



Mid term data of 610

Question No: 1 (M a r k s : 1)

No error detection scheme is perfect because transmission errors can affect the additional information as well as the data.

▶ [True](#) (Computer Networks and Internets, page82)

▶ False

Question No: 2 (M a r k s : 1)

----- Program sends a message to a remote computer and reports whether the computer responds.

▶ [Ping](#) (Computer Networks and Internets, page9)

▶ Traceroute

▶ ICMP

▶ Non of the given

Question No: 3 (M a r k s : 1)

----- was especially concerned about the lack of high powered computers.

▶ [ARPA](#) (Computer Networks and Internets, page5)

▶ IEEE

▶ EIA

▶ Non of the given

Question No: 4 (M a r k s : 1)

The term ----- is used to denote the definition of a packet used with a specific type of network.

▶ Packet

▶ [Frame](#) (Computer Networks and Internets, page 73)

▶ Data

▶ None of the given

Question No: 5 (M a r k s: 1)

Computer networks are often called ----- because they use packet technology.

- ▶ Ethernet
- ▶ Switch networks
- ▶ [Packet networks](#) (Computer Networks and Internets, page 73)
- ▶ None of the given

Question No: 6 (M a r k s: 1)

----- have advantages arisen from the size and ease of computation.

- ▶ CRC
- ▶ [Parity](#) (Page 19)
- ▶ Checksums
- ▶ None of given

Question No: 7 (M a r k s: 1)

Most LANs that employ ring topology use an access mechanism known as-----

- ▶ CSMA/CD
- ▶ CSMA/CA
- ▶ [TOKEN PASSING](#) (Computer Networks and Internets, page95)
- ▶ None of the given

Question No: 8 (M a r k s: 1)

IEEE LLC/SNAP header is -----, which is used to specify the type of data.

- ▶ [8 octets](#) (Computer Networks and Internets, page112)
- ▶ 8 bytes
- ▶ 8 bits
- ▶ None of the given

Question No: 9 (M a r k s: 1)

Formally named _____ informally known as the twisted pair Ethernet or TP Ethernet.

- ▶ 10 Base 2
- ▶ 10 Base 5
- ▶ [10 Base T](#) (Page 43)
- ▶ None of the given

Question No: 10 (M a r k s: 1)

An interface for twisted pair Ethernet must have an _____ connector , and must generate signals according to the _____ specification.

▶ [RJ-45, 10 Base T \(Computer Networks and Internets, page 126\)](#)

- ▶ RJ-45, 10 Base 5
- ▶ BNC, 10 Base 2
- ▶ BNC, 10 Base T

Question No: 11 (M a r k s: 1)

A bridges function in the _____ layers(s).

▶ [Physical \(MAC\) Click here for Detail](#)

- ▶ Data link
- ▶ Network
- ▶ Physical (MAC) and Data link

Question No: 12 (M a r k s: 1)

A Bridge can _____

- ▶ Filter a frame
- ▶ Forward a frame
- ▶ Extend a LAN

▶ [Do all the above Click here for Detail](#)

Question No: 13 (M a r k s: 1)

A Bridge forwards or filters a frame by comparing the information in its address table to the frame's _____

- ▶ Layer 2 source address
- ▶ Source node's physical address

▶ [Layer 2 destination address Click here for Detail](#)

- ▶ Layer 3 destination address

Question No: 14 (M a r k s: 1)

_____ computes shortest paths in a graph by using weights on edges as a measure of distance.

- ▶ Greedy algorithm
- ▶ Distance vector algorithm

▶ [Dijkstra's algorithm \(Computer Networks and Internets, page112\)](#)

- ▶ Non of the given

Question No: 15 (M a r k s: 1)

_____ is used for audio and video, since these have predefined maximum data rates

▶ [Constant Bit Rate \(CBR\) service](#) (Page 71)

- ▶ Variable Bit Rate (VBR) service
- ▶ Available Bit Rate (ABR) service
- ▶ None of the given

Question No: 16 (M a r k s: 1)

Unlike Frame Relay and ATM, SMDS (Switched multi-megabit Data service) offers_____ .

▶ [Connectionless service paradigm](#) (Computer Networks and Internets, page112)

- ▶ Connection oriented service paradigm
- ▶ Both Connectionless and Connection-oriented service paradigm
- ▶ None of the given

Question No: 17 (M a r k s: 1)

A network with throughput T and delay D has a total of _____ bit in transit at any time.

- ▶ T / D
- ▶ [T x D](#) (Computer Networks and Internets, page203)
- ▶ T + D
- ▶ None of the given

Question No: 18 (M a r k s: 1)

ATM is designed to work on_____.

- ▶ Twisted Pair
- ▶ Coaxial
- ▶ Radio Frequency
- ▶ [Fiber](#) (Computer Networks and Internets, page 72)

Question No: 19 (M a r k s: 1)

Computers attached to an Ethernet use ----- in which a computer waits for the ether to be idle before transmitting a frame.

▶ [CSMA/CD](#) (Computer Networks and Internets, page 93)

- ▶ CSMA/CA
- ▶ TOKEN PASSING
- ▶ None of the given

Question No: 20 (M a r k s: 1)

FDDI can transmits data at a rate of -----

▶ [100 million bits per second](#) (Page 314)

- ▶ 10 million bits per second
- ▶ 1000 million bits per second
- ▶ None of the given

**CS610- Computer Network
MIDTERM EXAMINATION
Spring 2010**

Question No: 1 (M a r k s: 1)

In Point-to-Point topology there are two topologies.

- ▶ Star and Tree
- ▶ Tree and Ring
- ▶ Star and Ring

▶ [Star and Tree](#) (Page 5)

- ▶ None of the given

Question No: 2 (M a r k s: 1)

----- Program sends a message to a remote computer and reports whether the computer responds.

▶ [Ping](#) (Computer Networks and Internets, page9)

- ▶ Traceroute
- ▶ ICMP
- ▶ Non of the given

Question No: 3 (M a r k s: 1)

----- has no way to determine the cause of the problem.

▶ ICMP

▶ [Ping](#) (Computer Networks and Internets, page 11)

- ▶ Trace route
- ▶ Non of the given

Question No: 4 (M a r k s: 1)

The term----- refers to the general concept of a small block of data

▶ **Packet** (Page 16)

- ▶ Frame
- ▶ Data
- ▶ None of the given

Question No: 5 (M a r k s: 1)

----- scheme, which is designed to help detect transmissions errors, send one extra bit of information with each character

▶ **Parity** (Computer Networks and Internets, page 77)

- ▶ Checksums
- ▶ CRC
- ▶ None of given

Question No: 6 (M a r k s: 1)

Local Talk is a LAN technology that employs -----

▶ **Bus topology** (Page 30)

- ▶ Ring topology
- ▶ Star topology
- ▶ None of the given

Question No: 7 (M a r k s: 1)

Most LANs that employ ring topology use an access mechanism known as-----

- ▶ CSMA/CD
- ▶ CSMA/CA

▶ **TOKEN PASSING** (Computer Networks and Internets, page95) rep

- ▶ None of the given

Question No: 8 (M a r k s: 1)

Ethernet uses a ----- bit static addressing scheme in which each device is assigned a unique address by the manufacturer.

- ▶ 64
- ▶ **48** (Computer Networks and Internets, page 109)
- ▶ 32
- ▶ 8

Question No: 9 (M a r k s: 1)

Formally named _____ informally known as the thick wire Ethernet or Thick net.

- ▶ 10 Base 2
- ▶ [10 Base 5](#) (Computer Networks and Internets, page 120)
- ▶ 10 Base T
- ▶ None of the given

Question No: 10 (M a r k s: 1)

Formally named _____ informally known as the twisted pair Ethernet or TP Ethernet.

- ▶ 10 Base 2
- ▶ 10 Base 5
- ▶ [10 Base T](#) (Page 43) rep
- ▶ None of the given

Question No: 11 (M a r k s: 1)

The maximum size of an Ethernet segment is _____

- ▶ 250 meters
- ▶ [500 meters](#) (Page 27)
- ▶ 700 meters
- ▶ None of the given

Question No: 12 (M a r k s: 1)

A Bridge can _____

- ▶ Filter a frame
- ▶ Forward a frame
- ▶ Extend a LAN
- ▶ [Do all the above](#) rep [Click here For Detail](#)

Question No: 13 (M a r k s: 1)

_____ computes shortest paths in a graph by using weights on edges as a measure of distance.

- ▶ Greedy algorithm
- ▶ Distance vector algorithm
- ▶ [Dijkstra's algorithm](#) (Computer Networks and Internets, page112) rep
- ▶ Non of the given

Question No: 14 (M a r k s : 1)

_____ is used for compressed audio and video where the data rate depends on the level of compression that can be achieved.

- ▶ Constant Bit Rate (CBR) service
- ▶ [Variable Bit Rate \(VBR\) service \(Page 71\)](#)
- ▶ Available Bit Rate (ABR) service
- ▶ None of the given

Question No: 15 (M a r k s : 1)

Basic LAN technologies such as Ethernet, Token Ring, and FDDI use a _____.

- ▶ [Connectionless service paradigm \(Computer Networks and Internets, page112\)](#)
- ▶ Connection-oriented service paradigm
- ▶ Both Connectionless and Connection-oriented service paradigm
- ▶ None of the given

Question No: 16 (M a r k s : 1)

The product of delay and throughput measures the _____ of data that can be present on the network.

- ▶ Area
- ▶ [Volume \(Page 80\)](#)
- ▶ Length
- ▶ None of the given

Question No: 17 (M a r k s : 1)

A network with throughput T and delay D has a total of _____ bit in transit at any time.

- ▶ T / D
- ▶ [T x D \(Computer Networks and Internets, page203\) rep](#)
- ▶ T + D
- ▶ None of the given

Question No: 18 (M a r k s : 1)

One repeater _____, two repeaters _____ the maximum cable length limitation.

- ▶ [doubles, triple \(Page 49\)](#)
- ▶ square roots, cube roots
- ▶ and, triple
- ▶ doubles, cancel

Question No: 19 (Marks: 1)

A network uses a ----- if all computers attach to a central point

▶ [Star Topology](#) (Page 25)

- ▶ Ring Topology
- ▶ Bus Topology
- ▶ None of the given

Question No: 20 (Marks: 1)

Computers attached to an Ethernet use ----- in which a computer waits for the other to be idle before transmitting a frame.

▶ [CSMA/CD](#) (Computer Networks and Internets, page 93) rep

- ▶ CSMA/CA
- ▶ TOKEN PASSING
- ▶ None of the given

**CS610- Computer Network
MIDTERM EXAMINATION
Fall 2008**

Question No: 1 (Marks: 1) - Please choose one

A typical port on an ATM switch operates at _____ or higher.

- ▶ OC-2 speed (155Mbps)
- ▶ OC-3 speed (100Mbps)
- ▶ [OC-3 speed \(155Mbps\)](#) (Page 72)
- ▶ OC-3 speed (155Gbps)

Question No: 2 (Marks: 1) - Please choose one

The product of delay and throughput measures the _____ of data that can be present on the network.

- ▶ Area
- ▶ [Volume](#) (Page 80) rep
- ▶ Length
- ▶ None of the given

Question No: 3 (Marks: 1) - Please choose one

_____ is used for compressed audio and video where the data rate depends on the level of compression that can be achieved.

- ▶ Constant Bit Rate (CBR) service
- ▶ [Variable Bit Rate \(VBR\) service](#)(Page 71) rep
- ▶ Available Bit Rate (ABR) service
- ▶ None of the given

Question No: 4 (Marks: 1) - Please choose one

Which of the following is a connecting device?

- ▶ Bridge
- ▶ Repeater
- ▶ Hub

▶ [All the given](#) [Click here for Detail](#)

Question No: 5 (Marks: 1) - Please choose one

A bridges function in the _____ layer(s).

▶ [Physical \(MAC\)](#) [rep](#) [Click here for Detail](#)

- ▶ Data link
- ▶ Network
- ▶ Physical (MAC) and Data link

Question No: 6 (Marks: 1) - Please choose one

IEEE LLC/SNAP header is -----, which is used to specify the type of data.

▶ [8 \(Computeroctets Networks and Internets, page112\)](#) [rep](#)

- ▶ 8 bytes
- ▶ 8 bits
- ▶ None of the given

Question No: 7 (Marks: 1) - Please choose one

The third field of the header consists of ----- bit Ethernet frame type.

- ▶ 48
- 2 ▶ 3

▶ [\(Computer▶ 16 Networks and Internets, page110\)](#)

- ▶ 8

Question No: 8 (Marks: 1) - Please choose one

An -----method, the network hardware designers specify how type information is included in the frame and the value use to identify various frame types.

▶ [Explicit frame\(Pagtype 35\)](#)

- ▶ Ideal frame type
- ▶ Implicit frame type
- ▶ None of the given

Question No: 9 (Marks: 1) - Please choose one

Local Talk is a LAN technology that employs -----

- ▶ Star topology

▶ [Bus topology\(Page 30\)](#) [rep](#)

- ▶ Ring topology
- ▶ None of the given

Question No: 10 (Marks: 1) - Please choose one

The Fast Ethernet hardware operates at a rate of -----

- ▶ 10 Mbps
- ▶ [100 Mbps\(Page 27\)](#)
- ▶ 1000 Mbps
- ▶ None of the given

Question No: 11 (Marks: 1) - Please choose one

----- scheme, which is designed to help detect transmissions errors, send one extra bit of information with each character

- ▶ [Parity\(Computer Networks and Internets, page 77\) rep](#)
- ▶ Checksums
- ▶ CRC
- ▶ None of given

Question No: 12 (Marks: 1) - Please choose one

Computer networks are often called ----- because they use packet technology.

- ▶ Ethernet
- ▶ Switch networks
- ▶ [Packet networks\(Computer Networks and Internets, page 73\) rep](#)
- ▶ None of the given

Question No: 13 (Marks: 1) - Please choose one

----- Program sends a message to a remote computer and reports whether the computer responds.

- ▶ [Ping \(Computer Networks and Internets, page 9\) rep](#)
- ▶ Traceroute
- ▶ ICMP
- ▶ Non of the given

Question No: 14 (Marks: 1) - Please choose one

In -----, network occupies larger areas like cities & countries.

- ▶ LAN
- ▶ [WAN \(Page 4\)](#)
- ▶ MAN
- ▶ None of the given

Question No: 15 (Marks: 1) - Please choose one

In -----, network occupies the smaller area like a room a floor or a building

- ▶ [LAN\(Page 4\)](#)
- ▶ WAN
- ▶ MAN
- ▶ None of the given

Question No: 16 (Marks: 1) - Please choose one

In Point-to-Point topology there are two topologies.

- ▶ Tree and Ring
- ▶ Star and Ring
- ▶ [Star and Tree\(Page 5\)](#)
- ▶ None of the given

**CS610- Computer Network
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Fall 2008**

Question No: 1 (Marks: 1) - Please choose one

_____ has a jitter zero

- ▶ None of the given
- ▶ Virtual Private Network
- ▶ Isochronous Network
- ▶ [Asynchronous Network \(Page 66\)](#)

Question No: 2 (Marks: 1) - Please choose one

Unlike Frame Relay and ATM, SMDS (Switched multi-megabit Data service) offers_____ .

- ▶ [Connectionless service paradigm \(Computer Networks and Internets, page112\)](#)
- ▶ Connection oriented service paradigm
- ▶ Both Connectionless and Connection-oriented service paradigm
- ▶ None of the given

Question No: 3 (Marks: 1) - Please choose one

ATM assigns each VC a _____ identifier that is divided two parts to produce a hierarchy.

- ▶ 21-bit
- ▶ 22-bit
- ▶ 23-bit
- ▶ [24-bit \(Page 67\)](#)

Question No: 4 (Marks: 1) - Please choose one

Most WAN systems include a mechanism that can be used to eliminate the common case of duplication routing is called_____

▶ Hierarchal address

▶ [Default route](#) (Computer Networks and Internets, page172)

▶ Shortest path ▶

▶ None of the given

Question No: 5 (Marks: 1) - Please choose one

The next hop to which a packet is sent depends only on

▶ [Packet's destination](#) (Computer Networks and Internets, page169)

▶ Packet's original source

▶ Path the packet has taken

▶ Non of the given

Question No: 6 (Marks: 1) - Please choose one

An interface for twisted pair Ethernet must have an _____ connector , and must generate signals according to the _____ specification.

▶ [RJ-45, 10 Base T](#) (Computer Networks and Internets, page 126) rep

▶ RJ-45, 10 Base 5

▶ BNC, 10 Base 2

▶ BNC, 10 Base T

Question No: 7 (Marks: 1) - Please choose one

When an application----- data, it makes a copy of the data available to all other computers on the network.

▶ [Broadcasting](#) [Click here for Detail](#)

▶ Multicasting ▶

▶ Unicasting ▶ None

▶ of the given

Question No: 8 (Marks: 1) - Please choose one

A----- provide a mechanism that a customer can use to set a physical address.

▶ Static addressing scheme

▶ [Configurable addressing scheme](#) (Page 34)

▶ Dynamic addressing scheme

▶ None of the given

Question No: 9 (Marks: 1) - Please choose one

FDDI can transmits data at a rate of-----

▶ [100 million bits per second](#) (Page 314) rep

- ▶ 100 million bits per second
- ▶ 100 million bits per second
- ▶ None of the given

Question No: 10 (Marks: 1) - Please choose one

Computers attached to an ether use----- in which a computer waits for the ether to be idle before transmitting a frame.

▶ [CSMA/CD](#) (Computer Networks and Internets, page 93) rep

- ▶ CSMA/CA
- ▶ TOKEN PASSING
- ▶ None of the given

Question No: 11 (Marks: 1) - Please choose one

----- have advantages arisen from the size and ease of computation.

- ▶ CRC
- ▶ [Parity](#) (Page 19) rep
- ▶ Checksums
- ▶ None of given

Question No: 12 (Marks: 1) - Please choose one

The term----- is used to denote the definition of a packet used with a specific type of network.

- ▶ Packet
- ▶ [rameF](#) (Computer Networks and Internets, page 73)
- ▶ Data
- ▶ None of the given

Question No: 13 (Marks: 1) - Please choose one

----- has no way to determine the cause of the problem.

- ▶ [Ping](#) (Computer Networks and Internets, page 11) rep
- ▶ Trace route
- ▶ ICMP
- ▶ Non of the given

Question No: 14 (Marks: 1) - Please choose one

----- Program sends a message to a remote computer and reports whether the computer responds.

▶ **Ping** (Computer Networks and Internets, page9) rep

- ▶ Traceroute
- ▶ ICMP
- ▶ Non of the given

Question No: 15 (Marks: 1) - Please choose one

In-----, network occupies the smaller area like a room a floor or a building

▶ **LAN** (Page 4) rep

- ▶ WAN
- ▶ MAN
- ▶ None of the given

Question No: 16 (Marks: 1) - Please choose one

No error detection scheme is perfect because transmission errors can affect the additional information as well as the data.

▶ **True** (Computer Networks and Internets, page82)

- ▶ False

Cs610-computer Networks

Quiz (1 & 2) spring 2012

CS610: Quiz 1

Question # 2 of 10 (Start time: 10:29:56 PM) Total Marks: 1

A network that uses _____ usually consists of a single long cable to which computer attach.

Select correct option:

Star Topology

Ring Topology

Bus Topology (Page 26)

Bus and Ring Topology

Question # 3 of 10 (Start time: 10:30:16 PM) Total Marks: 1

Ethernet uses a ----- bit static addressing scheme in which each device is assigned a unique address by the manufacturer.

Select correct option:

64

48 rep

32

8

Question # 4 of 10 (Start time: 10:30:36 PM) Total Marks: 1

No error detection scheme is perfect because transmission errors can affect _____.

Select correct option:

Data

Additional Information

Additional information & data (Computer Networks and Internets, page82)

Transmission medium

Question # 5 of 10 (Start time: 10:30:58 PM) Total Marks: 1

Star topolgy is the kind of

Select correct option:

Tree topology

Point-to-point topology (Page 5)

Broadcast topolgy

Ring topology

Question # 6 of 10 (Start time: 10:31:12 PM) Total Marks: 1

The Gigabit Ethernet hardware operates at a rate of -----

Select correct option:

10 Mbps

100 Mbps

1000 Mbps [Click here for Detail](#)

1000 Gbps

Question # 7 of 10 (Start time: 10:31:34 PM) Total Marks: 1

Fixed network is a type of networks which is classified with respect to the.....factor

Select correct option:

Size

Connectivity

Medium

Mobility (Page 6)

Question # 8 of 10 (Start time: 10:31:44 PM) Total Marks: 1

A network uses _____ to arrange computers to be connected in a single closed loop.

Select correct option:

Star Topology

Dual Ring Topology

Ring Topology (Page 25)

Bus Topology

Question # 9 of 10 (Start time: 10:32:02 PM) Total Marks: 1

Hardware that calculates a CRC uses two simple components.

Select correct option:

AND unit and XOR unit

Shift register and XOR unit (Page 20)

Shift register & AND unit

Shift register and shift XOR unit

Question # 10 of 10 (Start time: 10:32:53 PM) Total Marks: 1

When an application ----- data, it makes a copy of the data available to all other computers on the network.

Select correct option:

Broadcasting rep

Multicasting

Unicasting

None of the given

CS610: Quiz 1

Question # 1 of 10 (Start time: 09:55:01 PM) Total Marks: 1

Fixed network is a type of networks which is classified with respect to the.....factor

Select correct option:

Size

Connectivity

Medium

Mobility **rep**

Question # 2 of 10 (Start time: 09:55:38 PM) Total Marks: 1

----- is also called self healing network

Select correct option:

ATM

FDDI [Click here for detail](#)

Token Ring

None of the given

Question # 3 of 10 (Start time: 09:56:01 PM) Total Marks: 1

Local Talk is a LAN technology that employs -----

Select correct option:

Star topology

Bus topology **rep**

Ring topology

Ethernet

Question # 4 of 10 (Start time: 09:56:26 PM) Total Marks: 1

Some applications have large data transfer. In this way they hold the network for long time.this problem can be eliminated by

Select correct option:

Divide the application into small block or chunks called 'Packets'.

Divide the application into small block or chunks called 'Segments'.

Divide the data into small block or chunks called 'Segments'.

Divide the data into small block or chunks called 'Packets'. (Page 14)

Question # 5 of 10 (Start time: 09:56:54 PM) Total Marks: 1

For how much time would other computers be in wait while one computer was transferring 56MB file with packet size of 1000 bytes and transmission speed of 56Kbps

Select correct option:

0.143 sec **(Page 15)**

0.243 0.343

0.343 0.343

0.443 0.343

Question # 6 of 10 (Start time: 09:57:20 PM) Total Marks: 1

The Gigabit Ethernet hardware operates at a rate of -----

Select correct option:

10 Mbps

100 Mbps

1000 Mbps **rep**

1000 Gbps

Question # 7 of 10 (Start time: 09:57:37 PM) Total Marks: 1

The Fast Ethernet hardware operates at a rate of -----

Select correct option:

1000 bps

100 Mbps [Click here for detail](#)

10 Mbps

1000 Mbps

Question # 8 of 10 (Start time: 09:57:52 PM) Total Marks: 1

----- which is designed to help detect transmissions errors, send one extra bit of information with each character.

Select correct option:

Checksum

CRC

Parity **rep**

VRC

Question # 9 of 10 (Start time: 09:58:30 PM) Total Marks: 1

LAN that use ATM technology have a -----

Select correct option:

Bus topology

Star topology **(Page 31)**

Ring topology

Mesh Topology

Question # 10 of 10 (Start time: 09:58:58 PM) Total Marks: 1

FDDI can transmits data at a rate of -----

Select correct option:

3 million bits per second

1000 million bits per second

10 million bits per second

100 million bits per second **rep**

CS610: Quiz 1

Question # 1 of 10 (Start time: 11:14:05 PM) Total Marks: 1

----- is also called self healing network

Select correct option:

ATM

FDDI **rep**

Token Ring

None of the given

Question # 2 of 10 (Start time: 11:15:34 PM) Total Marks: 1

Most LANs that employ ring topology use an access mechanism known as-----

Select correct option:

CSMA/CD

CSMA/CA

CSMA

TOKEN PASSING **rep**

Question # 3 of 10 (Start time: 11:16:55 PM) Total Marks: 1

An ----- method, the network hardware designers specify how type information is included in the frame and the value use to identify various frame types.

Select correct option:

Explicit frame type **rep**

Ideal frame type

Implicit frame type

None of the given

Question # 4 of 10 (Start time: 11:17:47 PM) Total Marks: 1

Hardware that calculates a CRC uses two simple components.

Select correct option:

AND unit and XOR unit

Shift register and XOR unit **rep**

Shift register & AND unit

Shift register and shift XOR unit

Question # 5 of 10 (Start time: 11:18:59 PM) Total Marks: 1

The Ethernet standard specifies that frames are sent using the -----

Select correct option:

Differential Manchester
Not Return to Zero (NRZ)

Manchester Encoding (Page 27)

Return to Zero (RZ)

Question # 6 of 10 (Start time: 11:20:08 PM) Total Marks: 1

When an application ----- data, it makes a copy of the data available to all other computers on the network.

Select correct option:

Broadcasting rep

Multicasting

Unicasting

None of the given

Question # 7 of 10 (Start time: 11:21:26 PM) Total Marks: 1

LAN interface may use ----- to copy frame data directly from main memory.

Select correct option:

DMA (Page 32)

FDDI

CSMA/CD

None of the given

Question # 8 of 10 (Start time: 11:22:19 PM) Total Marks: 1

LAN and WAN are classified according to their.....

Select correct option:

Size (Page 4)

Connectivity

Medium

Mobility

Question # 9 of 10 (Start time: 11:23:43 PM) Total Marks: 1

For how much time would other computers be in wait while one computer was transferring 56MB file with transmission speed of 56Kbps

Select correct option:

10 Sec [Click here for detail](#)

11 Sec

12 Sec

13 Sec

Question # 10 of 10 (Start time: 11:25:05 PM) Total Marks: 1

A network uses _____ to arrange computers to be connected in a single closed loop.

Select correct option:

- Star Topology
- Dual Ring Topology
- Ring Topology** **rep**
- Bus Topology

CS610: Quiz 2

Question # 1 of 10 (Start time: 10:52:55 PM) Total Marks: 1
_____network topology is a bus but wiring topology is a star

Select correct option:

- 10Base-T** **(Page 44)**
- Ring
- 10Base-W
- Star

Question # 2 of 10 (Start time: 10:53:05 PM) Total Marks: 1
ATM is also called-----

Select correct option:

- Label rewriting
- Label switching system
- Label rewriting and label switching system** **(Page 68)**
- All of above

Question # 3 of 10 (Start time: 10:53:26 PM) Total Marks: 1
The most important task a bridge performs is _____

Select correct option:

- Packet switching
- Line controlling
- Noise controlling
- Frame filtering** **(Page 50)**

Question # 4 of 10 (Start time: 10:53:41 PM) Total Marks: 1
ABR stands for.....

Select correct option:

- Asynchronous Bit Rate
- Asynchronous Byte Recovery
- Asynchronous Bit Redundancy
- Available Bit Rate** **(Page 71)**

Question # 5 of 10 (Start time: 10:53:57 PM) Total Marks: 1

What will be the bandwidth rate for short distance 10Base-T?

Select correct option:

16 MHz

20 MHz (Computer Networks and Internets, page 128)

100 MHz

150 MHz

Question # 6 of 10 (Start time: 10:54:14 PM) Total Marks: 1

The maximum cable length of a LAN is _____

Select correct option:

Fixed (Page 48)

Unlimited

Fixed and Unlimited in different conditions

None of these

Question # 7 of 10 (Start time: 10:54:32 PM) Total Marks: 1

SMDS is.....

Select correct option:

Connectionless service (Page 65)

Connection oriented service

Used for delivering blocks of data

None of the above

Question # 8 of 10 (Start time: 10:54:46 PM) Total Marks: 1

All destinations on same switch have same

Select correct option:

Router

Information

Next hop (Page 58)

None of the above

Question # 9 of 10 (Start time: 10:55:04 PM) Total Marks: 1

If a link or a packet switch fails then which one of the following would possibly be happened?

Select correct option:

Link would be reestablished

Request to change failed hardware would appear

The packet switch will modify the tables (Page 63)

None of the above

Question # 10 of 10 (Start time: 10:55:34 PM) Total Marks: 1

..... is effectively a very short Ethernet with very long AUI cables. It can be connected into larger Ethernet Select correct option:

RJ-45

HUBS (Page 43)

10Base-T

None of these

Helping Material

Cs610- Computer Networks By Hammad Khalid Khan

Computer Networks and Internets with Internet Applications, 4/e (With CD) By Comer

Question No: 1(M a r k s: 1)

A ----- Relies on the hardware manufacturer to assign a unique physical address to each network interface.

▶Static addressing scheme (Page 34)

- ▶Configurable addressing scheme
- ▶Dynamic addressing scheme
- ▶None of the given

Question No: 2 (M a r k s: 1)

An interface for thin Ethernet must have an connector, and must enerate signals according to the specification.

- ▶RJ-45, 10 Base T
- ▶RJ-45, 10 Base 5
- ▶BNC, 10 Base 2

(CS610 Reference Book , Page 21)

- ▶BNC, 10 Base T

Question No: 3(M a r k s: 1)

A system with redundant bridges might have a problem with in the system.

- ▶Loop

[Click here for detail](#)

- ▶Filters
- ▶Spanning Trees
- ▶All given choices

Question No: 4(M a r k s: 1)

A Bridge can

- ▶Filter a frame
- ▶Forward a frame
- ▶Extend a LAN

Do the all

▶Do all the [Click here for detail](#)

Question No: 5(M a r k s: 1)

is used for typical data applications (where the data rate may be unknown and bursty) and allows use of whatever bandwidth is available at a given time.

- ▶Constant Bit Rate (CBR) service
- ▶Variable Bit Rate (VBR) service

▶**Available Bit Rate (ABR) service (Page 71)**

▶None of the given

Question No: 6(M a r k s: 1)

ATM assigns each VC a

identifier that is divided two parts to produce a hierarchy.

▶21-bit

▶22-bit

▶23-bit

▶**24-bit (Page 67)**

Question No: 7(M a r k s: 1)

of TCP/IP layering model, corresponds to basic network hardware.

▶**Physical Layer (Page 84)**

▶Network Interface Layer

▶Internet Layer

▶Transport Layer

Question No: 8(M a r k s: 1)

places the boundary between the second and third octets

▶Class A

▶**Class B (Computer Networks and Internets, page235)**

▶Class C

▶Class D

Question No: 9(M a r k s: 1)

UDP and TCP are both_
layer protocols

▶Physical

▶Data link

▶Network

▶Transport (Page 101) Question No: 10(M a r k s: 1)

Connection-oriented service, Point-to-point, Complete reliability, Full-duplex communication, Stream interface, Reliable connection startup and Graceful connection shutdown are the services provided by

▶IP

▶None of the given

▶TCP (Page 123)

▶UDP

Question No: 11(M a r k s: 1)

protocols of TCP/IP layering model specify how to ensure reliable transfer.

- ▶Physical Layer
- ▶Network Interface Layer
- ▶Internet Layer
- ▶**Transport Layer (Page 84)**

Question No: 12(M a r k s: 1)

identifies which application program on receiving computer should receive the data

- ▶Logical address
- ▶Source port
- ▶**Destination Port (Computer Networks and Internets, page313)**
- ▶None of the given

Question No: 13(M a r k s: 1)

identifies the application program that sent the data.

- ▶Destination Port
 - ▶**Source port**
- (Computer Networks and Internets, page313)**
- ▶Logical address
 - ▶None of the given

Question No: 14(M a r k s: 1)

Which of the following are interior routing protocols?

▶RIP

▶OSPF

▶BGP

▶RIP and OSPF

[Click here for detail](#)

Question No: 15(M a r k s: 1)

The Border Gateway Protocol (BGP) uses

for all communication

▶UDP

▶TCP

[Click here for detail](#)

▶Both UDP and TCP

▶None of the given

Question No: 16(M a r k s: 1)

measures distance in network hops, where each network between the source and destination counts as single hop.

▶BGP

▶OSPF

▶RIP

(Page 138)

▶None of the given

Question No: 17(M a r k s : 1)

OSPF is based on

▶Distance vector routing

▶Link state routing

(Page 140)

▶Path vector routing

▶Distance vector routing and Link state routing

Question No: 18(M a r k s : 1)

performs local multicast and uses IP-in-IP encapsulation to send multicast datagrams from one site on the Internet to another.

▶Distance Vector Multicast Routing Protocol (DVMRP) (Page 144)

▶Core Based Trees (CBT)

▶Protocol Independent Multicast_ Sparse Mode (PIM-SM)

▶Protocol Independent Multicast _ Dense Mode (PIM-DM)

Question No: 19(M a r k s: 1)

The length of time required to send a variable length packet is variable and does not require a complicated interrupt scheme to detect completion of transmission.

▶True

▶False

(Page 72)

Question No: 20(M a r k s: 1)

NEXT HEADER field in the base header defines type of header and it appears at end of fixed-size base header.

▶True

(Page 112)

▶False

Question No: 21(M a r k s: 1)

Although message exchange can be used to bind addresses, sending a request for each binding is hopelessly inefficient.

▶True **(Page 99)**

▶False

Question No: 22(M a r k s: 1)

Address mask defines how many bits of address are in suffix.

▶True

▶False (Page 103)

Question No: 23(M a r k s : 1)

A computer attached to a given network can only communicate with other computers attached to the same network. Is this a problem with multiple networks?

▶True (Page 81)

▶False

Question No: 24(M a r k s : 1)

In the 1970s large organizations began to acquire multiple networks. Each network in the organization formed island. Employees needed to choose a computer appropriate for each task. So they needed multiple screens, keyboards and computers.

▶False

▶True (Page 81)

Question No: 25(M a r k s : 1)

The term self-identifying is used for Classful IP addresses because the class of the address can be computed from the address

.

▶itself

(Page 87)

▶prefix

▶suffix

▶mask

Question No: 26(M a r k s: 1)

In which method of Address Resolution Protocol the protocol address independent of hardware address?

Were "T" stands for Table lookup, "C" for Closed-form Computation and "D" for Data Exchange?

▶T, C

▶D

▶C

▶T, D (Page 97)

Question No: 27(M a r k s: 1)

In which method of Address Resolution Protocol the protocol address is determined by hardware address?

Were "T" stands for Table lookup, "C" for Closed-form Computation and "D" for Data Exchange?

▶T

▶D

▶C (Page 97)

▶T, C

Question No: 28(M a r k s: 1)

Reconstruction of original datagram is called reassembly.

▶True

(Page 28)

▶False

Question No: 29(M a r k s: 1)

A computer needs a complete stack of protocols to run either a client or a server.

▶True (Computer Networks and Internets, page 344)

▶False

Question No: 30(M a r k s: 1)

TCP uses

mechanism to control the flow of data.

▶door

▶window (Page 126)

▶acknowledgment

▶retransmission

FINAL TERM EXAMINATION

Spring 2010

CS610- Data Communication

Question No: 1 (Marks: 1) - Please choose one

In Direct point to point communication adding the Nth computer requires----- new connections.

▶None of the given

2

▶N

▶N-1

(Page 23)

▶ $(N^2 - N)/2$

Question No: 2 (Marks: 1) - Please choose one

In -----, network occupies the smaller area like a room a floor or a building

▶LAN

(Page 4)

▶WAN

▶MAN

▶None of the given

Question No: 3 (Marks: 1) - Please choose one

The third field of the header consists of ----- bit Ethernet frame type.

▶48

▶32

▶16

[Click here for detail](#)

▶8

Question No: 4 (Marks: 1) - Please choose one

The maximum size of an Ethernet segment is

–

▶250 meters

▶500 meters

[Click here for detail](#)

▶700 meters

▶None of the given

Question No: 5 (Marks: 1) - Please choose one

The network with Throughput T and Delay D has a total ----- bits in transit at a time.

▶D + T

▶D – T

▶D X T

(Computer Networks and Internets, page203)

▶D / T

Question No: 6 (Marks: 1) - Please choose one

places the boundary between the first and second octets

▶Class A

(Computer Networks and Internets, page235)

▶Class B

▶Class C

▶Class D

Question No: 7 (Marks: 1) - Please choose one

Router detects datagram ----- than network MTU and then it splits into pieces and each piece is -----than outbound network MTU.

▶larger, smaller

(Page 108)

▶larger, larger

▶smaller, larger

▶smaller, smaller

Question No: 9 (Marks: 1) - Please choose one

Connectionless service, Message-Oriented protocol, best-effort delivery service, arbitrary interaction & operating system independent are the characteristics of

▶TCP

▶UDP (Page 120)

▶P

▶None of the given

Question No: 10 (Marks: 1) - Please choose one

----- provide Application to application communication it also called end to end communication

▶P

▶TP (Page 119)

▶RIP

▶None of the given

Question No: 11 (Marks: 1) - Please choose one

A routing table contains_

▶The destination network ID

▶The hop count to reach the network

▶The router ID of the next hop (Page 102)

▶All of the given

Question No: 12 (Marks: 1) - Please choose one

Which of the following protocols allows the sender and receiver to enforce policies.

▶RIP

▶OSPF

▶BGP

(Reference Book 347)

▶RIP and OSPF

Question No: 13 (Marks: 1) - Please choose one

measures distance in network hops, where each network between the source and destination counts as single hop.

▶BGP

▶OSPF

▶RIP

(Page 138)

▶Non of these

Question No: 14 (Marks: 1) - Please choose one

includes a 32-bits address mask with each address, which allows the address to be classful, classless, or subnetted.

▶RIP

▶OSPF (Page 140)

▶BGP

▶None of the given

Question No: 15 (Marks: 1) - Please choose one

One repeater -----, two repeaters ----- the maximum cable length limitation.

▶Double, triple

(Page 49)

▶Double, 4 time

▶half, triple

▶Double, half

Question No: 16 (Marks: 1) - Please choose one

ICMP message transport is acted upon by getting ICMP encrypted in IP.

▶True (Page 117)

▶False

Question No: 17 (Marks: 1) - Please choose one

Like most application programs, a client and server use a transport protocol to communicate.

▶True

(Page 146)

▶False

Question No: 18 (Marks: 1) - Please choose one

Mapping between a protocol address and a hardware address is called Address Resolution.

▶True (Page 93)

▶False

Question No: 19 (Marks: 1) - Please choose one

Address mask defines how many bits of address are in suffix?

▶True

▶False (Page 103)

Question No: 20 (Marks: 1) - Please choose one

A single networking technology is best for all needs.

▶True

▶False (Page 81)

Question No: 21 (Marks: 1) - Please choose one

In the 1970s large organizations began to acquire multiple networks. Each network in the organization formed island. Employees needed to choose a computer appropriate for each task. So they needed multiple screens, keyboards and computers.

▶False

▶True (Page 81) rep

Question No: 22 (Marks: 1) - Please choose one

Router detects datagram-----than network MTU

▶Larger

(Page 108) rep

▶Smaller

▶None of given

▶Equal

Question No: 23 (Marks: 1) - Please choose one

Information can flow in either or both direction between

▶Clients

▶Clients and servers

(Computer Networks and Internets, page 344)

▶Servers

▶None of given

Question No: 24 (Marks: 1) - Please choose one

On of the design goals for unicast route propagation is

.

▶consistency

▶inconsistency

▶stability

(Computer Networks and Internets, page 344)

▶dynamic addressing

Question No: 25 (Marks: 1) - Please choose one

IPV6 address consists of

▶ 32 Bits

▶ 64 Bits

▶ **128 Bits (Page 128)**

▶ none of the given

Question No: 26 (Marks: 1) - Please choose one

UDP offers application programs a Message-Oriented Interface, applications can depend on protocol to preserve data boundaries.

▶ **True (Page 120)**

▶ False

Question No: 27 (Marks: 1) - Please choose one

In case TCP, retransmission, acknowledgment from a computer on LAN are expected to arrive within

▶ Seconds

▶ Micro seconds

▶ **Milliseconds**

Click here for detail

▶ Nanoseconds

Question No: 28 (Marks: 1) - Please choose one

Twice NAT is another variant of NAT. it is used with site that runs server. In this process NAT box is connected to Domain Name.

▶True

(Page 131)

▶False

Question No: 29 (Marks: 1) - Please choose one

A network uses a -----arranges for computers to be connected in a closed loop.

▶Star Topology

▶Ring Topology (Page 25)

▶Bus Topology

▶None of the given

Question No: 30 (Marks: 1) - Please choose one

Protocol addresses are abstractions provided by

.

▶hardware

▶software (Page 93)

▶operating system

▶internet

FINALTERM EXAMINATION

Fall 2008

CS610- Computer Network

Question No: 1 (Marks: 1) - Please choose one

In Direct point to point communication adding the Nth computer requires----- new connections.

▶None of the given

▶N²

▶N-1 (Page 23)

▶ $(N^2 - N)/2$

Question No: 2 (Marks: 1) - Please choose one

In Point-to-Point topology there are two topologies.

- ▶Tree and Ring
- ▶Star and Ring
- ▶**Star and Tree (Page 5)**
- ▶None of the given

Question No: 3 (Marks: 1) - Please choose one

In -----, network occupies the smaller area like a room a floor or a building

- ▶**LAN (Page 4)**
- ▶WAN
- ▶MAN
- ▶None of the given

Question No: 4 (Marks: 1) - Please choose one

Hardware that calculates a CRC uses two simple components.

- ▶AND unit and XOR unit

▶Shift register and XOR unit (Page 20)

▶Shift register and AND unit

▶None of the given

Question No: 5 (Marks: 1) - Please choose one

CRC can detect more errors than a simple checksum.

▶true

(Computer Networks and Internets, page 80)

▶false

Question No: 6 (Marks: 1) - Please choose one

The Gigabit Ethernet hardware operates at a rate of -----

▶10 Mbps

▶100 Mbps

▶**1000 Mbps**

[Click here for detail](#)

▶None of the given

Question No: 7 (Marks: 1) - Please choose one

Formally named

informally known as the twisted pair Ethernet or TP Ethernet.

▶10 Base 2

▶10 Base 5

▶**10 Base T (Page 43)**

▶None of the given

Question No: 8 (Marks: 1) - Please choose one

An interface for thin Ethernet must have an
connector , and must generate signals according to
the
specification.

▶**RJ-45, 10 Base T**

▶RJ-45, 10 Base 5

▶**BNC, 10 Base 2 (cs610 reference book Page 201)**

▶BNC, 10 Base T

Question No: 9 (Marks: 1) - Please choose one

A system with redundant bridges might have a problem with
in the system.

▶Loop

[Click here for detail](#)

rep

▶Filters

▶Spanning Trees

▶All given choices

Question No: 10 (Marks: 1) - Please choose one

computes shortest paths in a graph by using weights on edges as a measure of distance.

▶Greedy algorithm

▶Distance vector algorithm

▶Dijkstra's algorithm

(Computer Networks and Internets, page 112)

▶Non of the given

Question No: 11 (Marks: 1) - Please choose one

Basic LAN technologies such as Ethernet, Token Ring, and FDDI use a

.

▶Connectionless service paradigm

(Computer Networks and Internets, page 112)

▶Connection-oriented service paradigm

▶Both Connectionless and Connection-oriented service paradigm

▶None of the given

Question No: 12 (Marks: 1) - Please choose one

protocols of TCP/IP layering model specify how to ensure reliable transfer.

▶Physical Layer

▶Network Interface Layer

▶Internet Layer

▶**Transport Layer (Page 84) rep**

Question No: 13 (Marks: 1) - Please choose one

An Internet Address (IP address) is a unique binary number assigned to a host and used for all communication with host

- ▶48-bit
- ▶32-bit (Page 85)
- ▶24-bit
- ▶None of the given

Question No: 14 (Marks: 1) - Please choose one

The address

identifies the physical network to which the computer is attached, while the identifies an individual computer on that network.

- ▶prefix , suffix (Page 85)
- ▶suffix , prefix
- ▶suffix , suffix
- ▶None of the given

Question No: 15 (Marks: 1) - Please choose one

places the boundary between the first and second octets

▶**Class A (Computer Networks and Internets, page 235)**

▶Class B

▶Class C

▶Class D

Question No: 16 (Marks: 1) - Please choose one

places the boundary between the third and fourth octets.

▶Class A

▶Class B

▶**Class C**

(Computer Networks and Internets, page 235)

▶Class D

Question No: 17 (Marks: 1) - Please choose one

field of header indicates whether a datagram is a fragment or a complete datagram.

▶**FLAGS**

[Click here for detail](#)

▶FLAGMENT OFFSET

▶IDENTIFICATION

▶None of the given

Question No: 18 (Marks: 1) - Please choose one

provides connectionless service.

▶TCP

▶UDP (Page 120)

▶IP

▶None of the given

Question No: 19 (Marks: 1) - Please choose one

UDP and TCP are both_

layer protocols

▶Physical

- ▶Data link
- ▶Network
- ▶Transport (Page 101) rep

Question No: 20 (Marks: 1) - Please choose one

Connection-oriented service, Point-to-point, Complete reliability, Full-duplex communication, Stream interface, Reliable connection startup and Graceful connection shutdown are the services provided by

- ▶IP
- ▶None of the given
- ▶TCP (Page 123) rep
- ▶UDP

Question No: 21 (Marks: 1) - Please choose one

protocols of TCP/IP layering model specify how to ensure reliable transfer.

- ▶Physical Layer
- ▶Network Interface Layer
- ▶Internet Layer

►Transport Layer (Page 84) rep

Question No: 22 (Marks: 1) - Please choose one

identifies which application program on receiving computer should receive the data

►Logical address

►Source port

►Destination Port (Computer Networks and Internets, page313) rep

►None of the given

Question No: 23 (Marks: 1) - Please choose one

identifies the application program that sent the data.

►DestinationPort

►Source port

(Computer Networks and Internets, page313) rep

►Logical address

►None of the given

Question No: 24 (Marks: 1) - Please choose one

The Border Gateway Protocol (BGP) uses
for all communication

▶UDP

▶TCP [Click here for detail](#)

rep

▶Both UDP and TCP

▶None of the given

Question No: 25 (Marks: 1) - Please choose one

Which of the following protocols allows the sender and receiver to enforce policies.

▶RIP

▶OSPF

▶BGP

(Reference Book 347) rep

▶RIP and OSPF

Question No: 26 (Marks: 1) - Please choose one

uses distance vector approach to define routing

▶BGP

▶OSPF

▶RIP

(Computer Networks and Internets, page332)

▶None of the given

Question No: 27 (Marks: 1) - Please choose one

ICMP message transport is acted upon by getting ICMP encrypted in IP.

▶True (Page 117)

▶False

Question No: 28 (Marks: 1) - Please choose one

Protocol addresses are abstractions provided by

.

▶hardware

▶software (Page 93) rep

▶operating system

▶internet

Question No: 29 (Marks: 1) - Please choose one

These packets serve same purpose on

as frames on

▶Intranet, LAN

▶Internet, WAN

▶Intranet, WAN

▶**Internet, LAN (Page 101)**

Question No: 30 (Marks: 1) - Please choose one

Address mask defines how many bits of address are in suffix?

▶True

▶**False (Page 103) rep**

Question No: 31 (Marks: 1) - Please choose one

A single networking technology is best for all needs.

▶True

▶False (Page 81) rep

Question No: 32 (Marks: 1) - Please choose one

A computer attached to a given network can only communicate with other computers attached to the same network. Is this a problem with multiple networks?

▶True (Page 81) rep

▶False

Question No: 33 (Marks: 1) - Please choose one

The term self-identifying is used for Classful IP addresses because the class of the address can be computed from the address

▶itself (Page 87)

▶prefix

▶suffix

▶mask

Question No: 34 (Marks: 1) - Please choose one

Find the class of the address.

10100111 11011011 10001011 01101111

▶A

▶B (Computer Networks and Internets, page 122)

▶E

▶C

Question No: 35 (Marks: 1) - Please choose one

Find the class of the address:

11110011 10011011 11111011 00001111

▶A

▶C

▶E

(Computer Networks and Internets, page 122)

▶B

Question No: 36 (Marks: 1) - Please choose one

In which method of Address Resolution Protocol the protocol address is determined by hardware address?

Were "T" stands for Table lookup, "C" for Closed-form Computation and "D" for Data Exchange?

▶T

▶D

▶C

(Page 97) rep

▶T, C

Question No: 37 (Marks: 1) - Please choose one

Which method of Address Resolution Protocol requires hardware broadcast?

Were "T" stands for Table lookup, "C" for Closed-form Computation and "D" for Data Exchange?

▶D (Page 97)

▶T

▶C

▶T, D

Question No: 38 (Marks: 1) - Please choose one

Which method of Address Resolution Protocol resolution with minimum delay?

Were "T" stands for Table lookup, "C" for Closed-form Computation and "D" for Data Exchange?

▶T, D

▶C

▶T

▶T, C

(Page 97)

Question No: 39 (Marks: 1) - Please choose one

In which method of Address Resolution Protocol the implimentation is more difficult?

Were "T" stands for Table lookup, "C" for Closed-form Computation and "D" for Data Exchange?

▶T, C

▶T

▶C

▶D **(Page 97)**

Question No: 40 (Marks: 1) - Please choose one

One of the design goals for unicast route propagation is

.

▶Consistency

▶inconsistency

▶stability

(Computer Networks and Internets, page 344) rep

▶dynamic addressing

Question No: 41 (Marks: 1) - Please choose one

Propagation of multicast routing information differs dramatically from unicast route propagation?

▶True

(Computer Networks and Internets, page 335)

▶False

Question No: 42 (Marks: 1) - Please choose one

The IP multicast abstraction allows an application running on an arbitrary computer to leave a multicast group at any time. While

an application on a computer remains a member of a group.

▶One or more

▶only one

▶no

▶many

Question No: 43 (Marks: 1) - Please choose one

To save traffic, an EGP does not summarize routing information from the autonomous system before passing it to another autonomous system.

▶True

▶False (Computer Networks and Internets, page 329)

Question No: 44 (Marks: 1) - Please choose one

In IPv6 the type of address used for collection of computers with same prefix. Are known as

.

▶Anycast

▶Unicast

▶Multicast

▶Non of the given (Page 114)

Question No: 45 (Marks: 1) - Please choose one

Special types of addresses in IPv6 used for multiple destinations; possibly not at same site. Are known as

.

▶Unicast

▶Anycast

▶Multicast (Page 114)

▶Non of the given

Question No: 46 (Marks: 1) - Please choose one

UDP offers application programs a Message-Oriented Interface, applications can depend on protocol to preserve data boundaries.

▶True (Page 120) rep

▶False

Question No: 47 (Marks: 1) - Please choose one

Reliability is the responsibility of the
layer

▶Network

▶Datalink

▶Transport (Page 123)

▶Application

Question No: 48 (Marks: 1) - Please choose one

TCP uses

mechanism to control the flow of data.

▶door

▶window (Page 126) rep

▶acknowledgment

▶retransmission

TCP uses window mechanism to control the flow of data.

Question No: 49 (Marks: 1) - Please choose one

The time for acknowledgement to arrival of packet depends on.

▶Distance to destination and Current traffic conditions (Page 125)

▶Current traffic conditions

▶Distance to destination

▶non of these

Question No: 50 (Marks: 1) - Please choose one

FDDI can transmits data at a rate of -----

▶**100 million bits per second**

(Page 31)

▶10 million bits per second

▶1000 million bits per second

▶None of the given

FINALTERM EXAMINATION Fall 2008

CS610- Computer Network

Question No: 1

(M a r k s : 1)

Computer networks are often called ----- because they use packet technology.

▶Ethernet

▶Switch networks

▶**Packet networks**

(Computer Networks and Internets, page 73)

▶None of the given

Question No: 2

(M a r k s : 1)

A network uses a -----arranges for computers to be connected in a closed loop.

▶Star Topology

▶Ring Topology (Page 25) rep

▶Bus Topology

▶None of the given

Question No: 3

(M a r k s : 1)

An -----method, the network hardware designers specify how type information is included in the frame and the value use to identify various frame types.

▶Explicit frame type (Computer Networks and Internets, page 108)

▶Ideal frame type

▶Implicit frame type

▶None of the given

Question No: 4

(M a r k s : 1)

An interface for thin Ethernet must have an connector , and must generate signals according to the specification.

▶RJ-45, 10 Base T

▶RJ-45, 10 Base 5

▶BNC, 10 Base 2

(cs610 reference book Page 201) rep

▶BNC, 10 Base T

Question No: 5

(M a r k s : 1)

A Bridge forwards or filters a frame by comparing the information in its address table to the frame's

▶Layer 2 source address

▶Source node's physical address

▶**Layer 2 destination address**

Click here for detail

▶Layer 3 destination address

Question No: 6

(M a r k s : 1)

Most WAN systems include a mechanism that can be used to eliminate the common case of duplication routing is called

▶Hierarchal address

▶Default route

(Computer Networks and Internets, page 172)

▶Shortest path

▶None of the given

Question No: 7

(M a r k s : 1)

of TCP/IP layering model, corresponds to basic network hardware.

▶Physical Layer

(Page 84) rep

▶Network Interface Layer

▶Internet Layer

▶Transport Layer

Question No: 8

(M a r k s : 1)

protocols of TCP/IP layering model specify how to ensure reliable transfer.

▶Physical Layer

▶Network Interface Layer

▶Internet Layer

▶**Transport Layer**

(Page 84) rep

Question No: 9

(M a r k s : 1)

is called an end-to-end protocol because it provide a connection directly from an application on one computer to an application on a remote computer.

▶IP

▶UDP

▶**TCP**

(Computer Networks and Internets, page 306)

▶None of the given

Question No: 10

(M a r k s : 1)

uses distance vector approach to define routing

▶BGP

▶OSPF

▶RIP

(Computer Networks and Internets, page332) rep

▶None of the given

Question No: 11

(M a r k s : 1)

is ideal in a situation where the group is small and all members are attached to contiguous Local Area Networks.

▶Flood-and –Prune

(Page 143)

▶Configuration-and -Tunneling

▶Core-Based Discovery

▶None of the given

Question No: 12

(M a r k s : 1)

Router that decrements TTL to sends ICMP time exceeded message, with router's address as source address

▶3

▶2

▶1

▶0 (Page 118)

Question No: 13

(Marks: 1)

Protocol addresses are abstractions provided by

.

▶hardware

▶software (Page 93) rep

▶operating system

▶internet

Question No: 14

(Marks: 1)

Although message exchange can be used to bind addresses, sending a request for each binding is hopelessly inefficient.

▶True

(Page 99) rep

▶False

Question No: 15

(Marks: 1)

ARP is almost always used to bind a

-bit IP address to a

-bit Ethernet address.

▶32, 48 (Page 98)

▶24, 32

▶32, 64

▶32, 128

Question No: 16

(M a r k s : 1)

In the 1970s large organizations began to acquire multiple networks. Each network in the organization formed island. Employees needed to choose a computer appropriate for each task. So they needed multiple screens, keyboards and computers.

▶False

▶True

(Page 81) rep

Question No: 17

(M a r k s : 1)

In which method of Address Resolution Protocol the protocol address is determined by hardware address?

Were "T" stands for Table lookup, "C" for Closed-form Computation and "D" for Data Exchange?

Types of

Features

Resolution

Use full with any hardware

T

Address change affects all hosts T

Protocol address is determined

C

by hardware address

▶T

▶D

▶C (Page 97) rep

▶T, C

Question No: 18

(Marks: 1)

The general form of an IP datagram is with a header followed by data. The header contains information that controls where and how the datagram is to be sent.

▶True

(Computer Networks and Internets, page 332)

▶False

Question No: 19

(Marks: 1)

To save traffic, an EGP does not summarize routing information from the autonomous system before passing it to another autonomous system.

▶True

▶False

(Computer Networks and Internets, page 329)

Question No: 20

(M a r k s : 1)

Which of the following is a correct representation of the IPv6?

▶**105.220.136.100.255.255.255.255.0.0.18.128.140.10.255.255**

(Page 114)

▶105.220.136.100.255.255.255.256.0.0.18.128.140.10.255.255

▶105.220.136.100.255.255.255.255.0.0.18.128.140.10.255.255.256

▶105.220.136.100.255.255.255.255.0.0.18.128.140.10.255

FINALTERM EXAMINATION

Fall 2008

CS610- Computer Network

Question No: 1

(Marks: 1) - Please choose one

The number of connections needed for N computer in direct point to point communication is equal to:

▶ $(N^2 - N)/2$

(Page 23)

▶ $N(N - 1)$

▶ N^2

▶None of the given

Question No: 2

(Marks: 1) - Please choose one

When an application----- data, it makes a copy of the data available to all other computers on the network.

▶**Broadcasting**

Click here for detail

▶Multicasting

▶Unicasting

▶None of the given

Question No: 3

(Marks: 1) - Please choose one

Ethernet uses a ----- bit static addressing scheme in which each device is assigned a unique address by the manufacturer.

▶64

▶48

(Computer Networks and Internets, page 109)

▶32

▶8

Question No: 4

(Marks: 1) - Please choose one

A system with redundant bridges might have a problem with
in the system.

▶Loop

Click here for detail

rep

▶Filters

▶Spanning Trees

▶All given choices

Question No: 5

(Marks: 1) - Please choose one

The product of delay and throughput measures the
of data that can be present on the network.

▶Area

▶Volume

(Page 80) rep

▶Length

▶None of the given

Question No: 6

(Marks: 1) - Please choose one

Connectionless service, Message-Oriented protocol, best effort delivery service, arbitrary interaction and operating system independent are the characteristics of

▶TCP

▶UDP (Page 110)

▶IP

▶None of the given

Question No: 7

(Marks: 1) - Please choose one

Connection-oriented service, Point-to-point, Complete reliability, Full-duplex communication, Stream interface, Reliable connection startup and Graceful connection shutdown are the services provided by

▶None of the given

▶TCP (

Page 123) rep

▶UDP

▶IP

Question No: 8

(Marks: 1) - Please choose one

The process of using a routing table to select a next hop for a given datagram is called

- ▶Encapsulation
- ▶Reassembling
- ▶Routing or forwarding

(Computer Networks and Internets, page 265)

- ▶None of the given

Question No: 9

(Marks: 1) - Please choose one

uses distance vector approach to define routing

- ▶BGP
- ▶OSPF
- ▶RIP

(Computer Networks and Internets, page332) rep

- ▶None of the given

Question No: 10

(Marks: 1) - Please choose one

A multicast routing scheme in which the protocol software builds a delivery tree from a central point is called

▶Distance Vector Multicast Routing Protocol (DVMRP)

▶Core Based Trees (CBT)

(Page 114)

▶Protocol Independent Multicast_ *Sparse Mode (PIM-SM)*

▶Protocol Independent Multicast_ *Dense Mode (PIM-DM)*

Question No: 11

(Marks: 1) - Please choose one

One repeater

, two repeaters

the maximum cable length limitation.

▶doubles, cancel

▶doubles, triple

(Page 49) rep

▶square roots, cube roots

▶and, triple

Question No: 12

(Marks: 1) - Please choose one

Whenever it handles a packet, IP software needs to separate the destination address into a and

▶postfix, Infix

▶non of these

▶Infix, prefix

▶prefix, suffix

(Page 87)

Question No: 13

(Marks: 1) - Please choose one

Although message exchange can be used to bind addresses, sending a request for each binding is hopelessly inefficient.

▶True

(Page 99) rep

▶False

Question No: 14

(Marks: 1) - Please choose one

ARP is almost always used to bind a

-bit IP address to a

-bit Ethernet address.

▶32, 48

(Page 98)

▶24, 32

▶32, 64

▶32, 128

Question No: 15

(Marks: 1) - Please choose one

End-to-end delivery service is connection oriented.

▶True

▶False

(Page 101)

Question No: 16

(Marks: 1) - Please choose one

A single networking technology is best for all needs.

▶True

▶False

(Page 81) rep

Question No: 17

(Marks: 1) - Please choose one

In the 1970s large organizations began to acquire multiple networks. Each network in the organization formed island. Employees needed to choose a computer appropriate for each task. So they needed multiple screens, keyboards and computers.

▶False

▶True

(Page 81)

Question No: 18

(Marks: 1) - Please choose one

Which method of Address Resolution Protocol is useful with any hardware?

Were "T" stands for Table lookup, "C" for Closed-form Computation and "D" for Data Exchange?

▶T

(Page 97)

▶C

▶D

▶C, D

Question No: 19

(Marks: 1) - Please choose one

In which method of Address Resolution Protocol the protocol address is determined by hardware address?

Were "T" stands for Table lookup, "C" for Closed-form Computation and "D" for Data Exchange?

▶T

▶D

▶C

(Page 97) rep

▶T, C

Question No: 20

(Marks: 1) - Please choose one

We use the term

_ to refer to a measure of the path that routing software use when choosing a route.

▶routing path

▶routing metric

▶**routing**

(Computer Networks and Internets, page330)

▶switching

Question No: 1 (M - 1) :

In broadcast topology there are two categories_____.

- ▶ SATELLITE RADIO
- ▶ RING TOPOLOGY
- ▶ **Both a & b**
- ▶ None of the above

Question No: 2 (M - 1) :

The termrefers to the general concept of a small block of data

- ▶ **Packet**
- ▶ Frame
- ▶ Data
- ▶ None of the given

Question No: 3 (M - 1) :

The term ----- is used to denote the definition of a packet used with a specific type of network.

- ▶ Packet
- ▶ **Frame**
- ▶ Data
- ▶ None of the given

Question No: 4 (M - 1) :

- ▶ CRC can detect more errors than a simple checksum.....
- ▶ True
- ▶ False

Question No: 5 (M - 1) :

The Ethernet standard specifies that frames are sent using the -----Manchester

Question No: 6 (M - 1) :

Most LANs that employ ring topology use an access mechanism known as-----

- ▶ CSMA/CD
- ▶ CSMA/CA
- ▶ **TOKEN PASSING**
- ▶ None of the given

Question No: 7 (M - 1) :

An -----method, the network hardware designers specify how type information is included in the frame and the value use to identify various frame types.

- ▶ **Explicit frame type**
- ▶ Ideal frame type
- ▶ Implicit frame type
- ▶ None of the given

Question No: 8 (M - 1) :

IEEE LLC/SNAP header is -----, which is used to specify the type of data.

- ▶ **8 octets**

- ▶ 8 bytes
- ▶ 8 bits
- ▶ None of the given

Question No: 9 (M - 1) :

Formally named _____ informally known as the thick wire Ethernet or Thick net.

- ▶ 10 Base 2
- ▶ **10 Base 5**
- ▶ 10 Base T
- ▶ None of the given vuzs.net

Question No: 10 (M - 1) :

Most NICs contain _____ circuitry that allows the NIC to operate independent of the CPU.

Question No: 11 (M - 1) :

A bridges function in the _____ layers(s).

- ▶ Physical(MAC)
- ▶ **Data Link**
- ▶ Network
- ▶ Physical (MAC) and Datalink

Question No: 12 (M - 1) :

A Bridge forwards or filters a frame by comparing the information in its address table to the frame's _____

- ▶ Layer 2 source address
- ▶ Source node's physical address
- ▶ **Layer 2 destination address**

- ▶ Layer 3 destination address

Question No: 13 (M - 1) .

The next hop to which a packet is sent depends only on

- ▶ **Packet's destination**
- ▶ Packet's original source
- ▶ Path the packet has taken
- ▶ Non of the given

Question No: 14 (M - 1) .

_____ is used for compressed audio and video where the data rate depends on the level of compression that can be achieved.

- ▶ Constant Bit Rate (CBR) service
- ▶ **Variable Bit Rate (VBR) service**
- ▶ Available Bit Rate (ABR) service
- ▶ None of the given

Question No: 15 (M - 1) .

ATM assigns each VC a _____ identifier that is divided two parts to produce a hierarchy.

- ▶ 21-bit
- ▶ 22-bit
- ▶ 23-bit
- ▶ **24 bit**

Question No: 16 (M - 1) .

ATM was designed for _____ and use a _____

Question No: 17 (M - 1) .

The product of delay and throughput measures the _____ of data that can be present on the network.

- ▶ Area
- ▶ **Volume**
- ▶ Length
- ▶ None of the given

Question No: 18 (M - 1) :

A typical port on an ATM switch operates at _____ or higher.

- ▶ OC-2 speed (155Mbps)
- ▶ OC-3 speed (100Mbps)
- ▶ **OC-3 speed (155Mbps)**
- ▶ OC-3 speed (155Gbps)

Question No: 19 (M - 1) :

A- interface ---- provides mechanism that automatically assigns a physical address to a station when the station first boots.

Question No: 20 (M - 1) :

By size there are.....classifications of networks.

- ▶ 2
- ▶ 3
- ▶ 4
- ▶ 1

Question No: 1 (M - 1) :

No error detection scheme is perfect because transmission errors can affect the additional information as well as the data.

▶ **True**

▶ False

No error detection scheme is perfect because transmission errors can affect the additional information as well as the data. A cyclicly redundancy chcek, which is slightly more difficult to computer can detect more errors then a Parity or Check sum mechnasim.

Question No: 2 (M - 1) :

----- Program sends a message to a remote computer and reports whether the computer responds.

▶ **Ping**

- ▶ Traceroute
- ▶ ICMP
- ▶ Non of the given

Question No: 3 (M - 1) :

----- was especially concerned about the lack of high powered computers.

▶ [ARPA](#)

- ▶ IEEE
- ▶ EIA
- ▶ Non of the given

[The US Department of Defense Advanced Research Projects Agency \(ARPA\) was especially concerned about the lack of high-powered computers. Many of the ARPA research projects needed access to the latest equipment](#)

Question No: 4 (M - 1) :

The term ----- is used to denote the definition of a packet used with a specific type of network.

▶ Packet

▶ [Frame](#)

- ▶ Data
- ▶ None of the given

To help distinguish between the general idea of packet transmission and the specific definition of packets for a given hardware technology, we use the term frame to denote the definition of a packet used with a specific type of network. Thus one might refer the maximum amount of data a frame can hold or the order in which bits of a frame are sent across a network.

Question No: 5 (M - 1) :

Computer networks are often called ----- because they use packet technology.

- ▶ Ethernet
- ▶ Switch networks
- ▶ [Packet networks](#)
- ▶ None of the given

Question No: 6 (M - 1) :

----- have advantages arisen from the size and ease of computation.

- ▶ CRC
- ▶ Parity
- ▶ [Checksums](#)
- ▶ None of given

Question No: 7 (M - 1) :

Most LANs that employ ring topology use an access mechanism known as-----

- ▶ CSMA/CD
- ▶ CSMA/CA
- ▶ [TOKEN PASSING](#)
- ▶ None of the given

Most LANs that employ ring technology use an access mechanism known as *token passing*. A token ring operates as a single, shared medium. When a computer wants to send data, it must wait until it obtains the token, when it is in control of the ring

Question No: 8 (M - 1) :

IEEE LLC/SNAP header is -----, which is used to specify the type of data.

▶ [8 octets](#)

- ▶ 8 bytes
- ▶ 8 bits
- ▶ None of the given

Question No: 9 (M - 1) :

Formally named _____ informally known as the twisted pair Ethernet or TP Ethernet.

- ▶ 10 Base 2
- ▶ 10 Base 5

▶ [10 Base T](#)

- ▶ None of the given

twisted pair ethernet

- Formally called 10 Base –T
- Also twisted pair Ethernet or simply TP Ethernet

Question No: 10 (M - 1) :

An interface for twisted pair Ethernet must have an _____ connector , and must generate signals according to the _____ specification.

▶ [RJ-45, 10 Base T](#)

- ▶ RJ-45, 10 Base 5
- ▶ BNC, 10 Base 2
- ▶ BNC, 10 Base T

an interface for twisted pair Ethernet must have an RJ-45 connector, and must generate signals according to the 10BaseT specification. (P# 683 E-books)

Question No: 11 (M - 1) :

A bridges function in the _____ layers(s).

- ▶ Physical (MAC)
- ▶ Data link
- ▶ Network

▶ [Physical \(MAC\) and Data link](#)

Question No: 12 (M - 1) :

A Bridge can _____

- ▶ Filter a frame
- ▶ Forward a frame
- ▶ Extend a LAN

► **Do all the above**

A bridge is a hardware device also used to connect two LAN segments to extend a LAN. It listens to all traffic and recognizes frame format. It also forwards only correct complete frames and discards the collided and error frames.

The most important task a bridge performs is frame filtering.

Question No: 13 (M - 1) :

A Bridge forwards or filters a frame by comparing the information in its address table to the frame's _____

- Layer 2 source address
- Source node's physical address

► **Layer 2 destination address**

- Layer 3 destination address

Question No: 14 (M - 1) :

_____ computes shortest paths in a graph by using weights on edges as a measure of distance.

- Greedy algorithm
- Distance vector algorithm

► **Dijkstra's algorithm**

- Non of the given

Dijkstra's algorithm computes shortest paths in a graph by using weights on edge as a measure of distance. A path with the fewest number of edges may not be the path with least weight. (P# 173 e-books)

Question No: 15 (M - 1) :

_____ is used for audio and video, since these have predefined maximum data rates

► **Constant Bit Rate (CBR) service**

- Variable Bit Rate (VBR) service
- Available Bit Rate (ABR) service
- None of the given

CONSTANT BIT RATE (CBR):

It is used for audio and video, since these have predefined maximum data rates.

Question No: 16 (M - 1) :

Unlike Frame Relay and ATM, SMDS (Switched multi-megabit Data service) offers _____ .

► **Connectionless service paradigm**

- Connection oriented service paradigm
- Both Connectionless and Connection-oriented service paradigm
- None of the given

Switched Multi megabit Data Service (SMDS) is also a Telco service. It is a connection less service.

FRAME RELAY:

It is used for Telco service for delivering blocks of data. It is connection based Service ATM uses the concept of connection-oriented networking

Question No: 17 (M - 1) :

A network with throughput T and delay D has a total of _____ bit in transit at any time.

▶ T / D

▶ T x D

▶ T + D

▶ None of the given

A network with throughput T and delay D has a total of T x D bits in transit at any time. (e-books)

Question No: 18 (M - 1) :

ATM is designed to work on_____.

▶ Twisted Pair

▶ Coaxial

▶ Radio Frequency

▶ Fiber

ATM is designed to work on fiber (but can be used with twisted pair). (P# 72)

Question No: 19 (M - 1) :

Computers attached to an ethernet use ----- in which a computer waits for the ether to be idle before transmitting a frame.

▶ CSMA/CD

▶ CSMA/CA

▶ TOKEN PASSING

▶ None of the given

All computers attached to the Ethernet use CSMA/CD to co-ordinate their activities. A computer wishing to transmit checks for electrical activity on the cable, informally called a *carrier*. If there is no carrier, the computer can transmit. If a carrier is present, the computer waits for the sender to finish before proceeding

Question No: 20 (M - 1) :

FDDI can transmits data at a rate of -----

▶ 100 million bits per second

▶ 10 million bits per second

▶ 1000 million bits per second

▶ None of the given

Question No: 1 (M - 1) :

In Point-to-Point topology there are two topologies.

▶ Star and Tree

▶ Tree and Ring

▶ Star and Ring

▶ Star and Tree

▶ None of the given

In *Point-to-Point* topology there are two topologies.

1) STAR topology

2) TREE topology

Question No: 2 (M - 1) .

----- Program sends a message to a remote computer and reports whether the computer responds.

▶ **Ping**

- ▶ Traceroute
- ▶ ICMP
- ▶ Non of the given

Ping program tests reach ability. It sends datagram from B to A, that echoes back to B. it uses ICMP echo request and echo reply messages.

Question No: 3 (M - 1) .

----- has no way to determine the cause of the problem.

- ▶ ICMP
- ▶ **Ping**
- ▶ Trace route
- ▶ Non of the given

Ping has no way to determine the cause of the problem. Tracing A Route Network administrators use another tool, trace route.

Question No: 4 (M - 1) .

The term----- ----- refers to the general concept of a small block of data

▶ **Packet**

- ▶ Frame
- ▶ Data
- ▶ None of the given

Packet is a generic term that refers to small block of data. Packet have different format. Each hardware uses different packet format.

Question No: 5 (M - 1) .

----- scheme, which is designed to help detect transmissions errors, send one extra bit of information with each character

- ▶ **Parity**
- ▶ Checksums
- ▶ CRC
- ▶ None of given

A parity scheme, which is designed to help detect transmission errors, sends

one extra bit of information with each character. Although it allows receiver to determine if a single bit has been changed parity can not detect transmission errors that change an even number of bits.

Question No: 6 (M - 1) .

Local Talk is a LAN technology that employs -----

- ▶ **Bus topology**
- ▶ Ring topology
- ▶ Star topology
- ▶ None of the given

LOCAL TALK:

Apple invented the LAN technology that uses bus topology. Its interface is included with all Macintosh computers.

Question No: 7 (M - 1) .

Most LANs that employ ring topology use an access mechanism known as-----

- ▶ CSMA/CD
- ▶ CSMA/CA
- ▶ **TOKEN PASSING**
- ▶ None of the given

Most LANs that employ ring technology use an access mechanism known as *token passing*. A token ring operates as a single, shared medium. When a computer wants to send data, it must wait until it obtains the token, when it is in control of the ring

Question No: 8 (M - 1) .

Ethernet uses a ----- bit static addressing scheme in which each device is assigned a unique address by the manufacturer.

- ▶ 64
- ▶ **48**
- ▶ 32
- ▶ 8

Ethernet uses a 48-bit static addressing scheme

Question No: 9 (M - 1) .

Formally named _____ informally known as the thick wire Ethernet or Thick net.

- ▶ 10 Base 2
- ▶ **10 Base 5**
- ▶ 10 Base T
- ▶ None of the given

Thick Ethernet, officially known as 10 Base 5, is the oldest form of Ethernet. It was originally developed in the late 1970's by Digital Equipment Corporation, IBM, and Xerox, and became an international standard (IEEE 802.3) in 1983.

Question No: 10 (M - 1) .

Formally named _____ informally known as the twisted pair Ethernet or TP Ethernet.

- ▶ 10 Base 2
- ▶ 10 Base 5
- ▶ **10 Base T**
- ▶ None of the given

[twisted pair ethernet](#)

[Formally called 10 Base -T](#)

- [Also twisted pair Ethernet or simply TP Ethernet](#)

Question No: 11 (M - 1) .

The maximum size of an Ethernet segment is _____

- ▶ 250 meters
- ▶ **[500 meters](#)**
- ▶ 700 meters
- ▶ None of the given

One Ethernet cable is sometimes called a segment. This segment is limited to 500 meters in length. The minimum separation between connections is 3 meters. (P# 27)

Question No: 12 (M - 1) .

A Bridge can _____

- ▶ Filter a frame
- ▶ Forward a frame
- ▶ Extend a LAN
- ▶ **[Do all the above](#)**

A bridge is a hardware device also used to connect two LAN segments to extend a LAN. It listens to all traffic and recognizes frame format. It also forwards only correct complete frames and discards the collided and error frames.

The most important task a bridge performs is frame filtering.

Question No: 13 (M - 1) .

_____ computes shortest paths in a graph by using weights on edges as a measure of distance.

- ▶ Greedy algorithm
- ▶ Distance vector algorithm
- ▶ **Dijkstra's algorithm**
- ▶ Non of the given

Dijkstras algorithm computes shortest paths in a graph by using weights on edge as a measure of distance. A path with the fewest number of edges may not be the path with least weight. (P# 173 e-books)

Question No: 14 (M - 1) .

_____ is used for compressed audio and video where the data rate depends on the level of compression that can be achieved.

- ▶ Constant Bit Rate (CBR) service
- ▶ **Variable Bit Rate (VBR) service**
- ▶ Available Bit Rate (ABR) service
- ▶ None of the given

VARIABLE BIT RATE (VBR):

It is used for compressed audio and video where the data rate depends on the level of compression that can be achieved.

Question No: 15 (M - 1) .

Basic LAN technologies such as Ethernet, Token Ring, and FDDI use a _____.

▶ **Connectionless service paradigm**

- ▶ Connection-oriented service paradigm
- ▶ Both Connectionless and Connection-oriented service paradigm
- ▶ None of the given

Basic LAN technologies such as **Ethernet, Token Ring, and FDDI use a connectionless service paradigm.** Although a computer needs to wait for access to a shared medium before sending a packet

Question No: 16 (M - 1) .

The product of delay and throughput measures the _____ of data that can be present on the network.

- ▶ Area
- ▶ **Volume**
- ▶ Length
- ▶ None of the given

DELAY THROUPTUT PRODUCT:

It is computed as delay time multiplied by effective throughput. It measures

amount of data that can be present in the network (P# 80)

Question No: 17 (M - 1) .

A network with throughput T and delay D has a total of _____ bit in transit at any time.

- ▶ T / D
- ▶ **T x D**
- ▶ T + D
- ▶ None of the given

A network with throughput T and delay D has a total of T x D bits in transit at any time. (e-books)

Question No: 18 (M - 1) .

One repeater _____, two repeaters _____ the maximum cable length limitation.

- ▶ **doubles, triple**
- ▶ square roots, cude roots
- ▶ and, triple
- ▶ doubles, cancel

One repeater doubles, two repeaters triple the maximum cable length limitation. (P# 49)

Question No: 19 (M - 1) .

A network uses a ----- if all computers attach to a central point

- ▶ **Star Topology**
- ▶ Ring Topology

- ▶ Bus Topology
- ▶ None of the given

STAR TOPOLOGY:

In this topology, all computers are attached to a central point, which is sometimes called the "Hub" (P# 25)

Question No: 20 (M - 1) .

Computers attached to an ethernet use ----- in which a computer waits for the other to be idle before transmitting a frame.

▶ CSMA/CD

- ▶ CSMA/CA
- ▶ TOKEN PASSING
- ▶ None of the given

All computers attached to the Ethernet use CSMA/CD to co-ordinate their activities. A computer wishing to transmit checks for electrical activity on the cable, informally called a *carrier*. If there is no carrier, the computer can transmit. If a carrier is present, the computer waits for the sender to finish before proceeding.

_____ **has a jitter zero**
None of the given
Virtual Private Network
Isochronous Network
Asynchronous Network

Unlike Frame Relay and ATM, SMDS (Switched multi-megabit Data service) offers_____.

Connectionless service paradigm

Connection oriented service paradigm
Both Connectionless and Connection-oriented service paradigm
None of the given

ATM assigns each VC a _____ identifier that is divided two parts to produce a hierarchy.

- 21-bit
- 22-bit
- 23-bit

24-bit

The VC is identified by a 24-bit value formed from the VPI or Virtual Path Indicator (8-bit),

Most WAN systems include a mechanism that can be used to eliminate the common case of duplication routing is called _____

Hierarchical address

[Default route](#) Shortest path

None of the given

The next hop to which a packet is sent depends only on

[Packet's destination](#)

Packet's original source

Path the packet has taken

None of the given

An interface for twisted pair Ethernet must have a _____ connector, and must generate signals according to the _____ specification.

[RJ-45, 10 Base T](#)

RJ-45, 10 Base 5

BNC, 10 Base 2

BNC, 10 Base T

(zh,vuzs,nov10)

When an application _____ data, it makes a copy of the data available to all other computers on the network.

[Broadcasting](#)

Multicasting

Unicasting

None of the given

[When an application broadcasts data, it makes a copy of the data available to all other computers on the network. Broadcast has many uses. For example, suppose a computer needs to find one of the printers on the network](#)

A _____ provide a mechanism that a customer can use to set a physical address.

Static addressing scheme

[Configurable addressing scheme](#)

Dynamic addressing scheme

None of the given

[One of the advantages of a configurable addressing scheme becomes apparent when network interface hardware fails and must be replaced: unlike hardware that uses a static assignment, a configurable interface can be replaced](#)

-

FDDI can transmits data at a rate of _____

100 million bits per second

100 million bits per second

100 million bits per second

None of the given

FDDI: Fiber distributed data interconnect (FDDI) is another ring technology. Its most important features are:

It uses fiber optics between stations and transmits data at 100Mbps.

It uses pair of fibers to form two concentric rings.

Computers attached to an ether use ----- in which a computer waits for the ether to be idle before transmitting a frame.

CSMA/CD

CSMA/CA

TOKEN PASSING

None of the given

_____ has advantages arisen from the size and ease of computation.

CRC

Parity

Checksums

None of given

The chief advantages arise from the size and ease of computation. Most networks that employ a checksum technique use a 76-bit or J2-bit checksum, and compute a single checksum for an entire packet.

The term _____ is used to denote the definition of a packet used with a specific type of network.

Packet

Frame

Data

None of the given

To help distinguish between the general idea of packet transmission and the specific definition of packets for a given hardware technology, we use the term frame to denote the definition of a packet used with a specific type of network

_____ has no way to determine the cause of the problem.

Ping

Trace route

ICMP

Non of the given

Ping has no way to determine the cause of the problem. Another reason why ping may fail to generate a response is less subtle: some companies configure their site to reject ping packets.

_____ Program sends a message to a remote computer and reports whether the computer responds.

Ping

Trace route

ICMP

Non of the given

In _____, network occupies the smaller area like a room a floor or a building.

LAN

WAN

MAN

None of the given

A typical port on an ATM switch operates at _____ or higher.

▶ OC-2 speed (155Mbps)

▶ OC-3 speed (100Mbps)

▶ **OC-3 speed (155Mbps)**

▶ OC-3 speed (155Gbps)

A typical port on an ATM switch operates at OC-3 speed (155 Mbps) or higher, with the largest and most expensive switches handling much higher capacities

The product of delay and throughput measures the _____ of data that can be present on the network.

▶ Area

▶ Volume

▶ Length

▶ None of the given

To summarize: The product of delay and throughput measures the volume of data that can be present on the network. A network with throughput T and delay D can have a total of $T \times D$ bits in transit at any time

_____ is used for compressed audio and video where the data rate depends on the level of compression that can be achieved.

Constant Bit Rate (CBR) service

Variable Bit Rate (VBR) service

Available Bit Rate (ABR) service

None of the given

VARIABLE BIT RATE (VBR):

It is used for compressed audio and video where the data rate depends on the level of compression that can be achieved.

Which of the following is a connecting device?

Bridge

Repeater

Hub

All the given

A bridges function in the _____ layers(s).

Physical (MAC)

Data link

Network

Physical (MAC) and Data link ►

IEEE LLC/SNAP header is -----, which is used to specify the type of data.

8 octets

8 bytes

8 bits

None of the given

X Packet Type (PT), the five values of which were listed previously, in Table 7-2. The IEEE 802. IX Packet Body Length (PBL) follows the Packet Type. Because the LLC/SNAP header is eight octets long, and the IEEE 802

The third field of the header consists of ----- bit Ethernet frame type.

48

32

16

8

An -----method, the network hardware designers specify how type information is included in the frame and the value use to identify various frame types.

Explicit frame type

Ideal frame type

Implicit frame type

None of the given

EXPLICIT FRAME TYPE:

In this type the identifying value is included with frame describes types of included data.

Local Talk is a LAN technology that employs _____

Star topology

Bus topology

Ring topology

None of the given

Almost altogether network technologies use different wiring schemes. e.g., local talk uses hubs

(physical star) to simulate a bus topology.

The Fast Ethernet hardware operates at a rate of _____

10 Mbps

100 Mbps

1000 Mbps

None of the given

The Ethernet speed was originally 3Mbps, and the current standard is 10Mbps the fast Ethernet operates at 100Mbps. There are also gigabits Ethernet available now

_____scheme, which is designed to help detect transmissions errors, send one extra bit of information with each character

Parity

Checksums

CRC

None of given www.vuzs.net

Computer networks are often called ----- because they use packet technology.

Ethernet

Switch networks

Packet networks

None of the given

Computer networks are often called packet networks or packet switching networks because they use packet technology

- _____ Program sends a message to a remote computer and reports whether the computer responds.

Ping

Trace route

ICMP

Non of the given

The ping program sends a message to a remote computer and reports whether the computer responds; the traceroute program identifies intermediate computers along a path to a remote destination. Ping and traceroute software is included in

In _____ network occupies larger areas like cities & countries.

LAN

WAN

MAN

None of the given

In -----, network occupies the smaller area like a room a floor or a building.

LAN

WAN

MAN

None of the given

In *Point-to-Point* topology there are two topologies.

Tree and Ring

Star and Ring

Star and Tree

None of the given

POINT-TO-POINT:

In Point-to-Point topology there are two topologies.

1) STAR topology

2) TREE topology

1. If a computer on the network shares resources for others to use, it is called _____

- a. Server
- b. Client
- c. Mainframe

Answer : a

2. Terminators are used in _____ topology.

- a. Bus
- b. Star

Answer : a

3. In _____ topology, if a computer's network cable is broken, whole network goes down.

- a. Bus
- b. Star

Answer : a

4. For large networks, _____ topology is used.

- a. Bus
- b. Star
- c. Ring

Answer : b

5. ISO stands for

- a. International Standard Organization
- b. International Student Organization
- c. Integrated Services Organization

Answer : a

6. ISO OSI model is used in

- a. Stand alone PC
- b. Network environment

Answer : b

7. Network cable lies on _____ layer

- a. Application
- b. Network
- c. Physical

Answer : c

8. _____ layer decides which physical pathway the data should take.

- a. Application
- b. Network
- c. Physical

Answer : c

9. ISDN is an example of _____ network

- a. Circuit switched
- b. Packet switched

Answer : a

10. X.25 is an example of _____ network

- a. Circuit switched
- b. Packet switched

Answer : b

11. _____ allows LAN users to share computer programs and data.

- a. Communication server
- b. Print server
- c. File server

Answer : c

12. Print server uses _____ which is a buffer that holds data before it is send to the printer.

- a. Queue
- b. Spool
- c. Node

Answer : b

13. A standalone program that has been modified to work on a LAN by including concurrency controls such as file and record locking is an example of_____

- a. LAN intrinsic software
- b. LAN aware software
- c. Groupware
- d. LAN ignorant software

Answer : a

14. The _____ portion of LAN management software restricts access, records user activities and audit data etc.

- a. Configuration management
- b. Security management
- c. Performance management

Answer : b

15. What is the max cable length of STP?

- a. 100 ft
- b. 200 ft
- c. 100 m
- d. 200 m

Answer : d

16. What is the max data capacity of STP?

- a. 10 mbps
- b. 100 mbps
- c. 1000 mbps
- d. 10000 mbps

Answer : b

17. Which connector STP uses?

- a. BNC
- b. RJ-11
- c. RJ-45
- d. RJ-69

Answer : c

18. What is the central device in star topology?

- a. STP server
- b. Hub/switch
- c. PDC
- d. Router

Answer : b

19. What is max data capacity for optical fiber cable?

- a. 10 mbps
- b. 100 mbps
- c. 1000 mbps
- d. 10000 mbps

Answer : c

20. Which of the following architecture uses CSMA/CD access method?

- a. ARCnet
- b. Ethernet

Answer : b

Question # 1 of CBR stands for.....

Constant Byte Rate

Constant Bit Rate

Connection break Recovery

None of the above

CONSTANT BIT RATE (CBR):

It is used for audio and video, since these have predefined maximum data rates.

Question # 2 of

The routing table in interior and exterior switches has which one of the following?

It should have next hop for each possible destination

The next hop in table must be on shortest path to destination

Both (a) and (b)

None of the above

Question # 3 of 10

Which one of the following is a method for computing routing table information?

Manual entry

Static routing

Boot time routing

None of the above

How to compute routing table information:

Static routing - at boot time

Dynamic routing - allow automatic updates by a program

Question # 4 of 10

Which one of the following is the responsibility of Dijkstra' algorithm?

To compute the shortest path between two nodes

To extract next hop information from path information

To insert next hop information into routing table

All of the above

While computing shortest path, first we assume graph representation of network at each node then we use Dijkstra's algorithm to compute shortest path from each node to every other node. Then extract next hop information from resulting path information and insert next hop information into routing tables.

Question # 5 of 10

Routing table is used to keep the information about.....

Destination

Medium of transmission

Routers used in network

All of the above

The routing table contains list of destination networks and next hop for each destination.

Question # 6 of 10 (Start time: 04:48:43 PM) Total M - 1

Frame relay is.....

Connection oriented service

Connectionless service

It is typically ranges from 5Mbps to 1000Mbps.

None of the above

It is used for Telco service for delivering blocks of data. It is connection based service and must contract with Telco for circuit between two endpoints. It is typically 56kbps or 1.5Mbps and can run to 100Mbps.

Question # 7 of 10 (Start time: 04:49:43 PM) Total M - 1

Which of the following is not a guided medium?

Twisted-pair cable

Fiber-optic cable

Atmosphere

Coaxial cable

Question # 8 of 10

Which of the following statement is wrong regarding PVC?

PVC last as long as the customer pay the periodic fee for its use.

Forwarding tables are automatically restored after power of equipment failure.

Forwarding table entries for PVC's are dynamically configured.

All of the above are wrong

ATM can provide customers with virtual circuits that look like traditional leased digital circuits. Such permanent virtual circuits (PVC) last as long as the customer pay the periodic fee for its use. The forwarding tables are automatically restored after power of equipment failure. The forwarding table entries for such permanent VC's are statically configured, the terms used by Telco's for this is provisioning

Question # 9 of 10

Which of the following statement is true regarding ATM?

Select correct option:

ATM is a single technology that is designed to meet the goals of both LANs and WANs.

ATM uses the concept of connection-oriented networking.

Both (a) and (b)

None of the above

ATM is a single technology that is designed

to meet the goals of both LANs and WANs.

ATM uses the concept of connection-oriented networking

Question # 10 of 10

Dijkstra's algorithm is used to compute the.....

shortest path between two nodes

number of nodes used in the network

distance between different nodes

none of the above

While computing shortest path, first we assume graph representation of network at each node then we use Dijkstra's algorithm to compute shortest path from each node to every other node. Then extract next hop information from resulting path information and insert next hop information into routing tables.

Question 1

NAT is not useful at a residence with Cable Modem or DSL connectivity.

True

False

NAT is useful at a residence with Cable Modem or DSL connectivity

Question 2

_____ includes a 32-bits address mask with each address, which allows the address to be classful, classless, or subnetted.

RIP

OSPF

BGP

None of the given

OSPF includes a 32-bit address mask with each address, which allows the address to be classful, classless, or subnetted.

Question 3

NAPT stands for _____

Network address and protocol translation

Network address and port translation

Network address and packet translation

None of the given

But Network Address and Port Translation (NAPT) (which is another modified form of NAT)

Question 4

Which of the following are interior routing protocols?

RIP

OSPF

BGP

RIP and OSPF

The Routing Information Protocol (RIP) and Open Shortest Path First (OSPF) are the two most well-known interior routing protocols used in the TCP/IP suite

Question 5

NAT stands for _____

Network address translation

Network address transmission

Network address test

None of the given

Question 6

In IP routing, forwarding refers to _____ transfer.

Packet

Datagram

Message

None of the given

FORWARDING refers to datagram transfer.

Question 7

Basic NAT does not work well for communication initiated from the Internet.

True

False

Basic NAT does not work well for communication initiated from the Internet

Question 8

To save traffic, an EGP does not summarize routing information from the autonomous system before passing it to another autonomous system

True

False

OSPF has designed as an Interior Gateway Protocol used to pass routing information among routers within an autonomous system.

Each Autonomous System chooses a routing protocol to exchange routing information which is summarized before being passed to another group.

Question 9

OSPF is based on-----

Distance vector routing

Link state routing

Path vector routing

Distance vector and link state routing

LINK-STATE ALGORITHM:

OSPF uses link-state routing.

Question 10

The Border Gateway Protocol (BGP) uses _____ for all communication

UDP

TCP

UDP and TCP

None of the given

"It uses reliable transport (TCP).

BGP uses the TCP/IP protocol on port 179 to establish connections

Question 11

_____ identifies the application program that sent the data.

Destination

Source port

Logical address

None of the given (not sure)
(Reference not available)

Question 12

_____ can be used to propagate information about remote networks

Dynamic routing

Static routing

Address resolution

None of the given

Dynamic routing can be used to propagate information about remote networks.

Question 13

Which of the following protocol uses UDP for all message transmission?

OSPF

BGP

RIP

BGP AND RIP

RIP uses UDP for all message transmissions

Question 14

OSPF stands for _____

Open Source Path First Protocol

Open shortest path first

Open Secure Path First Protocol

open shortest path first

(OSPF) known as the Open Shortest Path First Protocol).

Question 15

Typical internet routing uses uses a combination of two metrics _____.

Mouthing metrics

Administrative cost and routing metrics

Hop cost

Administrative cost and hop count

Typical internet routing uses uses a combination of two metrics Administrative cost and hop count

Question 16

_____ is a current version of BGP.

2

3

4

None of these

The current version is four (BGP-4).

Question 17

OSPF doesn't allows a router to introduce routes learned from another means.

True

False

SPF allows a router to introduce routes learned from another means (e.g., from BGP).

Question 18

Preliminary version of IP was called _____.
Select correct option:

- IP - New Generation (IPng)
- IP - Next Generation (IPng)
- IP - Net Generation (IPng)
- None of the given

A preliminary version of IP was called IP- Next Generation (IPng).

Question 19

Source is responsible for fragmentation.
Select correct option:

IPV4

IPV6

IPV6 source (not intermediate routers) is responsible for fragmentation

Question 20

IPV6 address consists of _____
Select correct option:

32 Bits

64 Bits

128 Bits

none of the given

IPV6 addresses are 128 bits.

Question

**Header contains all information needed to deliver datagram to the destination computer.
But which one of the following is not included:**

Destination address

Source address

Rectifier

Other delivery information

Header contains all information needed to deliver datagram to the destination computer

Destination address

Source address

Identifier

Other delivery information

_____ **field is used to identify a specific path through the network**

Flow label

Traffic class

Both a and b

None of the given

Flow label is partitioned into a TRAFFIC CLASS field and a separate FLOW LABEL field used to identify a specific path thorough the network.

The Source can configure outgoing datagram's to avoid _____
Segmentation

Defragmentation

Fragmentation

Source can configure outgoing datagrams to avoid fragmentation

Question

Every hardware technology specification includes the definition of the maximum size of the frame data area, which is called the _____ Transmission Unit.

Least

Maximum

Fragment

Frame

Every hardware technology specification includes the definition of the maximum size of the frame data area, which is called the Maximum Transmission Unit (MTU).

Question

Although the ARP message format is sufficiently general to allow arbitrary protocol and hardware addresses. ARP is almost always used to bind a 32-bit IP address to a _____ Ethernet address.

16-bit

48-bit

64-bit

128-bit

ARP is almost always used to bind a 32-bit IP address to a 48-bit Ethernet address

Question

Fragmentation when using ICMP for path MTU should be avoided.

True

False

Question

End to End delivery Service of IP datagram is _____

Connection oriented

Connectionless

both a and b

none of the given

End-to-end delivery service is connection less.

Question

HEADER LEN field gives size of extension header.

False

True

Question

_____ Serve Same purpose in Internet as frames on LAN

Packets

Virtual Packets

Virtual Frames

Both b and c

VIRTUAL PACKETS:

These packets serve same purpose in Internet as frames on LAN.

Question

Header contains all information needed to deliver datagram to the destination computer. But which one of the following is not included

Destination address

Source address

Rectifier

Other delivery information

Header contains all information needed to deliver datagram to the destination computer

- *Destination address*
- *Source address*
- *Identifier*
- *Other delivery information*

Question

_____ encapsulates IP datagram as data area in hardware frame.

Select correct option:

Network Interface Layer

Data link Layer

Network Layer

None of the given

Network interface layer encapsulates IP datagram as data area in hardware frame.

Question

_____ field is used to identify a specific path through the network

Select correct option:

Flow label

Traffic class

Both a and b

None of the given

Flow label is partitioned into a TRAFFIC CLASS field and a separate FLOW LABEL field used to identify a specific path thorough the network.

Question

IPV6 address with _____ leading zeros is interpreted to hold an IPV4 address.
Select correct option:

96

100

120

none of the given

IPv6 address with 96 leading zeros is interpreted to hold an IPv4 address.

Question

Although the ARP message format is sufficiently general to allow arbitrary protocol and hardware addresses. ARP is almost always used to bind a 32-bit IP address to a _____ Ethernet address.

48bit

Other options are missing

ARP is almost always used to bind a 32-bit IP address to a 48-bit Ethernet address

Question

For _____, information about forwarding is stored in a routing table, which is initialized at system initialization and must be updated as network topology changes.
Select correct option:

Efficiency

Security

Accuracy

Anomalies

For efficiency, information about forwarding is stored in a routing table, which is initialized at system initialization and must be updated as network topology changes

Question

_____ is a technique used to Limit datagram size to small MTU of any network

Select correct option:

Segmentation

Fragmentation

Encapsulation

none of the given

FRAGMENTATION:

One technique is to limit datagram size to smallest MTU of any network

Question

Class A mask is 255.0.0.0 which is used for _____

Select correct option:

Unicasting

Multicasting

Subnetting

All of the given

class A mask is 255.0.0.0 which is used for subnetting.

Question

When one computer sends an ARP message to another the message travels inside the hardware frame. Technically, placing a message inside a frame for transport is not called encapsulation.

Select correct option:

True

False

Technically, placing a message inside a frame for transport is called encapsulation

Which one of these is not a main feature of connectionless service:

It includes extension of LAN abstraction.

It has universal addressing and the data is delivered in packets frames), each with a header.

It combines collection of physical networks into a single virtual network.

It has universal addressing and the data is delivered in packets frames), without a header.

*The main features of connectionless service are
It includes extension of LAN abstraction. It has universal addressing and the data is delivered in packets (frames), each with a header. It combines collection of physical networks into a single virtual network*

Question

Which protocol is used to test different tools

ICMP

IGMP

TCP/IP

none of the given

ICMP can also be used to test different tools.

Question

_____ message is sent in response to incoming datagrams with problems.
Select correct option:

TCP/IP

IGMP

ICMP

none of the given

ICMP message is sent in response to incoming datagrams with problems. ICMP message is not sent for ICMP message.

Question

Which one is NOT the function of ping program

Traceability

Reach ability

Both a and b

None of the given

Ping program tests reachability

Question

IPV6 address with _____ leading zeros is interpreted to hold an IPV4 address.
Select correct option:

96

100

120

none of the given

IPv6 address with 96 leading zeros is interpreted to hold an IPv4 address

Question

A datagram cannot be larger than _____ of a network over which it is sent.
Select correct option:

MTU

Size

IP header

None of the given

Datagram encapsulated in a hardware frame must be smaller than the MTU for that hardware

Question

The Source can configure outgoing datagram's to avoid _____

Segmentation

Defragmentation

Fragmentation

None of the given

Fragmentation should be avoided. Source can configure outgoing datagrams to avoid fragmentation

Question

Every hardware technology specification includes the definition of the maximum size of the frame data area, which is called the _____ Transmission Unit.

Select correct option:

Least

Maximum

Fragment

Frame

Every hardware technology specification includes the definition of the maximum size of the frame data area, which is called the Maximum Transmission Unit (MTU).

Question

_____ Protocol provides error reporting mechanism.

Select correct option:

IGMP

SNMP

ICMP

none of the given

Internet Control Message Protocol (ICMP) provides error reporting mechanism.

Question

_____ Source is responsible for fragmentation.

Select correct option:

IPV4

IPV6

IPv6 source (not intermediate routers) is responsible for fragmentation

MTU Stands for _____

Minimum transmission unit

Maximum transmission unit

Multicast transmission unit

None of the given

MTU (Maximum Transmission Unit).

Question No: 1 (Marks: 1) - Please choose one

In Point-to-Point topology there are two topologies.

Star and Tree

Tree and Ring

Star and Ring

Star and Tree

None of the given

Question No: 2 (Marks: 1) - Please choose one

----- **Program sends a message to a remote computer and reports whether the computer responds.**

Ping

Traceroute

ICMP

Non of the given

Question No: 3 (Marks: 1) - Please choose one

----- **has no way to determine the cause of the problem.**

ICMP

Non of the given

Ping

Trace route

Question No: 4 (Marks: 1) - Please choose one

The term----- ----- refers to the general concept of a small block of data

Packet

Frame

Data

None of the given

Question No: 5 (Marks: 1) - Please choose one

----- **scheme, which is designed to help detect transmissions errors, send one extra bit of information with each character**

Parity

Checksums

CRC

None of given

Question No: 6 (Marks: 1) - Please choose one

Local Talk is a LAN technology that employs -----

Bus topology

Ring topology

None of the given
Star topology

Question No: 7 (Marks: 1) - Please choose one

Most LANs that employ ring topology use an access mechanism known as-----

TOKEN PASSING

CSMA/CA

TOKEN PASSING

None of the given

Question No: 8 (Marks: 1) - Please choose one

Ethernet uses a ----- bit static addressing scheme in which each device is assigned a unique address by the manufacturer.

64

48

32

8

Question No: 9 (Marks: 1) - Please choose one

Formally named _____ informally known as the thick wire Ethernet or Thick net.

[b]10 Base T (not sure)[/b]

10 Base 2

10 Base 5

10 Base T

None of the given

Question No: 10 (Marks: 1) - Please choose one

Formally named _____ informally known as the twisted pair Ethernet or TP Ethernet.

10 Base 2

10 Base 2

10 Base 5

10 Base T

None of the given

Question No: 11 (Marks: 1) - Please choose one

The maximum size of an Ethernet segment is _____

500 meters

250 meters

500 meters

700 meters

None of the given

Question No: 12 (Marks: 1) - Please choose one

A Bridge can _____

Do all the above

Filter a frame

Forward a frame

Extend a LAN

Do all the above

Question No: 13 (Marks: 1) - Please choose one

_____ computes shortest paths in a graph by using weights on edges as a measure of distance.

Dijkstra's algorithm

Greedy algorithm

Distance vector algorithm

Dijkstra's algorithm

Non of the given (not sure)

Question No: 14 (Marks: 1) - Please choose one

_____ is used for compressed audio and video where the data rate depends on the level of compression that can be achieved.

Constant Bit Rate (CBR) service

Variable Bit Rate (VBR) service

Available Bit Rate (ABR) service

None of the given

Question No: 15 (Marks: 1) - Please choose one

Basic LAN technologies such as Ethernet, Token Ring, and FDDI use a _____.

Connection-oriented service paradigm (not sure)

Connectionless service paradigm

Connection-oriented service paradigm

Both Connectionless and Connection-oriented service paradigm

None of the given

Question No: 1 (Marks: 1) - Please choose one

No error detection scheme is perfect because transmission errors can affect the additional information as well as the data

True

False

Question No: 2 (Marks: 1) - Please choose one

----- Program sends a message to a remote computer and reports whether the computer responds.

Ping

Ping

Traceroute

ICMP

Non of the given

Question No: 3 (Marks: 1) - Please choose one

----- was especially concerned about the lack of high powered computers.

ARPA

IEEE

EIA

Non of the given

Question No: 4 (Marks: 1) - Please choose one

The term ----- is used to denote the definition of a packet used with a specific type of network.

Packet

Frame

Data

None of the given

Question No: 5 (Marks: 1) - Please choose one

Computer networks are often called ----- because they use packet technology.

Ethernet

Switch networks

Packet networks

None of the given

Question No: 6 (Marks: 1) - Please choose one

----- have advantages arisen from the size and ease of computation.

CRC

Parity

Checksums

None of given

Question No: 7 (Marks: 1) - Please choose one

Most LANs that employ ring topology use an access mechanism known as-----

CSMA/CD

CSMA/CA

TOKEN PASSING

None of the given

Question No: 8 (Marks: 1) - Please choose one

IEEE LLC/SNAP header is -----, which is used to specify the type of data.

8 octets

8 bytes

8 bits

None of the given

Question No: 9 (Marks: 1) - Please choose one

Formally named _____ informally known as the twisted pair Ethernet or TP

Ethernet.

10 Base 2

10 Base 5

10 Base T

None of the given

Question No: 10 (Marks: 1) - Please choose one

An interface for twisted pair Ethernet must have an _____ connector , and must generate signals according to the _____ specification.

RJ-45, 10 Base T

RJ-45, 10 Base 5

BNC, 10 Base 2

BNC, 10 Base T

Question No: 11 (Marks: 1) - Please choose one

A bridges function in the _____ layers(s).

Physical (MAC)

Data link

Network

Physical (MAC) and Data link

Question No: 12 (Marks: 1) - Please choose one

A Bridge can _____

Filter a frame

Forward a frame

Extend a LAN

Do all the above

Question No: 13 (Marks: 1) - Please choose one

A Bridge forwards or filters a frame by comparing the information in its address table to the frame's _____

Layer 2 source address

Source node's physical address

Layer 2 destination address

Layer 3 destination address

[b]Question No: 14 (Marks: 1) - Please choose one

_____ computes shortest paths in a graph by using weights on edges as a measure of distance. [/b]

Greedy algorithm

Distance vector algorithm

Dijkstra's algorithm

Non of the given

Question No: 15 (Marks: 1) - Please choose one

_____ is used for audio and video, since these have predefined maximum data

rates

Constant Bit Rate (CBR) service

Variable Bit Rate (VBR) service

Available Bit Rate (ABR) service

None of the given

Question No: 10 (Marks: 1) - Please choose one

Formally named _____ informally known as the twisted pair Ethernet or TP Ethernet.

▶ 10 Base 2

▶ 10 Base 5

▶ **10 Base T**

▶ None of the given

Question No: 14 (Marks: 1) - Please choose one

_____ is used for compressed audio and video where the data rate depends on the level of compression that can be achieved.

▶ Constant Bit Rate (CBR) service

▶ **Variable Bit Rate (VBR) service**

▶ Available Bit Rate (ABR) service

▶ None of the given

Question No: 3 (Marks: 1) - Please choose one

ATM assigns each VC a _____ identifier that is divided two parts to produce a hierarchy.

21-bit ▶

22-bit ▶

23-bit ▶

24-bit ▶

Question No: 6 (Marks: 1) - Please choose one

An interface for twisted pair Ethernet must have an _____ connector , and must generate signals according to the _____ specification.

RJ-45, 10 Base T ▶

RJ-45, 10 Base 5 ▶

BNC, 10 Base 2 ▶

BNC, 10 Base T ▶

Question No: 8 (Marks: 1) - Please choose one

A ----- provide a mechanism that a customer can use to set a physical address.

Static addressing scheme ▶

Configurable addressing scheme ▶

Dynamic addressing scheme ▶

None of the given ►

Question No: 15 (Marks: 1) - Please choose one

In -----, network occupies the smaller area like a room a floor or a building

- LAN
- WAN
- MAN
- None of the given

- Which network topology uses a Hub?
- **Star**
- Bus
- Mesh
- Ring

Which of the following is not a network adapter?

- 3 com LP III
- 3 com Etherlink III ISA
- 3 com Etherlink II Adapter
- **3 com 3C508 ISA 16 BIT**

Question No: 15 (Marks: 1

_____ is used for audio a
rates

- Constant Bit Rate (CBR)
- Variable Bit Rate (VBR)
- Available Bit Rate (ABR)
- None of the given

Which is not transmission medium _____.

- Twisted Pair
- not given
- Radio Frequency
- Fiber

Q1= Network administrator wants to build an update routing which algorithm he use?

Q2=100mbps Ethernet NIC is connected to control Hub which supports 10mbps. What will be Data Rate in this scenario?

Q3=NIC 100mbps Ethernet NIC and other speed 10mbps. Are connected with each other What will be NIC Data Rate in this scenario?

Q4=two far away site offices want to connect which is better LAN and WAN?

and 2 I don't remember sorry

paper by Jawad

Question No: 10 (Marks: 1) - Please choose one

Formally named _____ informally known as the twisted pair Ethernet or TP Ethernet.

- ▶ 10 Base 2
- ▶ 10 Base 5
- ▶ **10 Base T**
- ▶ None of the given

Question No: 14 (Marks: 1) - Please choose one

_____ is used for compressed audio and video where the data rate depends on the level of compression that can be achieved.

- ▶ Constant Bit Rate (CBR) service
- ▶ **Variable Bit Rate (VBR) service**
- ▶ Available Bit Rate (ABR) service
- ▶ None of the given

Question No: 3 (Marks: 1) - Please choose one

Which network topology uses a Hub?

- **Star**
- Bus
- Mesh
- Ring

Which of the following is not a network adapter?

- 3 com LP III
- 3 com Etherlink III ISA
- 3 com Etherlink II Adapter
- **3 com 3C508 ISA 16 BIT**

Question No: 1 (Marks: 1) - Please choose one

A typical port on an ATM switch operates at _____ or higher.

- ▶ OC-2 speed (155Mbps)
- ▶ OC-3 speed (100Mbps)
- ▶ **OC-3 speed (155Mbps)**

- ▶ OC-3 speed (155Gbps)

Question No: 2 (Marks: 1) - Please choose one

The product of delay and throughput measures the _____ of data that can be present on the network.

- ▶ Area
- ▶ **Volume**
- ▶ Length
- ▶ None of the given

Question No: 3 (Marks: 1) - Please choose one

_____ is used for compressed audio and video where the data rate depends on the level of compression that can be achieved.

- Constant Bit Rate (CBR) service ▶
- Variable Bit Rate (VBR) service ▶**
- Available Bit Rate (ABR) service ▶
- None of the given ▶

Question No: 4 (Marks: 1) - Please choose one

Which of the following is a connecting device?

- Bridge ▶

Repeater ►

Hub ►

All the given ►

Question No: 5 (Marks: 1) - Please choose one

A bridges function in the _____ layers(s).

Physical (MAC) ►

Data link ►

Network ►

Physical (MAC) and Data link ►

Question No: 6 (Marks: 1) - Please choose one

IEEE LLC/SNAP header is -----, which is used to specify the type of data.

8 octets ►

8 bytes ►

8 bits ►

None of the given ►

Question No: 7 (Marks: 1) - Please choose one

The third field of the header consists of ----- bit Ethernet frame type.

48 ►

32 ►

16 ►

8 ►

Question No: 8 (Marks: 1) - Please choose one

An -----method, the network hardware designers specify how type information is included in the frame and the value use to identify various frame types.

Explicit frame type ►

Ideal frame type ►

Implicit frame type ►

None of the given ►

Question No: 9 (Marks: 1) - Please choose one

Local Talk is a LAN technology that employs -----

Star topology ►

Bus topology ►

Ring topology ►

None of the given ►

Question No: 10 (Marks: 1) - Please choose one

The Fast Ethernet hardware operates at a rate of -----

10 Mbps ►

100 Mbps ►

1000 Mbps ►

None of the given ►

Question No: 11 (Marks: 1) - Please choose one

----- scheme, which is designed to help detect transmissions errors, send one extra bit of information with each character

► **Parity**

Checksums ►

CRC ►

None of given ►

Question No: 12 (Marks: 1) - Please choose one

Computer networks are often called ----- because they use packet technology.

Ethernet ►

Switch networks ►

► **Packet networks**

None of the given ►

Question No: 13 (Marks: 1) - Please choose one

----- Program sends a message to a remote computer and reports whether the computer responds.

▶ **Ping**

Ping

Traceroute ▶

ICMP ▶

Non of the given ▶

Question No: 14 (Marks: 1) - Please choose one

In -----, network occupies larger areas like cities & countries.

LAN ▶

▶ **WAN**

MAN ▶

None of the given ▶

Question No: 15 (Marks: 1) - Please choose one

In -----, network occupies the smaller area like a room a floor or a building

▶ **LAN**

WAN ▶

MAN ▶

None of the given ▶

Question No: 16 (Marks: 1) - Please choose one

In *Point-to-Point* topology there are two topologies.

Tree and Ring ►

Star and Ring ►

► **Star and Tree**

None of the given ►

A popular LAN Technology that uses a shared Bus Topology is called.

WAN CSMA **Ethernet** Multicast

An electronic device that connects LAN segments

Ethernet 10Baset **Bridge** 10Base5

A form of addressing; in which a set of computers is assigned one address.

Broadcast Multicast Packet Switch CRC Bandwidth

A network technology that uses Collision Avoidance

Bridge Broadcast WAN **Wireless LAN**

Formal name for Thick Ethernet..

TDM Bandwidth **Network Analyzer** Broadcast

_____ has a jitter zero

▶None of the given ▶**Virtual Private Network** ▶Isochronous Network ▶Asynchronous Network

Unlike Frame Relay and ATM, SMDS (Switched multi-megabit Data service) offers_____.

▶**Connectionless service paradigm** ▶Connection oriented service paradigm

▶Both Connectionless and Connectionoriented service paradigm ▶None of the given

ATM assigns each VC a _____ identifier that is divided two parts to produce a hierarchy.

▶21-bit ▶22-bit ▶23-bit ▶**24-bit**

▶21-bit ▶22-bit ▶23-bit ▶**24-bit**

Most WAN systems include a mechanism that can be used to eliminate the common case of duplication routing is called_____

▶Hierarchal address ▶**Default route** ▶Shortest path ▶None of the given

The next hop to which a packet is sent depends only on

▶**Packet's destination** ▶Packet's original source ▶Path the packet has taken ▶None of the given

An interface for twisted pair Ethernet must have a _____ connector, and must generate signals according to the _____ specification.

- RJ45, 10 Base T
- RJ45, 10 Base 5
- BNC, 10 Base 2
- BNC, 10 Base T

When an application _____ data, it makes a copy of the data available to all other computers on the network.

- Broadcasting
- Multicasting
- Unicasting
- None of the given

A _____ provide a mechanism that a customer can use to set a physical address.

- Static addressing scheme
- Configurable addressing scheme
- Dynamic addressing scheme
- None of the given

FDDI can transmits data at a rate of _____

- 100 million bits per second
- 100 million bits per second
- 100 million bits per second
- None of the given

Computers attached to an ether use ----- in which a computer waits for the ether to be idle before transmitting a frame.

- CSMA/CD
- CSMA/CA
- TOKEN PASSING
- None of the given

_____ has advantages arisen from the size and ease of computation.

- CRC
- Parity
- Checksums
- None of given

The term _____ is used to denote the definition of a packet used with a specific type of network.

- Packet
- Frame
- Data
- None of the given

_____ has no way to determine the cause of the problem.

- Ping
- Trace route
- ICMP
- None of the given

_____ Program sends a message to a remote computer and reports whether the computer responds.

- Ping
- Trace route
- ICMP
- None of the given

In _____, network occupies the smaller area like a room a floor or a building.

- LAN
- WAN
- MAN
- None of the given

No error detection scheme is perfect because transmission errors can affect the additional information as well as the data.

- False
- True

A typical port on an ATM switch operates at _____ or higher.

- OC-2 speed (155Mbps)
- OC-3 speed (100Mbps)
- OC-3 speed (155Mbps)

- OC-3 speed (155Gbps)

The product of delay and throughput measures the _____ of data that can be present on the network.

- ▶Area
- ▶Volume
- ▶Length
- ▶None of the given

_____ is used for compressed audio and video where the data rate depends on the level of compression that can be achieved.

- ▶Constant Bit Rate (CBR) service
- ▶Variable Bit Rate (VBR) service

- ▶Available Bit Rate (ABR) service
- ▶None of the given

Which of the following is a connecting device?

- ▶Bridge
- ▶Repeater
- ▶Hub
- ▶All the given

A bridges function in the _____ layers(s).

- ▶Physical (MAC)
- ▶Data link
- ▶Network
- ▶Physical (MAC) and Data link

IEEE LLC/SNAP header is -----, which is used to specify the type of data.

- ▶8 octets
- ▶8 bytes
- ▶8 bits
- ▶None of the given

The third field of the header consists of ----- bit Ethernet frame type.

48 32 16 8

An -----method, the network hardware designers specify how type information is included in the frame and the value use to identify various frame types.

Explicit frame type
None of the given

Local Talk is a LAN technology that employs _____

Star topology
Bus topology
Ring topology
None of the given

The Fast Ethernet hardware operates at a rate of _____

10Mbps
100Mbps
1000 Mbps
None of the given

_____scheme, which is designed to help detect transmissions errors, send one extra bit of information with each character

Parity
Checksums
CRC
None of given

Computer networks are often called ----- because they use packet technology.

Ethernet
Switch networks
Packet networks
None of the given

_____Program sends a message to a remote computer and reports whether the computer responds.

Ping Traceroute ICMP None of the given

In _____ network occupies larger areas like cities & countries.

LAN WAN MAN None of the given

In -----, network occupies the smaller area like a room a floor or a building.

LAN WAN MAN None of the given

In *Point-to-Point* topology there are two topologies.

Tree and Ring Star and Ring Star and Tree None of the given

Computer networks are often called ----- because they use packet technology.

Ethernet Switch networks Packet networks None of the given

A network uses a -----arranges for computers to be connected in a closed loop.

Star Topology Ring Topology Bus Topology None of the given

An -----method, the network hardware designers specify how type information is included in the frame and the value use to identify various frame types.

Explicit frame type Ideal frame type Implicit frame type None of the given

An interface for thin Ethernet must have a _____ connector, and must generate signals according to the _____ specification.

- ▶ RJ-45, 10 Base T
- ▶ RJ-45, 10 Base 5
- ▶ BNC, 10 Base 2
- ▶ BNC, 10 Base T

A Bridge forwards or filters a frame by comparing the information in its address table to the frame's _____

- ▶ Layer 2 source address
- ▶ Source node's physical address
- ▶ Layer 2 destination address
- ▶ Layer 3 destination address

Most WAN systems include a mechanism that can be used to eliminate the common case of duplication routing is called _____

- ▶ Hierarchal address
- ▶ Default route
- ▶ Shortest path
- ▶ None of the given

_____ of TCP/IP layering model corresponds to basic network hardware.

- ▶ Physical Layer
- ▶ Network Interface Layer
- ▶ Internet Layer
- ▶ Transport Layer

_____ Protocols of TCP/IP layering model specify how to ensure reliable transfer.

- ▶ Physical Layer
- ▶ Network Interface Layer
- ▶ Internet Layer
- ▶ Transport Layer

_____ is called an end-to-end protocol because it provides a connection directly from an application on one computer to an application on a remote computer.

- ▶IP
- ▶**UDP**
- ▶TCP
- ▶None of the given

_____ uses distance vector approach to define routing

- ▶BGP
- ▶OSPF
- ▶**RIP**
- ▶None of the given

_____ is ideal in a situation where the group is small and all members are attached to contiguous Local Area Networks.

- ▶**Flood-and -Prune**
- ▶Configuration-and -Tunneling
- ▶Core-Based Discovery
- ▶None of the given

Router that decrements TTL to __ sends ICMP time exceeded message, with router's address as source address

- ▶3
- ▶2
- ▶1
- ▶**0**

Protocol addresses are abstractions provided by _____.

- ▶Hardware
- ▶**Software**
- ▶Operating system
- ▶Internet

Although message exchange can be used to bind addresses, sending a request for each binding is hopelessly inefficient.

▶True ▶False

ARP is almost always used to bind a ___-bit IP address to a ___-bit Ethernet address.

▶32, 48 ▶24, 32 ▶32, 64 ▶32, 128

In the 1970s large organizations began to acquire multiple networks. Each network in the organization formed island. Employees needed to choose a computer appropriate for each task. So they needed multiple screens, keyboards and computers.

▶False ▶True

In which method of Address Resolution Protocol the protocol address is determined by hardware address? Were "T" stands for Table lookup, "C" for Closed-form Computation and "D" for Data Exchange?

▶T ▶D ▶C ▶T, C

The general form of an IP datagram is with a header followed by data. The header contains information that controls where and how the datagram is to be sent.

▶True ▶False

To save traffic, an EGP does not summarize routing information from the autonomous system before passing it to another autonomous system.

▶True ▶False

Which of the following is a correct representation of the IPv6?

- ▶105.220.136.100.255.255.255.255.0.0.18.128.140.10.255.255
- ▶105.220.136.100.255.255.255.256.0.0.18.128.140.10.255.255
- ▶105.220.136.100.255.255.255.255.0.0.18.128.140.10.255.255.256
- ▶105.220.136.100.255.255.255.255.0.0.18.128.140.10.255

A _____ relies on the hardware manufacturer to assign a unique physical address to each network interface is called.

- ▶Static addressing scheme
- ▶Configurable addressing scheme
- ▶Dynamic addressing scheme
- ▶None of the given

A system with redundant bridges might have a problem with _____ in the system.

- ▶Loop
- ▶Filters
- ▶Spanning Trees
- ▶All given choices

A Bridge can _____

- ▶Filter a frame
- ▶Forward a frame
- ▶Extend a LAN
- ▶Do all the above

_____ is used for typical data applications (where the data rate may be unknown and bursty) and allows use of whatever bandwidth is available at a given time.

- ▶Constant Bit Rate (CBR) service
- ▶Variable Bit Rate (VBR) service
- ▶Available Bit Rate (ABR) service
- ▶None of the given

ATM assigns each VC a _____ identifier that is divided two parts to produce a hierarchy.

- ▶21-bit
- ▶22-bit
- ▶23-bit
- ▶24-bit

_____ of TCP/IP layering model corresponds to basic network hardware.

- ▶Physical Layer
- ▶Network Interface Layer
- ▶Internet Layer
- ▶Transport Layer

_____ places the boundary between the second and third octets

- ▶Class A
- ▶Class B
- ▶Class C
- ▶Class D

UDP and TCP are both _____ layer protocols

- ▶Physical
- ▶Data link
- ▶Network
- ▶Transport

Connection-oriented service, Point-to-point, Complete reliability, Full-duplex communication, Stream interface, Reliable connection startup and Graceful connection shutdown are the services provided by _____

- ▶IP
- ▶None of the given
- ▶TCP
- ▶UDP

_____ protocols of TCP/IP layering model specify how to ensure reliable transfer.

- ▶Physical Layer
- ▶Network Interface Layer
- ▶Internet Layer
- ▶Transport Layer

_____ identifies which application program on receiving computer should receive the data

- ▶Destination port
- ▶Source port
- ▶Logical address
- ▶None of the given

_____ identifies the application program that sent the data.

- ▶ Destination Port
- ▶ **Source port**
- ▶ Logical address
- ▶ None of the given

Which of the following are interior routing protocols?

- ▶ RIP
- ▶ OSPF
- ▶ BGP
- ▶ **RIP and OSPF**

The Border Gateway Protocol (BGP) uses _____ for all communication

- ▶ UDP
- ▶ **TCP**
- ▶ Both UDP and TCP
- ▶ None of the given

_____ measures distance in network hops, where each network between the source and destination counts as single hop.

- ▶ BGP
- ▶ OSPF
- ▶ **RIP**
- ▶ None of the given

OSPF is based on-----

- ▶ Distance vector routing
- ▶ **Link state routing**
- ▶ Path vector routing
- ▶ Distance vector routing and Link state routing

_____ performs local multicast and uses IP-in-IP encapsulation to send multicast datagram's from one site on the Internet to another.

▶Distance Vector Multicast Routing Protocol (DVMRP)

▶Core Based Trees (CBT)

▶Protocol Independent Multicast_ *Sparse Mode (PIM-SM)*

▶Protocol Independent Multicast_ *Dense Mode (PIM-DM)*

The length of time required to send a variable length packet is variable and does not require a complicated interrupt scheme to detect completion of transmission.

▶True ▶False

NEXT HEADER field in the base header defines type of header and it appears at end of fixed-size base header.

▶True ▶False

Although message exchange can be used to bind addresses, sending a request for each binding is hopelessly inefficient.

▶True ▶False

Address mask defines how many bits of address are in suffix?

▶True ▶False

A computer attached to a given network can only communicate with other computers attached to the same network. Is this a problem with multiple networks?

▶True ▶False

The term self-identifying is used for Classful IP addresses because the class of the address can be computed from the address_____.

▶itsel ▶prefix ▶suffix ▶mask

In which method of Address Resolution Protocol the protocol address independent of hardware address?

Were "T" stands for Table lookup, "C" for Closed-form Computation and "D" for Data Exchange?

▶T, C ▶D ▶C ▶T, D

Reconstruction of original datagram is called reassembly.

▶True ▶False

A computer needs a complete stack of protocols to run either a client or a server.

▶True ▶False

TCP uses _____ mechanism to control the flow of data.

▶Door ▶Window ▶Acknowledgment ▶Retransmission

In CRC there is no error if the remainder at the receiver is

Equal to the Remainder of the sender **Zero** Non Zero The quotient at the sender

Router is _____ Device.

Layer one Intelligent Unintelligent **None of above**

The repeater works at _____ Layer of OSI model

Data Link layer **Physical layer** Transport Layer Network Layer

Bridges are _____ Devices

Networking Internetworking All of above None of above

The address field of a frame in HDLC protocol contains the address of the _____ station.

Primary Secondary Tertiary **Primary and secondary**

WDM stands for

Wave Division Multiplexing Wrong Division Multiplexing

Well Division Multiplexing West Division Multiplexing

A traditional telephone line has a bandwidth of _____.

2000 Hz 4000 Hz 2000 MHz **4000 MHz**

Time slots are dynamically allotted in _____ TDM technique.

FDM Asynchronous WDM **Synchronous**

A portion of the path that carries TX b/w a given pair of devices is known as _____.

Node Bridge **Channel** Access Point

T Lines are _____ lines designed for digital data

Analog **Digital** Composite Telephone

Multiplexing has long been used as an essential tool in _____.

Electronic industry **Telephone industry** Space science VLAN

Switched analog service is leased line.

True **False**

If a T-1 carries 8000 frames, then data rate will be _____

2.544 Mbps **1.544 Mbps** 1.544 kbps 1.544 Gbps

Given a 10-bit sequence 1010011110 and a divisor of 1011, CRC will be

001 000 100 **101**

Asynchronous TDM is efficient only when the size of the time slot is kept relatively _____

Large Small **Medium** Zero

FTTC can be implemented in _____.

Telephone system Cable System **Telephone and Cable System** Non of the above

Europeans use a version of T-lines called _____

F-lines **E-line** D-lines S-lines

A prism can deflect the light depending upon the angle of _____ and the frequency.

Deviation Incident Refraction **Reflection**

Which error detection method can detect a single-bit error?

Simple parity check Two-dimensional parity check CRC All of the given

Which of the following techniques takes data from one high speed line and breaks it into portions?

Inverse subtraction Inverse addition **multiplexing** inverse multiplexing

Telephone network is an example of a _____ network

Packet-switched Circuit-switched Message-switched **Tele-switched**

FTTC stands for _____

fiber to the center fiber to the cable **fiber to the curb** flexible to the curb

Cable that connects the subscriber telephone to the nearest end office in a local loop is called

Twisted-pair cable Coaxial cable Fiber-optic cable Subscriber cable

In Synchronous TDM, Time slots are not same in number as input devices

True False

In Synchronous TDM, Time slots are not same in number as input devices.

True False

At the CRC checker, _____ means that the data unit is damaged

A string of 0s -- A string of 1s --A string of alternating 1s and 0s -**A nonzero-remainder**

Which of the following best describes a single-bit error?

A single bit is inverted **A single bit is inverted per data unit**

A single bit is inverted per transmission none of the given

Multiplexing is the set of techniques that allows simultaneous TX of multiple signals across a _____ data link

Single Double Multi None of the given

If the ASCII character G is sent and the character D is received, what type of error is this?

Single-bit Multiple-bit **Burst** Recoverable

Which error detection method involves polynomials?

Simple parity check Two-dimensional parity check **CRC** Checksum

For point-to-point configuration, addressing is needed

True **False**

Data link control is composed of _____ important functions.

2 **3** 4 5

The checksum of 0000 and 0000 is _____

1111 **0000** 1110 0111

_____ is used to attaché two autonomous system

BGP IGP **EGP** NONE OF

The border Gateway Protocol (BGP) uses _____ for all communication

UDP **TCP** UDP AND TCP Non of the given

Routing insert or changes value in _____

MAC address **routing table** both (a)and (b) non of the given

_____dose not depend on any particular unicast routing protocol

PIM-DM **PIM-SM** PIM-AM NON OF THE GIVEN

NAT software dose not allow a PC to connect with the internet and act as a NAT device at the same time
.

True **false**

Each autonomous system used to communicate among autonomous systems by chooses an IGP.

TRUE. FALSE

Which of the following protocols provide the information at the autonomous system level.?

BGP OSPF **RIP** OSPF and RIP

Which of the following protocols allow the sender and receiver to enforce policies.

RIP SOPF **BGP** BGP and RIP

Interior Gateway Protocols (IGPs) and Exterior Gateway Protocols (EGPs) two broad classes of Internet Routing Protocol.

TRUE FALSE .

The computer uses _____ to inform local router about the last application when it leaves.

ICMP **IGMP** SNMP None of the given

We use the term _____ to refer to a measure of the path that routing software uses when choosing a route.

Routing path routing metric **routing** switching

_____ is a current version of BGP.

2 **3** 4 None of the given

OSPF is based on _____

Distance vector routing **link state routing** path vector routing Distance vector routing and link state routing

In _____ routing, the table is initialized when the system boots and there are no further changes

Dynamic **static** both a and b none of the given

does not allow a router to introduce routes learned from another means

true **false**

Twice NAT fails if an application uses the IP addresses instead of Domain Name.

TRUE FALSE

A one-to-many communication between a source and a specific group of hosts is classified as a _____ communication.

Unicast multicast **broadcast** unicast & multicast

_____ identifies the application program that sent the data.

Destination port source port logical port none of the given

Twice NAT is another variant of NAT. it is used with site that runs server. In this process NAT box is connected to Domain Name.

True false

OSPF includes _____ address mask with each address.

30bit **32bit** 34bit none of the given

Twice NAT allows a site to run servers

True false

OSPF has designed as an Exterior Gateway Protocol used to pass routing information among routers within an autonomous system.

True **false**

In IP routing, forwarding refers to _____ transfer

Packet datagram message none of the given

It allows _____ computer(s) to share _____ IP address(s).

Multiple , multiple **multiple , single** single , single none of the given

Network Address Translation (NAT) requires device to perform packet translation

True fales

_____ encapsulates IP datagram as data area in hardware frame.

Network interface layer datalink layer network layer none of the given

_____ field is used to identify a specific path through the network

Flow lable traffic class both a and b none of the given

IPV6 address with _____ leading zeros is interpreted to hold an IPV4 address.

96 100 120 none of the given

Although the ARP message format is sufficiently general to allow arbitrary protocol and hardware addresses. ARP is almost always used to bind a 32-bit IP address to a _____ Ethernet address.

48bit

For _____, information about forwarding is stored in a routing table, which is initialized at system initialization and must be updated as network topology changes.

Efficiency Security Accuracy Anomalies

_____ is a technique used to Limit datagram size to small MTU of any network

Segmentation **Fragmantation** Encapsulation none of the given

Class A mask is 255.0.0.0 which is used for _____

Unicast multicast **subnetting** all of the given

When one computer sends an ARP message to another the message travels inside the hardware frame. Technically, placing a message inside a frame for transport is not called encapsulation.

True **false**

Which one of these is not a main feature of connectionless service:

It includes extension of LAN abstraction.

It has universal addressing and the data is delivered in packets frames), each with a header.

It combines collection of physical networks into a single virtual network.

It has universal addressing and the data is delivered in packets frames), without a header.

Which protocol is used to test different tools.

ICMP IGMP TCP/IP None of the given

_____ message is sent in response to incoming datagrams with problems.

TCP/IP IGMP **ICMP** none of the given

Which one is NOT the function of ping program

TRACABILITY REACH ABLITY BOTH a and b none of the given

IPV6 address with _____ leading zeros is interpreted to hold an IPV4 address

96 100 120 none of the

A datagram cannot be larger than _____ of a network over which it is sent.

MTU size IP header none of the

The Source can configure outgoing datagram's to avoid _____

Segmentation defragmentation **Fragmentation** none of the

Every hardware technology specification includes the definition of the maximum size of the frame data area, which is called the _____ Transmission Unit

Least **maximum** fragment frame

_____ Protocol provides error reporting mechanism

IGNP SNMP **ICMP** NONE OF THE

_____ Source is responsible for fragmentation.

IPV4 **IPV6**

MTU Stands for _____

Minimum transmission unit **Maximum transmission unit** Multi transmission unit none of the

TTL stands for _____

Time to Learn Time to Leave Time to Live **none of the given**

H.LEN shows the header length in units of ____ Bits

34 **32** 30 None of the given

There are _____ possibilities to detect the destination using Trace-route

1 **2** 3 None of the given

_____ **Source is responsible for fragmentation.**

IPV4 **IPV6**

_____ **encapsulates IP datagram as data area in hardware frame.**

Network Interface Layer Data link Layer Network Layer none of the given

IPV6 address consists of _____

32 Bits 64 Bits **128 Bits** none of the given

_____ **shows senders preference for low latency, high Reliability.**

:
TYPE **SERVICE TYPE** SERVICE PRIORITY None of the given

Class A mask is 255.0.0.0 which is used for _____

Unicasting Multicasting **Subnetting** All of the given

_____ Protocol provides error reporting mechanism.

IGMP SNMP **ICMP** none of the given

ICMP message transport is acted upon by getting ICMP _____ in IP.

De-encapsulated **Encapsulated** Segmented none of the given

Which protocol is used to test different tools.

ICMP IGMP TCP/IP none of the given

When one computer sends an ARP message to another the message travels inside the hardware frame. Technically, placing a message inside a frame for transport is not called encapsulation.

True **False**

Preliminary version of IP was called _____.

IP - New Generation (IPng) **IP - Next Generation (IPng)** IP - Net Generation (IPng) None of the given

Header contains all information needed to deliver datagram to the destination computer. But which one of the following is not included:

Destination address Source address **Rectifier** Other delivery information

_____ Source is responsible for fragmentation.

IPV4 **IPV6**

_____ layer Provides reliable delivery of datagram.

Network **Transport** Data link none of the given

Which one of these is not a main feature of connectionless service:

It includes extension of LAN abstraction.

It has universal addressing and the data is delivered in packets frames), each with a header.

It combines collection of physical networks into a single virtual network.

It has universal addressing and the data is delivered in packets frames), without a header.

The process of learning the path MTU is known as path MTU discovery.

True False

IPv6 _____ is responsible for fragmentation. Routers simply drop datagram's larger than network

Destination Intermediate routers **Source** Medium

IP datagram can contains _____ octets.

0-65,535 **1-65,535** 1-65,536 none of the given

_____ shows senders preference for low latency, high Reliability.

TYPE **SERVICE TYPE** SERVICE PRIORITY None of the given

Computer networks are often called ----- because they use packet technology.

▶Ethernet **▶Switch networks** ▶Packet networks ▶None of the given

A network uses a -----arranges for computers to be connected in a closed loop.

▶Star Topology **▶Ring Topology** ▶Bus Topology ▶None of the given

An -----method, the network hardware designers specify how type information is included in the frame and the value use to identify various frame types.

- ▶ **Explicit frame type**
- ▶ Ideal frame type
- ▶ Implicit frame type
- ▶ None of the given

Most WAN systems include a mechanism that can be used to eliminate the common case of duplication routing is called _____

- ▶ Hierarchal address
- ▶ **Default route**
- ▶ Shortest path
- ▶ None of the given

_____ of TCP/IP layering model corresponds to basic network hardware.

- ▶ Physical Layer
- ▶ **Network Interface Layer**
- ▶ Internet Layer
- ▶ Transport Layer

_____ Protocols of TCP/IP layering model specify how to ensure reliable transfer.

- ▶ Physical Layer
- ▶ Network Interface Layer
- ▶ Internet Layer
- ▶ **Transport Layer**

_____ is called an end-to-end protocol because it provides a connection directly from an application on one computer to an application on a remote computer.

▶IP ▶**UDP** ▶TCP ▶None of the given

_____ uses distance vector approach to define routing

▶BGP ▶OSPF ▶**RIP** ▶None of the given

_____ is ideal in a situation where the group is small and all members are attached to contiguous Local Area Networks.

▶**Flood-and -Prune**▶Configuration-and -Tunneling ▶Core-Based Discovery ▶None of the given

Router that decrements TTL to __ sends ICMP time exceeded message, with router's address as source address

▶3 ▶2 ▶1 ▶**0**

Protocol addresses are abstractions provided by _____.

▶Hardware ▶**Software** ▶Operating system ▶Internet

Although message exchange can be used to bind addresses, sending a request for each binding is hopelessly inefficient.

▶**True** ▶False

ARP is almost always used to bind a ___-bit IP address to a ___-bit Ethernet address.

▶32, 48 ▶24, 32 ▶32, 64 ▶32, 128

To save traffic, an EGP does not summarize routing information from the autonomous system before passing it to another autonomous system.

▶True ▶False

When an application _____ data, it makes a copy of the data available to all other computers on the network.

▶Broadcasting ▶Multicasting ▶Unicasting ▶None of the given

Ethernet uses a _____ bit static addressing scheme in which each device is assigned a unique address by the manufacturer.

▶64 ▶48 ▶32 ▶8

The product of delay and throughput measures the _____ of data that can be present on the network.

▶Area ▶Volume ▶Length ▶None of the give

Connectionless service, Message-Oriented protocol, best effort delivery service, arbitrary interaction and operating system independent are the characteristics of _____

▶TCP ▶UDP ▶IP ▶None of the given

Connection-oriented service, Point-to-point, Complete reliability, Full-duplex communication, Stream interface, Reliable connection startup and Graceful connection shutdown are the services provided by _____

▶None of the given ▶TCP ▶UDP ▶IP

The process of using a routing table to select a next hop for a given datagram is called_____

▶Encapsulation ▶Reassembling ▶Routing or forwarding ▶None of the given

_____uses distance vector approach to define routing

▶BGP ▶OSPF ▶RIP ▶None of the given

A multicast routing scheme in which the protocol software builds a delivery tree from a central point is called_____

▶Distance Vector Multicast Routing Protocol (DVMRP) ▶Core Based Trees (CBT)

▶Protocol Independent Multicast_ *Sparse Mode (PIM-SM)*

▶Protocol Independent Multicast_ *Dense Mode (PIM-DM)*

One repeater _____two repeaters _____ the maximum cable length limitation.

▶doubles, cancel ▶doubles, triple ▶square roots, cube roots ▶and, triple

Whenever it handles a packet, IP software needs to separate the destination address into a _____ and _____.

▶ postfix, Infix ▶ non of these ▶ Infix, prefix ▶ **prefix, suffix**

End-to-end delivery service is connection oriented.

▶ True ▶ **False**

A single networking technology is best for all needs.

▶ True ▶ **False**

We use the term _____ to refer to a measure of the path that routing software use when choosing a route.

▶ **routing path** ▶ routing metric ▶ routing ▶ switching

No error detection scheme is perfect because transmission errors can affect the additional information as well as the data.

▶ **True** ▶ False

----- Program sends a message to a remote computer and reports whether the computer responds.

▶ **Ping** ▶ Traceroute ▶ ICMP ▶ Non of the given

----- was especially concerned about the lack of high powered computers.

▶ **ARPA** ▶ IEEE ▶ EIA ▶ Non of the given

The term ----- is used to denote the definition of a packet used with a specific type of network.

▶ Packet ▶ **Frame** ▶ Data ▶ None of the given

Computer networks are often called ----- because they use packet technology.

▶ Ethernet ▶ Switch networks ▶ Packet networks ▶ **None of the given**

----- have advantages arisen from the size and ease of computation.

▶ CRC ▶ Parity ▶ Checksums ▶ None of given

Most LANs that employ ring topology use an access mechanism known as-----

▶ CSMA/CD ▶ CSMA/CA ▶ **TOKEN PASSING** ▶ None of the given

IEEE LLC/SNAP header is -----, which is used to specify the type of data.

- ▶ **8 octets**
- ▶ 8 bytes
- ▶ 8 bits
- ▶ None of the given

Formally named _____ informally known as the twisted pair Ethernet or TP Ethernet.

- ▶ 10 Base 2
- ▶ 10 Base 5
- ▶ **10 Base T**
- ▶ None of the given

twisted pair ethernet

- Formally called 10 Base -T
- Also twisted pair Ethernet or simply TP Ethernet

An interface for twisted pair Ethernet must have an _____ connector , and must generate signals according to the _____ specification.

- ▶ **RJ-45, 10 Base T**
- ▶ RJ-45, 10 Base 5
- ▶ BNC, 10 Base 2
- ▶ BNC, 10 Base T

A bridges function in the _____ layers(s).

- ▶ Physical (MAC)
- ▶ **Data link**
- ▶ Network
- ▶ Physical (MAC) and Data link

A Bridge can _____

- ▶ Filter a frame
- ▶ Forward a frame
- ▶ Extend a LAN
- ▶ **Do all the above**

A Bridge forwards or filters a frame by comparing the information in its address table to the frame's _____

- ▶ Layer 2 source address
- ▶ Source node's physical address
- ▶ **Layer 2 destination address**
- ▶ Layer 3 destination address

_____ computes shortest paths in a graph by using weights on edges as a measure of distance.

- ▶ Greedy algorithm
- ▶ Distance vector algorithm
- ▶ **Dijkstra's algorithm**
- ▶ Non of the given

_____ is used for audio and video, since these have predefined maximum data rates

- ▶ **Constant Bit Rate (CBR) service**
- ▶ Variable Bit Rate (VBR) service
- ▶ Available Bit Rate (ABR) service
- ▶ None of the given

Unlike Frame Relay and ATM, SMDS (Switched multi-megabit Data service) offers _____ .

- ▶ **Connectionless service paradigm**
- ▶ Connection oriented service paradigm
- ▶ Both Connectionless and Connection-oriented service paradigm
- ▶ None of the given

A network with throughput T and delay D has a total of _____ bit in transit at any time.

- ▶ T / D
- ▶ **T x D**
- ▶ T + D
- ▶ None of the given

ATM is designed to work on _____.

▶ Twisted Pair ▶ Coaxial ▶ Radio Frequency ▶ **Fiber**

ATM is designed to work on fiber (but can be used with twisted pair). (P# 72)

Computers attached to an ethernet use ----- in which a computer waits for the ether to be idle before transmitting a frame.

▶ **CSMA/CD** ▶ CSMA/CA ▶ TOKEN PASSING ▶ None of the given

FDDI can transmits data at a rate of -----

▶ **100 million bits per second**

▶ 10 million bits per second ▶ 1000 million bits per second ▶ None of the given

FDDI: Fiber distributed data interconnect (FDDI) is another ring technology. Its most important features are: It uses fiber optics between stations and transmits data at 100Mbps.

A typical port on an ATM switch operates at _____ or higher.

▶ OC-2 speed (155Mbps) ▶ **OC-3 speed (100Mbps)**

▶ **OC-3 speed (155Mbps)** ▶ OC-3 speed (155Gbps)

ATM DETAILS:

It transmits data at over 100Mbps.

- It uses fiber optics to connect computer to switch.
- Each connection includes two fibers.
- It is also shown in figure.

The product of delay and throughput measures the _____ of data that can be present on the network.

▶ Area ▶ **Volume** ▶ Length ▶ None of the given **Ans is amount of data**

DELAY THROUPTUT PRODUCT:

It is computed as delay time multiplied by effective throughput. It measures amount of data that can be present in the network.

_____ is used for compressed audio and video where the data rate depends on the level of compression that can be achieved.

Constant Bit Rate (CBR) service ▶ **Variable Bit Rate (VBR) service** ▶

Available Bit Rate (ABR) service ▶ None of the given ▶

VARIABLE BIT RATE (VBR):

It is used for compressed audio and video where the data rate depends on the level of compression that can be achieved.

Which of the following is a connecting device?

Bridge ► Repeater ► Hub ► **All the given ►**

A bridge's function is in the _____ layer(s).

Physical (MAC) ► **Data link ►** Network ► Physical (MAC) and Data link

Switches and bridges use MAC addressing to make networking decisions and therefore these types of equipment function on the data link layer.

Question No: 6 (Marks: 1) - Please choose one

IEEE LLC/SNAP header is -----, which is used to specify the type of data.

8 octets ► 8 bytes ► **8 bits ►** None of the given

Question No: 7 (Marks: 1) - Please choose one

The third field of the header consists of ----- bit Ethernet frame type.

48 ► **32 ►** 16 ► 8 ►

Question No: 8 (Marks: 1) - Please choose one

An -----method, the network hardware designers specify how type information is included in the frame and the value used to identify various frame types.

Explicit frame type ► Ideal frame type ► Implicit frame type ► None of the given ►

EXPLICIT FRAME TYPE:

In this type the identifying value is included with frame describes types of included data.

Local Talk is a LAN technology that employs -----

Star topology ► **Bus topology ►** Ring topology ► None of the given ►

Almost altogether network technologies use different wiring schemes. e.g., local talk uses hubs (physical star) to simulate a bus topology.

The Fast Ethernet hardware operates at a rate of -----

10 Mbps ► **100 Mbps ►** 1000 Mbps ► None of the given ►

The Ethernet speed was originally 3Mbps, and the current standard is 10Mbps the fast Ethernet operates at 100Mbps. There are also gigabits Ethernet available now

----- scheme, which is designed to help detect transmissions errors, send one extra bit of information with each character

▶ Parity Checksums ▶ CRC ▶ None of given

Computer networks are often called ----- because they use packet technology.

Ethernet **Switch networks** Packet networks **None of the given**

-----Program sends a message to a remote computer and reports whether the computer responds.

Ping Traceroute ICMP Non of the given

Ping program tests reachability. It sends datagram from B to A, that echoes back to B. it uses ICMP echorequest and echo reply messages.

In -----, network occupies larger areas like cities & countries.

▶ LAN ▶ **WAN** ▶ MAN ▶ None of the given

WIDE AREA NETWORK (WAN):

It is used for a country level networking and even for continents.

In -----, network occupies the smaller area like a room a floor or a building

▶ **LAN** ▶ WAN ▶ MAN ▶ None of the given

LOCAL AREA NETWORK (LAN): It is used for a single building.

In *Point-to-Point* topology there are two topologies.

▶ Tree and Ring

▶ Star and Ring

▶ **Star and Tree**

▶ None of the given

_____ has a jitter zero

▶ None of the given ▶ **Virtual Private Network** ▶ Isochronous Network▶

Asynchronous Network

Unlike Frame Relay and ATM, SMDS (Switched multi-megabit Data service) offers_____ .

Connectionless service paradigm▶ **Connection oriented service paradigm**

Both Connectionless and Connection-oriented service paradigm ▶ None of the given ▶

ATM assigns each VC a _____ identifier that is divided two parts to produce a hierarchy.

21-bit ▶ 22-bit ▶ 23-bit ▶ **24-bit** ▶

Most WAN systems include a mechanism that can be used to eliminate the common case of duplication routing is called _____

Hierarchical address ► **Default route** ► Shortest path ► None of the given ►

The next hop to which a packet is sent depends only on

► **Packet's destination** ► Packet's original source ► Path the packet has taken ► Non of the given ►

An interface for twisted pair Ethernet must have an _____ connector , and must generate signals according to the _____ specification.

RJ-45, 10 Base T ► RJ-45, 10 Base 5 ► BNC, 10 Base 2 ► BNC, 10 Base T ►

When an application----- data, it makes a copy of the data available to all other computers on the network.

Broadcasting ► Multicasting ► Unicasting ► None of the given ►

A ----- provide a mechanism that a customer can use to set a physical address.

Static addressing scheme ► **Configurable addressing scheme**

► Dynamic addressing scheme ► None of the given ►

FDDI can transmits data at a rate of ----- **100 million bits per second** -----

100 million bits per second ► 100 million bits per second ► 100 million bits per second ► None of the given ►

Computers attached to an ether use ----- in which a computer waits for the ether to be idle before transmitting a frame.

► **CSMA/CD** ► CSMA/CA ► TOKEN PASSING ► None of the given ►

----- have advantages arisen from the size and ease of computation.

► **CRC** ► Parity ► Checksums ► None of given ►

The term ----- is used to denote the definition of a packet used with a specific type of network.

► Packet ► **Frame** ► Data ► None of the given

----- has no way to determine the cause of the problem.

► **Ping** ► Trace route ► **ICMP** ► Non of the given

----- Program sends a message to a remote computer and reports whether the computer responds.

Ping ▶ Traceroute ▶ ICMP ▶ Non of the given

In -----, network occupies the smaller area like a room a floor or a building

▶ **LAN** ▶ WAN ▶ MAN ▶ None of the given

No error detection scheme is perfect because transmission errors can affect the additional information as well as the data.

True **False**

In Point-to-Point topology there are two topologies.

▶ Tree and Ring ▶ Star and Ring ▶ **Star and Tree** ▶ None of the given

In *Point-to-Point* topology there are two topologies.

- 1) STAR topology
- 2) TREE topology

----- Program sends a message to a remote computer and reports whether the computer responds.

▶ **Ping** (Not Sure) ▶ Traceroute ▶ ICMP ▶ Non of the given

Ping program tests reach ability. It sends datagram from B to A, that echoes back to B. it uses ICMP echo request and echo reply messages.

----- has no way to determine the cause of the problem.

▶ ICMP ▶ **Ping** ▶ Trace route ▶ Non of the given

Ping has no way to determine the cause of the problem. Tracing A Route Network administrators use another tool, trace route.

The term----- ----- refers to the general concept of a small block of data

▶ **Packet** ▶ Frame ▶ Data ▶ None of the given

Packet is a generic term that refers to small block of data. Packet have different format. Each hardware uses different packet format.

----- scheme, which is designed to help detect transmissions errors, send one extra bit of information with each character

▶ **Parity** ▶ Checksums ▶ CRC ▶ None of given

A parity scheme, which is designed to help detect transmission errors, sends one extra bit of information with each character. Although it allows receiver to determine if a single bit has been changed parity can not detect transmission errors that change an even number of bits.

Local Talk is a LAN technology that employs -----

- ▶ **Bus topology** ▶ Ring topology ▶ Star topology ▶ None of the given

LOCAL TALK:

Apple invented the LAN technology that uses bus topology. Its interface is included with all Macintosh computers.

Most LANs that employ ring topology use an access mechanism known as-----

- ▶ CSMA/CD ▶ CSMA/CA ▶ **TOKEN PASSING** ▶ None of the given

Most LANs that employ ring technology use an access mechanism known as *token passing*. A token ring operates as a single, shared medium. When a computer wants to send data, it must wait until it obtains the token, when it is in control of the ring

Ethernet uses a ----- bit static addressing scheme in which each device is assigned a unique address by the manufacturer.

- ▶ 64 ▶ **48** ▶ 32 ▶ 8

Ethernet uses a 48-bit static addressing scheme

Formally named _____ informally known as the thick wire Ethernet or Thick net.

- ▶ 10 Base 2 ▶ 10 Base 5 ▶ 10 Base T ▶ **None of the given**

Thick Ethernet Wiring informally called thick wire Ethernet or Thick net

Formally named _____ informally known as the twisted pair Ethernet or TP Ethernet.

- ▶ 10 Base 2 ▶ 10 Base 5 ▶ **10 Base T** ▶ None of the given

twisted pair ethernet

- Formally called 10 Base -T
- Also twisted pair Ethernet or simply TP Ethernet

The maximum size of an Ethernet segment is _____

- ▶ 250 meters
- ▶ **500 meters**
- ▶ 700 meters
- ▶ None of the given

One Ethernet cable is sometimes called a segment. This segment is limited to 500 meters in length. The minimum separation between connections is 3 meters. (P# 27)

A Bridge can _____

- ▶ Filter a frame
- ▶ Forward a frame
- ▶ Extend a LAN
- ▶ **Do all the above**

A bridge is a hardware device also used to connect two LAN segments to extend a LAN. It listens to all traffic and recognizes frame format. It also forwards only correct complete frames and discards the collided and error frames. The most important task a bridge performs is frame filtering.

_____ computes shortest paths in a graph by using weights on edges as a measure of distance.

- ▶ Greedy algorithm
- ▶ Distance vector algorithm
- ▶ **Dijkstra's algorithm**
- ▶ Non of the given

Dijkstras algorithm computes shortest paths in a graph by using weights on edge as a measure of distance. A path with the fewest number of edges may not be the path with least weight. (P# 173 e-books)

_____ is used for compressed audio and video where the data rate depends on the level of compression that can be achieved.

- ▶ Constant Bit Rate (CBR) service
- ▶ **Variable Bit Rate (VBR) service**
- ▶ Available Bit Rate (ABR) service
- ▶ None of the given

VARIABLE BIT RATE (VBR):

It is used for compressed audio and video where the data rate depends on the level of compression that can be achieved.

Basic LAN technologies such as Ethernet, Token Ring, and FDDI use a _____.

- ▶ Connectionless service paradigm
- ▶ Connection-oriented service paradigm
- ▶ **Both Connectionless and Connection-oriented service paradigm**
- ▶ None of the given

The product of delay and throughput measures the _____ of data that can be present on the network.

- ▶ Area
- ▶ **Volume**
- ▶ Length
- ▶ None of the given

DELAY THROUGHPUT PRODUCT:

It is computed as delay time multiplied by effective throughput. It measures amount of data that can be present in the network (P# 80)

A network with throughput T and delay D has a total of _____ bit in transit at any time.

▶ T / D ▶ **T x D** ▶ T + D ▶ None of the given

A network with throughput T and delay D has a total of T x D bits in transit at any time. (e-books)

One repeater _____, two repeaters _____ the maximum cable length limitation.

▶ **doubles, triple** ▶ square roots, cube roots ▶ and, triple ▶ doubles, cancel

One repeater doubles, two repeaters triple the maximum cable length limitation. (P# 49)

A network uses a ----- if all computers attach to a central point

▶ **Star Topology** ▶ Ring Topology ▶ Bus Topology ▶ None of the given

STAR TOPOLOGY:

In this topology, all computers are attached to a central point, which is sometimes called the "Hub" (P# 25)

Computers attached to an ethernet use ----- in which a computer waits for the other to be idle before transmitting a frame.

▶ **CSMA/CD** ▶ CSMA/CA ▶ TOKEN PASSING ▶ None of the given

LAN traffic congestion generally caused by

- A. Low bandwidth, Too many hosts in a broadcast domain, Multicasting, Broadcast Storms
- B. High Bandwidth
- C. None of above

-Answer

Answer: Option A

2.

Which among following is not a router function

- A. Packet Switching
- B. Packet Filtering
- C. Internetwork communication
- D. Forwarding **broadcasts** by default

-Answer

Answer: Option **D**

Explanation:

It is advantage of router that :
They do not forward broadcasts by default
They can filter the network based on layer 3 information

3.

OSI reference model has how many layers

- A. 4
- B. 5
- C. 7
- D. 3

-Answer

Answer: Option **C**

4.

Framing is done on which layer

- A. Datalink Layer
- B. Physical Layer
- C. Transport Layer
- D. Application Layer

-Answer

Answer: Option **A**

5.

Segments are made on which layer

- A. Session Layer
- B. Transport Layer
- C. Application Layer
- D. Network Layer

-Answer

Answer: Option **B**

6.

Which layer deals with TCP and UDP

- A. Transport Layer
- B. Physical Layer
- C. Network Layer
- D. None of above

-Answer

Answer: Option **A**

7.

Which layer deals with Flow control

- A. Session Layer
- B. Network Layer
- C. Transport Layer
- D. Application Layer

-Answer

Answer: Option **C**

Explanation:

Data integrity is ensured at the Transport layer by maintaining [flow control](#) and by allowing users to request reliable data transport between systems.

8.

Windows are used to

- A. control the amount of unacknowledged data segments
- B. creating new frames
- C. creating sigments
- D. none of above

-Answer

Answer: Option **A**

Explanation:

Windows are used to control the the amount of outstanding, unacknowledged data segments. This process is also known as windowing

9.

Which layer deals with Packets

- A. Physical Layer
- B. Network Layer
- C. Transport Layer
- D. Application Layer

-Answer

Answer: Option **B**

10.

Which layer deals with Network topology

- A. Physical Layer
- B. Datalink Layer
- C. Network Layer
- D. Session Layer

-Answer

Answer: Option **B**

Explanation:

Datalink layer deals with network topology and ensures the data to be delivered on the intended device on the LAN

11.

Binary value of 128 is

- A. 10000000
- B. 10100000
- C. 11000000
- D. 10100100

-Answer

Answer: Option **A**

12.

Which layer sends and receives bits

- A. Session Layer
- B. Physical Layer
- C. Datalink Layer
- D. None of above

-Answer

Answer: Option **B**

13.

Which mode has no collisions

- A. Half Duplex
- B. Full Duplex
- C. All of above
- D. None of above

-Answer

Answer: Option **B**

14.

A dedicated switch port is required for each

- A. Full duplex node
- B. Half duplex node
- C. Both of above
- D. None of above

-Answer

Answer: Option **A**

15.

MAC address is of how many bits

- A. 24 bit
- B. 32 bit
- C. 48 bit
- D. 128 bit

-Answer

Answer: Option C

Explanation:

[MAC address](#) means Media Access Control Address, which is 48 bit address in hexadecimal format burned on NETWORK INTERFACE CARD(NIC).

16.

MAC address is written in which format

- A. Binary format
- B. Simple numeric format
- C. Hexa **decimal** format
- D. none of above

-Answer

Answer: Option C

17.

Which of following is not an ethernet cable type

- A. straight-through cable
- B. crossover cable
- C. rolled cable
- D. array cable

-Answer

Answer: Option D

18.

Straight cable is used to connect

- A. Host to switch or hub
- B. Host to Router
- C. Both of above
- D. None of above

-Answer

Answer: Option A

19.

Crossover cable is used to connect

- A. Switch to router
- B. Host to host
- C. Hub to router
- D. none of above

-Answer

Answer: Option **B**

20.

Rolled cable is used to

- A. Connect switch to switch
- B. Connect Hub to Hub
- C. Connect Router to Router
- D. Connect Host to Router console serial communication port

-Answer

Answer: Option **D**

21.

Which network will not be susceptible to EMI

- A. Thicknet coax
- B. Thinnet coax
- C. [Fiber optic cable](#)
- D. none of above

-Answer

Answer: Option **C**

22.

Which type of RJ45 UTP calbe is used between switches

- A. straight-through cable
- B. Crossover cable
- C. Both can be used
- D. None can be used

-Answer

Answer: Option **B**

TCP/IP suite was created by

- A. IEEE
- B. Department of defence
- C. Open source
- D. None of above

-Answer

Answer: Option **B**

2. TCP/IP reference model contains how many layers

- A. 3
- B. 4
- C. 6
- D. 7

-Answer

Answer: Option **B**

Explanation:

TCP/IP reference model has four layer

Application Layer
Host to Host
Internet Layer
Network Access

3. Telnet

- A. allows user to connect client machine
- B. [transferring files](#)
- C. sharing files
- D. none of above

-Answer

Answer: Option **A**

4. Which protocol deals with emails

- A. FTP
- B. SMTP
- C. LPD
- D. X window

-Answer

Answer: Option **B**

5. Which protocol deals with resolving domain names

- A. X-Window
- B. SMTP
- C. DNS
- D. FTP

-Answer

Answer: Option **C**

6. Which protocol ensures reliable delivery

- A. TCP
- B. UDP
- C. Both of above
- D. None of above

-Answer

Answer: Option **A**

7. Which protocol uses window flow system

- A. UDP
- B. TCP
- C. FTP
- D. None of above

-Answer

Answer: Option **B**

8. ICMP works on which layer

- A. Physical Layer
- B. Datalink Layer
- C. [Network layer](#)
- D. Transport Layer

-Answer

Answer: Option C

9. Which protocol finds the MAC address from IP address

- A. SMTP
- B. ICMP
- C. ARP
- D. RARP

-Answer

Answer: Option C

10. Which IP is reserved for loopback testing

- A. 192.168.0.0
- B. 10.255.255.255
- C. 255.0.0.0
- D. None of above

-Answer

Answer: Option D

Explanation:

127.0.0.1 is reserved for loopback testing

11. Which protocol uses both TCP and UDP

- A. FTP
- B. SMTP
- C. Telnet
- D. DNS

-Answer

Answer: Option D

12. Which layer of TCP/IP stack is equivalent to transport layer of OSI

- A. [Application layer](#)
- B. [Host to Host](#) layer
- C. Internet
- D. [Network access](#)

-Answer

Answer: Option B

13. Which layer will be used while transmitting data using FTP or Telnet

- A. Presentation
- B. Application
- C. Session
- D. Transport

-Answer

Answer: Option **B**

14. Which company developed TCP/IP protocol for networking

- A. IBM
- B. DEC
- C. DARPA
- D. Xerox

-Answer

Answer: Option **C**

What is disadvantage of NAT

- A. Conserves the legally [registered](#) addresses
- B. Loss of end to end IP traceability
- C. Eliminates address renumbering as network changes
- D. None of above

-Answer

Answer: Option **B**

2. Which term is not related to NAT

- A. inside local
- B. outside local
- C. inside global
- D. external global

-Answer

Answer: Option **D**

3. Meaning of Outside local

- A. Name of inside source address before translation
- B. Name of destination host before translation
- C. Name of inside host after translation
- D. Name of outside destination host after translation

-Answer

Answer: Option **B**

4. Which command will allow you to see real time translation on your router

- A. show ip nat translations
- B. show ip nat [statistics](#)
- C. debug ip nat
- D. clear ip nat translations

-Answer

Answer: Option **C**

5. Which command will show you all the translations active on your router

- A. show ip nat translations
- B. show ip nat statistics
- C. debug ip nat
- D. clear ip nat translations

-Answer

Answer: Option **A**

6. Which command will show you the summary of NAT configuration

- A. show ip nat translations
- B. show ip nat statistics
- C. debug ip nat
- D. clear ip nat translations

-Answer

Answer: Option **B**

7. Which command would you place on the interface on a private network

- A. ip nat inside
- B. ip nat outside
- C. ip outside global
- D. ip inside local

-Answer

Answer: Option **A**

8. Pat address translation is also termed as

- A. NAT Fast
- B. NAT Static
- C. Overloading Static

- D. NAT Overload

-Answer

Answer: Option **D**

1. IPV6 is of how many bits

- A. 32 bits
- B. 64 bits
- C. 128 bits
- D. 256 bits

-Answer

Answer: Option **C**

2. IPV6 is in which format

- A. Hexadecimal format
- B. Octal format
- C. Alphanumeric format
- D. Numeric format

-Answer

Answer: Option **A**

3. EIGRPv6 use which multicast address?

- A. FF02::A
- B. FF02::5
- C. FF02::6
- D. FF02::9

-Answer

Answer: Option **A**

4. What multicast address does RIPng use

- A. FF02::A
- B. FF02::8
- C. FF02::9
- D. FF02::5

-Answer

Answer: Option **C**

5. When IPv6 launched

- A. June 2, 2012
- B. June 4, 2012
- C. June 5, 2012
- D. June 6, 2012

-Answer

Answer: Option **D**

6. Which of the following is not a feature of Anycast addressing in IPv6?

- A. Same IPv6 address assigned to multiple nodes
- B. [Routing protocol](#) makes the "nearest" determination
- C. Supports many future potential applications
- D. Provides an any-to-many communication model

-Answer

Answer: Option **D**

Which is not a valid type of routing

- A. Static routing
- B. [Default](#) routing
- C. Dynamic routing
- D. Custom routing

-Answer

Answer: Option **D**

2. Where we should use default routing

- A. on stub networks- which have only one exit path out of the network
- B. which have more than one exit path out of the network
- C. minimum five exit paths out of the network
- D. None of above

-Answer

Answer: Option **A**

3. Default administrative distance of EIGRP

- A. 0
- B. 1
- C. 110
- D. 90

-Answer

Answer: Option **D**

4. Default administrative distance of Static Route

- A. 0
- B. 90
- C. 100
- D. 1

-Answer

Answer: Option **D**

5. Default administrative distance of RIP

- A. 0
- B. 90
- C. 120
- D. 130

-Answer

Answer: Option **C**

6. Which among following have administrative distance 0

- A. Unknown
- B. RIP
- C. Static route
- D. Connected interface

-Answer

Answer: Option **D**

7. Which protocol uses an autonomous system number for activation

- A. IGRP
- B. RIP
- C. Both of above
- D. None of above

-Answer

Answer: Option **A**

8. Which protocol gives a full route table update every 30 seconds

- A. IEGRP
- B. RIP
- C. both of above
- D. none of above

-Answer

Answer: Option **B**

9. Which statement is true regarding classless routing protocol

- A. The use of discontinuous networks is not allowed
- B. Use of variable length subnet masks is premitted
- C. RIPv1 is a classless [routing protocol](#)
- D. IGRP supports classes routing within the same autonomous system

-Answer

Answer: Option **B**

10. Which command displays RIP routing updates

- A. [show ip route](#)
- B. debug ip rip
- C. show protocols
- D. debug ip route

-Answer

Answer: Option **B**

11. Which is true regarding RIPv2

- A. It has lower administrative distance than RIPv1
- B. It converges faster than RIPv1
- C. It is harder to configure than RIPv1
- D. It has the same timers as RIPv1

-Answer

Answer: Option **D**

Meaning of IOS is

- A. Integrated operating system
- B. Intergrated open system
- C. Internetworking operating system
- D. None of above

-Answer

Answer: Option **C**

2. First IOS was written in

- A. 1984
- B. 1985
- C. 1986
- D. 1987

-Answer

Answer: Option **C**

3. Which is not a function of IOS

- A. Carrying network protocols and functions
- B. Connecting high speed traffic between devices
- C. Providing scalability for ease of network growth and redundancy
- D. Creating session between hosts in LAN

-Answer

Answer: Option **D**

4. What happens first after starting a router

- A. Load IOS from flash memory
- B. Power on self test of router
- C. Searching by IOS of a valid configuration
- D. None of above

-Answer

Answer: Option **B**

Explanation:

When you bring up a router, it firstly run a Power on self test(POST), If it passes then it will load IOS from flash memory then after that IOS looks for a valid configuration.

5. CLI in IOS terminology is short form of

- A. Caller line interface
- B. Common line interface
- C. Command link interface
- D. None of above

-Answer

Answer: Option **C**

6. Subinterfaces allows to you to

- A. Create logical interfaces within the router
- B. Get into privileged mode
- C. Get into user execution mode
- D. None of above

-Answer

Answer: Option **A**

7. Which mode provides interactive configuration dialog

- A. User EXEC mode
- B. Privileged mode
- C. Global configuration mode
- D. Setup mode

-Answer

Answer: Option **D**

8. Which user mode has limited monitoring commands in IOS

- A. User EXEC mode
- B. Privileged EXEC mode
- C. Specific configuration mode
- D. Setup mode

-Answer

Answer: Option **A**

9. Which mode provide access to all router commands

- A. User EXEC mode
- B. Privileged mode
- C. Global configuration mode
- D. Setup mode

-Answer

Answer: Option **B**

10. Which mode commands affects interfaces/processes only

- A. User EXEC mode

- B. Privileged mode
- C. Specific configuration mode
- D. Setup mode

-Answer

Answer: Option **C**

11. Which command will show all commands available from that particular mode

- A. config
- B. enable
- C. interface
- D. ?

-Answer

Answer: Option **D**

Explanation: ? is called help command. It shows all commands available from mode in which you are [login](#)

12. Which command will take cursor to beginning of line

- A. Ctrl+A
- B. Ctrl+E
- C. Ctrl+B
- D. Ctrl+F

-Answer

Answer: Option **A**

13. Which command will take cursor to the end of line

- A. Ctrl+A
- B. Ctrl+E
- C. Ctrl+B
- D. Ctrl+F

-Answer

Answer: Option **B**

14. Which command will take cursor to one word back

- A. Ctrl+A
- B. Ctrl+B
- C. Ctrl+F
- D. Ctrl+D

-Answer

Answer: Option **B**

15. Which command will end configuration mode and returns to EXEC

- A. Ctrl+A
- B. Ctrl+B
- C. Ctrl+F
- D. Ctrl+Z

-Answer

Answer: Option **D**

16. Command to find the broadcast address from router

- A. show running-config
- B. show startup-config
- C. show interfaces
- D. show protocols

-Answer

Answer Option **C**

17. Command to show if DTE or DCE cable is plugged into serial 0

- A. sh int s0
- B. sh int serial 0
- C. show serial 0 controllers
- D. show controllers s 0

-Answer

Answer: Option **D**

18. How many simultaneous sessions a Cisco router support by default

- A. 3
- B. 4
- C. 5
- D. 6

-Answer

Answer: Option **C**

19. Command to delete NVRAM on a router

- A. delete NVRAM
- B. delete running-config
- C. erase NVRAM
- D. erase start

-Answer

Answer: Option **D**

20. Which layer of OSI model will have problem if you get message "Serial1 is down, line protocol is down" after typing "show interface serial 1"

- A. Physical Layer
- B. Datalink Layer
- C. Network layer
- D. It is router problem

-Answer

Answer: Option **A**

21. If you delete contents of NVRAM and reboot router, in which mode you will enter

- A. Privileged mode
- B. Global mode
- C. Setup mode
- D. There will be error

-Answer

Answer: Option **C**

22. How to display configurable parameters and statistics of all interfaces on router

- A. show running-config
- B. show startup-config
- C. show versions
- D. show interfaces

-Answer

Answer: Option **D**

.Routing is done on which layer

- A. Datalink Layer
- B. **Network Layer**

- C. Session
- D. Presentation

-Answer

Answer: Option **B**

2. Which performs modulation and demodulation

- A. Modem
- B. [Fiber optic](#)
- C. satellite
- D. [coaxial cable](#)

-Answer

Answer: Option **A**

3. Routing is done on which layer

- A. Datalink Layer
- B. Session Layer
- C. Network layer
- D. Transport Layer

-Answer

Answer: Option **C**

4. Dialogue control and token management are responsibilities of

- A. Network layer
- B. Session Layer
- C. Transport Layer
- D. None of above

-Answer

Answer: Option **B**

5. X.25 standard specifies

- A. technique for start-stop data
- B. technique for dial access
- C. DTE/DCE interface
- D. data bit rate

-Answer

Answer: Option **C**

6. First network which was made available

- A. IBMm Token Ring 1985
- B. Novell Netware
- C. IBM PC Network 1984
- D. DECNet 1980

-Answer

Answer: Option **D**

7. Most commonly used transmission speeds in BPS is

- A. 2400
- B. 9600
- C. 1200
- D. 4800

-Answer

Answer: Option **A**

8. A central computer surrounded by one or more computers is called

- A. ring network
- B. bus network
- C. star network
- D. all of above

-Answer

Answer: Option **C**

9. Which among following is correct

- A. Protocol converters are the same as multiplexers
- B. Protocol converters are the same as TDMs
- C. Protocol converters are usually not operated in pairs
- D. None of above

-Answer

Answer: Option **C**

10. A network which need human intervention for routing signal is

- A. Bus network
- B. ring network
- C. star network
- D. T switched network

-Answer

Answer: Option **D**

11. Videotax is combination of

- A. communication
- B. television
- C. computer technology
- D. all of above

-Answer

Answer: Option **D**

12. Name of the topology in which there are bidirectional links between each possible nodes

- A. Ring
- B. Mesh
- C. Star
- D. Tree

-Answer

Answer: Option **B**

13. Communication mode which supports data in both directions at the same time is called

- A. simplex
- B. Full **duplex**
- C. Half duplex
- D. multiplex

-Answer

Answer: Option **B**

14. Frequency range 300 kHz to 3 MHz is used for

- A. **AM radio** transmission
- B. FM radio transmission
- C. TV radio transmission
- D. None of above

-Answer

Answer: Option **A**

15. Sink means

- A. [sending unit](#)
- B. receiving unit
- C. broadcasting
- D. none of above

-Answer

Answer: Option **B**

16. At data link layer error detection is achieved by

- A. [Cyclic Redundancy](#) Code
- B. Hamming codes
- C. Bit stuffing
- D. Equalization

-Answer

Answer: Option **A**

17. Loss in signal power as light travels down the fiber is called

- A. Interruption
- B. Propagation
- C. Scattering
- D. Attenuation

-Answer

Answer: Option **D**

18. During networking, the process of processor asking each host that if it want to send message is called

- A. querying
- B. sharing
- C. communicating
- D. polling

-Answer

Answer: Option **D**

19. In data transmission the bit coding scheme used to represent a byte is typically

- A. EBCDIC
- B. SNA
- C. ASCII
- D. Hexadecimal

-Answer

Answer: Option **C**

20. A communication network which is used over regional, national or global area is

- A. LAN
- B. WAN
- C. MAN
- D. VAN

-Answer

Answer: Option **B**

21. Choose odd one

- A. bus hubs
- B. enterprise hubs
- C. low-end standalone hubs
- D. stackable hubs

-Answer

Answer: Option **A**