

Examiners' Report/ Principal Examiner Feedback

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Principal Learning

Manufacturing & Product Design MP301 Paper 01

Manufacturing Business Principles





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Unit MP301_01

Manufacturing Business Principles

In this series, the majority of candidates were able to provide a response to the majority of the questions. Only Q6(a), Q10 and Q11(a) proved to be challenging for all candidates. For Q6(a) most candidates, it would appear, were not familiar with the expression "disassembly/disposal costs". Q10 required an understanding of the term "financial risk assessment", whilst for Q11(a), candidates seemed confused by the principle of value adding and non-value adding.

Many of the questions in this series were designed to allow less able candidates to achieve a few marks, where they demonstrated limited knowledge/understanding, whilst allowing more able candidates to provide more detail and comprehension to achieve higher marks. In this context it is encouraging to see a wide spread of questions being attempted by candidates.

It is evident that individual candidates have a broad base of knowledge across the learning outcomes. There is limited evidence however of the deeper understanding required with the majority of high mark questions.

Short answer questions, such as those allowing two marks, require candidates to provide an outline. Whereas one mark questions often require them to identify a specific feature. An outline requires candidates to state or make a specific point then expand upon it. Much of this expansion was missing from candidate responses; consequently the second available mark was not always achieved. Centres might consider this and the mark schemes from previous papers, when preparing candidates for these externally assessed elements.

Question 1

This question required candidates to focus on a key business function and compare it with a support function.

Most candidates provided responses and although most stated a key business function, the linking between this function and the product/manufacturing operation, was not always clear. A significant number of candidates were unable to name a support function, suggesting key business functions such as research or logistics instead.

Question 2

This question required candidates to focus on a medium sized manufacturing-enterprise.

Most candidates answered some part of this correctly; although many responses suggested medium sized enterprise are smaller than large scale

enterprises or bigger than small or micro enterprises. Similarly, simply categorising a medium sized enterprise as having a medium size customer base, supply chain etc. is insufficient to merit significant marks being awarded.

Question 3

This question required candidates to focus on the role of the production manager in a large manufacturing enterprise.

This question proved to be appropriately challenging with the majority of candidates able to identify one or two characteristics of the role of the production manager. Some confused the role of maintenance or design with production and did not focus sufficiently on the setting up of efficient production cycles, layouts, tooling etc.

Question 4

This question required candidates to describe the need for leadership in a manufacturing enterprise

A range of marks was noted for this question although many candidates discussed management and confused the role of the leader with that of a manager or director. Consequently, the wider elements of leadership expected were often missing from responses.

Question 5

This question required candidates to understand the term inflation and its effects on a global manufacturer

Most candidates were able to discuss the implication of changes in rates of inflation however there was some confusion with exchange rates and import/export tariffs noted.

Question 6

This question required candidates to describe disassembly/disposal costs and the use of recyclable materials.

Perhaps surprisingly very few candidates were able to provide significant responses to the first part of this question, suggesting the term "disassembly/disposal" is unfamiliar to them. The second part of this question should focus on recycled materials yet many confused this with recycled products, suggesting some confused association with the first part of the question. The link to reducing production costs was also somewhat misunderstood with general discussion about recycling, allowing only limited marks to be achieved.

Question 7

This question required candidates to demonstrate an understanding of changes in interest rates.

Candidates were often able to demonstrate limited understanding although few were able to expand their answers to link changes in the cost of borrowing to the economic implication for the business.

Question 8

This question required candidates to outline one element of a business plan and the importance of R&D for a manufacturer.

The majority of candidates put forward one or two reasons for both elements of this question, showing a general understanding of planning and an idea of the function of R&D. The expansion expected to achieve full marks however, was often missing.

Question 9

This question required candidates to demonstrate an understanding of how investing in new technology impacts on production costs and how these costs can be reduced, by increases in efficiency.

Candidates were generally able to provide comprehensive responses to both parts of this question, although simply stating that the manufacturer should embrace lean manufacturing techniques does not allow the candidates access to the full range of marks. A greater analysis of the range of techniques and principles would have been expected.

Question 10

This question required an understanding of the term "financial risk assessment".

Most candidates struggled with this question confusing it with investment strategy, rather than a more comprehensive analysis of the financial health of a business.

Question 11

This question required candidates to outline examples of non-value adding activities and explain TQM.

The first part of this question proved challenging with many null responses. Some candidates tended to confuse this term with resources that are not directly associated with the product, rather than considering the principle of the "seven wastes" and how these fail to add value to products. The second part of the question allowed those candidates that explained the whole business approach to quality to achieve substantial marks. Many however, discussed quality in a very general sense and focused on quality control and issues surrounding poor quality only.

Question 12

This question required candidates to outline the term payback period.

Many were able to indicate that it related to either the time taken for an event to occur or the return of a financial investment, although only a few linked the two together. Some candidates confused the term with return on investment.

Question 13

This question required candidates to determine depreciation and complete a balance sheet.

This appears to be a straightforward question, however some candidates seemed confused by the use of the given data and formula, and were unable to complete the table correctly. Nonetheless, a significant number of candidates achieved full marks for this question.

Question 14

This question required candidates to complete a cost-benefit analysis.

This type of question has proved very challenging in previous series and it is pleasing to see that some candidates are beginning to demonstrate knowledge and understanding of the required techniques, allowing significant marks to be achieved. There were still a number of candidates who did not attempt this question.

Conclusions

The vast majority of the candidates completed most of the questions. However, there was insufficient focus on the requirements of the more substantial 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.

As noted in previous series it is evident that many of the questions, particularly when considering environmental issues, generated responses that would be considered general knowledge and consequently achieved few marks.

Although some candidates left questions unanswered, this was less obvious than in previous series. Candidates should be encouraged to at least attempt every question on the paper.

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