GCSE

178/01*265/01

INFORMATION AND COMMUNICATION TECHNOLOGY PAPER 1 (SHORT COURSE) INFORMATION AND COMMUNICATION TECHNOLOGY Foundation Tier

P.M. TUESDAY, 20 May 2008

1 hour

INSTRUCTIONS TO CANDIDATES

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. Where the space is not sufficient for your answer, continue the answer at the back of the book, taking care to number the continuation correctly.

INFORMATION FOR CANDIDATES

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

Answer **all** *questions*.

1. A school is designing a poster to advertise a fund raising auction. Part of this poster is shown
below.

```
Auction
In aid of school funds
```
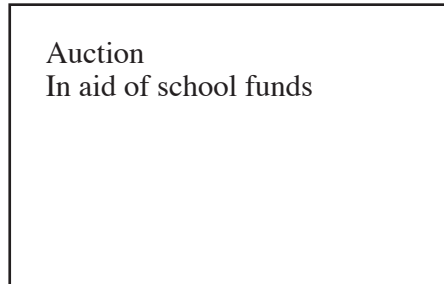
(a) Tick (✓) **two** *other suitable* data items that should be put on this poster.   [2]

	Tick (✓) two boxes only
Weather forecast	
Date of event	
Time of event	

(b) One of the features of the DTP (Desktop Publishing) software was used to improve this part
of the poster. The improved poster is shown below.

```
                Auction
          In aid of school funds
```
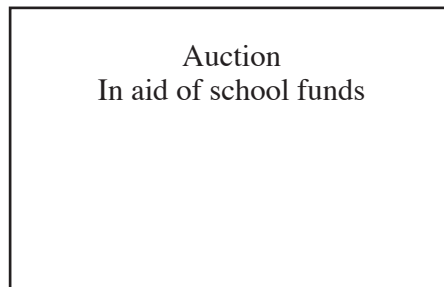
Circle which of the following features was used to improve this poster.   [1]

RIGHT JUSTIFY   CENTRE JUSTIFY   FULLY JUSTIFY

(c) Give **four** *other* features of the DTP (Desktop Publishing) software which could be used to
improve the poster.   [4]

....

....

(d)   Give **one** feature of the software that could be used to check for spelling mistakes.   [1]

....

(e)   Other than DTP software, state **one** other *type* of software that could be used in running the auction. Give an example of how it could be used.   [2]

Type of software ....

Example of use ....

Turn over.

2. Many shops use POS (Point of Sale) systems commonly called *checkouts*.

(a) Tick (✓) to show which of the following devices are used for *input* or *output* at the POS. *The first one has been done for you.* [3]

DEVICE	INPUT	OUTPUT
Keypad	✓	
Weighing scales		
Speaker		
Barcode scanner		

(b) Give **two** other *output devices* found at the POS. [2]

Output device 1 ....

Output device 2 ....

(c) Barcodes contain items of data.
Tick (✓) to show which **two** items of data are encoded in the barcode. [2]

	Tick (✓) two boxes only
Price	
Colour	
Country of origin	
Manufacturers code	

(d) Shoppers can pay for their goods in many different ways at the POS. [2]

Give **two** different ways shoppers can pay for their goods.

Method 1 ....

Method 2 ....

(e) *Other than different payment methods*, give **one** advantage of using POS systems in shops. [1]

Advantage ....

....

3. A personal trainer keeps a record of the fitness levels of his clients on a computer database. Part of this database is shown below.

Client No	Name	Activity	Gender	Fitness test score
474	Davies S	Cycling	M	6
387	Khan S	Running	F	11
210	Jones R	Aerobics	M	10
109	Robolski A	Cycling	M	12
078	Evans L	Running	F	13
321	Jones W	Running	M	9
045	Begum T	Aerobics	F	7
029	Smith R	Running	F	8
607	Adams Y	Cycling	F	5

(a) How many *fields* are in this database? .... [1]

(b) State which field is the *'keyfield'*. .... [1]

(c) The personal trainer wants to find the details of all *'runners'*.
Write down the *field* and the *search* data needed to get this data from the database. [1]

....

(d) The personal trainer sorts the *'Fitness test score'* into *descending* order. Whose name would appear at the top of the list? [1]

....

(e) Tick (✓) **one** box to show which of the following is an advantage of using a database for storing client records. [1]

	Tick (✓) only one
Makes it easier	
Faster to search for clients	
Can't go wrong	

Turn over.

4. A hotel uses the spreadsheet shown below to record details of monthly profit.

	A	B	C	D	E	F	G	H
1	**Month**	**Income**	**Wages**	**Electricity**	**Telephone**	**Gas**	**Total costs**	**Profit**
2	Jan	£6,000	£3,500	£500	£100	£0	£4,100	£1,900
3	Feb	£5,000	£3,500	£450	£100	£50	£4,100	£900
4	Mar	£7,000	£3,500	£410	£100	£0	£4,010	£2,990
5	Apr	£8,000	£3,500	£400	£100	£120	£4,120	£3,880
6	May	£9,500	£3,500	£350	£100	£200	£4,150	£5,350
7	Jun	£10,050	£4,500	£300	£100	£100	£5,000	£5,050
8	Jul	£11,000	£4,500	£300	£100	£50	£4,950	£6,050
9	Aug	£12,000	£4,500	£300	£100	£0	£4,900	£7,100
10	Sep	£9,000	£3,500	£320	£100	£120	£4,040	£4,960
11	Oct	£5,000	£3,500	£350	£100	£200	£4,150	£850
12	Nov	£4,500	£3,500	£400	£100	£150	£4,150	£350
13	Dec	£9,000	£4,000	£500	£100	£200	£4,800	£4,200

(a) Write down the contents of Cell **B6**. .... [1]

(b) Which of the following formulas could be used to give the **Total costs** in Cell **G2**? [1]

      A   =SUM(C2:F2)
      B   =B2+C2+D2+E2+F2
      C   =C2+D2+E2+F2
      D   =SUM(A2:B2)

      ....

(c) Give a suitable formula for working out the **Profit** in Cell **H2**.

    = ... [1]

(d) Tick (✓) which **two** of the following are *cell formatting* features used in *Column H*. [2]

	Tick (✓) two boxes only
Preview	
Currency	
Calculation	
Right Align	

(e) The manager produces a graph for *'Profit'* as shown below.
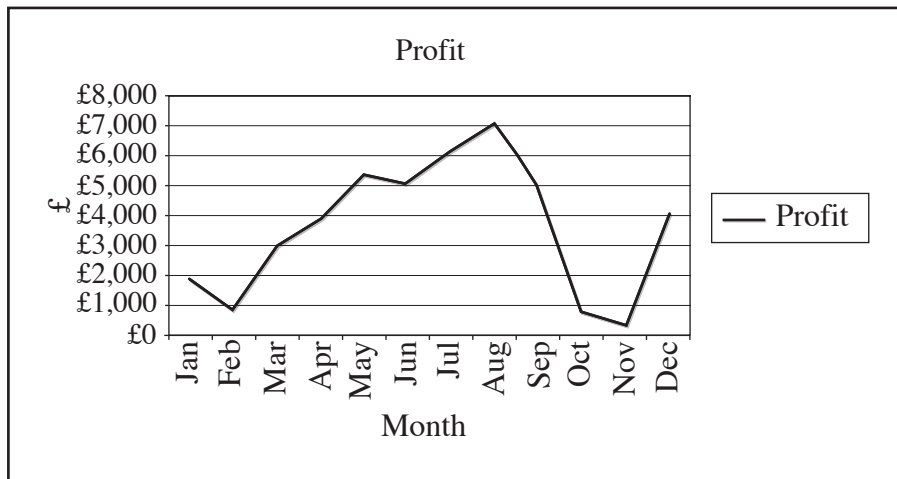
Give the name for this **type** of graph. .... [1]

(f) *Other than drawing graphs*, give **one** advantage of using a spreadsheet to work out the profit. [1]

....

....

Turn over.

5. A travel company allows customers to use its Internet website to book their own holidays.

www.holidaysrus.co.uk	**Holidays R' Us**
Latest Offers	
Flights only	What type of holiday are you looking for?
Beach holidays	
Lakes and Mountains	
Families	

(a) Give **one** method of *searching for* this website on the Internet. [1]

....

(b) Tick (✓) **two** advantages of booking a holiday online. [2]

	Tick (✓) two boxes only
Can book 24 hours a day	
More secure	
Never have to wait	
Faster to look at alternative holidays	

6. Numbers printed on the bottom of cheques by banks contain *encoded* data.

An example of these numbers is shown in bold on the cheque below.

Money Bank	www.moneybank.co.uk	20-28-34
10 Low St		
Cardiff		

Pay... Date..........................

.... £50-00

....

Account Payee

ı0 27 2ı   202834   ı2345662
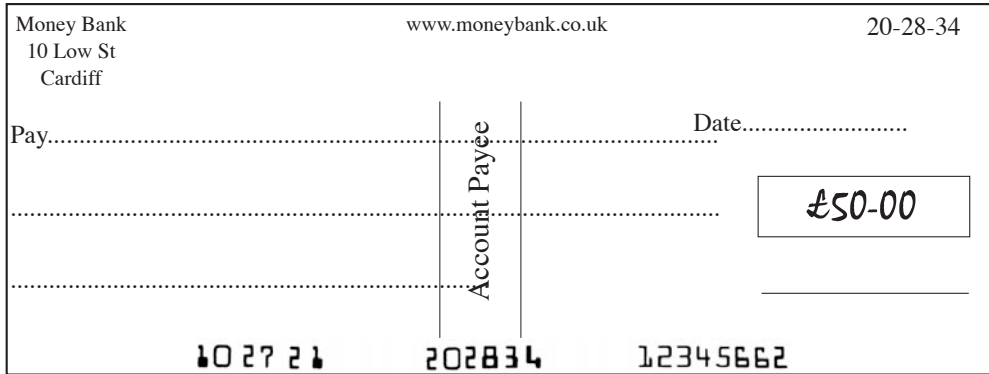
(a) Tick (✓) which **two** of the following are items of data encoded *by the bank* on the bottom of cheques. [2]

	Tick (✓) two boxes only
Price	
Bank sort code	
PIN number	
Account Number	

(b) The customer has already written an essential item of data on the cheque shown above. Give **two** other items of data which must be written on the cheque *by the customer*. [2]

....

Turn over.

7. A cinema complex has automatic teller machines (ATMs) commonly called *cashpoints*.

(a) The magnetic strip on the back of a credit card contains the PIN (Personal Identification Number).

A N Other

(i) Why does the customer need a PIN number? [1]

....

....

(ii) Tick (✓) **one** *other* item of data stored in the magnetic strip. [1]

	Tick (✓) only one
Account Number	
Bank Address	
Credit Card Number	

(b) Give **one** error message that could be displayed on the ATM's screen. [1]

Error message ....

(c) In addition to *getting* cash, give **three** *other* services that can be obtained from the cashpoint. [3]

Service 1 ....

Service 2 ....

Service 3 ....

8. A school uses a computer network.

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

....

....

(b) This school has set up a website and uses email (electronic mail) for contacting other schools.

(i) What is email? [1]

....

....

(ii) *Other than email*, give **two** different uses of the school's website. [2]

Use 1 ....

Use 2 ....

(c) The school gives user names to pupils. John Jones has been told to create a password to protect his files. [2]

Tick (✓) which **two** would **NOT** be good passwords.

	Tick (✓) two boxes only
JJ	
A*123*jj	
John Jones	
Account JJ#987gi3	

(d) *Other than problems with passwords*, give **one** other type of *specific problem* that could occur when using the network. [1]

....

....

Turn over.

9. Anna buys a notebook computer which has a GUI (Graphical User Interface) as shown below.

(a) Give **two** features of a GUI which will help her to use the computer. [2]

Feature 1 ....

Feature 2 ....

(b) Tick (✓) which **two** of the following are *advantages* of using a notebook computer over a desktop computer. [2]

	Tick (✓) two boxes only
Easier to use	
Lighter to carry it around	
Easier to do homework on	
Can use it in remote locations	

(c) Both notebooks and desktops can use 'wireless' technology. [1]

Give **one** advantage of *'wireless'* technology.

....

....

(d) Anna's parents are worried about the *health hazards of using a computer*.

Give a possible health hazard and **one** method of preventing it. [2]

Health hazard ....

Prevention ....

....

(e) Anna's parents are also worried about *dangers to children* from using the Internet.

Give **one** possible *danger to children* in using the Internet. [1]

Danger of using the Internet ....

....

Turn over.

For continuation only.