

Examiners' Report

January 2010

Principal Learning

Manufacturing and Product Design MP301 Manufacturing Business Principles

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Manufacturing and Product Design Level 3 Unit 1

Manufacturing Business Principles

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 learners often gave brief descriptions of general principles such as recycling, management duties and financial concepts; however, the specific requirements of the question were often missed. More able learners 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 learners these responses were specific to the question being asked.

It is evident that some learners 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.

Question 1

This question required learners to focus on key business functions. Most learners answered this correctly although, for the first key business function, some confusion exists between logistics and production. Similarly, for the second business function, some learners confused Sales/Marketing with Research/Design and Development.

Question 2

This question required learners to focus on micro, medium and large business enterprises.

Most learners answered some part of this correctly although the wide range of numbers being quoted suggests a vague concept of the boundaries between micro/medium and medium/large.

Question 3

This question required learners to focus on:

- a) the responsibilities of a logistics manager
- b) the advantages/disadvantages of a production manager being responsible for two departments

Part a) elicited many vague responses, with many learners able to identify elements of what the logistics manager might do, but the role was often confused with production responsibilities or sales requirements. For maximum marks to be awarded learners needed to expand upon the statement that 'goods need to be delivered on time', by perhaps considering record keeping, cost effective distribution, customer delivery requirements etc.

Part b) proved to be challenging, with many general responses regarding cost saving by the company being prevalent. Very few learners managed to link maintenance with production sufficiently to achieve full marks; similarly, the impact upon other areas of the production function being a priority for maintenance was often missed by learners.

Question 4

This question required learners to focus on the responsibilities of the marketing department.

Most learners were able to identify at least one key responsibility; however, there were a considerable number of responses which discussed the role of the design or sales function and few learners were able to give sufficient detail to gain full marks.

Question 5

This question required learners to focus on carbon offsetting techniques.

The responses to this question, whilst comprehensive, did not sufficiently focus on carbon offsetting, being mostly a consideration of recycling, emissions and other "green" issues. A significant number of learners did mention planting trees but rarely linked this sufficiently to the principle of carbon offsetting. Very few learners were able to discuss the carbon footprint of an organisation or how carbon credits are used.

Question 6

This question required learners to focus on inflation and the effects of exchange rates on imports and exports.

Part a) required learners to describe inflation; most learners understood that this is a general rise in prices, however, some responses failed to state that this takes place over a period of time.

In Part b) many learners understood the relationship between the price of goods and exchange rates. Less able learners thought that Sterling becoming weaker made it cheaper to import foreign goods and vice versa; however, the majority of responses correctly identified this link. Few learners made a clear connection between products being more or less competitive in foreign markets via the change in interest rates.

Question 7

This question required learners to focus on government subsidies for manufacturing enterprises.

This question brought responses that focused predominantly on supporting employers in areas of high unemployment. Very few learners were able to comment on issues such as certain industries being strategically important, national skill shortages, business development or the impact on the supply chain.

Question 8

This question required learners to focus on direct and fixed costs.

Most learners were able to explain a fixed cost and relate it to an example; however, the understanding of a direct cost was, for the most part, poorly answered with very few learners able to give a typical example.

Question 9

This question required learners to focus on the impact of shortages of local labour, globalisation and environmental legislation.

At this level comprehensive descriptions are anticipated, and many learners only managed to state one or two factors that could be substantiated. Where questions have a significant number of marks attributed learners should be encouraged to look for as many reasons as possible in response to the factors they have to consider.

Question 10

This question required learners to focus on:

- a) Kanban systems
- b) Just in Time

Part a) was clearly not understood, as the vast majority of learners were unable to produce a response to this question.

Part b) was answered by most learners, but with insufficient detail to gain the full range of marks. Some responses suggested that the product arrived at the customer's workplace "just in time". Generally, mid-range marks were achieved for this question.

Question 11

This question required learners to focus on the importance of research and development for small to medium manufacturing enterprises.

As this question is towards the end of the paper and totals 8 marks it is anticipated that learners will develop a series of responses in some detail. Marks were generally in the mid-range at best, because too few reasons for the importance of research and development were demonstrated by learners.

Question 12

This question required learners to focus on cash flow and residual values.

Many learners gave a good response to both parts of this question although cash flow often explained that money just moved, not from where to where. Similarly, the responses regarding residual values often failed to relate them to assets.

Question 13

This question required learners to focus on sales projections and their part in the planning process.

The responses to this question were very generic demonstrating little understanding of the links between sales and planning. Consequently, marks were in the low to mid-band. The impact upon strategic planning, responding to competitors and the changing demand for company products were not fully explored by the majority of learners.

Question 14

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 learners with the data being correctly entered in the table for the most part; however, the loss elements were incorrectly annotated with less able learners not being able to determine the correct answer.

Part b) was answered by most learners; however, the responses generally only developed one point rather than considering the full range of options.

Question 15

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

For Part a) most learners could not complete this calculation correctly and had to use guesswork to determine the preferred product.

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

The vast majority of the learners attempted a wide range of questions across the paper. However, there was insufficient focus on the requirements of the more challenging questions with many learners 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.

Statistics

Level 3 Unit 1 Manufacturing Business Principles

	Max. Mark	A*	A	B	C	D	E
<i>Raw boundary mark</i>	90	78	69	60	51	42	33
Points Score	14	12	10	8	6	4	2

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.

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