

Surname	Centre Number	Candidate Number
Other Names		0



GCSE

178/01

**INFORMATION AND COMMUNICATION
TECHNOLOGY**

PAPER 1

Foundation Tier

P.M. MONDAY, 13 June 2011

1 hour

Examiner's Use Only		
Question	Maximum Mark	Mark Awarded
1	11	
2	2	
3	9	
4	9	
5	6	
6	10	
7	4	
8	5	
9	2	
10	2	
Total Mark	60	

0178
010001

INSTRUCTIONS TO CANDIDATES

Use black ink or black ball-point pen. Do not use pencil or gel pen. Do not use correction fluid.

Write your name, centre number and candidate number in the spaces at the top of this page.

Answer **all** questions.

Write your answers in the spaces provided in this booklet.

If you run out of space in the question-and-answer booklet you may use continuation sheets. Number the questions clearly and put your sheets in this question-and-answer booklet.

INFORMATION FOR CANDIDATES

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



J U N 1 1 0 1 7 8 0 1 0 1

Answer all questions.

1. An estate agent uses Desktop Publishing (DTP) software to create the following business card.



- (a) Tick (✓) which **four** of the following features were used to produce this business card. [4]

- | | |
|----------------------|--------------------------|
| CLIP ART | <input type="checkbox"/> |
| BORDER ART | <input type="checkbox"/> |
| RIGHT JUSTIFY | <input type="checkbox"/> |
| CENTRE TEXT | <input type="checkbox"/> |
| FONT STYLE | <input type="checkbox"/> |

- (b) Give **one** feature of the DTP software which could be used to check for spelling mistakes. [1]

- (c) Give **two** other *types* of documents the estate agent could produce using DTP software. [2]

Document 1

Document 2



- (d) Give a suitable example of how each of the following types of software could be used by the estate agent in running his business. [2]

The first one has been done for you.

<i>Type of software</i>	<i>Use in an estate agent's business</i>
<i>Spreadsheet</i>	<i>To work out the profit and loss accounts for the business.</i>
Multimedia software	
Database software	

- (e) Give **one** potential health risk the estate agent could suffer when using a computer and say how it could be prevented. [2]

Health risk

Prevention

11

- 2. Complete the following sentences using only the words given in the list below by putting a letter, A, B or C in the correct box.

A. INFORMATION

B. DATA

C. FIGURES

Use each word only once.

(a) Raw readings collected from sensors are called [1]

(b) The readings are used to create a graph and this gives us [1]

2



3. A sports centre manager has begun to set up a computerised database of members. Part of this database is shown below.

Member Number	Name	Gender	Start Date	Club	Disabled Parking Permit
1432	Davies, Y	M	01/01/2010	Basketball	Y
5276	Ali, R	M	04/05/2010	Tennis	N
2863	Peters, L	F	03/09/2010	Soccer	Y
8234	Mertson, S	M	12/09/2010	Tennis	N
2869	Jones, D	F	03/01/2010	Basketball	Y
2945	Smith, F	F	02/09/2010	Soccer	N
2876	Evans, L	M	14/09/2010	Soccer	N

- (a) How many *records* are in this database? [1]
- (b) State the '*keyfield*'. [1]
- (c) The manager wants to use validation techniques in the database to prevent errors when entering the data. Circle which of the following is the **most suitable** validation technique for each field.
Do not use the same technique twice. [2]

<i>Field</i>	<i>Validation Techniques</i>
Gender	PRESENCE CHECK LIST BOX CHECK DIGIT FORMAT CHECK
Start Date	PRESENCE CHECK LIST BOX CHECK DIGIT FORMAT CHECK

- (d) The 'Gender' field uses coded data e.g. M and F.
Give **one** advantage of using coded data. [1]
-
-
- (e) How many members in the database shown above are in the '*Tennis*' Club? [1]



(f) The manager wants to send a letter to all disabled parking permit holders. Write down the *field* and the *search* data needed to get this data from this database. [1]

.....

(g) Give **one** reason why the manager would add a new record to this database. [1]

.....

(h) Give **one** advantage of keeping membership data on a computer database. [1]

.....

.....



4. Bank cards can be used in shops at the Point of Sale (POS) system commonly called a 'checkout'.

(a) Give **two** types of *bank card* that can be used at the POS. [2]

.....

(b) Give a reason why bank cards have a PIN number. [1]

.....

(c) Tick (✓) to show which **two** *input* devices are found at a shop *checkout*. [2]

Tick (✓) **two** boxes only

Weighing scales

Card reader

Speaker

Printer

(d) *Other than bank cards*, give **two** different ways shoppers can pay for their goods. [2]

(i)

(ii)

(e) Bar codes on goods do **not** contain the *Price*.

Give **two** items of data *encoded* in the bar code. [2]

.....



5. A student has £100 a week to spend and is trying to save £60 to buy a concert ticket. The student used the following spreadsheet to help him plan his budget.

	A	B
1		
2	Weekly Income	£100
3		
4	Food	£20
5	Utilities	£10
6	Phone and Internet	£10
7	Clothes and entertainment	£20
8	Rent	£25
9	TOTAL	£85
10		
11	Savings	£15

- (a) Give the total amount he is planning to save in **one** week. [1]
- (b) Tick (✓) which **two** of the following are *cell formatting* features used in this spreadsheet. [2]

Tick (✓) **two** boxes only

- | | |
|-------------|--------------------------|
| Right Align | <input type="checkbox"/> |
| Decimals | <input type="checkbox"/> |
| Formulas | <input type="checkbox"/> |
| Currency | <input type="checkbox"/> |

- (c) Write a label, A, B, C or D in the box to show which of the following formulas could be used to give the Total Cost in **Cell B9**. [1]

- A =B9+C9+D9+E9
 B =SUM(B4:B8)
 C =B4+B5+B6+B7+B8
 D =Total Cost B:E

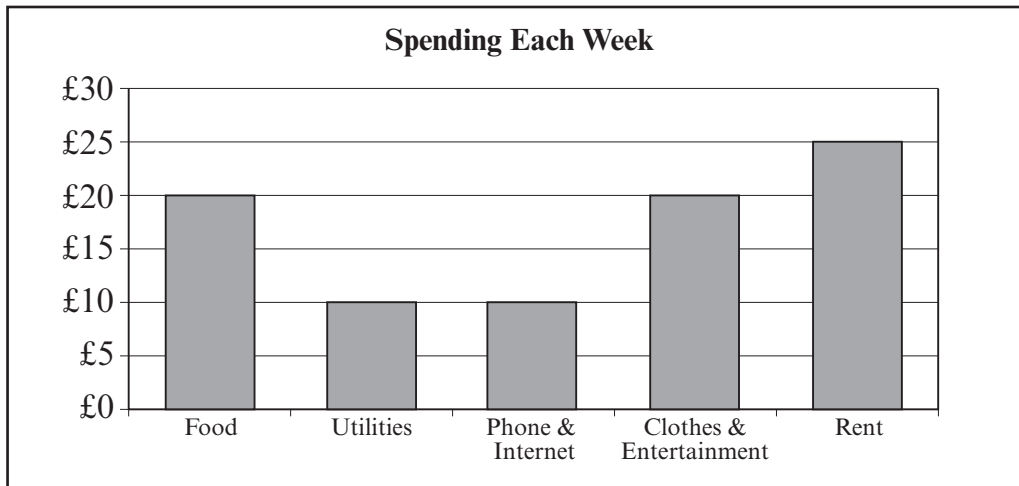


(d) Give a formula which could be used to give the *Savings* in **Cell B11**.

[1]

.....

(e) The student produced a graph of his spending as shown below.



Give the *type* of graph he used. [1]

6



6. A school has a network

(a) What is a *network*? [1]

.....

(b) Tick (✓) the **two** items needed when a new pupil is added to the school network. [2]

Tick (✓) two boxes only

IT teacher	<input type="checkbox"/>
Username	<input type="checkbox"/>
Password	<input type="checkbox"/>
IT room	<input type="checkbox"/>

(c) Give **two** rules about passwords a pupil should obey. [2]

Rule 1

.....

.....

Rule 2

.....

.....

(d) Tick (✓) the **two** sentences which are *advantages* of using a network. [2]

Tick (✓) two boxes only

Networks are more reliable than stand alone computers	<input type="checkbox"/>
Networks share viruses	<input type="checkbox"/>
Networks share programs	<input type="checkbox"/>
Networks share printers	<input type="checkbox"/>



(e) Teachers use email to send messages to other teachers on the network.

Tick (✓) the **two** sentences which are *advantages* of using email on the school network.

[2]

Tick (✓) two boxes only

Email is easy to use

Emails are likely to spread viruses

You can record when the email is sent

Emails can be edited

(f) Teachers can also put notices to pupils on the school's intranet.

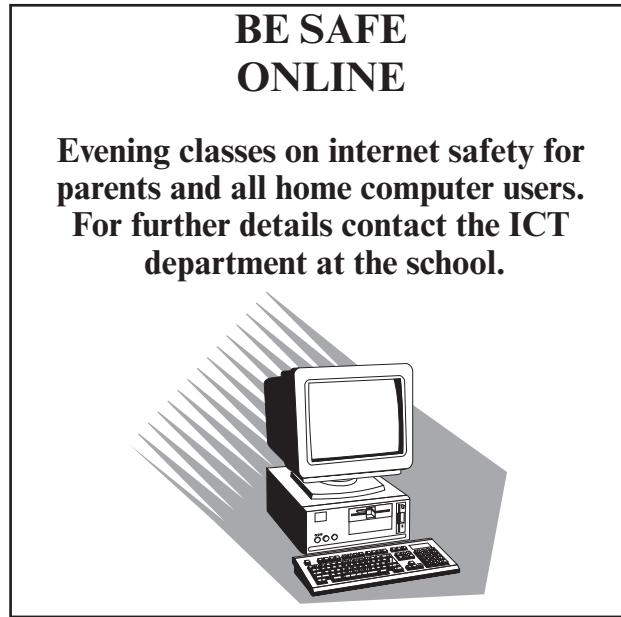
Give an example of a suitable type of notice a teacher might put on the intranet *for pupils*.

[1]

10



7. The following poster appeared in a shop.



(a) Describe **two** pieces of advice home users might be given about *virus protection*. [2]

Advice 1

.....
.....

Advice 2

.....
.....

(b) Give **two** problems which could arise for *children using the Internet at home*. [2]

Problem 1

.....
.....

Problem 2

.....
.....

4



8. A company has a website.

(a) Tick (✓) **two** essential facilities needed for a website.

[2]

Tick (✓) **two boxes only**

An accountant

A spreadsheet

An internet service provider

A web address (url)

(b) Customers can buy the company's products online (*online shopping*).

*Other than being able to shop from home, give **one** advantage for the customer of online shopping.*

[1]

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

(c) Give **one disadvantage** of online shopping.

[1]

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

(d) *Other than online shopping, give **one** other use for a company's website.*

[1]

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

5



9. A computer controls a burglar alarm.
This burglar alarm is linked to a sensor and an output device.

(a) Give a suitable **sensor** which could be used in this burglar alarm system. [1]

.....

(b) Give a suitable **output device** which could be used in this burglar alarm system. [1]

.....

1/2

10. A computer uses *wireless* devices.

(a) Name **one** *wireless* device used with a computer. [1]

.....

(b) Give **one** advantage of using *wireless* devices. [1]

.....

1/2

