MODULE F THE INTERNET · F2

URLs, DNS and how a web page reaches your screen

Original practice questions · 21 marks · ~25 minutes · Cambridge 0478 syllabus 5.1.2, 5.1.5

Name _____ Date _____

Instructions. Answer all questions in the spaces provided. The marks for each part are shown in brackets [ ]. The total for this worksheet is **21 marks**. All web addresses and organisations on this sheet are made up.

1

Total: 6 marks

(a) State what is meant by a uniform resource locator (URL). **[2]**

A museum and a campsite each have a website. These are two of their URLs:

```
https://www.marshmuseum.example/opening-times.html
https://www.lakeviewcampsite.example/booking.html
```

(b) Each row of the table shows one part taken from these URLs. Tick (✓) **one** box in each row to show which part of a URL it is. **[4]**

Part of a URL	Protocol	Domain name	Web page / file name
www.lakeviewcampsite.example			
booking.html			
https			
opening-times.html			

2

Total: 5 marks

(a) Tick (✓) **one** box in each row to show which of these carries out each task when a web page is located, retrieved and displayed. **[5]**

Task	Web browser	Domain name server (DNS)	Web server
Stores the web pages for a website			
Holds a database of domain names and their matching IP addresses			
Sends a request for the web page to the web server			
Sends the HTML files for the requested page to the user's device			
Renders the HTML so the page can be seen			

3

Total: 5 marks

A hotel guest wants to check the opening times of the museum. The guest types **https://www.marshmuseum.example/opening-times.html** into the address bar of a web browser on a tablet computer.

(a) The statements **P** to **U** describe how the web page is located, retrieved and displayed. They are in the wrong order. Write the letters in the table to show the correct order. The first one has been done for you. **[5]**

Letter	Statement
P	The DNS finds the IP address that matches the domain name and sends it back to the web browser.
Q	The web page is displayed on the tablet computer's screen.
R	The web browser sends the domain name from the URL to the DNS.
S	The web server finds the web page and sends its HTML files back to the web browser.
T	The guest types the URL into the address bar of the web browser.
U	The web browser uses the IP address to send a request for the web page to the web server.

Order	1	2	3	4	5	6
Letter	T					

4 **Total: 2 marks**

(a) Explain why the web browser needs the IP address of the web server before it can retrieve the museum's web page. **[2]**

5 **Total: 3 marks**

(a) Give the full name of **HTML**. **[1]**

(b) Describe the role of HTML in displaying the museum's web page on the guest's tablet computer. **[2]**

Total for this worksheet: 21 marks