COM-208: Computer Networks - Quiz 2 (A)

Name:

1. Assume that DNS uses TCP as the transport layer protocol. Which of the following is true:

   (a) We no longer need root and top-level DNS servers.
   (b) DNS queries take longer to answer, since TCP has to first establish a connection.
   (c) Both of the above.

2. We say that TCP is a "connection-oriented protocol" because:

   (a) The sender and the receiver are connected through network links that use circuit-switching.
   (b) TCP maintains state about the communicating processes.
   (c) Both of the above.

3. A web client contacts a web server either directly or through a proxy. Which of the following is true:

   (a) Loading the content is significantly faster through the proxy.
   (b) Using the proxy does not significantly improve performance.
   (c) Either of the above can be true, depending on the situation.

4. Which transport layer protocol does HTTP use?

   (a) TCP.
   (b) UDP.
   (c) Neither of the above. HTTP is itself a transport layer protocol.

5. When the user types the URL of a web page in the browser, the type of the first HTTP request the browser makes is:

   (a) POST
   (b) GET
   (c) DIG

6. The following is true about HTTP cookies:

   (a) They are a mechanism used by web servers to link subsequent HTTP requests to the same client.
   (b) They are used to violate user privacy.
   (c) Both of the above.

7. You access a web page that consists of 1 HTML file and 3 pictures, all stored on the same server. Suppose your browser uses a single non-persistent connection, and that DNS resolution has already been completed. What is the minimum number of round-trip-times needed to display the web page?

   (a) 4 RTTs.
   (b) 5 RTTs.
   (c) 8 RTTs.

8. A client-server (CS) architecture is different from a peer-to-peer (P2P) architecture in that:

   (a) CS always achieves better performance than P2P, independent from the number of users.
   (b) CS typically relies on dedicated infrastructure for running the server processes.
   (c) CS never poses a threat on user privacy, whereas P2P always does.

9. A web browser needs to contact www.epfl.ch. The minimum number of DNS requests sent is:

   (a) 0
   (b) 1
   (c) 3

10. A host is part of a P2P system. In order to know which other peers have content X, the host will:

    (a) Ask a central entity (tracker).
    (b) Query a distributed hash table (DHT).
    (c) Both of the above are valid options.

COM-208: Computer Networks - Quiz 2 (B)

Name:

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2. A host is part of a P2P system. In order to know which other peers have content X, the host will:

   (a) Query a distributed hash table (DHT).
   (b) Ask a central entity (tracker).
   (c) Both of the above are valid options.

3. Which transport layer protocol does HTTP use?

   (a) UDP.
   (b) TCP.
   (c) Neither of the above. HTTP is itself a transport layer protocol.

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   (a) CS never poses a threat on user privacy, whereas P2P always does.
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6. We say that TCP is a "connection-oriented protocol" because:

   (a) TCP maintains state about the communicating processes.
   (b) The sender and the receiver are connected through network links that use circuit-switching.
   (c) Both of the above.

7. A web browser needs to contact www.epfl.ch. The minimum number of DNS requests sent is:

   (a) 3
   (b) 1
   (c) 0

8. When the user types the URL of a web page in the browser, the type of the first HTTP request the browser makes is:

   (a) DIG
   (b) GET
   (c) POST

9. The following is true about HTTP cookies:

   (a) They are used to violate user privacy.
   (b) They are a mechanism used by web servers to link subsequent HTTP requests to the same client.
   (c) Both of the above.

10. A web client contacts a web server either directly or through a proxy. Which of the following is true:

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