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UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
General Certificate of Education Ordinary Level

CDT: DESIGN AND COMMUNICATION **7048/02**

Paper 2: School Based Assessment **October/November 2011**

INFORMATION FOR THE EXAMINATION IN 2011

No Additional Materials are required.

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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.**

This document consists of **6** printed pages and **2** blank pages.

1 Consider the situation where a range of full-size furniture made from corrugated cardboard is to be produced.

Research:

(a) existing furniture made from corrugated cardboard;

(b) types of furniture on which you could base your work.

Identify a suitable type of furniture and collect the anthropometric data that you will need to help you design and make the furniture.

Develop a design for a piece of furniture made from corrugated cardboard.

Produce a prototype of the piece of furniture along 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 board game called 'Save Our Planet' is to be produced.

Research:

(a) the design and construction of existing board games and their packaging;

(b) environmental issues on which you could base your work.

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

Develop designs for:

(a) the board game;

(b) packaging for the game.

Produce prototypes of both the board 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.

3 Consider the situation where a website is to be produced that will raise people's a[illegible] of your school's or college's facilities and achievements. The website will be promoted usi[illegible] standing display board placed in the school's or college's reception area.

Research:

(a) the design and construction of existing free-standing display boards;

(b) existing school and college websites.

Identify your school's or college's facilities and recent achievements and collect some information about them.

Develop designs for:

(a) an introductory page for the website;

(b) the free-standing display board.

Produce:

(a) a computer printout of the introductory page;

(b) a prototype of the free-standing display board.

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 toy company requires packaging to hold a child's soft toy.

Research:

(a) soft toys on which you could base your work;

(b) existing ways of packaging soft toys.

Identify a suitable soft toy and collect some information about it.

Develop a design for a piece of packaging to hold a soft toy.

Produce a prototype of the packaging along 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 bicycle manufacturer requires a holder to display its brochures in a number of retail outlets. The holder is to be made from card. It should be 'flat packed' so that it can be easily posted to retail outlets around the world.

Research:

(a) bicycles on which you could base your work;

(b) existing designs for brochure and leaflet holders.

Identify a suitable bicycle and collect some information about it.

Develop designs for:

(a) the front cover of the brochure;

(b) the brochure holder.

Produce prototypes of both the front cover of the brochure and the brochure 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.

6 Consider the situation where a petrol service station is to be built.

Research:

(a) existing petrol service stations;

(b) possible sites for the petrol service station.

Identify:

(a) the range of facilities that the petrol service station will include;

(b) a suitable site and collect some information about it.

Develop a design for the petrol service station.

Produce a model of the petrol service station along 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.

7 Consider the situation where a stage set is required for a drama or music production.

Research:

(a) possible productions that your work could be based on;

(b) existing stage sets.

Identify a suitable production and collect some information about it.

Develop a design for a stage set.

Produce a model of the stage set along 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.

8 Consider the situation where a soccer or rugby team is to undertake an overseas tour. At each match venue, various souvenirs are to be available for fans to buy.

Research:

(a) existing souvenirs and promotional items sold at such events;

(b) teams on which you could base your work.

Identify a suitable team and collect some information about it.

Develop designs for **two** souvenirs.

Produce prototypes of the two souvenirs along with 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 a range of mechanical toy kits is to be produced. Each kit consists of an A3 sheet of card on which are printed the parts that need to be cut out and glued together to make a mechanical toy. The sheet will also include instructions on how to make the mechanical toy.

Research:

(a) existing mechanical toys made from card;

(b) objects on which your mechanical toy could be based.

Identify a suitable object on which you will base your mechanical toy and collect some information about it.

Develop a design for a mechanical toy made from a sheet of A3 card.

Produce:

(a) a prototype of the sheet of A3 card with the parts and instructions on;

(b) a mechanical toy which has been made from the A3 sheet.

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

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 new computer game is to be marketed. The game is to be promoted using a point-of-sale display stand. The shape of the stand must in some way reflect the theme of the game.

Research:

(a) existing point-of-sale display stands used to promote computer games;

(b) possible themes for the game.

Identify:

(a) a suitable theme for the game and collect some information about it;

(b) a title for the game.

Develop designs for:

(a) the inserts to go into a clear plastic case which holds the game;

(b) a point-of-sale display stand that holds the plastic case.

Produce prototypes of both the inserts and the point-of-sale 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.

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