

# 6-A-Day – Computer Science GCSE (27)

Q1	<p>Points may include:</p> <p>Programmers need to understand each other's code</p> <ul style="list-style-type: none"> <li>• ... so need clear commenting / consistent formats eg for variable names</li> <li>• ... suitable examples</li> </ul> <p>Programmers need to ensure that their code will work with the code written by others</p> <ul style="list-style-type: none"> <li>• ... agree clear interfaces between modules</li> <li>• ... and stick to agreed interfaces/ protocols</li> <li>• ... suitable examples</li> </ul> <p>The success of one programmer's work depends on the others</p> <ul style="list-style-type: none"> <li>• ... so a need for professionalism</li> <li>• ... suitable examples</li> </ul>	6	<p><b>High Level Response (5-6)</b> A detailed explanation why standards are needed with relevant examples. There will be few if any errors in spelling, grammar and punctuation. Technical terms will be used appropriately and correctly.</p> <p><b>Medium Level Response (3-4)</b> Some explanation of standards needed with examples but a limited explanation of why they are needed. Examples may not be wholly relevant. There may be occasional errors in spelling, grammar and punctuation. Technical terms will be mainly correct.</p> <p><b>Low Level Response (0-2)</b> There may be a vague description of standards but with no or little explanation of why needed and/or examples. Information will be poorly expressed and there will be a limited, if any, use of technical terms. Errors of grammar, punctuation and spelling may be intrusive.</p>
Q2	<p><i>Correct answer:</i></p> $  \begin{array}{r}  1\ 1\ 0\ 1\ 1\ 0\ 0\ 0 \\  +\ 0\ 1\ 1\ 0\ 0\ 0\ 0\ 0 \\  \hline  (1)\ 0\ 0\ 1\ 1\ 1\ 0\ 0\ 0  \end{array}  $ <p><i>Award marks for:</i></p> <ul style="list-style-type: none"> <li>• 1 1 1 0 0 0 for bits 5 to 0</li> <li>• 0 0 for bits 7 and 6.</li> </ul>	2	
Q3	<ul style="list-style-type: none"> <li>• there is an overflow/a carry left over after the addition/does not fit into one byte.</li> </ul>	1	

Q4

- html: define content/layout of web pages/links
- jpg: images/photos
- mp3: sound/audio/music files
- pdf: documents

4

Do not accept "text files" for pdf – candidates must indicate that there is some additional formatting / layout if they use "text"  
"Media files" is too vague for jpg or mp3

Q5

- 1
- 0.  
(respectively)

2

Q6

*Correct answer:*

p	q	(NOT p) AND q
0	0	0
1	0	0
0	1	1
1	1	0

*Award marks for*

- Correct missing input cases (0 1, 1 1 or 1 1, 0 1)
- Output of 1 for 0 1
- Output of 0 for 1 1.

3