

Surname	Centre Number	Candidate Number
Other Names		0



**GCSE**

4333/01

**INFORMATION AND COMMUNICATION TECHNOLOGY**

**UNIT 3: ICT IN ORGANISATIONS**

P.M. WEDNESDAY, 13 June 2012

1½ hours

**Examiner only**

<b>Total Marks</b>	
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**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 use the continuation pages at the back of the booklet, taking care to number the question(s) correctly.

**INFORMATION FOR CANDIDATES**





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

Quality of written communication will be assessed in question **9**.



*Answer all questions.*

1. (a) Tick (✓) the correct boxes to show if the following devices are used for *Input* or *Output*. [4]

DEVICE	NAME	INPUT	OUTPUT
	<b>Webcam</b>	1 <input type="checkbox"/>	2 <input type="checkbox"/>
	<b>Microphone</b>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
	<b>Printer</b>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
	<b>Graphics tablet</b>	7 <input type="checkbox"/>	8 <input type="checkbox"/>

- (b) State what is meant by *Multimedia*. [1]

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(c) **Tick (✓)** the correct boxes to show which of the following statements about storing sound files in MP3 format are *True* or *False*. [3]

True	False
1	2
3	4
5	6

Copyright laws do not apply to music stored in MP3 format.

MP3 files are compressed sound files.

MP3 files are quick to transfer.

(d) Musical devices often have a *MIDI interface*. State the purpose of a MIDI interface. [2]

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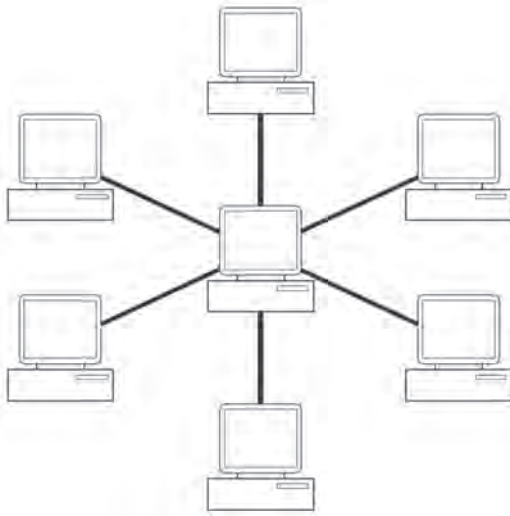
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2. (a) Name the *topology* of the network shown below. [1]



Topology: .....

(b) Name **two** other types of topology. [2]

Topology 1: .....

Topology 2: .....

(c) Tick (✓) the correct boxes to show if each statement about networks is *True* or *False*. [4]

	True	False
An <i>Intranet</i> is a private network used within an organisation.	1 <input type="checkbox"/>	2 <input type="checkbox"/>
The <i>Internet</i> is a local network.	3 <input type="checkbox"/>	4 <input type="checkbox"/>
An <i>Extranet</i> is an internal network that cannot be accessed by customers.	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Backups are not required with networks.	7 <input type="checkbox"/>	8 <input type="checkbox"/>



3. Many different types of *Human-Computer Interface* (HCI) are used on ICT systems.

(a) Name the type of HCI shown below.

[1]



Interface: .....

(b) Tick (✓) the correct box to show which HCI is the most suitable for each use.

[3]

Use	Command Line	Biometric	Touch-Sensitive
Thumbprint recognition to loan a library book	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
Choose items at a Point of Sale terminal	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Writing batch files for the network	7 <input type="checkbox"/>	8 <input type="checkbox"/>	9 <input type="checkbox"/>

(c) Give **two** advantages of using *voice recognition*.

[2]

**Advantage 1:** .....

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**Advantage 2:** .....

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(d) Give **two** disadvantages of using *voice recognition*. [2]

**Disadvantage 1:** .....

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**Disadvantage 2:** .....

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(e) **Tick (✓)** the correct box to show if the task is carried out by an *Operating System* or *Applications Software*. [4]

<b>Task</b>	<b>Operating System</b>	<b>Applications Software</b>
Controlling input and output devices	1 <input type="checkbox"/>	2 <input type="checkbox"/>
Create a webpage	3 <input type="checkbox"/>	4 <input type="checkbox"/>
Ensure that data is written to the backing store	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Boots up the computer	7 <input type="checkbox"/>	8 <input type="checkbox"/>



4. A computer database is used to store details of the clothes a shop has for sale. Part of the database is shown below.

Item No.	Type	Colour	Size	Price (£)
05674	Jumper	B	S	39.99
09923	Jacket	G	M	84.99
57890	Polo Shirt	B	L	19.99
43627	Jumper	R	L	32.45
00932	T-Shirt	Y	S	8.50

- (a) The data in the *Colour* and *Size* fields is encoded. Give **two** reasons why data is encoded. [2]

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- (b) Give **one** problem that could occur with using one character for encoding colours, and explain, using an example, what you should do to solve the problem. [2]

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(c) Give **two** advantages and **two** disadvantages of using ICT systems to store and process data. [4]

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5. (a) Animators use many different techniques.

- (i) Name the key frame (flash) animation technique used to get the computer to generate the *in-between frames*. [1]



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- (ii) Name the animation technique used to allow an animator to *track the frame-by-frame motion* of an object. [1]



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- (iii) State **two** effects that increasing and/or decreasing the frame rate would have on the animation. [2]

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- (b) State what is meant by *Persistence of Vision*. [1]

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(c) Describe what is meant by *Rotoscoping*.

[2]



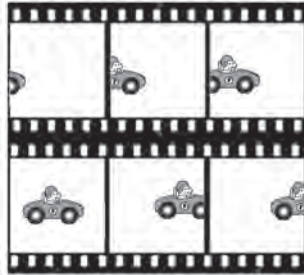
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(d) Describe what is meant by *Stop Motion*.

[2]



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6. (a) Tick (✓) the correct boxes to show which of the following items are encoded on a bank cheque. [2]

<b>Bank of Monee</b>	Date .....
Pay .....	<input style="width: 100px; height: 20px;" type="text"/>
Amount .....	A N Other
.....	
464590      37465327      102201	

ITEM	TICK (✓)
Account Number	<input style="width: 40px; height: 25px;" type="checkbox"/> 1
Date	<input style="width: 40px; height: 25px;" type="checkbox"/> 2
Sort Code	<input style="width: 40px; height: 25px;" type="checkbox"/> 3
Name	<input style="width: 40px; height: 25px;" type="checkbox"/> 4

(b) Give **three** services available at an *Automatic Teller Machine* (ATM). [3]

**Service 1** .....

**Service 2** .....

**Service 3** .....



(c) Give **two** advantages of ATMs for the *customer*. [2]

**Advantage 1** .....

.....

**Advantage 2** .....

.....

(d) Give **two** advantages of ATMs for the *bank*. [2]

**Advantage 1** .....

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**Advantage 2** .....

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7. (a) Complete the following sentences about websites, using only the words given below.

**HTML**

**Searched**

**URL**

**LAN**

**Web Server**

**Hosted**

**Name**

**Website**

(i) ..... is a language used to create a webpage. [1]

(ii) The unique address for every website on the internet is called a  
..... [1]

(iii) In order to allow people to view a website over the internet it must be  
..... on a ..... [2]



(b) State what is meant by the following **four** website terms. [4]

(i) *Hotspot* .....

.....  
.....

(ii) *Home Page* .....

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(iii) *Hyperlink* .....

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.....

(iv) *Leader Board* .....

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(c) When you use a search engine a list of results is produced similar to that shown below.



(i) State the name given to the shaded area. [1]

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.....

(ii) Give the reason why organisations try to make sure that the link to their website appears within this shaded area. [1]

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8. (a) Tick (✓) the correct boxes to show which of the following statements apply to the *Data Protection Act 1998*. [3]

Statement	TICK (✓)
Data must not be transferred outside EU to countries without adequate provision	<input type="checkbox"/> 1
Data must be adequate, relevant and not excessive	<input type="checkbox"/> 2
Music files can only be shared with other family members	<input type="checkbox"/> 3
Data must be deleted when no longer needed	<input type="checkbox"/> 4
Software should not be copied	<input type="checkbox"/> 5
Digital signatures are legally binding in the same way as handwritten signatures	<input type="checkbox"/> 6

(b) State a *crime* covered by the *Computer Misuse Act 1990*, describe a *consequence* and a method of *prevention*. [3]

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9. ‘Recent developments in ICT systems are having an impact on the way people work.’

Discuss the above statement. Include in your answer recent developments in ICT that have had an impact on working practices. List the advantages **and** disadvantages they offer the workforce and employers. [9]

Dotted lines for writing answer.



