MADAN MOHAN MALAVIYA UNIVERSITY OF TECHNOLOGY

Gorakhpur

Subject: Computer Networks

Course Code: BIT-253

Computer Networks- Lab work

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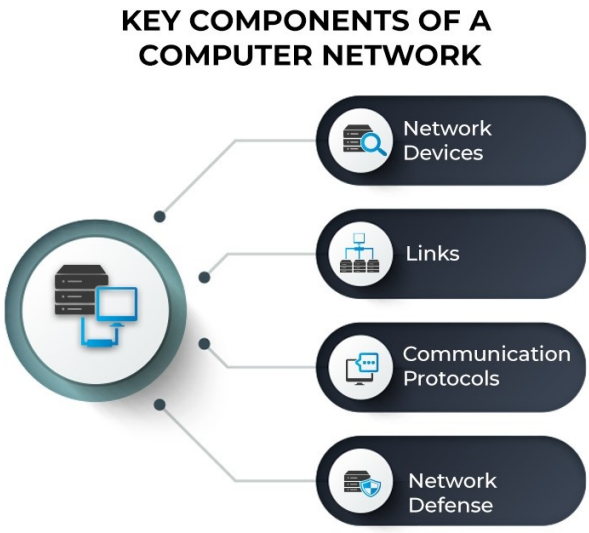
EXPERIMENTS

Exercise: Propose an Algorithm and code in *cpp* or *c* language for the following scenario.

1. To create a scenario and study the performance of CSMA/CD protocol through simulation.
2. To create a scenario and study the performance of token bus and token ring protocols through simulation.
3. Implementation of Error detection and correction algorithms.
4. Implementation and study of 1-bit sliding window viz., stop and wait protocol.
5. Implementation and study of Go-Back-N protocol.
6. Implementation and study of selective repeat protocol.
7. To get the MAC or Physical address of the system using Address Resolution Protocol.
8. Implementation of distance vector routing algorithm.
9. Implementation of link state routing algorithm.
10. To write a client-server application for chat using TCP.
11. To write a C program to develop a DNS client server to resolve the given hostname.



* For two programs, (first and second) Last date of File checking is 30/03/2023

Reference Books:

1. LL Peterson, BS Davie, Computer Networks: A Systems Approach, 5th Ed., Morgan-Kauffman, 2011.
2. Comer, Computer Networks & Internet with Internet Applications by Pearson Education.
3. JF Kurose, KW Ross, Computer Networking: A Top-Down Approach, 5th Ed., Addison-Wesley, 2009.
4. W Stallings, Cryptography and Network Security, Principles and Practice, 5th Ed., Prentice-Hall, 2010
5. With the help of an example explain Supervised, Unsupervised, Reinforcement learning.
6. W. Stallings, "Data and Computer Communication", Pearson Education, Fifth Edition.