

Write your name here

Surname

Other names

Centre Number

Candidate Number

**Edexcel IGCSE**

# Information and Communication Technology

## Paper 1: Written paper

Sample Assessment Material  
**Time: 1 hour 30 minutes**

Paper Reference  
**4IT0/01**

**You do not need any other materials.**

Total Marks

### Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided  
– *there may be more space than you need.*

### Information

- The total mark for this paper is 100.
- The marks for **each** question are shown in brackets  
– *use this as a guide as to how much time to spend on each question.*

### Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.

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Turn over ►

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## SECTION A

Answer ALL questions.

For each question, choose an answer A, B, C or D and put a cross in the box ☒. Mark only one answer for each question. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

1 Which **one** of these is an input device?

- A A data projector
- B A monitor
- C A graphics tablet
- D A speaker

(Total for Question 1 = 1 mark)

2 Which device would be used to produce a hard copy of an email?

- A A sensor
- B A printer
- C A webcam
- D A scanner

(Total for Question 2 = 1 mark)

3 Computer files can be stored in a:

- A table
- B record
- C folder
- D field.

(Total for Question 3 = 1 mark)

4 The type of software used to produce and run a slide show is:

- A desktop publishing
- B presentation
- C graphics
- D framing.

(Total for Question 4 = 1 mark)



5 Writing an email when not connected to the internet is known as:

- A working online
- B forwarding
- C working offline
- D copying.

(Total for Question 5 = 1 mark)

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6 Which **one** of these would hold the largest amount of data?

- A A terabyte
- B A megabyte
- C A maxibyte
- D A kilobyte

(Total for Question 6 = 1 mark)

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7 Devices connecting to a network must have a(n):

- A USB cable
- B IP address
- C sound card
- D backup device.

(Total for Question 7 = 1 mark)

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8 Some membership cards can be read electronically.

Where on the card is the electronic data stored?

- A Magnetic stripe
- B Name printed on the card
- C Number printed on the card
- D Signature strip

(Total for Question 8 = 1 mark)

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9 Which **one** of these is **not** a method used to improve data security?

- A Backup
- B Spellchecking
- C Encryption
- D Password protection

(Total for Question 9 = 1 mark)

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10 Traffic light systems are used to help traffic flow freely.

What type of software is used in a traffic light system?

- A Management software
- B System software
- C Control software
- D Communication software

(Total for Question 10 = 1 mark)

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11 Operating systems that allow users to run more than one program at a time are known as:

- A multi-tasking
- B multi-user
- C networking
- D utility programs.

(Total for Question 11 = 1 mark)

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12 Fingerprint scanners are used to identify individuals.

The term used to describe this type of scanner is:

- A ergonomic
- B optical
- C digital
- D biometric.

(Total for Question 12 = 1 mark)

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**13** Many people buy goods over the internet.

Which **one** of these statements is accurate?

- A** All goods bought over the internet are cheaper than those sold in shops.
- B** The sale of goods over the internet is well regulated.
- C** It is possible to compare prices before buying goods over the internet.
- D** Images of goods displayed on the internet are always accurate.

**(Total for Question 13 = 1 mark)**

**14** Many people have concerns about the security of online banking services.

Which **one** of these is the most appropriate advice to follow when using these services?

- A** Install a firewall and choose a simple password.
- B** Install a virus checker and change your password regularly.
- C** Install a virus checker and choose a simple password.
- D** Install a firewall and change your password regularly.

**(Total for Question 14 = 1 mark)**

**15** A computer is advertised with a '3GHz Pentium 4 processor'.

What is the processor speed in pulses per second?

- A** 4 000 000 000 000
- B** 4 000 000 000
- C** 3 000 000 000 000
- D** 3 000 000 000

**(Total for Question 15 = 1 mark)**

**16** Music can be downloaded from the internet.

Which **one** of these statements is true?

- A** It is always necessary to have the owner's permission before downloading music.
- B** Downloaded music can always be legally copied and passed to other people.
- C** Individual tracks, rather than whole CDs, can always be legally downloaded.
- D** All music files take the same time to download.

**(Total for Question 16 = 1 mark)**

**TOTAL FOR SECTION A = 16 MARKS**



**SECTION B**

**Answer ALL questions.**

**Some questions must be answered with a cross in a box ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.**

**17** A large supermarket has a network of Electronic Point of Sale (EPOS) terminals.

(a) The table contains a list of components of an EPOS terminal.

For **each** component put a cross in the correct box to show whether it is used for input, output or both.

(4)

Component	Input only	Output only	Input and Output
Concept keyboard	☒	☒	☒
Touch screen	☒	☒	☒
Printer	☒	☒	☒
Chip and pin reader	☒	☒	☒

(b) Each item for sale in a supermarket has a bar code.

(i) Identify the item of data that **must** be stored in the bar code.

(1)

(ii) Bar code scanning is an automated method of entering data.

Give **two** advantages of using bar code scanning rather than entering the data manually.

(2)

1 .....

2 .....



(c) The data collected by the bar code scanner is used to update the database of stock items.

(i) Identify where this database will be stored.

(1)

(ii) Describe **three** ways in which the data collected can be used by the supermarket.

(3)

1 .....

.....

2 .....

.....

3 .....

.....

**(Total for Question 17 = 11 marks)**



**18** George Smith runs a small company that rents rooms to tenants. A stand-alone computer is used for general office work.

(a) Identify **one** input device and **one** output device that will be needed.

(2)

Input device

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Output device

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(b) George needs to complete the tasks given in the table.

Complete the table by identifying the most appropriate type of applications software to use for each task.

(4)

Task	Type of Applications Software
Keeping records of tenants	
Writing letters to tenants	
Calculating rents for tenants	
Producing advertising flyers	

(c) Identify **one** other type of software George will need in addition to application software.

(1)

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(d) George often works on his computer all day.

Identify **two** possible health issues that this may cause.

For each issue give **one** action that George should take to reduce the risk.

Do not repeat answers.

(4)

Health issue 1

.....  
.....

Action

.....  
.....

Health issue 2

.....  
.....

Action

.....  
.....

(e) George can personalise the computer's settings to meet his needs.

One setting he could change is the speed of the mouse movement.

Identify **three** other computer settings he could change.

(3)

1 .....  
.....

2 .....  
.....

3 .....  
.....



(f) George's computer has 2Gb RAM (Random Access Memory).

(i) State what Gb stands for.

(1)

(ii) Describe the characteristics of RAM.

(2)

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**(Total for Question 18 = 17 marks)**

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19 'Charles Books' is a company that sells books either by mail order (using post) or online.

(a) In the table put a cross in the boxes next to the **four** items that can be used to connect to the internet.

(4)

Printer	<input type="checkbox"/>
Scanner	<input type="checkbox"/>
Internet service provider	<input type="checkbox"/>
Broadband connection	<input type="checkbox"/>
Chip and pin reader	<input type="checkbox"/>
Modem	<input type="checkbox"/>
Web browser	<input type="checkbox"/>
Word processor	<input type="checkbox"/>

(b) When an online order is received an automatic confirmation message is sent to the customer.

Name the method of communication used to send the confirmation.

(1)



(c) (i) One advantage to the customers of ordering books online, rather than using the mail order system, is that they receive an automatic confirmation message.

Identify **three other** advantages to the **customers** of ordering online.

(3)

1 .....

2 .....

3 .....

(ii) Identify **three** advantages to the **company** of being able to receive orders online rather than via the mail order system.

(3)

1 .....

2 .....

3 .....

(d) Jim Wales wants to find the website address of 'Charles Books'.

Explain how Jim could use the internet to help him find the website address.

(3)

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.....

.....



(e) Some customers are concerned about using credit cards to pay online.

Identify **two** concerns the customers may have.

For each concern give **one** action that can be taken to reduce the concern.

Do not repeat answers.

(4)

Concern 1

.....  
.....

Action

.....  
.....

Concern 2

.....  
.....

Action

.....  
.....

**(Total for Question 19 = 18 marks)**



**20** 'JOY Build' is a small manufacturing company.

It has a Local Area Network (LAN).

(a) Identify **one** hardware component that a workstation must have to allow access to the LAN.

(1)

(b) One benefit of using a LAN is that steps can be taken to ensure data security.

(i) Identify **three** other benefits.

(3)

1 .....

.....

2 .....

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3 .....

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(ii) Identify **three** ways in which data on the network can be made more secure.

(3)

1 .....

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2 .....

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3 .....

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(c) 'JOY Build' has set up an intranet as part of the LAN.

(i) Describe the features of an intranet.

(2)

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(ii) Identify **two** facilities that 'JOY Build' could provide as part of the intranet.

(2)

1 .....

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2 .....

.....

**(Total for Question 20 = 11 marks)**



**21** Blackwood Centre has 50 networked computers with access to the internet.

The computers are used by local people for a variety of different reasons.

(a) Jemal uses a computer at the centre to send emails with photographs to his brother who lives in another country.

(i) Jemal has some printed photographs.

Describe how he could get them into a format that can be attached to an email.

(2)

.....

.....

.....

.....

(ii) Jemal has been advised to keep backup copies of his photograph files.

Give **two** reasons for the advice.

(2)

1 .....

.....

2 .....

.....

(iii) Name **one** appropriate storage device for keeping backup copies of the photographs.

(1)

.....

(iv) Give **one** physical method Jemal could use to keep his backup copies safe.

(1)

.....





(b) Jemal has a school project to complete on the effects of global warming. He uses a search engine to help him.

(i) When Jemal enters the words *global warming* into the search engine a large number of links are given.

Give **two** things Jemal can do to reduce the number of links.

(2)

1 .....

.....

2 .....

.....

(ii) Identify **two** other ICT based sources Jemal could use to help with his research.

(2)

1 .....

.....

2 .....

.....

(iii) Identify **two** non-ICT based sources Jemal could use to help with his research.

(2)

1 .....

.....

2 .....

.....



(c) When using the internet for research Jemal must ensure that the information provided is as accurate as possible.

Explain how Jemal can do this.

(2)

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(d) Jemal must produce a written report of his findings.

Describe **one** legal constraint that Jemal must consider when producing this report.

(3)

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**(Total for Question 21 = 17 marks)**

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**22** The widespread use of ICT has had a huge impact on the way that individuals and organisations work.

(a) One impact is that some employees are able to work from home.

(i) Identify **one** advantage and **one** disadvantage to an **employee** of working from home.

(2)

Advantage

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.....

Disadvantage

.....

.....

(ii) Identify **one** advantage and **one** disadvantage to a **company** of employees working from home.

(2)

Advantage

.....

.....

Disadvantage

.....

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