

Candidate Name	Centre Number	Candidate Number
		0



**GCSE**

143/04

**DESIGN AND TECHNOLOGY**

**PAPER 2**

**FOCUS AREA: TEXTILES TECHNOLOGY**

**Higher Tier**

A.M. MONDAY, 2 June 2008

1½ hours

	Leave Blank
<b>Question 1</b>	
<b>Question 2</b>	
<b>Question 3</b>	
<b>Question 4</b>	
<b>Question 5</b>	
<b>TOTAL MARK</b>	

**ADDITIONAL MATERIALS**

In addition to this examination paper you will need coloured pencils.

**INSTRUCTIONS TO CANDIDATES**

Write your name, centre number and candidate number in the spaces at the top of this page.

Answer **all** questions.

Write your answers in the spaces provided in this booklet. Where the space is not sufficient for your answer, continue the answer at the back of the book, taking care to number the continuation correctly.

**INFORMATION FOR CANDIDATES**

The number of marks is given in brackets at the end of each question or part-question.

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

1. (a) From the list below, choose the most suitable material for **each** of the textile products shown. Use **each** material once. [4]

**Silk**

**Kevlar**

**Wool**

**Polyester**

**Ripstop Nylon**

**Canvas**

- (i) A tent



.....

- (ii) A bag



.....

- (iii) A bullet proof vest



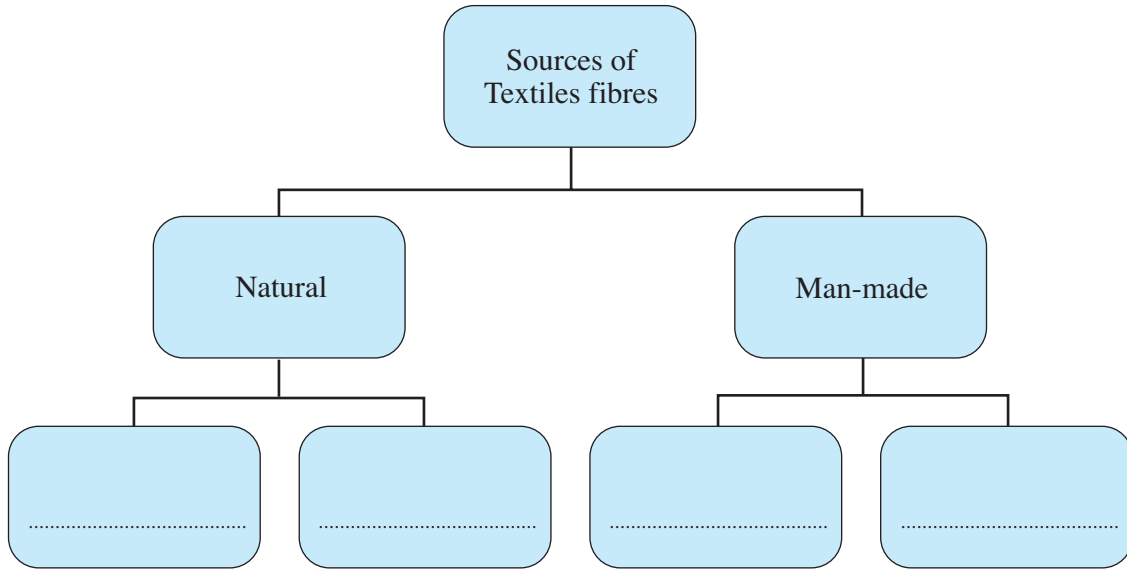
.....

- (iv) A floor cushion



.....

- (b) Textiles fibres are either natural or man made. **Complete** the diagram below by adding **two** natural fibres and **two** man-made fibres. [4]



- (c) The baby's clothes shown below are made from a knitted cotton material.



- (i) Give **two** reasons why a knitted cotton material has been chosen to make the clothes. 2 × [2]

Reason 1: .....

.....

Reason 2: .....

.....

- (ii) The knitted cotton material is flammable. Explain how manufacturers minimise this problem. [2]

.....  
 .....

(d) The picture below shows some close up details on the front of the vest top.



(i) Name **two** decorative techniques used to make the fish image.

2 × [1]

Technique 1: .....

Technique 2: .....

- (ii) Two preparation stages are listed below. Explain why **each** is necessary to achieve a high quality finish. 2 × [2]

	PREPARATION STEP	EXPLANATION
<b>1</b>	Affix iron-on interfacing to the wrong sides of the materials.	<p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>
<b>2</b>	Test the machine stitch before use.	<p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>

**THERE ARE NO QUESTIONS ON THIS PAGE**



2. Colourful designs can be applied to textile materials by printing and dyeing. Some examples are shown below.



(a) (i) Name **two** methods of *printing* textile materials used in industry. 2 × [1]

.....  
.....

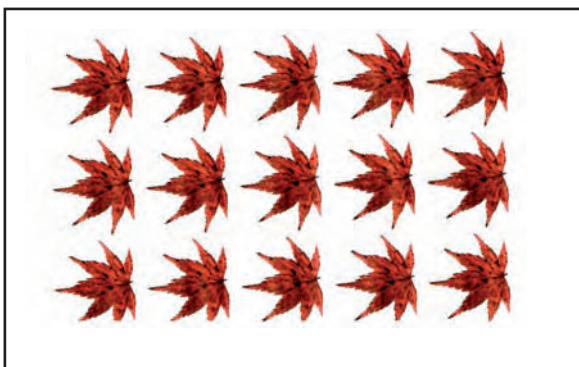
(ii) Name a different method of *printing* textile materials that you could use. [1]

.....

(b) Choose the correct term from the word bank below for **each** example of the patterns shown. 2 × [1]

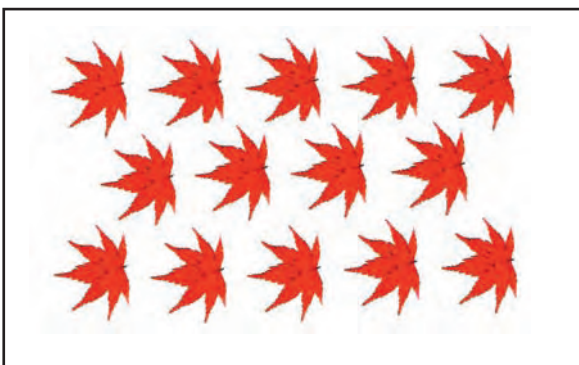
**Half drop      Single motif      Full drop      Abstract**

(i)



..... pattern

(ii)



..... pattern

(c) An image board based on *Autumn* is shown below.



(i) Explain how this image board could help a designer.

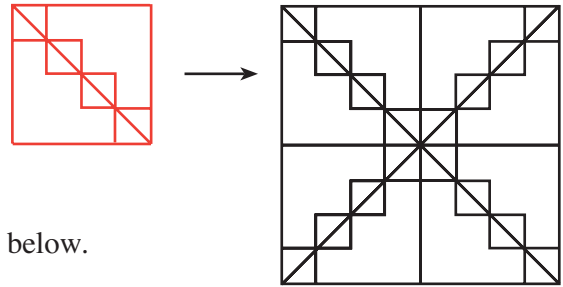
[2]

.....

.....



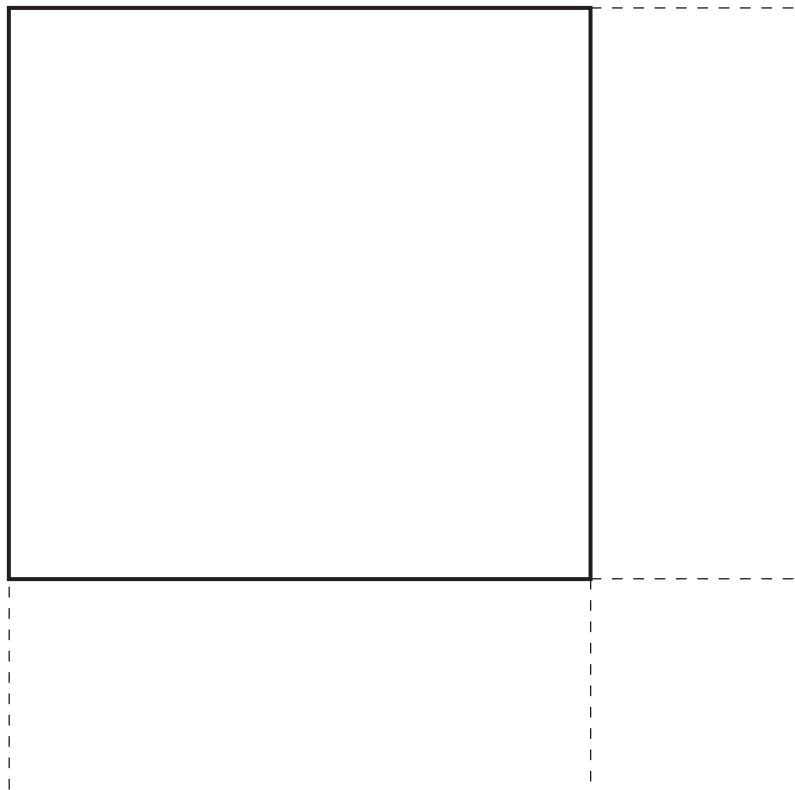
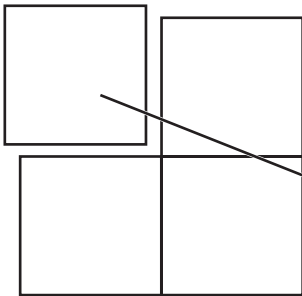
- (ii) Use the image board of *Autumn* shown opposite to create an imaginative pattern that can be repeated four times for the front of a cushion. *An example is shown.*



You must **draw** your idea in the space below.

**Marks will be awarded for:**

- using the image board to create an imaginative pattern which can be repeated four times on the front of a cushion; [4]
- showing creative and skilful use of colour. [4]



- (d) Use notes and/or sketches, to describe how you could reproduce the *colour* and *texture* of the leaf shown below, on a textile product. 2 × [3]



Colour

Texture

3. (a) A textile product made by *batch production* is shown below.



Explain what you understand by the term *batch production*.

[2]

.....

.....

- (b) Manufacturers try to make sure their products are made to high quality standards. Use the picture below to identify **two** examples of where quality control has been achieved. 2 × [1]



I. ....

II. ....

- (c) The pictures below show a prototype of a wallet to be used for storing CDs. The pictures show some manufacturing faults.



- (i) State **two** manufacturing faults. 2 × [1]

Fault 1: .....

Fault 2: .....

- (ii) Use notes and sketches to describe how **each** fault could be avoided. 2 × [4]

**Avoiding fault 1:**

**Avoiding fault 2:**

- (d) Name the construction technique used on the edge of the wallet and state its **two** functions. 3 × [1]

Name of construction technique: .....

Function 1: .....

Function 2: .....

- (e) Fashion designers make use of new developments in the textile industry.

State **two** such developments which could influence designers. 2 × [1]

I. ....

II. ....



4. The pictures below show different views of a boot bag made from cordura material.



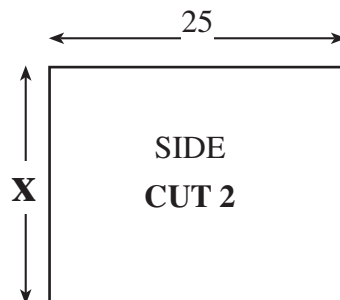
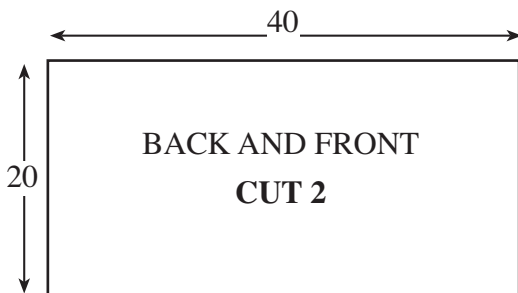
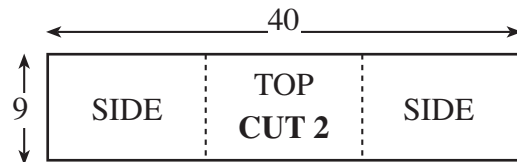
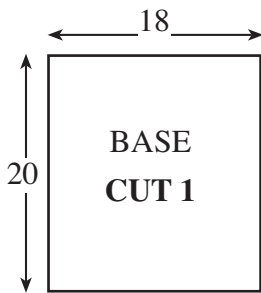
(a) State **two** properties of cordura which make it a suitable choice for a boot bag. 2 × [1]  
*One has been given for you.*

Property 1: It is durable.

Property 2: .....

Property 3: .....

(b) Details of the templates used to make a similar boot bag are shown below.  
 All dimensions are in cm.



(i) State the missing dimension marked by **X**. [1]

X = ..... cm

(ii) Sketch an economical layout of the templates needed to make one boot bag on a length of cordura material which is 150 cm wide. *Your sketch does not need to be drawn to scale.* [4]

(iii) State the minimum length of material needed to make one boot bag. [2]

.....

(iv) Give **one** example of how CAD could be used to help a manufacturer plan mass production of the boot bag. [2]

.....  
.....

(c) Use diagrams and notes to describe an experiment you could carry out to compare the durability in two different materials. [4]

.....  
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.....

5. Teenagers like to follow contemporary fashion trends. You have been asked to design a casual winter outfit for a male **or** female which has a strong focus on style details and pockets with interesting fastenings.

(a) Sketch the front and back views of your design on the opposite page using the silhouettes provided.

**Marks will be awarded for:**

- (i) a design that is imaginative and suitable for teenage winter casual wear; [4]
- (ii) showing clear close up construction details of **three** different styles of pockets with interesting fastenings; [6]
- (iii) showing **four** accurate style details; [4]
- (iv) a co-ordinated colour scheme; [3]
- (v) quality of graphical communication. [4]

(b) (i) Name **one** specific material that could be used for one of the items of clothing and explain in detail why you would recommend using it. [4]

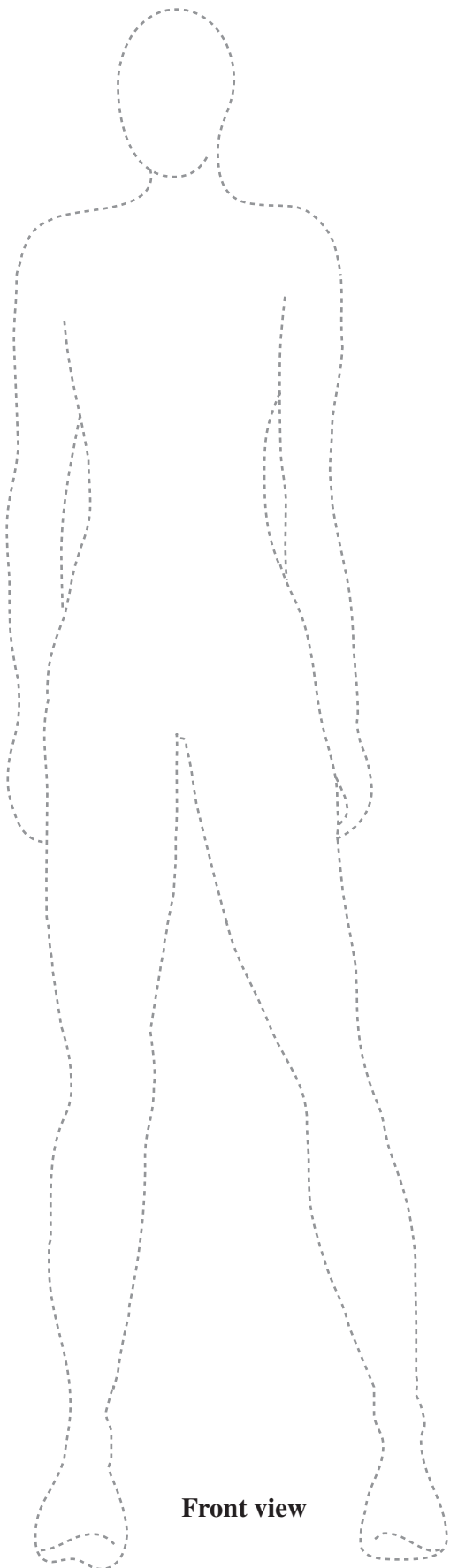
Name of material: .....

Explanation: .....

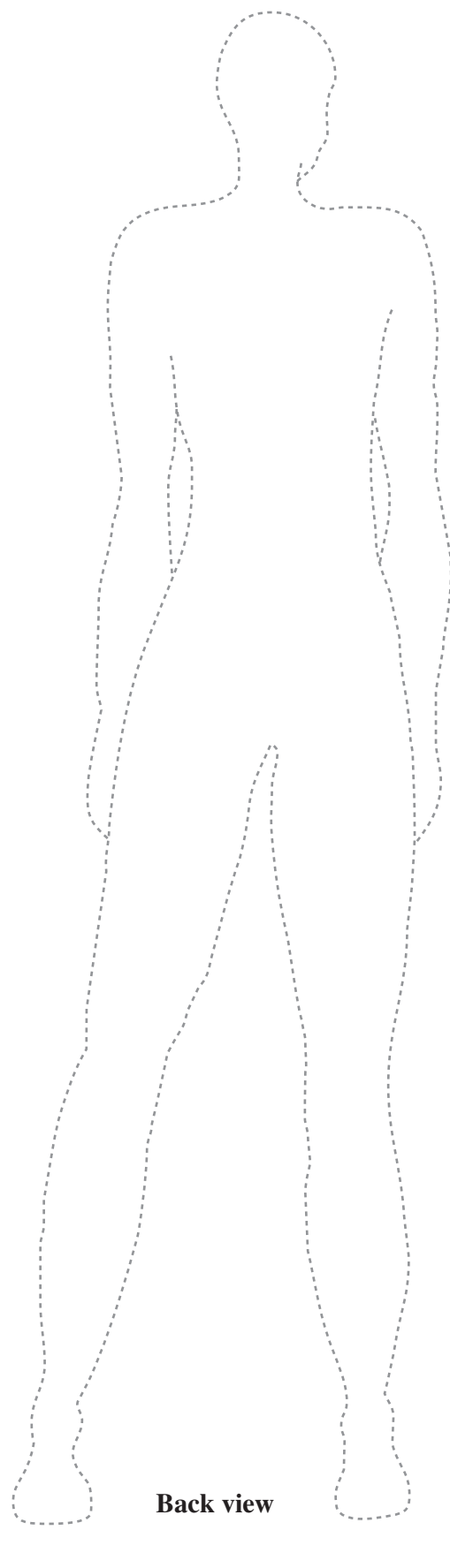
.....

.....

**Use this space to show construction details of the pockets with interesting fastenings**



**Front view**



**Back view**

