General Certificate of Education June 2005 Advanced Level Examination



DESIGN AND TECHNOLOGY: PRODUCT DESIGN PD6T (TEXTILES) Unit 6 Written Paper

Friday 17 June 2005 1.30 pm to 4.30 pm

In addition to this paper you will require:

- an unlined answer book (7024) which is provided separately;
- normal writing and drawing instruments.

Time allowed: 3 hours

Instructions

- Use blue or black ink or ball-point pen. Pencil and coloured pencils should only be used 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 PD6T.
- Answer one question from each of Sections A, B and C and one other question from any section.

Information

- The maximum mark for this paper is 100.
- 24 marks are allocated to each question and 4 marks overall are allocated for quality of written communication.
- Mark allocations are shown in brackets.
- This paper carries 20 per cent of the total marks 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.

H/S05/PD6T PD6T

Answer **one** question from **each** of the three sections and **one** other question from any section.

SECTION A

Materials and Components

1 Many designs, patterns and special effects can be 'engineered' into fabrics during production.

Describe in detail how **four** *different* and distinctive patterned fabrics have been created through construction methods rather than through printing or finishing techniques.

In each case suggest applications for the use of these fabrics.

 $(4 \times 6 \text{ marks})$

2 In the technological development of new textile products, including new fibres and fabrics, nature has proved a source of inspiration and has in many cases been imitated.

Give detailed descriptions of three recent textile developments that have imitated nature.

 $(3 \times 8 \text{ marks})$

SECTION B

Design and Market Influences

3 Many textiles products can be considered design icons of their time.

Choose **two** of the following categories and identify **one** specific product from each category.

Printed textiles Accessories Furnishings Fashion separates

For **each** product, explain why it can be regarded as an icon of design and how it reflects the time in which it was created. ($2 \times 12 \text{ marks}$)

- 4 Marketing can be very important when planning a range of products.
 - (a) What elements of the marketing function would the textiles industry need to take into consideration when planning a new range of products? (16 marks)
 - (b) What constraints might affect retail buying decisions? (8 marks)

TURN OVER FOR SECTION C

SECTION C

Processes and Manufacture

- 5 Describe some of the modern production facilities and manufacturing systems which enable textile manufacturers to respond quickly to change. (24 marks)
- 6 (a) Describe three different industrial methods of dyeing yarn and/or fabric. $(3 \times 4 \text{ marks})$
 - (b) What practices could a dye house implement when addressing environmental issues? (6 marks)
 - (c) Explain why colour fastness is important to the consumer.

 What labelling could be provided to assist care and maintenance? (6 marks)

END OF QUESTIONS