

**GENERAL CERTIFICATE OF SECONDARY EDUCATION
 INFORMATION AND COMMUNICATION TECHNOLOGY**

ICT B (Higher Tier)

FRIDAY 6 JUNE 2008

Morning
 Time: 1 hour 30 minutes

Candidates answer on the question paper

Additional materials (enclosed): Insert 2380/1 & 2/PRE

Additional materials (required):

Flowchart stencil

Candidates pre-prepared materials



Candidate Forename

Candidate Surname

Centre Number

Candidate Number

INSTRUCTIONS TO CANDIDATES

- Write your name in capital letters, your Centre Number and Candidate Number in the boxes above.
- Use blue or black ink. Pencil may be used for graphs and diagrams only.
- Read each question carefully and make sure that you know what you have to do before starting your answer.
- Answer **all** the questions.
- Do **not** write in the bar codes.
- Write your answer to each question in the space provided.

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 **80**.
- No marks will be awarded for using brand names of software packages or hardware.

FOR EXAMINER'S USE	
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8	
9	
TOTAL	

This document consists of **14** printed pages and **2** blank pages and an Insert.

1 State the type of software that would be **most** suitable for each of the tasks shown in the table below.

You may use the same software more than once. Do not use brand names.

Task	Type of software
To access Exotic Holidays website	
To write a report	
To calculate the exchange rates	
To modify a web page graphic	
To analyse numeric holiday data	

[5]

2 Exotic Holidays uses a range of electronic methods to communicate with customers.

(a) Describe each of the following methods of electronic communication.

(i) Email

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.....
.....
.....

(ii) Instant Messaging (IM)

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.....
.....
.....

(iii) Chat

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.....
.....
.....

(iv) On-line discussion forums

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.....
.....
.....[8]

(b) State **two** drawbacks of using chat compared to email.

Drawback 1
.....
Drawback 2
.....[2]

Blogs are often used by customers of Exotic Holidays whilst they are on holiday.

(c) Describe what a blog is.

.....
.....
.....[2]

(d) Explain why an Exotic Holidays' customer might use a blog.

.....
.....
.....
.....
.....
.....[3]

- 3 You have been asked to create a database to explore holiday options.

Part of the database structure is shown below.

Field name	Field Type	Choices
Name	Text	
Most like to visit	Look-up	Africa, Asia, Europe
Most interested in	Look-up	Sport, science, history, music, animals, art
Preferred type of holiday	Look-up	Beach, city, ski, adventure
Preferred month	Look-up	Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sept, Oct, Nov, Dec
Maximum length of holiday (number of days)	Number	
Any health issues	Free Text	
Gender	Look-up	Male, female

- (a) Using the space provided on the next page (page 5) design a questionnaire that could be given to a group of teenagers to see what type of holiday would best suit the group.

The questionnaire results will be entered into the database.

You should add one other appropriate field of your own.

The space below is for your questionnaire design.

A large, empty rectangular box with a thin black border, occupying most of the page. It is intended for the student to draw or write their questionnaire design.

[8]

7
BLANK PAGE

PLEASE DO NOT WRITE ON THIS PAGE
TURN OVER FOR NEXT QUESTION

4 Exotic Holidays use an on-line form to enable users to request a quotation. The on-line form is shown below.

Request a Quote

Title

First Name

Last Name

Contact Address

Address Line 1

Address Line 2

Town / City

Country

Postcode

Contact Details

Email

Telephone Number

Mobile Number

Last name, postcode and email address are compulsory fields.

(a) For each of these fields give **one** reason why it is compulsory. Each reason must be different.

Last Name

.....
.....

Postcode

.....
.....

Email Address

.....
.....

[3]

The designer of the website wants to try to make sure that customers do not make mistakes when they fill in the form.

(b) Describe **two** ways the designer can help to reduce the number of mistakes.

1.....
.....
.....
2.....
.....
.....[4]

(c) Give **two** problems that might be caused by mistakes in the form.

Problem 1
.....
Problem 2
.....[2]

(d) To book a holiday on-line you would use both a screen and a printer.

Explain why **both** of these devices are used.

Use examples to illustrate your answer.

.....
.....
.....
.....
.....
.....[4]

- 5 Exotic Holidays stores data from its customers on a database. The Data Protection Act defines certain types of data as sensitive.

State **three** types of sensitive data that could be held by Exotic Holidays.

Type 1.....

.....

Type 2.....

.....

Type 3.....

.....[3]

6 Part of the registration process used by Exotic Holidays is shown below.

- Customer completes a web application form
- Customer sends the registration form to the company
- Exotic Holiday's system receives the form and holds in a queue
- An automatic email is sent to the customer thanking them for their request
- A member of staff reviews the pending registration forms
- At the request of the member of staff, the system checks to see if the request is from an existing customer
- By pressing a submit form button the customers' details are added to the system
- Existing customer records are checked for inconsistencies before adding the record to the system
- The member of staff calculates the cost of the customer's travel and sends an email to the customer
- The email is automatically added to the company's system and the customer's records.

Draw a system flowchart to show how this process takes place.

7 Give **two** advantages and **one** disadvantage to a customer of using an on-line holiday catalogue rather than a paper-based catalogue.

Advantage 1

.....

Advantage 2

.....

Disadvantage

.....[3]

BLANK PAGE

PLEASE DO NOT WRITE ON THIS PAGE

TURN OVER FOR NEXT QUESTION

- 8 Exotic Holidays arranges holidays in a wide range of different countries. The table below shows a range of currencies and the exchange rates Exotic Holidays obtained when it booked holidays in 2007.

Currency	Rates to the pound (£)
Turkish Lira	2.63 Lira
Chinese Yuan	13.56 Yuan
Icelandic Krona	121.37 Kron
Jamaican Dollar	113.93 Dollars

- (a) In the grid shown design a simple spreadsheet to enable Exotic Holidays to enter an amount in pounds (£) and automatically calculate the equivalent amount in each foreign currency.

You only need to show the formula for one of the currencies.

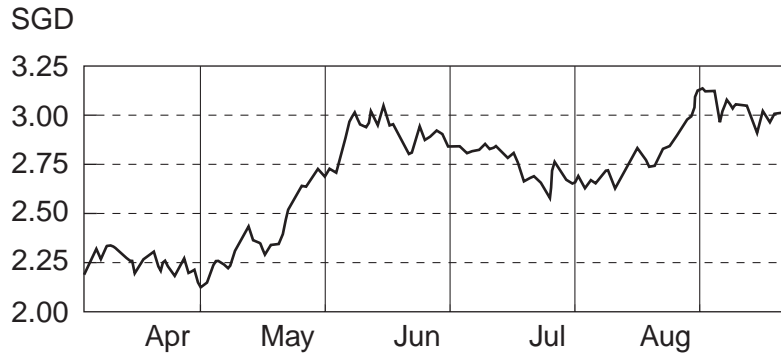
	A	B	C	D
1				
2				
3				
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8				

[7]

One of the problems Exotic Holidays has in buying holidays for its customers and paying local staff is that exchange rates change.

The chart below shows the UK Pound relative to the Singapore Dollar (SGD) in 2006.

In April you could only buy 2.12 dollars with a pound, in August you could buy 3.12 dollars with a pound.



Exotic Holidays has to charge customers for holidays at the time of booking but it pays for holidays when the holiday is taken.

Predicting future exchange rates is vital to the company's success.

(b) Explain how ICT could be used to help Exotic Holidays predict future exchange rates.

.....

.....

.....[2]

(c) Describe the main **drawbacks** of your suggested solution.

Drawbacks

.....

.....

.....

.....

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.....

.....

.....

.....

.....[6]

9 Exotic Holidays promotes itself as an environmentally friendly travel company.

State **three** ways that the use of ICT can improve the environmental impact of a travel company.

For each way give a reason for your selection.

1

Reason

.....
.....

2

Reason

.....
.....

3

Reason

.....
..... [6]

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