EDEXCEL GCSE
RESISTANT MATERIALS
PAST PAPERS 2010 – 2013

QUESTION 12
DESIGN QUESTION
THE EXAM

- It is 90 minutes long.
- You will need a BLACK ball point pen for the exam.
- Do NOT use coloured pens, coloured pencils, or highlighters.
- Answer ALL the questions.
- There are 80 marks for the paper.
- Read each question carefully and think “What does the examiner want to read in my answer”, not “I’ll put some information down which may not be relevant”.
- If you find a question hard, leave it and come back to it later.
- Answer the questions you find easiest first (this will be your personal choice).
- Study the way each question is written. There are common themes and the way they are set out is the same each year. Therefore you can work out what the question is going to ask you. Obviously the content will be different (IE a different picture, but the questions will be very similar!)
- If you have time, check your answers and re-read them several times.

<table>
<thead>
<tr>
<th>Questions</th>
<th>Marks</th>
<th>Suggested Timings</th>
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<tbody>
<tr>
<td>1-10</td>
<td>10</td>
<td>11 minutes</td>
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<tr>
<td>Question 11</td>
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<td>Question 12</td>
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<td>Question 13</td>
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<td>Question 14</td>
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</table>
12 You have been asked to design a salt pot and a pepper pot.

The specification for the salt and pepper pots are that they must:
• identify which pot holds salt and which pot holds pepper
• be easy to clean
• be easy to refill
• be held together as a pair
• not slip out of the hand
• allow for the salt and pepper to come out
• be made from materials available in a school workshop
• be manufactured using processes available in a school workshop.

In the spaces opposite, use sketches and, where appropriate, brief notes to show two different design ideas for the salt and pepper pots that meet the specification points above.

Candidates are reminded that if a pencil is used for diagrams/sketches it must be dark (HB or 8).

Coloured pens, pencils and highlighter pens must not be used.

PLEASE DO NOT WRITE OR DRAW IN THIS SPACE.
PLEASE USE THE SPACES OPPOSITE FOR YOUR DESIGNS.
Design idea 1

(8 marks)

Design idea 2

(8 marks)

(Total for Question 12 = 16 marks)
12 You have been asked to design a drink cup holder to be used by the waiters in a fast food restaurant.

The specification for the drink cup holder is that it must:

- hold four drink cups
- stop the cups from falling over as they are carried
- be easy to carry
- be easy to remove the cups from the holder
- be easily wiped clean
- stack when not being used
- be made from materials available in a school workshop
- be manufactured using processes available in a school workshop.

Additional information

Details of a drink cup:

![details of a drink cup]

All dimensions in mm

In the spaces opposite, use sketches and, where appropriate, brief notes to show two different design ideas for the drink cup holder that meet the specification points above.

Candidates are reminded that if a pencil is used for the diagrams/sketches it must be dark (HB or B).

Coloured pens, pencils and highlighter pens must not be used.

PLEASE DO NOT WRITE OR DRAW IN THIS SPACE.
PLEASE USE THE SPACES OPPOSITE FOR YOUR DESIGNS.
Design idea 1

Design idea 2

(Total for Question 12 = 16 marks)
12 You have been asked to design a toilet roll holder.

**Dimensions of toilet roll**

The specification for the toilet roll holder is that it must:

- hold one toilet roll
- provide storage space for a spare roll
- allow the toilet paper to be unrolled
- allow the toilet roll to be easily replaced
- be easily fixed to a wall
- be easily cleaned
- be made from materials available in a school workshop
- be manufactured using processes available in a school workshop.

In the spaces opposite, use sketches and, where appropriate, brief notes to show **two different** design ideas for the toilet roll holder that meet the specification points above.

Candidates are reminded that if a pencil is used for diagrams/sketches it must be dark (HB or B).

Coloured pens, pencils and highlighter pens must **not** be used.

**PLEASE DO NOT WRITE OR DRAW IN THIS SPACE.**

**PLEASE USE THE SPACES OPPOSITE FOR YOUR DESIGNS.**
Design idea 1

Design idea 2

(Total for Question 12 = 16 marks)
You have been asked to design a spice jar holder.

Dimensions of spice jar

All dimensions in mm

The specification for the spice jar holder is that it must:

- hold four spice jars
- keep the spice jars upright
- allow for easy removal of spice jars
- have a stable base
- be portable
- stop the jars from falling out when moved
- be made from materials available in a school workshop
- be manufactured using processes available in a school workshop.

In the spaces opposite, use sketches and, where appropriate, brief notes to show two different design ideas for the spice jar holder that meet the specification points above.

Candidates are reminded that if a pencil is used for diagrams/sketches it must be dark (HB or B).

Coloured pens, pencils and highlighter pens must not be used.
Design idea 1

Design idea 2

(Total for Question 12 = 16 marks)