

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

Name:
SCIPER:

1. We say that TCP is a “connection-oriented” protocol because:
 - (a) Every packet sent by a TCP sender is delivered to the intended TCP receiver with probability 100%.
 - (b) A TCP sender and receiver are always connected through packet switches that use connection switching.
 - (c) A TCP sender and receiver maintain state about each other.
2. Assuming no caching, the amount of time it takes for a web client to download a web page from a web server is
 - (a) 1 round-trip time (RTT) between the client and server.
 - (b) at least 2 RTTs between the client and server.
 - (c) at most 2 RTTs between the client and server.
3. Cookies enable
 - (a) a packet switch to link subsequent packets to the same source IP address.
 - (b) a web server to link subsequent HTTP requests to the same web client.
 - (c) a proxy web server to decide whether cached data is stale.
4. Proxy web servers do not cache small files because
 - (a) web clients can download small files very quickly.
 - (b) the overhead of checking whether the file is stale cancels out the benefit of caching.
 - (c) both of the above.
5. Domain Name Service (DNS) translates
 - (a) DNS names to process addresses.
 - (b) DNS names to IP addresses.
 - (c) IP addresses to MAC addresses.
6. Every Internet end-system must know the IP address of at least one
 - (a) DNS server
 - (b) root DNS server.
 - (c) authoritative DNS server for each domain it wants to communicate with.
7. When you visit a web page, the minimum number of requests to DNS servers that take place as a result is
 - (a) 4.
 - (b) 1.
 - (c) 0.
8. The DNS root servers come under a massive denial-of-service (DoS) attack. As a result, an Internet end-system
 - (a) cannot reach any other Internet end-system.
 - (b) can only reach end-systems it communicated with recently.
 - (c) is not affected at all by the attack.
9. When we say that peer-to-peer file distribution “scales better” than client-server, we mean that
 - (a) file distribution time increases more slowly with the number of downloaders
 - (b) file distribution time increases more slowly with the number of involved packet switches.
 - (c) file distribution time decreases with the number of downloaders.
10. Peer-to-peer file distribution systems use distributed hash tables (DHTs) to
 - (a) store content files.
 - (b) store illegal content files.
 - (c) map file IDs to file location information.

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

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1. Assuming no caching, the amount of time it takes for a web client to download a web page from a web server is
 - (a) 1 round-trip time (RTT) between the client and server.
 - (b) at least 2 RTTs between the client and server.
 - (c) at most 2 RTTs between the client and server.
2. When you visit a web page, the minimum number of requests to DNS servers that take place as a result is
 - (a) 0.
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 - (c) 4.
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 - (a) the overhead of checking whether the file is stale cancels out the benefit of caching.
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