TELANGANA TRIBAL WELFARE RESIDENTIAL DEGREE COLLEGE FOR WOMEN (TTWRDCW), SURYAPET

COURSE: COMPUTER NETWORKS

Academic Year 2022– 2023

CourseObjective:

1. Describe how computer networks are organized with the concept of layered approach.
2. Implement a simple LAN with hubs, bridges and switches.
3. Describe how packets in the Internet are delivered.
4. Analyze the contents in a given Data Link layer packet, based on the layer concept.
5. Design logical sub-address blocks with a given address block.
6. Decide routing entries given a simple example of network topology
7. Describe what classless addressing scheme is.
8. Describe how routing protocols work.

CourseOutcomes:

1. Analyze the requirements for a given organizational structure and select the most appropriate networking architecture and technologies.
2. Have a basic knowledge of the use of cryptography and network security.
3. Specify and identify deficiencies in existing protocols, and then go onto formulate new and better protocols.
4. Analyze, specify and design the topological and routing strategies for an IP based networking infrastructure.
5. Have a working knowledge of datagram and internet socket programming.

SYLLABUS

Computer Networks –

Computer Networks cover both basic and complex data transit and network basics (DCN). A computer network is a collection of devices that are linked together. A computer, printer, or other data-transmitting and receiving device may be a node. Communication channels are the linkages that connect the nodes.

Design and Analysis of Algorithms –

DAA covers everything there is to know about algorithms, including algorithm control structure, asymptotic analysis, master method, recurrence, simple sorting algorithm, recursion tree method, selection sort, bubble sort, divide and conquer, insertion sort, binary search, counting sort, merge sort, lower bound theory, and more. An algorithm is a finite collection of instructions that defines a series of activities to be performed in order to solve a specific problem or group of issues.