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General Certificate of Secondary Education

Design and Technology: Graphic Products

45501

Unit 1: Written Paper

Report on the Examination

2011 examination – June series

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SECTION A

Question 1

1 (a)
The vast majority of candidates attempted to design two ideas for a teaching aid to help primary school children learn how to tell the time. Whilst technical specification points could have been covered better, most candidates concentrated on the design aspects of the clock face.

Most candidates had moveable hands indicated on their designs but few managed to comply with all five design specification points. Some candidates did not give sufficient details of how the clock would be manufactured (net or sizes), or any assembly details or even how the clock would stand and be flat packed.

Centres should encourage candidates to practice drawing workable ideas, which may include additional drawings including sizes and nets. Annotation was often vague and unrelated to constructional details.

Candidates are reminded to design using graphic product materials and avoid using more resistant materials such as wood and metals.

It was very clear which centres had prepared their candidates for Section A and used the preparation sheet effectively. These candidate's ideas generally showed more creativity, originality and their ideas would have appealed more to a primary school audience.

1 (b) (i)
The majority of candidates had responded well to this question and shown some form of development. Most candidate's concentrated on the hand design and colour and few spent much time on the front design. Lettering was not well developed.

1 (b) (ii)
There was little evidence that candidates had studied fasteners beyond that of a split pin or click fastener. Too many candidates simply invented fasteners or 'pin' or tried to adapt a 'safety pin'.

1 (c)
It is important that candidates are able to sketch and communicate design ideas effectively and not many scored highly for the 3-D drawing. Most tended to be within the 3 – 4 banding. A number of candidates simply put together a form of oblique project. There were some excellent isometric sketches from those scoring higher marks. Candidates were not required to apply colour to the 3-D drawing.

1 (d)
Most candidates gained some marks for evaluating the effectiveness of their design as a teaching aid. In general most candidates tend not to be critical about their design or failed to suggest potential modifications. Most comments were either self congratulatory or simply descriptive.

SECTION B

Question 2

2 (a)
Many candidates gave a good response to this question and gained marks although there was repetition in some answers.

2 (b)
Some poor responses were given to this question. There was a general lack of understanding of the term 'batch production'. Many candidates did not provide a graphic product to support their answer.

2 (c) (i)
There was a mixed response to this question with only a small number of correct answers seen. Some candidates mentioned lithography but many responses were incorrect. Screen printing was awarded marks.

2 (c) (ii)
A fair response was seen but again there was no real depth of knowledge displayed by candidates and a lack of technical terminology was evident.

2 (d) (i) & (ii)
Responses to these questions seem to vary on a centre by centre basis but in the main responses given showed that candidates were unfamiliar with the terms. Phosphorescent ink was often confused with luminescence and reflective properties.

Question 3

3 (a)
Most candidates scored marks on this section showing a good general understanding of environmental issues, although not such a good understanding of the commercial aspects relating to the question.

Few candidates demonstrated enough depth to gain 3 marks in each of the two parts to the question with 2 marks being average score in each part. In general there was too much repetition between parts (a) (i) and (a) (ii).

3 (b)
Candidates demonstrated a limited knowledge of materials. There was a fair response to the sections headed 'product use' and 'bio-degradable' but a limited response to the section headed for 'why suitable'. The poorest responses were for foamboard, which many candidates assumed was 'Styrofoam'. Too many single word answers of 'strong' or 'light' were given without relating them to the use given.

Question 4

4 (a)
It was pleasing to note that most candidates attempted this question, although few used the graph to describe the product lifecycle. Instead they described the shape of the graph or repeated the words on it and did not refer to the vertical axis. Many candidates did not use the example of a seasonal greetings card to support their answer.

4 (b) & (c)
There was limited understanding of the term 'throw away society' from many of the candidates. Too many candidates focussed the issue of recycling to the exclusion of other issues.

Question 5

5 (a)
On the whole, this was a well answered question. Very few candidates put the music storage device in an incorrect orientation.

5 (b)
Responses seen suggested that there is room for candidate to further develop these techniques.

5 (c)
It was pleasing to note that in general the rendering of the screen was well attempted, but there was little evidence of stylised/conventional responses. Unfortunately too many candidates rendered the entire music storage device.

Question 6

6 (a)
It was pleasing to note that the candidates performed well in this question with most scoring over half of the marks. Most candidates created the basic net of the soap box, although few included correct dust flaps. There is an issue with line quality with many candidates using soft blunt pencils.

6 (b)
The response to the 'R' symbol was quite good but many candidates assumed the 'e' symbol was associated with European Legislation.

Question 7

7 (a)
'Robert Subuda' was correctly answered by most candidates. Too many candidates however ticked two responses incorrectly.

7 (b) (i)
Most candidates picked up marks on this question although it was noticeable that a number of candidates lost marks through not referencing the correct part of the card.

7 (b) (ii)
The use of generic terms such as 'knife' and 'glue' seems to be reducing, although there seemed to be limited evidence of 'creasing and folding' equipment beyond the back of a pair of scissors.

7b (iii)
Some candidates gave poor responses, as they did not attempt a 3-D sketch or take real care to make the sketch understandable. It was felt that the sketches were often too rushed.

In general it was noticeable that candidates displayed limited theoretical understanding and this is an area which needs to be explored in order for candidates to perform to the best of their ability, particularly on the section B part of the question paper.

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