

Final examination on Introduction to the Internet

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1 Review questions

1. What are the five layers in the Internet protocol stack? What are the principal responsibilities of each of these layers?
2. What information is used by a process running on one host to identify a process running on another host?
3. What is the difference between persistent HTTP with pipelining and persistent HTTP without pipelining?
4. Describe briefly cookies in web browsers. Why are they useful?
5. What is the conditional `GET` HTTP request useful for?
6. How an organisation's web server and mail server can have exactly the same alias for a hostname?
7. Describe shortly how a Domain Name Server performs load balancing.

2 True or false?

1. Suppose a user requests a Web page that consists of some text and two images. For this page the client will send one request and receive three response messages.
2. Two distinct Web pages can be sent over the same persistent connection.
3. With non-persistent connections between browser and origin server, it is possible for a single TCP segment to carry two distinct HTTP request messages.
4. The `Date:` header in the HTTP response message indicates when the object in the response was last modified.