MODULE F THE INTERNET · F2

URLs, DNS and how a web page reaches your screen: mark scheme

21 marks · Cambridge 0478 syllabus 5.1.2 (URLs) and 5.1.5 (how web pages are located, retrieved and displayed)

How to use. One mark per creditworthy point up to the maximum shown. **/** separates alternative words; **//** separates alternative answers. Words in (brackets) are not needed for the mark. Credit any other valid answer that shows the same understanding.

QUESTION	ANSWER	MARKS	GUIDANCE
1(a) 0478 5.1.2	Any two from: A text-based address // an address made of words / characters (An address) for / that locates a web page // website (on the internet / world wide web) It can contain the protocol, the domain name and the web page / file name	**2**	max 2. A correct example URL with no description: max 1. Do not accept "an IP address".
1(b) 0478 5.1.2	www.lakeviewcampsite.example: Domain name booking.html: Web page / file name https: Protocol opening-times.html: Web page / file name	**4**	One mark per correct row. A row with more than one box ticked scores 0.
2(a) 0478 5.1.5	Stores the web pages: Web server Holds a database of domain names and IP addresses: DNS Sends a request for the web page: Web browser Sends the HTML files to the user's device: Web server Renders the HTML: Web browser	**5**	One mark per correct row. A row with more than one box ticked scores 0.
3(a) 0478 5.1.5	Correct order: T, R, P, U, S, Q One mark for each of positions 2 to 6 with the correct letter: 2 = R, 3 = P, 4 = U, 5 = S, 6 = Q	**5**	Mark each position separately. Each letter should be used once.
4(a) 0478 5.1.5	Any two from: The IP address identifies / locates the web server (on the internet) The URL / domain name is text, so it must be converted (by the DNS) to the IP address // the domain name cannot be used to locate the server directly The request for the web page is sent / addressed to the web server's IP address // routers use the IP address to send the request to the correct web server ... so the request reaches the web server that stores the museum's web page	**2**	max 2. Do not accept "to connect to the internet" or "so the page loads faster".

QUESTION	ANSWER	MARKS	GUIDANCE
5(a) 0478 5.1.4, 5.1.5	Hypertext markup language	**1**	All three parts needed. Ignore capitals and spacing ("hyper text").
5(b) 0478 5.1.5	Any two from: The web page is written / created in HTML // HTML describes the content / structure / layout of the page The web server sends the page (to the browser) as HTML (files) The web browser renders / interprets the HTML ... to display the page (text, images, links) on the screen	**2**	max 2. Do not accept "HTML is the protocol used to send the page" (that is HTTP / HTTPS).

Total: 21 marks