OCR
RECOGNISING ACHIEVEMENT

ADVANCED SUBSIDIARY GCE UNIT

2514

INFORMATION AND COMMUNICATION TECHNOLOGY

Practical Applications of ICT using Standard/Generic Applications Software
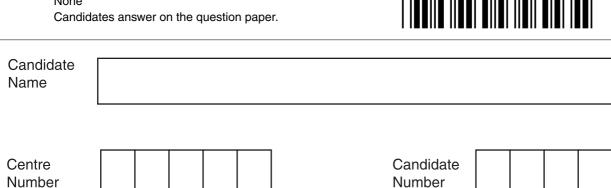
TUESDAY 22 MAY 2007

Morning

Time: 1 hour 30 minutes

Additional materials:
None
Candidates answer on the question paper.

Candidate Name

Centre Number

Candidate Number

INSTRUCTIONS TO CANDIDATES

- Write your name, Centre number and Candidate number in the boxes above.
- Answer **all** the questions.
- Use blue or black ink. Pencil may be used for graphs and diagrams only.
- Read each question carefully and make sure you know what you have to do before starting your answer.
- Do **not** write in the bar code.
- Do **not** write outside the box bordering each page.
- WRITE YOUR ANSWER TO EACH QUESTION IN THE SPACE PROVIDED. ANSWERS WRITTEN ELSEWHERE WILL NOT BE MARKED.

INFORMATION FOR CANDIDATES

- The number of marks for each question is given in brackets [ ] at the end of each question or part question.
- The total number of marks for this paper is 90, of which 4 marks are allocated to the assessment of the quality of written communication.
- You will be awarded marks for the quality of written communication where an answer requires a piece of extended writing.
- No marks will be awarded for using brand names of software packages or hardware.

For Examiner's Use	
1	26
2	29
3	14
4	10
5	7
QWC	4
Total	90

This document consists of **10** printed pages and **2** blank pages.

A business has recently started selling fish food and pond accessories by mail order.
The mail order service is to be called Koi Bitz.

1 A logo is to be developed for Koi Bitz. This logo will be on all company documentation.

   (a) The logo can be either a bitmap or vector graphic.

   Describe vector graphics.

   ....

   ....

   ....

   ....

   ....

   ....[4]

   (b) Describe **two** advantages and **two** disadvantages of using clip art when creating the logo for Koi Bitz.

   Advantage 1 ....

   ....

   ....

   Advantage 2 ....

   ....

   ....

   Disadvantage 1 ....

   ....

   ....

   Disadvantage 2 ....

   ....

   ....[8]

(c)   A logo has been created for Koi Bitz. This is shown in Fig. 1.

An image has been removed due to third party copyright restrictions

Details: An image of a logo created for Koi Bitz, which is an oval shape with the words 'Koi Bitz in it and an image of a fish

Fig. 1

Explain how the logo shown in Fig. 1 was created.

....

....

....

....

....

....[4]

(d)   Describe how grouping could be used to aid the re-arrangement of the logo.

....

....

....

....

....

....[4]

[Turn over

(e) The clip art used in the logo needs to be modified.

Describe the following features that could be used.

(i) brightness ....

....

....[2]

(ii) fill ....

....

....[2]

(iii) contrast ....

....

....[2]

2 The business currently keeps manual records of regular customers. The records are to be transferred to a database.

(a) Explain **three** reasons why a database is suitable to store and handle customer records.

Reason 1 ....

....

....

Reason 2 ....

....

....

Reason 3 ....

....

....[6]

(b) The database can be developed using off-the-shelf software or it can be custom-written.

    (i) Describe **two** advantages of using off-the-shelf software.

....

....

....

....

....

....[4]

    (ii) Describe **two** advantages of having the software custom-written.

....

....

....

....

....

....[4]

(c) The data held in the database will be normalised.

Identify the characteristics of data in:

    (i) First normal form (1NF) ....

....

....[2]

    (ii) Second normal form (2NF) ....

....

....[2]

    (iii) Third normal form (3NF) ....

....

....[2]

                                                                       [Turn over

(d) When the database is being designed a data dictionary is created.

Describe **three** main components of a data dictionary.

Component 1 ....

....

....

Component 2 ....

....

....

Component 3 ....

....

....[6]

(e) The entities and attributes that will be used in the database are:

CUSTOMER (Cust_ID, Surname, Forename, Telephone Number)

ORDER (Order_Code, Cust_ID, Date, Product_ID, Quantity)

PRODUCT (Product_ID, Description, Price)

The primary key of the entity PRODUCT is Product_ID.

(i) State the primary key of the ORDER entity.

....[1]

(ii) State one foreign key.

....[1]

(iii) State the relationship between the PRODUCT and ORDER entities.

....[1]

3 The financial accounts for Koi Bitz are to be done using spreadsheet software.

(a) Identify and describe **three** form controls that could be used to customise the user interface.

Form Control 1 ....

Description ....

....

....

Form Control 2 ....

Description ....

....

....

Form Control 3 ....

Description ....

....

....[6]

(b) Absolute and relative cell replication will be used.

Describe absolute and relative cell replication giving an example of each.

Absolute ....

....

....

Example ....

....

Relative ....

....

....

Example ....

....[6]

[Turn over

 (c) State the type of chart most suitable to display the following:

  (i) the proportion of customers from each region of the U.K.

  ....[1]

  (ii) sales of a brand of fish food over a 12 month period.

  ....[1]

4 A mail merge letter is to be produced and sent to all regular customers of the business.

 (a) Word fields can be used during the mail merge process.

  Describe each of the following word fields:

  (i) ASK ....

  ....

  ....[2]

  (ii) NEXT RECORD ....

  ....

  ....[2]

  (iii) SKIP RECORD IF ....

  ....

  ....[2]

 (b) Explain the process of mail merge.

  ....

  ....

  ....

  ....

  ....

  ....[4]

5 The business will use a computerised stock control system.

Describe the characteristics of a computerised stock control system that could assist the business.

....

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....

....[7]

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