

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 : 07-06-2023

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. Write briefly :

- a) What is the need of Protocols?
- b) What are the advantages of Optic fiber as a transmission media?
- c) Differentiate between Pure ALOHA and Slotted ALOHA.
- d) Explain the term Hamming Distance in brief.
- e) Explain the BOOTP protocol in brief.
- f) How many bits are consumed by IPv4 and IPv6 addresses respectively.
- g) What do you mean by congestion? Also explain the cause of congestion?
- h) Explain the UDP protocol in brief.
- i) What do you mean by Domain Name Space (DNS)? Explain
- j) Explain the term HTTP.

## SECTION-B

2. Write a detailed note on following transmission media.
  - a) Twisted- pair
  - b) Co-axial cable
3. Write a detailed note on CSMA/CD.
4. Explain in detail about RARP protocol.
5. Write a detailed note on Token Bucket Algorithm.
6. Write a detailed note on Firewalls.

## SECTION-C

7. Write a detailed note on OSI Model.
8. **Write a detailed note on the following protocols :**
  - a) Stop & wait
  - b) Go back-N ARQ
  - c) Selective repeat ARQ
9. **Explain the following terms in detail :**
  - a) DDNS
  - b) WWW
  - c) Bluetooth

**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.**