



Wednesday 18 June 2014 – Afternoon

GCSE MANUFACTURING

B232/02 Manufacturing Processes

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 the question marked with an asterisk (*).
- This document consists of **8** pages. Any blank pages are indicated.

1 Manufacturing sectors produce different products.

(a) Name **two** different manufacturing sectors.
Name **two** products that are made in each sector.

Sector

Product

Product

[3]

Sector

Product

Product

[3]

(b) For **one** of the products you have given in part (a), describe how modern technology is used in its manufacture.

Product

.....

.....

..... [2]

2 (a) Complete the chart below by inserting the following manufacturing stages in the correct order.

Production planning
Assembly
Final quality check

Processing and production
Dispatch

Manufacturing stage
Material supply and control
Packaging

[5]

(b) 'Packaging' is a manufacturing stage.

Name **one** tool or item of equipment that would be used during the packaging stage.

..... [1]

(c) Describe one safety precaution that should be taken when using the tool or item of equipment named in part (b).

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

3 (a) Give **two** examples of each of the manufacturing processes shown below.

(i) Forming

1

2

[2]

(ii) Finishing

1

2

[2]

(b) Describe **two** benefits to a company of using information, communication and digital technologies in the supply of components, ingredients or raw materials.

1

.....

..... [2]

2

.....

..... [2]

4 (a) Explain why a manufacturer would make a prototype before going into full scale production.

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

(b) Describe **one** method that could be used to manufacture a prototype.

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

5 Composite materials are increasingly used in the manufacture of products.

(a) Explain, using **one** example, what is meant by the term 'composite material'.

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

(b) Explain how the use of polymers has made complex products easier to manufacture.

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

6 Stages in the design of a new product are shown below.

Client brief

Research

Producing design ideas

Presenting design ideas

Modifying designs

(a) Describe what takes place in the following stages:

(i) Client Brief
.....
..... [2]

(ii) Presenting design ideas
.....
..... [2]

(b) Give **two** benefits to a company of using CAD during the design of a product.

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

(c) Describe how modern technology is used during the following stages in the manufacture of a product.

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

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

7 Give **three** points that should be considered when choosing materials, components or ingredients for manufactured products and explain why each is important.

1
.....
.....
..... [3]

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

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

