

6-A-Day – Computer Science GCSE (24)

<p>Q1</p>	<p>e.g.</p> <ul style="list-style-type: none"> • Touch screen • ... respond to fingers / stylus on specified icons • ... for example a software keyboard • ... eg converts handwriting to text • Hardware buttons • ... a small number around the edge of the tablet • ... for most common commands • ... eg bring up menu / next / previous / play / pause etc... • Microphone • ... captures user's speech and analyses it to match known patterns for commands • ... or speech recognition for typing documents • ... can be made to learn new commands / macros • Camera • ... used to capture user's image / for webcam applications • ... used to capture user's movement eg as input to games • ... used to capture text for processing by OCR 	<ul style="list-style-type: none"> • Accelerometer / tilt sensor • ... used to determine the position in which the tablet is held • ...to change screen orientation automatically (eg movie image) • ... used as in input to games <p>(1 mark for identifying device and 1 mark for use)</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Not Keyboard or onscreen keyboard Not mouse (but accept an in-built pointer device e.g. touchpad)</p> </div>
<p>Q2</p>	<p>e.g.</p> <ul style="list-style-type: none"> • Controls access to the network / verify passwords entered on any computer • Provides files to the other computers on the network • Installs software on workstations • Make the printer accessible to the other computers • Controls the access of computers to the Internet/to each other • Stores, delivers and sends emails for all users on the network 	<p style="text-align: center;">3</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Accept short descriptions eg domain controller, file server etc. Do not accept simply "manages or monitors or controls printer/Internet/devices...". The candidate should clearly be referring to users/workstations accessing these.</p> </div>
<p>Q3</p>	<p>Automatic update</p> <ul style="list-style-type: none"> • Checks on the (software manufacturer's site on the) Internet for newer versions of programs which are installed • If found it download / installs the software 	

Q4	<p>Clock Speed:</p> <ul style="list-style-type: none"> • The higher the clock speed the faster the CPU will run • Represents the number of fetch execute cycles / instructions the CPU can process in a given time
Q5	<ul style="list-style-type: none"> • So that computers can be based on logic circuits. • ... (each part of the circuit) can be in one of two states • ... 0 and 1/true or false <div style="border: 1px solid black; padding: 5px; margin-top: 10px; width: fit-content;"> <p>Mention of 0/1 without the right context is too vague for a mark.</p> </div>
Q6	<ul style="list-style-type: none"> • The instruction consists of an operator/op code • ... and an operand • both stored as bit patterns • (op code) from a given instruction set • Each op code has a unique bit pattern