

NDTEF/LONDON EXAMINATIONS

**Information Technology
GCSE 2708**

Exam Paper

**Full Course
(Foundation Tier)**

JUNE 1998

Here is part of an advert for the O-zone Theme Park.

The Environmentally Friendly Theme Park

Greenhouse Restaurant Whale Pool Monsoon Ride

O-zone

Doomsday Room Solar House Millennium Village

For further information send for our **FREE** information pack.

Available as: CD-ROM Video Leaflet

The three information packs contain different types of information.

1a Complete the table below to show the types of information each pack could contain.

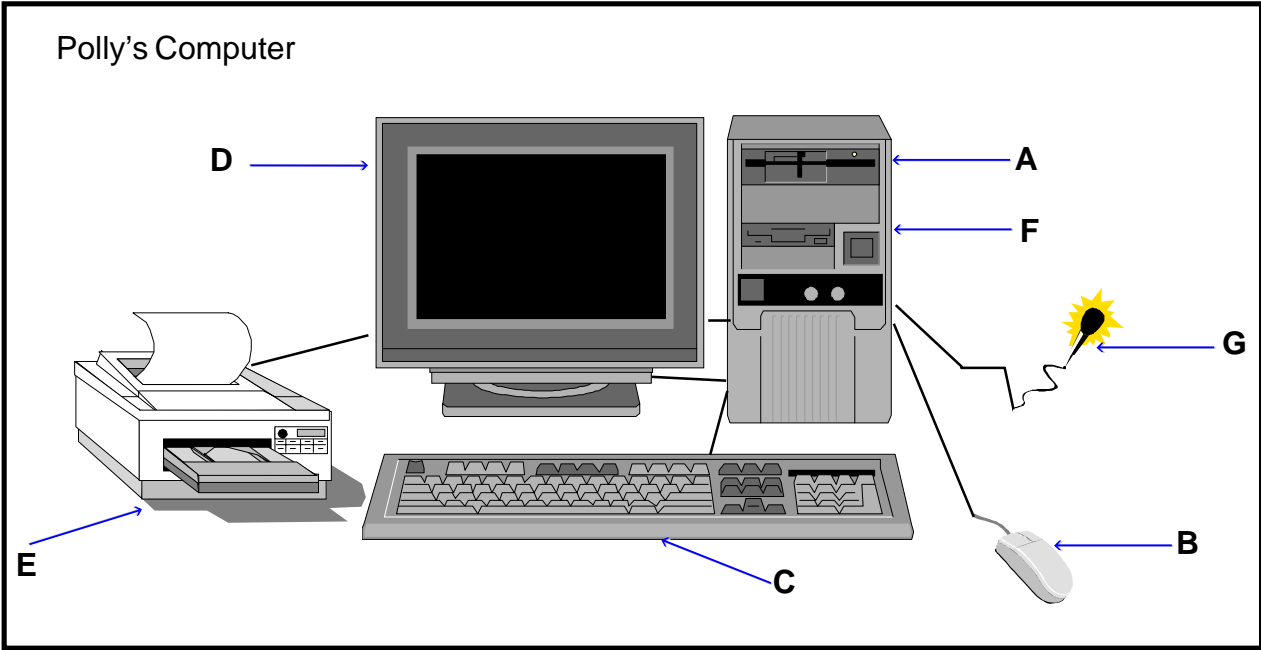
Information

Pack

	CD-ROM	Video	Leaflet
Sound	✓	✓	
Colour			
Text			
Numerical Data			
Interactive Games			
Art Images			
Video			
Animation			

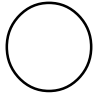
○
7 marks

Polly and Fred plan to visit O-zone.
 They want information packs.
 They have computers at home so they both choose the CD-ROM pack.



1b Complete the table below to show the parts of Polly's computer system.

	Name	Input	Output	Memory
A	CD-ROM Drive			✓
B				
C				
D				
E				
F				
G				

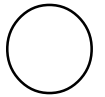


12 marks

TURN OVER

When Polly uses the CD-ROM, the video pictures look slow and jerky, but the rest of the system seems to work properly.

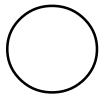
1c Explain why the pictures look slow and jerky.



2 marks

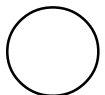
Polly and Fred can buy tickets using the:
telephone
post, using an application form
park's own Internet Website
ticket office at the entrance to the park.
Polly and Fred may have to give their **names** and **addresses**, to be stored on a database.

1d State which of these four ways does **NOT** require names and addresses to be stored on a database.



1 mark

1e Give **ONE** reason why the Theme Park may need this information.



1 mark

Fred and Polly fill out the application forms shown below.

Ticket Application Form		
Name		
Address		
Ticket Type	Adult	Child
	With Rides	Without Rides

Ticket Application Form		
Name		
Address		
Ticket Type	Adult	Child
	With Rides	Without Rides

These forms have been badly designed.

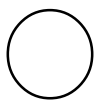
1f State **TWO** problems the form may create in capturing the data. For each problem describe how the design of the form could be improved.

Problem 1 _____

Solution _____

Problem 2 _____

Solution _____



6 marks



TOTAL
29 marks

TURN OVER

Question 2

Marks

Details from all the application forms are kept on a datafile.

The records produced by the applications from Polly and Fred are as follows.

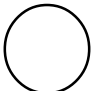
Ticket Number	100123
Title	Mr.
Surname	Green
Firstname	Fred
Address 1	17 Hopefield St.
Address 2	Chester
Address 3	
Post Code	
Type	C

Ticket Number	100124
Title	
Surname	Smith
Firstname	P
Address 1	81 Old Hall Flats
Address 2	Westerhope Rd.
Address 3	Lancashire
Post Code	PR17 3QN
Type	AR

Description of codes used in the ticket file.

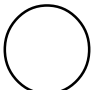
Ticket Type: A = Adult C = Child R = Rides included

2a State how many fields there are in each record.



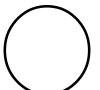
1 mark

2b State **ONE** field that contains only numeric data.



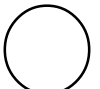
1 mark

2c State **ONE** field that contains only text data.



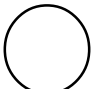
1 mark

2d State the key field used in the file.



1 mark

2e List down all the valid codes for the Ticket Type field.



2 marks

Polly is aware that the information she has given to O-zone could be used for reasons other than issuing tickets.
She does not want this to happen.

2f Describe **ONE** other way that O-zone might use the information about Polly to help their business.



2 marks

2g Give **ONE** way Polly might **NOT** want her information used.



2 marks

The law protects the rights of people with regard to the use of personal information held on computer systems.

2h State the name of the law that does this.



1 mark

2i Explain how Polly could use this law to limit the way O-zone uses her personal information.



3 marks



TOTAL
14 marks

TURN OVER

When tickets are ordered they are sent to the customer together with a letter.

O-zone

**Environmental Theme Park
Worcester Plains
Worcester
WR4 5QZ
Tel. 011 435 4512**

Mr Fred Green
17, Hopefield St.
Chester.

April 14 1998
Please quote REF: 982

Dear Mr. Green

Further to your application I am pleased to enclose 2 tickets to O-zone Theme Park.

May I take this opportunity to thank you for the custom and hope that you fully enjoy the visit to O-zone, the only environment friendly theme park.

Should you have any questions concerning the visit please do not hesitate to contact me at the booking office.

Yours sincerely

Belinda Spakowski
Bookings Manager

3a Insert the correct words into the paragraph below.

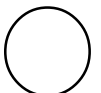
mail merge

fields

form letter

datafile

O-zone needs to reply to all these people within 24 hours. It would be difficult to type all the letters individually so a _____ system is used to combine a _____ containing information on forthcoming events with a number of _____ from the customer _____ to make the replies appear more personal.



4 marks

The actual letters to the customers are: **12 point Times Roman left aligned.**

3b Describe what would happen if the letter was changed to **14 point** text.



2 marks

3c Describe how it would look different if it was **fully justified**.



2 marks

O-zone used to print the letters onto headed paper where the logo had already been printed.
Recently a new system was set up that lets them print the whole letter, including the logo.

3d State **ONE** advantage and **ONE** disadvantage of O-zone printing the whole of the letter, including the logo.

Advantage

Disadvantage



4 marks

TURNOVER

When writing the letter to the customers it was realised that using the word **your** instead of **the** would make the letter seem more friendly.
Jane, a wordprocessor operator, was given the task of changing the letter.
The office manager was surprised to see Jane editing the words one by one.

3e Describe a more sensible method that Jane could use to do this task.



3 marks



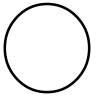
TOTAL
15 marks

Question 4

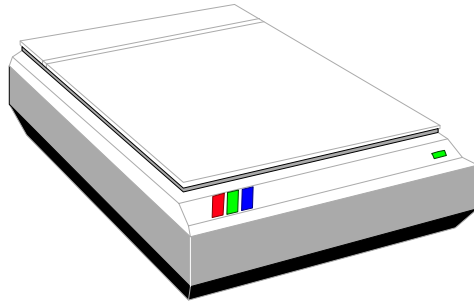
Marks

O-zone have produced a new advertising leaflet.
This is printed in portrait orientation.

4a Write down the name of a different orientation from *portrait*.



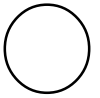
1 mark



A scanner is used to help produce the leaflet.

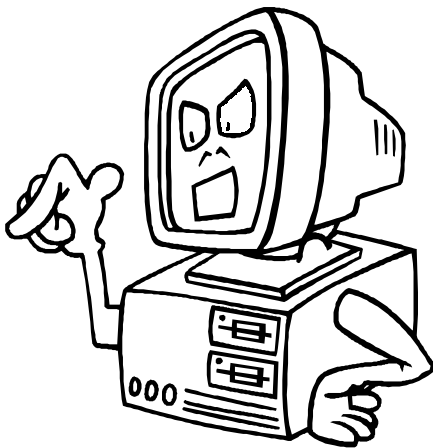
4b Circle the correct word below.

A scanner is an **INPUT** / **OUTPUT** device.



1 mark

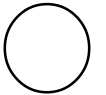
The leaflet contains the following cartoon and photograph.



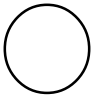
When these were scanned, the options **line art** or **greyscale** at **120 dots per inch** or **600 dots per inch** were offered.

TURNOVER

4c Explain **ONE** difference between **line art** and **greyscale**.


2 marks

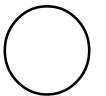
4d State whether the cartoon should be scanned as a **line art** or **greyscale** image.


1 mark

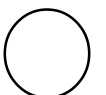
4e Give **TWO** reasons for your answer.

Reason 1

Reason 2


4 marks

4f Describe how a photograph scanned at **600 dots per inch** would look different to one scanned at **120 dots per inch**.


2 marks


TOTAL
11 marks

O-zone also make use of the internet to advertise the theme park.

5a Insert the following terms into the paragraph below.

- search engine World Wide Web browser
- home-page service-provider modem

O-zone have a _____ on the _____ from which you can click on buttons to select other pages of information about the park. To access the site load up your _____ software, enter *http://www.o_zone/menu.com* or use a _____ to look for *o_zone*. If you have a computer but are not yet connected to the internet you need to buy a _____ to connect you to the telephone network and subscribe to a _____ who will provide you with the necessary software and passwords to hook you up.

○

6 marks

Use of the internet by companies and individuals has increased in recent years.

5b State **ONE** thing that has led to this increase in internet use.

○

2 marks

5c State **ONE** benefit that has resulted from use of the internet.

○

2 marks

5d State **TWO** concerns people may have about the internet.

Concern 1

Concern 2

○

4 marks

TURN OVER

O-Zone uses a number of different methods to communicate with its customers.

5e Draw lines linking the remaining boxes on the left to the correct boxes on the right.

Telephone		http://www.o_zone/bookin.com	
Fax		LP64 2QW	
E-Mail		bookings@ozone.co.uk	
Post Code		0117 2834657	
Web Site		0117 2834568	

○
4 marks

O-Zone uses E-Mail for communication between workers, customers and suppliers throughout the world.

5f Tick whether the following statements about E-Mail are **true** or **false**.

	TRUE	FALSE
You can send letters simultaneously to a number of people		
You have to be at the computer when a message is sent or you will not receive it		
You have to be connected to the telephone system all the time you are typing in your e-mail message		
You can include pictures with e-mail messages		
You can include sounds with e-mail messages		
You can include video clips with e-mail messages		
You can include computer programs with e-mail messages		

○
7 marks

When the O-zone E-Mail software is used, Jane's **mail** is downloaded.

Marks

5g Explain what happens when the computer downloads Jane's mail.



2 marks

5h State **TWO** other options you would expect the E-Mail software to offer Jane.

Option 1

Option 2



2 marks

5i Each message changes colour after it is read for the first time .
Explain why this is sensible.



2 marks



TOTAL
31 marks

TURNOVER

The Education Department at O-zone run workshops for visitors.

The workshops run THREE times a day (11 am, 1 pm and 3pm).

The workshops cost £5 per person and can take up to TEN people each.

Bookings for the workshops are taken up to ten minutes before they start, on the day of the visit, at the booking office.

The booking office staff have a sheet for each workshop as shown below.

Workshop Booking Form

Date Time

Name

1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

When people book a place their names are written on the sheet.

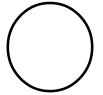
The list of people booked into each workshop is taken to the education department ten minutes before the workshop starts.

6a Describe **TWO** problems with the current workshop booking **system**.

Marks

Problem 1 _____

Problem 2 _____



4 marks

O-zone are evaluating the workshop booking system.

The options are to:

Keep the existing system

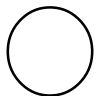
Change to a computer database system

6b List **THREE** reasons **FOR** changing to a computerised system.

Reason 1 _____

Reason 2 _____

Reason 3 _____



3 marks

TURN OVER

The O-zone management decide to change to a computer database system.

- 6c Write down the **THREE** fields that the booking office would need to use when booking a customer a place on a workshop.

Field 1 _____

Field 2 _____

Field 3 _____



1 mark

- 6d Circle whether or not these fields of information can be coded.
If so, give a suitable code for each, using the minimum number of characters possible.

FIELD 1 YES/NO Code _____

FIELD 2 YES/NO Code _____

FIELD 3 YES/NO Code _____



5 marks

O-zone use a private company to design a booking system for the workshops.

This system is delivered with full documentation which includes a **user guide**.

- 6e Write down **THREE** other items of documentation that would exist for the new system.

i _____

ii _____

iii _____



3 marks

The following people might use the new system:
booking office staff
O-zone sales manager
educational department teaching staff.

6f Describe **ONE** task **EACH** might carry out.

Booking office staff

O-zone sales manager

Education Department teaching staff



6 marks



TOTAL
22 marks

TURNOVER

Question 7

Marks

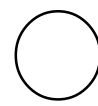
The workshop teaches visitors how to use a spreadsheet to investigate the environment.

Fred has never used a spreadsheet before.

The Education Department decide to look at different types of **help** that can be provided.

7a Complete the table below, giving **ONE** good feature and **ONE** poor feature of each form of help being considered.

	Good Feature	Poor Feature
On-line help menu		
On-line tutorials & demonstrations		
Manufacturers' manuals		
Customised help sheets		



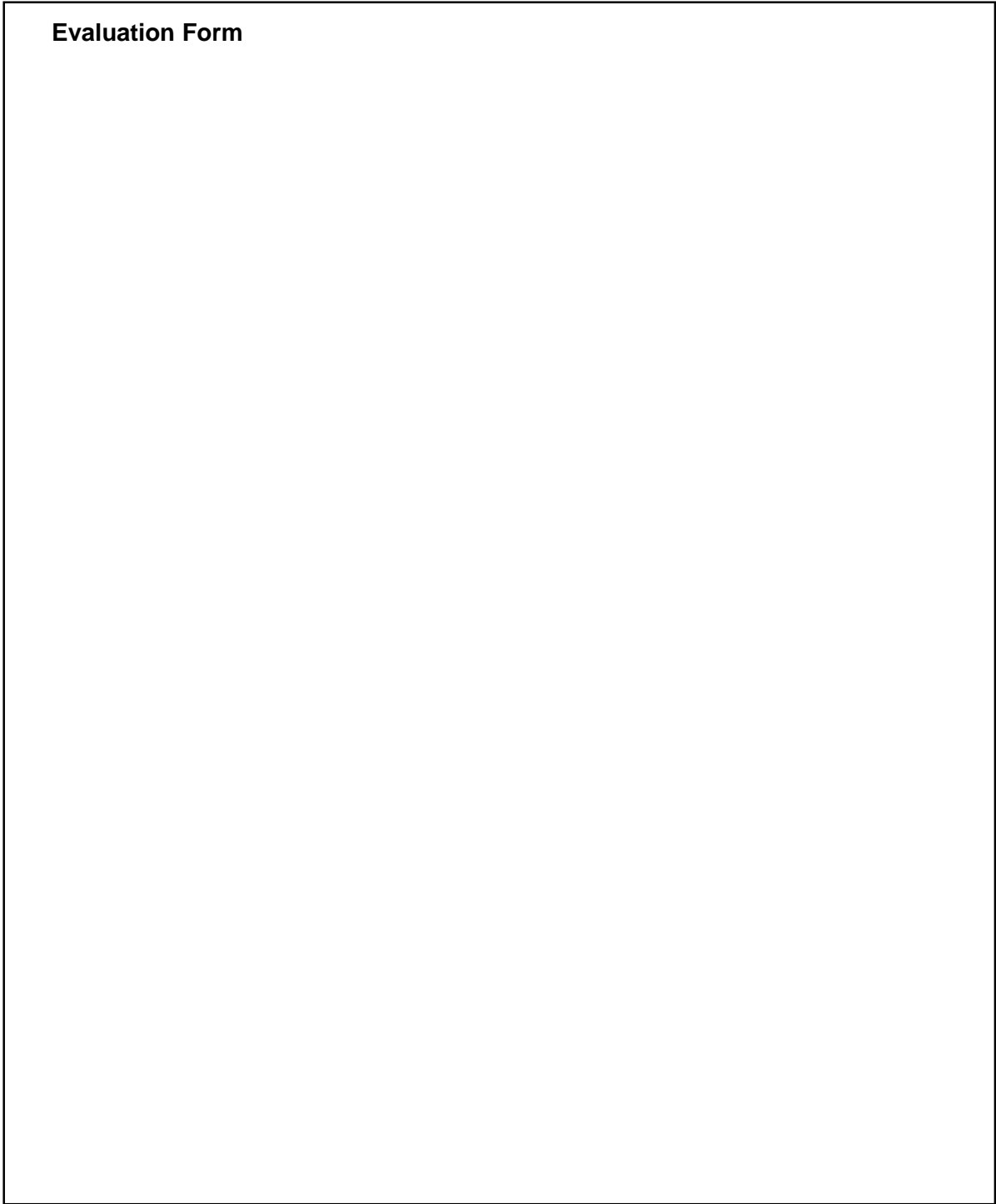
8 marks

The Education Department want to monitor the success of their workshops. In particular they want to find answers to the following questions:

- Did customers find the workshops too easy, too difficult or about right?
- Were workshops enjoyed more by men or by women?
- Which age group felt that they learned most from the workshops?

7b Produce an **evaluation form** for customers to complete at the end of their workshop. The form should capture information suitable for input into a database. The database could then be interrogated to answer the questions.

Evaluation Form



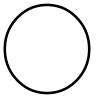
7 marks

TURN OVER

7 continued

Marks

7c Describe a suitable method for inputting the data from your form into the computer.

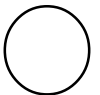


2 marks

7d Give **TWO** benefits of this method of input.

Benefit 1 _____

Benefit 2 _____

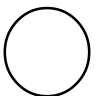


2 marks

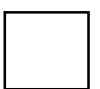
7e Give **TWO** drawbacks of this method of input.

Drawback 1 _____

Drawback 2 _____



2 marks



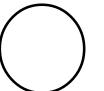
TOTAL
21 marks

Question 8

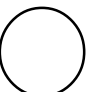
Marks

O-zone make use of surveillance cameras to ensure the safety and security of their customers.
The cameras are hidden so people do not know when they are being filmed.
A security guard monitors the pictures "live" and they are recorded on video.
The video tapes are stored for one week and then wiped.

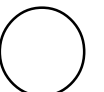
8a Describe **ONE** situation where the "live" pictures might be used.


2 marks

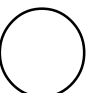
8b Describe **ONE** situation where the video tapes might be used.


2 marks

8c Write down **ONE** reason why members of the public might object to being filmed in this way.


1 mark

8d Write down **ONE** reason why the video tapes are wiped after a week.


2 marks


TOTAL
7 marks

END