

Unit 1:

1. Which transmission mode is commonly used for serial communication? (4 marks)
2. What are the three main protocols used for routing in the internet? (6 marks)

Unit 2:

1. How does Hamming Codes work for error detection in digital transmission? (4 marks)
2. Explain the concept of PPP and its uses in internet connectivity. (6 marks)

Unit 3:

1. Which wireless standard is used for Fast Ethernet connections? (4 marks)
2. Explain the concept of Binary Exponential Backoff Algorithm in CSMA/CD networks. (6 marks)

Unit 4:

1. Explain the concept of logical addressing in packet switching networks. (4 marks)
2. Describe the difference between RIP and OSPF routing protocols. (6 marks)

Unit 5:

1. Describe the difference between TCP and UDP transport layer protocols. (4 marks)
2. Describe the difference between AIMD and QUIC protocol algorithms. (6 marks)

Unit 6:

1. Explain the concept of dynamic addressing in DHCP protocol. (4 marks)
2. Explain the concept of HTTP protocol in web servers. (6 marks)