

Time : 3 Hours

Max. Marks : 60

The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.

Note : Attempt five questions in all, select one question from each section, and question 9 is compulsory. All question carry equal marks.

SECTION - A

1. What is OSI and TCP/IP reference model? Compare critically both the model with layered architecture. (12)
2. Discuss the following:
 - (a) Wireless Lan
 - (b) VOIP
 - (c) E-mail security (12)

SECTION - B

3. What are the data link control and protocols? Explain the noisy channel protocol. (12)
4. Explain the following:
 - (a) CDMA
 - (b) Mobile telephone system
 - (c) IEEE-802.15 (12)

SECTION - C

5. What are the role of the network layer protocol? Explain the link-state, distance vector, and flooding routing protocols. (12)
6. Write short note on the following:
 - (a) OSPF
 - (b) Remote procedure call
 - (c) Mobile IP (12)

SECTION - D

7. What are the role of application layer protocols? Explain in detail the SMTP, FTP and WWW. (12)
8. Discuss the following:
 - (a) Socket programming
 - (b) POP3 and IMAP
 - (c) DNS (12)

SECTION - E (Compulsory)

9. Explain the following:
 - (a) What are the principles of network security?
 - (b) List the steps involved in creating the checksum.
 - (c) Compare the maximum window size in go-back-N and selective-repeat ARQs.
 - (d) With reference to TCP/IT what are static and dynamic addressing?
 - (e) What is the difference between a port address, a logical address, and a physical address?
 - (f) What are headers and trailers, and how do they get added and removed? (6×2=12)