

Surname						Other Names					
Centre Number						Candidate Number					
Candidate Signature											

For Examiner's Use

General Certificate of Secondary Education
June 2006

**DESIGN AND TECHNOLOGY
(TEXTILES TECHNOLOGY) (SHORT COURSE)
Written Paper
Higher Tier**

**3557/H
H**



Wednesday 14 June 2006 1.30 pm to 3.00 pm

<p>For this paper you must have:</p> <ul style="list-style-type: none"> a pen, pencil, ruler, eraser, pencil sharpener and coloured pencils an insert sheet for use with question 5.

For Examiner's Use			
Question	Mark	Question	Mark
1		4	
2		5	
3		6	
Total (Column 1) →			
Total (Column 2) →			
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.
- Answer the 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 to be marked.
- Show the working of your calculations.

Information

- The maximum mark for this paper is 100.
- The marks for questions are shown in brackets.
- You are reminded of the need for good English and clear presentation in your answers.

Design brief

A specialist bag store sells many different types of bags.

You have been asked to design and make a bag to be sold in the store.

The bag must

- be based on the theme of 'Pop Art'
- have an appliqué decoration
- include a method of carrying or hanging the bag
- have different sections to separate things in the bag
- be suitable for industrial production.

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

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

Question 1 is about research to generate design ideas.

1 (a) The store has been selling a range of bags for a long time.

How might information about recent sales figures be useful when planning new products?

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(3 marks)

(b) Designers have to think about the effects of the products they design.

(i) Explain **two** ways that a design could affect the health and safety of workers when they are making a bag.

1
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2
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(4 marks)

(ii) The bag must also be environmentally friendly.

Explain **two** ways that a bag design could affect the environment.

1
.....

2
.....

(4 marks)

Question 2 is about designing your product.

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

Use the information given in the **design brief** on page 2.

Use pencil to draw and label **two** different design ideas for your product.

Marks will be given for:

- quality of two different design ideas *(2 × 3 marks)*
- quality of notes and sketches. *(2 × 2 marks)*

Design Idea A

What could this bag be used for?

.....

(5 marks)

Design Idea B

What could this bag be used for?

.....

(5 marks)

(b) Choose **one** of your design ideas for development.

Tick the box to show the design idea you would choose.

Design Idea A Design Idea B

Who is the target market for this bag?

Explain how the design idea you have chosen will appeal to your target market.

.....

.....

.....

.....

(3 marks)

Question 2 continues on the next page

Turn over ►

(c) Use sketches, labelling and notes to present a final design for your bag.

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

You must show a front **and** a back view.

Marks will be given for:

- use of the Pop Art theme; *(4 marks)*
- originality and quality of the design including the appliqué, different sections and method of carrying or hanging the bag; *(10 marks)*
- use of colour; *(3 marks)*
- use of fabrics and components; *(4 marks)*
- presentation of the final idea. *(3 marks)* *(24 marks)*

Question 3 is about fabrics and components.

3 Describe the qualities you need in the main fabrics for your product.

Explain why you think these qualities are important.

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(6 marks)

6

Question 4 is about developing your bag.

4 You have been asked to include a method of carrying or hanging the bag.

(a) Use notes and diagrams to describe **one** method you might consider when developing your ideas. You will need to show how it is attached to the bag.

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(3 marks)

(b) Evaluate the suitability of this method for your bag.

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.....

(2 marks)

(c) Explain how you will decide on the size of your bag.

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.....

(2 marks)

Question 5 is about industrial manufacture.

5 A manufacturer is making the shorts shown on the insert sheet as part of a new range of casual wear.

(a) Look carefully at the shorts shown on the insert sheet.

Explain how **two** different features make the shorts suitable for casual wear.

(i) Feature 1 is

.....

.....

(2 marks)

(ii) Feature 2 is

.....

.....

(2 marks)

(b) Complete the manufacturing specification below for **one** pair of shorts.

<p>Fabric:</p> <p>0.80 m × 150 cm medium weight woven cotton</p>	<p>Diagram to show how outside leg seam will be constructed</p>
<p>Description of three components needed:</p> <p>1</p> <p>.....</p> <p>2</p> <p>.....</p> <p>3</p> <p>.....</p> <p style="text-align: right;"><i>(6 marks)</i></p>	
<p>Diagram to show how hem of shorts leg will be made</p>	<p>Explain three Quality Control checks for front pockets</p> <p>1</p> <p>.....</p> <p>.....</p> <p>2</p> <p>.....</p> <p>.....</p> <p>3</p> <p>.....</p> <p>.....</p> <p style="text-align: right;"><i>(6 marks)</i></p>
<p style="text-align: right;"><i>(4 marks)</i></p>	<p style="text-align: right;"><i>(4 marks)</i></p>

Turn over ►

(c) (i) Suggest **one** finish that could be used on the shorts fabric.

.....
(1 mark)

(ii) Explain why you think it would be useful.

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

27

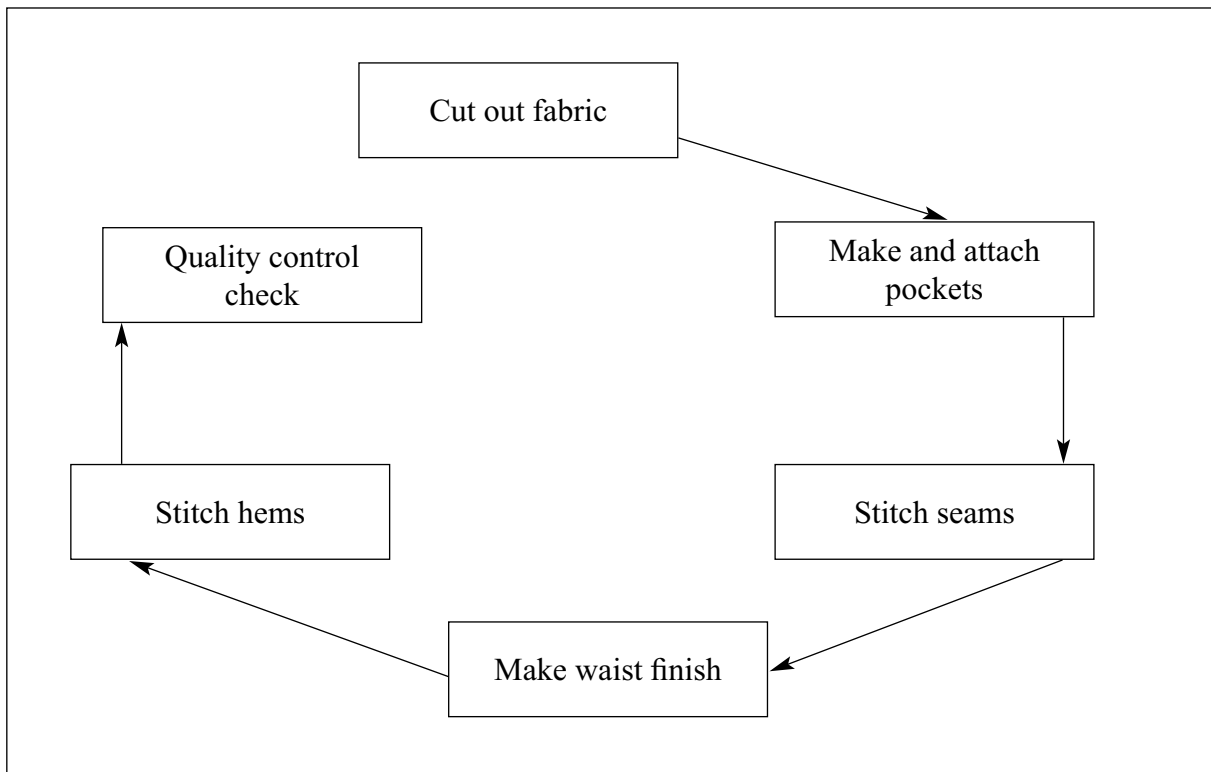
Question 6 is about industrial production systems.

6 An efficient manufacturing system for the shorts in Question 5 is important.

Study the manufacturing system shown below.

Manufacturing System

Each worker in the team makes a complete pair of shorts.



(a) Why is this an efficient system for a manufacturer?

Give reasons.

.....

.....

.....

.....

.....

(4 marks)

Turn over ►

(b) Computerised manufacture can help with efficiency.

Give specific ways in which computerised manufacture can

(i) reduce labour costs in **two** different ways;

1

2

(4 marks)

(ii) make the workplace safer in **two** different ways.

1

2

(4 marks)

12

END OF QUESTIONS

There are no questions printed on this page

There are no questions printed on this page

**DESIGN AND TECHNOLOGY
(TEXTILES TECHNOLOGY)
Full and Short Courses
Foundation and Higher Tiers**

This insert is provided for use with Question 5.

Front view of shorts



Back view of shorts



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