

6-A-Day – Computer Science GCSE (p1.6-2016)

Q1	<p>A house has computers in each room and a central router. Every room allows both Ethernet and WiFi connections to the router.</p> <p>(a) Identify if the house network is a LAN (local area network) or a WAN (wide area network). Justify your choice.</p> <p>Network type:</p> <p>Justification:</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>[3]</p>																		
Q2	<p>The following table has descriptions of Ethernet and WiFi.</p> <p>Tick (✓) one box in each row to identify if the description is more appropriate for Ethernet or WiFi.</p> <table border="1" data-bbox="411 913 1198 1176"><thead><tr><th>Description</th><th>Ethernet</th><th>WiFi</th></tr></thead><tbody><tr><td>A wired connection</td><td></td><td></td></tr><tr><td>More likely to be affected by interference</td><td></td><td></td></tr><tr><td>Data can be transmitted at a faster speed</td><td></td><td></td></tr><tr><td>Wireless transmission</td><td></td><td></td></tr><tr><td>Shorter transmission range before data is lost</td><td></td><td></td></tr></tbody></table> <p>[5]</p>	Description	Ethernet	WiFi	A wired connection			More likely to be affected by interference			Data can be transmitted at a faster speed			Wireless transmission			Shorter transmission range before data is lost		
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Q3	<p>(i) Describe the purpose of the router in the house's network.</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>[2]</p>																		
Q4	<p>(ii) Identify two additional items of network hardware, apart from cables and a router, that may be used within the house network.</p> <p>1</p> <p>2</p> <p>[2]</p>																		

The questions on this worksheet have been taken from the 2018 OCR GCSE Computer Science Paper 1

Q5

A user enters a uniform resource locator (URL) into a web browser on one of the computers in the house. A system is then used to find the IP address of the web server associated with the URL.

(i) Name the system which matches URLs to IP addresses on the web.

.....
..... [1]

Q6

The following statements describe what happens after the IP address has been found and returned to the user's computer.

There are **five** missing statements in the table.

Write the letter of the missing statements from the table in the correct place to complete the description.

- 1 The request is put into packets
- 2
- 3 The packets are sent across the network
- 4
- 5
- 6 If they have not arrived:
- 7 A timeout is sent to request the packets are resent
- 8 If they have arrived:
- 9
- 10

Letter	Statement
A	The server checks if all the packets have arrived
B	The packets are put in order
C	The request is processed by the web server
D	The packets are received by the host server
E	Each packet is given the address and a number

[5]