

Tuesday 26 June 2012 – Morning

GCSE MANUFACTURING

B234/02 Impact of Modern Technologies on Manufacturing

Candidates answer on the Question Paper.

OCR supplied materials:
None

Other materials required:
None

Duration: 1 hour



Candidate forename		Candidate surname	
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Centre number							Candidate number				
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INSTRUCTIONS TO CANDIDATES

- Write your name, centre number and candidate number in the boxes above. Please write clearly and in capital letters.
- Use black ink. HB pencil may be used for graphs and diagrams only.
- Answer **all** the questions.
- Read each question carefully. Make sure you know what you have to do before starting your answer.
- Write your answer to each question in the space provided. Additional paper may be used if necessary but you must clearly show your candidate number, centre number and question number(s).
- Do **not** write in the bar codes.

INFORMATION FOR CANDIDATES

- The number of marks is given in brackets [] at the end of each question or part question.
- The total number of marks for this paper is **60**.
- Your Quality of Written Communication will be assessed in questions marked with an asterisk (*).
- This document consists of **8** pages. Any blank pages are indicated.

1 Manufacturing sectors produce different products.

(a) Complete the links below to identify which manufacturing sector makes the products listed.

Manufacturing Sector	Product
Clothing and textiles	Swimming costume
Paper and print	Hairspray
Electrical	Garden bench
Chemical and Pharmaceutical	Calendar
Food and drink	Hair straighteners
Packaging	Tissue box
Furniture	Frozen vegetables

[7]

(b) Select **one** product from the list above.

Product

State **one** modern technology used in that product.

..... [1]

(c) State **one** sector not in the list above and give an example of a product from that sector.

Sector [1]

Product [1]

2 (a) Name **two** different processes carried out in a manufacturing sector of your choice.

Manufacturing sector

Process 1 [1]

Process 2 [1]

(b) Describe how quality control techniques are applied in each of the manufacturing processes identified in part (a).

1

.....

..... [2]

2

.....

..... [2]

3 Describe the impact of modern technologies on each of the following:

Workforce

.....

..... [2]

Environment

.....

..... [2]

Disposal of products

.....

..... [2]

4 CAD/CAM (Computer Aided Design/Computer Aided Manufacture) is used by manufacturers.

(a) Give **three** factors that need to be considered by a designer when using CAD/CAM.

1 [1]

2 [1]

3 [1]

(b) Give **three** benefits to a manufacturer of producing a prototype before making the final product.

1 [1]

2 [1]

3 [1]

(c) Explain what is meant by the term 'remote manufacture'.

..... [3]

5 One product from a batch fails to meet the specification during manufacture.

(a) What term could be used to describe the failed product.

.....
..... [1]

(b) Give **three** ways this could affect the company financially.

1
..... [1]

2
..... [1]

3
..... [1]

(c) Describe **two** factors which should be considered when disposing of products.

Factor 1
.....
..... [2]

Factor 2
.....
..... [2]

6 Describe **three** factors that should be considered by manufacturing companies when selecting materials, components and/or ingredients.

1
.....
..... [2]

2
.....
..... [2]

3
.....
..... [2]

7 Explain, using examples, how the following could affect a manufacturing company's image.

Fair trade
.....
..... [3]

Health and safety
.....
..... [3]

Quality standards
.....
..... [3]

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