6-A-Day – Computer Science GCSE (28)

Q1	• To store the files/eg operating system • Even when the system is switched off/which must be non-volatile.	2
Q2	eg • Can share files/can work collaboratively on same files • Can share hardware resources/suitable example • Can access their files from any computer/classroom • Can work together from different computers using instant messaging • Centralised deployment of software to all computers	2
Q3	eg • Passwords protected user accounts • ... to ensure that only authorised people can access the network. • Network policy restrictions eg students only allowed to log in during school hours, from certain computers • ... ensures that attempts to enter in the system are likely to be genuine. • Different levels of access/each user can only access the files they need • ... prevents accidental damage to files. • Firewall... • ... to prevent unauthorised access /hacking into the network. *Marks in pairs. Award one mark for a correctly identified measure and another mark for an appropriate expansion explaining how this measure improves security* Filtering / censoring is not answering the question (unless candidates explain that web sites known to pose a security threat – e.g. because they are known to distribute viruses – are filtered)	4

Q4	• If the interval is smaller/if you sample more often you have more data to store... • ... so larger file • but the sound reproduced is closer to the original... • ...so better quality.	3
Q5	*Points may include:* **Advantages** • Computer system is more systematic than human... will not forget some patients/give consistent results • Software can be deployed in several departments • Easier to analyse records and measure the performance of the hospital. **Reliability** • Critical application, lives may be at stake if there are errors in the program • Loss of data/loss of power or any system down time can have adverse effects.	**High Level Response (5–6 marks)** A good understanding with detailed descriptions of both advantages and the need for reliability. There will be few if any errors in spelling, grammar and punctuation. Technical terms will be used appropriately and correctly. **Medium Level Response (3–4 marks)** A description of some advantages of the system and the need for reliability but one may be limited. There may be occasional errors in spelling, grammar and punctuation. Technical terms will be mainly correct. **Low Level Response (1–2 marks)** There may be an attempt to describe the advantages or the need for reliabilty but this is vague and some of the statements made are inaccurate. 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.
Q6	eg • Circuit only needs to check for two states/uses switches... • ... electricity flowing or not flowing/on or off/1 and 0 • ... resulting in more reliable circuits.	2