Computer Network

SET B

MCQ (1x30=30)

Q1. What is Broadcast MAC Address ?

A. EE-EE-EE-EE-EE-EE

B. FF-FF-FF-FF-FF-FF

C. AA-AA-AA-AA-AA-AA

D. one of above

Q2.IANA stands for \_\_\_\_\_\_\_\_\_\_  
 a) Internet Assigned Numbers Authority  
 b) Internal Assigned Numbers Authority  
 c) Internet Associative Numbers Authoritative  
 d) Internal Associative Numbers Authority

Q3. During error reporting, ICMP always reports error messages to  
 A. Destination  
 B. Source  
 C.Next router  
 D. Previous router

Q4. The header size of IP is

A. 4 byte

B 20 byte

C.. 8 byte

D 48 byte

Q5.Both station can transmit and receive data simultaneously in

1. simplex mode
2. Half duplex mode
3. Full duplex mode
4. None of Above

Q6.In star topology if the central hub goes down, it effects

1. One node
2. No node
3. whole system
4. Don't know

Q7.Find the parity bit for 0011011

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

Q8.If the value of checksum is 1, then the message is

1. accepted
2. rejected
3. sent back
4. resend

Q9.CRC stands for

1. combine resistance check
2. cyclic redundancy code
3. combine redundancy code
4. cyclic redundancy check

Q10.Your boss is concerned about security on your network. She wants to make sure that no one can identify passwords if they happen to view a configuration on your router. What command will encrypt all passwords on your router?

1. Router1#service password-encryption
2. Router1(config)#service password-encryption
3. Router1#enable secret password
4. Router1(config)#enable secret password

Q11.The domain name system is maintained by  
a) distributed database system  
b) a single server  
c) a single computer  
d) none of the mentioned

Q12. UDP has the same Checksum controlling like

1. TCP
2. ICMP
3. STMP
4. IP

Q13.The header size of a UDP datagram is:

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

Q14.Guided media provides a conduct from one device to another, includes

1. twisted pair cable
2. fiber optic cable
3. coaxial cable
4. All of the above

Q15.Which of the following commands will remove an IP address on your Catalyst 1900 switch?

1. Switch1#ip address 10.1.1.1
2. Switch1#ip address 10.1.1.1 255.255.255.0
3. Switch1(config)#no ip address 10.1.1.1 255.255.255.0
4. Switch1(config-vlan)#no ip address 10.1.1.1 255.255.255.0

Q16.The most secured cable used in communication is

1. UTP
2. STP
3. Optical fiber
4. None

Q17.The network layer is responsible for the

1. Node to node communication
2. Source to destination
3. Hop to hop communication
4. both b and c

Q18.Which address identifies a process on a host?  
a) physical address  
b) logical address  
c) port address  
d) specific address

Q19. RARP stands for

A Reverse Address Resolve Point

B Reverse Address Rest Protocol

C Reverse Address Resolution Protocol

D None.

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| Q20.What does Router do in a network? |
| 1. Forwards a packet to all outgoing links |  |
| 1. Forwards a packet to the next free outgoing link |  |
| 1. Determines on which outing link a packet is to be forwarded |  |
| 1. Forwards a packet to all outgoing links except the originated link |  |

Q21.ICMP is primarily used for  
a) error and diagnostic functions  
b) addressing  
c) forwarding  
d) none of the mentioned

Q22.Network layer firewall has two sub-categories as  
a) State full firewall and stateless firewall  
b) Bit oriented firewall and byte oriented firewall  
c) Frame firewall and packet firewall  
d) None of the mentioned

Q23.When a router cannot route a datagram, the datagram is discarded and sends a message to source i.e.

1. Destination Unreachable
2. Destination unverified
3. Destination Unavailable
4. Destination no-entry

Q24.SMTP service listens for connection on port number  
a) 20  
b) 21  
c) 25  
d) 23

Q25.IP is \_\_\_\_\_\_\_\_ protocol.  
a) Application layer  
b) Transport layer  
c) Network layer  
d) None of the mentioned

Q26.The network address of 172.16.0.0/17 provides how many subnets and hosts?

|  |  |
| --- | --- |
| [A.](javascript:%20void%200;) | 7 subnets, 30 hosts each |
| [B.](javascript:%20void%200;) | 2 subnets, 32,766 hosts each |
| [C.](javascript:%20void%200;) | 8 subnets, 2,046 hosts each |
| [D.](javascript:%20void%200;) | 7 subnets, 2,046 hosts each |

Q27.In Server based network, there should be at least one………in a network.

1. server
2. client
3. peer
4. sender

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| Q28.If an Ethernet port on a router were assigned an IP address of 192.168.112.1/25, what would be the valid subnet address of this host? |
| |  |  | | --- | --- | | [A.](javascript:%20void%200;) | 192.168.112.0 | | [B.](javascript:%20void%200;) | 192.168.0.0 | | [C.](javascript:%20void%200;) | 192.168.96.0 | | [D.](javascript:%20void%200;) | 192.168.255.0 | |

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| Q29.Which of the following devices translates an IP addresses into hostnames ? |
| a.DNS Server |  |
| b.Hub |  |
| c.DHCP Server |  |
| d.Firewall |  |

Q30. Which command would you use in the CLI at User mode to enter Privileged EXEC mode?

1. Privilege
2. Admin
3. Enable
4. Disable

Short Answer questions ( 6x5=30)

Q1. What is Networking? Explain the applications on network?

2. What is Workgroup and Domain in network? Explain the P2P network with neat diagram?

3. What is TCP? Explain its structure.

4. Define protocol? Draw the IPV6 structure and explain it.

5. What is multicast? Explain routed and routing protocol.

6. What is logical address? Explain its types? Differentiate between public and private IP address.

7. What is wireless network? What are its pros and cons.

8. Explain the different types of topologies used in network?

Long Answer questions:

1.

a. why do we need DNS? Explain the Working Principle of DNS with neat diagram. Chapter 6

b. What is single bit and burst bit error? Explain the TCP and UDP structure with neat diagram. Chapter 6

2.

a. what is Subnet? Mentions its pros and cons. explain the Subnetting with class A example.

b. What is FLSM? How it is differ form VLSM? Explain the VLSM with examples.

3.

a. Explain the IPV6 structure with neat diagram? what is difference between logical and physical address.

b. What is hub? How is it differ from Switch? Explain the various components of switch?