

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (Information Technology) (Sem.-4)

COMPUTER NETWORKS

Subject Code : BTIT-401-18

M.Code : 77538

Date of Examination : 07-05-2024

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

1. Answer briefly :

- a) List various connection topologies.
- b) Explain the term Virtual LAN.
- c) What do you mean by CRC? Explain in brief.
- d) Explain the term piggybacking in brief.
- e) Explain the DHCP protocol in brief.
- f) What is IP addressing? How it is classified?
- g) What do you mean by congestion control? Explain in brief.
- h) Explain in brief about Quality of Service.
- i) Differentiate between Telnet and FTP.
- j) Define the term Cryptography.

SECTION-B

2. Differentiate between Wired LAN and Wireless LANs in detail.
3. Write a detailed note on CSMA/CA.
4. Write a detailed note on ARP protocol.
5. Explain in detail about Leaky Bucket Algorithm. Also, differentiate between Leaky Bucket and Token Bucket Algorithm.
6. Write a detailed note on E-Mail.

SECTION-C

7. **Explain the following Multiplexing techniques in detail :**

- a) Frequency Division
- b) Time Division
- c) Wave Division.

8. **Explain the following terms in detail :**

- a) Telnet
- b) FTP
- c) SNMP.

9. **Explain the following protocols in detail :**

- a) TCP
- b) UDP.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.