

Surname		Other Names	
Centre Number		Candidate Number	
Candidate Signature			

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General Certificate of Secondary Education  
June 2005

**DESIGN AND TECHNOLOGY:  
TEXTILES TECHNOLOGY (SHORT COURSE)  
Higher Tier**

3557/H

**H**



Friday 24 June 2005 1.30 pm to 3.00 pm

**In addition to this paper you will require:**  
a pen, pencil, ruler, eraser, pencil sharpener and  
coloured pencils.

For Examiner's Use	
Number	Mark
1	
2	
3	
4	
5	
6	
7	
<b>TOTAL</b>	
Examiner's initials	

Time allowed: 1 hour 30 minutes

**Instructions**

- Use blue or black ink or ball-point pen. Use pencil and coloured pencils only for drawing.
- Fill in the boxes at the top of this page.
- Answer **all** questions in the spaces provided.
- All working must be shown.
- Do all rough work in this book. Cross through any work you do not want marked.

**Information**

- The maximum mark for this paper is 100.
- Mark allocations are shown in brackets.
- An insert with body shapes has been provided as a guide for the candidates doing the fashion option.
- Wherever calculations are needed you should show your working.
- You are reminded of the need for good English and clear presentation.

**THERE ARE NO QUESTIONS PRINTED ON THIS PAGE**

**Design Brief**

Choose **either** Option A **or** Option B:

**Option A Dressing-up clothes for children**

A national museum is holding a special exhibition to celebrate Native American Indian culture. You are the designer for a manufacturing company. You have been asked to design and make a dressing-up outfit for children.

The outfit must:

- be based on Native American Indian culture;
- include surface decoration;
- be able to take a reasonable amount of wear and tear;
- sell well in the museum shop;
- be suitable for small scale production.

**Option B A decorative learning panel for children**

A national museum is holding a special exhibition to celebrate Native American Indian culture. You are the designer for a manufacturing company. You have been asked to design and make a decorative learning panel to show young children about the Native American Indian culture.

The panel must:

- show images of Native American Indian culture;
- include surface decoration;
- be able to be hung on a wall;
- sell well in the museum shop;
- be suitable for small scale production.

Tick the box to show which one you have chosen.

**Option A Dressing-up clothes**

**Option B Decorative panel**

**You should answer the questions in this paper in the order in which they are written.**

**Turn over ►**

Answer **all** questions in the spaces provided.

**Question 1 is about research to generate design ideas.**

- 1 (a) Visitors to the museum want to buy products to remind them of what they have seen.

Explain different ways the designer can get ideas from the exhibition.

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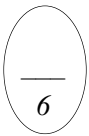
*(4 marks)*

- (b) Designers often study the work of others for ideas.

Give **two** benefits of this.

1 .....  
2 .....

*(2 marks)*



**Question 2 is about designing your product.**

**2 (a)** You have been asked to show your design ideas.

Use the design criteria given in the design brief for the option you have chosen.

(i) Draw and label **two** different ideas for your product.

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Idea A

Idea B

*(8 marks)*

Choose **one** of your ideas for development.

Tick the box to show the idea you would choose.

Idea A

Idea B

(ii) Describe **two** features of the idea you have chosen which will help it to sell.

1 .....

.....

2 .....

.....

*(4 marks)*

**QUESTION 2 CONTINUES ON THE NEXT PAGE**

**Turn over ►**

- (b) Use sketches, labelling and notes to present a final design for your product including the use of surface decoration techniques.

You have this page and the next to present your design.

If you have chosen the dressing-up clothes you must show a back view.

Marks will be awarded for:

- use of theme; *(4 marks)*
- originality and quality of the design; *(8 marks)*
- use of colour in the product; *(3 marks)*
- use of fabrics and components; *(4 marks)*
- presentation of the final idea. *(3 marks)*

(22 marks)

**Turn over ►**

34

**Question 3 is about fabrics.**

**3** Write a **four** point fabric specification for your product.

Explain why you consider each point important.

1 The fabric must be .....

Because .....

2 The fabric must be .....

Because .....

3 The fabric must be .....

Because .....

4 The fabric must be .....

Because .....

*(8 marks)*





**TURN OVER FOR THE NEXT QUESTION**

**Turn over ►**

**Question 4 is about product development.**

4 Some textile products sold in the museum shop are decorated with the image shown below.



(a) Describe **two** different surface decoration techniques that you could use to create this image.

You may use diagrams if you wish.

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(6 marks)

- (b) (i) The design team will make a final prototype of a new product.

Describe how it might be used to help ensure that manufacture is trouble free.

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*(5 marks)*

- (ii) The prototype will be used to set standards for the manufacture.

Give **two** manufacturing tolerance levels for **your** product.

1 .....  
.....

*(2 marks)*

2 .....  
.....

*(2 marks)*

**TURN OVER FOR THE NEXT QUESTION**

**Turn over ►**

**Question 5 is about industrial manufacture.**

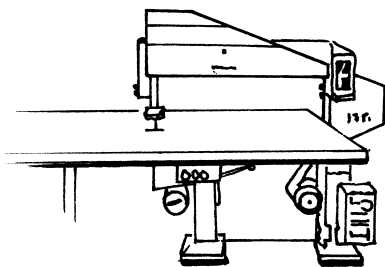
5 (a) Explain why manufacturers of textile products use quality control systems.

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(5 marks)

(b) When cutting fabrics, many layers are cut at the same time using a band saw.

What health and safety precautions would the manufacturer take to ensure the safety of the workforce?



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(6 marks)

(c) Manufacturers often have some parts of textile products made in another factory.

(i) Give **two** benefits of this.

- 1 .....
- 2 .....

(2 marks)

(ii) Give **one** problem which this can cause.

.....

(1 mark)

**Question 6 is about smart fabrics.**

**6 (a)** What are smart fabrics?

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*(2 marks)*

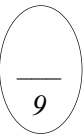
**(b) (i)** Describe **one** smart fabric used in sportswear.

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*(4 marks)*

**(ii)** Smart fabrics are very expensive.

Why might someone buying sportswear think it is worth the extra cost?

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*(3 marks)*



**TURN OVER FOR THE NEXT QUESTION**

**Turn over ►**

**Question 7 is about textile products and the consumer.**

7 Study the photographs of the two cushions.

Answer the questions which follow.

(a) Describe **one** way in which fabric and/or components have been used to add interest.

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*(4 marks)*

(b) Evaluate the use of zips to fasten the back of these cushion covers.

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*(4 marks)*

(c) As fashion cushions, these designs are intended to have a limited life.

What are the environmental issues related to the manufacture of such ‘throw away’ products?

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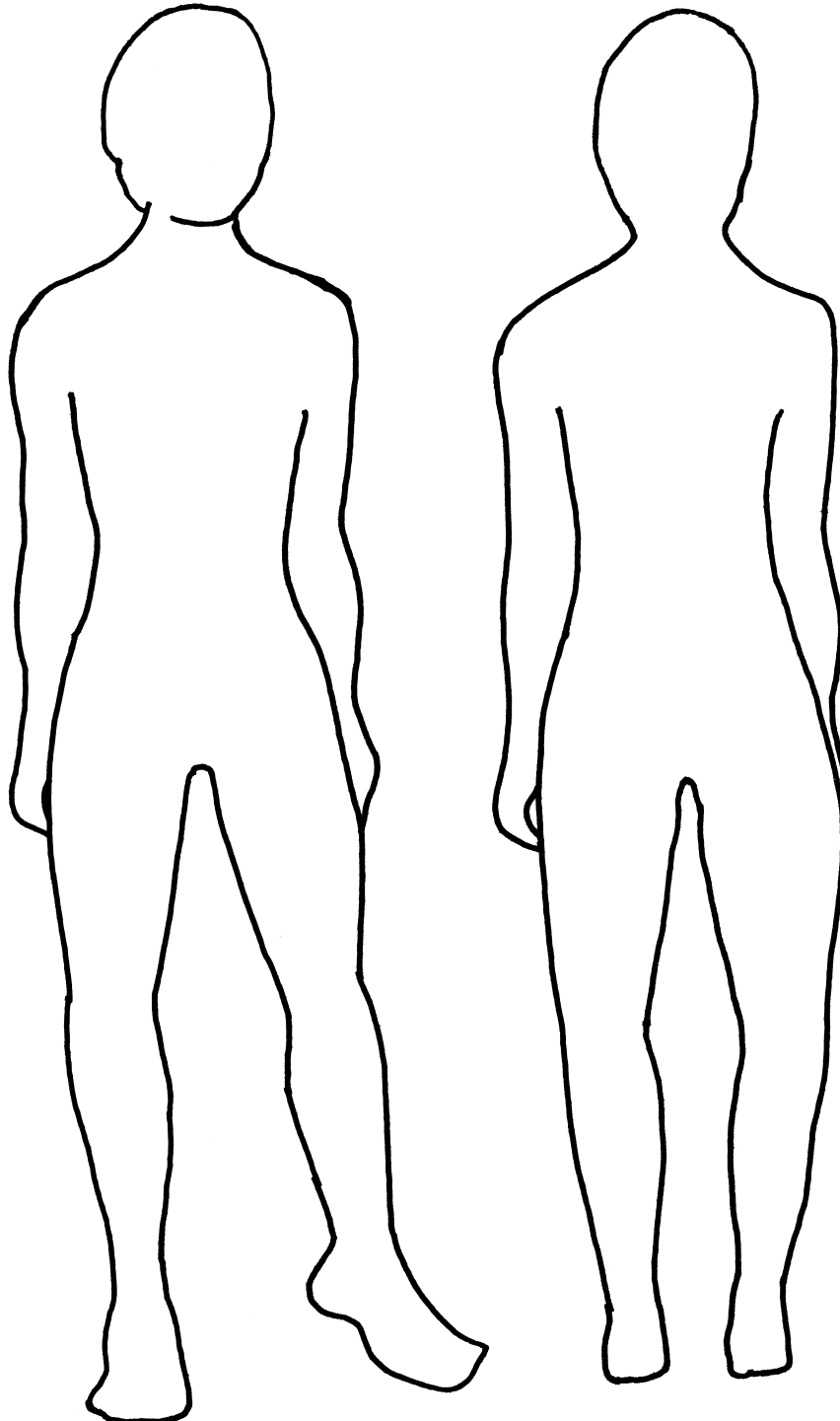
*(6 marks)*

**END OF QUESTIONS**

**DESIGN AND TECHNOLOGY:  
TEXTILES TECHNOLOGY  
Full and Short Courses**

This insert is provided for use in the examination. It may be used as a guide for the Fashion option.

**Do not draw on this page.**



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This insert page should **not** be sent to the examiner.

Insert to

**3547/F 3547/H  
3557/F 3557/H**

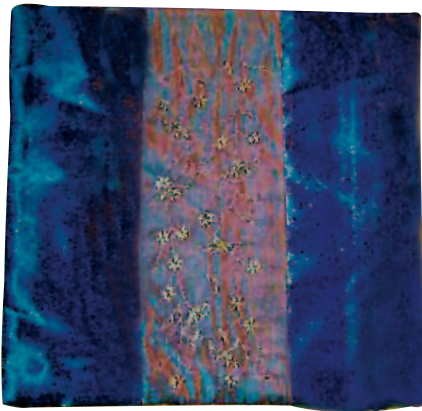
**DESIGN AND TECHNOLOGY  
TEXTILES TECHNOLOGY  
Full and Short Courses**

**H**

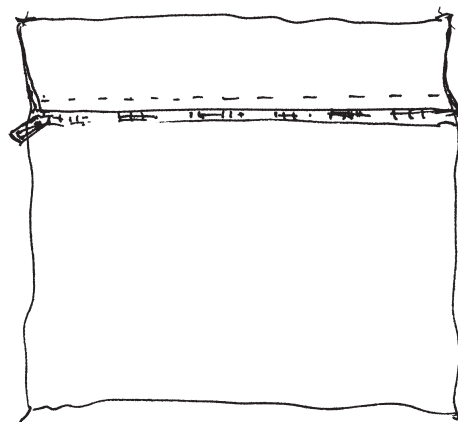
**HIGHER TIER**

This insert is provided for use in the examination.

**Cushion A**



Front View



Back View



Close up of front

This insert page should **not** be sent to the examiner.

Turn over ►



**Cushion B**



Front View



Back View



Close up of front