Raw boundary mark: the minimum mark required by a learner to qualify for a given grade.

Further copies of this publication are available from Edexcel Publications, Adamsway, Mansfield, Notts, NG18 4FN

Telephone 01623 467467 Fax 01623 450481

Email <u>publications@linneydirect.com</u>
Order Code DP024413 Summer 2010

For more information on Edexcel qualifications, please visit <a href="www.edexcel.com/quals">www.edexcel.com/quals</a>

Edexcel Limited. Registered in England and Wales no.4496750 Registered Office: One90 High Holborn, London, WC1V 7BH