

SECTION-A

1. What are the basic components of a Network ? Discuss different types of network in detail. 15
2. (a) What are various transmission mediums in computer networks ? Discuss. 7
(b) Define TCP/IP reference model. How it works ? Discuss different layers of TCP/IP model in detail. 8

SECTION-B

3. What is Multiplexing ? What are its different types ? Discuss in detail. 15
4. Explain the following :
(a) Pulse Code Modulation
(b) Hybrid switching $2 \times 7.5 = 15$

SECTION-C

5. (a) What is IEEE 802 standard ? How many IEEE 802 standards are there ? Discuss in detail. 10
(b) How Token Bus Network works ? 5
6. How Data Link Layer works ? Explain Data Link Layer Design Issues in detail. 15

SECTION-D

7. What is cryptography in computer networks ? What are its types ? Discuss in detail. 15
8. What is a network service ? What services can a computer network offer ? Discuss in detail. 15