

Centre Number						Candidate Number				
Surname										
Other Names										
Candidate Signature										

For Examiner's Use	
Examiner's Initials	
Question	Mark
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
TOTAL	



General Certificate of Education  
Advanced Subsidiary Examination  
June 2009

# Design and Technology: TEXT1 Product Design (Textiles)

Unit 1 Materials, Components and Application

Tuesday 19 May 2009 9.00 am to 11.00 am

**For this paper you must have:**

- normal writing and drawing instruments
- Insert Sheet.

**Time allowed**

- 2 hours

**Instructions**

- Use black ink or black 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 Section A.
- Answer **one** question from Section B.
- Answer Section C.
- You must answer the questions in the spaces provided. Answers written in margins or on blank pages will not be marked.
- Do all rough work in this book. Cross through any work you do not want to be marked.

**Information**

- The maximum mark for this paper is 80.
- There are 20 marks for each of Sections A and B and 40 marks for Section C.
- The marks for questions are shown in brackets.
- You will be marked on your ability to
  - use good English,
  - organise information clearly
  - use specialist vocabulary where appropriate.

**Advice**

- Illustrate your answers with sketches and/or diagrams wherever you feel it is appropriate.



J U N O 9 T E X T 1 0 1

**SECTION A**

Answer **all** questions in this section.

- 1** Place **each** of the fibres listed below in the correct box in the table.  
You should use each fibre only once.

viscose                  linen                  Tactel®                  elastane                  silk

Natural cellulose	Natural protein	Regenerated	Synthetic

(5 marks)

5

- 2** List **two** properties of non-woven fabrics.

1 .....

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2 .....

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(2 marks)

2

- 3** Fibres must be twisted together to make yarns before they can be made into fabrics.  
Give **two** reasons why the twisting is important.

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2 .....

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(2 marks)

2



4 (a) Explain the difference between the *selvedge* and *raw edge* of a woven fabric.

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(2 marks)

4 (b) What is meant by the *straight grain* of a woven fabric?

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(1 mark)

3

5 (a) Explain the term *directional pile* as applied to fabric.

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(2 marks)

5 (b) Name **two** fabrics which have a directional pile.

1.....  
2.....

(2 marks)

4

Turn over ▶



6 What is meant by *colour fastness* of fabrics?

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(2 marks)

2

7 What is meant by *smart fabric*?

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(2 marks)

2



**SECTION B**

Answer **one** question in this section, either Question 8 or Question 9.

**8** Study the photograph of the bag (**Figure 1**) shown on the Insert Sheet.

**8** (a) The bag is made from a plain weave cotton fabric.  
Critically evaluate the use of this fabric for the bag.

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*(5 marks)*

**Turn over ▶**



**8 (b) (i)** The bag has a polyester lining.  
Evaluate the use of polyester for this lining fabric.

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*(4 marks)*

**8 (b) (ii)** Explain the reasons for lining a bag.

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*(4 marks)*



**8** (c) Explain the use of top stitching on the edges of the bag.

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*(2 marks)*

**8** (d) Justify the use of components in this bag.

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*(5 marks)*

**Turn over ▶**

<b>20</b>



Do **not** answer this question if you have answered Question 8.

9 Study the photographs of the jacket (**Figures 2 and 3**) shown on the Insert Sheet.

9 (a) The outer fabric is made from polyester in a plain weave structure.  
Evaluate the suitability of this fabric for the jacket.

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(5 marks)





9 (b) The label shown below is attached to the jacket.



Explain what it tells the consumer in relation to this jacket.

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*(3 marks)*

9 (c) Explain the reasons for lining the jacket.

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*(4 marks)*

9 (d) Explain the use of piping on parts of the jacket.

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*(2 marks)*

**Turn over ▶**



9 (e) The pocket flaps are fastened with poppers.

9 (e) (i) Suggest **one** other component which could be used to fasten the flaps.

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(1 mark)

9 (e) (ii) Compare the use of poppers to fasten the flaps with the component you selected in part (e)(i).

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(3 marks)

9 (f) The seams of the jacket have been top-stitched.  
Give **two** reasons for this.

1.....  
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2.....  
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(2 marks)

20



**SECTION C**

You must answer this question.

**10** Study the photographs of the rag doll (**Figures 4 and 5**) and the swing ticket attached to the doll (**Figure 6**) shown on the Insert Sheet.  
Refer to them when answering the questions about this textile product.

**10 (a)** Analyse the ways in which the designer of the doll has targeted the consumer market for which it is intended.

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*(4 marks)*

**Question 10 continues on the next page**

**Turn over ▶**



**10** (b) The doll is filled with polyester fibre.  
Explain why this has been selected for the filling.

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(9 marks)

**Turn over for the next question**

**Turn over ▶**







**Draw your diagrams in the space below**

**Question 10 continues on the next page**

*(8 marks)*

**Turn over ▶**





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**DO NOT WRITE ON THIS PAGE  
ANSWER IN THE SPACES PROVIDED**



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