Surname		Centre Number	Candidate Number
Other Names			0

WJEC CBAC

GCSE

4333/01

INFORMATION AND COMMUNICATION TECHNOLOGY
UNIT 3: ICT IN ORGANISATIONS

P.M. WEDNESDAY, 13 June 2012

1½ hours

Suitable for Modified Language Candidates

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**.

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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
	Webcam	1	2
	Microphone	3	4
	Printer	5	6
	Graphics tablet	7	8

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

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Examiner only

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

	True	**False**
Copyright laws do not apply to music stored in MP3 format.	1	2
MP3 files are compressed sound files.	3	4
MP3 files are quick to transfer.	5	6

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

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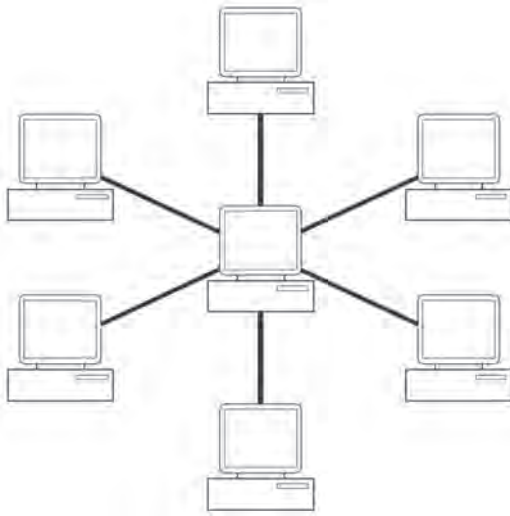
Topology: ....

(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 *Intranet* is a private network used within an organisation.	1	2
The *Internet* is a local network.	3	4
An *Extranet* is an internal network that cannot be accessed by customers.	5	6
Backups are not required with networks.	7	8

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	2	3
Choose items at a Point of Sale terminal	4	5	6
Writing batch files for the network	7	8	9

(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]

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

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. What should you do to solve the problem? Give an example. [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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(4333-01) **Turn over.**

(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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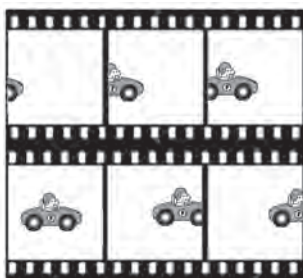
6. *(a)* Which of the following items are encoded on a bank cheque? **Tick (✓)** the correct boxes. [2]

Bank of Monee   Date ....

Pay ....

Amount ....

....   A N Other

464590   37465327   ⊦02201⊦

ITEM	TICK (✓)
Account Number	1
Date	2
Sort Code	3
Name	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 ....

....

Advantage 2 ....

....

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) What is meant by the following **four** website terms? [4]

(i) *Hotspot* ....

....

....

(ii) *Home Page* ....

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(iii) *Hyperlink* ....

....

....

(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]

....

(ii) Why do organisations try to make sure that the link to their website appears within this shaded area? [1]

....

(4333-01) **Turn over.**

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

Statement	TICK (✓)
Data must not be transferred outside EU to countries without adequate provision	1
Data must be adequate, relevant and not excessive	2
Music files can only be shared with other family members	3
Data must be deleted when no longer needed	4
Software should not be copied	5
Digital signatures are legally binding in the same way as handwritten signatures	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. In your answer include recent developments in ICT that have had an impact on working practices. List the advantages **and** disadvantages they offer the workforce and employers. [9]

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Question number	Write the question numbers in the left-hand margin

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