

› Review Questions

Concepts

1. What is a computer network?

- (A) A way to connect devices to share data
- (B) Web pages that can be shared globally
- (C) A dedicated line from one computer to another
- (D) A set of IP addresses needed to access other computers

2. What are the connected steps between a sending and a receiving location called?

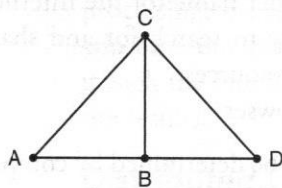
- (A) A route
- (B) A heuristic
- (C) A path
- (D) A conduit

3. What is bandwidth?
 - (A) How long it takes 10 megabytes of data to be sent
 - (B) The amount of data that can be sent in a fixed period of time
 - (C) The delay in how long it takes between requesting and loading a web page
 - (D) The amount of data divided by the latency
4. Why is Internet routing usually dynamic?
 - (A) So that if a path on the route is congested or not working, a new path can be assigned
 - (B) So that it can speed up or slow down as necessary to avoid data congestion
 - (C) So that new routes can be tested in beta mode before being available globally
 - (D) So that as noise on a route becomes louder, traffic can be limited until it reaches acceptable levels
5. What is the name for the protocol that handles processing at the sending and receiving locations?
 - (A) Local Area Network Protocol
 - (B) Point-to-point Protocol
 - (C) Transmission Control Protocol
 - (D) Redundancy Protocol
6. What is the number assigned to devices on the Internet?
 - (A) Internet Protocol address
 - (B) Domain name
 - (C) Host name
 - (D) Router location
7. How do packets know how to get to their destination?
 - (A) The router knows the path and sends it step-by-step to its final destination.
 - (B) Each path has an embedded code that directs the packets to the correct location.
 - (C) The destination location emits pulses that guide the data packets to its location.
 - (D) The destination IP address is included in each packet.
8. Why is the Internet considered to be fault-tolerant?
 - (A) It has dedicated lines between devices.
 - (B) It has duplicate paths to all locations.
 - (C) It is secured against all threats.
 - (D) It is open to anyone with a connection.
9. What is the World Wide Web?
 - (A) A collection of wires and cables to connect devices
 - (B) Another name for the Internet
 - (C) A way to search for and share documents and resources
 - (D) A browser
10. What can be determined by comparing the time it takes different systems to complete the same task?
 - (A) Efficiency
 - (B) Reliability
 - (C) Speedup
 - (D) Validity
11. A parallel computing system uses multiple computers to run
 - (A) sections of the data at the same time
 - (B) the same data to measure the fastest ISP
 - (C) sections of the program at the staggered times to avoid overlap
 - (D) sections of the program at the same time
12. Which computing system can process larger datasets when multiple devices are combined because of the additional memory and storage provided?
 - (A) Dispersed
 - (B) Incremental
 - (C) Parallel
 - (D) Sequential

Application of Concepts

13. Which of the following is true about packets?
 - (A) Packets leave and arrive at their destination at the same time.
 - (B) Packets travel along different paths to their destination.
 - (C) Each router decrypts the packets to confirm their destination.
 - (D) If a packet does not arrive at the destination, the entire message is resent.

14. Given the network in the diagram, what is an available path for A and B if the link between A and B is down?



- (A) A C B
(B) A C D
(C) C D B A
(D) A C D A
15. What could be added to the diagram to provide redundancy?
- (A) Duplicate routers at each node
(B) An additional path between A and D
(C) More cables connecting all locations
(D) A signal booster to maintain the speed between sending and receiving locations
16. Which of the following is false about HTTPS?
- (A) HTTPS uses Certificate Authorities (CAs) to verify a site's identity.
(B) HTTPS encrypts data before it is separated into packets.
(C) HTTPS ensures the secure sharing of data.
(D) HTTPS trades faster performance for more security.
17. Why is there a limit to adding additional devices to a parallel system?
- (A) The processor speed is limited and additional devices cannot create additional speedup.
(B) There are only so many configurations to connect devices in parallel.
(C) Space and connections to power in a building limit the number of devices.
(D) The amount of time the sequential part takes to run cannot be shortened by adding devices.