

A-0827

Total Pages : 3

Roll No.

MCS-506/MIT(CS)-403

**INTRODUCTION TO COMPUTER
NETWORKS/INTRODUCTION TO
NETWORKS**

(MCA/MSCT/MSCCS)

Examination, June 2025

Time : 2:00 Hrs.

Max. Marks : 70

Note :- This paper is of Seventy (70) marks divided into Two (02) Sections 'A' and 'B'. Attempt the questions contained in these sections according to the detailed instructions given therein. *Candidates should limit their answers to the questions on the given answer sheet. No additional (B) answer sheet will be issued.*

Section-A

Long Answer Type Questions 2×19=38

Note :- Section 'A' contains Five (05) Long-answer type questions of Nineteen (19) marks each. Learners are required to answer any *two* (02) questions only.

1. What is Computer Network ? Explain LAN, WAN and MAN with an example
2. What is firewall ? Explain the types of firewall.
3. Explain the difference between Guided and Unguided Transmission media with an example.
4. Explain connection oriented and connectionless services in brief with an example.
5. What is network topology ? Explain various network topologies in brief with an example.

Section–B

Short Answer Type Questions 4×8=32

Note :– Section ‘B’ contains Eight (08) Short-answer type questions of Eight (08) marks each. Learners are required to answer any *four* (04) questions only.

1. What is Virtual Private Network (VPN) ? Explain Intranet, Extranet and Private network with an example.
2. What is data communication ? Explain the basic components of data communication ?
3. What is the difference between OSI and TCP/IP model ? Explain.

4. Explain the concept of ALOHA.
5. What is cryptography ? Explain Symmetric Key Cryptography and Asymmetric Key Cryptography.
6. What is Digital Signal ? Difference between Baseband and Broadband Signal.
7. Explain Bluetooth Architecture in detail.
8. What is Public Key Cryptography ? What are the advantages and disadvantages of Public Key Cryptography ?
