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BSCS-4B

QUESTION NO 1:

Give some advantages and disadvantages of the connectionless service.

ANSWER:

ADVANTAGES:

- It is simple.
- The source and destination routers focus on only one packet at a time.
- It sends the packet without handshaking.

DISADVANTAGES:

- The packets do not arrive in an orderly manner.
- The message in this service will have long headers.
- Packets decide the route while transmission based on the network congestion.

QUESTION NO 2:

Give some advantages and disadvantages of the connection-oriented service.

ANSWER:

ADVANTAGES:

- It heavily relies on connection.
- It does not have problems with duplicate data packets.
- It guarantees data packet sequencing.

DISADVANTAGES:

- It requires more headers to ensure the communication between the sender and the receiver is reliable.
- It has a big header size.

QUESTION NO 3:

How are OSI and ISO related to each other?

ANSWER:

ISO stands for International Standards Organization which is a multinational organization that tries to standardize network communication protocols at the international level. OSI (Open System Interconnection) is a model that ISO put together as a networking communication standard.

QUESTION NO 4:

Draw a complete Chart to show protocol running on each OSI layer.

ANSWER:

OSI LAYER	PROTOCOAL RUNNING ON LAYER
Application layer	HTTP,FTP,POP,SMTP,DNS
Presentation layer	XOR,TLS,SSL,MIME
Session layer	ASP,X.225,ISO 8327
Transport layer	TCP,UDP
Network layer	IPV5,IPV6,ICMP,IPSEC,ARP,MPLS
Data link layer	RAPA,PPP, Frame relay, ATM etc.
Physical layer	RS 232, 100 Base IX, ISDN, Fiber, Wireless, Hubs

QUESTION NO 5:

Define IP4 Classes, Number of hosts and networks in each class.

ANSWER:

ADDRESS CLASS	NO.OF NETWORKS	NO.OF HOSTS	Range
CLASS A	127 (2 are reserved)	16,777,214	1.0.0.0 to 126.0.0.0
CLASS B	16,384	65,534	128.0.0.0 to 191.255.0.0
CLASS C	2,097,152	254	192.0.0.0 to 223.255.255.0
CLASS D	N/A	Multicasting	224.0.0.0 to 239.255.255.255
CLASS E	N/A	Experimental	240.0.0.0 to 255.255.255.255