

Centre Number	Candidate Number	Name
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CAMBRIDGE INTERNATIONAL EXAMINATIONS
International General Certificate of Secondary Education

INFORMATION TECHNOLOGY

0418/01

Paper 1

October/November 2003

1 hour 15 minutes

Candidates answer on the Question Paper.
No additional materials are required.

READ THESE INSTRUCTIONS FIRST

Write in dark blue or black pen in the spaces provided on the Question Paper.
You may use a soft pencil for any diagrams, graphs, music or rough working.
Do not use staples, paper clips, highlighters, glue or correction fluid.

Answer **all** questions.

At the end of the examination, fasten all your work securely together.

The number of marks is given in brackets [] at the end of each question or part question.

For Examiner's Use

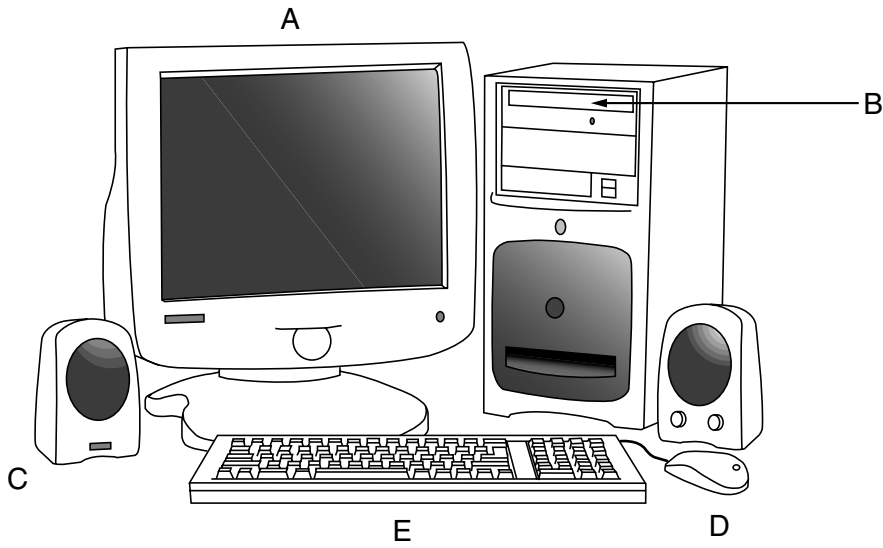
If you have been given a label, look at the details. If any details are incorrect or missing, please fill in your correct details in the space given at the top of this page.

Stick your personal label here, if provided.

This document consists of **12** printed pages.



1 Name the objects **A, B, C, D and E** using the words from the list.



- | | | | |
|-----------------------|------------------|-----------------|-------------------|
| CD ROM Drive | Joystick | Keyboard | Microphone |
| Midi Interface | Monitor | Mouse | Plotter |
| Printer | Processor | Speaker | Video |

A

B

C

D

E [5]

2 Ring **two** items which contain personal data.

- | | | |
|------------------------|---------------------|-----------------------|
| Car park ticket | Credit card | Digital clock |
| Keyboard | Pupil record | Remote control |
- [2]

3 Draw **five** lines on the diagram to match the software to its use.

The first one has been done for you.

Software	Use
Presentation graphics	recording data in a science experiment
Word processor	preparing a talk to show how a computer works
Spreadsheet	writing letters to parents
Database	keeping school tuck shop accounts
Desk Top Publishing	storing pupil records
Measuring program	producing the school magazine

[5]

4 Give **two** ways in which a hard disc is different from a CD ROM.

1

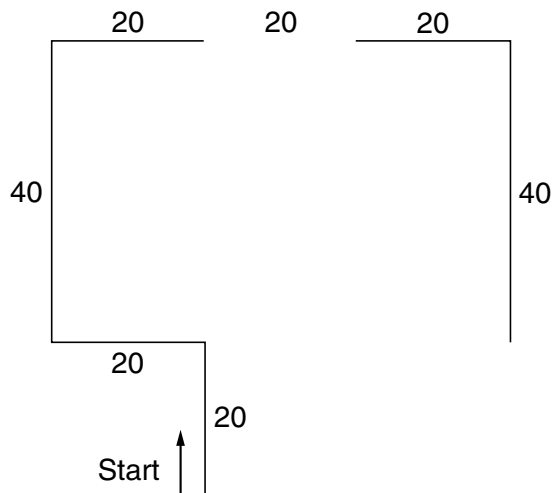
.....

2

..... [2]

5 A floor turtle can use the following instructions:

INSTRUCTION	MEANING
FORWARD n	Move n mm forward
BACKWARD n	Move n mm backward
LEFT t	Turn left t degrees
RIGHT t	Turn right t degrees
PENUP	Lift the pen
PENDOWN	Lower the pen



Complete the set of instructions to draw the above shape by filling in the blank lines.

PEN DOWN
 FORWARD 20
 LEFT 90

[4]

6 Tick whether the following statements are **TRUE** or **FALSE**.

	TRUE ✓	FALSE ✓
OMR is used to read data from school registers.		
OCR is used to read data from bank cheques		
DTP is used to store pupil records on a school computer system.		
Regular use of computers improves your eyesight.		

[4]

7 Describe **two** features of a mouse.

- 1
-
- 2
- [2]

8 Describe **two** precautions you can take to prevent viruses from entering your computer system.

- 1
-
- 2
- [2]

9 (a) Name **two** types of software which could be used in a school's sports department.

- 1
- 2 [2]

(b) State how each type of software would be used.

- 1
-
- 2
- [2]

- 10** Pupil records are kept on a computer in the school office. Here is a part of a file of year 12 student records.

Exam Number	Pupil Name	Gender	Form	Home Phone	Date of Birth
1001	Zhang Zhiyaq	M	MJ	3574891	861201
1002	Kumar Mohandas	M	NK	6542738	861025
1003	Mohammed Hafiz	M	NK	6541984	870121
1004	Janine Dixon	F	KL	4256234	870611

- (a) (i)** Write down the name of the field which would be used as the key field.

.....

- (ii)** Why would it be used?

.....

.....

[2]

- (b)** Which field is most likely to be designed as Boolean/logical data type?

..... [1]

- (c)** Why is it more suitable to use date of birth rather than age?

..... [1]

- (d)** State **two** ways in which pupil records can be protected from unauthorised use.

1

.....

2

..... [2]

- 11** State **one** advantage and **one** disadvantage of using a laptop computer rather than a desktop computer.

Advantage

.....

Disadvantage

..... [2]

12 You have been asked to set up a science experiment to measure the rates of cooling of different liquids. You must use a computer to do this. You will need a monitor, keyboard and a mouse to help set up the experiment.

Name **three** other items of hardware or software. For each one you will need to say what it will be used for.

1

.....

2

.....

3

..... [3]

13 A school uses a database to store records about its students. Describe a situation where a record on the database would need to be:

(a) inserted

..... [1]

(b) deleted

..... [1]

(c) amended

..... [1]

14 (a) Name two household appliances which use computer control.

1

.....

2

..... [2]

(b) Describe two ways in which the use of such appliances has influenced people's lifestyles.

1

.....

2

..... [2]

15 At the end of the school year the head teacher sends a letter home to parents. This letter contains details of their new class teacher. Describe the steps in the production of such a letter using mailmerge.

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

16 Most home computer owners use a modem to connect to the Internet using a telephone line.

(a) Why is a modem needed?

.....
..... [1]

(b) Give **two** advantages for individuals of using the Internet in the home.

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

17 (a) Employees in a school office use computers for long periods of time.

(i) Describe one health problem which can be caused by such use.

.....
.....

(ii) Describe one way in which this might be prevented.

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

(b) The employees print a lot of copies of the same documents. Give two reasons why they should use a laser printer rather than an inkjet printer.

1
.....

2
..... [2]

18 A school is going to publish its exam results on its website. Describe three stages in the creation of a page, naming the particular type of software which would be used at each stage.

Stage 1
.....

Stage 2
.....

Stage 3
..... [3]

19 A school is going to buy computers to create a new IT room. They will be connected to the existing network.

(a) Give two factors other than cost that should be taken into account when choosing suitable computers to add to the network.

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

(b) The purchase of new computers will cause the fileserver to be short of storage space and run more slowly. Describe two solutions to these problems.

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

(c) Apart from the computer, describe one item of hardware which would be needed and explain how it could be connected to the network.

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

22 The results and pictures of a school sports day are to be included in a school magazine article. At the moment the results are stored in a spreadsheet. Describe how this article will be produced.

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..... [4]