

SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN
(AUTONOMOUS)

(Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC)

Chromepet, Chennai - 600 044.

B.Sc.Computer Science - END SEMESTER EXAMINATIONS - APRIL 2025

SEMESTER - VI

22UCSCT6009 - Computer Networks

Total Duration : 2 Hrs.30 Mins.

Total Marks : 60

Section B

Answer any **SIX** questions ($6 \times 5 = 30$ Marks)

1. Distinguish static and dynamic mapping.
2. State the purpose of layering in networks.
3. State the purpose of SNMP.
4. Discuss the 3 main divisions of DNS.
5. Elaborate in brief about IPV6 routing protocol.
6. Explain functions of MAC layer in detail.
7. How collision is avoided in CSMA/CA? Describe strategies used for this.
8. What is shortest path routing? Discuss common algorithms used for the same.

Section C

Answer any **THREE** questions ($3 \times 10 = 30$ Marks)

9. Compare and contrast guided and unguided media for transmission.
10. A needs to send a message consisting of 9 packets to B using sliding window (size 3) and Go-Back-N error control strategy. All packets are ready and immediately available for transmission. If every 5th packet that A transmits gets lost, compute the number of packets A will transmit for sending complete message to B?
11. Discuss in detail about Manchester Encoding, its advantages and disadvantages.
12. Examine the importance of BOOTP and the congestion control strategies used to enhance the computer network's Quality of Service (QoS).
13. Examine the concepts and applications of cryptography.
