

Question 1

A link in a network which slows the throughput down is known as?

Choose one answer.

- ☐ 1. tier-1 ISP
- ☐ 2. Network edge
- ☐ 3. bottleneck link
- ☐ 4. IETF and RFCs
- ☐ 5. {

Question 2

Both fiber and coaxial cable are employed in this system, it is often referred to as?

Choose one answer.

- ☐ 1. hybrid fiber coax (HFC)
- ☐ 2. end systems (hosts)
- ☐ 3. transmission delay
- ☐ 4. bandwidth

Question 3

Commonly used for computer networks within a building

Choose one answer.

- ☐ 1. TCP and IP (TCP/IP)
- ☐ 2. fiber to the home (FTTH)
- ☐ 3. Internet Exchange Point (IXP)
- ☐ 4. Unshielded twisted pair (UTP)

Question 4

Component of FTTH which connects the ONT to the CO

Choose one answer.

- ☐ 1. hybrid fiber coax (HFC)
- ☐ 2. transmission rate
- ☐ 3. optical line terminator (OLT)
- ☐ 4. digital subscriber line

Question 5

Data in the link layer is known as a

Choose one answer.

- ☐ 1.  $N \cdot L/R$
- ☐ 2. segment
- ☐ 3. frame
- ☐ 4. message

Question 6

data in the network layer is known as a

Choose one answer.

- ☐ 1. frame
- ☐ 2. datagram
- ☐ 3. L/R
- ☐ 4. servers

Question 7

data in the transport layer is known as a

Choose one answer.

- ☐ 1. segment
- ☐ 2. frame
- ☐ 3. message
- ☐ 4. clients

Question 8

End systems are connected together by a network of \_\_\_\_\_ and \_\_\_\_\_.

Choose one answer.

- ☐ 1. routers and link-layer switches
- ☐ 2. communication links and packet switches
- ☐ 3. Internet Engineering Task Force
- ☐ 4. circuit switching and packet switching

Question 9

formula for d end-end (the end to end delay)

Choose one answer.

- ☐ 1. TCP and IP (TCP/IP)
- ☐ 2. customer and provider
- ☐ 3.  $N(d_{\text{proc}} + d_{\text{trans}} + d_{\text{prop}})$
- ☐ 4. propagation delay

Question 10

IETF is the abbreviation for

Choose one answer.

- ☐ 1. Internet Service Provider
- ☐ 2. Internet Engineering Task Force
- ☐ 3. Internet Exchange Point
- ☐ 4. optical line terminator

Question 11

In the network of networks an access ISP is said to be the \_\_\_\_\_ and the global transit ISP is said to be the \_\_\_\_\_.

Choose one answer.

- ☐ 1. servers
- ☐ 2. Internet Service Provider
- ☐ 3. central office
- ☐ 4. customer and provider

Question 12

Laptops, smartphones, tablets, TVs, gaming consoles, Web cams, automobiles, environmental sensing devices, picture frames, and home electrical and security systems are all devices that fall under the category of what?

Choose one answer.

- ☐ 1. route (path)
- ☐ 2. access networks
- ☐ 3. packet loss
- ☐ 4. end systems (hosts)

Question 13

Method in which a packet switch must receive the entire packet before it can begin to transmit the first bit of the packet onto the outbound link.

Choose one answer.

- ☐ 1. store-and-forward transmission
- ☐ 2. IETF and RFCs
- ☐ 3. customer and provider
- ☐ 4. regional ISP

Question 14

Method to move data through a network of links and switches which reserves communication sessions between end systems is known as?

Choose one answer.

- ☐ 1. bandwidth
- ☐ 2. circuit-switching
- ☐ 3. route
- ☐ 4. Protocol

Question 15

Multiple end systems that exchange data with each other

Choose one answer.

- ☐ 1. TCP and IP (TCP/IP)
- ☐ 2. Distributed applications
- ☐ 3. circuit-switching
- ☐ 4. customer and provider

Question 16

One of the two categories that hosts are divided into; PCs, smartphones, and other mobile devices.

Choose one answer.

- ☐ 1. segment
- ☐ 2. packets
- ☐ 3. clients
- ☐ 4. L/R

Question 17

One of the two categories that hosts are divided into; powerful machines that store and distribute Web pages, stream video, relay e-mail.

Choose one answer.

- ☐ 1. servers
- ☐ 2. frame
- ☐ 3. segment
- ☐ 4. packets

Question 18

Packet switches have multiple links attached to them. For each attached link the packet switch has an \_\_\_\_\_, which stores packets that the router is about to send into that link.

Choose one answer.

- ☐ 1. route (path)
- ☐ 2. central office
- ☐ 3. Network edge
- ☐ 4. output buffer

Question 19

packets experience this as it waits to be transmitted onto the link

Choose one answer.

- ☐ 1. message
- ☐ 2. segment
- ☐ 3. queuing delay
- ☐ 4. queuing delays

Question 20

reserves space for communication by partitioning the physical media into frequencies

Choose one answer.

- ☐ 1. Unshielded twisted pair (UTP)
- ☐ 2. transmission rate
- ☐ 3. frequency-division multiplexing (FDM)
- ☐ 4. transmission delay

Question 21

Specifies how a program running on one end system asks the Internet infrastructure to deliver data to a specific destination program running on another end system

Choose one answer.

- ☐ 1. Application Programming Interface (API)
- ☐ 2. Internet Engineering Task Force
- ☐ 3. optical network terminator (ONT)
- ☐ 4. optical line terminator (OLT)

Question 22

Table that maps destination address to a routers outbound links

Choose one answer.

- ☐ 1. Network edge
- ☐ 2. forwarding table
- ☐ 3. frame
- ☐ 4. queuing delay

Question 23

The five layers of the internet protocol stack

Choose one answer.

- ☐ 1. Application, Presentation, Session, Transport, Network, Link, Physical
- ☐ 2. Application, Transport, Network, Link, and Physical
- ☐ 3. Application Programming Interface (API)
- ☐ 4. optical network terminator (ONT)

Question 24

The ISP which connects to a tier-1 ISP is known as a

Choose one answer.

- ☐ 1. tier-1 ISP
- ☐ 2. central office
- ☐ 3. segment
- ☐ 4. regional ISP

Question 25

The network that physically connects an end system to the first router also known as the edge router.

Choose one answer.

- ☐ 1. packets
- ☐ 2. message
- ☐ 3. access networks
- ☐ 4. clients

Question 26

The seven layers of the OSI model includes the following:

Choose one answer.

- ☐ 1. Application, Presentation, Session, Transport, Network, Link, Physical
- ☐ 2. Application, Transport, Network, Link, and Physical
- ☐ 3. optical network terminator (ONT)
- ☐ 4. Application Programming Interface (API)

Question 27

The speed of a link measured in bits/second.

Choose one answer.

- ☐ 1. processing delay
- ☐ 2. transmission rate
- ☐ 3. frame
- ☐ 4. bandwidth

Question 28

The time required to examine the packet's header and determine where to direct the packet.

Choose one answer.

- ☐ 1. access networks
- ☐ 2. processing delay
- ☐ 3. propagation delay
- ☐ 4. queuing delays

Question 29

The time required to propagate from the beginning of the link to router B

Choose one answer.

- ☐ 1. transmission delay
- ☐ 2. queuing delay
- ☐ 3. propagation delay
- ☐ 4. processing delay

Question 30

The two fundamental approaches to moving data through a network of links and switches.

Choose one answer.

- ☐ 1. circuit-switching
- ☐ 2. customer and provider
- ☐ 3. communication links and packet switches
- ☐ 4. circuit switching and packet switching

Question 31

The two most prominent types of packet switches

Choose one answer.

- ☐ 1. route (path)
- ☐ 2. communication links and packet switches
- ☐ 3. routers and link-layer switches
- ☐ 4. IETF and RFCs

Question 32

the width of the band in FDM

Choose one answer.

- ☐ 1. bandwidth
- ☐ 2. segment
- ☐ 3. clients
- ☐ 4. packets

Question 33

This occurs when either a packet arriving or an already-queued packet is dropped.

Choose one answer.

- ☐ 1. packets
- ☐ 2. packet loss
- ☐ 3. servers
- ☐ 4. datagram

Question 34

this small chunk of data travels through communication links and packet switches

Choose one answer.

- ☐ 1. packet loss
- ☐ 2. clients
- ☐ 3. servers
- ☐ 4. packets

Question 35

Two common internet standards

Choose one answer.

- ☐ 1. Network edge
- ☐ 2. bandwidth
- ☐ 3. IETF and RFCs
- ☐ 4. servers

Question 36

Two of the most important protocols in the internet.

Choose one answer.

- ☐ 1. circuit-switching
- ☐ 2. route
- ☐ 3. IETF and RFCs
- ☐ 4. TCP and IP

Question 37

Two types of optical-distribution network architectures

Choose one answer.

- ☐ 1. optical line terminator (OLT)
- ☐ 2. active optical networks (AON) and passive optical networks (PON)
- ☐ 3. optical network terminator (ONT)
- ☐ 4. communication links and packet switches

Question 38

Typically a stand-alone building with its own switches, which is a meeting point where multiple ISPs can peer together

Choose one answer.

- ☐ 1. Internet Exchange Point (IXP)
- ☐ 2. Internet Engineering Task Force
- ☐ 3. Internet Service Provider
- ☐ 4. Unshielded twisted pair (UTP)

Question 39

Variable delays that depend on the level of congestion in the network.

Choose one answer.

- ☐ 1. processing delay
- ☐ 2. queuing delay
- ☐ 3. IETF and RFCs
- ☐ 4. queuing delays

Question 40

What part of the internet are end systems found?

Choose one answer.

- ☐ 1. servers
- ☐ 2. message
- ☐ 3. regional ISP
- ☐ 4. Network edge

Question 41

When transferring a large file from Host A to Host B across a computer network, if the file consists of  $F$  bits and the transfer takes  $T$  seconds for Host B to receive all  $F$  bits this rate takes  $F/T$  bits/sec.

Choose one answer.

- ☐ 1. instantaneous throughput
- ☐ 2. average throughput
- ☐ 3. central office
- ☐ 4. regional ISP

Question 42

Which of following term refers to the data in the application layer?

Choose one answer.

- ☐ 1. segment
- ☐ 2. frame
- ☐ 3. message
- ☐ 4. servers

Question 43

Which of the following refers to the amount of time required to push all of the packet's bits into the link?

Choose one answer.

- ☐ 1. transmission rate
- ☐ 2. propagation delay
- ☐ 3. queuing delay
- ☐ 4. transmission delay

Question 44

Which of the following terms refers to the packages of information?

Choose one answer.

- ☐ 1. servers
- ☐ 2. clients
- ☐ 3. packet loss
- ☐ 4. packets

Question 45

DSL is the abbreviation for? \_\_\_\_\_