COMPUTER NETWORKING : CONCEPTS

CSE 3751

Assignment -02

1. Explain the difference between FTP and FTPS protocol?

2. Explain the steps involved in the DHCP 4-way handshake process.

3. Differentiate between Cisco 3-tier and 2-tier architecture referred by the network professionals while designing a network for an organization.

4. How do the cloud service models: Infrastructure as a Service (IaaS), Platform as a Service (PaaS), Software as a Service (SaaS) and Desktop as a Service (DaaS) differ in terms of its use?

5. With the help of a neat diagram discuss the working of Address Resolution Protocol (ARP).

6. State the similarity and difference between access point and Wi-Fi router.

7. Explain why modems are important in internet connectivity from house hold hosts.

8. Briefly explain how does router use OSPF protocol to find the best path for a destination host/network

9. Can QoS be used as a solution for controlling the traffic with better performance in a network? List out the metrics used in this approach for measurement of traffic over a network

10. What is a Bridge Protocol Data Unit (BPDU) frame? How this is used to find the route bridge in a network comprising of multiple switches having redundancy paths among them and that employs spanning tree protocol?

11. Name and discus various types of VLAN that are supported in computer networking.

12. Describe the role of Dynamic Host Configuration Protocol (DHCP) in a wireless network.

13. Mention and describe the relevance and importance of the different performance metrics for operation of any networking device.

14. Write the default format of a syslog message? Explain each component.

15. What does change management focus in a network implanted organization? State different phases and the functionality of each associated with the process of its implementation.

16. What are the different recovery concepts used in any networking organization for overcoming sudden network disasters? Explain the process of network device backup and restoration in the event of disaster recovery.

17. Mention some of the most common guidelines for defining password policies created by system administrators.

18. Name and define the key terminologies must be referred when implementing the high availability techniques within a network.

19. Assume a critical server operates for 8,745 hours per year and experienced 10 failures within the same year. Further, the IT professionals engaged spends a total of 60 hours in the same year for repairing all the failures. Find (i) Mean Time To Repair (ii) Mean Time Between Failure

20. State the difference between active- active and active-passive configuration with suitable diagram.