# WJEC 2014 Online Exam Review

GCE Computing CG1 1101-01

All Candidates' performance across questions

Question Title	N	Mean	S D	Max Mark	F F	Attempt %	
1	2588	3.4	1.3	5	67.3	99.9	
2	2590	4.9	1.3	6	81.1	100	←
3	2590	5.3	2.4	10	52.8	100	←
4	2580	1.5	1.3	5	29.4	99.6	
5	2576	2.3	1.3	6	38.9	99.5	
6	2567	1.5	1	3	49.9	99.1	←
7	2334	2.2	1.7	4	54.9	90.1	
8	2587	3.5	1.4	5	70.5	99.9	
9	2578	3.8	1.9	6	63.8	99.5	
10	2546	0.9	0.8	3	28.7	98.3	
11	2568	4	2.3	9	44.8	99.2	
12	2570	3.6	1.5	5	72.6	99.2	
13	2581	2.9	0.8	4	73.5	99.7	
14	2560	1.2	1.1	5	23	98.8	
15	2523	4.1	2.2	7	59.2	97.4	
16	2559	2	1.2	6	33	98.8	
17	2547	6	2.3	11	54.3	98.3	

GCE Computing CG1 1101-01
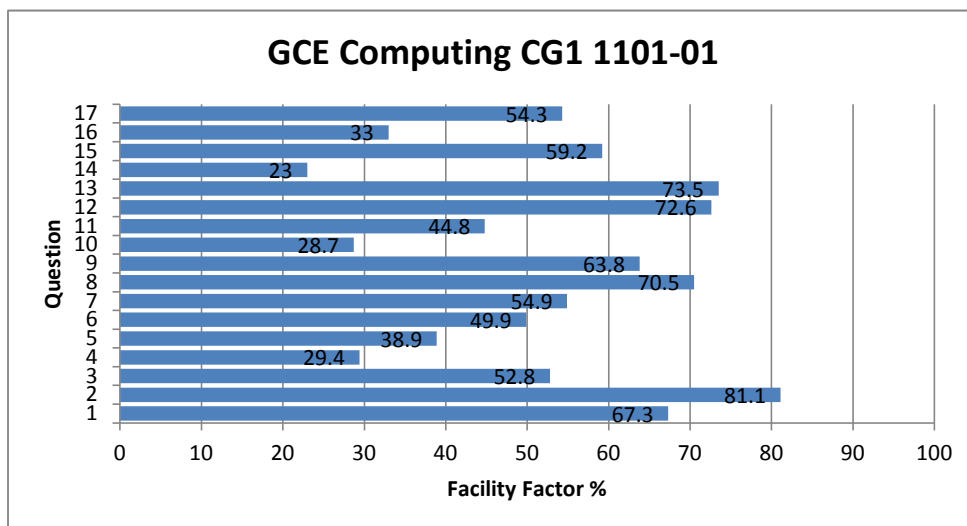
2. Information about a diving competition is stored on a computer system. Competitors are awarded a mark out of 10 for each dive, for example 8.7 and each competitor must make six dives.

(c) Draw a diagram to show how the **six** dive scores for each of the competitors might sensibly be stored in a two-dimensional array. [2]

© WJEC CBAC Ltd. (1101-01) **Turn over.**

(c) Draw a diagram to show how the **six** dive scores for each of the competitors might sensibly be stored in a two-dimensional array. [2]

Time for Dives (Scores)

Name of Diver	1	2	3	4	5	6
Bob	7.8	8.1	8.3	....	....	....
Jane	8.1	7.9	6.3	....	....	....
John	6.9	8.2	7.3	....	....	....
Lucy	....	....	....	....	....	....
Naruto	....	....	....	....	....	....

(c)   Draw a diagram to show how the **six** dive scores for each of the competitors might sensibly be stored in a two-dimensional array.   [2]

2 marks

Time for Dives (Scores)

Name of Diver	1	2	3	4	5	6
Bob	7.8	8.1	8.3	....	....	....
Jane	8.1	7.9	6.3	....	....	....
John	6.9	8.2	7.3	....	....	....
Lucy	....	....	....	....	....	....
Naruto	....	....	....	....	....	....

(c) Draw a diagram to show how the **six** dive scores for each of the competitors might sensibly be stored in a two-dimensional array. [2]

	Dave	John	bob	...
1	8.7	9.3	5.4	...
2	9.2	8.4	7.5	...
3	7.1	8.8	8.9	...
4	8.2	7.8	6.8	...
5	6.4	8.5	9.2	...
6	7	9.1	7.3	...

(c) Draw a diagram to show how the **six** dive scores for each of the competitors might sensibly be stored in a two-dimensional array.

[2]

	Dave	John	bob	...
1	8.7	9.3	5.4	...
2	9.2	8.4	7.5	...
3	7.1	8.8	8.9	...
4	8.2	7.8	8.8	...
5	6.4	8.5	9.2	...
6	7	9.1	7.3	...

(c) Draw a diagram to show how the **six** dive scores for each of the competitors might sensibly be stored in a two-dimensional array. [2]

	1st	2nd	3dr	- - - -
MArk	6.2	5.1	6.8	
SAM	7.3	8.2	6.5	
- - - -				

(c) Draw a diagram to show how the **six** dive scores for each of the competitors might sensibly be stored in a two-dimensional array. [2]

	1st	2nd	3dr	. . . .
MArk	6.2	5.1	6.8	
SAM	7.3	8.2	6.5	
. . . .				

3. *(b)* Checks will be applied to the data when the existing member details are entered into the new computerised system.

(i) One item of data that is **validated** is the total number of whole years that they have been a member. Describe a suitable **validation** check that could be carried out in this case. Give an example of **invalid** input data that would be detected by **this** check. [2]

....

....

....

....

....

....

(ii) One item of data that is **verified** is the member's postcode. Describe a suitable **verification** check that could be carried out on the member's postcode and describe how **this** check would detect **input errors**. [2]

....

....

....

....

....

....

© WJEC CBAC Ltd.   (1101-01)   **Turn over.**

3. (b) Checks will be applied to the data when the existing member details are entered into the new computerised system.

   (i) One item of data that is **validated** is the total number of whole years that they have been a member. Describe a suitable **validation** check that could be carried out in this case. Give an example of **invalid** input data that would be detected by **this** check. [2]

   A data type check can be used to ensure the entered data is an integer. Incorrect data includes "A", "#" or "2.7".

   (ii) One item of data that is **verified** is the member's postcode. Describe a suitable **verification** check that could be carried out on the member's postcode and describe how **this** check would detect **input errors**. [2]

   A double entry verification check can be used where the postcode has to be entered twice and then the two are compared, if they do not match then an input error is detected

3. (b) Checks will be applied to the data when the existing member details are entered into the new computerised system.

   (i) One item of data that is **validated** is the total number of whole years that they have been a member. Describe a suitable **validation** check that could be carried out in this case. Give an example of **invalid** input data that would be detected by **this** check. [2]

   A data type check can be used to ensure the entered data is an integer. Incorrect data includes "A", "#" or "2.7."

   (i) 2

   (ii) One item of data that is **verified** is the member's postcode. Describe a suitable **verification** check that could be carried out on the member's postcode and describe how **this** check would detect **input errors**. [2]

   A double entry verification check can be used where the post code has to be entered twice and then the two are compared, if they do not match then an input error is detected

   (ii) 2

3. (b) Checks will be applied to the data when the existing member details are entered into the new computerised system.

(i) One item of data that is **validated** is the total number of whole years that they have been a member. Describe a suitable **validation** check that could be carried out in this case. Give an example of **invalid** input data that would be detected by **this** check. [2]

A Type Check could be carried out as the whole number of years that they have been a member must be an integer. An example of invalid data is "1B3".

(ii) One item of data that is **verified** is the member's postcode. Describe a suitable **verification** check that could be carried out on the member's postcode and describe how **this** check would detect **input errors**. [2]

Double entry could be carried out on the members postcode to verify it. This works by the member entering their postcode twice, and the computer compares them to ensure they are identical. If they aren't a message will appear informing the user.

3. *(b)* Checks will be applied to the data when the existing member details are entered into the new computerised system.

(i) One item of data that is **validated** is the total number of whole years that they have been a member. Describe a suitable **validation** check that could be carried out in this case. Give an example of **invalid** input data that would be detected by **this** check. [2]

A Type Check could be carried out as the whole number of years that they have been a member must be an integer. An example of invalid data is "1B3".

(i) 2

(ii) One item of data that is **verified** is the member's postcode. Describe a suitable **verification** check that could be carried out on the member's postcode and describe how **this** check would detect **input errors**. [2]

Double entry could be carried out on the members postcode to verify it. This works by the member entering their postcode twice, and the computer compares them to ensure they are identical. If they aren't a message will appear informing the user.

(ii) 2

3. (b) Checks will be applied to the data when the existing member details are entered into the new computerised system.

(i) One item of data that is **validated** is the total number of whole years that they have been a member. Describe a suitable **validation** check that could be carried out in this case. Give an example of **invalid** input data that would be detected by **this** check. [2]

You can use Character check. An integer would be used to identify the number of whole years So characters such as a letter (A) would be invalid. An individual Cannot work for "A" years.

(ii) One item of data that is **verified** is the member's postcode. Describe a suitable **verification** check that could be carried out on the member's postcode and describe how **this** check would detect **input errors**. [2]

Double-entry can be used. The user can input the Same postcode twice to ensure there were no input errors.

3. (b) Checks will be applied to the data when the existing member details are entered into the new computerised system.

(i) One item of data that is **validated** is the total number of whole years that they have been a member. Describe a suitable **validation** check that could be carried out in this case. Give an example of **invalid** input data that would be detected by **this** check. [2]

You can use Character check. An integer would be used to identify the number of whole years. So characters Such as a letter (A) would be invalid. An individual Cannot work for "A" years.

(ii) One item of data that is **verified** is the member's postcode. Describe a suitable **verification** check that could be carried out on the member's postcode and describe how **this** check would detect **input errors**. [2]

Double-entry can be used. The user can input the Same postcode twice to ensure there were no input errors.

(i) 2

(ii) 0

6. A section of a spreadsheet is shown below that should determine whether a person is an adult or not.

	A	B	C
1			
2	**Adult Age**	**18**	
3			
4	*Name*	*Age*	*Adult YES or NO*
5			
6	Harry Smith	17	
7	Bethan Lloyd	19	
8	Gary Chan	21	

(a) Write a formula for cell C6 using the cell references from the spreadsheet to output *YES* if the person is 18 or older and *NO* if they are younger than 18. [2]

....

6. A section of a spreadsheet is shown below that should determine whether a person is an adult or not.

	A	B	C
1			
2	**Adult Age**	18	
3			
4	Name	Age	Adult YES or NO
5			
6	Harry Smith	17	
7	Bethan Lloyd	19	
8	Gary Chan	21	

(a) Write a formula for cell C6 using the cell references from the spreadsheet to output *YES* if the person is 18 or older and *NO* if they are younger than 18. [2]

IF B6 > B2 output "Adult yes." Else output "Adult No"

6. A section of a spreadsheet is shown below that should determine whether a person is an adult or not.

	A	B	C
1			
2	**Adult Age**	18	
3			
4	Name	Age	Adult YES or NO
5			
6	Harry Smith	17	
7	Bethan Lloyd	19	
8	Gary Chan	21	

(a) Write a formula for cell C6 using the cell references from the spreadsheet to output YES if the person is 18 or older and NO if they are younger than 18. [2]

IF B6 > B2 output "Adult Yes" Else output "Adult No"

6. A section of a spreadsheet is shown below that should determine whether a person is an adult or not.

	A	B	C
1			
2	**Adult Age**	18	
3			
4	Name	Age	Adult YES or NO
5			
6	Harry Smith	17	
7	Bethan Lloyd	19	
8	Gary Chan	21	

NOT AN
excel
) FORMULA

(a) Write a formula for cell C6 using the cell references from the spreadsheet to output YES if the person is 18 or older and NO if they are younger than 18. [2]

If (B6 >= 18) {echo "YES"}, Else {echo "NO"} End If

6. A section of a spreadsheet is shown below that should determine whether a person is an adult or not.

	A	B	C
1			
2	**Adult Age**	**18**	
3			
4	Name	Age	Adult YES or NO
5			
6	Harry Smith	17	
7	Bethan Lloyd	19	
8	Gary Chan	21	

(handwritten annotation: NOT AN excel FORMULA)

(a) Write a formula for cell C6 using the cell references from the spreadsheet to output YES if the person is 18 or older and *NO* if they are younger than 18. [2]

(handwritten answer:) If (B6 >= 18) {echo "YES"}, Else {echo "NO"} End If

6. A section of a spreadsheet is shown below that should determine whether a person is an adult or not.

	A	B	C
1			
2	**Adult Age**	18	
3			
4	Name	Age	Adult YES or NO
5			
6	Harry Smith	17	
7	Bethan Lloyd	19	
8	Gary Chan	21	

(a) Write a formula for cell C6 using the cell references from the spreadsheet to output *YES* if the person is 18 or older and *NO* if they are younger than 18. [2]

$$= IF(B6 \geq B\$2\$, YES, NO)$$

6. A section of a spreadsheet is shown below that should determine whether a person is an adult or not.

	A	B	C
1			
2	**Adult Age**	18	
3			
4	Name	Age	Adult YES or NO
5			
6	Harry Smith	17	
7	Bethan Lloyd	19	
8	Gary Chan	21	

(a) Write a formula for cell C6 using the cell references from the spreadsheet to output *YES* if the person is 18 or older and *NO* if they are younger than 18. [2]

$= IF (B6 \geq B\$2\$, YES, NO)$