

Mark Scheme (Results)

June 2012

**Principal Learning** 

Manufacturing & Product Design MP302 Paper 01

Customer Needs and Market Requirements in Manufacturing

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## **General Marking Guidance**

- All candidates must receive the same treatment.
   Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

Question Number	Answer	Mark
1(a)	<ul> <li>A manufacturer might study a competitors sales figures for the previous year (1) and then compare them with their own sales figures (1)</li> <li>A company might study the final years results that are published by a rival company (1) as required by law and then compare those results with their own figures to see how they compare (1)</li> <li>Look at data that has been collected by the financial institutions (1) and compare that information with their own results over set time (1)</li> <li>Compare previous sales of it's own product from a given group by year/age/region etc. (1) with current sales for the same group (1) (1 x 2)</li> </ul>	(2)

Question Number	Answer	Mark
	<ul> <li>1 mark for each of the following to a maximum of 4 marks: (or one detailed answer for four marks)</li> <li>Manufacturers can use focus groups in a number of ways. They can plan advertising strategies (1) by looking at the responses made by the focus group (1)</li> <li>Focus groups are asked to complete questionnaires (1) and the responses to these questionnaires produce data (1)</li> </ul>	Mark
	<ul> <li>That data can be used to reappraise a product (1) and if necessary make changes to make the more sellable (1)</li> <li>They can also look at very basic responses such as likes and dislikes (1) change and adapt the product to meet particular requirements (1)</li> </ul>	
	Exemplar answer for 4 marks:	
	Manufacturers would look at the responses made by focus groups so that they can start to plan strategies. This might include making changes to products to make them more sellable or to make them meet particular requirements that have been highlighted by the focus group.  (1 x 4)	
	(4 x 1)	(4)

Quest	ion	Indicative content	
	umber		
1(c)	er	It is important for manufacturers to use market data because it helps them stay ahead of the competition. For example, a manufacturer can study market data to see what range of products have sold or not sold. They might be able to see if products with particular features have sold well and that might inspire them to incorporate particular features in their products. It means that the manufacturer may well be able to keep a competitive edge on its rivals and help to ensure that the company makes a profit on the new product. If market data is not used there is a danger that the sales of a new product will not take off and that could cause economic problems for the manufacturer developing a new product. Manufacturers use market data to gain an understanding of the current market in order to predict future trends. By monitoring changing trends they can model a products life cycle and begin the development of new or improved products.	
Level	Mark	Descriptor	
	0	No rewardable material	
1	1-2	Some acknowledgement that there is a link between market	
	data and staying ahead of the competition.		
2	3-4	An understanding of the fact that market data can help in	
		planning ahead and staying ahead of the competition.	
3	5-6	A full understanding that the collection of market data helps planning when developing products and that not paying	
		attention to such data can have a detrimental effect on a manufacturer.	

Question Number	Answer	Mark
Number 2(a)	<ul> <li>1 mark for each of the following to a maximum of 3 marks: (or one detailed answer for three marks)</li> <li>Stop people in specialist sports shops (1) and ask questions about their preferences for sports equipment (1) to find out what might be required in the future (1)</li> <li>Talk to people in Sports centres (1) to establish lifestyle preferences (1) to find out what activities they like doing so that planning of future equipment might be decided on (1)</li> <li>Put questionnaires (1) to see what type of patientics</li> </ul>	
	magazines (1) to see what type of activities people like to do and find out if there is a gap in the market for a particular piece of equipment (1).  (1 x 3)	(2)
	(3 x 1)	(3)

Question Number	Answer	Mark
2(b)	<ul> <li>1 mark for each of the following to a maximum of 4 marks: (or one detailed answer for four marks)</li> <li>They would use the information gathered to find out what type of activities are enjoyed (1) so that they can plan ahead to develop new sports equipment (1)</li> <li>They could look at specialist activities like rowing (1) and see if there is a gap in the market for a new machine that does something that people really want (1)</li> <li>They can look at the statistics and see what people want in various areas (1) and then target the sales of particular equipment to particular geographical areas (1)</li> </ul>	
	Exemplar answer for 4 marks:  Sports equipment manufacturers would find out what activities people liked doing and then plan their products around those preferences. They might use the information gained in market research to see if there was a gap in the market that they could exploit and develop a new product to fit a need.  (1 x 4)  (4 x 1)	(4)

Question Number	Answer	Mark
	<ul> <li>1 mark for each of the following to a maximum of 4 marks: (or one detailed answer for four marks)</li> <li>Areas should work together because product development depend on knowing the customer needs (1) and sales and marketing may determine future requirements (1)</li> <li>Marketing and sales depends on having a product that is of good quality (1) and it is the development of a high quality product that could influence the development department</li> </ul>	
	<ul> <li>(1)</li> <li>The development of a product is dependent on it having a market (1) so the it is vital that the marketing and sales departments work together so that the market in assured (1)</li> </ul>	
	Exemplar answer for 4 marks:	
	Different departments in a manufacturing organisation work together because the success of a product depends on understanding customer needs and knowing customer needs can determine future requirements. Once the market is known and understood a product can be developed in line with that market and then sold knowing that there is a market for that product.  (1 x 4)	
	(4 x 1)	(4)

Question Number	Answer	Mark
4(a)	One mark for identification, one mark for expansion	
	The purpose of the Sale of Goods Act 1979 is:	
	To give a consumer confidence that any product purchase is of a satisfactory quality (1) and is fit for purpose (1)  To protect the customer (1) in case of faulty products	
	(1) (1 x 2)	(2)

Question Number	Answer	Mark
4(b)	<ul> <li>One mark for identification, one mark for expansion (x 2)</li> <li>If there is an obvious fault with the item at any time within the first 6 months/it has not been caused by wear and tear or misuse (1) the retailer has the responsibility to put the matter right (1)</li> <li>The seller must offer to at least repair the goods (1) they must do this within reasonable time/at no additional cost (1)</li> <li>The buyer should be given a replacement item on a 'like for like' (1) basis and not simply the cheapest and most basic model (1)</li> <li>If the damage is minor and can be repaired easily (1) then the retailer can insist on product being repaired (1)</li> </ul>	(4)

Question	Answer		Mark
Number			
4(c)	Three ways stated:     Place newspaper announcements (1)     Television / radio announcements (1)     Personal letter to purchaser (1)     Email to purchaser (1)     Press release (1)     Posters in shop/retail outlet (1)  Any reasonable method accepted		
		(3 x 1)	(3)

Question Number	Answer	Mark
5(a)	<ul> <li>One mark for identification, one mark for expansion</li> <li>Recycling symbols (1) on packaging (1)</li> <li>Make whole product recyclable (1) and make it clear in documentation (1)</li> <li>Poster campaign (1) to make recycling a selling point (1)</li> <li>Offer discounts on future purchases (1) if customers return for recycling at end of useful life (1)</li> <li>Any reasonable response accepted</li> </ul>	
	(1 x 2)	(2)

Quest	ion	Indicative content	
		This delive content	
for a manufacturer because the consumer is now very m aware of the pollution and environmental issues that sure the packaging of consumer goods. Manufacturers are aw the issues such as the non biodegradable factors when u plastics. Often when consumer goods such as televisions white goods are packed they are surrounded by polystyre Polystyrene is a non-biodegradable plastic and this type plastic is often disposed of in landfill sites. Manufacturers think carefully about using these materials and should fir alternatives to avoid harming the environment. Manufact should also think about using paper and card. These com trees and the process that is used to remove the lignin from the trees to make paper and card uses a large amount of che that very often harm the environment. In order to be		The use of product packaging is an environmental responsibility for a manufacturer because the consumer is now very much aware of the pollution and environmental issues that surround the packaging of consumer goods. Manufacturers are aware of the issues such as the non biodegradable factors when using plastics. Often when consumer goods such as televisions and white goods are packed they are surrounded by polystyrene. Polystyrene is a non-biodegradable plastic and this type of plastic is often disposed of in landfill sites. Manufacturers should think carefully about using these materials and should find alternatives to avoid harming the environment. Manufacturers should also think about using paper and card. These come from trees and the process that is used to remove the lignin from the trees to make paper and card uses a large amount of chemicals that very often harm the environment. In order to be environmentally responsible manufacturers should cut down on the packaging of products.	
Level Mark Descriptor			
LCVCI	0	No rewardable material	
1	1-2	Some acknowledgement that there is a link between packaging and the environment.	
2	3-4	An understanding of the fact that some materials are non biodegradable and that too much use of packaging can cause an increase in landfill sites and that manufacturers have a responsibility to reduce the use of non biodegradable material.	
3	5-6	A full understanding of all the issues surrounding the responsibilities of manufacturers and the amount of and type of material used in packaging. This should include an understanding of the non-biodegradable/landfill issues and an appreciation of the processes involved in the manufacture of packaging and that the manufacturer should take responsibility where they are able to.	

Questi		Indicative content	
labour is one of economics. It is usually the case that companies who employ illegal workers pay those worker lower wages than legitimate workers. The knock on effect this is that the product that is being produced can theref sold on at a much lower price. This is seen by the consurate a good thing and, as it is seen to be cheap, will be purch favour of the product that has been manufactured legiting. This means that the manufacturer who employs legal worked loses sales and could be forced out of business. Because manufacturers do employ illegal labour the ones that do use this as a promotional tool for example by promoting		In the short term the main effect of a competitor using illegal labour is one of economics. It is usually the case that companies who employ illegal workers pay those workers much lower wages than legitimate workers. The knock on effect of this is that the product that is being produced can therefore be sold on at a much lower price. This is seen by the consumer as a good thing and, as it is seen to be cheap, will be purchased in favour of the product that has been manufactured legitimately. This means that the manufacturer who employs legal workers loses sales and could be forced out of business. Because some manufacturers do employ illegal labour the ones that don't can use this as a promotional tool for example by promoting their goods as "fairtrade".	
Level	Mark	Descriptor	
	0	No rewardable material	
1	1-2	Some acknowledgement that there is an issue and that illegal workers can cause problems for legal companies.	
2	3-4	An understanding of the tensions created by illegal workers and that there are a number of issues involved, and that the illegal employment of workers can have some definable consequences on a competitive manufacturer.	
3	5-6	A full understanding of all the issues involved and an appreciation that the employment of illegal workers can have a profound effect on a competitive company.	

Question Number	Answer	Mark
6(a)	<ul> <li>1 mark for each of the following to a maximum of 4 marks: (or one detailed answer for four marks)</li> <li>Celebrity endorsement might be seen by some customers as a good thing (1) and that if someone famous says that a product is good it must be (1)</li> <li>Some products such as food items (1) might be advertised by a famous chef (1) and this could be seen as a healthy thing (1)</li> <li>Celebrity endorsement can be seen as aspirational (1) if the consumer sees a product being eaten by a celebrity the consumer could think they could be like the celebrity if they</li> </ul>	
	purchase that product (1)  Exemplar answer for 4 marks: The public see celebrity endorsement as a good thing and may think that if a famous person says that a product is good then it must be. For example, Jamie Oliver might endorse a food product and people may think that because he has said it is good it is automatically healthy.  (1 x 4)  (4 x 1)	(4)

Questi		Indicative content
6(b)		From a food company's point of view, providing the customer with free samples can be a very sound commercial proposition. It means that the consumers can try products before they buy them in the supermarket. Undertaking this strategy, the food manufacturer can help build up a customer base. It is a form of advertising and a method of really getting the product to the customer. It can also act as a form of customer research to see if people like the product being given away. There is however a cost implication. A company has to weigh up the pros and cons of giving away some of their products. By giving away a product, the company would dig into the profit margin.
Level	Mark	Descriptor
	0	No rewardable material
1	1-2	An appreciation of the issue from the provider's point of view and that it makes good economic sense to give away a free sample to get more people to buy the product.
2	3-4	An understanding of the financial sense of providing free samples and that it can be used as a research tool.
3	5-6	A full understanding of the issues with pros and cons of giving away free samples of food products. There should be a full understanding including any financial implications for the manufacturing companies.

Question	Answer	Mark
Number		
7(a)	<ul> <li>One mark for identification, one mark for expansion (x 2)</li> <li>Helpful to consumers because they can shop at home (1) using internet and need not go out of the house (1)</li> <li>Could be cheaper (1) because it cuts out the middleman (1)</li> <li>Problems could occur with payment (1) with a danger of personal details being stolen (1)</li> <li>Cannot view the product (1) so could lead to more product returns (1)</li> <li>Increased price of goods (1) due to added postage and packaging (1)</li> </ul>	(4)

Questi Numb		Indicative content
7(b)		Internet search engines are useful for manufacturers because they are a very quick method of matching up the consumer with the manufacturer. They are also able to focus down any search or enquiry making it more likely that the consumer will be directed exactly at the product that they are specifically looking for. It is also possible for a manufacturer to pay the search engine provider to ensure that their product appears at the start of the list therefore making it more likely that their product will be viewed first.
Level	Mark	Descriptor
	0	No rewardable material
1	1-2	An appreciation of the fact that search engines can be useful in
		that the manufacturer can be assured that their products will be
		seen when the customer undertakes a search.
2	3-4	An understanding of the fact that search engines can be useful in that the manufacturer can be assured that their products will be seen when the customer undertakes a search and that it is quick and will be linked specifically to the product being searched for.
3	5-6	A full understanding of the fact that search engines can be useful in that the manufacturer can be assured that their products will be seen when the customer undertakes a search and that by paying the search engine provider, their product could be made to appear first on the list thus making more likely that their product will be sold.

Question Number	Answer	Mark
7(c)	<ul> <li>One mark for identification, one mark for expansion (x 2)</li> <li>It could be more cost effective (1) as specialist magazines are likely to be read in more detail (1)</li> <li>To allow their products to be compared with other products (1) to demonstrate the superiority of their product (1)</li> <li>Allow magazines to undertake trials/tests (1) to encourage the sales of their product (1)</li> <li>The specialist magazine will target exact potential customers (1) who are likely to be interested in promoted products (1)</li> </ul> Any sensible response accepted	(4)
	(2 x 2)	(4)

Question Number	Answer	Mark
8(a)	<ul> <li>Employment laws can affect market place because all have to be paid minimum wage (1) and this will have a knock on effect the cost of products (1)</li> <li>If all workers are guaranteed a minimum wage it means that all employers have to pay according to the same rules (1) and as a consequence all companies appear to operate on a level playing field (1).</li> <li>The National Minimum Wage Act sets out the minimum wages that workers have to be paid (1) and this should remove the advantage of low wage jobs (1).</li> </ul>	
	(1 x 2)	(2)

	Question Indicative content Number	
8(b)(i)		Changes to government policy can have a considerable effect on the market place. For example, an increase in taxes can increase the cost of products and produce and could reduce sales. On the other hand, a decrease of tax could increase sales. Government policy could make steps to stimulate the market such as the car scrappage scheme. Other things like the imposition of import tariffs can raise prices and affect the market.
Level	Mark	Descriptor
	0	No rewardable material
1	1-2	Some idea that government can have an impact on the market place and that taxes do make a difference.
2	3-4	An appreciation of the fact that government can impact on the market with some examples given.
3	5-6	A full understanding and appreciation of all the aspects of government intervention and that they can have either a negative or positive impact.

Questi		Indicative content
8(b)(ii)		The supply of strategic materials can have a major impact on conditions in the market place. For example, the interruption of the supply of a major commodity such as oil can have a major impact on many aspects of life. If the supply of oil is interrupted the price of almost everything would increase. It would mean the cost of fuel would go up and hauliers who transport everything that we rely on, from foodstuffs to clothing would increase.  Another strategic material might be metal. If the price of iron ore or bauxite increases or they are blocked in some way the price of final products would increase.
Level	Mark	
	0	No rewardable material
1	1-2	Some acknowledgement that the supply of strategic materials can affect the market place.
2	3-4	An understanding of the link between the supply of strategic materials and cost, and that prices could rise when the cost of materials rise.
3	5-6	A full understanding of all the issues surrounding supply of materials and the impact that this might have on society. Examples of the various strategic materials and the consequences of the lack of these materials should be presented.

Quest Numb		Indicative content	
9		Reports and forecasts from the treasury and data from the Office of National Statistics can be used in a number of ways. For example unemployment figures could be used when a manufacturer is considering setting up a new factory. It may be a good idea to move to an area of high unemployment to ensure a good supply of workers. Other information such as economic forecasts can be used in planning of strategy for a company. For example, forecasts involving industrial output can influence manufacturing decisions.	
Level	Mark	Descriptor	
	0	No rewardable material	
1	1-2	Some appreciation that statistics can have an impact on manufacturing and that they have influence.	
2	3-4	A realisation that there is a link between national statistics and how manufacturers plan future production.	
3	5-6	A good understanding of the links between national statistics and planning with some examples given.	

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