COMPUTER NETWORKS LAB (Common to CSE & IT)

Course Code: 19CT1113 L T P C 0 0 3 1.5

Course Outcomes: At the end of the Course the student shall be able to:

CO1: Illustrate a Local Area Network.

CO2: Demonstrate error handling methods.

CO3: Model the network protocols using a network simulator.

CO4: Analyze packet transmission using TCP and UDP.

CO5: Demonstrate application layer protocols.

LIST OF PROGRAMS:

- 1. Installation of Simulation Tools (packet tracer and NS2).
- 2. Configure the LAN using packet tracer.
- 3. Design a sample topology using NS2 Simulation Tool.
- 4. Implement CRC and Hamming code for error handling.
- 5. To create scenario for CSMA/CD using NS2 Simulation Tool.
- 6. Implementation of stop and wait protocol.
- 7. Implementation of goback-N protocol and selective repeat protocol using NS2 Simulation Tool.
- 8. Implementation of distance vector routing algorithm.
- 9. Implementation of Link state routing algorithm using NS2 Simulation Tool.
- 10. Implement TCP and UDP on different pairs of systems using NS2 Simulation Tool.
- 11. Configuring any two application layer protocols using packet tracer..
- 12. Implementation of wireless networks using NS2 Simulation Tool.

WEB REFERENCES:

1. https://www.isi.edu/nsnam/ns/