



SWARNANDHRA

COLLEGE OF ENGINEERING & TECHNOLOGY

(AUTONOMOUS)

Accredited by National Board of Accreditation, AICTE, New Delhi, Accredited by NAAC with "A" Grade – 3.32 CGPA, Recognized under 2(f) & 12(B) of UGC Act 1956. Approved by AICTE, New Delhi, Permanent Affiliation to JNTU-K, Kakinada Seetharampuram, W.G. DT., Narsapur-534280, (Andhra Pradesh)

DEPARTMENT OF INFORMATION TECHNOLOGY

TEACHING PLAN

Course Code	Course Title	Semester	Branch	Contact Periods /Week	Academic Year	Date of commencement of Semester
20IT5L01	Network Programming Lab	V	IT	3 Periods	2024-25	05-06-2024

COURSE OUTCOMES

1	Apply the basics of Physical layer in real time applications.
2	Apply data link layer concepts, design issues, and protocols.
3	Apply Network layer routing protocols and IP addressing.
4	Implement the functions of Application layer and Presentation layer paradigms and Protocols.

Experiment Number	Experiment	Contact Hours
1	Implement the data link layer framing methods such as character stuffing and bit stuffing.	3
2	Implement on a data set of characters the three CRC polynomials -CRC 12, CRC 16 and CRC CCIP.	3
3	To write a C program to develop a DNS client server to resolve the given hostname.	3
4	Write a program to implementation client server application in UDP.	3
5	Take an example subnet graph with weights indicating delay between nodes. Now obtain Routing table at each node using distance vector routing algorithm.	3
6	Programs using Raw sockets (like packet capturing and filtering)	3
7	Programs using TCP Sockets (like echo server & client)	3
8	Write a C program to perform sliding window protocols	3
9	To simulate the Open Shortest Path First routing protocol based on the cost assigned to the path.	3
10	Implement dijkstra's algorithm to compute the shortest path in a graph	3
11	Simulate the implementing Routing protocols using border gateway protocol(BGP)	3

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Kakinada
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12	Design TCP client server application to reverse the given input sentence	3
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CUMULATIVE PROPOSED PERIODS		36
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	Name	Signature with Date
Faculty	Ms. U Jenny Grace	<i>U. Jenny Grace</i> 5/6/24
Module Coordinator	Mr. Ch. R.K. Raju	<i>Ch. R.K. Raju</i> 5/6/24
Programme Coordinator	Dr. RVVSV Prasad	<i>Dr. RVVSV Prasad</i> 5/6/24

5/6/24

Principal

Date of
Commencem
ent of
Semester

5-06-2024

Protocols.

Contact
Hours

3

3

3

3

3

3

3

3

3

3

3