

Design & Technology

AQA A-Level

Ease of manufacture

Materials required for questions

- Pencil
- Rubber
- Calculator

Instructions

- Use black ink or ball-point pen
- Try answer all questions
- Use the space provided to answer questions
- Calculators can be used if necessary
- For the multiple choice questions, circle your answer

Advice

- Marks for each question are in brackets
- Read each question fully
- Try to answer every question
- Don't spend too much time on one question

Good luck!

Q1. How do ribs and webbing improve product design?

- A** They make products heavier
- B** They increase strength while reducing material thickness
- C** They require additional assembly steps

Q2. What is the main advantage of snap fittings?

- A** They eliminate the need for screws/adhesives
- B** They make disassembly impossible
- C** They increase production costs

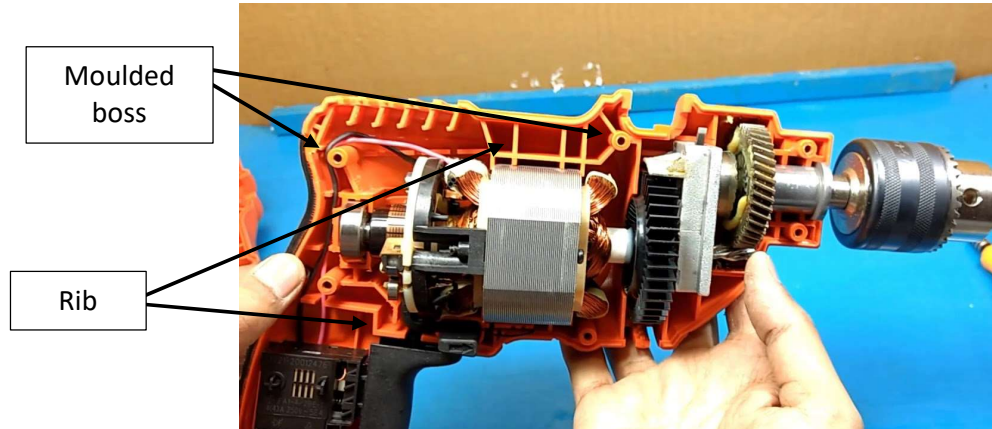
Q3. How do pre-made components aid manufacturing?

- A** They reduce custom fabrication time
- B** They slow down production lines
- C** They increase material waste

Q4. Which design feature reduces assembly labour?

- A** Hand-carved joints
- B** Custom weld points
- C** Snap-fit components

Q5. State the function of each of the features below (2 marks)



Moulded boss

Rib

Answers

Q1. B

Q2. A

Q3. A

Q4. C

Q5.

Moulded boss

- To help locate two halves of an injection moulded casing.
- To allow a 'self-tapping' screw to be used to secure two halves of an injection moulding casing together.

Rib

- To provide strength and rigidity to an injection moulded casing.
- To reduce the volume of plastic needed by allowing for a thinner wall thickness