

Surname						Other Names					
Centre Number						Candidate Number					
Candidate Signature											

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General Certificate of Secondary Education  
June 2004

**DESIGN AND TECHNOLOGY:  
TEXTILES TECHNOLOGY  
Foundation Tier**

**3547/F**

**F**



Thursday 24 June 2004 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	
<b>TOTAL</b>	
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.

**Design brief**

You are a textile product designer.

You have to design a denim product for children aged 5 to 10 years old.

Your product will need to sell well.

Choose **one** of the following:

**either**

**A** a textile product for a child's room

**or**

**B** an item of clothing for a child.

- The product will be batch produced.
- It must be made from denim fabric.
- The product must be decorated.

Tick the box to show which one you have chosen.

A textile product for a child's room.

An item of clothing for a child.

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

**NO QUESTIONS APPEAR ON THIS PAGE**

**Turn over ►**

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

**Question 1 is about researching existing products.**

1 (a) These existing denim products are not selling very well.

Give **two** reasons why they are not selling well.

(i)



1 .....

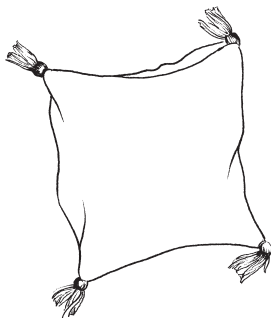
.....

2 .....

.....

*(2 marks)*

(ii)



1 .....

.....

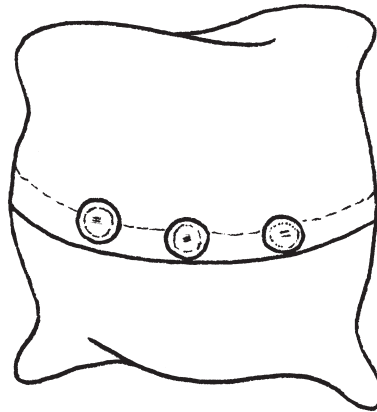
2 .....

.....

*(2 marks)*

(b) Fastenings on a product are important.

Look at the products below.



(i) Name the fastening used.

.....  
(1 mark)

(ii) Name **one** different fastening that could be used.

.....  
(1 mark)

(iii) Give **two** reasons for your choice.

1 .....  
2 .....  
(2 marks)

(c) Give **three** things a designer would need to find out about denim fabrics before designing products.

1 .....  
2 .....  
3 .....  
(3 marks)

Turn over ►

**Question 2 is about the design of your product.**

2 (a) Designers use computers to help design textile products.

Give **two** ways in which a computer can help you to design textile products.

1 .....  
.....  
*(2 marks)*

2 .....  
.....  
*(2 marks)*

(b) Products must be safe for children to use.

Explain **two** different ways a designer can make sure a product is safe for children.

1 .....  
.....  
.....  
*(2 marks)*

2 .....  
.....  
.....  
*(2 marks)*

(c) You have been asked to show **two** design ideas to the manufacturer.

The **design** specification says that the **product** must:

- be made from denim;
- be decorated in an original way;
- be batch produced.

(i) Draw **two** ideas in pencil.

--	--

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) Explain **one** reason why you think adults will like this idea.

.....

.....

(2 marks)

(iii) Explain **one** reason why you think children will like this idea.

.....

.....

(2 marks)

Turn over ►

(d) Present a final design for your product on this page and the next.

Show the decoration.

If you have chosen the fashion product you may use the body shapes as a guide.

Marks will be awarded for:

- use of denim fabric/components; *(3 marks)*
- the decoration; *(5 marks)*
- originality and quality of the design; *(10 marks)*
- presentation of the final idea. *(3 marks)*



**QUESTION 2 CONTINUES ON THE NEXT PAGE**

**Turn over ►**



**Question 3 is about the denim fabric and components used for your product.**

3 (a) Denim fabrics are usually made from cotton.

Give **three** reasons why denim is a good fabric to use for your product.

1 .....

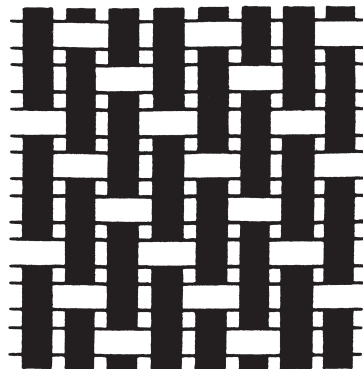
2 .....

3 .....

*(6 marks)*

(b) Denim fabric is woven.

The picture below shows a twill weave.



Give **two** reasons for using a twill weave.

1 .....

2 .....

*(4 marks)*

**Turn over ►**

(c) You will need to design a care label for your denim product.

(i) Choose **one** symbol from **each** group below.

Put a circle around each symbol that you choose.



(3 marks)

(ii) Explain what the symbol you have chosen from **Group A** means.

.....  
.....

(2 marks)

(d) Denim fabrics are usually dyed blue.

Explain **three** different ways in which a manufacturer can put different colour on the denim fabric.

	Method	Explain how it is done
1		
2		
3		

(6 marks)

(e) Describe **two** components which you could use on your product.

Component 1: .....

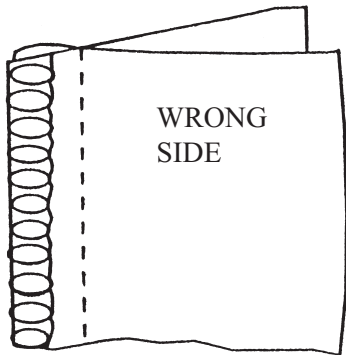
Description: .....  
(2 marks)

Component 2: .....

Description: .....  
(2 marks)

(f) Denim fabrics can fray badly. You will need to choose the seams carefully. You could use one of the seams below.

**Overlocked Seam**



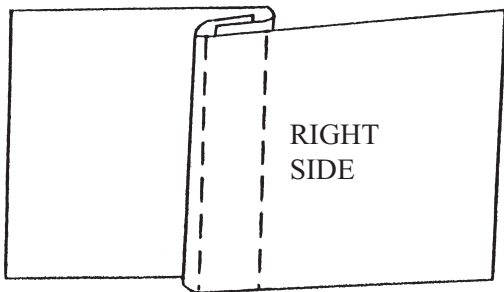
(i) Why might you choose the overlocked seam?

.....  
.....  
.....  
(2 marks)

(ii) Why would you **not** choose the overlocked seam?

.....  
.....  
.....  
(2 marks)

**Double stitched Seam**



(iii) Why might you choose the double stitched seam?

.....  
.....  
.....  
(2 marks)

(iv) Why would you **not** choose the double stitched seam?

.....  
.....  
.....  
(2 marks)

Turn over ►

**Question 4 is about the manufacture of your product.**

- 4 (a) The textile manufacturer will need a *production plan* before your product can be manufactured.

Why is a production plan needed?

.....

.....

.....

.....

(3 marks)

- (b) Factories use computerised machines.

Give **two** different advantages of using computerised machines for each of the processes listed below.

	<b>Process</b>	<b>Advantages</b>
<b>1</b>	Pattern laying and cutting fabric	1 .....
		.....
		2 .....
		.....
<b>2</b>	Sewing buttonholes	1 .....
		.....
		2 .....
		.....
<b>3</b>	Steam pressing the final product	1 .....
		.....
		2 .....
		.....

(6 marks)

(c) (i) Describe **three** ways the manufacturer can make sure **your product** is well made in the factory.

- 1 .....
- .....
- 2 .....
- .....
- 3 .....
- .....

(6 marks)

(ii) Give **three** reasons why you think your product is good value for money.

- 1 .....
- .....
- 2 .....
- .....
- 3 .....
- .....

(6 marks)

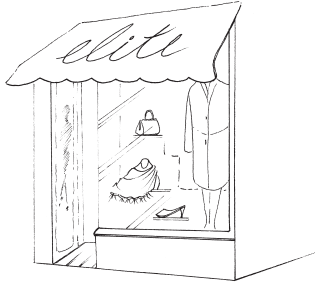
**TURN OVER FOR THE NEXT QUESTION**

**Turn over ►**

**Question 5 is about the selling of your textile product.**

**5 (a)** Give **one** advantage and **one** disadvantage of buying the products in each of the following places.

(i) Designer shop



**Advantage:** .....

.....  
(1 mark)

**Disadvantage:** .....

.....  
(1 mark)

(ii) High street chain store



**Advantage:** .....

.....  
(1 mark)

**Disadvantage:** .....

.....  
(1 mark)

(iii) Mail order catalogue



**Advantage:** .....

.....  
(1 mark)

**Disadvantage:** .....

.....  
(1 mark)

(iv) Market stall



**Advantage:** .....

.....  
(1 mark)

**Disadvantage:** .....

.....  
(1 mark)



(b) Manufacturers often use computers to help them work out batch production costs.

An example of a spreadsheet is shown below.

	A	B	C	D	E
1	<b>Materials</b>	<b>Quantity bought</b>	<b>Cost per unit</b>	<b>Total cost</b>	
2	Buttons	7000	£0.05	£350.00	
3	Care labels	1000	£0.02	£20.00	
4	Fabric	2000 metres	£3.00	£6,000.00	
5	Interfacing	500 metres	£0.50	£250.00	
6	Lining	1500 metres	£1.00	£1,500.00	
7	Packaging	1000 bags	£0.05	£50.00	
8	Threads	100 reels	£2.00	£200.00	
9				<b>£8,370.00</b>	
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

What are the advantages of using a computer spreadsheet to work out the final selling price?

.....

.....

.....

.....

.....

.....

.....

(4 marks)

END OF QUESTIONS

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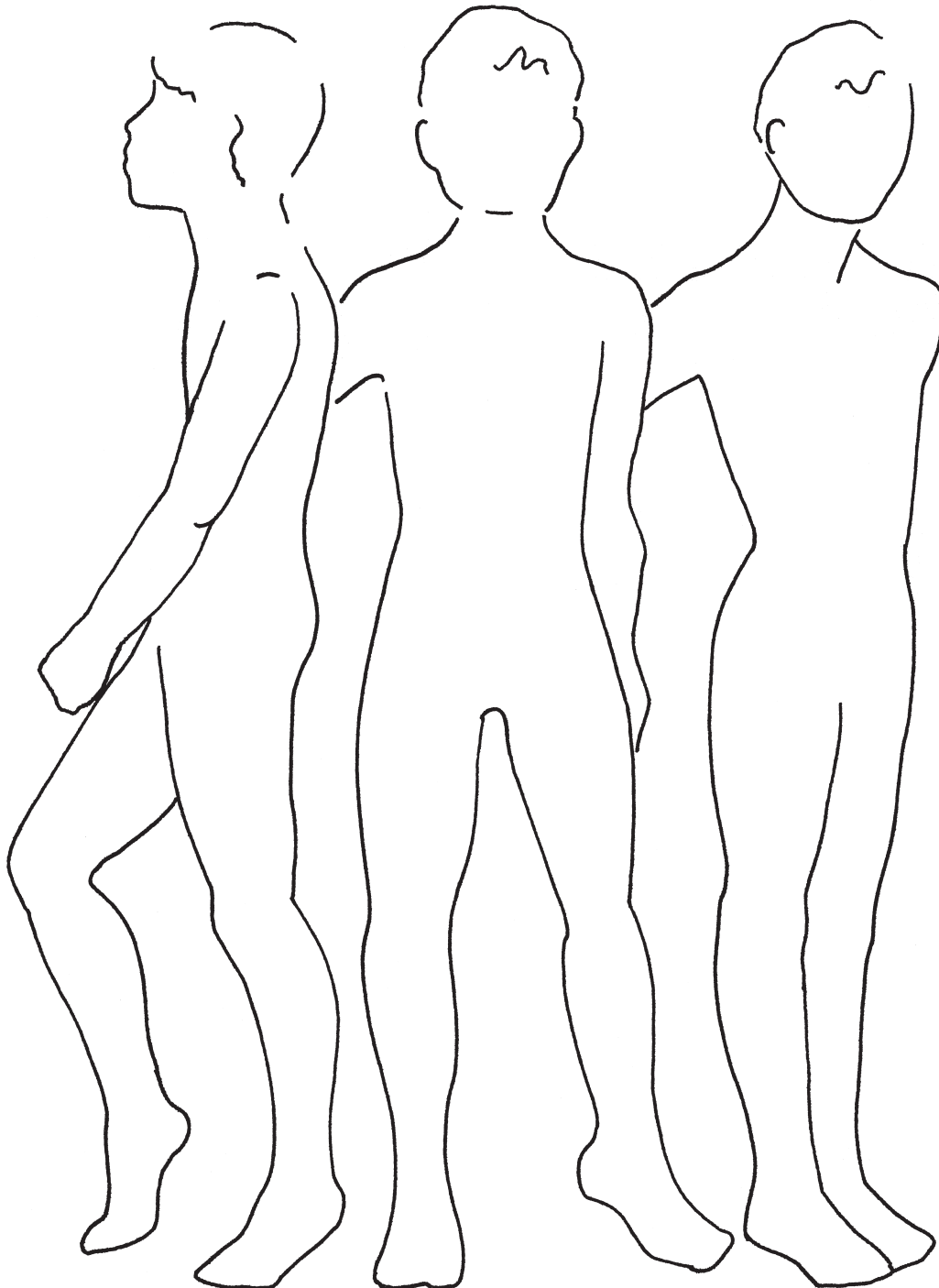
**THERE ARE NO QUESTIONS PRINTED ON THIS PAGE**

**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.**



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

Insert to

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