

Write your name here	
Surname	Other names
Centre Number	Candidate Number
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Edexcel GCSE	
Design and Technology: Textiles Technology Unit 2: Knowledge and Understanding of Textiles Technology	
Tuesday 22 June 2010 – Morning Time: 1 hour 30 minutes	Paper Reference 5TT02/01
You do not need any other materials.	Total Marks
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Instructions

- Use **black** ink or ball-point pen.
- If pencil is used for diagrams/sketches it must be dark (HB or B). Coloured pens, pencils and highlighter pens must **not** be used.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided
– *there may be more space than you need.*

Information

- The total mark for this paper is 80.
- The marks for **each** question are shown in brackets
– *use this as a guide as to how much time to spend on each question.*
- Questions labelled with an **asterisk** (*) are ones where the quality of your written communication will be assessed
– *you should take particular care on these questions with your spelling, punctuation and grammar, as well as the clarity of expression.*

Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.

Turn over ►

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Answer ALL the questions.





For each question 1 to 10, choose an answer A, B, C or D. Put a cross in the box indicating the answer you have chosen . If you change your mind about an answer, put a line through the box and then mark your new answer with a cross .

1 Which **one** of these fibres comes from an animal source?

- A Linen
- B Viscose
- C Silk
- D Cotton

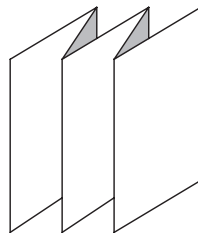
(Total for Question 1 = 1 mark)

2 Which **one** of these symbols shows that the product is able to be hand washed?

- A 
- B 
- C 
- D 

(Total for Question 2 = 1 mark)

3 The diagram below shows a method of reducing fullness in fabric.



Which **one** of the following does the diagram show?

- A Gathers
- B Darts
- C Pleats
- D Elastic

(Total for Question 3 = 1 mark)



4 Which **one** of the following describes layplanning?

- A An arrangement of pattern pieces as a sewing guide
- B An arrangement of pattern pieces to ensure the best use of fabric
- C The arrangement of fabric in layers
- D The arrangement of pattern pieces so they fill up the fabric

(Total for Question 4 = 1 mark)

5 Which **one** of the following is used to stabilise (stiffen) fabric?

- A Interfacing (Vilene)
- B Carbon paper
- C Elastic
- D Ribbon

(Total for Question 5 = 1 mark)

6 Wool is often blended with cashmere because:

- A both fibres cost the same
- B wool increases the overall cost of the fabric
- C wool lowers the overall cost of the fabric
- D neither fibre can be machine washed

(Total for Question 6 = 1 mark)

7 Which **one** of these surface decoration techniques is **not** a resist method?

- A Batik
- B Tie and dye
- C Silk painting
- D Block

(Total for Question 7 = 1 mark)



8 Which **one** of the following fabrics is made using the weft knitted technique?

- A Velour
- B Rib
- C Lace
- D Net

(Total for Question 8 = 1 mark)

9 Chromatic textiles are ones that:

- A change shape according to the environment and the wearer
- B change colour according to the environment and the wearer
- C release a scent when they sense warmth
- D release a scent when the temperature drops

(Total for Question 9 = 1 mark)

10 Lamination is a process that:

- A joins together layers of fabric by sewing them together
- B uses machinery to change the surface of the fabric by brushing
- C applies a coating to only one side of a fabric
- D joins together two or more fabrics using heat and glue

(Total for Question 10 = 1 mark)







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5
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11 (a) The table below shows some tools and equipment.

Complete the table below by giving the missing names and uses.

Tools/Equipment	Name	Use
	(1)	To measure accurately
	Embroidery rings	(1)
	(1)	To remove hand and machine stitches and to cut open buttonholes
	Pins	(1)



(b) Describe why patchwork is environmentally friendly.

(2)

.....
.....

(c) Modelling and prototyping take place to help develop textile products.

Give **two** reasons why a toile is made before full scale manufacturing takes place.

(2)

1

2

(d) Describe **one** benefit to the manufacturer of the cutting process used in high volume production.

(2)

.....
.....
.....

(e) Slippery and thick fabric must be assessed carefully before cutting.

(i) Give **one** reason why a manufacturer needs to consider how slippery the fabric is when cutting in high volume production.

(1)

.....

(ii) Give **two** reasons why a manufacturer needs to consider how thick the fabric is when cutting in high volume production.

(2)

1

2



(f) Wedding dresses are often made of silk as the fibres are fine and soft which make them comfortable to wear.

(i) Explain **one** other advantage of making the wedding dress out of silk.

(2)

.....

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(ii) Explain **one** disadvantage of making the wedding dress out of silk.

(2)

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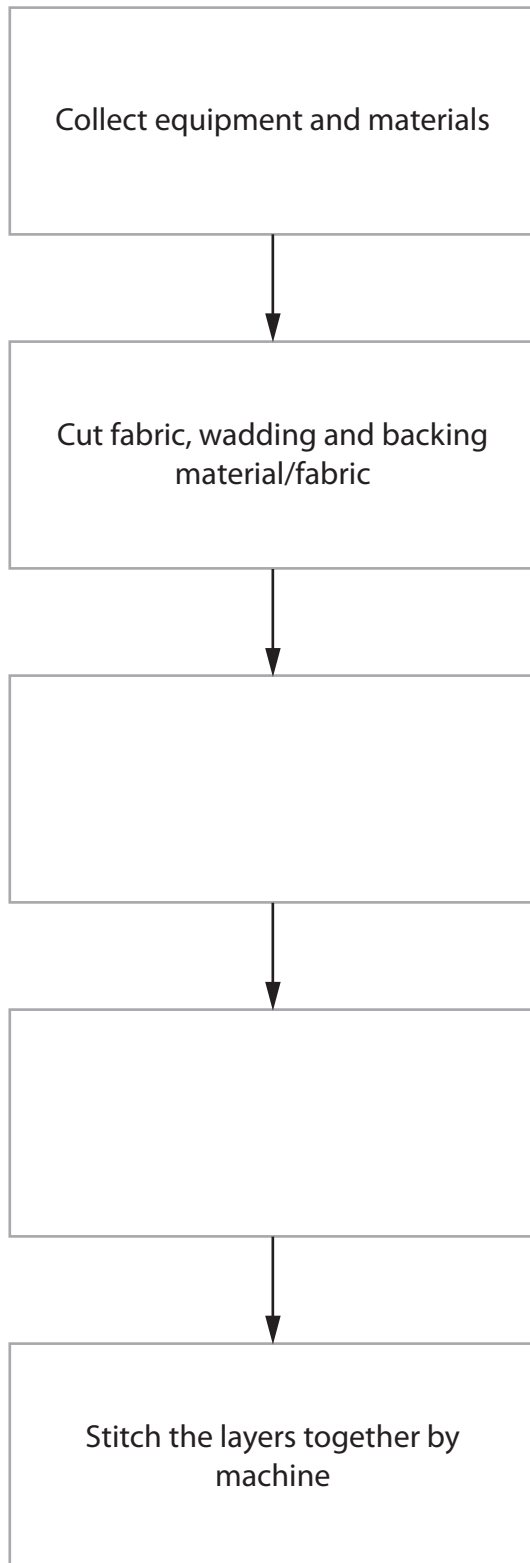
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(g) Complete the block diagram below to show the main stages of the construction of a piece of quilted fabric in the classroom.

The first two stages and the last stage have been done for you.

(2)



(Total for Question 11 = 19 marks)



12 You have been asked to design a garment to be worn by three year olds after they come out of water.

The specification for the garment is that it must:

- consist of only one item
- be attractive to a young child
- be made from absorbent fabric
- be warm to wear
- be safe to wear
- be easy to put on and take off
- use decorative techniques
- be suitable for batch production.

In the spaces opposite use sketches and, where appropriate, brief notes to show **two different** design ideas for the garment that meet the specification points above.

Candidates are reminded that if a pencil is used for diagrams/sketches it must be dark (HB or B).

Coloured pens, pencils and highlighter pens must **not** be used.

PLEASE DO NOT WRITE OR DRAW IN THIS SPACE.

PLEASE USE THE SPACES OPPOSITE FOR YOUR DESIGNS.



Design idea 1

(8)

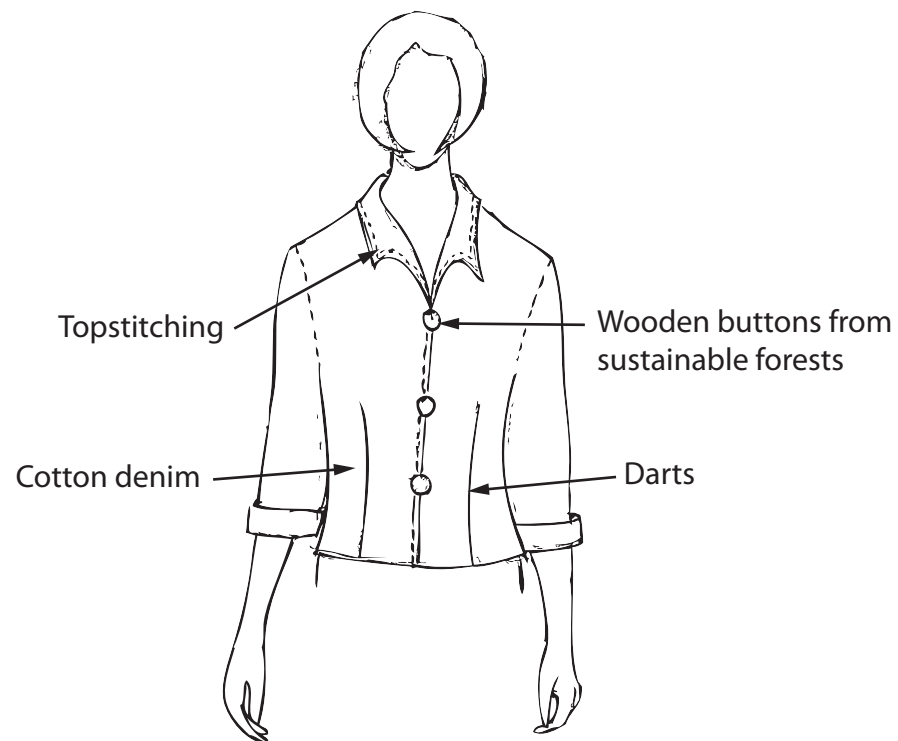
Design idea 2

(8)

(Total for Question 12 = 16 marks)



13 The drawing below shows a summer jacket made from light blue denim.



The fabric of the jacket is denim twill weave.

(a) Give **two** properties of denim fabric that make it suitable for this jacket.

For each property, justify your answer.

(4)

Property 1

Justification

Property 2

Justification



(b) The designer wishes to add a motif to the jacket.

Describe **one** benefit of using CAD/CAM for this process.

(2)

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(c) Explain why the jacket is successful in meeting the following specification points:

(i) it is suitable to be worn in summer

(2)

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.....

(ii) it is easy to put on and take off.

(2)

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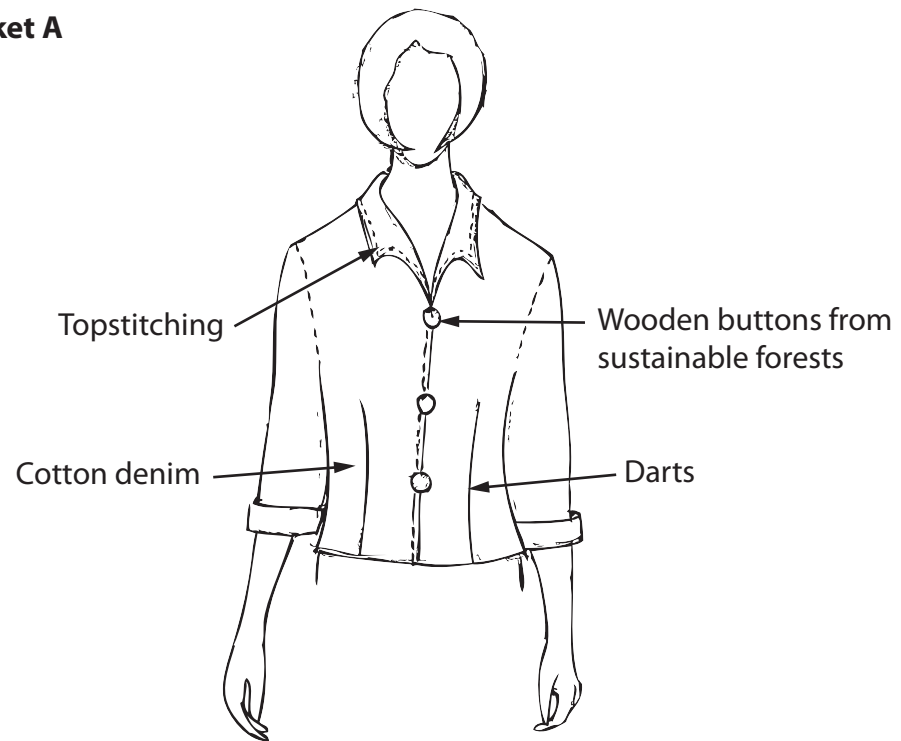
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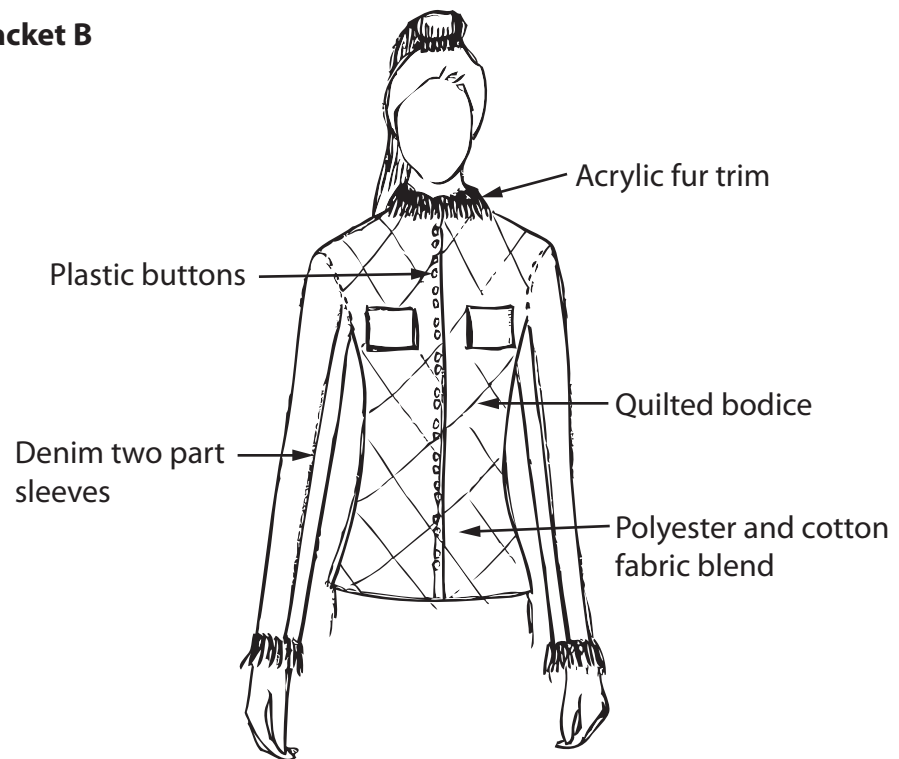


*(d) Two annotated drawings of jackets are shown below.

Jacket A



Jacket B



14 CAD/CAM is used in the manufacturing of textile products.

(a) Give **two** types of CAM equipment used in the manufacturing of textile products.

(2)

1

2

(b) Explain **two** benefits to the designer of 3D modelling using CAD.

(4)

1

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2

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(c) Describe **one** reason why it is important for designers to consider the impact that colours have when designing for different cultures.

(2)

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(d) Microfibre is a modern synthetic fibre.

(i) Give **one** feature of a microfibre.

(1)

(ii) Explain **one** advantage and **one** disadvantage to the consumer of polartec fleece, rather than a traditional fleece.

(4)

Advantage

Disadvantage



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