6-A-Day – Computer Science GCSE (48)

Q1	max 2 for explanation max 1 for example/use of Figure 2 or 3 • An image is made up of/consists of pixels • A pixel can be one colour • Each colour has a unique/corresponding binary number • Each pixel/square is given the binary number of its colour • The binary numbers are stored in order in the file • E.g. White = 000, Red = 010, Blue= 110, top line would be 0000000100100010110110	3	Accept answers that are annotated on Figures 1 and 2, or that use these to explain the storage of the image, that meet each bullet The example must be more than describing what the diagram shows, e.g. 'the squares with W in are white' is not enough.
Q2	Max 1 for description, 1 for example • To store data/information about the image/data • E.g.Dimensions/height/width/No. of bits per pixel/Colours used/location/date/file type	2	0 marks for filename as example 'tells you something about the image' = TV 0 marks for definition referring to how the image is 'displayed'
Q3	• The amplitude/height of the wave is measured • At set/regular intervals//by reasonable example • And stored as a binary number • The samples form an approximated sound wave	3	NOT frequency/pitch NB For the second bullet, this must relate to set intervals/the same interval. A set number of times per second does not suggest the same intervals.
Q4	• **File size increases** • **So the sound is truer/better quality/more accurate compared to the original/analogue**	2	
Q5	2 from • Tasks can split between the processors… • …tasks/processes/software/ can be processed faster • …more processes completed per second • Allows multitasking // Run more than one process/task/instruction/data at a time/per clock cycle… • … tasks/processes/software/ can be processed faster • …more processes completed per second	2	MUST have given splitting tasks, or multi-tasking to allow speed Faster can only be given a mark if the first bullet(s) have been given.
Q6	Max 2 per difference, 1 for RAM, 1 for ROM e.g. • RAM is volatile • ROM is non-volatile • RAM stores currently running instructions/programs/applications/OS/data • ROM stores boot-up instructions/bios • RAM can be changed • ROM (normally) cannot be changed	4	Do not allow e.g. ROM is not for 2nd mark. Mark in pairs