# CP1402 Midterm preparation questions SP2 2015 True/False

*Indicate whether the statement is true or false.*

1. To prepare to enter the networking field, a student should master a number of general networking technologies.
   1. True
   2. False

1. The command used to view IP information on a Windows workstation is ipconfig. a. True
   1. False

1. Standards assist in network design.
   1. True
   2. False

1. \*The most popular method for connecting nodes on a network is circuit switching. a. True
   1. False

1. Clients on a client/server network share their resources directly with each other. a. True
   1. False

1. Ethernet is an example of a baseband system found on many LANs. a. True
   1. False

1. \*Modern Ethernet networks are based on the star topology. a. True
   1. False

1. All protocols are routable.
   1. True
   2. False

1. Latency occurs when a signal traveling on one wire or cable infringes on the signal traveling over an adjacent wire or cable. a. True
   1. False

1. \*ICMP (Internet Control Message Protocol) reports on the success or failure of data delivery. a. True
   1. False

1. The maximum distance a signal can travel and still be interpreted accurately is equal to a segment’s maximum length.
   1. True
   2. False

1. The Application layer includes software applications.
   1. True
   2. False

1. Not all Transport layer protocols are concerned with reliability. a. True
   1. False

1. The simplest form of a network is a client/server network. a. True
   1. False

# Multiple Choice

*Identify the choice that best completes the statement or answers the question.*

1. Which OSI model layer manages data encryption?
   1. Physical
   2. Session
   3. Application
   4. Presentation

1. Which Data Link sublayer manages access to the physical medium?
   1. LLC
   2. MAC
   3. Management layer
   4. Addressing layer

1. \*In the TCP/IP protocol suite, \_\_\_\_ is the core protocol responsible for logical addressing. a. TCP
   1. UDP
   2. IP
   3. ARP

1. \*A straight thorugh cable is used to connect\_\_\_\_\_
   1. A PC to a laptop
   2. A switch to another switch
   3. A switch to a router
   4. A PC to a switch

1. On an Ethernet network, a(n) \_\_\_\_ is the portion of a network in which collisions occur if two nodes transmit data at the same time. a. collision domain
   1. broadcast domain
   2. interference domain
   3. duplicate domain

1. A \_\_\_\_ network is confined to a relatively small space.
   1. NAN
   2. MAN
   3. WAN
   4. LAN

1. The more twists per foot in a pair of wires, the more resistant the pair will be to \_\_\_\_. a. throughput
   1. attenuation
   2. cross talk
   3. latency

1. When signals are free to travel in both directions over a medium simultaneously, the transmission is considered \_\_\_\_.
   1. simplex
   2. multiplex
   3. half-duplex
   4. full-duplex

1. \*The phenomenon of offering multiple types of communications services on the same network is known as \_\_\_\_.
   1. convergence
   2. unified communications
   3. divergence
   4. multi-communications

1. The \_\_\_\_ is a fixed number associated with a device’s NIC.
   1. LLC address
   2. frame address
   3. logical address
   4. physical address

1. Modern LANs use \_\_\_\_ or higher wiring.
   1. Cat 3
   2. Cat 5
   3. RG-6
   4. RG-59

1. The serial interface on the back of the connectivity device is often labeled “\_\_\_\_.” a. Connector
   1. Port
   2. Board
   3. Console

1. Which network topology is the most common?
   1. ring
   2. star
   3. hybrid
   4. Ethernet

1. \*Which IEEE standard describes Ethernet?
   1. 802.1
   2. 802.3
   3. 802.5
   4. 802.11

1. In which OSI model layer do hubs operate?
   1. Physical
   2. Network
   3. Data Link
   4. Physical and Data Link

1. Which network model ensures that no computer on the network has more authority than another? a. client/server
   1. stand alone
   2. peer-to-peer
   3. distributed

1. \*A physical topology \_\_\_\_.
   1. specifies device types
   2. depicts a network in broad scope
   3. specifies connectivity methods
   4. specifies addressing schemes

1. Many network problems can be traced to poor cable \_\_\_\_ techniques.
   1. manufacturing
   2. engineering
   3. installation
   4. planning

1. How is reliability achieved in TCP?
   1. Routing
   2. Sliding windows
   3. Sequence numbers and acknowledgements
   4. Port numbers

1. \*The byte 00001110 means \_\_\_\_ on a digital network.
   1. 3
   2. 6
   3. 14
   4. 30

1. The points where circuits interconnect with other circuits is known as \_\_\_\_. a. entrance facilities
   1. cross-connect facilities
   2. IDF (intermediate distribution frame)
   3. telecommunications closet

1. A \_\_\_\_ facilitates communication and resource sharing between other computers on the network. a. servlet
   1. workstation
   2. personal computer
   3. server

1. \_\_\_\_ are the distinct units of data that are exchanged between nodes on a network. a. Segments
   1. Packets
   2. Topologies
   3. Protocols

1. The subprotocol that enables TCP/IP to internetwork - that is, to traverse more than one LAN segment and more than one type of network through a router is \_\_\_\_. a. TCP
   1. ICMP
   2. UDP
   3. IP

1. \*Standards define the \_\_\_\_ performance of a product or service. a. ideal
   1. most acceptable
   2. minimum acceptable
   3. maximum acceptable

1. \*One of the most common transmission flaws affecting data signals is \_\_\_\_. a. noise
   1. attenuation
   2. throughput
   3. latency

1. A \_\_\_\_ is simply a linked series of devices.
   1. star
   2. star-wired ring
   3. ring
   4. daisy-chain

1. Which type of protocol is useful when data must be transferred quickly?
   1. connection-oriented
   2. connectionless
   3. TCP
   4. IP

1. In which OSI model layer does IP operate?
   1. Physical
   2. Transport
   3. Network
   4. Data Link

1. \_\_\_\_ is more efficient than TCP for carrying messages that fit within one data packet. a. IP
   1. UDP
   2. ICMP
   3. IGMP

1. \*The goal of \_\_\_\_ is to establish international technological standards to facilitate the global exchange of information and barrier free trade.
   1. ANSI
   2. ISO
   3. ITU
   4. ISOC

1. \*In the domain name www.google.com, \_\_\_\_ is the top-level domain (TLD). a. http
   1. www
   2. google
   3. com

1. \*The most common logical topologies are \_\_\_\_ and ring.
   1. bus
   2. star
   3. wired
   4. hybrid

1. \*\_\_\_\_ is a utility that can verify that TCP/IP is installed, bound to the NIC, configured correctly, and communicating with the network. a. ARP
   1. PING
   2. Telnet
   3. FTP

1. A complex combination of topologies is known as a \_\_\_\_ topology.
   1. mixed
   2. hybrid
   3. compound
   4. mulitpart

1. Which OSI model layer initiates the flow of information?
   1. Physical
   2. Session
   3. Application
   4. Presentation

1. \*1000Base-T is a standard for achieving throughputs \_\_\_\_ times faster than Fast Ethernet over copper cable. a. 2
   1. 5
   2. 10
   3. 100

1. \*Each network node has \_\_\_\_ types of addresses.
   1. two
   2. three
   3. four
   4. five

1. The data transmission characteristic most frequently discussed and analyzed by networking professionals is \_\_\_\_.
   1. noise
   2. scalability
   3. throughput
   4. cost

1. \*In which OSI model layer(s) do NICs operate?
   1. Physical
   2. Network and Physical
   3. Data Link
   4. Physical and Data Link

1. Which Data Link sublayer manages flow control?
   1. LLC
   2. MAC
   3. Management layer
   4. Addressing layer

1. \*Dependability is a characteristic of \_\_\_\_.
   1. soft skills
   2. network communications
   3. technical skills
   4. network servers

1. \*Which term identifies a room containing connectivity for groups of workstations in its area? a. MDF (main distribution frame)
   1. entrance facilities
   2. work area
   3. telecommunications closet

1. \*The 10GBase-T standard is considered a breakthrough for transmitting 10 Gbps over \_\_\_\_ medium. a. coaxial
   1. twisted pair
   2. fiber
   3. atmosphere

1. \*In packet switching, when packets reach their destination node, the node \_\_\_\_ them based on their control information.
   1. disassembles
   2. deletes
   3. reassembles
   4. separates

1. \_\_\_\_ is the process of reconstructing segmented data.
   1. Reassembly
   2. Reengineering
   3. Resegmenting
   4. Realigning

1. A \_\_\_\_ occurs when two transmissions interfere with each other.
   1. jam
   2. collision
   3. carrier sense
   4. multiple access event

1. \*Transport layer protocols break large data units into \_\_\_\_.
   1. PDUs
   2. segments
   3. frames
   4. block IDs

1. \*Within Ethernet frame types, the \_\_\_\_ signals to the receiving node that data is incoming and indicates when the data flow is about to begin.
   1. FCS
   2. header
   3. preamble
   4. frame

1. Which statement accurately describes the OSI model?
   1. It describes how software programs interact with humans.
   2. It prescribes the type of hardware or software that should support each layer.
   3. It describes how software programs interact with other software programs.
   4. It describes a theoretical representation of what happens between two nodes communicating on a network.

1. \*A \_\_\_\_ network connects clients and servers from multiple buildings.
   1. NAN
   2. MAN
   3. WAN
   4. TAN

1. \*1000Base-SX has a maximum throughput of \_\_\_\_.
   1. 1 Gbps
   2. 10 Gbps
   3. 100 Gbps
   4. 1000 Gbps

1. \*The process of determining the best path from Point A on one network to Point B on another is known as \_\_\_\_. a. mapping
   1. enhancing
   2. reconfiguring
   3. routing

1. \*The most significant factor in choosing a transmission method is its \_\_\_\_. a. noise
   1. attenuation
   2. throughput
   3. latency

1. \*A(n) \_\_\_\_ number is the address on a host where an application makes itself available to incoming or outgoing data.
   1. port
   2. source
   3. destination
   4. application

1. \*\_\_\_\_ ARP table entries are created when a client makes an ARP request that cannot be satisfied by data already in the ARP table. a. Static
   1. Dynamic
   2. Temporary
   3. On-demand

1. In a ring network, each workstation acts as a(n) \_\_\_\_ for the transmission. a. repeater
   1. amplifier
   2. terminator
   3. manager

1. TCP is a(n) \_\_\_\_ subprotocol.
   1. open-ended
   2. indiscriminating
   3. connection-oriented
   4. connectionless

1. All Ethernet networks, independent of their speed or frame type, use an access method called \_\_\_\_. a. CSMA
   1. CSMA/DC
   2. CSAM/CD
   3. CSMA/CD

1. A UDP header contains \_\_\_\_fields.
   1. four
   2. six
   3. eight
   4. ten

1. In which OSI model layer does TCP operate?
   1. Physical
   2. Transport
   3. Network
   4. Data Link

1. \*A cross over cable is used to connect\_\_\_\_\_ *(like devices)*
   1. A PC to a laptop
   2. A switch to another switch
   3. A switch to a router
   4. All of the above

1. \*Which statement describes an advantage of networks?
   1. Networks require decentralized management.
   2. Isolating network devices decreases costs.
   3. Isolating network devices allows implementation of the sneakernet file sharing method.
   4. Networks enable multiple users to share resources.

1. \_\_\_\_ networks are the most popular type of network for medium- and large-scale organizations. a. Client/server
   1. Peer-to-peer
   2. Stand-alone
   3. Stationary

1. \*Often, separate LANs are interconnected and rely on several \_\_\_\_ running many different applications and managing resources other than data. a. workstations
   1. servers
   2. clients
   3. stand-alone computers

1. \*\_\_\_\_ services refer to the capability of a server to share data files, applications, and disk storage space. a. File
   1. Data
   2. Management
   3. Access

1. \*Which type of service supports e-mail?
   1. management
   2. communications
   3. access
   4. file

1. \*Which IEEE standard describes specifications for wireless transmissions? a. 802.1
   1. 802.3
   2. 802.5
   3. 802.11

1. When signals may travel in both directions over a medium but only in one direction at a time, the transmission is considered \_\_\_\_. a. simplex
   1. multiplex
   2. half-duplex
   3. full-duplex

1. When signals may travel in only one direction over a medium, the transmission is considered \_\_\_\_. a. simplex
   1. multiplex
   2. half-duplex
   3. full-duplex

1. \*The most common 1-Gigabit Ethernet standard in use today is \_\_\_\_.
   1. 1000Base-T
   2. 1000Base-SX
   3. 10GBase-SR
   4. 1000Base-LX

1. Together, the FCS and the header make up the \_\_\_\_-byte “frame” for the data.
   1. 15
   2. 18
   3. 21
   4. 24