

M.Sc. 3rd Semester Examination, 2024

COMPUTER SCIENCE

(Advanced Networking Lab)

(Practical)

PAPER – COS-395 (M1)

Full Marks : 25

Time : 2 hours

The figures in the right hand margin indicate marks

Answer any **one of the following questions :**

20 × 1

- 1. Write a program to implement the Cyclic Redundancy Check (CRC) error detection algorithm.**
- 2. Write a program to implement the Stop and Wait Protocol.**

(Turn Over)

3. Write a program to implement the Sliding Window Protocol.
4. Write a program to implement the Selective Repeat Sliding Window Protocol.
5. Write a program to implement the Distance Vector routing algorithm.
6. Write a program to implement the Dijkstra algorithm for shortest-path routing.
7. Write a program to implement a Client-Server model.
8. Write a program to implement a UDP Client-Server model.
9. Write a program to implement a TCP Client-Server model.
10. Write a program to Create a socket for HTTP for web page upload and download.

11. Write a program to implement the RPC (Remote Procedure Call).
12. Write a code simulating ARP/RARP protocols.
13. Write a code simulating PING and TRACEROUTE commands.
14. Write a program to implement the Sub-netting.
15. Write a code simulating the Congestion Control algorithm.

PNB + Viva-voce – 05
