

Started on Monday, 18 December 2023, 4:25 PM

State Finished

Completed on Monday, 18 December 2023, 4:35 PM

Time taken 9 mins 8 secs

Question 1

Complete

Marked out of 1.00

Find out the invalid subnet mask from the following

- a. 223.0.0.0
- b. None of these
- c. 255.255.255.252
- d. 255.240.0.0

Question 2

Complete

Marked out of 1.00

Which of the following describe the process identifier that is used to run OSPF on a router?

- A. It is globally significant.
- B. It is locally significant.
- C. It is needed to identify a unique instance of an OSPF database.
- D. It is an optional parameter required only if multiple OSPF processes are running on the router.

Select one:

- B and C
- A and C
- A and D
- B and D

Question 3

Complete

Marked out of 1.00

Transmission data rate is decided by _____

- a. data link layer
- b. transport layer
- c. physical layer
- d. network layer

...

Question 4

Complete

Marked out of 1.00

Which of the following is not a limitation of IPV4 addresses?

- a. IPV4 fits for small topology drawing
- b. IPV4 lacks end-to-end connectivity
- c. IPV4 suffers from IP address depletion
- d. IPV4 cannot handle internet routing table expansion

Question 5

Complete

Marked out of 1.00

Dynamic Host Configuration Protocol is used for

- a. both IPV4 and IPV6
- b. None of these
- c. IPV6
- d. IPV4

Question 6

Complete

Marked out of 1.00

In reference to OSI model, TCP/IP model does not have _____

- a. session layer
- b. transport layer
- c. application layer
- d. application layer

...

Question 7

Complete

Marked out of 1.00

For a given subnet mask 255.128.0.0, what is the number of subnets?

- a. 6
- b. 8
- c. 2
- d. 4

Question 8

Complete

Marked out of 1.00

In a given subnet mask 255.0.0.0, what is the number of Host ID bits?

- a. 221
- b. 21
- c. 12
- d. 24

Question 9

Complete

Marked out of 1.00

Routing inside a single administrative domain is called as..... routing.

- a. Path Vector
- b. None of these
- c. Inter-domain
- d. Intra-domain

**Question 10**

Complete

Marked out of 1.00

Which of the following is incorrect about Network Address Translation?

- a. Certain application will not function while NAT is enabled.
- b. NAT is a process in which one or more local IP address is translated into one or more Global IP address and vice versa.
- c. Router will do NAT translation without configuration.
- d. NAT results in switching path delays.

Question 11

Complete

Marked out of 1.00

The traffic field of IPV6 is similar to which field in the IPV4 header?

- a. Type of service
- b. Option field
- c. Fragmentation field
- d. Fast switching

Question 12

Complete

Marked out of 1.00

The sharing of medium and its links by two or more devices is called

- a. Duplexing
- b. Fully duplexing
- c. Microplexing
- d. Multiplexing

...

Question 13

Complete

Marked out of 1.00

A email service uses which one of the following transport layer protocol?

- a. TCP
- b. HTTP
- c. UDP
- d. Both TCP and UDP

Question 14

Complete

Marked out of 1.00

In link layer, parity bits are used for

- a. to transmit data faster
- b. to detect errors
- c. encryption of data
- d. to identify the user

Question 15

Complete

Marked out of 1.00

Layer that translates between physical (MAC) and logical addresses is

- a. Datalink
- b. Physical
- c. Transport
- d. Network

Question 16

Complete

Marked out of 1.00

Which of the following is incorrect about Network Address Translation?

- a. Certain application will not function while NAT is enabled.
- b. Router will do NAT translation without configuration.
- c. NAT results in switching path delays.
- d. NAT is a process in which one or more local IP address is translated into one or more Global IP address and vice versa.

Question 17

Complete

Marked out of 1.00

Which multiple access techniques is used by IEEE 802.11 standards for wireless LANs?

- a. CSMA/CD
- b. ALOHA
- c. CSMA
- d. CSMA/CA

Question 18

Complete

Marked out of 1.00

The time required to examine the packet's header and determine where to direct the packet is part of _____

- a. Transmission delay
- b. Processing delay
- c. Propagation delay
- d. Queuing delay

...

Question 19

Complete

Marked out of 1.00

Which fields helps to check rearrangement of the fragments in IPV4?

- a. Fragment Offset
- b. Protocol field value
- c. Flags
- d. Checksum

Question 20

Complete

Marked out of 1.00

The maximum size of payload field in Ethernet frame is

- a. 1300 bytes
 - b. 1000 bytes
 - c. 1500 bytes
 - d. 1200 bytes
- bytes
bytes
bytes
bytes

[◀ CS301_Quiz1_23.11.2023](#)



Started on Thursday, 23 November 2023, 4:30 PM

State Finished

Completed on Thursday, 23 November 2023, 4:52 PM

Time taken 21 mins 53 secs

Question **1**

Complete

Marked out of 1.00

Which of the following is true for Address Resolution Protocol (ARP)?

- a. ARP request is broadcast and ARP reply is also broadcast.
- b. ARP request is broadcast and ARP reply is unicast.
- c. ARP request is unicast and ARP reply is broadcast.
- d. ARP request is unicast and ARP reply is also unicast.

Question **2**

Complete

Marked out of 1.00

Which address identifies a process on a host?

- a. specific address
- b. logical address
- c. port address
- d. physical address

Question 3

Complete

Marked out of 1.00

What is the Hexadecimal equivalent of the following Ethernet address

010110100010001010101000110001010101000001111

- a. 5A115518AA0F
- b. 5A1155189A0E
- c. None of these
- d. 5A115514AA0F

Question 4

Complete

Marked out of 1.00

The number of bits in IPV4 address, IPV6 address, MAC address and Port address are

- a. 128, 32, 48, 16
- b. 32, 128, 64, 16
- c. 32, 128, 48, 16
- d. 32, 128, 48, 32

Question 5

Complete

Marked out of 1.00

Communication between a computer and a speaker involves

- a. Automatic
- b. Full-duplex
- c. Simplex
- d. Half-duplex

Question 6

Complete

Marked out of 1.00

The maximum size of payload field in Ethernet frame is

- a. 1500 bytes
- b. 1200 bytes
- c. 1000 bytes
- d. 1300 bytes

Question 7

Complete

Marked out of 1.00

Which of the following statement is incorrect,

A shared broadcast media of transmission bandwidth 20 Mbps is shared by 100 users then,

- a. Using CDMA scheme, each of the users have an access to 200 Kbps of bandwidth
- b. Using CDMA scheme, each of the users have an access to 20 Mbps of bandwidth
- c. Using FDMA scheme, each of the users have an access to 200 Kbps of bandwidth
- d. Using TDMA scheme, each of the users have an access to 200 Kbps of bandwidth

Question 8

Complete

Marked out of 1.00

Which of the following delay is faced by the packet in travelling from one end system to another?

- a. Queuing delay
- b. Transmission delay
- c. All of these
- d. Propagation delay

Question 9

Complete

Marked out of 1.00

Find out the invalid subnet mask from the following

- a. None of these
- b. 255.255.255.252
- c. 255.255.242.0
- d. 255.240.0.0

Question 10

Complete

Marked out of 1.00

Which of the following is a set of rules that governs the data communication in a computer network

- a. RFCs
- b. None of these
- c. Activity standards
- d. Protocols

Question 11

Complete

Marked out of 1.00

Header of a frame generally contains

- a. MAC addresses
- b. All of these
- c. Frame identifier
- d. Synchronization bytes

Question 12

Complete

Marked out of 1.00

Which one is a valid subnet mask out of the following?

- a. 223.0.0.0
- b. 240.0.0.0
- c. None of these
- d. 255.230.255.0

Question 13

Complete

Marked out of 1.00

What is the class of this IPv4 address **11101111 11110111 11000111 00011101**?

- a. class B
- b. class C
- c. class A
- d. class D

Question 14

Complete

Marked out of 1.00

Transmission rate is decided by

- a. network layer
- b. physical layer
- c. data link layer
- d. transport layer

Question 15

Complete

Marked out of 1.00

The sharing of medium and its links by two or more devices is called

- a. Duplexing
- b. Multiplexing
- c. Microplexing
- d. Fully duplexing

Question 16

Complete

Marked out of 1.00

In link layer, parity bits are used for

- a. to transmit data faster
- b. to identify the user
- c. to detect errors
- d. encryption of data

Question 17

Complete

Marked out of 1.00

Ethernet frame consists of

- a. None of these
- b. IP address
- c. Default mask
- d. MAC address

Question 18

Complete

Marked out of 1.00

The function of Digital Subscriber Line Access Multiplexer is to _____

- a. Convert digital signals into analog signals
- b. Amplify digital signals
- c. De-amplify digital signals
- d. Convert analog signals into digital signals

Question 19

Complete

Marked out of 1.00

Which of the following task is not done by data link layer?

- a. Framing
- b. Error control
- c. Flow control
- d. Encoding

Question 20

Complete

Marked out of 1.00

Which physical media provides the highest transmission speed in a network?

- a. twisted pair cable
- b. optical fiber
- c. electrical cable
- d. co-axial cable

Question 21

Complete

Marked out of 1.00

Define the type of this Ethernet frame destination address **FF:FF:FF:FF:FF:FF**

- a. None of these
- b. Unicast
- c. Multicast
- d. Broadcast

Question 22

Complete

Marked out of 1.00

In computer networks nodes are....

- a. the computer that routes the data
- b. the computer that terminates the data
- c. the computer that originates/generates the data
- d. All of these

Question 23

Complete

Marked out of 1.00

What is access points (AP) in a wireless LAN?

- a. both device that allows wireless devices to connect to a wired network and wireless device itself
- b. all nodes in the network
- c. wireless device itself
- d. device that allows wireless devices to connect to a wired network

Question 24

Complete

Marked out of 1.00

Which of the following is link layer protocol

- a. PPP (point-to-point protocol)
- b. HDLC (High Level Data Link control)
- c. All of these
- d. Ethernet

Question 25

Complete

Marked out of 1.00

Which sub-layer of the data link layer performs data link functions that depend upon the type of medium?

- a. network interface control sub-layer
- b. Logical link control sub-layer
- c. error control sub-layer
- d. Media access control sub-layer

Question 26

Complete

Marked out of 1.00

The size of an IP address in IPV6 is.....

- a. 128 bytes
- b. 60 bits
- c. 128 bits
- d. 40bytes

Question 27

Complete

Marked out of 1.00

Which is not true for Packet switching?

- a. The delivery of these packets becomes easy when complicated protocols are used.
- b. Multiple users can use the same channel while transferring their packets.
- c. Installation costs of packet switching are expensive.
- d. A dedicated path is followed throughout the session.

Question 28

Complete

Marked out of 1.00

What is default subnet mask address of this IPV4 address **11001111 11110111 11000111 00011101**?

- a. 255.255.255.255
- b. 255.0.0.0
- c. 255.255.0.0
- d. 255.255.255.0

Question 29

Complete

Marked out of 1.00

Which of the following is not a valid IP address?

- a. 192.25.256.8
- b. 145.6.14.1
- c. 145.6.14.8
- d. 192.168.2.1

Question 30

Complete

Marked out of 1.00

Which is true for circuit switching?

- a. While switching, time is wasted in waiting.
- b. All of these
- c. The rate at which the data is transmitted is constant.
- d. The bandwidth used is not constant.

Question 31

Complete

Marked out of 1.00

What is default subnet mask address of this IPV4 address **172.15.165.1**?

- a. 255.0.0.0
- b. 255.255.255.255
- c. 255.255.255.0
- d. 255.255.0.0

Question 32

Complete

Marked out of 1.00

Optical Network Terminator is connected to splitter using _____

- a. hybrid fiber co-axial cable
- b. Twisted pair cable
- c. microwave link
- d. Optical cable

Question 33

Complete

Marked out of 1.00

A landline telephone network is an example of..... network.

- a. Circuit switched
- b. Line switched
- c. Packet switched
- d. Both packet switched and circuit switched

Question 34

Complete

Marked out of 1.00

Propagation delay depends on

- a. Distance between routers
- b. Transmission rate
- c. Speed of CPU
- d. Packet length

Question 35

Complete

Marked out of 1.00

In class C classful IPv4 addressing format, the number of networks allowed under Class C addresses is

- a. 2^{24}
- b. 2^{21}
- c. 2^7
 2^7
- d. 2^{14}

Question 36

Complete

Marked out of 1.00

What kind of transmission medium is most appropriate to carry data in a computer network that is exposed to electrical interference?

- a. Optical fiber
- b. Coaxial cable
- c. Microwave link
- d. Un-shielded twisted pair

Question 37

Complete

Marked out of 1.00

Transmission delay not depends upon

- a. Distance between routers
- b. Bandwidth of the medium
- c. Packet length
- d. Transmission rate

◀ Mid-Semester Exam_CS301 (GNR+Diu)_06-11-2023_9.30 AM to 11.30 AM

Jump to...

Started on Thursday, 23 November 2023, 4:30 PM

State Finished

Completed on Thursday, 23 November 2023, 4:52 PM

Time taken 21 mins 53 secs

Question **1**

Complete

Marked out of 1.00

Which of the following is true for Address Resolution Protocol (ARP)?

- a. ARP request is broadcast and ARP reply is also broadcast.
- b. ARP request is broadcast and ARP reply is unicast.
- c. ARP request is unicast and ARP reply is broadcast.
- d. ARP request is unicast and ARP reply is also unicast.

Question **2**

Complete

Marked out of 1.00

Which address identifies a process on a host?

- a. specific address
- b. logical address
- c. port address
- d. physical address

Question 3

Complete

Marked out of 1.00

What is the Hexadecimal equivalent of the following Ethernet address

010110100010001010101000110001010101000001111

- a. 5A115518AA0F
- b. 5A1155189A0E
- c. None of these
- d. 5A115514AA0F

Question 4

Complete

Marked out of 1.00

The number of bits in IPV4 address, IPV6 address, MAC address and Port address are

- a. 128, 32, 48, 16
- b. 32, 128, 64, 16
- c. 32, 128, 48, 16
- d. 32, 128, 48, 32

Question 5

Complete

Marked out of 1.00

Communication between a computer and a speaker involves

- a. Automatic
- b. Full-duplex
- c. Simplex
- d. Half-duplex

Question 6

Complete

Marked out of 1.00

The maximum size of payload field in Ethernet frame is

- a. 1500 bytes
- b. 1200 bytes
- c. 1000 bytes
- d. 1300 bytes

Question 7

Complete

Marked out of 1.00

Which of the following statement is incorrect,

A shared broadcast media of transmission bandwidth 20 Mbps is shared by 100 users then,

- a. Using CDMA scheme, each of the users have an access to 200 Kbps of bandwidth
- b. Using CDMA scheme, each of the users have an access to 20 Mbps of bandwidth
- c. Using FDMA scheme, each of the users have an access to 200 Kbps of bandwidth
- d. Using TDMA scheme, each of the users have an access to 200 Kbps of bandwidth

Question 8

Complete

Marked out of 1.00

Which of the following delay is faced by the packet in travelling from one end system to another?

- a. Queuing delay
- b. Transmission delay
- c. All of these
- d. Propagation delay

Question 9

Complete

Marked out of 1.00

Find out the invalid subnet mask from the following

- a. None of these
- b. 255.255.255.252
- c. 255.255.242.0
- d. 255.240.0.0

Question 10

Complete

Marked out of 1.00

Which of the following is a set of rules that governs the data communication in a computer network

- a. RFCs
- b. None of these
- c. Activity standards
- d. Protocols

Question 11

Complete

Marked out of 1.00

Header of a frame generally contains

- a. MAC addresses
- b. All of these
- c. Frame identifier
- d. Synchronization bytes

Question 12

Complete

Marked out of 1.00

Which one is a valid subnet mask out of the following?

- a. 223.0.0.0
- b. 240.0.0.0
- c. None of these
- d. 255.230.255.0

Question 13

Complete

Marked out of 1.00

What is the class of this IPv4 address **11101111 11110111 11000111 00011101**?

- a. class B
- b. class C
- c. class A
- d. class D

Question 14

Complete

Marked out of 1.00

Transmission rate is decided by

- a. network layer
- b. physical layer
- c. data link layer
- d. transport layer

Question 15

Complete

Marked out of 1.00

The sharing of medium and its links by two or more devices is called

- a. Duplexing
- b. Multiplexing
- c. Microplexing
- d. Fully duplexing

Question 16

Complete

Marked out of 1.00

In link layer, parity bits are used for

- a. to transmit data faster
- b. to identify the user
- c. to detect errors
- d. encryption of data

Question 17

Complete

Marked out of 1.00

Ethernet frame consists of

- a. None of these
- b. IP address
- c. Default mask
- d. MAC address

Question 18

Complete

Marked out of 1.00

The function of Digital Subscriber Line Access Multiplexer is to _____

- a. Convert digital signals into analog signals
- b. Amplify digital signals
- c. De-amplify digital signals
- d. Convert analog signals into digital signals

Question 19

Complete

Marked out of 1.00

Which of the following task is not done by data link layer?

- a. Framing
- b. Error control
- c. Flow control
- d. Encoding

Question 20

Complete

Marked out of 1.00

Which physical media provides the highest transmission speed in a network?

- a. twisted pair cable
- b. optical fiber
- c. electrical cable
- d. co-axial cable

Question 21

Complete

Marked out of 1.00

Define the type of this Ethernet frame destination address **FF:FF:FF:FF:FF:FF**

- a. None of these
- b. Unicast
- c. Multicast
- d. Broadcast

Question 22

Complete

Marked out of 1.00

In computer networks nodes are....

- a. the computer that routes the data
- b. the computer that terminates the data
- c. the computer that originates/generates the data
- d. All of these

Question 23

Complete

Marked out of 1.00

What is access points (AP) in a wireless LAN?

- a. both device that allows wireless devices to connect to a wired network and wireless device itself
- b. all nodes in the network
- c. wireless device itself
- d. device that allows wireless devices to connect to a wired network

Question 24

Complete

Marked out of 1.00

Which of the following is link layer protocol

- a. PPP (point-to-point protocol)
- b. HDLC (High Level Data Link control)
- c. All of these
- d. Ethernet

Question 25

Complete

Marked out of 1.00

Which sub-layer of the data link layer performs data link functions that depend upon the type of medium?

- a. network interface control sub-layer
- b. Logical link control sub-layer
- c. error control sub-layer
- d. Media access control sub-layer

Question 26

Complete

Marked out of 1.00

The size of an IP address in IPV6 is.....

- a. 128 bytes
- b. 60 bits
- c. 128 bits
- d. 40bytes

Question 27

Complete

Marked out of 1.00

Which is not true for Packet switching?

- a. The delivery of these packets becomes easy when complicated protocols are used.
- b. Multiple users can use the same channel while transferring their packets.
- c. Installation costs of packet switching are expensive.
- d. A dedicated path is followed throughout the session.

Question 28

Complete

Marked out of 1.00

What is default subnet mask address of this IPV4 address **11001111 11110111 11000111 00011101**?

- a. 255.255.255.255
- b. 255.0.0.0
- c. 255.255.0.0
- d. 255.255.255.0

Question 29

Complete

Marked out of 1.00

Which of the following is not a valid IP address?

- a. 192.25.256.8
- b. 145.6.14.1
- c. 145.6.14.8
- d. 192.168.2.1

Question 30

Complete

Marked out of 1.00

Which is true for circuit switching?

- a. While switching, time is wasted in waiting.
- b. All of these
- c. The rate at which the data is transmitted is constant.
- d. The bandwidth used is not constant.

Question 31

Complete

Marked out of 1.00

What is default subnet mask address of this IPV4 address **172.15.165.1**?

- a. 255.0.0.0
- b. 255.255.255.255
- c. 255.255.255.0
- d. 255.255.0.0

Question 32

Complete

Marked out of 1.00

Optical Network Terminator is connected to splitter using _____

- a. hybrid fiber co-axial cable
- b. Twisted pair cable
- c. microwave link
- d. Optical cable

Question 33

Complete

Marked out of 1.00

A landline telephone network is an example of..... network.

- a. Circuit switched
- b. Line switched
- c. Packet switched
- d. Both packet switched and circuit switched

Question 34

Complete

Marked out of 1.00

Propagation delay depends on

- a. Distance between routers
- b. Transmission rate
- c. Speed of CPU
- d. Packet length

Question 35

Complete

Marked out of 1.00

In class C classful IPv4 addressing format, the number of networks allowed under Class C addresses is

- a. 2^{24}
- b. 2^{21}
- c. 2^7
 2^7
- d. 2^{14}

Question 36

Complete

Marked out of 1.00

What kind of transmission medium is most appropriate to carry data in a computer network that is exposed to electrical interference?

- a. Optical fiber
- b. Coaxial cable
- c. Microwave link
- d. Un-shielded twisted pair

Question 37

Complete

Marked out of 1.00

Transmission delay not depends upon

- a. Distance between routers
- b. Bandwidth of the medium
- c. Packet length
- d. Transmission rate

◀ Mid-Semester Exam_CS301 (GNR+Diu)_06-11-2023_9.30 AM to 11.30 AM

Jump to...

[Dashboard](#) / [Courses](#) / [Autumn 2021-22](#) / [BTech Sem-5](#) / [CS301_CSE & IT](#) / [General](#)

/ [Pre-Mid-Semester Exam CS301 \(Section 1 + Section 2\)_19-08-2021 10.15 ti 11.15 AM](#)

Started on Thursday, 19 August 2021, 10:21 AM

State Finished

Completed on Thursday, 19 August 2021, 10:59 AM

Time taken 38 mins 19 secs

Grade **21.00** out of 30.00 (**70%**)

Question **1**

Complete

Mark 0.00 out of 1.00

Which is true for circuit switching?

- a. The bandwidth used is not constant.
- b. While switching, time is wasted in waiting.
- c. All of these
- d. The rate at which the data is transmitted is constant.

The correct answer is:

The rate at which the data is transmitted is constant.

Question **2**

Complete

Mark 1.00 out of 1.00

Ethernet frame consists of

- a. Default mask
- b. None of these
- c. IP address
- d. MAC address

The correct answer is:

MAC address



Question 3

Complete

Mark 1.00 out of 1.00

Which of the following is a set of rules that governs the data communication in a computer network

- a. Protocols
- b. None of these
- c. RFCs
- d. Activity standards

The correct answer is:

Protocols

Question 4

Complete

Mark 2.00 out of 2.00

What will be the propagation time when the distance between two nodes is 2400km? Assuming the communication media between the nodes is fiber cable and the light travels with a speed to be 2×10^8 m/s in the cable.

- a. 2 ms
- b. None of these
- c. 12 ms
- d. 5 ms

The correct answer is:

12 ms



Question 5

Complete

Mark 0.00 out of 2.00

A shared broadcast medium of transmission rate 5 Mbps is being shared by 10 users (U1, U2,U10). Calculate the maximum transmission rate of each of the users if the channel access scheme used is FDMA. If instead of FDMA the scheme being used is CDMA then what will be the maximum transmission rate of each of the users?

- a. 50 Mbps, 5 Mbps
- b. None of these
- c. 500 Kbps, 5000 Kbps
- d. 5000 Kbps, 5000 Kbps

The correct answer is:

500 Kbps, 5000 Kbps

Question 6

Complete

Mark 1.00 out of 1.00

A landline telephone network is an example of..... network.

- a. Circuit switched
- b. Line switched
- c. Packet switched
- d. Both packet switched and circuit switched

The correct answer is:

Circuit switched



Question 7

Complete

Mark 1.00 out of 1.00

Which sub-layer of the data link layer performs data link functions that depend upon the type of medium?

- a. Logical link control sub-layer
- b. error control sub-layer
- c. Media access control sub-layer
- d. network interface control sub-layer

The correct answer is:

Media access control sub-layer

Question 8

Complete

Mark 1.00 out of 1.00

Which address identifies a process on a host?

- a. port address
- b. physical address
- c. logical address
- d. specific address

The correct answer is:

port address



Question 9

Complete

Mark 0.00 out of 1.00

What kind of transmission medium is most appropriate to carry data in a computer network that is exposed to electrical interference?

- a. Coaxial cable
- b. Optical fiber
- c. Microwave link
- d. Un-shielded twisted pair

The correct answer is:

Optical fiber

Question 10

Complete

Mark 1.00 out of 1.00

The sharing of medium and its links by two or more devices is called

- a. Duplexing
- b. Multiplexing
- c. Fully duplexing
- d. Microplexing

The correct answer is:

Multiplexing



Question 11

Complete

Mark 1.00 out of 1.00

Transmission delay not depends upon

- a. Distance between routers
- b. Bandwidth of the medium
- c. Packet length
- d. Transmission rate

The correct answer is:

Distance between routers

Question 12

Complete

Mark 1.00 out of 1.00

In computer networks nodes are....

- a. the computer that originates/generates the data
- b. the computer that routes the data
- c. All of these
- d. the computer that terminates the data

The correct answer is:

All of these



Question 13

Complete

Mark 1.00 out of 1.00

Communication between a computer and a speaker involves

- a. Simplex
- b. Full-duplex
- c. Automatic
- d. Half-duplex

The correct answer is:

Simplex

Question 14

Complete

Mark 1.00 out of 1.00

The function of Digital Subscriber Line Access Multiplexer is to _____

- a. Amplify digital signals
- b. Convert digital signals into analog signals
- c. De-amplify digital signals
- d. Convert analog signals into digital signals

The correct answer is:

Convert analog signals into digital signals



Question 15

Complete

Mark 1.00 out of 1.00

Which of the following task is not done by data link layer?

- a. Flow control
- b. Encoding
- c. Framing
- d. Error control

The correct answer is:

Encoding

Question 16

Complete

Mark 0.00 out of 1.00

Which of the following statement is incorrect,

A shared broadcast media of transmission bandwidth 20 Mbps is shared by 100 users then,

- a. Using TDMA scheme, each of the users have an access to 200 Kbps of bandwidth
- b. Using CDMA scheme, each of the users have an access to 20 Mbps of bandwidth
- c. Using CDMA scheme, each of the users have an access to 200 Kbps of bandwidth
- d. Using FDMA scheme, each of the users have an access to 200 Kbps of bandwidth

The correct answer is:

Using CDMA scheme, each of the users have an access to 200 Kbps of bandwidth



Question 17

Complete

Mark 0.00 out of 1.00

Optical Network Terminator is connected to splitter using _____

- a. Optical cable
- b. Twisted pair cable
- c. microwave link
- d. hybrid fiber co-axial cable

The correct answer is:

Optical cable

Question 18

Complete

Mark 1.00 out of 1.00

In link layer, parity bits are used for

- a. to detect errors
- b. to identify the user
- c. encryption of data
- d. to transmit data faster

The correct answer is:

to detect errors



Question 19

Complete

Mark 1.00 out of 1.00

The number of bits in IPV4 address, IPV6 address, MAC address and Port address are

- a. 32, 128, 64, 16
- b. 128, 32, 48, 16
- c. 32, 128, 48, 32
- d. 32, 128, 48, 16

The correct answer is:

32, 128, 48, 16

Question 20

Complete

Mark 1.00 out of 1.00

Which physical media provides the highest transmission speed in a network?

- a. co-axial cable
- b. optical fiber
- c. electrical cable
- d. twisted pair cable

The correct answer is:

optical fiber



Question 21

Complete

Mark 0.00 out of 3.00

What are the propagation time and the transmission time for a 5Mbyte message (an image) if the transmission rate of the network is 1Mbps? Assume that the distance between the sender and the receiver is 8000 km and that light travels at 4×10^8 m/s.

- a. 50msecs, 40msecs
- b. 2msecs, 40msecs
- c. 2msecs, 40secs
- d. 50msecs, 40secs

The correct answer is:

2msecs, 40secs

Question 22

Complete

Mark 3.00 out of 3.00

The message 11001001 is to be transmitted using CRC polynomial x^3+1 to protect it from errors. The message that should be transmitted after appending the CRC code with the original data is

- a. 1100001010
- b. None of these
- c. 1100001011
- d. 1100001110

The correct answer is:

None of these



Question 23

Complete

Mark 1.00 out of 1.00

Which is not true for Packet switching?

- a. Installation costs of packet switching are expensive.
- b. Multiple users can use the same channel while transferring their packets.
- c. A dedicated path is followed throughout the session.
- d. The delivery of these packets becomes easy when complicated protocols are used.

The correct answer is:

A dedicated path is followed throughout the session.

Question 24

Complete

Mark 1.00 out of 1.00

Header of a frame generally contains

- a. All of these
- b. MAC addresses
- c. Synchronization bytes
- d. Frame identifier

The correct answer is:

All of these

[◀ Mid-Semester Exam_CS301 \(Section 1 + Section 2\)_13-09-2021_9.00 AM to 9.40 AM](#)

Jump to...

[Continuous LAB Assessment_24.08.2021_4.15pm to 4.30pm ►](#)

Started on Friday, 12 November 2021, 1:20 PM

State Finished

Completed on Friday, 12 November 2021, 1:28 PM

Time taken 8 mins 30 secs

Grade 7.00 out of 10.00 (70%)

Question 1

Complete

Mark 1.00 out of 1.00

The well-known port addresses are assigned to the

- a. None of these
- b. Destination
- c. Source
- d. Routers

Question 2

Complete

Mark 1.00 out of 1.00

Which fields helps to check rearrangement of the fragments in IPV4?

- a. Protocol field value
- b. Checksum
- c. Fragment Offset
- d. Flags

Question 3

Complete

Mark 1.00 out of 1.00

A email service uses which one of the following transport layer protocol?

- a. UDP
- b. Both TCP and UDP
- c. HTTP
- d. TCP

Question 4

Complete

Mark 1.00 out of 1.00

The traffic field of IPV6 is similar to which field in the IPV4 header?

- a. Fragmentation field
- b. Type of service
- c. Option field
- d. Fast switching

Question 5

Complete

Mark 1.00 out of 1.00

Fragmentation is done in layer.

- a. Transport Layer
- b. Data link Layer
- c. Physical layer
- d. Network Layer

Question 6

Complete

Mark 1.00 out of 1.00

Which of these is not a type of error-reporting message?

- a. Destination unreachable
- b. Router error
- c. Source quench
- d. Time exceeded

Question 7

Complete

Mark 0.00 out of 1.00

Which of the following is incorrect about Network Address Translation?

- a. Router will do NAT translation without configuration.
- b. NAT is a process in which one or more local IP address is translated into one or more Global IP address and vice versa.
- c. Certain application will not function while NAT is enabled.
- d. NAT results in switching path delays.

Question 8

Complete

Mark 0.00 out of 1.00

Routing inside a single administrative domain is called as..... routing.

- a. Path Vector
- b. Intra-domain
- c. Inter-domain
- d. None of these

Question 9

Complete

Mark 0.00 out of 1.00

In an IPV4 packet, the value of HLEN is 1010 in binary. How many bytes of options are being carried by this packet?

- a. 20 bytes
- b. 12 bytes
- c. 10 bytes
- d. 32 bytes

Question 10

Complete

Mark 1.00 out of 1.00

Which of the following is true for Address Resolution Protocol (ARP)?

- a. ARP request is broadcast and ARP reply is also broadcast.
- b. ARP request is broadcast and ARP reply is unicast.
- c. ARP request is unicast and ARP reply is also unicast.
- d. ARP request is unicast and ARP reply is broadcast.

Jump to...

Continuous LAB Assessment_28.10.2021_4.15pm to 4.30pm ►

Started on Tuesday, 24 August 2021, 4:19 PM

State Finished

Completed on Tuesday, 24 August 2021, 4:25 PM

Time taken 6 mins

Grade 8.00 out of 10.00 (80%)

Question 1

Complete

Mark 1.00 out of 1.00

What will be the propagation time when the distance between two points is 2400km? Assuming the propagation speed to be 4×10^8 m/s in cable

- a. 2ms
- b. 5ms
- c. 1ms
- d. 6ms

The correct answer is:

6ms

Question 2

Complete

Mark 1.00 out of 1.00

The _____ layer links network/user support layers by segmenting and rearranging the data.

- a. application layer
- b. transport layer
- c. session Layer
- d. network layer

The correct answer is:

transport layer

Question 3

Complete

Mark 0.00 out of 1.00

The OSI model was developed ____ TCP/IP model.

- a. None of these
- b. after
- c. simultaneous to
- d. prior to

The correct answer is:

after

Question 4

Complete

Mark 1.00 out of 1.00

Which multiple access techniques is used by IEEE 802.11 standards for wireless LANs?

- a. CSMA
- b. CSMA/CA
- c. ALOHA
- d. CSMA/CD

The correct answer is:

CSMA/CA

Question 5

Complete

Mark 1.00 out of 1.00

In reference to OSI model, TCP/IP model does not have ____

- a. application layer
- b. transport layer
- c. session layer
- d. application layer

The correct answer is:

session layer

Question 6

Complete

Mark 1.00 out of 1.00

Which of the following option is correct?

In wireless distribution system

- a. only one access point exists
- b. access points are not required
- c. multiple access points are inter-connected with each other
- d. there is no access point

The correct answer is:

multiple access points are inter-connected with each other

Question 7

Complete

Mark 1.00 out of 1.00

Which layer is responsible for the process to process delivery in a general network model?

- a. transport layer
- b. network layer
- c. session layer
- d. data link layer

The correct answer is:

transport layer

Question 8

Complete

Mark 1.00 out of 1.00

Transmission data rate is decided by _____

- a. network layer
- b. data link layer
- c. physical layer
- d. transport layer

The correct answer is:

physical layer

Question 9

Complete

Mark 1.00 out of 1.00

There are n stations in a slotted LAN. Each station attempts to transmit with a probability p in each time slot. What is the probability that only one station transmits in a given time slot?

- a. $1-(1-p)^{(n-1)}$
- b. $(1-p)^{(n-1)}$
- c. $p(1-p)^{(n-1)}$
- d. $np(1-p)^{(n-1)}$

The correct answer is:

$np(1-p)^{(n-1)}$

Question 10

Complete

Mark 0.00 out of 1.00

Which multiple access techniques is used by Ethernet standards for wireless LANs

- a. CSMA
- b. CSMA/CD
- c. ALOHA
- d. CSMA/CA

The correct answer is:

CSMA/CD

[◀ Pre-Mid-Semester Exam_CS301 \(Section 1 + Section 2\)_19-08-2021_10.15 ti 11.15 AM](#)[Jump to...](#)

Started on Thursday, 28 October 2021, 4:21 PM

State Finished

Completed on Thursday, 28 October 2021, 4:28 PM

Time taken 7 mins 19 secs

Grade 8.00 out of 10.00 (80%)

Question 1

Complete

Mark 1.00 out of 1.00

Which one of the following is not a function of network layer?

- a. routing
- b. congestion control
- c. error control
- d. inter-networking

Question 2

Complete

Mark 0.00 out of 1.00

For a given subnet mask 255.128.0.0, what is the number of subnets?

- a. 8
- b. 2
- c. 4
- d. 6

Question 3

Complete

Mark 1.00 out of 1.00

In a given subnet mask 255.0.0.0, what is the number of Host ID bits?

- a. 21
- b. 24
- c. 12
- d. 221

Question 4

Complete

Mark 1.00 out of 1.00

In class C classful IPv4 addressing format, the number of networks allowed under Class C addresses is

- a. 2^{24}
- b. 2^7
- c. 2^{14}
- d. 2^{21}

Question 5

Complete

Mark 1.00 out of 1.00

Error control is responsibility of which OSI layers

- a. Network and Transport layer
- b. Physical and Data link layer
- c. All of these
- d. Data link and Transport layer

Question 6

Complete

Mark 1.00 out of 1.00

Which one of the following protocol is NOT used to resolve one form of address to another one?

- a. **DNS**
- b. **ARP**
- c. **RARP**
- d. **DHCP**

Question 7

Complete

Mark 1.00 out of 1.00

While configuring the router, the IP address assigned to one port is 201.14.2.1/23. LAN1 is attached to this port of the router. Which of the following IP addresses are valid on this LAN1 interface,

- I1: 201.14.1.100**
- I2: 201.14.1.3**
- I3: 201.14.2.2**
- I4: 201.14.3.0**

- a. Only I2 and I3
- b. Only I1 and I2
- c. Only I3 and I4
- d. Only I1 and I3

Question 8

Complete

Mark 0.00 out of 1.00

Find out the invalid subnet mask from the following

- a. **223.0.0.0**
- b. **None of these**
- c. **255.255.255.252**
- d. **255.240.0.0**

Question 9

Complete

Mark 1.00 out of 1.00

In the even parity, find the parity bit of data 1001001001.

- a. **1**
- b. **X**
- c. **0**
- d. **None of these**

Question 10

Complete

Mark 1.00 out of 1.00

In the IPV4 addressing format, the number of hosts allowed under Class A addresses

- a. **2^{32-2}**
- b. **2^{24-2}**
- c. **2^{16-2}**
- d. **2^{8-2}**

[◀ Continuous Assessment_12.11.2021_1.15pm to 1.30pm](#)

Jump to...

[Announcements ►](#)

[Dashboard](#) / [Courses](#) / [Autumn 2022-23](#) / [BTech - CSE/ IT Semester 5](#) / [CS301 2022](#) / [General](#)

/ [Mid-Semester Exam_CS301 \(Section 1 + Section 2\)_06-09-2022_2.00 PM to 3.00 PM](#)

Started on Tuesday, 6 September 2022, 2:00 PM

State Finished

Completed on Tuesday, 6 September 2022, 2:53 PM

Time taken 53 mins 8 secs

Question 1

Complete

Marked out of 1.00

Which of the following statement is correct for Slotted Aloha

- a. divide time into discrete time intervals
- b. None of these
- c. require global time synchronization
- d. divide time into discrete time intervals and also requires global time synchronization

Question 2

Complete

Marked out of 1.00

Which of the following statements is not applicable for cable internet access?

- a. It includes Hybrid Fiber Co-axials
- b. Analog signal is converted to digital signal in DSLAM
- c. Cable modem connects home PC to Ethernet port
- d. It is a shared broadcast medium



Question 3

Complete

Marked out of 1.00

What is the role of logical link control sublayer in layer 2?

a. Connection Establishment

b. Sequencing

c. Error detection

d. Acknowledgment

Question 4

Complete

Marked out of 1.00

In slotted ALOHA, the vulnerable time is _____ the frame transmission time.

a. half of a frame transmission time

b. twice of a frame transmission time

c. same as the a frame transmission time

d. None of these



Question 5

Complete

Marked out of 1.00

What is the primary purpose of a virtual local area networks?

- a. To create a virtual private network
- b. Demonstrating the proper layout for network
- c. Segmenting a network inside a switch or device
- d. Simulating a network

Question 6

Complete

Marked out of 1.00

In Carrier Sense Multiple Access which node senses the channel, if idle it sends the data, otherwise it checks the medium after a random amount of time (not continuously) and transmits when found idle.

- a. 1-persistent
- b. 0-persistent
- c. Non-persistent
- d. P-persistent

Question 7

Complete

Marked out of 1.00

The time required to examine the packet's header and determine where to direct the packet is part of _____

- a. Queuing delay
- b. Transmission delay
- c. Propagation delay
- d. Processing delay

Question 8

Complete

Marked out of 1.00

Layer that translates between physical (MAC) and logical addresses is

- a. Network
- b. Transport
- c. Physical
- d. Datalink

Question 9

Complete

Marked out of 1.00

Which of the following protocols is the bit-oriented protocol?

- a. HTTP
- b. SSL
- c. HDLC
- d. All of these

Question 10

Complete

Marked out of 1.00

What are not the responsibilities of the Data link Layer?

- a. IP addressing
- b. MAC addressing
- c. Error detection
- d. Framing



Question 11

Complete

Marked out of 1.00

What is the total vulnerable time value of pure Aloha?

- a. None of these
- b. T_{fr}
- c. $2 \times T_{fr}$
- d. $\frac{1}{2} T_{fr}$

Question 12

Complete

Marked out of 1.00

What are not the responsibilities of the Network Layer?

- a. Routing
- b. IP addressing
- c. Path determination
- d. Framing

Question 13

Complete

Marked out of 1.00

Which are end system devices

- a. All of these
- b. smartphones
- c. web servers
- d. mail servers



Question 14

Complete

Marked out of 1.00

The OSI model was developed ____ TCP/IP model.

- a. with no link to TCP/IP
- b. prior to
- c. simultaneous to
- d. after

Question 15

Complete

Marked out of 2.00

The sender employs the "Go Back 10 ARQ" scheme. A 50 Kbps link has a propagation speed of 2×10^8 m/s. The transmitter and receiver is at 2000 km distance from each other. Each frame is 100 bytes long, assuming no transmission delay what will be the minimum round trip time delay for transmission of 1 million bits?

- a. 20 ms
- b. None of these
- c. 10 ms
- d. 50 ms

Question 16

Complete

Marked out of 1.00

The length of theof a specific packet will depend on the number of earlier-arriving packets that are queued and waiting for transmission onto the link.

- a. None of these
- b. Propagation delay
- c. Transmission delay
- d. Queuing delay

Question 17

Complete

Marked out of 1.00

Which multiple access techniques is used by IEEE 802.11 standards for wireless LANs?

- a. CSMA
- b. ALOHA
- c. CSMA/CA
- d. CSMA/CD

Question 18

Complete

Marked out of 1.00

In the transfer of files between four pairs of client-servers through a common transmission channel of transmission rate 1 Mbps. All the server access links have a transmission rate of 2 Mbps and all the client access links have a transmission rate of 2.5 Mbps, the throughput of this network will be

- a. 2.5 Mbps
- b. None of these
- c. 0.25 Mbps
- d. 2 Mbps

Question 19

Complete

Marked out of 1.00

A sender-receiver employs even parity for error correction scheme, what will be the parity bit for 1001011?

- a. 1
- b. 0
- c. None of these
- d. 2



Question 20

Complete

Marked out of 2.00

Consider the Go-back-N protocol with a sender's window size of '8'. Suppose at time 't' the next frame in the buffer (i.e. the next inorder frame) the receiver is expecting has a sequence No. 5. Assume that the medium does not reorder the messages. What is the possible set of sequence number inside the sender's window at time 't'. Assume the sender has already received acknowledgment for all the previously transmitted frames.

- a. [4, 12]
- b. None of these
- c. [5, 12]
- d. [5, 13]

Question 21

Complete

Marked out of 1.00

A three-layer switch can be called as.....

- a. Bridge
- b. Router
- c. None of these
- d. Repeater

Question 22

Complete

Marked out of 1.00

What are not the responsibilities of the Data link Layer?

- a. IP addressing
- b. MAC addressing
- c. Error detection
- d. Framing

Question 23

Complete

Marked out of 1.00

In reference to OSI model, TCP/IP model does not have _____

- a. network layer
- b. transport layer
- c. application layer
- d. session layer

Question 24

Complete

Marked out of 1.00

What will be the propagation time when the distance between two points is 2400km? Assuming the propagation speed to be 4×10^8 m/s in cable.

- a. 1 ms
- b. 6ms
- c. 2 ms
- d. 5ms



Question 25

Complete

Marked out of 1.00

Which of the following statement is incorrect, if the transmission bandwidth of a shared broadcast media of 50 Mbps is shared by 500 users then,

- a. Using FDMA scheme, each of the users have an access to 100 Kbps of bandwidth
- b. Using CDMA scheme, each of the users have an access to 100 Kbps of bandwidth
- c. Using TDMA scheme, each of the users have an access to 100 Kbps of bandwidth
- d. Using CDMA scheme, each of the users have an access to 50 Mbps of bandwidth

Question 26

Complete

Marked out of 1.00

The functions of _____ layer in the OSI model are handled by the transport layer itself in TCP/IP.

- a. network layer and presentation
- b. application layer and session
- c. presentation and session
- d. transport layer and session



Question 27

Complete

Marked out of 1.00

The _____ layer links network/user support layers by segmenting and rearranging the data.

- a. Session Layer
- b. Network Layer
- c. Transport Layer
- d. Application Layer

Question 28

Complete

Marked out of 1.00

Which is true for Circuit Switching?

- a. The bandwidth used is not fixed.
- b. The bandwidth used is not fixed.
- c. The bandwidth used is not fixed.
- d. All true

Question 29

Complete

Marked out of 1.00

Transmission data rate is decided by _____.

- a. data link layer
- b. transport layer
- c. network layer
- d. physical layer

Question 30

Complete

Marked out of 1.00

In Carrier Sense Multiple Access, which CSMA scheme senses the channel, if idle it sends the data, otherwise it continuously keeps on checking the medium for being idle and transmits unconditionally as soon as the channel gets idle.

- a. O-persistent
- b. 1-persistent
- c. P-persistent
- d. Non-persistent

Question 31

Complete

Marked out of 1.00

Error detection and correction are offered by both

- a. Network Layer and Transport Layer
- b. Data link layer and Network Layer
- c. Physical Layer and Data link Layer
- d. Data link layer and Transport Layer



Question 32

Complete

Marked out of 1.00

To avoid collisions on wireless networks, _____ was invented.

- a. CSMA/CD
- b. CSMA/CA
- c. Ethernet
- d. None of these

Question 33

Complete

Marked out of 1.00

Which is not true for Packet switching?

- a. Multiple users can use the same channel while transferring their packets.
- b. Multiple users can use the same channel while transferring their packets.
- c. The delivery of these packets becomes easy when complicated protocols are used.
- d. Installation costs of packet switching are expensive.

Question 34

Complete

Marked out of 1.00

The technique of temporarily delaying acknowledgements so that they can be hooked onto the next outgoing data frame is called

- a. Cyclic redundancy check
- b. None of these
- c. Piggybacking
- d. Parity check

Question 35

Complete

Marked out of 1.00

In _____, each station is forced to send only at the beginning of the time slot.

- a. Pure Aloha
- b. Slotted Aloha
- c. CSMA/CD
- d. CSMA/CA

[◀ Announcements](#)

Jump to...



[Dashboard](#) / [Courses](#) / [Autumn 2022-23](#) / [BTech - CSE/ IT Semester 5](#) / [CS301 2022](#) / [General](#)

/ [QUIZ 3_CS301 \(Section 1 + Section 2\)_04-11-2022_11.00 PM to 11.15 PM](#)

Started on Friday, 4 November 2022, 11:00 AM

State Finished

Completed on Friday, 4 November 2022, 11:14 AM

Time taken 14 mins 52 secs

Grade **12.00** out of 15.00 (80%)

Question **1**

Complete

Mark 1.00 out of 1.00

If the value in protocol field is 2 in IPV4 header, the protocol used is.....?

- a. ICMP
- b. TCP
- c. UDP
- d. IGMP

Question **2**

Complete

Mark 1.00 out of 1.00

What should be the flag value to indicate the last fragment?

- a. Time to live value
- b. M = 1
- c. None of these
- d. M = 0

Question 3

Complete

Mark 1.00 out of 1.00

The traffic field of IPV6 is similar to which field in the IPV4 header?

- a. Option field
- b. Fragmentation field
- c. Type of service
- d. Fast switching

Question 4

Complete

Mark 1.00 out of 1.00

What is the network address of the subnet which contains a host with the IP address 192.168.12.198 with subnet mask 255.255.255.0?

- a. 192.168.0.0
- b. 192.168.12.12
- c. 192.168.12.0
- d. 192.168.12.255

Question 5

Complete

Mark 1.00 out of 1.00

Which fields helps to check rearrangement of the fragments in IPV4?

- a. Flags
- b. Checksum
- c. Fragment Offset
- d. Protocol field value

Question 6

Complete

Mark 1.00 out of 1.00

Consider three devices A, B, and C with IP addresses 100.10.5.2, 100.10.5.5 and 100.10.5.6 respectively. The subnet mask is set to 255.255.255.252 for all the three devices. Which one of the following is true?

- a. Only A and B belong to same subnet
- b. A, B, and C all belongs to three different subnets
- c. A, B, and C all belongs to the same subnet
- d. only B and C belongs to same subnet

Question 7

Complete

Mark 0.00 out of 1.00

Which of the following is incorrect about NAT?

- a. Static Nat creates affixed translation of private addresses to public addresses.
- b. NAT does not conserve IPV4 addresses.
- c. NAT helps to reuse private IP addresses.
- d. Static NAT allows the user to configure one-to-one translation.

Question 8

Complete

Mark 0.00 out of 1.00

Suppose the IP address of device **1** is 10.10.36.1 and device **2** is 10.10.12.1 and the subnet mask used is 255.255.0.0. Both the devices will be able to communicate with each other using

- a. None of these
- b. Router
- c. Switch
- d. Hub

Question 9

Complete

Mark 1.00 out of 1.00

Two popular routing tables are Distance Vector and Link State routing, which of the following are true?

1. count-to-infinity is a problem only in distance vector and not in link state routing.
2. In link state, the shortest path algorithm is run only at one node.
3. In distance vector, the shortest path algorithm is run only at one node.
4. Distance vector requires fewer number of network messages than link state.

- a. 1, 2 and 4 only
- b. 1, 3, and 4 only
- c. 2 and 3 only
- d. 1 and 4 only

Question 10

Complete

Mark 1.00 out of 1.00

In an IPv4 packet, the value of HLEN is 1010 in binary. How many bytes of options are being carried by this packet?

- a. 12 bytes
- b. 20 bytes
- c. 10 bytes
- d. 32 bytes

Question 11

Complete

Mark 1.00 out of 1.00

The following is a dump of a UDP header in hexadecimal format

0632000D001EE217

What is the total length of the datagram?

- a. 22 bits
- b. 22 bytes
- c. 8 bytes
- d. 20 bytes

Question 12

Complete

Mark 0.00 out of 1.00

An organization is granted the block 130.34.12.64/26. Find the maximum number of host addresses that can be assigned for this network?

- a. 32
- b. 18
- c. 256
- d. None of these

Question 13

Complete

Mark 1.00 out of 1.00

Which of these is not a type of error-reporting message?

- a. Source quench
- b. Router error
- c. Time exceeded
- d. Destination unreachable

Question 14

Complete

Mark 1.00 out of 1.00

What is the type of the destination address of these Ethernet address 4A:30:10:21:10:1A

- a. Broadcast
- b. Not a valid address
- c. Multicast
- d. Unicast

Question 15

Complete

Mark 1.00 out of 1.00

Suppose the IP address of device **1** is 162.198.2.1 and device **2** is 162.198.3.2 and the subnet mask used is 255.255.255.0. Both the devices will be able to communicate with each other using switch

- a. True
- b. False

Jump to...

[Announcements ►](#)

Started on Tuesday, 6 September 2022, 2:00 PM

State Finished

Completed on Tuesday, 6 September 2022, 2:46 PM

Time taken 46 mins 35 secs

Grade **26.00** out of 37.00 (**70%**)

Question **1**

Complete

Mark 0.00 out of 1.00

What is the role of logical link control sublayer in layer 2?

- a. Acknowledgment
- b. Error detection
- c. Sequencing
- d. Connection Establishment

The correct answer is:

Error detection

Question **2**

Complete

Mark 2.00 out of 2.00

Consider the Go-back-N protocol with a sender's window size of '8'. Suppose at time 't' the next frame in the buffer (i.e. the next inorder frame) the receiver is expecting has a sequence No. 5. Assume that the medium does not reorder the messages. What is the possible set of sequence number inside the sender's window at time 't'. Assume the sender has already received acknowledgment for all the previously transmitted frames.

- a. [5, 12]
- b. [4, 12]
- c. [5, 13]
- d. None of these

The correct answer is:

[5, 12]

Question 3

Complete

Mark 1.00 out of 1.00

The OSI model was developed ____ TCP/IP model.

- a. after
- b. prior to
- c. simultaneous to
- d. with no link to TCP/IP

The correct answer is:

after

Question 4

Complete

Mark 0.00 out of 1.00

In Carrier Sense Multiple Access which node senses the channel, if idle it sends the data, otherwise it checks the medium after a random amount of time (not continuously) and transmits when found idle.

- a. O-persistent
- b. 1-persistent
- c. P-persistent
- d. Non-persistent

The correct answer is:

Non-persistent

Question 5

Complete

Mark 1.00 out of 1.00

What are not the responsibilities of the Data link Layer?

- a. MAC addressing
- b. IP addressing
- c. Error detection
- d. Framing

The correct answer is:

IP addressing

Question 6

Complete

Mark 0.00 out of 1.00

What is the primary purpose of a virtual local area networks?

- a. Segmenting a network inside a switch or device
- b. Demonstrating the proper layout for network
- c. To create a virtual private network
- d. Simulating a network

The correct answer is:

Segmenting a network inside a switch or device

Question 7

Complete

Mark 0.00 out of 1.00

In the transfer of files between four pairs of client-servers through a common transmission channel of transmission rate 1 Mbps. All the server access links have a transmission rate of 2 Mbps and all the client access links have a transmission rate of 2.5 Mbps, the throughput of this network will be

- a. None of these
- b. 2.5 Mbps
- c. 0.25 Mbps
- d. 2 Mbps

The correct answer is:

0.25 Mbps

Question 8

Complete

Mark 1.00 out of 1.00

The time required to examine the packet's header and determine where to direct the packet is part of _____

- a. Processing delay
- b. Transmission delay
- c. Queuing delay
- d. Propagation delay

The correct answer is:

Processing delay

Question 9

Complete

Mark 0.00 out of 1.00

Which of the following statements is not applicable for cable internet access?

- a. Analog signal is converted to digital signal in DSLAM
- b. Cable modem connects home PC to Ethernet port
- c. It includes Hybrid Fiber Co-axials
- d. It is a shared broadcast medium

The correct answer is:

Analog signal is converted to digital signal in DSLAM

Question 10

Complete

Mark 0.00 out of 1.00

What are not the responsibilities of the Network Layer?

- a. Routing
- b. Path determination
- c. IP addressing
- d. Framing

The correct answer is:

Framing

Question 11

Complete

Mark 1.00 out of 1.00

In slotted ALOHA, the vulnerable time is _____ the frame transmission time.

- a. same as the a frame transmission time
- b. twice of a frame transmission time
- c. None of these
- d. half of a frame transmission time

The correct answer is:

same as the a frame transmission time

Question 12

Complete

Mark 1.00 out of 1.00

Which multiple access techniques is used by IEEE 802.11 standards for wireless LANs?

- a. CSMA/CA
- b. CSMA
- c. ALOHA
- d. CSMA/CD

The correct answer is:

CSMA/CA

Question 13

Complete

Mark 1.00 out of 1.00

The _____ layer links network/user support layers by segmenting and rearranging the data.

- a. Network Layer
- b. Session Layer
- c. Application Layer
- d. Transport Layer

The correct answer is:

Transport Layer

Question 14

Complete

Mark 1.00 out of 1.00

Which are end system devices

- a. web servers
- b. mail servers
- c. smartphones
- d. All of these

The correct answer is:

All of these

Question 15

Complete

Mark 0.00 out of 1.00

A three-layer switch can be called as.....

- a. Router
- b. Repeater
- c. Bridge
- d. None of these

The correct answer is:

Router

Question 16

Complete

Mark 1.00 out of 1.00

The length of theof a specific packet will depend on the number of earlier-arriving packets that are queued and waiting for transmission onto the link.

- a. Transmission delay
- b. Queuing delay
- c. Propagation delay
- d. None of these

The correct answer is:

Queuing delay

Question 17

Complete

Mark 0.00 out of 1.00

Error detection and correction are offered by both

- a. Data link layer and Transport Layer
- b. Network Layer and Transport Layer
- c. Data link layer and Network Layer
- d. Physical Layer and Data link Layer

The correct answer is:

Data link layer and Transport Layer

Question 18

Complete

Mark 1.00 out of 1.00

Which is not true for Packet switching?

- a. The delivery of these packets becomes easy when complicated protocols are used.
- b. Multiple users can use the same channel while transferring their packets.
- c. Multiple users can use the same channel while transferring their packets.
- d. Installation costs of packet switching are expensive.

The correct answer is:

Multiple users can use the same channel while transferring their packets.

Question 19

Complete

Mark 1.00 out of 1.00

What are not the responsibilities of the Data link Layer?

- a. IP addressing
- b. Framing
- c. MAC addressing
- d. Error detection

The correct answer is:

IP addressing

Question 20

Complete

Mark 1.00 out of 1.00

What will be the propagation time when the distance between two points is 2400km? Assuming the propagation speed to be 4×10^8 m/s in cable.

- a. 1 ms
- b. 5ms
- c. 2 ms
- d. 6ms

The correct answer is:

6ms

Question 21

Complete

Mark 1.00 out of 1.00

Which of the following statement is correct for Slotted Aloha

- a. None of these
- b. require global time synchronization
- c. divide time into discrete time intervals and also requires global time synchronization
- d. divide time into discrete time intervals

The correct answer is:

divide time into discrete time intervals and also requires global time synchronization

Question 22

Complete

Mark 1.00 out of 1.00

To avoid collisions on wireless networks, _____ was invented.

- a. CSMA/CD
- b. None of these
- c. CSMA/CA
- d. Ethernet

The correct answer is:

CSMA/CA

Question 23

Complete

Mark 1.00 out of 1.00

A sender-receiver employs even parity for error correction scheme, what will be the parity bit for 1001011?

- a. 1
- b. None of these
- c. 2
- d. 0

The correct answer is:

0

Question 24

Complete

Mark 1.00 out of 1.00

In Carrier Sense Multiple Access, which CSMA scheme senses the channel, if idle it sends the data, otherwise it continuously keeps on checking the medium for being idle and transmits unconditionally as soon as the channel gets idle.

- a. 1-persistent
- b. O-persistent
- c. Non-persistent
- d. P-persistent

The correct answer is:

1-persistent

Question 25

Complete

Mark 1.00 out of 1.00

Which of the following protocols is the bit-oriented protocol?

- a. HTTP
- b. HDLC
- c. All of these
- d. SSL

The correct answer is:

HDLC

Question 26

Complete

Mark 1.00 out of 1.00

The technique of temporarily delaying acknowledgements so that they can be hooked onto the next outgoing data frame is called

- a. Parity check
- b. None of these
- c. Cyclic redundancy check
- d. Piggybacking

The correct answer is:

Piggybacking

Question 27

Complete

Mark 0.00 out of 1.00

Which is true for Circuit Switching?

- a. All true
- b. The bandwidth used is not fixed.
- c. The bandwidth used is not fixed.
- d. The bandwidth used is not fixed.

The correct answer is:

The bandwidth used is not fixed.

Question 28

Complete

Mark 1.00 out of 1.00

What is the total vulnerable time value of pure Aloha?

- a. T_{fr}
- b. $\frac{1}{2} T_{fr}$
- c. $2 \times T_{fr}$
- d. None of these

The correct answer is:

$2 \times T_{fr}$

Question 29

Complete

Mark 2.00 out of 2.00

The sender employs the "Go Back 10 ARQ" scheme. A 50 Kbps link has a propagation speed of 2×10^8 m/s. The transmitter and receiver is at 2000 km distance from each other. Each frame is 100 bytes long, assuming no transmission delay what will be the minimum round trip time delay for transmission of 1 million bits?

- a. 20 ms
- b. 10 ms
- c. 50 ms
- d. None of these

The correct answer is:

20 ms

Question 30

Complete

Mark 1.00 out of 1.00

Layer that translates between physical (MAC) and logical addresses is

- a. Datalink
- b. Transport
- c. Network
- d. Physical

The correct answer is:

Network

Question 31

Complete

Mark 1.00 out of 1.00

The functions of _____ layer in the OSI model are handled by the transport layer itself in TCP/IP.

a. network layer and presentation

b. presentation and session

c. transport layer and session

d. application layer and session

The correct answer is:

presentation and session

Question 32

Complete

Mark 0.00 out of 1.00

In reference to OSI model, TCP/IP model does not have _____

a. application layer

b. network layer

c. transport layer

d. session layer

The correct answer is:

session layer

Question 33

Complete

Mark 1.00 out of 1.00

Transmission data rate is decided by _____.

- a. data link layer
- b. transport layer
- c. physical layer
- d. network layer

The correct answer is:

physical layer

Question 34

Complete

Mark 1.00 out of 1.00

In _____, each station is forced to send only at the beginning of the time slot.

- a. CSMA/CA
- b. Slotted Aloha
- c. Pure Aloha
- d. CSMA/CD

The correct answer is:

Slotted Aloha

Question 35

Complete

Mark 0.00 out of 1.00

Which of the following statement is incorrect, if the transmission bandwidth of a shared broadcast media of 50 Mbps is shared by 500 users then,

- a. Using FDMA scheme, each of the users have an access to 100 Kbps of bandwidth
- b. Using CDMA scheme, each of the users have an access to 50 Mbps of bandwidth
- c. Using CDMA scheme, each of the users have an access to 100 Kbps of bandwidth
- d. Using TDMA scheme, each of the users have an access to 100 Kbps of bandwidth

The correct answer is:

Using CDMA scheme, each of the users have an access to 100 Kbps of bandwidth

[◀ Announcements](#)

Jump to...

[Dashboard](#) / [Courses](#) / [Autumn 2021-22](#) / [BTech Sem-5](#) / [CS301_CSE & IT](#) / [General](#)

/ [Pre-Mid-Semester Exam CS301 \(Section 1 + Section 2\)_19-08-2021 10.15 ti 11.15 AM](#)

Started on Thursday, 19 August 2021, 10:21 AM

State Finished

Completed on Thursday, 19 August 2021, 10:59 AM

Time taken 38 mins 19 secs

Grade 21.00 out of 30.00 (70%)

Question 1

Complete

Mark 0.00 out of 1.00

Which is true for circuit switching?

- a. The bandwidth used is not constant.
- b. While switching, time is wasted in waiting.
- c. All of these
- d. The rate at which the data is transmitted is constant.

The correct answer is:

The rate at which the data is transmitted is constant.

Question 2

Complete

Mark 1.00 out of 1.00

Ethernet frame consists of

- a. Default mask
- b. None of these
- c. IP address
- d. MAC address

The correct answer is:

MAC address



Question 3

Complete

Mark 1.00 out of 1.00

Which of the following is a set of rules that governs the data communication in a computer network

- a. Protocols
- b. None of these
- c. RFCs
- d. Activity standards

The correct answer is:

Protocols

Question 4

Complete

Mark 2.00 out of 2.00

What will be the propagation time when the distance between two nodes is 2400km? Assuming the communication media between the nodes is fiber cable and the light travels with a speed to be 2×10^8 m/s in the cable.

- a. 2 ms
- b. None of these
- c. 12 ms
- d. 5 ms

The correct answer is:

12 ms



Question 5

Complete

Mark 0.00 out of 2.00

A shared broadcast medium of transmission rate 5 Mbps is being shared by 10 users (U1, U2,U10). Calculate the maximum transmission rate of each of the users if the channel access scheme used is FDMA. If instead of FDMA the scheme being used is CDMA then what will be the maximum transmission rate of each of the users?

- a. 50 Mbps, 5 Mbps
- b. None of these
- c. 500 Kbps, 5000 Kbps
- d. 5000 Kbps, 5000 Kbps

The correct answer is:

500 Kbps, 5000 Kbps

Question 6

Complete

Mark 1.00 out of 1.00

A landline telephone network is an example of..... network.

- a. Circuit switched
- b. Line switched
- c. Packet switched
- d. Both packet switched and circuit switched

The correct answer is:

Circuit switched



Question 7

Complete

Mark 1.00 out of 1.00

Which sub-layer of the data link layer performs data link functions that depend upon the type of medium?

- a. Logical link control sub-layer
- b. error control sub-layer
- c. Media access control sub-layer
- d. network interface control sub-layer

The correct answer is:

Media access control sub-layer

Question 8

Complete

Mark 1.00 out of 1.00

Which address identifies a process on a host?

- a. port address
- b. physical address
- c. logical address
- d. specific address

The correct answer is:

port address



Question 9

Complete

Mark 0.00 out of 1.00

What kind of transmission medium is most appropriate to carry data in a computer network that is exposed to electrical interference?

- a. Coaxial cable
- b. Optical fiber
- c. Microwave link
- d. Un-shielded twisted pair

The correct answer is:

Optical fiber

Question 10

Complete

Mark 1.00 out of 1.00

The sharing of medium and its links by two or more devices is called

- a. Duplexing
- b. Multiplexing
- c. Fully duplexing
- d. Microplexing

The correct answer is:

Multiplexing



Question 11

Complete

Mark 1.00 out of 1.00

Transmission delay not depends upon

- a. Distance between routers
- b. Bandwidth of the medium
- c. Packet length
- d. Transmission rate

The correct answer is:

Distance between routers

Question 12

Complete

Mark 1.00 out of 1.00

In computer networks nodes are....

- a. the computer that originates/generates the data
- b. the computer that routes the data
- c. All of these
- d. the computer that terminates the data

The correct answer is:

All of these



Question 13

Complete

Mark 1.00 out of 1.00

Communication between a computer and a speaker involves

- a. Simplex
- b. Full-duplex
- c. Automatic
- d. Half-duplex

The correct answer is:

Simplex

Question 14

Complete

Mark 1.00 out of 1.00

The function of Digital Subscriber Line Access Multiplexer is to _____

- a. Amplify digital signals
- b. Convert digital signals into analog signals
- c. De-amplify digital signals
- d. Convert analog signals into digital signals

The correct answer is:

Convert analog signals into digital signals



Question 15

Complete

Mark 1.00 out of 1.00

Which of the following task is not done by data link layer?

- a. Flow control
- b. Encoding
- c. Framing
- d. Error control

The correct answer is:

Encoding

Question 16

Complete

Mark 0.00 out of 1.00

Which of the following statement is incorrect,

A shared broadcast media of transmission bandwidth 20 Mbps is shared by 100 users then,

- a. Using TDMA scheme, each of the users have an access to 200 Kbps of bandwidth
- b. Using CDMA scheme, each of the users have an access to 20 Mbps of bandwidth
- c. Using CDMA scheme, each of the users have an access to 200 Kbps of bandwidth
- d. Using FDMA scheme, each of the users have an access to 200 Kbps of bandwidth

The correct answer is:

Using CDMA scheme, each of the users have an access to 200 Kbps of bandwidth



Question 17

Complete

Mark 0.00 out of 1.00

Optical Network Terminator is connected to splitter using _____

- a. Optical cable
- b. Twisted pair cable
- c. microwave link
- d. hybrid fiber co-axial cable

The correct answer is:

Optical cable

Question 18

Complete

Mark 1.00 out of 1.00

In link layer, parity bits are used for

- a. to detect errors
- b. to identify the user
- c. encryption of data
- d. to transmit data faster

The correct answer is:

to detect errors



Question 19

Complete

Mark 1.00 out of 1.00

The number of bits in IPV4 address, IPV6 address, MAC address and Port address are

- a. 32, 128, 64, 16
- b. 128, 32, 48, 16
- c. 32, 128, 48, 32
- d. 32, 128, 48, 16

The correct answer is:

32, 128, 48, 16

Question 20

Complete

Mark 1.00 out of 1.00

Which physical media provides the highest transmission speed in a network?

- a. co-axial cable
- b. optical fiber
- c. electrical cable
- d. twisted pair cable

The correct answer is:

optical fiber



Question 21

Complete

Mark 0.00 out of 3.00

What are the propagation time and the transmission time for a 5Mbyte message (an image) if the transmission rate of the network is 1Mbps? Assume that the distance between the sender and the receiver is 8000 km and that light travels at 4×10^8 m/s.

- a. 50msecs, 40msecs
- b. 2msecs, 40msecs
- c. 2msecs, 40secs
- d. 50msecs, 40secs

The correct answer is:

2msecs, 40secs

Question 22

Complete

Mark 3.00 out of 3.00

The message 11001001 is to be transmitted using CRC polynomial x^3+1 to protect it from errors. The message that should be transmitted after appending the CRC code with the original data is

- a. 1100001010
- b. None of these
- c. 1100001011
- d. 1100001110

The correct answer is:

None of these



Question 23

Complete

Mark 1.00 out of 1.00

Which is not true for Packet switching?

- a. Installation costs of packet switching are expensive.
- b. Multiple users can use the same channel while transferring their packets.
- c. A dedicated path is followed throughout the session.
- d. The delivery of these packets becomes easy when complicated protocols are used.

The correct answer is:

A dedicated path is followed throughout the session.

Question 24

Complete

Mark 1.00 out of 1.00

Header of a frame generally contains

- a. All of these
- b. MAC addresses
- c. Synchronization bytes
- d. Frame identifier

The correct answer is:

All of these

[◀ Mid-Semester Exam_CS301 \(Section 1 + Section 2\)_13-09-2021_9.00 AM to 9.40 AM](#)

Jump to...

[Continuous LAB Assessment_24.08.2021_4.15pm to 4.30pm ►](#)

Started on Friday, 12 November 2021, 1:20 PM

State Finished

Completed on Friday, 12 November 2021, 1:28 PM

Time taken 8 mins 30 secs

Grade 7.00 out of 10.00 (70%)

Question 1

Complete

Mark 1.00 out of 1.00

The well-known port addresses are assigned to the

- a. None of these
- b. Destination
- c. Source
- d. Routers

Question 2

Complete

Mark 1.00 out of 1.00

Which fields helps to check rearrangement of the fragments in IPV4?

- a. Protocol field value
- b. Checksum
- c. Fragment Offset
- d. Flags

Question 3

Complete

Mark 1.00 out of 1.00

A email service uses which one of the following transport layer protocol?

- a. UDP
- b. Both TCP and UDP
- c. HTTP
- d. TCP

Question 4

Complete

Mark 1.00 out of 1.00

The traffic field of IPV6 is similar to which field in the IPV4 header?

- a. Fragmentation field
- b. Type of service
- c. Option field
- d. Fast switching

Question 5

Complete

Mark 1.00 out of 1.00

Fragmentation is done in layer.

- a. Transport Layer
- b. Data link Layer
- c. Physical layer
- d. Network Layer

Question 6

Complete

Mark 1.00 out of 1.00

Which of these is not a type of error-reporting message?

- a. Destination unreachable
- b. Router error
- c. Source quench
- d. Time exceeded

Question 7

Complete

Mark 0.00 out of 1.00

Which of the following is incorrect about Network Address Translation?

- a. Router will do NAT translation without configuration.
- b. NAT is a process in which one or more local IP address is translated into one or more Global IP address and vice versa.
- c. Certain application will not function while NAT is enabled.
- d. NAT results in switching path delays.

Question 8

Complete

Mark 0.00 out of 1.00

Routing inside a single administrative domain is called as..... routing.

- a. Path Vector
- b. Intra-domain
- c. Inter-domain
- d. None of these



Question 9

Complete

Mark 0.00 out of 1.00

In an IPV4 packet, the value of HLEN is 1010 in binary. How many bytes of options are being carried by this packet?

- a. 20 bytes
- b. 12 bytes
- c. 10 bytes
- d. 32 bytes

Question 10

Complete

Mark 1.00 out of 1.00

Which of the following is true for Address Resolution Protocol (ARP)?

- a. ARP request is broadcast and ARP reply is also broadcast.
- b. ARP request is broadcast and ARP reply is unicast.
- c. ARP request is unicast and ARP reply is also unicast.
- d. ARP request is unicast and ARP reply is broadcast.

Jump to...

Continuous LAB Assessment_28.10.2021_4.15pm to 4.30pm ►

Started on Tuesday, 24 August 2021, 4:19 PM

State Finished

Completed on Tuesday, 24 August 2021, 4:25 PM

Time taken 6 mins

Grade 8.00 out of 10.00 (80%)

Question 1

Complete

Mark 1.00 out of 1.00

What will be the propagation time when the distance between two points is 2400km? Assuming the propagation speed to be 4×10^8 m/s in cable

- a. 2ms
- b. 5ms
- c. 1ms
- d. 6ms

The correct answer is:

6ms

Question 2

Complete

Mark 1.00 out of 1.00

The _____ layer links network/user support layers by segmenting and rearranging the data.

- a. application layer
- b. transport layer
- c. session Layer
- d. network layer

The correct answer is:

transport layer

Question 3

Complete

Mark 0.00 out of 1.00

The OSI model was developed ____ TCP/IP model.

- a. None of these
- b. after
- c. simultaneous to
- d. prior to

The correct answer is:

after

Question 4

Complete

Mark 1.00 out of 1.00

Which multiple access techniques is used by IEEE 802.11 standards for wireless LANs?

- a. CSMA
- b. CSMA/CA
- c. ALOHA
- d. CSMA/CD

The correct answer is:

CSMA/CA

Question 5

Complete

Mark 1.00 out of 1.00

In reference to OSI model, TCP/IP model does not have ____

- a. application layer
- b. transport layer
- c. session layer
- d. application layer

The correct answer is:

session layer

Question 6

Complete

Mark 1.00 out of 1.00

Which of the following option is correct?

In wireless distribution system

- a. only one access point exists
- b. access points are not required
- c. multiple access points are inter-connected with each other
- d. there is no access point

The correct answer is:

multiple access points are inter-connected with each other

Question 7

Complete

Mark 1.00 out of 1.00

Which layer is responsible for the process to process delivery in a general network model?

- a. transport layer
- b. network layer
- c. session layer
- d. data link layer

The correct answer is:

transport layer

Question 8

Complete

Mark 1.00 out of 1.00

Transmission data rate is decided by _____

- a. network layer
- b. data link layer
- c. physical layer
- d. transport layer

The correct answer is:

physical layer

Question 9

Complete

Mark 1.00 out of 1.00

There are n stations in a slotted LAN. Each station attempts to transmit with a probability p in each time slot. What is the probability that only one station transmits in a given time slot?

- a. $1-(1-p)^{(n-1)}$
- b. $(1-p)^{(n-1)}$
- c. $p(1-p)^{(n-1)}$
- d. $np(1-p)^{(n-1)}$

The correct answer is:

$np(1-p)^{(n-1)}$

Question 10

Complete

Mark 0.00 out of 1.00

Which multiple access techniques is used by Ethernet standards for wireless LANs

- a. CSMA
- b. CSMA/CD
- c. ALOHA
- d. CSMA/CA

The correct answer is:

CSMA/CD

[◀ Pre-Mid-Semester Exam_CS301 \(Section 1 + Section 2\)_19-08-2021_10.15 ti 11.15 AM](#)[Jump to...](#)

Started on Thursday, 28 October 2021, 4:21 PM

State Finished

Completed on Thursday, 28 October 2021, 4:28 PM

Time taken 7 mins 19 secs

Grade 8.00 out of 10.00 (80%)

Question 1

Complete

Mark 1.00 out of 1.00

Which one of the following is not a function of network layer?

- a. routing
- b. congestion control
- c. error control
- d. inter-networking

Question 2

Complete

Mark 0.00 out of 1.00

For a given subnet mask 255.128.0.0, what is the number of subnets?

- a. 8
- b. 2
- c. 4
- d. 6

Question 3

Complete

Mark 1.00 out of 1.00

In a given subnet mask 255.0.0.0, what is the number of Host ID bits?

- a. 21
- b. 24
- c. 12
- d. 221

Question 4

Complete

Mark 1.00 out of 1.00

In class C classful IPv4 addressing format, the number of networks allowed under Class C addresses is

- a. 2^{24}
- b. 2^7
- c. 2^{14}
- d. 2^{21}

Question 5

Complete

Mark 1.00 out of 1.00

Error control is responsibility of which OSI layers

- a. Network and Transport layer
- b. Physical and Data link layer
- c. All of these
- d. Data link and Transport layer

Question 6

Complete

Mark 1.00 out of 1.00

Which one of the following protocol is NOT used to resolve one form of address to another one?

- a. **DNS**
- b. **ARP**
- c. **RARP**
- d. **DHCP**

Question 7

Complete

Mark 1.00 out of 1.00

While configuring the router, the IP address assigned to one port is 201.14.2.1/23. LAN1 is attached to this port of the router. Which of the following IP addresses are valid on this LAN1 interface,

- I1: 201.14.1.100**
- I2: 201.14.1.3**
- I3: 201.14.2.2**
- I4: 201.14.3.0**

- a. Only I2 and I3
- b. Only I1 and I2
- c. Only I3 and I4
- d. Only I1 and I3

Question 8

Complete

Mark 0.00 out of 1.00

Find out the invalid subnet mask from the following

- a. **223.0.0.0**
- b. **None of these**
- c. **255.255.255.252**
- d. **255.240.0.0**

Question 9

Complete

Mark 1.00 out of 1.00

In the even parity, find the parity bit of data 1001001001.

- a. **1**
- b. **X**
- c. **0**
- d. **None of these**

Question 10

Complete

Mark 1.00 out of 1.00

In the IPV4 addressing format, the number of hosts allowed under Class A addresses

- a. **2^{32-2}**
- b. **2^{24-2}**
- c. **2^{16-2}**
- d. **2^{8-2}**

[◀ Continuous Assessment_12.11.2021_1.15pm to 1.30pm](#)

Jump to...

[Announcements ►](#)

Transmission data rate is decided by _____

- a. transport layer
- b. physical layer
- c. data link layer
- d. network layer

Feedback

The correct answer is:

physical layer

Question 2

Complete

Mark 1.00 out of 1.00

[Flag question](#)

Question text

What will be the propagation time when the distance between two points is 2400km? Assuming the propagation speed to be 4×10^8 m/s in cable

- a. 6ms
- b. 1ms
- c. 5ms
- d. 2ms

Feedback

The correct answer is:

6ms

Question 3

Complete

Mark 1.00 out of 1.00

Flag question

Question text

In reference to OSI model, TCP/IP model does not have _____

- a.
session layer
- b.
application layer
- c.
transport layer
- d.
application layer

Feedback

The correct answer is:

session layer

Question 4

Complete

Mark 1.00 out of 1.00

Flag question

Question text

- a.
- b.
- c.
- d.

Feedback

The correct answer is:

Question 5

Complete

Mark 1.00 out of 1.00

[Flag question](#)

Question text

The OSI model was developed ____ TCP/IP model.

a.

prior to

b.

simultaneous to

c.

after

d.

None of these

Feedback

The correct answer is:

after

Question 6

Complete

Mark 1.00 out of 1.00

[Flag question](#)

Question text

Which multiple access techniques is used by IEEE 802.11 standards for wireless LANs?

a.

CSMA/CA

b.

CSMA

c.

CSMA/CD

d.

ALOHA

Feedback

The correct answer is:

CSMA/CA

Question 7

Complete

Mark 1.00 out of 1.00

Flag question

Question text

The _____ layer links network/user support layers by segmenting and rearranging the data.

a.

application layer

b.

transport layer

c.

session Layer

d.

network layer

Feedback

The correct answer is:

transport layer

Question 8

Complete

Mark 1.00 out of 1.00

Flag question

Question text

Which multiple access techniques is used by Ethernet standards for wireless LANs

- a.
ALOHA
- b.
CSMA
- c.
CSMA/CA
- d.
CSMA/CD

Feedback

The correct answer is:

CSMA/CD

Question 9

Complete

Mark 1.00 out of 1.00

Flag question

Question text

Which of the following option is correct?

In wireless distribution system

- a.
access points are not required
- b.
only one access point exists
- c.
there is no access point
- d.

multiple access points are inter-connected with each other

Feedback

The correct answer is:

multiple access points are inter-connected with each other

Question 10

Complete

Mark 1.00 out of 1.00

Flag question

Question text

Which layer is responsible for the process to process delivery in a general network model?

a.

network layer

b.

session layer

c.

transport layer

d.

data link layer

Feedback

The correct answer is:

transport layer

Header of a frame generally contains

- a.
MAC addresses
- b.
All of these
- c.
Synchronization bytes
- d.
Frame identifier

Feedback

The correct answer is:

All of these

Question 2

Complete

Mark 1.00 out of 1.00

[Remove flag](#)

Question text

What is access points (AP) in a wireless LAN?

- a.
both device that allows wireless devices to connect to a wired network and wireless device itself
- b.
device that allows wireless devices to connect to a wired network
- c.
all nodes in the network
- d.
wireless device itself

Feedback

The correct answer is:

device that allows wireless devices to connect to a wired network

Question 3

Complete

Mark 3.00 out of 3.00

[Remove flag](#)

Question text

What are the propagation time and the transmission time for a 500kbyte message (an email) if the transmission rate of the network is 1Gbps? Assume that the distance between the sender and the receiver is 14000 km and that light travels at 2×10^8 m/s.



a.

7ms, 4ms



b.

7ms, 8ms



c.

8ms, 4ms



d.

8ms, 7ms

Feedback

The correct answer is:

7ms, 4ms

Question 4

Complete

Mark 0.00 out of 1.00

[Remove flag](#)

Question text

Which of the following statement is incorrect,

A shared broadcast media of transmission bandwidth 20 Mbps is shared by 100 users then,

a.

Using CDMA scheme, each of the users have an access to 200 Kbps of bandwidth

b.

Using FDMA scheme, each of the users have an access to 200 Kbps of bandwidth

c.

Using CDMA scheme, each of the users have an access to 20 Mbps of bandwidth

d.

Using TDMA scheme, each of the users have an access to 200 Kbps of bandwidth

Feedback

The correct answer is:

Using CDMA scheme, each of the users have an access to 200 Kbps of bandwidth

Question 5

Complete

Mark 1.00 out of 1.00

[Flag question](#)

Question text

Which sub-layer of the data link layer performs data link functions that depend upon the type of medium?

a.

Logical link control sub-layer

b.

network interface control sub-layer

c.

Media access control sub-layer

d.

error control sub-layer

Feedback

The correct answer is:
Media access control sub-layer

Question 6

Complete

Mark 3.00 out of 3.00

[Remove flag](#)

Question text

The message 11001001 is to be transmitted using CRC polynomial x^3+1 to protect it from errors. The message that should be transmitted after appending the CRC code with the original data is

a.

None of these

b.

1100001010

c.

1100001110

d.

1100001011

Feedback

The correct answer is:

None of these

Question 7

Complete

Mark 1.00 out of 1.00

[Flag question](#)

Question text

Which of the following task is not done by data link layer?

a.
Error control

b.
Flow control

c.
Framing

d.
Encoding

Feedback

The correct answer is:

Encoding

Question 8

Complete

Mark 1.00 out of 1.00

[Flag question](#)

Question text

Ethernet frame consists of

a.
IP address

b.
None of these

c.
Default mask

d.
MAC address

Feedback

The correct answer is:

MAC address

Question 9

Complete

Mark 1.00 out of 1.00

[Remove flag](#)

Question text

Communication between a computer and a speaker involves



a.
Simplex



b.
Half-duplex



c.
Automatic



d.
Full-duplex

Feedback

The correct answer is:

Simplex

Question 10

Complete

Mark 1.00 out of 1.00

[Flag question](#)

Question text

Transmission delay not depends upon

a.

Transmission rate

b.

Bandwidth of the medium

c.

Distance between routers

d.

Packet length

Feedback

The correct answer is:

Distance between routers

Question 11

Complete

Mark 1.00 out of 1.00

[Flag question](#)

Question text

What kind of transmission medium is most appropriate to carry data in a computer network that is exposed to electrical interference?

a.

Microwave link

b.

Coaxial cable

c.

Un-shielded twisted pair

d.

Optical fiber

Feedback

The correct answer is:

Optical fiber

Question 12

Complete

Mark 1.00 out of 1.00

[Flag question](#)**Question text**

Propagation delay depends on

a.
Packet length

b.
Transmission rate

c.
Speed of CPU

d.
Distance between routers

Feedback

The correct answer is:

Distance between routers

Question 13

Complete

Mark 1.00 out of 1.00

[Flag question](#)**Question text**

Which physical media provides the highest transmission speed in a network?

a.
optical fiber

b.
co-axial cable

c.
electrical cable

d.
twisted pair cable

Feedback

The correct answer is:
optical fiber

Question 14

Complete

Mark 2.00 out of 2.00

[Remove flag](#)

Question text

Suppose five clients are connected to five servers (making five pairs of client-server networks) through a common transmission channel of transmission rate 5 Mbps. All the server access links have a transmission rate of 4 Mbps and all the client access links have a transmission rate of 2 Mbps, the throughput of this network will be

- a.
2 Mbps
- b.
5 Mbps
- c.
1 Mbps
- d.
None of these

Feedback

The correct answer is:
1 Mbps

Question 15

Complete

Mark 2.00 out of 2.00

[Remove flag](#)

Question text

A shared broadcast medium of transmission rate 5 Mbps is being shared by 10 users (U1, U2,U10). Calculate the maximum transmission rate of each of the users if the channel access scheme used is FDMA. If instead of FDMA the scheme being used is CDMA then what will be the maximum transmission rate of each of the users?

a.

None of these

b.

5000 Kbps, 5000 Kbps

c.

500 Kbps, 5000 Kbps

d.

50 Mbps, 5 Mbps

Feedback

The correct answer is:

500 Kbps, 5000 Kbps

Question 16

Complete

Mark 1.00 out of 1.00

[Flag question](#)

Question text

Which of the following is link layer protocol

a.

PPP (point-to-point protocol)

b.

HDLC (High Level Data Link control)

c.

All of these

d.

Ethernet

Feedback

The correct answer is:

All of these

Question 17

Complete

Mark 1.00 out of 1.00

Flag question

Question text

In link layer, parity bits are used for



a.
to detect errors



b.
to transmit data faster



c.
encryption of data



d.
to identify the user

Feedback

The correct answer is:

to detect errors

Question 18

Complete

Mark 1.00 out of 1.00

Flag question

Question text

In computer networks nodes are....

- a.
the computer that terminates the data
- b.
All of these
- c.
the computer that routes the data
- d.
the computer that originates/generates the data

Feedback

The correct answer is:

All of these

Question 19

Complete

Mark 1.00 out of 1.00

[Flag question](#)

Question text

Optical Network Terminator is connected to splitter using _____

- a.
hybrid fiber co-axial cable
- b.
Optical cable
- c.
microwave link
- d.
Twisted pair cable

Feedback

The correct answer is:

Optical cable

Question 20

Complete

Mark 1.00 out of 1.00

Flag question

Question text

The sharing of medium and its links by two or more devices is called



a.
Fully duplexing



b.
Microplexing



c.
Multiplexing



d.
Duplexing

Feedback

The correct answer is:

Multiplexing

Question 21

Complete

Mark 1.00 out of 1.00

Flag question

Question text

A landline telephone network is an example of..... network.



a.
Packet switched



b.

Line switched

c.

Both packet switched and circuit switched

d.

Circuit switched

Feedback

The correct answer is:

Circuit switched

Question 22

Complete

Mark 0.00 out of 1.00

[Remove flag](#)

Question text

Which is not true for Packet switching?

a.

A dedicated path is followed throughout the session.

b.

Installation costs of packet switching are expensive.

c.

Multiple users can use the same channel while transferring their packets.

d.

The delivery of these packets becomes easy when complicated protocols are used.

Feedback

The correct answer is:

A dedicated path is followed throughout the session.

Question 23

Complete

Mark 1.00 out of 1.00

Flag question

Question text

Bluetooth is a wireless technology for

- a.
LAN (Local Area Network)
- b.
WAN (Wide Area Network)
- c.
MAN (Metropolitan Area Network)
- d.
PAN (Personal Area Network)

Feedback

The correct answer is:

PAN (Personal Area Network)

Question 24

Complete

Mark 0.00 out of 1.00

Remove flag

Question text

Which is true for circuit switching?

- a.
All of these
- b.
The bandwidth used is not constant.
- c.
The rate at which the data is transmitted is constant.
- d.

While switching, time is wasted in waiting.

Feedback

The correct answer is:

The rate at which the data is transmitted is constant.

NOTE : Wrong answer are highlighted in RED TEXT

Question 1

Complete

Mark 1.00 out of 1.00

Question text

Which of the following is incorrect about Network Address Translation?

a.

NAT is a process in which one or more local IP address is translated into one or more Global IP address and vice versa.

b.

Certain application will not function while NAT is enabled.

c.

Router will do NAT translation without configuration.

d.

NAT results in switching path delays.

Question 2

Complete

Mark 1.00 out of 1.00

Flag question

Question text

Which of the following is true for Address Resolution Protocol (ARP)?

a.

ARP request is unicast and ARP reply is broadcast.

b.

ARP request is unicast and ARP reply is also unicast.

c.

ARP request is broadcast and ARP reply is unicast.

d.

ARP request is broadcast and ARP reply is also broadcast.

Question 3

Complete

Mark 1.00 out of 1.00

Flag question

Question text

Which fields helps to check rearrangement of the fragments in IPV4?

a.

Flags

b.

Checksum

c.

Fragment Offset

d.

Protocol field value

Question 4

Complete

Mark 1.00 out of 1.00

Flag question

Question text

Which of these is not a type of error-reporting message?

a.

Router error

b.

Destination unreachable

c.

Source quench

d.

Time exceeded

Question 5

Complete

Mark 0.00 out of 1.00

Flag question

Question text

The well-known port addresses are assigned to the

a.

Destination

b.

None of these

c.

Routers

d.

Source

Question 6

Complete

Mark 1.00 out of 1.00

Flag question

Question text

Fragmentation is done in layer.

a.

Physical layer

b.

Transport Layer

c.

Data link Layer

d.

Network Layer

Question 7

Complete

Mark 0.00 out of 1.00

Flag question

Question text

In an IPV4 packet, the value of HLEN is 1010 in binary. How many bytes of options are being carried by this packet?

a.

12 bytes

b.

10 bytes

c.

32 bytes

d.

20 bytes

Question 8

Complete

Mark 1.00 out of 1.00

Flag question

Question text

Routing inside a single administrative domain is called as..... routing.

a.

Inter-domain

b.

Path Vector

c.

Intra-domain

d.

None of these

Question 9

Complete

Mark 1.00 out of 1.00

Flag question

Question text

A email service uses which one of the following transport layer protocol?

a.

TCP

b.

Both TCP and UDP

c.

HTTP

d.

UDP

Question 10

Complete

Mark 1.00 out of 1.00

Flag question

Question text

The traffic field of IPV6 is similar to which field in the IPV4 header?

a.

Type of service

b.

Option field

c.

Fragmentation field

d.

Fast switching

Question 1

Complete

Mark 1.00 out of 1.00

Flag question

Question text

In the IPV4 addressing format, the number of hosts allowed under Class A addresses

a.

$2^{16}-2$

b.

$2^{8}-2$

c.

$2^{24}-2$

d.

$2^{32}-2$

Question 2

Complete

Mark 0.00 out of 1.00

Flag question

Question text

For a given subnet mask 255.128.0.0, what is the number of subnets?

a.

8

b.

2

c.

4

d.

6

Question 3

Complete

Mark 1.00 out of 1.00

Flag question

Question text

Error control is responsibility of which OSI layers

a.

Data link and Transport layer

b.

Network and Transport layer

c.

Physical and Data link layer

d.

All of these

Question 4

Complete

Mark 0.00 out of 1.00

Flag question

Question text

While configuring the router, the IP address assigned to one port is 201.14.2.1/23. LAN1 is attached to this port of the router. Which of the following IP addresses are valid on this LAN1 interface,

I1: 201.14.1.100

I2: 201.14.1.3

I3: 201.14.2.2

I4: 201.14.3.0

a.

Only I2 and I3

b.

Only I1 and I2

c.

Only I1 and I3

d.

Only I3 and I4

Question 5

Complete

Mark 1.00 out of 1.00

Flag question

Question text

Which one of the following is not a function of network layer?

a.

inter-networking

b.

congestion control

c.

error control

d.

routing

Question 6

Complete

Mark 1.00 out of 1.00

Flag question

Question text

In class C classful IPv4 addressing format, the number of networks allowed under Class C addresses is

a.

2^{24}

b.

2^{14}

c.

2^7

d.

2^{21}

Question 7

Complete

Mark 1.00 out of 1.00

Flag question

Question text

In a given subnet mask 255.0.0.0, what is the number of Host ID bits?

a.

24

b.

12

c.

221

d.

21

Question 8

Complete

Mark 1.00 out of 1.00

Flag question

Question text

Which one of the following protocol is NOT used to resolve one form of address to another one?

a.

RARP

b.

ARP

c.

DNS

d.

DHCP

Question 9

Complete

Mark 1.00 out of 1.00

Flag question

Question text

In the even parity, find the parity bit of data 1001001001.

a.

0

b.

X

c.

1

d.

None of these

Question **10**

Complete

Mark 1.00 out of 1.00

Question text

Find out the invalid subnet mask from the following

a.

None of these

b.

255.255.255.252

c.

223.0.0.0

d.

255.240.0.0

[Dashboard](#) / [Courses](#) / [Autumn 2022-23](#) / [BTech - CSE/ IT Semester 5](#) / [CS301 2022](#) / [General](#)

/ [QUIZ 3_CS301 \(Section 1 + Section 2\)_04-11-2022_11.00 PM to 11.15 PM](#)

Started on Friday, 4 November 2022, 11:00 AM

State Finished

Completed on Friday, 4 November 2022, 11:14 AM

Time taken 14 mins 52 secs

Grade **12.00** out of 15.00 (80%)

Question **1**

Complete

Mark 1.00 out of 1.00

If the value in protocol field is 2 in IPV4 header, the protocol used is.....?

- a. ICMP
- b. TCP
- c. UDP
- d. IGMP

Question **2**

Complete

Mark 1.00 out of 1.00

What should be the flag value to indicate the last fragment?

- a. Time to live value
- b. M = 1
- c. None of these
- d. M = 0

Question 3

Complete

Mark 1.00 out of 1.00

The traffic field of IPV6 is similar to which field in the IPV4 header?

- a. Option field
- b. Fragmentation field
- c. Type of service
- d. Fast switching

Question 4

Complete

Mark 1.00 out of 1.00

What is the network address of the subnet which contains a host with the IP address 192.168.12.198 with subnet mask 255.255.255.0?

- a. 192.168.0.0
- b. 192.168.12.12
- c. 192.168.12.0
- d. 192.168.12.255

Question 5

Complete

Mark 1.00 out of 1.00

Which fields helps to check rearrangement of the fragments in IPV4?

- a. Flags
- b. Checksum
- c. Fragment Offset
- d. Protocol field value

Question 6

Complete

Mark 1.00 out of 1.00

Consider three devices A, B, and C with IP addresses 100.10.5.2, 100.10.5.5 and 100.10.5.6 respectively. The subnet mask is set to 255.255.255.252 for all the three devices. Which one of the following is true?

- a. Only A and B belong to same subnet
- b. A, B, and C all belongs to three different subnets
- c. A, B, and C all belongs to the same subnet
- d. only B and C belongs to same subnet

Question 7

Complete

Mark 0.00 out of 1.00

Which of the following is incorrect about NAT?

- a. Static Nat creates affixed translation of private addresses to public addresses.
- b. NAT does not conserve IPV4 addresses.
- c. NAT helps to reuse private IP addresses.
- d. Static NAT allows the user to configure one-to-one translation.

Question 8

Complete

Mark 0.00 out of 1.00

Suppose the IP address of device **1** is 10.10.36.1 and device **2** is 10.10.12.1 and the subnet mask used is 255.255.0.0. Both the devices will be able to communicate with each other using

- a. None of these
- b. Router
- c. Switch
- d. Hub

Question 9

Complete

Mark 1.00 out of 1.00

Two popular routing tables are Distance Vector and Link State routing, which of the following are true?

1. count-to-infinity is a problem only in distance vector and not in link state routing.
2. In link state, the shortest path algorithm is run only at one node.
3. In distance vector, the shortest path algorithm is run only at one node.
4. Distance vector requires fewer number of network messages than link state.

- a. 1, 2 and 4 only
- b. 1, 3, and 4 only
- c. 2 and 3 only
- d. 1 and 4 only

Question 10

Complete

Mark 1.00 out of 1.00

In an IPv4 packet, the value of HLEN is 1010 in binary. How many bytes of options are being carried by this packet?

- a. 12 bytes
- b. 20 bytes
- c. 10 bytes
- d. 32 bytes

Question 11

Complete

Mark 1.00 out of 1.00

The following is a dump of a UDP header in hexadecimal format

0632000D001EE217

What is the total length of the datagram?

- a. 22 bits
- b. 22 bytes
- c. 8 bytes
- d. 20 bytes

Question 12

Complete

Mark 0.00 out of 1.00

An organization is granted the block 130.34.12.64/26. Find the maximum number of host addresses that can be assigned for this network?

- a. 32
- b. 18
- c. 256
- d. None of these

Question 13

Complete

Mark 1.00 out of 1.00

Which of these is not a type of error-reporting message?

- a. Source quench
- b. Router error
- c. Time exceeded
- d. Destination unreachable

Question 14

Complete

Mark 1.00 out of 1.00

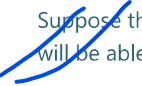
What is the type of the destination address of these Ethernet address 4A:30:10:21:10:1A

- a. Broadcast
- b. Not a valid address
- c. Multicast
- d. Unicast

Question 15

Complete

Mark 1.00 out of 1.00

 Suppose the IP address of device **1** is 162.198.2.1 and device **2** is 162.198.3.2 and the subnet mask used is 255.255.255.0. Both the devices will be able to communicate with each other using switch

- a. True
- b. False

Jump to...

[Announcements ►](#)

[Dashboard](#) / [Courses](#) / [Autumn 2022-23](#) / [BTech - CSE/ IT Semester 5](#) / [CS301 2022](#) / [General](#)

/ [QUIZ 3_CS301 \(Section 1 + Section 2\)_04-11-2022_11.00 PM to 11.15 PM](#)

Started on Friday, 4 November 2022, 11:00 AM

State Finished

Completed on Friday, 4 November 2022, 11:14 AM

Time taken 14 mins 52 secs

Grade **12.00** out of 15.00 (80%)

Question **1**

Complete

Mark 1.00 out of 1.00

If the value in protocol field is 2 in IPV4 header, the protocol used is.....?

- a. ICMP
- b. TCP
- c. UDP
- d. IGMP

Question **2**

Complete

Mark 1.00 out of 1.00

What should be the flag value to indicate the last fragment?

- a. Time to live value
- b. M = 1
- c. None of these
- d. M = 0

Question 3

Complete

Mark 1.00 out of 1.00

The traffic field of IPV6 is similar to which field in the IPV4 header?

- a. Option field
- b. Fragmentation field
- c. Type of service
- d. Fast switching

Question 4

Complete

Mark 1.00 out of 1.00

What is the network address of the subnet which contains a host with the IP address 192.168.12.198 with subnet mask 255.255.255.0?

- a. 192.168.0.0
- b. 192.168.12.12
- c. 192.168.12.0
- d. 192.168.12.255

Question 5

Complete

Mark 1.00 out of 1.00

Which fields helps to check rearrangement of the fragments in IPV4?

- a. Flags
- b. Checksum
- c. Fragment Offset
- d. Protocol field value

Question 6

Complete

Mark 1.00 out of 1.00

Consider three devices A, B, and C with IP addresses 100.10.5.2, 100.10.5.5 and 100.10.5.6 respectively. The subnet mask is set to 255.255.255.252 for all the three devices. Which one of the following is true?

- a. Only A and B belong to same subnet
- b. A, B, and C all belongs to three different subnets
- c. A, B, and C all belongs to the same subnet
- d. only B and C belongs to same subnet

Question 7

Complete

Mark 0.00 out of 1.00

Which of the following is incorrect about NAT?

- a. Static Nat creates affixed translation of private addresses to public addresses.
- b. NAT does not conserve IPV4 addresses.
- c. NAT helps to reuse private IP addresses.
- d. Static NAT allows the user to configure one-to-one translation.

Question 8

Complete

Mark 0.00 out of 1.00

Suppose the IP address of device **1** is 10.10.36.1 and device **2** is 10.10.12.1 and the subnet mask used is 255.255.0.0. Both the devices will be able to communicate with each other using

- a. None of these
- b. Router
- c. Switch
- d. Hub

Question 9

Complete

Mark 1.00 out of 1.00

Two popular routing tables are Distance Vector and Link State routing, which of the following are true?

1. count-to-infinity is a problem only in distance vector and not in link state routing.
2. In link state, the shortest path algorithm is run only at one node.
3. In distance vector, the shortest path algorithm is run only at one node.
4. Distance vector requires fewer number of network messages than link state.

- a. 1, 2 and 4 only
- b. 1, 3, and 4 only
- c. 2 and 3 only
- d. 1 and 4 only

Question 10

Complete

Mark 1.00 out of 1.00

In an IPv4 packet, the value of HLEN is 1010 in binary. How many bytes of options are being carried by this packet?

- a. 12 bytes
- b. 20 bytes
- c. 10 bytes
- d. 32 bytes

Question 11

Complete

Mark 1.00 out of 1.00

The following is a dump of a UDP header in hexadecimal format

0632000D001EE217

What is the total length of the datagram?

- a. 22 bits
- b. 22 bytes
- c. 8 bytes
- d. 20 bytes

Question 12

Complete

Mark 0.00 out of 1.00

An organization is granted the block 130.34.12.64/26. Find the maximum number of host addresses that can be assigned for this network?

- a. 32
- b. 18
- c. 256
- d. None of these

Question 13

Complete

Mark 1.00 out of 1.00

Which of these is not a type of error-reporting message?

- a. Source quench
- b. Router error
- c. Time exceeded
- d. Destination unreachable

Question 14

Complete

Mark 1.00 out of 1.00

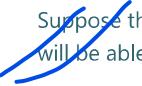
What is the type of the destination address of these Ethernet address 4A:30:10:21:10:1A

- a. Broadcast
- b. Not a valid address
- c. Multicast
- d. Unicast

Question 15

Complete

Mark 1.00 out of 1.00

 Suppose the IP address of device **1** is 162.198.2.1 and device **2** is 162.198.3.2 and the subnet mask used is 255.255.255.0. Both the devices will be able to communicate with each other using switch

- a. True
- b. False

Jump to...

[Announcements ►](#)

Started on Monday, 18 December 2023, 4:25 PM

State Finished

Completed on Monday, 18 December 2023, 4:35 PM

Time taken 9 mins 8 secs

Question 1

Complete

Marked out of 1.00

Find out the invalid subnet mask from the following

- a. 223.0.0.0
- b. None of these
- c. 255.255.255.252
- d. 255.240.0.0

Question 2

Complete

Marked out of 1.00

Which of the following describe the process identifier that is used to run OSPF on a router?

- A. It is globally significant.
- B. It is locally significant.
- C. It is needed to identify a unique instance of an OSPF database.
- D. It is an optional parameter required only if multiple OSPF processes are running on the router.

Select one:

- B and C
- A and C
- A and D
- B and D

Question 3

Complete

Marked out of 1.00

Transmission data rate is decided by _____

- a. data link layer
- b. transport layer
- c. physical layer
- d. network layer

...

Question 4

Complete

Marked out of 1.00

Which of the following is not a limitation of IPV4 addresses?

- a. IPV4 fits for small topology drawing
- b. IPV4 lacks end-to-end connectivity
- c. IPV4 suffers from IP address depletion
- d. IPV4 cannot handle internet routing table expansion

Question 5

Complete

Marked out of 1.00

Dynamic Host Configuration Protocol is used for

- a. both IPV4 and IPV6
- b. None of these
- c. IPV6
- d. IPV4

Question 6

Complete

Marked out of 1.00

In reference to OSI model, TCP/IP model does not have _____

- a. session layer
- b. transport layer
- c. application layer
- d. application layer

...

Question 7

Complete

Marked out of 1.00

For a given subnet mask 255.128.0.0, what is the number of subnets?

- a. 6
- b. 8
- c. 2
- d. 4

Question 8

Complete

Marked out of 1.00

In a given subnet mask 255.0.0.0, what is the number of Host ID bits?

- a. 221
- b. 21
- c. 12
- d. 24

Question 9

Complete

Marked out of 1.00

Routing inside a single administrative domain is called as..... routing.

- a. Path Vector
- b. None of these
- c. Inter-domain
- d. Intra-domain

**Question 10**

Complete

Marked out of 1.00

Which of the following is incorrect about Network Address Translation?

- a. Certain application will not function while NAT is enabled.
- b. NAT is a process in which one or more local IP address is translated into one or more Global IP address and vice versa.
- c. Router will do NAT translation without configuration.
- d. NAT results in switching path delays.

Question 11

Complete

Marked out of 1.00

The traffic field of IPV6 is similar to which field in the IPV4 header?

- a. Type of service
- b. Option field
- c. Fragmentation field
- d. Fast switching

Question 12

Complete

Marked out of 1.00

The sharing of medium and its links by two or more devices is called

- a. Duplexing
- b. Fully duplexing
- c. Microplexing
- d. Multiplexing

...

Question 13

Complete

Marked out of 1.00

A email service uses which one of the following transport layer protocol?

- a. TCP
- b. HTTP
- c. UDP
- d. Both TCP and UDP

Question 14

Complete

Marked out of 1.00

In link layer, parity bits are used for

- a. to transmit data faster
- b. to detect errors
- c. encryption of data
- d. to identify the user

Question 15

Complete

Marked out of 1.00

Layer that translates between physical (MAC) and logical addresses is

- a. Datalink
- b. Physical
- c. Transport
- d. Network

Question 16

Complete

Marked out of 1.00

Which of the following is incorrect about Network Address Translation?

- a. Certain application will not function while NAT is enabled.
- b. Router will do NAT translation without configuration.
- c. NAT results in switching path delays.
- d. NAT is a process in which one or more local IP address is translated into one or more Global IP address and vice versa.

Question 17

Complete

Marked out of 1.00

Which multiple access techniques is used by IEEE 802.11 standards for wireless LANs?

- a. CSMA/CD
- b. ALOHA
- c. CSMA
- d. CSMA/CA

Question 18

Complete

Marked out of 1.00

The time required to examine the packet's header and determine where to direct the packet is part of _____

- a. Transmission delay
- b. Processing delay
- c. Propagation delay
- d. Queuing delay

...

Question 19

Complete

Marked out of 1.00

Which fields helps to check rearrangement of the fragments in IPV4?

- a. Fragment Offset
- b. Protocol field value
- c. Flags
- d. Checksum

Question 20

Complete

Marked out of 1.00

The maximum size of payload field in Ethernet frame is

- a. 1300 bytes
 - b. 1000 bytes
 - c. 1500 bytes
 - d. 1200 bytes
- bytes
bytes
bytes
bytes

[◀ CS301_Quiz1_23.11.2023](#)



Started on Thursday, 23 November 2023, 4:30 PM

State Finished

Completed on Thursday, 23 November 2023, 4:52 PM

Time taken 21 mins 53 secs

Question **1**

Complete

Marked out of 1.00

Which of the following is true for Address Resolution Protocol (ARP)?

- a. ARP request is broadcast and ARP reply is also broadcast.
- b. ARP request is broadcast and ARP reply is unicast.
- c. ARP request is unicast and ARP reply is broadcast.
- d. ARP request is unicast and ARP reply is also unicast.

Question **2**

Complete

Marked out of 1.00

Which address identifies a process on a host?

- a. specific address
- b. logical address
- c. port address
- d. physical address

Question 3

Complete

Marked out of 1.00

What is the Hexadecimal equivalent of the following Ethernet address

010110100010001010101000110001010101000001111

- a. 5A115518AA0F
- b. 5A1155189A0E
- c. None of these
- d. 5A115514AA0F

Question 4

Complete

Marked out of 1.00

The number of bits in IPV4 address, IPV6 address, MAC address and Port address are

- a. 128, 32, 48, 16
- b. 32, 128, 64, 16
- c. 32, 128, 48, 16
- d. 32, 128, 48, 32

Question 5

Complete

Marked out of 1.00

Communication between a computer and a speaker involves

- a. Automatic
- b. Full-duplex
- c. Simplex
- d. Half-duplex

Question 6

Complete

Marked out of 1.00

The maximum size of payload field in Ethernet frame is

- a. 1500 bytes
- b. 1200 bytes
- c. 1000 bytes
- d. 1300 bytes

Question 7

Complete

Marked out of 1.00

Which of the following statement is incorrect,

A shared broadcast media of transmission bandwidth 20 Mbps is shared by 100 users then,

- a. Using CDMA scheme, each of the users have an access to 200 Kbps of bandwidth
- b. Using CDMA scheme, each of the users have an access to 20 Mbps of bandwidth
- c. Using FDMA scheme, each of the users have an access to 200 Kbps of bandwidth
- d. Using TDMA scheme, each of the users have an access to 200 Kbps of bandwidth

Question 8

Complete

Marked out of 1.00

Which of the following delay is faced by the packet in travelling from one end system to another?

- a. Queuing delay
- b. Transmission delay
- c. All of these
- d. Propagation delay

Question 9

Complete

Marked out of 1.00

Find out the invalid subnet mask from the following

- a. None of these
- b. 255.255.255.252
- c. 255.255.242.0
- d. 255.240.0.0

Question 10

Complete

Marked out of 1.00

Which of the following is a set of rules that governs the data communication in a computer network

- a. RFCs
- b. None of these
- c. Activity standards
- d. Protocols

Question 11

Complete

Marked out of 1.00

Header of a frame generally contains

- a. MAC addresses
- b. All of these
- c. Frame identifier
- d. Synchronization bytes

Question 12

Complete

Marked out of 1.00

Which one is a valid subnet mask out of the following?

- a. 223.0.0.0
- b. 240.0.0.0
- c. None of these
- d. 255.230.255.0

Question 13

Complete

Marked out of 1.00

What is the class of this IPv4 address **11101111 11110111 11000111 00011101**?

- a. class B
- b. class C
- c. class A
- d. class D

Question 14

Complete

Marked out of 1.00

Transmission rate is decided by

- a. network layer
- b. physical layer
- c. data link layer
- d. transport layer

Question 15

Complete

Marked out of 1.00

The sharing of medium and its links by two or more devices is called

- a. Duplexing
- b. Multiplexing
- c. Microplexing
- d. Fully duplexing

Question 16

Complete

Marked out of 1.00

In link layer, parity bits are used for

- a. to transmit data faster
- b. to identify the user
- c. to detect errors
- d. encryption of data

Question 17

Complete

Marked out of 1.00

Ethernet frame consists of

- a. None of these
- b. IP address
- c. Default mask
- d. MAC address

Question 18

Complete

Marked out of 1.00

The function of Digital Subscriber Line Access Multiplexer is to _____

- a. Convert digital signals into analog signals
- b. Amplify digital signals
- c. De-amplify digital signals
- d. Convert analog signals into digital signals

Question 19

Complete

Marked out of 1.00

Which of the following task is not done by data link layer?

- a. Framing
- b. Error control
- c. Flow control
- d. Encoding

Question 20

Complete

Marked out of 1.00

Which physical media provides the highest transmission speed in a network?

- a. twisted pair cable
- b. optical fiber
- c. electrical cable
- d. co-axial cable

Question 21

Complete

Marked out of 1.00

Define the type of this Ethernet frame destination address **FF:FF:FF:FF:FF:FF**

- a. None of these
- b. Unicast
- c. Multicast
- d. Broadcast

Question 22

Complete

Marked out of 1.00

In computer networks nodes are....

- a. the computer that routes the data
- b. the computer that terminates the data
- c. the computer that originates/generates the data
- d. All of these

Question 23

Complete

Marked out of 1.00

What is access points (AP) in a wireless LAN?

- a. both device that allows wireless devices to connect to a wired network and wireless device itself
- b. all nodes in the network
- c. wireless device itself
- d. device that allows wireless devices to connect to a wired network

Question 24

Complete

Marked out of 1.00

Which of the following is link layer protocol

- a. PPP (point-to-point protocol)
- b. HDLC (High Level Data Link control)
- c. All of these
- d. Ethernet

Question 25

Complete

Marked out of 1.00

Which sub-layer of the data link layer performs data link functions that depend upon the type of medium?

- a. network interface control sub-layer
- b. Logical link control sub-layer
- c. error control sub-layer
- d. Media access control sub-layer

Question 26

Complete

Marked out of 1.00

The size of an IP address in IPV6 is.....

- a. 128 bytes
- b. 60 bits
- c. 128 bits
- d. 40bytes

Question 27

Complete

Marked out of 1.00

Which is not true for Packet switching?

- a. The delivery of these packets becomes easy when complicated protocols are used.
- b. Multiple users can use the same channel while transferring their packets.
- c. Installation costs of packet switching are expensive.
- d. A dedicated path is followed throughout the session.

Question 28

Complete

Marked out of 1.00

What is default subnet mask address of this IPV4 address **11001111 11110111 11000111 00011101**?

- a. 255.255.255.255
- b. 255.0.0.0
- c. 255.255.0.0
- d. 255.255.255.0

Question 29

Complete

Marked out of 1.00

Which of the following is not a valid IP address?

- a. 192.25.256.8
- b. 145.6.14.1
- c. 145.6.14.8
- d. 192.168.2.1

Question 30

Complete

Marked out of 1.00

Which is true for circuit switching?

- a. While switching, time is wasted in waiting.
- b. All of these
- c. The rate at which the data is transmitted is constant.
- d. The bandwidth used is not constant.

Question 31

Complete

Marked out of 1.00

What is default subnet mask address of this IPV4 address **172.15.165.1**?

- a. 255.0.0.0
- b. 255.255.255.255
- c. 255.255.255.0
- d. 255.255.0.0

Question 32

Complete

Marked out of 1.00

Optical Network Terminator is connected to splitter using _____

- a. hybrid fiber co-axial cable
- b. Twisted pair cable
- c. microwave link
- d. Optical cable

Question 33

Complete

Marked out of 1.00

A landline telephone network is an example of..... network.

- a. Circuit switched
- b. Line switched
- c. Packet switched
- d. Both packet switched and circuit switched

Question 34

Complete

Marked out of 1.00

Propagation delay depends on

- a. Distance between routers
- b. Transmission rate
- c. Speed of CPU
- d. Packet length

Question 35

Complete

Marked out of 1.00

In class C classful IPv4 addressing format, the number of networks allowed under Class C addresses is

- a. 2^{24}
- b. 2^{21}
- c. 2^7
 2^7
- d. 2^{14}

Question 36

Complete

Marked out of 1.00

What kind of transmission medium is most appropriate to carry data in a computer network that is exposed to electrical interference?

- a. Optical fiber
- b. Coaxial cable
- c. Microwave link
- d. Un-shielded twisted pair

Question 37

Complete

Marked out of 1.00

Transmission delay not depends upon

- a. Distance between routers
- b. Bandwidth of the medium
- c. Packet length
- d. Transmission rate

◀ Mid-Semester Exam_CS301 (GNR+Diu)_06-11-2023_9.30 AM to 11.30 AM

Jump to...