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|-------------------|------------------|---------------------|
| Candidate Name | Centre Number | Candidate Number |
| | | 0 |



GCSE

178/01*265/01

**INFORMATION AND
COMMUNICATION TECHNOLOGY**

PAPER 1

**(SHORT COURSE) INFORMATION AND
COMMUNICATION TECHNOLOGY**

Foundation Tier

P.M. TUESDAY, 19 May 2009

1 hour

| Examiner's Use Only | | |
|-----------------------|-----------------|-----------------|
| Question | Maximum Mark | Mark Awarded |
| 1 | 2 | |
| 2 | 2 | |
| 3 | 3 | |
| 4 | 10 | |
| 5 | 13 | |
| 6 | 5 | |
| 7 | 7 | |
| 8 | 6 | |
| 9 | 5 | |
| 10 | 5 | |
| 11 | 2 | |
| Total Mark | 60 | |

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. Data is entered into a computer using **MICR** and **OCR**.

(a) Tick (✓) **one** box to show which is a suitable example of the use of **MICR**. [1]

| | Tick (✓) one box only |
|-----------------------|-----------------------|
| Scanning pictures | |
| Scanning bank cheques | |

(b) Tick (✓) **one** box to show which is a suitable example of the use of **OCR**. [1]

| | Tick (✓) one box only |
|--------------------|-----------------------|
| Scanning postcodes | |
| Scanning barcodes | |

2

2. Mobile phones use *wireless* technology.

(a) Give **one** advantage of using *wireless* technology. [1]


.....

(b) Other than cost, give **one disadvantage** of using a mobile phone over a non wireless landline telephone. [1]

.....

2

3. Complete the table below saying which is *data* and which is *knowledge*. **The first one is done for you.** [3]

| | |
|---|-------------|
| 31 (mph) | DATA |
| You have exceeded the 30 mile an hour speed limit | |
|  | |
| 1 min 20 seconds | |

3

4. The manager of Newland Health Centre is designing a flyer to advertise its opening times. This flyer is shown below.

| |
|---|
| <p>Newland Health Centre</p> <p>New opening times Monday to Friday 8:00 a.m. to 6:30 p.m.</p> <p>Closed Saturday and Sunday</p> |
|---|

- (a) Tick (✓) **two other suitable** data items she should put on this flyer. [2]

| | Tick (✓) two boxes only |
|-----------------------------------|-------------------------|
| Address of Health Centre | |
| Favourite doctor | |
| Name of receptionist | |
| Telephone number of Health Centre | |

- (b) Give **one** feature of the DTP software used to check for errors in spelling. [1]

- (c) The Manager has improved the flyer. The improved version is shown below.

| |
|--|
| <p><u>Newland Health Centre</u></p> <p>New opening times Monday to Friday 8:00 a.m. to 6:30 p.m.</p> <p><i>Closed Saturday and Sunday</i></p> |
|--|

- Circle** which of the following features was used to improve this poster. [5]

| | | | |
|----------------------|------------------|--------------------|-------------------|
| ITALICS | CLIPART | CENTRE TEXT | BOLD FONT |
| FULLY JUSTIFY | UNDERLINE | BULLETS | BORDER ART |

- (d) The manager also uses database and presentation software in running the Health Centre. Give an example of how each type of software could be used. [2]

Database

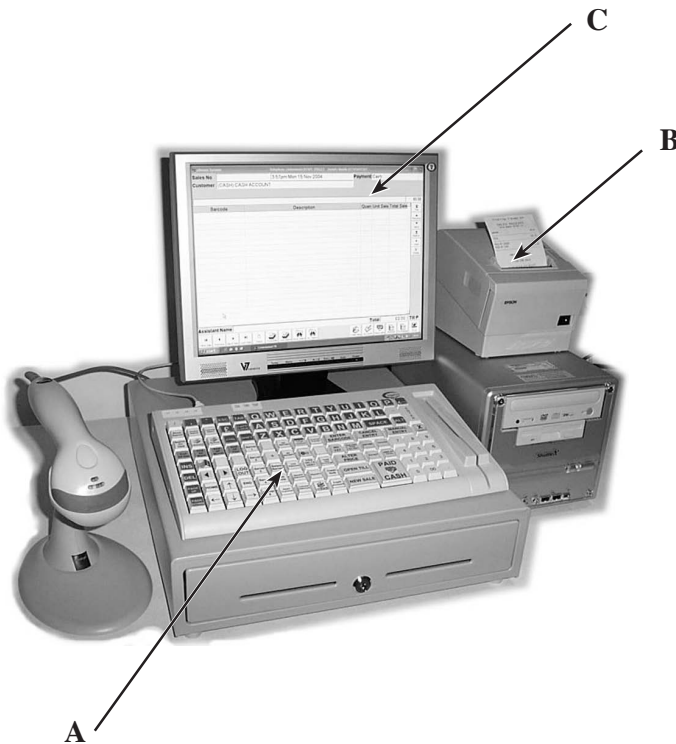
.....

Presentation

.....

10

5. A bookshop uses a Point of Sale (POS) terminal like the one shown below.



- (a) Put a tick (✓) in the boxes in the table below, to indicate whether the devices labelled A, B and C are used for input or output. [3]

| DEVICE | INPUT | OUTPUT |
|-----------|-------|--------|
| A keypad | | |
| B printer | | |
| C monitor | | |

- (b) Give **one other device** used for *input* at the POS. [1]

.....

- (c) Books have barcodes which contain items of data.

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

.....

(d) Give **one** method of entering the product data when a barcode is damaged. [1]

.....

(e) Point of Sales (POS) systems allow shops to offer extra services to customers.
Give **three other** services shops can offer at the POS. [3]

Service 1

Service 2

Service 3

(f) The *bookshop* also sells books online, using the Internet.
Give **two** advantages of buying a book online. [2]

Advantage 1

.....

Advantage 2

.....

(g) Give **one other** specific use of the Internet for the *bookshop*. [1]

.....

.....

6. A local drama group uses a database to store details of cast members. Part of this database is shown below.

| Membership No. | Lastname | Firstname | Speciality | Gender | Date of Membership |
|----------------|----------|-----------|------------|--------|--------------------|
| 090 | Davies | Sara | Singer | F | 12/07/07 |
| 091 | Evans | Mair | Dancer | F | 14/03/07 |
| 092 | Jones | Kerry | Musician | F | 05/21/08 |
| 093 | Khan | Abu | Singer | M | 05/05/05 |
| 094 | Phillips | James | Dancer | M | 18/11/06 |
| 095 | Rogers | Daniel | Musician | M | 12/12/04 |
| 096 | Carter | Eliza | Dancer | F | 17/10/07 |

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

(b) When the organiser was typing in the data he made a mistake in the *Date of Membership* field.

(i) Write down the mistake in the *Date of Membership* field. [1]

.....

(ii) State how this mistake could have been prevented. [1]

.....

.....

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

.....

(d) Who has been a member for the longest amount of time? [1]

.....



7. A football club uses a spreadsheet. Part of this spreadsheet is shown below.

| | A | B | C | D | E | F | G | H | I | J |
|---|-------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|
| 1 | Income (£) | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | TOTAL |
| 2 | Ticket sales (£) | 63000 | 63000 | 63000 | 63000 | 65000 | 70000 | 61000 | 59000 | 507000 |
| 3 | Fundraising (£) | 4000 | 4000 | 2000 | 100 | 150 | 180 | 200 | 300 | 10930 |
| 4 | Sponsors (£) | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 16000 |
| 5 | Advertising (£) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 8000 |
| 6 | Programme sales (£) | 180 | 150 | 100 | 160 | 180 | 140 | 120 | 100 | 1130 |
| 7 | TOTAL INCOME (£) | 70180 | 70150 | 68100 | 66260 | 68330 | 73320 | 64320 | 62400 | 543060 |

(a) Give the income from *Fundraising* in cell D3. [1]

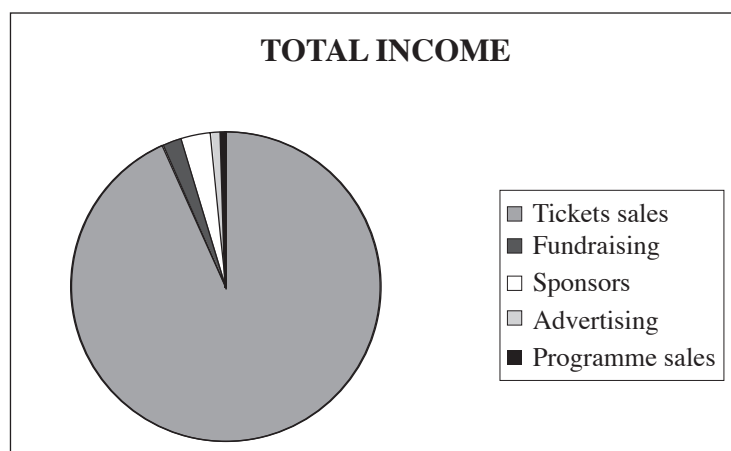
(b) Which **cell** shows the *most ticket sales* in any one month? [1]

(c) Which of the following formulas could be used to give the total ticket sales in Cell J2? [1]

- A =B2+C2+D2+E2+F2+G2+H2+I2
 B =B2+C2+D2+F2+G2+H2+I2
 C =TOTAL Row B
 D =SUM(B2:I2)

.....

(d) A graph for '**Total Income**' is shown below.



Give the name of this type of graph. [1]

(e) Tick (✓) which **two** of the following are *advantages* of using a spreadsheet. [2]

| | Tick (✓) two boxes only |
|--|-------------------------|
| If the data changes the results of formulas could change | |
| Calculates data easily | |
| Can be used to do investigations | |
| It is faster | |

(f) Other than the cost of buying spreadsheet software, give **one** specific *disadvantage* of using *spreadsheets* to work out the total income. [1]

Do not give general disadvantages of using computers.

.....

.....



8. People are worried about the health hazards of using computers.

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

Health hazard

Prevention

(b) The following advertisement appeared in a local newspaper.

Parents are you worried
about your children using the Internet?

Come to a public meeting
to talk about your concerns with experts.

(i) State what is meant by the *Internet*. [1]

.....

.....

(ii) Give **three** concerns parents might have about their children using the Internet. [3]

Concern 1

Concern 2

Concern 3

6

9. Banks use automatic teller machines (ATMs) commonly called *cashpoints*.

(a) Give **two** types of cards which could be used at a cashpoint. [2]

Card 1

Card 2

(b) Other than getting cash, give **three** services that can be obtained from the cashpoint. [3]

Service 1

Service 2

Service 3

5

10. The introduction of computers has affected jobs and has changed the way people work.

(a) 'Teleworking' has had an effect on jobs.

What is meant by 'teleworking'? [1]

.....
.....

(b) People use their computers for *videoconferencing*.

Give **two** extra items of *hardware* specifically needed for videoconferencing. [2]

.....
.....

(c) Give **two** *other* different effects of using computers on employment. [2]

Effect 1

.....
Effect 2

.....

5

11. Tick (✓) which **two** are helpful features of a Graphical User Interface (GUI).

[2]

| | Tick (✓) two boxes only |
|------------------------|-------------------------|
| Icons | |
| What if investigations | |
| Favourite settings | |
| Drawing graphs | |

②

