

# UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS General Certificate of Education Ordinary Level

#### **CDT: DESIGN AND COMMUNICATION**

7048/02

Paper 2 School Based Assessment

October/November 2008

INFORMATION FOR THE EXAMINATION IN 2008

No Additional Materials are required.

## **READ THESE INSTRUCTIONS FIRST**

You are required to spend two semesters (terms) designing and realising possible solutions to one of the following problems. Wherever possible you should apply your chosen problem to an actual location in your local area. Remember that this is coursework and you may seek guidance from your teacher or any other sources that may support you in developing your design work.



International Examinations

1 Consider the situation where a golf club is to give new members 3 golf balls, 12 golf tees and a ball marker. The items are to be packaged in a box made from card.

#### Research:

- (a) the design and construction of current packages for golf balls and the sizes of the items to be packaged;
- **(b)** possible golf clubs that the packaging could be designed for.

Identify a particular golf club that you will design the packaging for and collect some information about it.

Develop a design for a piece of packaging to hold 3 golf balls, 12 golf tees and a ball marker.

Produce a prototype of the packaging together with supporting drawings that fully communicate your design.

Devise and use suitable techniques for testing your design against its original specification so that it can be evaluated fully.

2 Consider the situation where a shop selling food products grown in Mauritius requires an attractive and original window display stand that has moving parts.

#### Research:

- (a) the types of food products that are grown in Mauritius;
- **(b)** ways in which battery powered mechanisms could be used to make parts of the display stand move.

Identify the range of food products that will be displayed and collect some information about them.

Develop a design for a window display stand that has moving parts.

Produce a working model of the window display stand supported by drawings that fully communicate your design.

Devise and use suitable techniques for testing your design against is original specification so that it can be evaluated fully.

© UCLES 2008 7048/02/O/N/08

3 Consider the situation where a guide to surfing on the waters around Mauritius and a holder to display the guide are required. The guide is to be made from one sheet of A3 paper which is folded to give an A5 format. The holder is to be made from card and produced as a flat packed item so that it can be easily posted to hotels and other places where it will be used.

#### Research:

- (a) places around Mauritius where people can surf;
- **(b)** the design and construction of current tourist guides and the holders used to display them.

Identify the places that you will feature in your guide and collect some information about them.

Develop designs for:

- (a) the guide;
- (b) the holder.

Produce prototypes of both the guide and the holder. These should be accompanied by supporting drawings that fully communicate your designs.

Devise and use suitable techniques for testing your designs against their original specification so that they can be evaluated fully.

**4** Consider the situation where a pop-up guide book about one of the museums in Mauritius is to be published.

#### Research:

- (a) museums that the guide book could be designed for;
- **(b)** the design and construction of pop-up books and the mechanisms that they use.

Identify a particular museum that you will design the guide for and collect some information about it.

Develop designs for:

- (a) the front and back covers of the guide;
- **(b)** two pop-up pages.

Produce a prototype of the guide together with supporting drawings that fully communicate your design.

Devise and use suitable techniques for testing your design against its original specification so that it can be evaluated fully.

5 Consider the situation where a board game called 'A Tour of Mauritius' is to be produced.

Research:

- (a) the design and construction of existing board games and their packaging;
- **(b)** places of interest in Mauritius that could feature in the game.

Identify the places of interest that you will feature in your design and collect some information about them.

Develop designs for:

- (a) the board game;
- **(b)** packaging for the game.

Produce prototypes of both the game and its packaging. These should be accompanied by supporting drawings that fully communicate your designs.

Devise and use suitable techniques for testing your designs against their original specification so that they can be evaluated fully.

6 Consider the situation where a public outdoor eating area is to be built. The area must provide facilities for up to 10 people to eat food that they have brought from home and to dispose of their litter.

Research:

- (a) similar existing facilities;
- **(b)** possible sites where the facility could be built.

Identify a suitable site for the eating area and collect some information about it.

Develop a design for the eating area.

Produce a model of the area together with supporting drawings that fully communicate your design.

Devise and use suitable techniques for testing your design against its original specification so that it can be evaluated fully.

© UCLES 2008 7048/02/O/N/08

7 Consider the situation where a range of bags made from fabric is to be produced. The fabric is to be coloured and printed using traditional techniques such as tie and dye, batik and block printing.

#### Research:

- (a) traditional fabric printing techniques;
- **(b)** the design and construction of existing shoulder bags.

Identify the printing technique that you will use and collect some information about it.

Develop designs for:

- (a) the pattern to be printed on the fabric;
- **(b)** a shoulder bag.

Produce a prototype of the bag with the pattern printed on it. This should be accompanied by supporting drawings that fully communicate your design.

Devise and use suitable techniques for testing your design against its original specification so that it can be evaluated fully.

**8** Consider the situation where a campaign to raise people's awareness of environmental issues in Mauritius is to take place. The organisers of the campaign require a counter top display stand to promote their web site. The stand is to be made from card.

#### Research:

- (a) environmental issues that affect Mauritius;
- **(b)** the design and construction of existing counter top display stands.

Identify an environmental issue that you will base your design on and collect some information about it.

Develop designs for:

- (a) an introductory page for the web site;
- **(b)** the counter top display stand.

Produce:

- (a) a computer printout of the introductory page;
- **(b)** a prototype of the counter top display stand.

These should be accompanied by supporting drawings that fully communicate your designs.

Devise and use suitable techniques for testing your designs against their original specification so that they can be evaluated fully.

**9** Consider the situation where, as part of a special promotion, a cut out mask based on a 'Super Hero' character is to be printed on the back of a breakfast cereal box.

#### Research:

- (a) the design and construction of existing breakfast cereal boxes;
- (b) various 'Super Hero' characters.

Identify the 'Super Hero' that you will base your mask on and collect some information about them.

Develop a design for a cereal box with a 'Super Hero' mask printed on the back. Instructions about how to cut out and assemble the mask should be included.

### Produce:

- (a) a prototype of the cereal box;
- (b) a mask which has been made from the design printed on the box.

These should be accompanied by supporting drawings that fully communicate your design.

Devise and use suitable techniques for testing your design against its original specification so that it can be evaluated fully.

10 Consider the situation where a range of jewellery which reflects the art and culture of Mauritius is to be produced. Each piece of jewellery will be packaged in a blister pack.

#### Research:

- (a) the design and construction of existing blister packs;
- (b) the art and culture of Mauritius.

Identify a particular aspect of the art or culture of Mauritius and collect some information about it.

Develop designs for:

- (a) a piece of jewellery;
- **(b)** a blister pack.

Produce prototypes of both the jewellery and the blister pack. These should be accompanied by supporting drawings that fully communicate your designs.

Devise and use suitable techniques for testing your designs against their original specification so that they can be evaluated fully.

© UCLES 2008 7048/02/O/N/08

# **BLANK PAGE**

# **BLANK PAGE**

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (UCLES) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest possible opportunity.

University of Cambridge International Examinations is part of the Cambridge Assessment Group. Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge.