

Model Questions (2 Marks, 5 Marks and 10 marks)

### **Unit-1**

2 Marks:

1. Define Computer Network?
2. Define Internet?
3. What is ARPANET?
4. What do mean by network topology?
5. What is a network? And what are the benefits of the networks?
6. What do mean by half-duplex?
7. Define multiplexing and demultiplexing?
8. What are the different transmission media?

5 Marks:

9. Explain the types of transmission modes.
10. What is network topology? Explain the different network topologies.
11. What are the different types of networks? Explain in detail.
12. What are the applications of Computer Networks?

10 Marks:

13. Explain the OSI reference model with neat diagram.
14. Explain the TCP/IP reference model with neat diagram
15. What is OSI Model? Explain the functions and protocols and services of each layer?
16. Briefly explain different types of transmission Medias in computer networks?

### **Unit-2**

2 Marks:

1. Define Analog and Digital signal?
2. Define frequency?
3. What is Composite signal?
4. What is baud rate?
5. Define bandwidth?
6. What is Attenuation?
7. Define Jitter?
8. Define Line coding?
9. What is data rate and signal rate?
10. Define Block coding?

5 Marks:

11. Describe Manchester and Differential Manchester scheme?

10 Marks:

12. Briefly explain various Line coding schemes?

**Unit-3**

2 Marks:

1. What do mean by MODEM?
2. What is Sampling?

5 Marks:

3. Explain AM, FM and PM
4. Describe the Pulse Code Modulation (PCM) technique with neat diagram?
5. Explain Delta Modulation (DM) technique with neat diagram?
6. Describe Frequency shift keying?

10 Marks:

7. Briefly explain the different data transmission modes (Parallel and Serial)?
8. Explain ASK, FSK, and PSK with neat diagram?

**Unit-4**

2 Marks:

1. Define Multiplexing ?
2. Define checksum?
3. What is an error?
4. Define framing?
5. List out the Protocols in Datalink layer.
6. What is Piggybacking
7. What are the flow characteristics related to QoS?
8. Define flow control?
9. What is FDM?
10. What do mean by redundancy?
11. Define Parity Check?
12. Define CRC?
13. What is Hamming code?
14. What do mean by error control?

5 Marks:

15. What is an error ? Explain the types of errors ?
16. Explain the Point to Point Protocol in detail.
17. Explain the various error detection methods?

18. Briefly explain the CRC error detection scheme ?

19. Explain about Sliding Window Protocols?

10 Marks:

20. Define Multiplexing. Explain the various types of multiplexing?

### **Unit-5**

2 Marks:

1. What is Switching?
2. Define congestion?
3. What do mean by congestion control?
4. What is datagram?
5. What is packet fragmentation?

5 Marks:

6. Define Switching and Briefly explain the Datagram Approach in Packet Switching Method with neat diagram?
7. Differentiate packet switching and circuit switching?

10 Marks:

8. Write short notes on circuit switching, packet switching and message switching.

### **Unit-6**

2 Marks:

1. What are the two sublayers of Data link layer?
2. What do mean by wireless LAN?
3. Define WWW ?
4. What is throughput?
5. What is pure ALOHA ?
6. What is Media Access Control?
7. What is Router?
8. What is CSMA/CD?
9. What do mean by carrier sense multiple access?

5 Marks:

10. What is transmission media? Explain different forms of transmission media?
11. Explain about the different types of connecting devices in computer networks?

10 Marks:

12. Briefly describe the types of transmission media?
13. Briefly explain the CSMA/CD method with neat diagram?
14. Define computer networks? Discuss various types of networks topologies in computer network with its advantages and disadvantages.
15. Define the following terms
  - i- Hub
  - ii- Switch
  - iii- Router
  - iv- Bridge
  - v- Gateway

### **Unit-7**

#### **2 Marks:**

1. What is POP?
2. Define HTTP?
3. What is DNS?
4. Define ICMP?
5. What are the types of classful addressing?
6. What do mean by ARP?
7. Define unicast and Multicast?
8. Define Ip address?
9. Define TCP?
10. Define UDP?

#### **5 Marks:**

11. Briefly Explain TCP protocol?
12. Write short notes on
  - i- TCP
  - ii- UDP
13. Briefly describe the classful addressing?

#### **10 Marks:**

14. Briefly explain IP datagram header format with neat diagram?