

Surname	Centre Number	Candidate Number
Other Names		0



GCSE

4331/01



INFORMATION AND COMMUNICATION TECHNOLOGY

**UNIT 1: Understanding ICT
(Short Course) INFORMATION AND COMMUNICATION TECHNOLOGY
UNIT 1: Understanding ICT**

WEDNESDAY, 17 MAY 2017 – MORNING

1 hour 30 minutes

For Examiner's use only		
	Maximum Mark	Mark Awarded
Total	80	

4331
010001

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 **12**.



MAY1743310101

1. Tick (✓) the correct boxes below to show which of the following statements about Bluetooth connectivity are True or False. [5]

Statement	True	False
Bluetooth will only work over long distances	1 <input type="checkbox"/>	2 <input type="checkbox"/>
No wires are needed when exchanging files via Bluetooth	3 <input type="checkbox"/>	4 <input type="checkbox"/>
Bluetooth allows you to speak hands-free on a phone	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Music can be played wirelessly from your phone to a speaker using Bluetooth	7 <input type="checkbox"/>	8 <input type="checkbox"/>
Transfer speeds when sending files are faster than using wireless (Wi-Fi)	9 <input type="checkbox"/>	10 <input type="checkbox"/>

2. A school has recorded the daily temperature on their sports field at the same time every day. Complete the table below to show an example of data **and** information. [2]

The data and information **must** be linked to the example of knowledge given below.

Knowledge	The highest recorded temperature was 31°C and this was the warmest day of the week.
Data	
Information	



3. (a) The members of a family use email. *Describe* what is meant by email. [2]

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(b) Give **one** example of how a family member could make use of email. [1]

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(c) Sending an email is a low cost way of communicating; give **one** other *advantage* of using email services. [1]

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(d) A family member receives the following email.

From: email77no-secret@online.com
To: Recipients
Subject: Urgent action needed
Date: May 7 2017 05:54:33

Dear Sir/Maddam

It has come to our attention that your account need to be updating.

Please click **here** urgently to enter your username and password to allow u to use your banking account with no worries. You just need to verify your account numberand password.

Kind regards

The online Banking team

world bank 2007 - 2015

(i) **Tick (✓)** the correct box below to show which **misuse** of email is being attempted in the above email. [1]

- Viruses
- Cyberbullying
- Phishing

(ii) Describe **two** features of the email that would cause the family member to be suspicious about this email. [2]

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(iii) Give **one** piece of advice on how the family member could prevent any misuse caused by this email. [1]

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4. A family run a pet grooming business from home. They have created a database of all their clients. Part of the database is shown below.

Owner ID	Owner Name	Pet Name	Pet Type	Shampoo?	Date of Last Visit
12	S Jones	Ruby	Cat	Y	25/04/2017
23	D Khan	Co Co	Rabbit	N	12/01/2017
36	L Finch	Snowflake	Dog	Y	07/05/2017
49	J Tuck	Spot	Cat	N	06/05/2017
54	J Redman	Sailor	Dog	Y	29/10/2016
61	G Rees	Scooby	Dog	N	25/02/2017
79	N Williams	Daisy	Cat	Y	27/03/2017
85	S Edwards	Spike	Dog	N	22/09/2016
97	M Kazlauskas	George	Rabbit	N	18/12/2016
101	A Miller	Duke	Dog	Y	03/03/2017

(a) State how many fields with a *Boolean* data type are shown in the database. [1]

(b) Give the name of the **key field** and explain the purpose of this field. [2]

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(c) The family sorts the database into **ascending** order of **Date of Last Visit**. Give the Owner ID that would appear at the top of the list. [1]

(d) **Tick (✓)** the correct **validation method** that could be used on the **Pet Type** field. [1]

Drop down list

 1

Length check

 2

Range check

 3


- (e) The family need to find out which dogs have a shampoo treatment. Complete the table below to show how they can obtain this information from the database. [2]

Field Name	Operator	Search Criteria
	=	

AND

Field Name	Operator	Search Criteria
	=	

- (f) The family would like to include a calculated field called **Reminder Letter Due** to allow them to send reminders to owners **30 days** after their last visit. Give the calculation that would be used in this field. [1]
-



5. A family are planning a new games room for their home. They have priced up four options as shown below.

	A	B	C	D	E
1	Budget	£2,000.00			
2					
3	Items	Option 1	Option 2	Option 3	Option 4
4	Wooden Flooring	£500	£400	£700	£250
5	Rug	£40	£55	£160	£80
6	Lamp	£30	£100	£55	£110
7	Table	£40	£25	£125	£65
8	Blinds	£40	£65	£50	£75
9	Painting	£10	£40	£50	£55
10	Television	£400	£350	£1,150	£550
11	Games Console	£300	£315	£450	£400
12	Virtual Reality Headset	£600	£500	£200	£300
13	Gaming Chair	£40	£50	£110	£100
14	Total	£2,000	£1,900	£3,050	£1,985
15	15% Discount	£300.00	£285.00	£457.50	£297.75
16	Total Cost	£1,700.00	£1,615.00	£2,592.50	£1,687.25
17	Within Budget	In Budget	In Budget	Over Budget	In Budget

- (a) Which of the following formulas would be used in cell **B14**. [1]

A =A4+A5+A6+A7+A8+A9+A10+A11+A12+A13

B =SUM(B4:B13)

C =SUM(B3:B14)

D =B3+B4+B5+B6+B7+B8+B9+B10+B11+B12+B13

- (b) Give a suitable formula for calculating the **Total Cost** in cell **E16**. [1]

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- (c) Circle which function could be used to find the *lowest* cost option for a Gaming Chair. [1]

MIN

MAX

AVERAGE

ROUND

- (d) Give the formula used to calculate the 15% Discount in cell **B15**. [1]

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7. A school uses ICT to monitor the weather.

(a) Give **three** suitable sensors that would be used to collect weather data. [3]

Sensor 1

Sensor 2

Sensor 3

(b) Tick (✓) the correct boxes below to show which **three** of the following are ways of displaying weather information. [3]

Table 1

Icons 2

Logging 3

Weather balloons 4

Animations 5

Science experiment 6

(c) Other than ways of displaying weather information, give **three** advantages and **one** disadvantage of ICT based weather forecasting systems. [4]

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8. The settings in the desktop environment can be changed.

Describe how the desktop environment can be customised to meet the needs of a user. [3]

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9. Using a computer can cause health hazards. Describe the cause of **three different** health hazards. For **each** one describe a *different* way to reduce the hazard. [3 × 2]

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10. Music can be bought from a website and downloaded onto different devices.

(a) Give **one** method of finding a specific song on a music download website. [1]

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(b) Describe **three** advantages of downloading music at home. [3]

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(c) Give **one** disadvantage of downloading music. [1]

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