

Introduction to Broadband Technologies

Questions

1. In a broadband context, what is the difference between synchronous and asynchronous communications?

Synchronous communication has the same upload/download speed and asynchronous communication has different upload/download speeds.

2. What is latency?

Latency is the time between sending a command and the command being acknowledged.

3. From Eli's point of view, what is the difference between business and residential service?

Eli says that business service has better customer service and guarantees.

4. Explain the difference between a static and a dynamic IP address.

You pay for a static IP address, it stays the same even after the computer restarts. Dynamic IP addresses change.

5. Why might an organization want a static rather than a dynamic IP address?

A static IP address best supports name resolution, so that a computer can be most reliably reached over the network by its host/domain name. Web and FTP servers in particular benefit from fixed addressing for this reason.

6. Why would an ISP block a particular port?

Security reasons, or if other web servers are communicating through that port

7. What is an SLA?

An SLA is service level agreement, agreeing to a provider's terms for a service.

8. When would you use a T1 line?

When you need a guarantee of maximum uptime.

9. What are two advantages of a T1 line?

Fast, reliable uptime, SLA, possibly available where cable or DSL services aren't.

10. What is the primary disadvantage of a T1 line?

High cost

11. What is the primary advantage of carrier class Ethernet?

99.9% uptime guarantee

12. In wireless networking, what does 'unlimited Internet' mean?

No restrictions on upload and download traffic

13. In an old building, what could be a problem source concerning DSL service?

Old telephone lines, bad quality lines would provide bad quality Internet

14. With a cable connection, what type of problem could be associated with a trunk line?

Busy peak times

15. From a business perspective, what is a potential weakness of Cable?

No SLA

16. What is FIOS?

FIOS is Fiber Optic Internet connection for residential users

17. What is the reason that you probably don't want a satellite connection?

High cost, high latency