**Module-2 = Data Communication (Network +)**

1. What are the LAN and WAN?
2. Describe common network components.
3. What are the Peer-to-Peer Network and Client-Server Network Model?
4. What is MPLS?
5. What are types of Network Topologies?
6. What are the difference Start, Ring, and Mesh Topologies?
7. What is OSI Model? Write down list of OSI Model.
8. Describe about of OSI Model?
9. What are the Hub, Switch and Router?
10. What are the Flow Control, Windowing and buffer?
11. What is Data Encapsulation?
12. What are the Coaxial, Twisted-pair and Fiber optic cable?
13. What are the difference between UTP and STP?
14. Write down of wiring standards. TIA/EIA-568A ad TIA/EIA-568B.
15. Write down purpose of straight-through and crossover cable.
16. What are the functions of Cable properties?
17. What are the Collision Domain, Broadcast Domain and CSMA/CD?
18. Write down of Hexadecimal to Binary and Decimal? Example of: **F5 =?**
19. Write down of Decimal to Binary, and Binary to Decimal. Example of: **250 =?** And **11101101 =?**
20. Write down difference of Hub and Switch?
21. Difference between Switch and Bridge?
22. What is function of Router?
23. What is function of Routing table and CAM Table?
24. What is firewall?
25. What is function of DHCP and DNS?
26. What is Proxy Server?

1. What is TCP/IP and DoD model?
2. Write down of DHCP Client and Server process.
3. Difference between of TCP ad UDP?
4. What is ICMP and ARP?
5. What is Data encapsulation?
6. What are the difference of Telnet and SSH?
7. What are the FTP, SFTP, TFTP?
8. What are the SMTP, POP3, IMAP4, RDP, HTTP, HTTPS, SSL/TLS?
9. What are the IP Address, Subnet Mask and Default Gateway?
10. What is subnet?
11. What are types of IP Class and Range?
12. What is private and Public IP Address? Write down list of Private IP Address range?
13. Why we use Loopback address?
14. What is APIPA? When use APIPA Address?
15. What is CIDR?
16. What is Subnetting and VLSM?
17. What is VPN?
18. What are the VLAN and STP?
19. What is Repeater?
20. What are the difference between Hub and Switch?
21. What is RIP?
22. What is CSMA/CA?
23. What is MAC Address?
24. What is ACL?
25. What is Firewall?
26. What is Binary bit/byte?
27. What is Ipconfig?
28. What is nslookup?
29. Why we use ping command?
30. What are the Tracert and Pathping?
31. Describe about of Netstat and Nbtstat?
32. What is function of NetBIOS