COM-208: Computer Networks - Quiz 1 (A)

Name:

1. Traffic is arriving at a queue with average rate A and departing through an outgoing link with transmission rate $R > A$. The queuing delay will therefore depend on:
   (a) the nature/burstiness profile of the arriving traffic.
   (b) the size of the buffer.
   (c) Both of the above.
2. In bandwidth flooding, the attacker:
   (a) sends a large number of packets to the targeted host.
   (b) is a passive receiver of the sender's messages.
   (c) establishes a large number of connections at the targeted host.
3. We can increase the average throughput between a source and a destination by increasing:
   (a) the amount of data sent by the source.
   (b) the transmission rate of the bottleneck link.
   (c) the rate at which the application layer of the source generates data.
4. A network administrator has decided to reduce by 50% the lengths of the links among all switches of the network. What will be the result of such a choice?
   (a) The end-to-end transmission delays will be reduced by 50%.
   (b) The end-to-end propagation delays will be reduced by 50%.
   (c) None of the above.
5. A forwarding table is used by a switch in order to:
   (a) store entire packets before they are forwarded.
   (b) store information about where to forward the packets.
   (c) fast-forward specific packets in case of congestion.
6. A packet sequence arriving at a switch experiences long queuing delays. How could we reduce these delays?
   (a) By increasing the size of the buffer/queue at the switch.
   (b) By increasing the transmission rate of the outgoing link(s) of the switch.
   (c) By increasing the transmission rate of the inbound link(s) of the switch.
7. Which of the following is true?
   (a) With connection switching, data is lost with higher probability than in packet switching.
   (b) With connection switching, the end-to-end delays can be predicted in advance.
   (c) With connection switching, the end-to-end delays are always very small.
8. In the Internet, packet switching is preferred to connection switching, because:
   (a) it offers better performance.
   (b) it can support more users at the same cost.
   (c) Both of the above.
9. During rush hours, DSL performs generally better than Cable, because:
   (a) DSL always offers higher downstream and upstream speeds.
   (b) DSL uses twisted-pair copper technology.
   (c) DSL is not a shared medium like Cable.
10. An IXP is:
    (a) a special type of ISP.
    (b) a meeting point where only regional ISPs can peer together.
    (c) a meeting point where ISPs of any type can peer together.

COM-208: Computer Networks - Quiz 1 (B)

Name:

1. A forwarding table is used by a switch in order to:
   (a) fast-forward specific packets in case of congestion.
   (b) store entire packets before they are forwarded.
   (c) store information about where to forward the packets.
2. During rush hours, DSL performs generally better than Cable, because:
   (a) DSL uses twisted-pair copper technology.
   (b) DSL is not a shared medium like Cable.
   (c) DSL always offers higher downstream and upstream speeds.
3. In the Internet, packet switching is preferred to connection switching, because:
   (a) it can support more users at the same cost.
   (b) it offers better performance.
   (c) Both of the above.
4. A packet sequence arriving at a switch experiences long queuing delays. How could we reduce these delays?
   (a) By increasing the size of the buffer/queue at the switch.
   (b) By increasing the transmission rate of the outgoing link(s) of the switch.
   (c) By increasing the transmission rate of the inbound link(s) of the switch.
5. In bandwidth flooding, the attacker:
   (a) establishes a large number of connections at the targeted host.
   (b) is a passive receiver of the sender's messages.
   (c) sends a large number of packets to the targeted host.
6. We can increase the average throughput between a source and a destination by increasing:
   (a) the transmission rate of the bottleneck link.
   (b) the amount of data sent by the source.
   (c) the rate at which the application layer of the source generates data.
7. An IXP is:
   (a) a special type of ISP.
   (b) a meeting point where ISPs of any type can peer together.
   (c) a meeting point where only regional ISPs can peer together.
8. Which of the following is true?
   (a) With connection switching, the end-to-end delays can be predicted in advance.
   (b) With connection switching, data is lost with higher probability than in packet switching.
   (c) With connection switching, the end-to-end delays are always very small.
9. A network administrator has decided to reduce by 50% the lengths of the links among all switches of the network. What will be the result of such a choice?
   (a) The end-to-end transmission delays will be reduced by 50%.
   (b) The end-to-end propagation delays will be reduced by 50%.
   (c) None of the above.
10. A queue has an incoming link with transmission rate A and an outgoing link with transmission rate $R > A$. The queuing delay will therefore depend on:
    (a) the nature/burstiness profile of the arriving traffic.
    (b) the size of the buffer.
    (c) Both of the above.