

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**

MONDAY, 14 MAY 2018 – 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

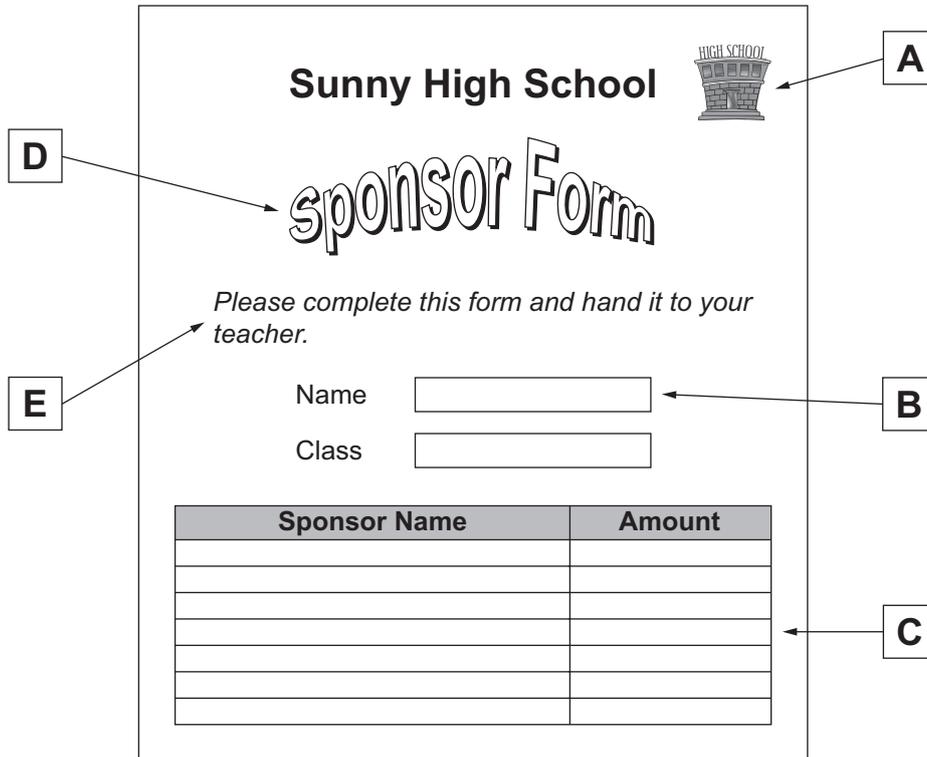
The number of marks is given in brackets at the end of each question or part-question. Quality of written communication will be assessed in question **11(b)**.



MAY1843310101

Answer all questions.

1. A school has used Desktop Publishing software (DTP) to produce the first draft of a sponsor form for the school's sponsored car wash event.



- (a) Complete the table below by inserting the correct formatting feature to match the letter. *The first one has been done for you.* [4]

Letter	Feature
A	Clip Art
B	
C	
D	
E	



(b) Other than the features already shown opposite, name **two** different features that could improve the appearance of the sponsor form. [2]

.....

.....

(c) Other than a sponsor form, name a type of DTP document and describe how it could be used when organising the car wash. [2]

Type of Document

Use

.....

.....

2. Tick (✓) the correct box below to show whether each of the following is *data*, *information* or *knowledge*. [4]

	Data	Information	Knowledge
Jodie raised the highest amount of sponsorship money with £117 and a certificate was awarded	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
£37, £44, £117, £107 are all amounts raised by students in the sponsored car wash	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
37, 44, 117, 107	<input type="checkbox"/> 7	<input type="checkbox"/> 8	<input type="checkbox"/> 9
ND18FLX	<input type="checkbox"/> 10	<input type="checkbox"/> 11	<input type="checkbox"/> 12



3. A family uses email.

(a) Describe in detail what is meant by the term email. [2]

.....
.....

(b) Give **one** specific example of how a family could make use of a file attachment. [1]

.....
.....
.....

(c) Give an advantage to the family of using email folders. [1]

.....
.....
.....

(d) Describe **three** ways emails could be misused. [3]

.....
.....
.....
.....
.....
.....
.....
.....
.....
.....



4. (a) Complete the following sentences about *school registration systems* using only the words given below. [4]

Biometric	OMR	Smart Cards	MIS
RFID	VLE	Tutorial	LAN

- (i) is a type of registration system that uses fingerprints or retina scans to register students.
- (ii) A type of registration that uses a form that has been completed with a pencil and is then scanned by a machine after being completed is called registration.
- (iii) A tag that uses microchips and radio signals worn by all students that registers them when they enter the classroom is called registration.
- (iv) are made of plastic and contain a chip that can be swiped through a machine to register the student.

(b) Give **two** general advantages of electronic registration compared to paper based, manual school registration. [2]

Advantage 1

.....

.....

.....

Advantage 2

.....

.....

.....



5. Give **three** different ways the desktop environment can be customised to manage multi-media software. [3]



.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....



BLANK PAGE

**PLEASE DO NOT WRITE
ON THIS PAGE**

4331
01007



07

6. A school is calculating the profit made from the annual sponsored car wash. Part of the spreadsheet is shown below.

	A	B	C	D	E	F	G
1	Sponsored Car Wash						
2							
3	Sponsored Money Raised					Target per Year Group =	£100
4	Year	Number of Cars	Price per Car	Total Money	Target Raised?		
5	Year 7	47	£3.00	£141.00	Target Hit		
6	Year 8	30	£3.00	£90.00	Under Target		
7	Year 9	20	£3.00	£60.00	Under Target		
8	Year 10	31	£3.00	£93.00	Under Target		
9	Year 11	16	£3.00	£48.00	Under Target		
10	Year 12	35	£3.00	£105.00	Target Hit		
11	Year 13	30	£3.00	£90.00	Under Target		
12			Total raised	£627.00			
13							
14	Expenses						
15	Item	Quantity	Price	Total			
16	Buckets	100	£0.99	£99.00		Total Profit	
17	Sponges	200	£0.50	£100.00		£291.00	
18	Washing Liquid	50	£0.75	£37.50			
19	Polish	50	£1.99	£99.50			
20			Total	£336.00			

- (a) Give the data in cell **B10**.

[1]

- (b) Give the letter of the correct formula used to calculate the **Total Raised** in cell **D12**.

[1]

A = D4+D5+D6+D7+D8+D9+D10

B = SUM(D5:D11)

C = SUM(C4:C11)



(c) Give the formula that has been used in cell **F17**, to work out the Total Profit. [1]

=

(d) The required target is shown in cell **G3**. Using absolute cell referencing, give the IF statement that would be used in cell **E7** to display the *Under Target message*. [1]

= IF

(e) Give **two** benefits of using a spreadsheet to calculate the total profit for the sponsored car wash. [2]

Benefit 1

.....

Benefit 2

.....

7. Using broadband to connect to the Internet has many benefits. **Tick (✓)** the correct boxes below to show whether the statement is true for a benefit of broadband. [4]

	Tick only 4
This connection allows you to download music and films extremely quickly.	<input type="checkbox"/> 1
This connection does not allow you to use the land phone at the same time as being connected to the Internet.	<input type="checkbox"/> 2
This connection allows a wireless connection.	<input type="checkbox"/> 3
It is available everywhere.	<input type="checkbox"/> 4
This method of connecting to the Internet has high monthly subscription costs.	<input type="checkbox"/> 5
You can use it for cheaper phone services.	<input type="checkbox"/> 6
You are always connected to the Internet.	<input type="checkbox"/> 7



8. Part of a database to record information on the cars involved in the school's annual sponsored car wash is shown below.

Car Registration Number	Car Make	Car Model	Teacher Name	Cleaning Inside?	Amount Paid	Car Wash Date
ND18 KFW	Citroen	DS3	Mrs Smith	Y	£3.50	21/05/2018
ML14 VEV	Ford	Fiesta	Mr Williams	Y	£3.50	21/05/2018
KR07 GIF	Vauxhall	Astra	Miss Brook	N	£3.00	21/05/2018
DG17 HGF	Peugeot	308	Miss Price	Y	£3.50	24/05/2018
K8 KAT	BMW	M5	Mr Styles	Y	£3.50	24/05/2018
CK64 OLP	Nissan	Juke	Mr Jones	Y	£3.50	24/05/2018
SL18 PPN	Hyundai	Santa Fe	Mr Thomas	Y	£3.50	25/05/2018
GL15 MIS	Fiat	500	Mrs Jacewitz	N	£3.00	25/05/2018

(a) State how many records are shown in the above database. [1]

(b) State how many different data types have been used in this database. [1]

(c) Identify the key field and give the purpose of the key field. [2]

.....

.....

.....

(d) Which field has been sorted into ascending order? [1]

.....

(e) State the name for a type of formatted output from a database. [1]

.....



(f) The **Cleaning Inside?** field is encoded. State **two** advantages of encoding data. [2]

Advantage 1

.....
.....

Advantage 2

.....
.....



9. On-line shopping is used by many people all around the world.

(a) **Tick (✓)** the correct box below to show which of the following would be the most suitable validation technique for checking a debit card number is sensible and reasonable. [1]

Validation Technique	Tick (✓)
Range check	<input type="checkbox"/> 1
Check Digit	<input type="checkbox"/> 2
Double keying	<input type="checkbox"/> 3

(b) Give **two** methods of finding a product when on a shopping website. [2]

Method 1

.....

.....

Method 2

.....

.....

(c) Other than name and postal address, give **two** items of data that would need to be verified by the customer when making an online purchase and give a suitable, different *verification* check for each. [2 × 2]

.....

.....

.....

.....

.....

.....



(d) Advantages of on-line shopping include being able to buy products on-line at any time of the day from any device that has access to the Internet. Give **three** other advantages of on-line shopping to the customer. [3]

.....

.....

.....

.....

.....

.....

.....

.....



10. For each control system used in the home, listed below;

- name a **sensor** used for the control system (must be different for each system);
- name an **output device** used in the control system (must be different for each system);
- describe how the systems works. [3 × 3]

I. **Burglar alarm system**

.....

.....

.....

.....

II. **Smart meter**

.....

.....

.....

.....

III. **Electronic toy**

.....

.....

.....

.....



BLANK PAGE

**PLEASE DO NOT WRITE
ON THIS PAGE**



BLANK PAGE

**PLEASE DO NOT WRITE
ON THIS PAGE**

