

General Certificate of Education
June 2007
Advanced Subsidiary Examination



DESIGN AND TECHNOLOGY: PRODUCT DESIGN PD3D
(3-D DESIGN)
Unit 3 Design and Market Influences

Tuesday 5 June 2007 9.00 am to 10.30 am

For this paper you must have:

- a lined answer book (AB08) which is provided separately
- normal writing and drawing instruments.

Time allowed: 1 hour 30 minutes

Instructions

- Use blue or black ink or ball-point pen. Use pencil and coloured pencils 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 PD3D.
- Answer **all** questions.
- Two sheets of A3 paper are provided for use with **Question 2**. No further sheets are to be used.
- Securely attach the two sheets of A3 paper to your answer book at the end of the examination.

Information

- The marks for questions are shown in brackets.
- The maximum mark for this paper is 100.
Four of these marks will be awarded for using good English, organising information clearly and using specialist vocabulary where appropriate.

Advice

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

Answer **all** questions.

You are advised to spend about 20 minutes on Question 1 and about 1 hour 10 minutes on Question 2.

- 1 (a) Describe how a designer might use the following graphical communication methods in the design process.
- (i) A mood board *(4 marks)*
 - (ii) Thumb-nail/quick sketches *(4 marks)*
 - (iii) A 3-D rendering *(4 marks)*
- (b) Explain how the following factors might influence design decisions of a designer who is developing a range of fashionable jewellery suitable for the 16–21-year-old age group.
- (i) Target market (potential users) *(4 marks)*
 - (ii) Ergonomic and anthropometric issues *(4 marks)*

Use the two separate A3 sheets provided to answer Question 2 where appropriate.

Clearly indicate the sections of the question you answer on the sheets.

2 You are asked to produce design ideas for a range of jewellery/body adornment pieces. Your design ideas should meet the following specification.

- Reflect the interests and fashions of the 16–21-year-old age group
- Be a fun item
- Be in a budget price range
- Make innovative use of modern materials and/or technology
- Be suitable for batch production.

(a) On sheet **1** produce a range of annotated initial design ideas. *(15 marks)*

(b) On sheet **2** develop a final design solution for **one** item of jewellery/body adornment. Your final design should include the following:

- a final presentation drawing
- details of construction
- details of materials and components
- appropriate dimensions
- how your design meets the specification.

Marks will be awarded for:

- | | |
|---|-------------------|
| (i) quality of communication | <i>(10 marks)</i> |
| (ii) originality and innovation of product | <i>(10 marks)</i> |
| (iii) appropriateness of materials and components | <i>(10 marks)</i> |
| (iv) methods of construction | <i>(10 marks)</i> |
| (v) dimensions and dimensioning | <i>(6 marks)</i> |
| (vi) details of finish | <i>(5 marks)</i> |
| (vii) how the design meets the specification. | <i>(10 marks)</i> |

END OF QUESTIONS

There are no questions printed on this page