

Dronacharya College of Engineering, Gurgaon

Department of Electronics and Computers Engineering

Subject: Computer Networks (IT-305-F)

Semester: VI/ Branch:ECS

Important Questions

Section A

1. Explain in detail the OSI reference model.
2. Give the advantages & disadvantages of bus & ring topologies.
3. What are LAN, MAN and WAN?
4. Explain the services & protocols of Network layer.
5. What are the functions of presentation layer of OSI model?
6. Discuss limitations of OSI Model

Section B

1. What is the main difference between TCP and UDP?
2. Explain why subnet masking is used.
3. Define ARP and RARP?
4. What do you mean by IP addressing? Also explain the IP address classes and subnet addressing.
5. Explain IP version 6(IPv6) and ARPANET?
6. Describe the functions of each of the layers of TCP/IP reference model.
7. Discuss History of TCP/IP reference model?
8. What are different functions of IGMP?
9. How do you find the class of address given the IP address?
10. Why is sub netting required?
11. Explain the Hierarchical name spaces in Domain Name System
12. What are the limitations of POP3 protocol? How is IMAP4 better than POP3 protocol?
13. What are HTTP transactions?
14. What is the use of Virtual Terminal in remote computing?

Write the functions of MUA and MTA.

Section C

1. Explain Synchronous Optical Network (SONET).

2. Explain Wireless Links.
3. Compare ATM and Frame Relay.
4. Explain Synchronous Digital Hierarchy (SDH)?
5. Explain Distributed Queue Dual Bus (DQDB)?
6. Explain the following: Hubs, Switches, Bridges, Routers, and Gateways with appropriate diagrams?
7. Compare the implementations of Ethernet, Fast Ethernet and Gigabit Ethernet.
8. Explain different congestion control techniques in WAN.
9. What is routing? How an optimal routing algorithm can improve network performance?
10. What are distributed queues in DQDB?
11. How multiplexing is done in SONET?
12. Why don't we use Ethernet for long distance connection instead of SONET?

Section D

1. Explain polling and traps in detail.
2. Explain Network Operating Systems Windows NT/2000 in detail.
3. Explain Internet and Private Networks.
4. What is piggybacking?
5. What are remote monitoring techniques?
6. Give the architecture of client server infrastructure.
7. What are the main functions of NOS?
8. Which field in IPv4 and IPv6 header is used for specifying classes of service?