

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)
Higher Tier**

3557/H



Thursday 24 June 2004 1.30 pm to 3.00 pm

H

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	
TOTAL	
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 the designer for a manufacturing company.

A client wants to develop a range of denim products for children between the ages of 5 and 10.

You have been asked to design and make an original product which will 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.
- The product must be made from denim fabric.
- The product must be decorated in an interesting way.

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.

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

Question 1 is about researching ideas.

1 Designers will often study existing products before coming up with new ideas for their product.

Explain how this can help them.

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(6 marks)

6

TURN OVER FOR THE NEXT QUESTION

Turn over ▶

Question 2 is about the design of your product.

2 (a) Designers use computers when **designing** textile products.

Explain how computers can help you to design new textile products.

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(6 marks)

(b) You have been asked to design a product for manufacture.

The product must be safe for children to use.

Explain **two** ways you can ensure your product is safe for children.

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2

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(4 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;
- include changes to the denim by printing and/or dyeing;
- be decorated in an original way;
- be batch produced.

(i) Use pencil sketches to show **two** initial ideas for the 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) Give **one** reason why you have chosen this product for further development.

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(2 marks)

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

Show style details and 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)*
- use of printing and/or dyeing methods; *(3 marks)*
- the decoration; *(5 marks)*
- originality and quality of the design; *(10 marks)*
- presentation of the final idea. *(3 marks)*

TURN OVER FOR THE NEXT QUESTION

Turn over ►

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

3 (a) Describe the qualities of denim which make it suitable for your product.

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(5 marks)

(b) Explain why denim fabrics sometimes contain Lycra.

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(2 marks)

(c) What do you need to consider when selecting thread for your product?

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(2 marks)

Question 4 is about the manufacture of your product.

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

Why is a production plan needed?

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(3 marks)

- (b) (i) Describe **two** quality controls you would use to make sure that your product was manufactured to a good standard.

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(4 marks)

- (ii) In what ways would you consider your product to be good value for money?

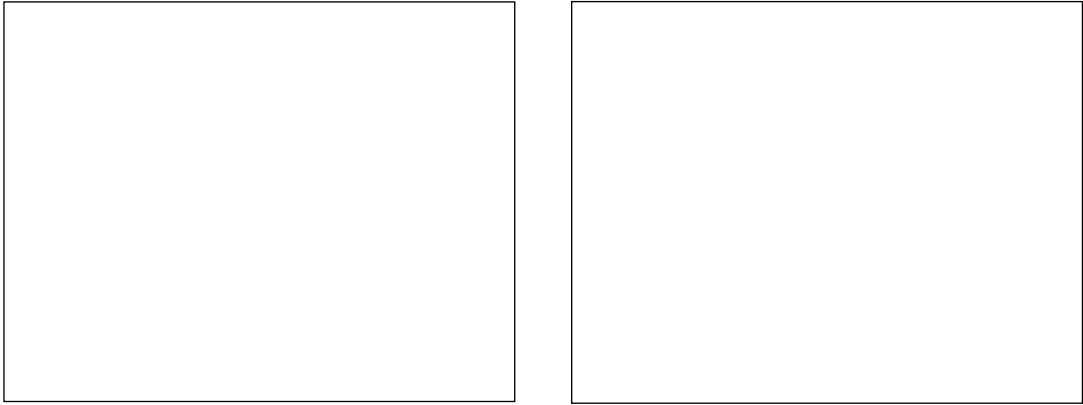
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(6 marks)

Question 5 is about manufacturing processes.

5 (a) Some denim products have decorated edges as a feature.

(i) Sketch **two** suitable edge features you have researched.



(4 marks)

(ii) Explain the steps that will be needed to make **one** of the features you have sketched in part 5(a)(i). You may use diagrams if you wish.

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(4 marks)

(b) A manufacturer of textile products uses the following systems.

Explain why each is used in industrial manufacture.

(i) Making prototypes before manufacturing starts.

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(4 marks)

(ii) Having sections of products made in another factory.

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(4 marks)

(iii) Using computerised machines to sew seams automatically.

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(3 marks)

TURN OVER FOR THE NEXT QUESTION

Turn over ►

Question 6 is about the marketing of textile products.

6 Discuss the advantages **and** disadvantages of buying the products in each of the following retail outlets.

(a) Designer shops.

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(3 marks)

(b) High street chain store.

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(3 marks)

(c) Mail order catalogue.

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(3 marks)

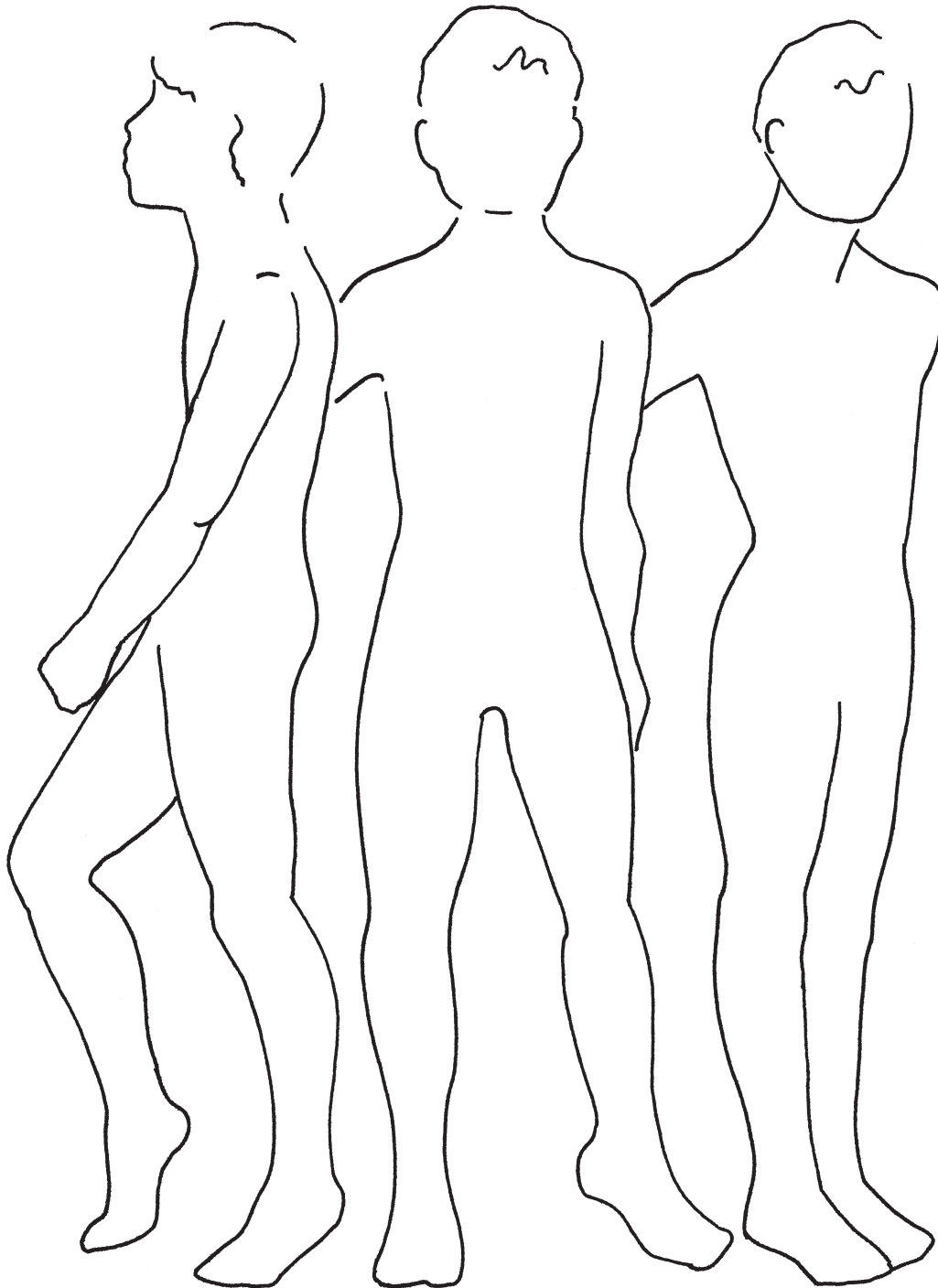
END OF QUESTIONS

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.



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

Insert to

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