

1387

April 2025

Time - Three hours
(Maximum Marks: 100)

- (N.B. 1. Answer all questions under Part-A. Each question carries 3 marks.
2. Answer all the questions either (a) or (b) in Part-B. Each question carries 14 marks.]

PART - A

1. List the components of data communication.
2. Define switch. List the two different modes of switching.
3. Draw the format of Token ring frame.
4. Differentiate circuit switching and packet switching.
5. Differentiate connection oriented and connectionless service.
6. Define VLSM.
7. List the principles of security.
8. Write a short note symmetric encryption.
9. Write about viruses in network security.
10. State the applications of gateways.

[Turn over.....]

PART - B

11. (a) Describe the types of topologies in networks.
(Or)
(b) Discuss the various types of transmission media.
12. (a) Draw the layered architecture of the OSI model. Discuss the functions of each layer.
(Or)
(b) Explain about the types of Ethernets.
13. (a) Discuss any two application layer protocols of TCP/IP.
(Or)
(b) Describe about IP addressing in networking.
14. (a) Write in detail about the different types of attack.
(Or)
(b) Discuss the AES algorithm with an example.
15. (a) Describe about the types of firewall.
(Or)
(b) Discuss about wireless security issues.
