

# CDT: DESIGN AND COMMUNICATION

Paper 7048/01

Structured

## General comments

Centres are to be congratulated on their thorough preparation of candidates for the examination. It was evident from the responses that Centres had covered the syllabus content and that candidates were able to demonstrate their knowledge and understanding under examination conditions.

Candidates were required to answer **Question 1** or **2 (Section 1)** and any two questions from **Questions 3, 4, 5** and **6 (Section 2)**. **Question 1** proved to be more popular than **Question 2**. **Questions 3** and **5** were the most popular choices from the optional questions. There was no evidence to suggest that candidates had insufficient time to answer three questions.

The overall performance of candidates was comparable to that of previous years. Candidates of all abilities appeared to find the paper accessible, resulting in a wide range of total marks out of 100 (90 plus down to a few below 10).

A small number of candidates made rubric errors, answering both **Questions 1** and **2** or attempting all 6 questions. It would be helpful if all Centres made the instructions clear to candidates at the start of the examination.

It is not necessary for Centres to tie scripts with string or staple them together as candidates are required to write their details on each sheet of paper. Completed candidate scripts should be placed in the despatch envelope in the order shown on the attendance register.

## Comments on specific questions

### **Section 1**

#### **Question 1**

Candidates had to answer either **Question 1** or **Question 2**. **Question 1** proved to be more popular than **Question 2**.

- (a) (i) The side view of the sunshade was generally completed to a good standard, with many candidates producing answers that scored full marks. Common errors were often caused by an incorrect height or width rather than a misunderstanding of the overall shape of the sunshade.
- (ii) The plan view was completed less successfully than the side view. Whilst many candidates managed to complete the roof correctly the 'overhang' and legs proved to be more challenging. Only a small number of candidates managed to score maximum marks on this question.
- (b) Responses to this question were pleasing in that most candidates were able to draw an equilateral triangle with an 80mm base. Far fewer candidates managed to draw a triangle that showed the true shape of the panel of the roof.
- (c) This proved to be the most challenging part of **Question 1** and a small number of candidates made no attempt to answer it at all. Some candidates failed to draw the upper rim correctly but picked up marks for the lower rim and the depth being correct. The base of the tube was drawn correctly by a large number of candidates but the height and the off-set were often incorrect.

- (d) Very few candidates managed to score maximum marks for this question. Only a small number of candidates produced a correct line of intersection. The enhancement by some candidates was impressive.

## Question 2

Candidates had to answer either **Question 1** or **Question 2**. **Question 2** proved to be less popular than **Question 1**.

- (a) (i) Sketches and notes were used to show a range of ideas for a diving board although the design was not always shown by the side of the pool. The frame and ladder were usually evident.
- (ii) Sketches and notes were used to show a range of ideas for a slide but very few candidates gave due consideration to the height of the slide.
- (b) (i) The outline shape of the pool was usually drawn in isometric and often to the correct overall size. Candidates were less successful in adding the depth to the pool. This question produced a good range of marks.
- (ii) The majority of candidates were successful in adding one of their designs for the diving board at the deep end of the swimming pool. The quality of the isometric drawing was very variable and a number of two dimensional responses were seen.
- (iii) The majority of candidates were successful in adding one of their designs for the slide at the shallow end of the swimming pool. The drawings were not always in isometric or to the correct scale.
- (c) A good range of sketches and notes were used to show ideas for the pictogram. A small number of candidates clearly did not understand the word pictogram and relied heavily upon words to convey the message.
- (d) The scale drawing of the hexagons was generally completed to a good standard, with many solutions correct to the overlay. Most pictograms included a ball and a red cross or diagonal.

## Section 2

### Question 3

This proved to be one of the most popular optional questions.

- (a) There was clear evidence that candidates understood how to draw a pie chart and the responses were impressive in terms of accuracy and use of colour. Many candidates scored full marks for this question.
- (b) Many candidates failed to use the given illustration to draw a full size pictograph (with three parts). Some candidates produced a pictograph that was based on one drawing of the given illustration. This often meant that the three days were not clearly shown.
- (c) (i) A good range of imaginative ideas were seen for the design for the card. The words 'Orange' and 'Secret' were usually incorporated in the designs.
- (ii) Very few candidates managed to successfully render the holder to look like acrylic. The card was usually successfully added to the holder although the quality of lettering and images did not always enhance the overall appearance. A number of excellent answers were seen for this question.

### Question 4

This proved to be one of the least popular optional questions.

- (a) This question was completed to a good standard, with many candidates scoring maximum marks. The hexagon proved to be the most challenging aspect of this question with some hexagons either an incorrect size or irregular in shape (sides of a different length).

- (b) There was limited evidence of candidates really understanding how to produce a perspective drawing from the given vanishing points. The back corner and roof of the structure proved particularly challenging for candidates.
- (c) (i) The curves and lettering were generally added to a good standard, although the curves were always parallel. Many candidates scored high marks for this question.
- (ii) Appropriate colours were usually used to enhance the design for the front of the serving area. The colouring was usually completed to a high standard.

### Question 5

This proved to be a popular optional question.

- (a) There was clear evidence to suggest that the majority of candidates had a good understanding of developments (nets). Many candidates scored maximum marks. In this respect this question did not achieve a good degree of differentiation
- (b) Most candidates produced a range of sketches and notes to show an alternative method of holding the package in a closed position. Unfortunately, many solutions relied upon other manufactured components such as magnets or string.
- (c) Some excellent sketches and notes were seen that clearly showed the position of both the drink and the snack. There was less clear evidence to indicate the material being used for the divider or the means of holding the divider in position in the box.

### Question 6

This proved to be one of the least popular optional questions.

- (a) There was clear evidence that candidates understood how to draw an ellipse although very few candidates managed to score maximum marks by completing the outline shape of the menu card to the overlay. The triangles proved to be particularly difficult to complete. Many candidates scored full marks for the base.
- (b) Responses to this question were disappointing. Whilst many candidates chose an appropriate colour to show the wood, very few added the grain correctly. Rendering of the stainless steel post was also disappointing in that few candidates attempted to show a reflective surface.
- (c) (i) Many candidates misread this question as a requirement for an advert card for a colouring competition. Consequently, sketches and notes were used to show ideas for the colouring competition although a significant number of candidates failed to use the 'Speedboat' in the design or to clearly indicate the areas to be coloured.
- (ii) A design was usually added to the card although this sometimes had little resemblance to the candidate's design idea. Many candidates coloured the design idea rather than showing a design that could be coloured.

# CDT: DESIGN AND COMMUNICATION

Paper 7048/02

Coursework

## General comments

The majority of projects were well presented and candidates had concentrated their efforts on the design content of their folders. Unfortunately, some candidates had spent a lot of time on the Research and Analysis section at the expense of some others. As a general guide, mark allocation should be an indication of the amount of time to be given to each aspect of the assessment scheme.

## Comments on specific assessment headings

### **Problem Identification**

Most candidates were able to identify a meaningful design problem linked to the chosen theme and many were awarded high marks for this introduction to their project. It should be possible for the reader of a folder to be under no doubt as to the intention of the brief at the earliest opportunity.

### **Research and Analysis**

This section should indicate that the candidate is thinking through the possible requirements of the project outcome and identifying those issues that need to be considered at various stages as the project progresses. Information that is relevant to this should then be collected and collated in some orderly way.

Most candidates were able to do this and many looked at existing products to help develop their ideas. However, there was a tendency for some candidates to reproduce pages of information, often from textbooks, that was totally irrelevant at this stage of the project folder. For example, information on materials and constructions should be considered only when a design idea has been chosen and is being developed at a later stage.

### **Specification for a Possible Solution**

In many ways the Specification should be considered as a summary of research and analysis, setting out the design requirements for the product. This is one section where candidates often fail to gain high marks because they do not see this as following on from the previous section. Specification points are often too vague or general in nature and could be applied to a whole range of product types. Failure to complete this section successfully also undermines the quality of subsequent product evaluation as there are no meaningful reference points from which to work.

### **Proposals for a Solution**

Some candidates should be congratulated on the imagination shown and the quality of communication skills used to present possible design ideas. Many ideas were genuinely innovative in nature and indicated that candidates had developed the ability to look beyond a narrow range of obvious solutions.

Unfortunately many initial ideas failed to progress beyond this point but it is hoped that candidates with such vision will develop the confidence to follow these through as they develop expertise in the subject.

Although candidates tend to present a range of complete design ideas, it is hoped that they will develop the ability to select aspects from more than one choice when presenting and developing the chosen solution.

### Realisation

Only photographic evidence of design solutions was seen by CIE's Moderator so it is difficult to comment in detail about made products. However, work appeared to cover the intended range of appropriate materials and many artefacts were finished to a very high standard.

### Evaluation

This, alongside Specification, is the other section where many candidates do not do themselves justice. There was evidence that candidates had carried out user tests and questionnaires. However, these were often ticked boxes, which in themselves cannot be the end of the evaluation and must lead to qualitative judgement and comment.

Candidates need to be reminded that evaluation is of the **product**, with reference to the Specification, and not of the design folio or progress of the project generally.

A successful evaluation, by its very nature, will then lead to suggestions for further development and improvement