

General Certificate of Education  
January 2005  
Advanced Subsidiary Examination



**DESIGN & TECHNOLOGY: PRODUCT DESIGN PD1T**  
**(TEXTILES)**  
**Unit 1 Materials and Components**

Monday 10 January 2005 Morning Session

**In addition to this paper you will require:**

- a lined answer book (AB08) which is provided separately;
- normal writing and drawing instruments;
- a colour Insert Sheet (enclosed).

Time allowed: 1 hour 30 minutes

**Instructions**

- Use blue or black ink or ball-point pen. Pencil and coloured pencils should be used only for drawing.
- Write the information required on the front of your answer book. The *Examining Body* for this paper is AQA. *The Paper Reference* is PD1T.
- Answer Question 1 and any **two** of Questions 2 to 4.
- Use the Insert Sheet included to help you answer **Question 1**.

**Information**

- The maximum mark for this paper is 100.
- 40 marks are allocated to Question 1, 28 to each of Questions 2 to 4 and 4 marks overall are for quality of written communication.
- Mark allocations are shown in brackets.
- This paper carries 30 per cent of the total marks for AS and 15 per cent for Advanced Level.
- You are reminded of the need for good English and clear presentation. The quality of your written communication will be assessed across all questions.

**Advice**

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

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Answer Question 1.

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**1** Study the fashion illustrations on the Insert Sheet.

Answer the following questions.

- (a) Both these jackets are intended for winter wear.  
Explain how the wearer is kept warm by the fabric structure of:
- (i) Jacket A; *(6 marks)*
  - (ii) Jacket B. *(8 marks)*
- (b) (i) Compare the insulation efficiency of the fastenings in the two jackets. *(5 marks)*
- (ii) Compare the other features of the jackets that make them appropriate for winter wear. *(6 marks)*
- (c) The outer fabric of both jackets is made from polyester fibre.  
Describe the qualities of polyester that make it appropriate for the jackets shown. *(9 marks)*
- (d) Which jacket do you consider to be best value for money?  
Explain your reasons for the choice you make. *(6 marks)*

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Answer any **two** questions from 2, 3 and 4.

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2 Cotton is often considered to be an *easy care* fabric.

- (a) (i) Explain the properties of cotton that make it easy to launder. (7 marks)
- (ii) What are the problems that make cotton fabrics difficult to care for? (7 marks)
- (b) How can cotton fabrics be made easier to care for? (4 marks)
- (c) Explain the care advice you would recommend for:
- (i) cotton corduroy trousers; (5 marks)
- (ii) a cotton polyester duvet cover. (5 marks)

3 It is important to consider fabric characteristics in the light of intended end use.

- (a) Giving examples, explain:
- (i) what is meant by *pattern repeat* in a fabric; (6 marks)
- (ii) how fabric choice for various textile products might be affected by the pattern repeat. (8 marks)
- (b) Giving examples, explain:
- (i) what is meant by *directional pile* in a fabric; (6 marks)
- (ii) how fabric choice for various textile products might be affected by a directional pile. (8 marks)

4 Explain the differences between each of the following.

- (a) Staple and filament yarn (6 marks)
- (b) Natural and synthetic fibres (6 marks)
- (c) Button and toggle fastenings (4 marks)
- (d) Warp knit and weft knit (6 marks)
- (e) Lining and underlining (6 marks)

**END OF QUESTIONS**

**Jacket A**

100% polyester suedette bonded to polar fleece (68% polyester 32% acrylic).  
Zip fastener. Hood is also lined with fleece fabric. Zip, neck and hood are finished with suedette binding.  
Machine wash. **£45**

The photograph shows a loose-fitting olive green fashion jacket made from a bonded suedette fabric. It has long sleeves and a loose-fitting hood.

The centre front and hood edges are finished with a toning suedette binding. A visible chunky zip fastens the jacket from the hem edge to the neck.

The jacket is just below the waist in length. There are two open patch pockets, one either side of the zip, at the bottom of the jacket.

The photograph is not reproduced here due to third-party copyright constraints.



**Jacket B**

Quilted both sides with goose down filling.  
Tightly woven 100% polyester microfibre shell with 100% nylon lining.  
2-way zip fastener with storm flap. Snap off hood lined with polyester fleece.  
Machine wash. **£88**

Source: Lands' End