

**Cisco**

# QoS

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STUDY  
PRINTABLES

## PRINTABLE PRACTICE QUESTIONS

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## Chapter 1

# IP QoS Fundamentals

1. What is the overall "goal" of achieving a converged network?

Select the best answer.

- A. Allowing different types of traffic to send traffic as needed.
- B. The ease of decoupling converged applications back into nonintegrated networks.
- C. Limiting latency to a maximum of 120 ms.
- D. Insuring voice traffic is given the highest priority.

[Find the Answer](#) p. 65

2. What are the characteristics of converged traffic?

Choose three:

- A. SMTP is time sensitive.
- B. Constant small-packet voice flow competes with bursty data flow.
- C. Voice and video are time sensitive.
- D. Brief outages must be acceptable on parts of the network.
- E. Brief outages are not acceptable.

[Find the Answer](#) p. 65



3. When does delay get to the point where voice calls suffer from "talker overlap"?

Select the best answer.

- A. Greater than 120 ms.
- B. Greater than 300 ms.
- C. Less than 250 ms.
- D. Greater than 250 ms.

[Find the Answer](#) p. 65

4. What voice problem is caused by the signal reflecting the speakers voice from the remote side phone back into the speakers ear?

Select the best answer.

- A. Call disconnect
- B. Echo
- C. Jitter
- D. Variation of delay

[Find the Answer](#) p. 65

5. What are the four main problems facing converged enterprise networks?

Choose four:

- A. Bandwidth capacity
- B. End-to-end Delay
- C. Lack of network management
- D. Multicast convergence times
- E. Jitter
- F. Packet loss

[Find the Answer](#) p. 65



## Answers: Chapter 1

1. <b>A</b>	<a href="#">Review Question</a> p. 2	<a href="#">Detailed Explanation</a> p. 77
2. <b>B, C, E</b>	<a href="#">Review Question</a> p. 2	<a href="#">Detailed Explanation</a> p. 77
3. <b>D</b>	<a href="#">Review Question</a> p. 3	<a href="#">Detailed Explanation</a> p. 77
4. <b>B</b>	<a href="#">Review Question</a> p. 3	<a href="#">Detailed Explanation</a> p. 78
5. <b>A, B, E, F</b>	<a href="#">Review Question</a> p. 3	<a href="#">Detailed Explanation</a> p. 78
6. <b>D</b>	<a href="#">Review Question</a> p. 4	<a href="#">Detailed Explanation</a> p. 79
7. <b>B, C, E, F</b>	<a href="#">Review Question</a> p. 4	<a href="#">Detailed Explanation</a> p. 79
8. <b>B</b>	<a href="#">Review Question</a> p. 5	<a href="#">Detailed Explanation</a> p. 80
9. <b>C</b>	<a href="#">Review Question</a> p. 5	<a href="#">Detailed Explanation</a> p. 80
10. <b>D</b>	<a href="#">Review Question</a> p. 5	<a href="#">Detailed Explanation</a> p. 80
11. <b>C</b>	<a href="#">Review Question</a> p. 6	<a href="#">Detailed Explanation</a> p. 81
12. <b>A</b>	<a href="#">Review Question</a> p. 6	<a href="#">Detailed Explanation</a> p. 81
13. <b>B</b>	<a href="#">Review Question</a> p. 7	<a href="#">Detailed Explanation</a> p. 82
14. <b>C</b>	<a href="#">Review Question</a> p. 7	<a href="#">Detailed Explanation</a> p. 82
15. <b>C</b>	<a href="#">Review Question</a> p. 7	<a href="#">Detailed Explanation</a> p. 82
16. <b>D</b>	<a href="#">Review Question</a> p. 8	<a href="#">Detailed Explanation</a> p. 83
17. <b>B</b>	<a href="#">Review Question</a> p. 8	<a href="#">Detailed Explanation</a> p. 83
18. <b>C</b>	<a href="#">Review Question</a> p. 8	<a href="#">Detailed Explanation</a> p. 83

## Explanations: Chapter 1

1. [Review Question](#) p. 2

**Answers: A**

**Explanation A.** Correct - The consolidation of multiple non-integrated networks into a single converged network means that the single network must be able to handle the different traffic characteristics and requirements.

**Explanation B.** Incorrect - Converged networks are likely to remain a single network.

**Explanation C.** Incorrect - Depending on the application requirements, converged networks will have different levels of service.

**Explanation D.** Incorrect - Depending on the application requirements, converged networks will have different levels of service.

PrepLogic Question: [11656-100](#)

2. [Review Question](#) p. 2

**Answers: B, C, E**

**Explanation A.** Incorrect- SMTP is not a time sensitive protocol. It can wait even several minutes without any undue harm.

**Explanation B.** Correct - The challenge of a converged network is to allow the small-packet voice data enough available bandwidth to have a steady stream amongst the chunkier data packets traveling on the same wire.

**Explanation C.** Correct - Voice and video are extremely time sensitive and must have higher priority over other traffic on the network.

**Explanation D.** Incorrect - Outages must be overcome through proper network redundancy.

**Explanation E.** Correct - Network redundancy must be designed into the network to eliminate single points of failure.

PrepLogic Question: [11656-101](#)

3. [Review Question](#) p. 3

**Answers: D**



**Explanation A.** Incorrect - The problem typically occurs when delay is greater than 250 ms.

**Explanation B.** Incorrect - The problem typically occurs when delay is greater than 250 ms.

**Explanation C.** Incorrect - The problem typically occurs when delay is greater than 250 ms.

**Explanation D.** Correct - Talker overlap is network delay that creates a "walkie talkie" call effect.

PrepLogic Question: [11656-102](#)

4. [Review Question](#) p. 3

**Answers: B**

**Explanation A.** Incorrect - Call disconnect is when the calls terminate unexpectedly.

**Explanation B.** Correct - Echo is when the user can hear his own voice reflected back through the remote side speaker.

**Explanation C.** Incorrect - Jitter is a delay in the delivery of voice packets which result in a "choppy" call.

**Explanation D.** Incorrect - This is just another term for Jitter.

PrepLogic Question: [11656-103](#)

5. [Review Question](#) p. 3

**Answers: A, B, E, F**

**Explanation A.** Correct - Large graphics files and increased use of voice/video applications cause bandwidth capacity problems on a converged network.

**Explanation B.** Correct - The time it takes for a packet to get from one end to the other is a major issue. The delay includes both fixed and variable delay.

**Explanation C.** Incorrect - Network management has nothing to do with issues facing convergence of networks.

**Explanation D.** Incorrect - Issues dealing with convergence of enterprise networks deal with capacity and delay.



**Explanation E.** Correct - The variation of delay (jitter) can contribute to problems on the converged network.

**Explanation F.** Correct - Packet loss is typically caused by congestion. The elimination of congestion is very important when converging networks.

PrepLogic Question: [11656-104](#)

6. [Review Question](#) p. 4

**Answers: D**

**Explanation A.** Incorrect - The bottleneck is the lowest bandwidth segment from end-to-end.

**Explanation B.** Incorrect - The bottleneck is the lowest bandwidth segment from end-to-end.

**Explanation C.** Incorrect - The bottleneck is the lowest bandwidth segment from end-to-end.

**Explanation D.** Correct - Segment 3 has the lowest end-to-end bandwidth.

**Explanation E.** Incorrect - The bottleneck is the lowest bandwidth segment from end-to-end.

**Explanation F.** Incorrect - Along any path there is always a potential bottleneck.

PrepLogic Question: [11656-105](#)

7. [Review Question](#) p. 4

**Answers: B, C, E, F**

**Explanation A.** Incorrect - Enabling RSTP will not increase bandwidth.

**Explanation B.** Correct - This is the easiest method but also the most costly.

**Explanation C.** Correct - By prioritizing traffic, you can insure that time-sensitive data is sent before less time sensitive data.

**Explanation D.** Incorrect - Routing protocols have almost no affect on available bandwidth.

**Explanation E.** Correct - Layer 2 compression is a way to put more data on the existing links.

