

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (AI&DS/Block Chain/CSE/CS/DS/CSD/DS) (Sem.–5,7)

COMPUTER NETWORKS

Subject Code : BTCS 504-18

M.Code : 93919

Date of Examination : 18-11-2025

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 do you mean by wireless communication? Discuss.
- b) Compare TCP and UDP.
- c) Name seven layers of OSI reference model.
- d) Briefly explain IPv4 protocol.
- e) What are SNMP and HTTP? Discuss.
- f) Discuss CRC error detection technique.
- g) Briefly explain the concept of WWW.
- h) What do you understand by Cryptography? Discuss.
- i) Compare pure and slotted Aloha protocols.
- j) What is DNS? Why is it required?

SECTION-B

2. Differentiate between LAN, MAN and WAN.
3. Discuss the Token Bucket congestion control algorithm.
4. Explain the topologies used in a LAN. Write their advantages and disadvantages also.
5. Explain four way handshaking methods to terminate a connection in TCP.
6. Explain various CSMA protocols.

SECTION-C

7. Explain in detail various transmission media used for data communication in detail.
8. Explain Distance Vector Routing Protocol. What is its major drawback?
9. Explain in detail various sliding window protocols.

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.