

**OCR**

Oxford Cambridge and RSA

**Friday 15 June 2018 – Afternoon****GCSE MANUFACTURING****B232/02** Manufacturing Processes

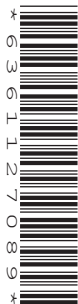
Candidates answer on the Question Paper.

**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. If additional space is required, you should use the lined page(s) at the end of this booklet. The question number(s) must be clearly shown.
- Do **not** write in the barcodes.

**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 **12** pages. Any blank pages are indicated.

2

Answer **all** the questions.

1 Manufacturing sectors produce different types of products.

(a) Complete the links to identify which manufacture makes the products listed.  
One has been done for you.

Manufacturing Sector	Product
Chemical and pharmaceutical	Freeze-dried vegetables
Clothing and textiles	Portable generator
Electrical	Carrier bag
Machinery and equipment	Car windscreen
Packaging	Alarm clock
Food and drink	Ski jacket
Motor manufacturing	Washing power

[6]

(b) (i) Give **one** different example of a product made in the Machinery and equipment sector.

..... [1]

(ii) Name **one** process used in its manufacture.

..... [1]

3

- 2 Give **one** example of a manufactured product that you have studied or made.

Product .....

- (a) (i) Name **two** materials used in the manufacture of the product.

1 .....

2 .....

[2]

- (ii) State **two** health and safety precautions taken when handling these materials.

1 .....

2 .....

[2]

- (b) Give **two** factors that should be considered when choosing materials, components or ingredients for manufactured products. State why each factor is important.

Factor .....

Importance .....

[2]

Factor .....

Importance .....

[2]

4

3 A manufacturer is considering increasing production and using a new supplier for the materials needed.

(a) Give **two** justified factors other than costs that the manufacturer should consider before choosing a supplier.

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

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

(b) Explain how '*information, communication and digital technology*' can be used to monitor stock levels.

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

5

- 4 (a) Complete the chart below by inserting the following design stages in the correct order.

**Presenting a design solution**

**Modifying design solutions**

**Developing design ideas**

**Producing design specifications**

Design Stage	
1	
2	Considering material details and constraints
3	Considering production details and constraints
4	Applying quality standards
5	
6	
7	

[4]

- (b) Explain how modern technologies could be used in the '*developing design ideas*' stage.

.....

.....

.....

..... [3]

- 5 (a) Describe how a manufacturer could identify design requirements for a new product.

.....

.....

.....

..... [3]

- (b) (i) Name **one** modern technology used to manufacture a prototype.

..... [1]

- (ii) Explain how a prototype can be used to test the suitability of a design.

.....

.....

.....

..... [3]

6 Manufacturers use systems and control technology to monitor and control production.

(a) (i) Give **one** example of an input device that could be used in a control system.

..... [1]

(ii) Give **one** example of an output device that could be used in a control system.

..... [1]

(iii) Explain, using **one** example, what is meant by the term 'feedback' in a control system.

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

(b) (i) Describe the use of a system used to monitor the weight of finished products.

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

(ii) Describe the impact on the manufacturer if each product in a batch is found to be over the required weight.

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

7 (a) Describe **two** benefits to a manufacturer of introducing new equipment.

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

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

(b) Explain the impact on the manufacturer of not maintaining quality standards when manufacturing products.

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



8\* Discuss the impact on the manufacturer of introducing new production methods.

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..... [6]

END OF QUESTION PAPER



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This image shows a blank sheet of white paper designed for writing. It features a series of evenly spaced horizontal blue lines across its entire width. A single vertical blue line runs down the left side, creating a narrow margin. The paper is otherwise completely empty, with no text or markings.

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