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.

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.