

GCSE

Specimen Papers and Mark Schemes

**Edexcel GCSE
Design & Technology: Textiles Technology
Short course (3971)**

**For First Examination
Summer 2003**

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Attempt ALL questions in the spaces provided.

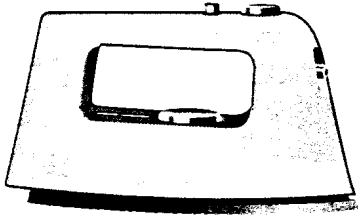
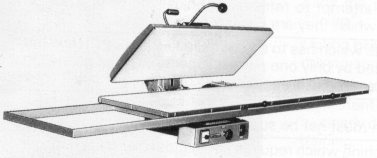
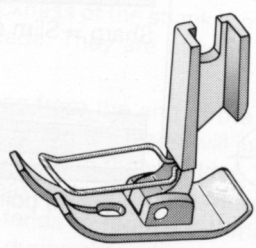
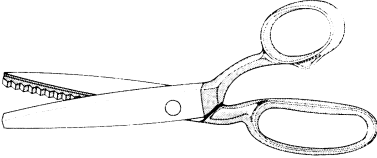
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1. The table below shows either some items of textiles tools or components or equipment.

(a) Complete the table by:

- (i) naming each tool or component or equipment;
- (ii) describing its use.

The first one is done for you.

TOOLS/ COMPONENTS/ EQUIPMENT	NAME	USE
	Iron	Used for pressing seams during production
		
		
		

(6)

(b) The iron can be used at different temperatures. In the space below, draw the symbol that you would expect to find in a pair of jeans to help with the ironing of the product.

Leave blank

(2)

(c) When using electrical equipment, safety is very important.

Give **three** safety rules you should follow when using electrical equipment.

1

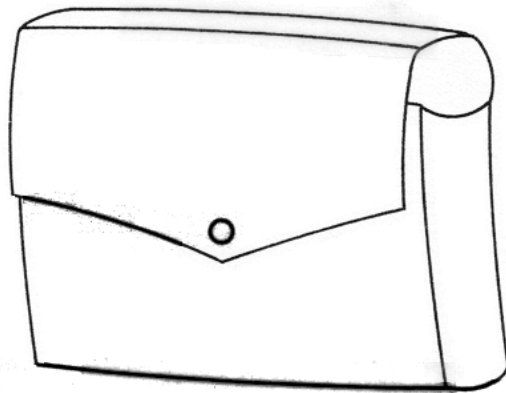
2

3

(3)

(Total 11 marks)

2. The clutch bag sketched below is produced for the evening wear market. It is made from cotton fabric.



(a) Give **two** reasons for using cotton to make this bag.

1

2

(2)

(b) The manufacturer had decided to change the appearance of the fabric by using colour.

(i) Name **three** different methods of colouring cotton fabric.

1

2

3

(3)

(ii) Choose **one** method from your answer to (b)(i) and explain, using notes and sketches, the stages of applying the colour to the cotton fabric.

(6)

(Total 11 marks)

3. The diagram below shows a child's winter jacket.



ADDITIONAL INFORMATION

The jacket is quilted.
The sleeves are elasticated.
It is designed for children aged 5-8 years.

(a) Two specification points for the jacket are:

- it must keep the user warm;
- it must keep the user dry.

Give **three** more points of specification which could be included in the specification for this garment. For each point, give a reason why it should be included.

1

Reason

2

Reason

3

Reason

(6)

(b) Give **three** specific fibres which would be suitable for making this garment.

1

2

3

(3)

(c) Give **one** property associated with **one** of the fibres you have named in (b) and explain how this property makes it suitable for this garment.

Property

Explanation.....

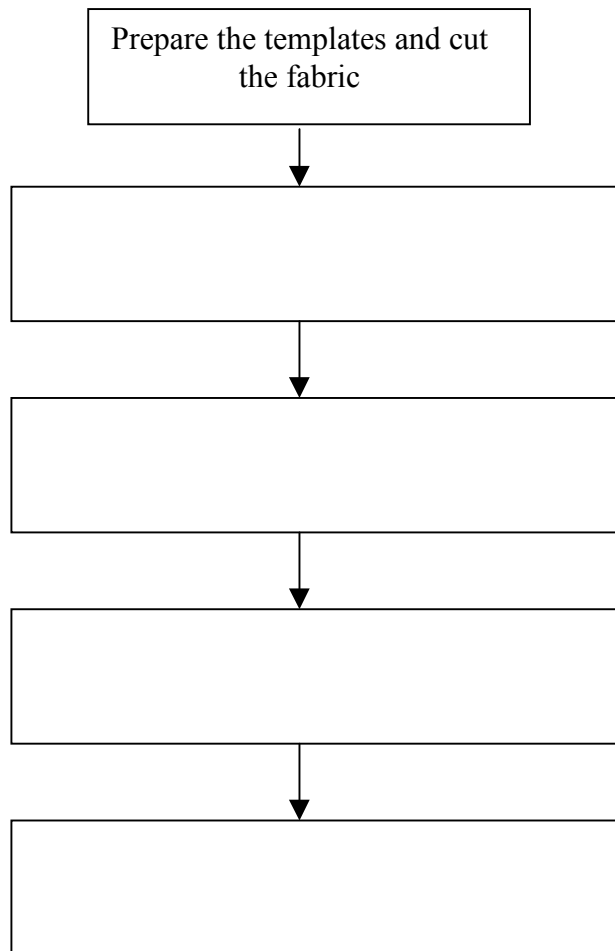
.....
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(4)

(d) The jacket is to be mass-produced.

Complete the diagram below to show the main stages of the production process.

The first stage has been done for you.



(5)

(e) The purpose of this product is to protect against the winter weather.

Leave blank

Describe how this jacket fulfils its purpose.

.....

.....

.....

.....

.....

.....

(4)

(Total 22 marks)

PAPER TOTAL 44 MARKS

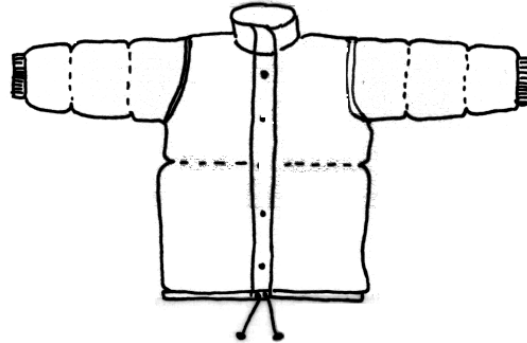
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Attempt ALL questions in the spaces provided.

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1. The diagram below shows a child's winter jacket.



ADDITIONAL INFORMATION

The jacket is quilted.
The sleeves are elasticated.
It is designed for children aged 5-8 years.

- (a) Two points of specification for the jacket are:

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- it must keep the user dry.

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1

Reason

2

Reason

3

Reason

(6)

- (b) Give **three** specific fibres which would be suitable for making this garment.

1

2

3

(3)

(c) Give **one** property associated with **one** of the fibres you have named in (b) and explain how this property makes it suitable for this garment.

Property

Explanation.....

.....

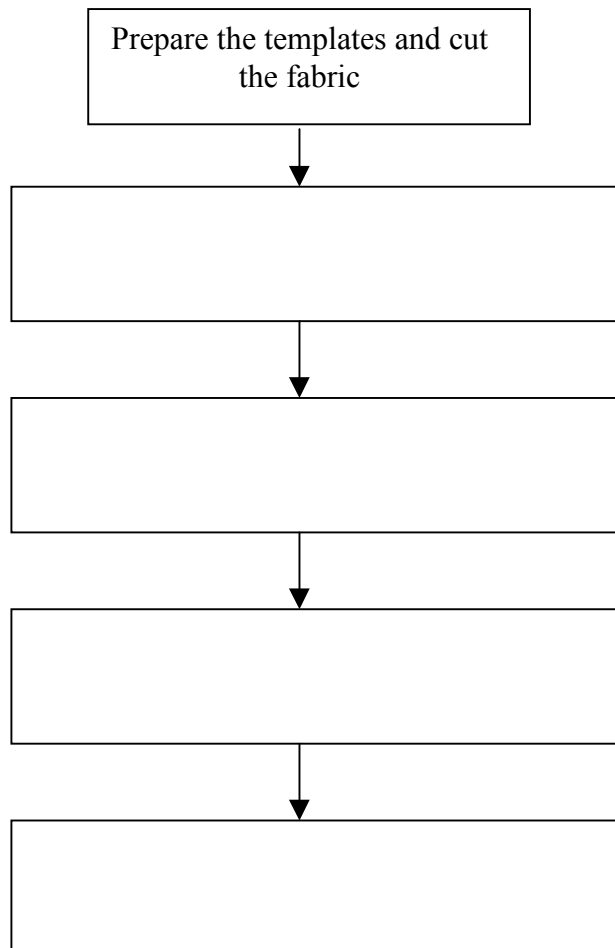
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The first stage has been done for you.



(5)

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(4)

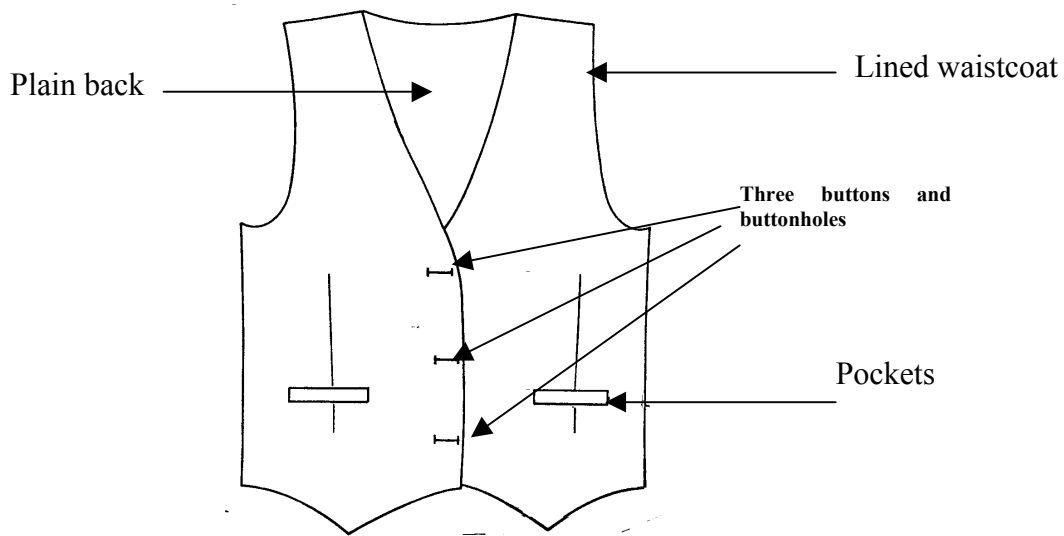
(Total 22 marks)

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TURN OVER FOR QUESTION 2

2. The waistcoat illustrated below is to be constructed in a school classroom.



(a) Choosing the correct equipment to cut out the pattern pieces is important. A student could use cutting out shears or pinking shears.

Give an advantage of using each piece of equipment and justify **one** of your answers.

Cutting out shears

Pinking shears.....

Justification.....

.....

(3)

(b) In the space below, draw the pattern pieces needed to make the waistcoat and add the commercial pattern markings to indicate the following:

- straight grain;
- seam allowance;
- buttons and buttonholes.

(6)

(c) The waistcoat is to be produced in a checked fabric. The fabric must ensure a quality finish for the checked waistcoats.

Explain **one** point that must be considered when cutting the pattern pieces from the checked fabric to ensure a quality finish.

.....
.....

(2)

(Total 11 marks)

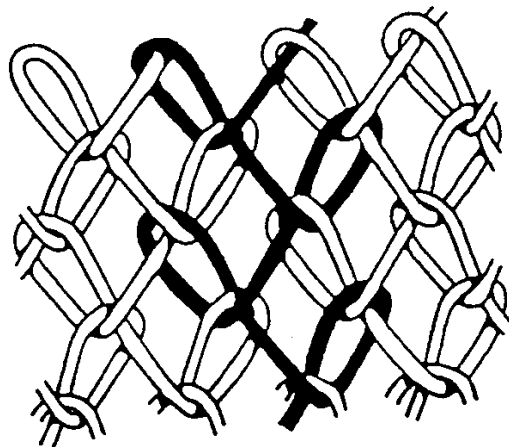
3. Knitted fabric is widely used in today's clothing market.

(a) (i) Describe **three** qualities of weft knitted fabrics that make them suitable for clothing products.

- 1
-
- 2
-
- 3
-

(6)

(ii) Look at the diagram below of a warp-knitted fabric.



Explain **one** advantage that warp-knitted fabrics have over weft knitted fabrics.

-
-
-

(3)

(iii) Use notes and sketches to show the construction of weft knitted fabrics.

*Leave
blank*


(2)

(Total 11 marks)

PAPER TOTAL 44 MARKS

END

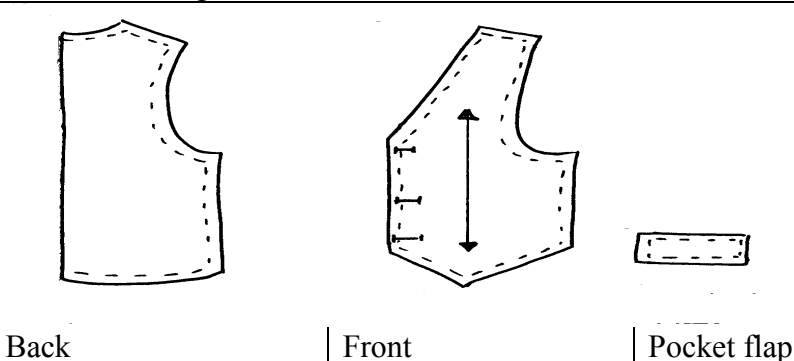
DESIGN AND TECHNOLOGY: TEXTILES TECHNOLOGY (3971/2F)
SHORT COURSE FOUNDATION TIER MARK SCHEME

Qu.	Prt Qu.	Sub Qu.	Detailed Possible Answers	Mark Alloc.	Sub. Total
1	(a)	(i)	Name: Flat-bed press Name: Presser foot Name: Pinking shears	3x1	
		(ii)	Use: Large flat-bed press with lid that is lowered to create pressure Use: The presser foot is attached to sewing machine, with hole in centre for sewing needle Use: To provide a zig-zag edge when cutting	3x1	(6)
	(b)		Iron symbol Correct number of spots 	1 1	(2)
	(c)		Unplug when not in use Check state of flex Use the correct fuse	3x1	(3)
					(11)
2	(a)		Any 2 appropriate reasons	2x1	(2)
	(b)	(i)	Screen printing; tie dye; resist dye; silk printing	3x1	(3)
		(ii)	Tie and dye –marble effect; stripper and pleats circles; square tied patterns. One of the oldest methods of dyeing cloth. Areas of fabric are tied with thread and immersed in dye. The tightness of the thread resists the dye and prevents it penetrating to the tied areas. (resist dye) Batik – originated in Java by hand. Now adapted for machines. Areas of fabric are covered in wax removed by heat. Where wax has cracked during process is repeated for each colour. Screen Printing: A type of stencilling by hand and machine. The screens are the width of the fabric and the length of the pattern repeat. The screens are covered with silk, organdy, nylon or glass fibre. Designs are transferred by photographic method. Colour is forced through mesh by a squeegee; each colour uses a different screen. The dye is heat set. Silk painting: Patterns are applied to silk using a gutta pen, which puts down a resistant outline. The spaces are then filled with silk paint which spreads across the fabric. The paint is heat set.	6x1	(6)
					(11)

Qu.	Prt Qu.	Sub Qu.	Detailed Possible Answers	Mark Alloc.	Sub. Total
3	(a)		Accept any three relevant points of specification and reasons eg Point: Hood Reason: To keep head dry and warm Point: Fastenings Reason: To keep out wind and rain Point: Lightweight Reason: To keep extra weight to a minimum Point: Warm lining Reason: To keep child warm	6x1	(6)
	(b)		Polyester; Nylon; Cotton	3x1	(3)
	(c)		Properties could include: Polyester –strong; shrink resistant; lightweight Nylon – strong; water resistant; quick drying Cotton – showerproof (with finish)– washable + clear reason for choice	1+3	(4)
	(d)		Sort into bundles for machinists Attach pockets to fronts Top stitch Join shoulder seams –front back Construct collar Attach to jacket Join sleeves to bodice Stitch through cuff to waist band Complete casing at waist Complete casing at buttonholes Attach buttons Construct hood Correct sequence	4x1 1	(5)
	(e)		Points could include: Quilting provides additional warmth Elasticated cuffs provide additional warmth Hood protects head Front fastening/ drawstring add to warmth	2x2	(4)
					(22)
			TOTAL FOR PAPER 44 MARKS		

**DESIGN AND TECHNOLOGY: TEXTILES TECHNOLOGY (3971/2H)
SHORT COURSE HIGHER TIER MARK SCHEME**

Qu.	Prt Qu.	Sub Qu.	Detailed Possible Answers	Mark Alloc.	Sub. Total
1	(a)		Accept any three relevant points of specification and reasons eg Point: Hood Reason: To keep head dry and warm Point: Fastenings Reason: To keep out wind and rain Point: Lightweight Reason: To keep extra weight to a minimum Point: Warm lining Reason: To keep child warm	6x1	(6)
	(b)		Polyester; Nylon Cotton	3x1	(3)
	(c)		Properties could include: Polyester –strong; shrink resistant; lightweight Nylon – strong; water resistant; quick drying Cotton – showerproof (with finish)– washable + clear reason for choice	1+3	(4)
	(d)		Sort into bundles for machinists Attach pockets to fronts Top stitch Join shoulder seams –front back Construct collar Attach to jacket Join sleeves to bodice Stitch through cuff to waist band Complete casing at waist Complete casing at buttonholes Attach buttons Construct hood Correct sequence	4x1 1	(5)
	(e)		Points could include: Quilting provides additional warmth Elasticated cuffs provide additional warmth Hood protects head Front fastening/ drawstring add to warmth	2x2	(4)
					(22)

Qu.	Prt Qu.	Sub Qu.	Detailed Possible Answers	Mark Alloc.	Sub. Total
2.	(a)		Cutting out shears – long blades therefore long straight cuts, will tackle thick and fine fabric	1	(3)
			Pinking shears – finishes edge; help to prevent fraying even when shape can find difficulty cutting knitted fabrics + justification of either	1 1	
	(b)		Pattern pieces Pattern markings	3x1 3x1	(6)
			 <p>Back Front Pocket flap</p>		
	(c)		Ensuring the straight grain is maintained so that the checks remain straight OR Ensure checks match at key points e.g. front fastenings	2	(2)
					(11)
3	(a)	(i)	Ability to stretch and regain shape; comfortable – moulds to shape; Warmth – air trapped ∴ makes them warmer; Retains shape when washed	3x2	(6)
		(ii)	Warp knitted will not fray or ladder because the warp threads are interlocked by knitting sideways	3x1	(3)
		(iii)	Diagram which clearly shows features/construction of weft knitted fabric.	2x1	(2)
					(11)
TOTAL FOR PAPER 44 MARKS					

**DESIGN & TECHNOLOGY: TEXTILES TECHNOLOGY (3971)
SPECIFICATION GRID**

PAPER 2F				
Quest	Assessment objective tested	Content covered by question	Question style/type	Marks
1	AO1	Preparing, processing and finishing materials.	Structured question on a theme.	Total 11
2	AO1	Classification and selection of materials and components.	Structured question on a theme.	Total 11
3	AO3	Design and market influence.	Product analysis – candidates are asked to analyse a product following the analysis process.	Total 22
PAPER 2H				
Quest	Assessment objective tested	Content covered by question	Question style/type	Marks
1	AO3	Design and market influence.	Product analysis – candidates are asked to analyse a product following the analysis process.	Total 22
2	AO1	Preparing, processing and finishing materials.	Structured question on a theme.	Total 11
3	AO1	Classification and selection of materials and components.	Structured question on a theme.	Total 11

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