

General Certificate of Secondary Education June 2012

Design and Technology:
Graphic Products

45501

(Specification 4550)

Unit 1: Written Paper

Report on the Examination

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SECTION A

The vast majority of students attempted all the questions within the time allocation. The handwriting of some candidates however, was difficult to read and did cause problems for examiners in marking answers given.

Most candidates did not have any problems in accessing the question paper and most centres seemed to have prepared quite well for this paper.

Question 1 – Designing

- Q1 (a) There was good evidence of candidates being well prepared prior to the exam, with many candidates able to reference the three specification points with each idea. Most candidates provided a 3-D sketch of a charity box and a suitable 1 piece surface development (net). Although there were a lot of rectangular boxes with different headers, sketching on the whole was good as was the annotation. However, only a few candidates showed very creative solutions.
- **Q1 (b)** This question was generally well done. Most surface developments (nets) were adequately drawn with minor omissions of detail, but most would fit together, (correct number of faces and correct dimensions) even when the net was quite complex.
 - Many candidates lost marks as they drew the wrong number of glue tabs or put glue 'blobs' on the edges of the faces of the box. Some candidates made a good attempt at drawing locking and crash bases and nearly all included a suitable money slot. Overall the quality of line work was good.
- Q1 (c) There were many examples of creative solutions, the majority being drawn in isometric, but there were still too many oblique drawings. A number of candidates did not include the charity name in a suitable letter style or a suitable image. Virtually all candidates indicated colour, mainly through rendering the drawing, though some did use labels.
- **Q1 (d)** Most candidates responses provided an evaluation which was of a descriptive nature. A few candidates evaluated the charity box as opposed to the surface decoration (image).

Question 2 – Modelling Materials

This was quite well attempted but there were few candidates demonstrating an accurate knowledge of materials. Most were unable to give appropriate advantages/disadvantages for all three materials and health and safety was limited to 'take care when using a knife or sharp corners'.

Question 3 – CAD/CAM

Q3 (a) Candidates responded in a variety of ways to this question. A small number of candidates had difficulty in answering this question. The specification makes references to CAD/CAM (particularly in the section dealing with 'Information and Communication Technology' and 'Processes and Manufacture'). Therefore it is important that candidates have an understanding of CAD/CAM as there is an expectation, that during the lifetime of the specification, we will be assessing this part of the content. A wide range of answers and approaches were acceptable and credit was given where knowledge was evident.

Q3 (b) (i) & (ii)

There was a mixed response to this question. Many candidates answered well but quite a number referred to general ICT advantages and disadvantages.

Q3 (c) Many centres had clearly prepared their candidates well for this topic. A good knowledge of smart materials was evident and pupils were able to apply their knowledge to the scenario of preventing ticket fraud.

Question 4 – Printing

- **Q4 (a)** Many candidates correctly named the printing processes, but few gave correct reasons for choice and good knowledge of print runs was shown.
- **Q4 (b)** The vast majority of candidates demonstrated a good knowledge of the four printing process colours.
- **Q4 (c)** A high number of candidates correctly identified the printing process.
- **Q4 (d)** A significant number of candidates demonstrated limited understanding of Quality Control checks, specifically for a printed product.

Question 5 – Environment

- **Q5 (a)** Most candidates seemed to understand what 'over packaging' is and gave examples to support their answers. Candidates did fail to give structured responses which often led to repetition.
- Q5 (b) This question was generally answered well by a majority of candidates.
- **Q5 (c)** Explanation of copyright was well explained by the majority of candidates, but the examples were sometimes for 3-D objects.

Question 6 - Branding

Q6 (a) Wally Olins was known by most candidates.

Q6 (b) (i)

This was generally well answered. All candidates were reasonably successful with this and focussed their responses on colour.

Q6 (b) (ii)

The majority of candidates scored well on this question, showing a good understanding of the functions of the text style.

Q6b (iii)

This was very well answered by the majority of candidates.

Q6 (c) The majority of candidate responses seen suggested that they had a limited understanding of the concept of exploded drawings and simply resorted to copying the given views. Very few candidates had the parts in proportion or alignment and most made a very poor attempt at the hull and only a minority added the recesses on the hull.

Mark Ranges and Award of Grades

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