Unit 1: Introduction to Computer Network

Q.1) Define **the term**

1. Computer Network
2. LAN
3. Communication Mode.
4. Network components
5. Peers
6. Interfaces
7. Network Software
8. Wireless Network
9. Protocol.
10. Topology.

Q.2) Answer the following Question

1. What is computer Network? What are its goals?
2. Explain any one topology with its advantages and disadvantages.
3. Write a note on point-point and broadcast transmission.
4. How are networks classified?
5. What is an internetwork? Explain its structure in brief.
6. Short note on WAN and MAN.
7. What are standard? What is their need? What are the two types of standards?
8. Compare peer-to-peer LAN and Server based LAN.
9. Explain the relationship between services and protocol.
10. Describe network components.

Unit 2 : Network Models

Q.1 Answer the following in short.

1. What is Network model?

2. Write name of addresses used in TCP/IP protocol.

3. Difference between physical address and logical address.

4. What is sub netting?

Define the following terms

6. Physical address.

7. Broadcast address.

8. Port address

9. HTTP.

10. Framing

Q.2 Answer the following question.

1. Explain OSI reference model in detail.

2. Explain TCP/IP model in detail.

3. Explain IP Address in detail.

4. Explain class full addressing.

Unit 3. Transmission Media

Q.1) Answer the following questions in short.

1. What is transmission media?
2. What are types of transmission media?
3. Which are types of twisted-pair cables?
4. Write the types of wireless data transmission?
5. What is propagation mode in fiber optic cable?
6. What is infrared?
7. What is wireless LAN?
8. What is unguided media?
9. Write a short note on Propagation mode.
10. Write a short note on Guided mode.

Q.2) Answer the following question.

1. Describe transmission media in detail.
2. State advantages of wireless LAN
3. State disadvantages if wireless LAN
4. Describe STP and UTP cable.
5. Explain guided media in brief.

Unit 4: Wired and Wireless LANs

Q.1) Define the terms.

1. Ethernet
2. Star backbone
3. Bust backbone
4. VLAN
5. CSMA/CD
6. What are IEEE standards?
7. Describe fast Ethernet.
8. What is Bluetooth in WLAN?
9. What is network interface card?
10. Short note on IEEE 802.11.

Q.2) Answer the following question.

1. How Bluetooth works?
2. What is VLAN? What are types of VLAN?
3. Describe fast Ethernet.
4. What is network interface card?
5. Describe the frame format and physical layer of Ethernet.

Unit 5 : Network Connectivity Devices

Q.1) Answer the following question in short.

1. What are network connectivity devices?
2. What is active and passive hub?
3. Which are types of bridges in networking?
4. Describe the term transparent bridge.
5. What are repeaters? Define different types of repeaters.
6. Define the terms Gateway.
7. Define the terms hub.
8. Define the terms Repeater.
9. Explain switches with suitable diagram.
10. Define Router.

Q.2) Answer the following question:

1. What is Router? Explain its components.
2. Which two frame types are used in order to find the route to the destination network segment in source Route Bridging?
3. Describe hub in brief.
4. What are repeaters? Define different types of repeaters.
5. Which are types of bridges in networking?
6. Explain the various network connecting devices.

Unit 6 : Network security

Q.1) Answer the following question in short.

1. What is meant by Network security?
2. What is plaintext and cipher text?
3. What is attack? What are its types?
4. What is encryption and decryption?
5. What are types of Firewall?
6. Write names of substitution techniques?

Q.2) Answer the following question

1. Explain the devices used to maintain network security.
2. What is difference between substitution cipher and transposition cipher?
3. Difference between symmetric and asymmetric cryptography.
4. Define steganography.
5. Define and explain Passive attack.
6. Explain working of firewall.