Roll No. ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐ Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (ECE)   (Sem.–6)
COMPUTER NETWORKS
Subject Code : BTCS-504-18
M.Code : 79374
Date of Examination : 29-05-2023

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. **Explain the following:**

    a) LAN, MAN, WAN

    b) PPP

    c) Bandwidth and Throughput

    d) TCP and UDP

    e) Bridge and Router

    f) Ring topology

    g) FTP

    h) Twisted pair cable

    i) Pure Aloha and Slotted Aloha

    j) Fading.

2. Discuss the advantages and disadvantages of different network topologies.

3. Explain with example multiplexing and de-multiplexing at transport layer.

4. Explain in detail error detection and correction control methods.

5. Discuss token bucket congestion control algorithm.

6. Differentiate between synchronous and asynchronous TDM.

SECTION-C

7. Write a detailed note on ISO-OSI reference model.

8. What is DNS? Differentiate between recursive and iterative queries. Explain the formats of the query and response messages used in DNS.

9. Explain the four way process of handshaking to terminate the connection in TCP.

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.