

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 (SHORT COURSE)  
Foundation Tier**

3557/F

**F**



Thursday 24 June 2004 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	
<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.

**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)

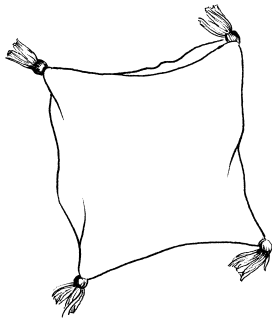


1 .....

2 .....

*(2 marks)*

(ii)



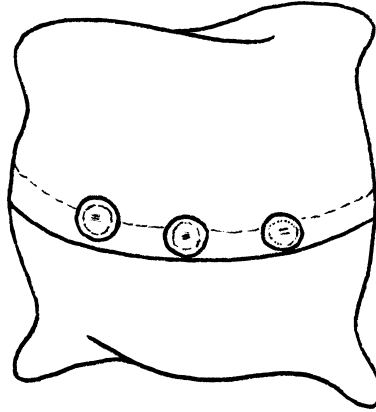
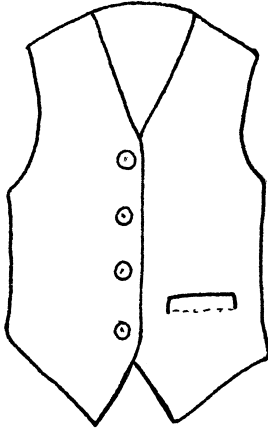
1 .....

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) 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)*

(b) 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) Give **one** reason why you have chosen this idea to develop.

.....

.....

(2 marks)

Turn over ►

(c) 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 .....

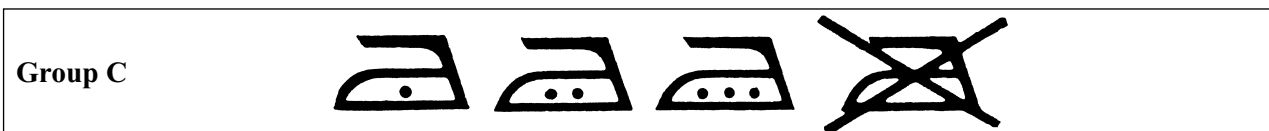
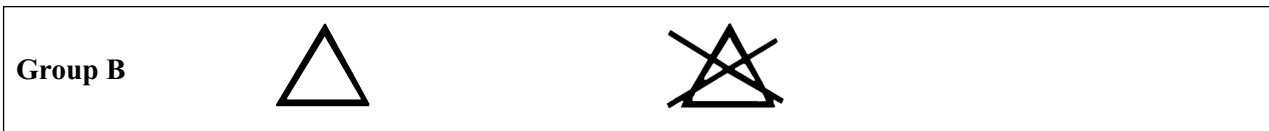
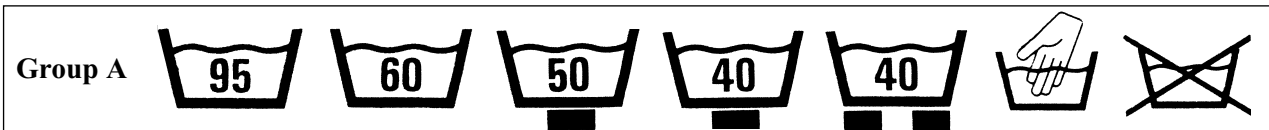
.....

(6 marks)

(b) 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)

(c) Denim fabrics are usually dyed blue.

Explain **one** way in which a manufacturer can put different colour on the denim fabric.

.....

.....

.....

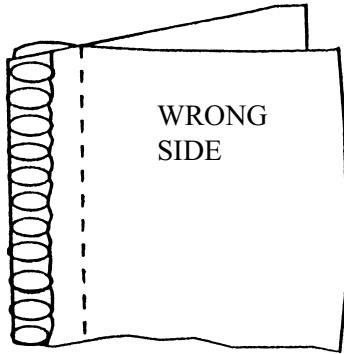
(2 marks)

**Question 4 is about the manufacturing process.**

4 (a) Denim fabrics can fray badly. You will need to choose the seams carefully.

The seam below is often used on denim products.

**Overlocked Seam**



(i) Why might you choose the overlocked seam?

.....

.....

.....

*(2 marks)*

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

.....

.....

.....

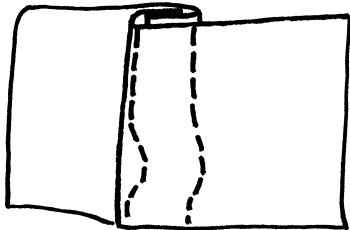
*(2 marks)*

(b) Quality control found faults on the double stitched seams of a batch of products.

Give **one** reason why the fault has happened.

Explain how you would correct the fault.

(i)



Reason for fault .....

.....

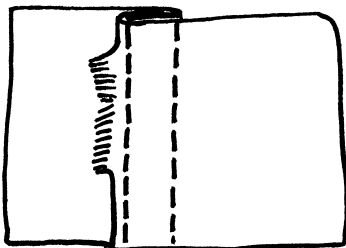
How to correct the fault .....

.....

.....

*(2 marks)*

(ii)



Reason for fault .....

.....

How to correct the fault .....

.....

.....

*(2 marks)*

(c) 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)

**TURN OVER FOR THE NEXT QUESTION**

**Turn over ►**

**Question 5 is about the cost of manufacturing products.**

5 (a) Cost is important. Manufacturers need to save money.

Give **one** advantage and **one** disadvantage of each of these ways of saving money.

(i) Materials are only delivered the day before they are needed.

Advantage .....

Disadvantage .....

*(2 marks)*

(ii) Some parts of products are made in another factory.

Advantage .....

Disadvantage .....

*(2 marks)*

(b) Explain why these are **not** good ways of saving money.

(i) Sewing machines are only serviced when they break down.

1 .....

2 .....

*(2 marks)*

(ii) Buying poor quality sewing thread which is cheaper.

1 .....

2 .....

*(2 marks)*

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

An example of a spreadsheet with the cost of materials 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					

(i) Give **two** other important costs needed before the selling price can be worked out.

1 .....

2 .....

(2 marks)

(ii) Give **one** advantage of using a computer spreadsheet to work out the final selling price.

.....

.....

(2 marks)

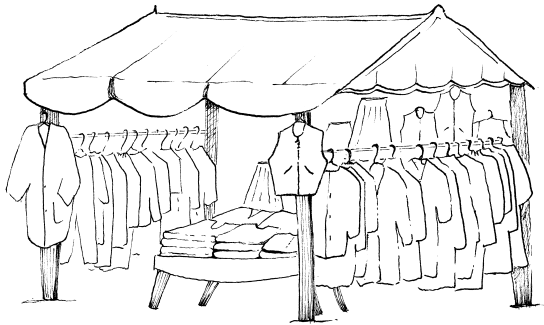
**TURN OVER FOR THE NEXT QUESTION**

**Turn over ►**

**Question 6 is about the selling of your textile product.**

**6** Give **one** advantage and **one** disadvantage of buying the products in each of the following places.

(a) Market stall



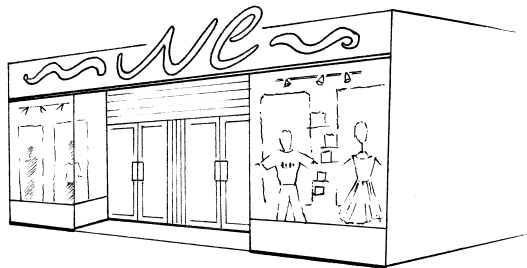
**Advantage:** .....

.....  
(1 mark)

**Disadvantage:** .....

.....  
(1 mark)

(b) High street chain store



**Advantage:** .....

.....  
(1 mark)

**Disadvantage:** .....

.....  
(1 mark)

(c) Mail order catalogue



**Advantage:** .....

.....  
(1 mark)

**Disadvantage:** .....

.....  
(1 mark)

**END OF QUESTIONS**

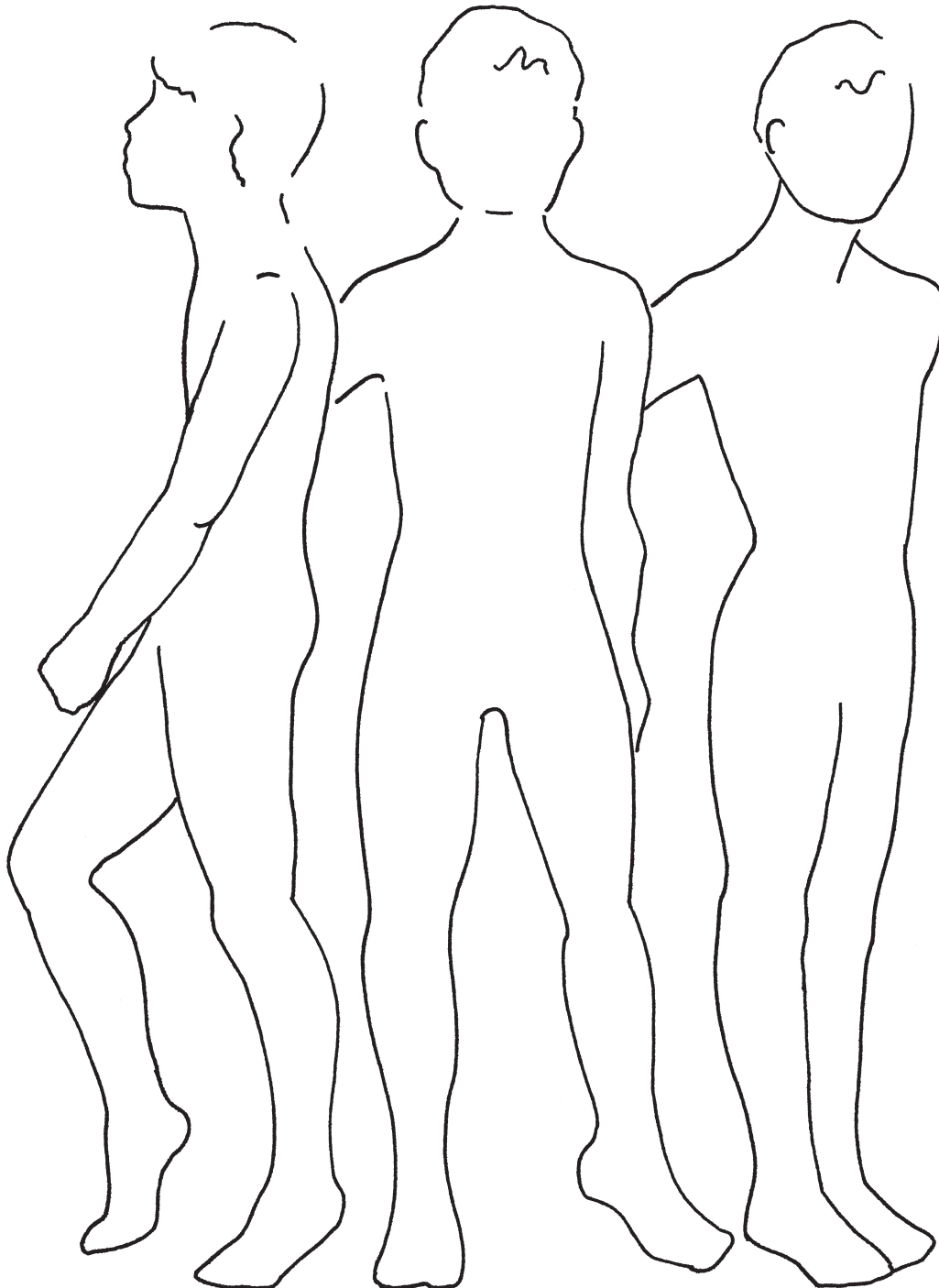


**DESIGN AND TECHNOLOGY:**

**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**