Computer Network

SET A

MCQ (1x30=30)

Data communications are the transfer of data through some

1. **transmission medium**
2. linear medium
3. Network LAN
4. Protocols

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| Which of the following are benefits of VLANs?   1. They increase the size of collision domains. 2. They allow logical grouping of users by function. 3. They can enhance network security. 4. They increase the size of broadcast domains while decreasing the number of collision domains. 5. They simplify switch administration. 6. They increase the number of broadcast domains while decreasing the size of the broadcast domains. 7. 1 and 5 8. 2 and 4 9. 1,3,and 5 10. **2,3 and 6** |
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 Which of the following prompts indicates your router is in Privileged EXEC mode?

1. Router>
2. **Router#**
3. Router&
4. Router$

Network in which every computer is capable of playing the role of client, server or both at the same time is called

1. **peer-to-peer network**
2. local area network
3. dedicated server network
4. wide area network

A communication path way that transfers data from one point to another is called

1. Link
2. Node
3. Medium
4. Topology

Keyboard and traditional monitors are examples of

1. **Simplex devices**
2. Duplex devices
3. Half Duplex devices
4. Full Duplex devices

How many bits in the data unit has changed in single bit error?

1. **only 1**
2. two bits
3. three bits
4. four bits

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| What is the size of Source and Destination IP address in IP header? |
| 1. 4 bits |  |
| 1. 8 bits |  |
| 1. 16 bits |  |
| 1. **32 bits** |  |

Find the parity bit for 1001011

1. **0**
2. 1
3. 2
4. None

Traditionally, the Internet checksum is

1. 8-bit
2. **16-bit**
3. 24-bit
4. 32-bit

Unlike User Datagram Protocol (UDP), the Transmission Control Protocol (TCP) has the Services which is

1. **Connection Oriented**
2. Connectionless
3. Connection Available
4. Connection Origin

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| The applications of the Client and Server Model are |
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| 1. World Wide Web |
| 1. Network Printing |
| 1. Email |
| 1. **All of the above** |

The header size of a UDP datagram is:

1. 4 bytes
2. **8 bytes**
3. 20 bytes
4. 28 bytes

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| What is the subnetwork address for a host with the IP address 200.10.5.68/28? |
| |  |  | | --- | --- | | [A.](javascript:%20void%200;) | 200.10.5.56 | | [B.](javascript:%20void%200;) | 200.10.5.32 | | [**C.**](javascript:%20void%200;) | **200.10.5.64** | | [D.](javascript:%20void%200;) | 200.10.5.0 | |

Transmission media are directly controlled by the

1. **physical layer**
2. data link layer
3. network layer
4. session layer

Which one of the following task is not done by data link layer?  
a) framing  
b) error control  
c) flow control  
**d) channel coding**

Unguided medium is

1. twisted pair cable
2. coaxial cable
3. fiber optic cable
4. **free space**

In Coaxial Cable, the whole cable is protected by a

1. shield
2. **plastic cover**
3. insulator
4. conductor

Segmentation and reassembly is the responsibility of

1. 7th Layer
2. 6th Layer
3. 5th Layer
4. **4th layer**

Transmission data rate is decided by  
a) network layer  
**b) physical layer**  
c) data link layer  
d) transport layer

When a router needs to send a packet destined for another network, it must know the

1. Datagram
2. Medium
3. Path Flow
4. **IP Address**

The network layer concerns with  
a) bits  
b) frames  
**c) packets**  
d) none of the mentioned

 You need to set up a password that will prevent unauthorized users from telnetting/ssh into your router. What series of commands would you use?

1. Acme1(config)# line console 0  
   Acme1(config-line)# password acme   
   Acme1(config-line)# login
2. Acme1(config)# line vty 0   
   Acme1(config-line)# enable password acme
3. Acme1(config)# line vty 0  
   Acme1(config-line)# enable secret acme  
   Acme1(config-line)# login
4. **Acme1(config)# line vty 0  
   Acme1(config-line)# password acme  
   Acme1(config-line)# login**

Wildcard domain names start with label  
a) @  
**b) \***  
c) &  
d) #

The 4 byte IP address consists of  
a) network address  
b) host address  
**c) both network address & host address**  
d) none of the mentioned

The network layer protocol of internet is  
a) ethernet  
**b) internet protocol**  
c) hypertext transfer protocol  
d) none of the mentioned

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| You need to subnet a network that has 5 subnets, each with at least 16 hosts. Which classful subnet mask would you use? |
| |  |  | | --- | --- | | [A.](javascript:%20void%200;) | 255.255.255.192 | | [**B.**](javascript:%20void%200;) | **255.255.255.224** | | [C.](javascript:%20void%200;) | 255.255.255.240 | | [D.](javascript:%20void%200;) | 255.255.255.248 |  |  | | --- | | What is the function of a router? | | 1. converting the data from one format to another |  | | 1. **Forward the packet to the up links** |  | | 1. error detection in data |  | | 1. None of the above |  |   RIR stands for \_\_\_\_\_\_\_\_ a) Regional Internal Registries b) Registries Internet Regional c) **Regional Internet Registries** d) Registries Internal Regional   |  | | --- | | To test the IP stack on your local host, which IP address would you ping? | | |  |  | | --- | --- | | [A.](javascript:%20void%200;) | 127.0.0.0 | | [B.](javascript:%20void%200;) | 1.0.0.127 | | [**C.**](javascript:%20void%200;) | **127.0.0.1** | | [D.](javascript:%20void%200;) | 127.0.0.255 | |   22 |

An RPC (remote procedure call) is initiated by the

1. Server
2. **Client**
3. both (a) and (b)
4. none of the mentioned

Network layer firewall works as a  
a) Frame filter  
**b) Packet filter**  
c) Both Frame as well as Packet filter  
d) None of the mentioned

In a simple echo-request message, the value of the sum is 01010000 01011100. Then, value of checksum is  
**a) 10101111 10100011**  
b) 01010000 01011100  
c) 10101111 01011100  
d) 01010000 10100011

HTTP client requests by establishing a \_\_\_\_\_\_\_\_\_\_ connection to a particular port on the server.  
a) User datagram protocol  
**b) Transmission control protocol**c) Broader gateway protocol  
d) None of the mentioned

HTTPS is \_\_\_\_\_\_\_\_ protocol.  
**a) Application layer**  
b) Transport layer  
c) Network layer  
d) None of the mentioned

The data link layer takes the packets from \_\_\_\_\_\_\_\_\_ and encapsulates them into frames for transmission.  
**a) network layer**  
b) physical layer  
c) transport layer  
d) application layer

DNS database contains  
a) name server records  
b) hostname-to-address records  
c) hostname aliases  
**d) all of the mentioned**

The network address of 172.16.0.0/19 provides how many subnets and hosts?

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| [A.](javascript:%20void%200;) | 7 subnets, 30 hosts each |
| [B.](javascript:%20void%200;) | 8 subnets, 8,190 hosts each |
| [C.](javascript:%20void%200;) | 8 subnets, 2,046 hosts each |
| [D.](javascript:%20void%200;) | 7 subnets, 2,046 hosts each |

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| An example of a layer that is absent in broadcast networks is:   1. Physical layer |  |
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| 1. Presentation layer |
| 1. **Network layer** |
| 1. Application layer   Ethernet frame consists of a) **MAC address** b) IP address c) both MAC address and IP address d) none of the mentioned  The maximum size of payload field in ethernet frame is a) 1000 bytes b) 1200 bytes c) 1300 bytes **d) 1500 bytes** |

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| DNS can use the services of \_\_\_\_\_\_\_\_ using the well-known port 53. | |
| http://highered.mheducation.com/olcweb/styles/shared/spacer.gif |  |  |
| 1. **UDP** |  |  |
| 1. TCP |  |  |
| 1. either (a) or (b) |  |  |
| 1. none of the above |  |  |