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

ATM is designed to work on_____.

► Twisted Pair

► Coaxial

► Radio Frequency

► Fiber (Computer Networks and Internets, page 72)

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

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

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

► Star and Tree

► Tree and Ring

► Star and Ring

► Star and Tree (Page 5)

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

► Ping (Computer Networks and Internets, page9)

► Traceroute

► ICMP

► None of the given

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

► ICMP

► Ping (Computer Networks and Internets, page 11)

► Trace route

► Non of the given

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

► Packet (Page 16)

► Frame

► Data

► None of the given

---------- 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

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

► Bus topology (Page 30)

► Ring topology

► Star topology

► None of the given

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

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

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

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

The maximum size of an Ethernet segment is_____

► 250 meters

► 500 meters (Page 27)

► 700 meters

► None of the given

A Bridge can _____

► Filter a frame

► Forward a frame

► Extend a LAN

► Do all the above rep

Questions:

1. We have two satellite locations, at first location one bridge is configured and at second location 2 bridges are configured. Which location performed will be faster? Give reason. (3 marks)

Answer:- Click here for detail Satellite locations with two bridges configured will performed faster. The brigade also had to provide power to virtually all of its East Timor assets. Setting up the satellite system, for example, required supplying power to both the communications station and the users' computers. A bridge that has multiple ports is known as a networking switch. Both bridges and switches are capable of directing traffic to specific network addresses instead of broadcasting the data to all devices on a network segment. This functionality makes the bridge or switches a more advanced networking device over a hub or repeater.

2. There are two sites office A & B, both are using VPN. If a user of another network wants to send some packet to A, then what will be the behavior of network A? How data is protected in VPN environment? (05 marks)

Answer:- Click here for detail In theory when a machine on private network A wants to send a packet to a machine on private network B the packet is accepted by the VPN server. It is then encrypted and encapsulated within a standard IP

packet that has a destination address corresponding to the VPN server at network B. Notice that both VPN servers have to have to be “on the Internet” in the sense of having publicly accessible IP addresses. When the packet arrives at network B’s VPN server it extracts the encapsulated private packet, decrypts it and sends it on its way within the local network. The machines within network A and B don't have to have publicly accessible address - that is they don't have to be on the public Internet. This way of using the public Internet to connect two machines that are not on the public internet is another advantage of the VPN approach. As far as users of network A and B are concerned the VPN is as good as a dedicated physical connection. The idea of using public data packets to transfer embedded private data packets is often called “tunnelling” because it seems to create a data tunnel between the two networks. .

3. Star Textile has huge network of systems and switches. A task is given to IT Officer that if some link goes the entire network works smoothly. Which routing method will be use? 5 marks

Answer:- Distributed routing method is better for this purpose because Distributed routing relies on each node to compute its own routing table and build the required connections with its neighbors. Ideally, the network operation, status, and architecture of each node is transparent. Distributed routing is more

flexible than centralized routing because each node handles its own routing. The result is often improved system performance.

4. Six devices are connected in network A,B,C,D,E and F. All devices are on same packet switch. Computer A wants to send packet to E. How will packet switch forwards the packet? 3 marks

Answer:- rep

5. Network administrator wants to build a tunnel between sites offices. How will he build using private virtual network? 3 marks

Answer:- To establishes a private network that can send data securely between these two locations or networks through a "tunnel." A VPN tunnel connects the two PCs or networks and allows data to be transmitted over the Internet as if it were still within those networks.