

Surname						Other Names					
Centre Number						Candidate Number					
Candidate Signature											

Leave blank

General Certificate of Secondary Education
June 2005

**DESIGN AND TECHNOLOGY:
TEXTILES TECHNOLOGY
Higher Tier**

3547/H

H



Friday 24 June 2005 1.30 pm to 3.30 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	
TOTAL	
Examiner's initials	

Time allowed: 2 hours

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 125.
- 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 a head dress;
- 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;
- have a 3-dimensional feature;
- 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.

Explain why it is important that they do not make exact copies.

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(3 marks)

- (c) Discuss the promotion of textile souvenir products linked to special exhibitions.

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(3 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

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2

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(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 head dress or 3-dimensional feature.

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; *(10 marks)*
- use of colour in the product; *(3 marks)*
- use of fabrics and components; *(4 marks)*
- presentation of the final idea. *(3 marks)*

(24 marks)

Turn over ►

36

Question 3 is about fabrics and components.

3 (a) Describe the qualities you need in the main fabric for your product.

Explain why you think these qualities are important.

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(6 marks)

(b) The manufacturer’s label will be made as a separate component.

(i) Describe how computer technology will help in the manufacture of this label.

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(4 marks)

(ii) Explain why the manufacturer would have the label made in a different factory.

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(3 marks)

TURN OVER FOR THE NEXT QUESTION

Turn over ►

Question 4 is about developing your product.

4 The choice and use of colour is important if your product is to sell.

(a) Describe how you could test different colour effects when developing ideas.

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(4 marks)

(b) Name **two** different ways to add colour to your product.

Complete the table below.

Way of adding colour	Advantage	Disadvantage
1
2

(6 marks)

- (c) (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.

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(2 marks)

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(2 marks)

TURN OVER FOR THE NEXT QUESTION

Question 5 is about industrial manufacture.

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

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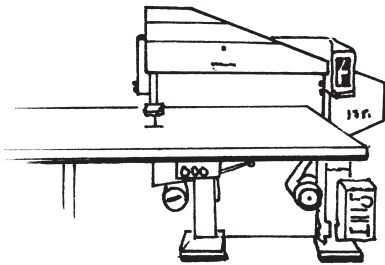
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(5 marks)

(b) When cutting fabrics, many layers are cut at a 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)

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)

(c) Describe **one** other smart fabric that you have researched.

Explain what it is used for.

Description

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It is used for

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(5 marks)

Question 7 is about textile products and the consumer.

7 Study the photographs of the two cushions.

Answer the questions which follow.

(a) Describe the ways in which the two cushions have been made interesting.

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(5 marks)

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

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(4 marks)

(c) The label says that the cushion cover must be dry cleaned.

Explain why it should not be washed.

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(3 marks)

(d) 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)

(e) Explain why some textile products are packaged before going to the shops.

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(4 marks)

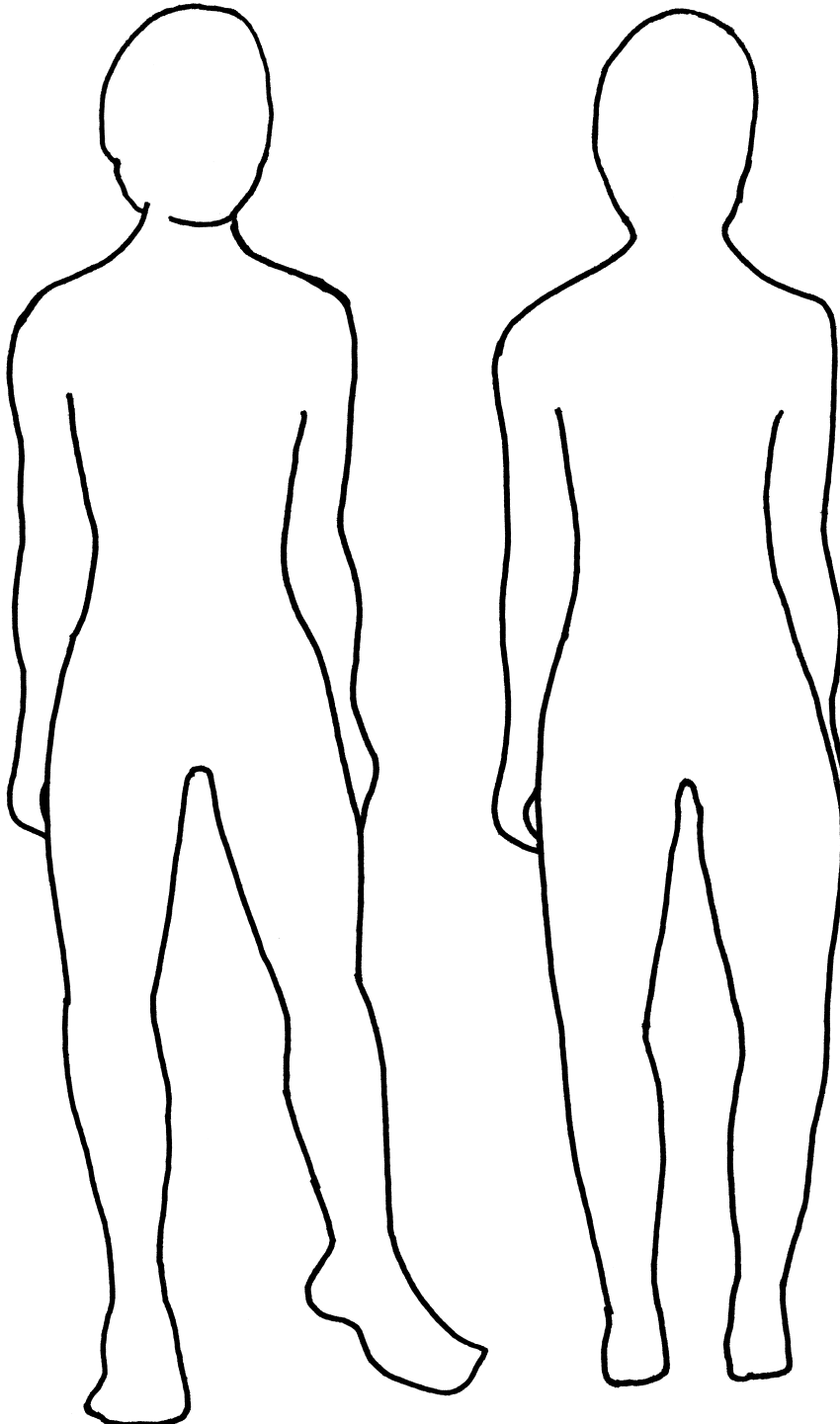
END OF QUESTIONS

THERE ARE NO QUESTIONS PRINTED ON THIS PAGE

**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.



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

Insert to

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

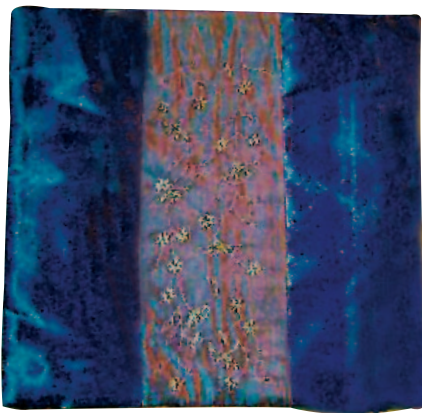
**DESIGN AND TECHNOLOGY
TEXTILES TECHNOLOGY
Full and Short Courses**

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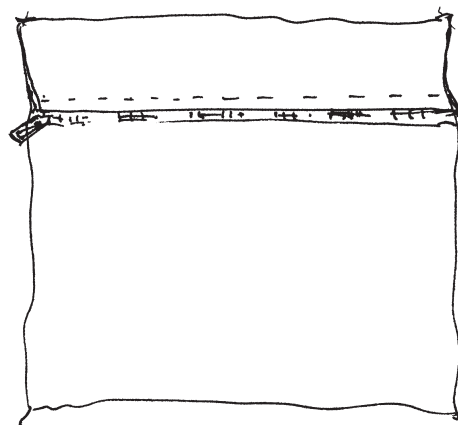
HIGHER TIER

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