Sri Indu Institute of Engineering & Technology

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Affiliated to JNTUH, Hyderabad.

COURSE FILE

ON

DATA COMMUNICATION AND NETWORK LAB

CourseCode-CS506PC

III B.Tech I-SEMESTER

A.Y.: 2022-2023

Prepared by
Mrs.D.UMA
Assistant Professor

Head of the Department
Electronics and Communication Engg. Dept
SRI INDU INSTITUTE OF ENGG & TECH
Sheriguda(V), Ibrahimpatnam(M), R.R.Dist-501 510

PRINCIPAL
Sri Indu Institute of Engineering & Tech
Sheriguda(Vill), Ibrahimpatnam
R.R. Dist. Telangana-501 510.

DEPARTMENTOFELECTRONICSAND COMMUNICATION ENGINEERING

Nameofthephysical laboratory	DATA COMMUNICATION AND NETWORK LAB
Coursecode	CS506PC
RoomNo.	A-107
Nameofthe lab incharge	D.UMA
NameoftheFaculty incharge	D.UMA

Index of Course File

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INSTITUTEVISIONANDMISSION

Vision:

To become a premier institute of academic excellence by providing the world class education that transforms individuals into high intellectuals, by evolving them as empathetic and responsible citizens through continuous improvement.

Mission:

IM1: Tooffer outcome-basededucationandenhancementoftechnicalandpracticalskills.

IM2: To Continuous assess of teaching-learning process through institute-industry collaboration.

IM3: Tobeacentreofexcellenceforinnovativeandemergingfieldsintechnology development with state-of-art facilities to faculty and students' fraternity.

IM4: To Create an enterprising environment to ensure culture, ethics and socialresponsibility among the stakeholders.

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

DEPARTMENT VISION AND MISSION

Vision:

To become a recognized center in the field of Electronics and Communication Engineering by producing creative engineers with social responsibility and address ever-changingglobal challenges.

Mission:

DM1: To facilitate an academic environment that enables student's centric learning.

DM2: To provide state-of-the-art hardware and software technologies to meet industry requirements.

DM3: To continuously up date the Academic and Research infrastructure.

DM4: To Conduct Technical Development Programs for over all professional caliber of Stake Holders.

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PROGRAM EDUCATIONAL OBJECTIVES

Program Educational objectives are to Promote:

PEO1: Graduates with a strong foundation in Electronics and Communication Engineering, Science and Technology to become successful in the chosen professional career.

PEO2: Graduates with ability to execute innovative ideas for Research and Development with continuous learning.

PEO3: Graduates inculcated with industry based soft-skills to enable employability.

PEO4: Graduates demonstrate with ability to work in inter disciplinary teams and ethical professional behavior.

PROGRAM SPECIFIC OUTCOMES

PSO 1: Design Skills: Design, analysis and development a economical system in the area ofEmbedded system & VLSI design.

PSO2:SoftwareUsage: Ability to investigate and solve the engineering problem susing MATLAB, Keil and Xilinx.

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PROGRAM OUT COMES

1. **ENGINEERING KNOWLEDGE**: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

2. **PROBLEM ANALYSIS**: Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusion susing first principles of mathematics, natural sciences, and engineering sciences.

3. **DESIGN/DEVELOPMENT OF SOLUTIONS**: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

4. **CONDUCT INVESTIGATIONS OF COMPLEX PROBLEMS**: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

5. **MODERNTOOLUSAGE**:Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.

6. **THE ENGINEER AND SOCIETY**: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

7. **ENVIRONMENT AND SUSTAINABILITY**: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

8. **ETHICS**: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

9. **INDIVIDUAL AND TEAM WORK**: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

10. **COMMUNICATION**: Communicate effectively on complex engineering activities with the engineeringcommunityandwithsocietyat large, suchas, beingableto comprehendandwrite effective reports and design documentation, make effective presentations, give and receive clear instructions.

11. **PROJECTMANAGEMENTANDFINANCE**:Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

12. **LIFE-LONG LEARNING**: Recognizethe need for,and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

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Course Syllabus with Structure

R18 B.Tech. ECE Syllabus **JNTUHYDERABAD**

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B.Tech.IN ELECTRONICS AND COMMUNICATION ENGINEERING
COURSE STRUCTURE & SYLLABUS (R18)

Applicable From 2022-2023 Admitted Batch

III YEARISEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	EC501PC	Microprocessors & Microcontrollers	3	1	0	4
2	EC502PC	Data Communications and Networks	3	1	0	4
3	EC503PC	Control Systems	3	1	0	4
4	SM504MS	Business Economics & Financial Analysis	3	0	0	3
5		Professional Elective - I	3	0	0	3
6	EC505PC	Microprocessors & Microcontrollers Lab	0	0	3	1.5
7	EC506PC	Data Communications and Networks Lab	0	0	3	1.5
8	EN508HS	Advanced Communication Skills Lab	0	0	2	1
9	*MC510	Intellectual Property Rights	3	0	0	0
		Total Credits	**18**	**3**	**8**	**22**

III YEARIISEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	EC601PC	Antennas and Propagation	3	1	0	4
2	EC602PC	Digital Signal Processing	3	1	0	4
3	EC603PC	VLSI Design	3	1	0	4
4		Professional Elective - II	3	0	0	3
5		Open Elective - I	3	0	0	3
6	EC604PC	Digital Signal Processing Lab	0	0	3	1.5
7	EC605PC	e – CAD Lab	0	0	3	1.5
8	EC606PC	Scripting Languages Lab	0	0	2	1
9	*MC609	Environmental Science	3	0	0	0
		Total Credits	**18**	**3**	**8**	**22**

CS506PC: DATA COMMUNICATION AND NETWORK LAB

B.Tech III Year I Semester

L	T	P	C
0	0	2	1

Note: Any **twelve** of the following experiments

LISTOF EXPERIMENTS:

1. Writing a TCL Script to create two nodes and links between nodes
2. Writing a TCL Script to transmit data between nodes
3. Evaluate the performance of various LAN Topologies
4. Evaluate the performance of Drop Tail and RED queue management schemes
5. Evaluate the performance of CBQ and FQS cheduling Mechanisms
6. Evaluate the performance of TCP and UDP Protocols
7. Evaluate the performance of TCP ,NewReno and Vegas
8. Evaluate the performance of AODV and DSR routing protocols
9. Evaluate the performance of AODV and DSDV routing protocols
10 .Evaluate the performance of IEEE802.11andIEEE802.15.4
11. Evaluate the performance of IEEE802.11andSMAC
12. Capturing and Analysis of TCP and IP Packets
13. Simulation and Analysis of ICMP and IGMP Packets
14. Analyze the Protocols SCTP ,ARP, Net BIOS,IPXVINES
15. Analysis of HTTP, DNS and DHCP Protocols

MajorEquipmentRequired:
Requiredsoftware(OpenSource)likeNS-2,NSG-2.1andWireSHARK

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CO,PO,PSO'S MAPPING

A.Y:2022-23 **SEMESTER:I** **CLASS:III ECE-A**

Course Out come After completing this course, the student will be able to:

C317.1 TCL Script to create two nodes and links between nodes (Knowledge)
C317.2 Evaluate the performance of various LAN Topologies (Evaluation)
C317.3 Evaluate the performance of TCP and UDP Protocols (Evaluation)
C317.4 Capturing and Analysis of TCP and IP Packets (Analysis)
C317.5 Evaluate the performance of IEEE802.11andIEEE802.15.4 (Evaluation)
C317. 6 Analysis of HTTP, DNS and DHCP Protocols (Analysis)

Mapping of course out comes with program out comes:

High-3 Medium-2 Low-1

PO/ CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C317.1	2	2	2	-	2	-	-	-	-	-	-	2	-	-
C317.2	2	2	2	-	2	-	-	-	-	-	-	2	-	-
C317.3	2	-	2	2	2	-	-	-	-	-	-	2	-	-
C317.4	-	2	-	2	2	-	-	-	-	-	2	2	-	-
C317.5	-	-	-	-	2	-	-	-	-	-	-	2	-	-
C317.6	2	-	2	-	2	-	-	-	-	-	2	2	-	-
C317	**2**	**2**	**2**	**2**	**2**	-	-	-	-	-	**2**	**2**	-	-

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LIST OF EXPERIMENTS AND THEIR CO,PO,PSO MAPPING

S.No	Name of the program	CO	PO/PSO	
			PO	PSO
1	Writing a TCL Script to create two nodes and links between nodes.	CO1	PO1,PO2,PO3, PO5,PO12	-
2	Writing a TCL Script to transmit data between nodes	CO2	PO1,PO2,PO3, PO5,PO12	-
3	Evaluate the performance of various LAN Topologies	CO2	PO1,PO3,PO3, PO12	-
4	Evaluate the performance of Drop Tail and RED queue management schemes	CO1	PO1,PO2,PO3, PO12	-
5	Evaluate the performance of CBQ and FQS cheduling Mechanisms	CO2	PO1,PO2,PO3, PO12	-
6	Evaluate the performance of TCP and UDP Protocols	CO2	PO1,PO2,PO3, PO12	-

7	Evaluate the performance of TCP ,NewReno and Vegas	CO3	PO1,PO2,PO3, PO12	-
8	Evaluate the performance of AODV and DSR routing protocols.	CO2	PO1,PO2,PO3,	-
9	Evaluate the performance of AODV and DSDV routing protocols	CO1	PO1,PO2,PO3,	-
10	Evaluate the performance of IEEE802.11andIEEE802.15.4	CO3	PO1,PO2,PO3,	-
11	Evaluate the performance of IEEE802.11andSMAC	CO3	PO1,PO2,PO3, PO12	-
12	Capturing and Analysis of TCP and IP Packets.	C02	PO1,PO2,PO3, PO12	-
13	Simulation and Analysis of ICMP and IGMP Packets	CO2,CO3	PO1,PO2,PO3, PO12	-
14	Analyze the Protocols SCTP ,ARP, Net BIOS,IPXVINES	C02	PO1,PO2,	-
15	Analysis of HTTP, DNS and DHCP Protocols	C02	PO1,PO2,	-

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Class Timetable

CLASS: III-B.Tech ECE-A A.Y:2022-23 SEMESTER: I LH: C-201

TIME/ DAY	I 9:40-10:30	II 10:30 -11:20	III 11:20-12:10	IV 12:10-1:00	1:00-1:30	V 1:30-2:20	VI 2:20-3:10	VII 3:10-4:00
MON	DCN	IPR	CS	LIB	LUNCH	MPMC LAB / DCN LAB		
TUE	CS	MPMC	EMI	DCN		CYB	BEFA	SPORTS
WED	CYB	MPMC(T)/DCN(T)	CS	EMI		DCN LAB / MPMC LAB		
THU	EMI	DCN	CO-CU/DAA			IPR	MPMC	CS(T)/MPMC(T)
FRI	CS	BEFA	EMI	MPMC		DCN(T)/CS(T)	ACS LAB	
SAT	MPMC	IPR	MPMC(ADJUNCT)			BEFA	DCN	COUN

*(T) – Tutorial Concern Faculty

Course Code	Course Name	Name of the Faculty	Course Code	Course Name	Name of the Faculty
EC501PC	MPMC- Microprocessors & Microcontrollers	I.Venu	EC505PC	MPMC LAB- Microprocessors & Microcontrollers Lab	I.Venu/K.Srikanth/P.Srilatha
EC502PC	DCN-Data Communications and Networks	Y.Raju	EC506PC	DCN LAB- Data Communications and Networks Lab	J.Anand Rao/ M.Ganesh/Y.Raju
EC503PC	CS-Control Systems	K.Srikanth	EN508HS	ACS LAB- Advanced Communication Skills Lab	D.Ananda Rao
SM504MS	BEFA- Business Economics & Financial Analysis	K V Nagamani	*MC510	IPR-Intellectual Property Rights	S.Srinivas
			MPMC(ADJUNCT)	G.Chandrasekhar	
EC513PE	EMI-Electronic Measurements and Instrumentation (PE-I)	M.Ganesh	LIB	Library	B.Jyothirmai/S.Alekhya
			COUN	Counseling	Dr.S.Suresh/S.Alekhya/M.Ganesh
*CYB	Cyber Security	T.Divya	CO-CU/DAA	Co-Curricular/Dept.Assc.Act.	M.Ganesh/S.Naresh/P.KrishnaRao
			SPORTS	Sports	M.Ganesh/K.Padma

Class Incharge Head of the Department Principal

Head of the Department
Electronics and Communication Engg. Dept.
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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

III ECE Regular Lab External Exams Timetable

A.Y: 2022-23 **SEM: I** **Timings: -** 10:00 AM To 01: 00 PM

S.No.	Name of the Lab	Year/ Sec	Date & Time of the Lab Exam	Name of the Lab Internal Examiners
1	Microprocessors & Microcontrollers Lab	III ECE-A	23.01.2023(FN)	Mr.I.Venu
		III ECE-B	24.01.2023(FN)	Mr.I.Venu
		III ECE-C	25.01.2023(FN)	Mrs.A.Vaani
2	Data Communications and Networks Lab	III ECE-A	24.01.2023(FN)	Mrs.D.Uma
		III ECE-B	25.01.2023(FN)	Mr.A.Vijay Kumar
		III ECE-C	23.01.2023(FN)	Mrs.D.Uma
3	Advanced Communication Skills Lab	III ECE-A	25.01.2023(FN)	Dr.Anand Kumar
		III ECE-B	23.01.2023(FN)	Dr.Anand Kumar
		III ECE-C	24.01.2023(FN)	Dr.Anand Kumar
4	Microprocessors & Microcontrollers Lab	III CSE (IOT)	25.01.2023(FN)	Mrs.A.Vaani

HOD/ECE

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

III ECE Regular Lab External Examiners From Vignan Inst. of Tech.(89)

Timings:-10:00 AM To 01: 00 PM **A.Y: 2022-23** **SEM: I**

S.No.	Name of the Lab	Year/ Sec	Date & Time of the Lab Exam	Name of the Lab Internal Examiners	Name of the Lab External Examiners With Designation and Contact Details
1	Microprocessors & Microcontrollers Lab	III ECE-A	23.01.2023(FN)	Mr.I.Venu	Mr G. RANJITH KUMAR (9059511681)
		III ECE-B	24.01.2023(FN)	Mr.I.Venu	Mr U. SRINIVAS (9704130809)
		III ECE-C	25.01.2023(FN)	Mrs.A.Vaani	Mr U. SRINIVAS (9704130809)
2	Data Communications and Networks Lab	III ECE-A	24.01.2023(FN)	Mrs.D.Uma	Mrs B KALYANI(8498866860)
		III ECE-B	25.01.2023(FN)	Mr.A.Vijay Kumar	Mr CH.SUDHAKAR (9666417213)
		III ECE-C	23.01.2023(FN)	Mrs.D.Uma	Mrs B KALYANI (8498866860)
3	Advanced Communication Skills Lab	III ECE-A	25.01.2023(FN)	Dr.Anand Kumar	Mrs G.P. RAGINI (9110520062)
		III ECE-B	23.01.2023(FN)	Dr.Anand Kumar	Mrs G.P. RAGINI (9110520062)
		III ECE-C	24.01.2023(FN)	Dr.Anand Kumar	Mrs G.P. RAGINI (9110520062)
4	Microprocessors & Microcontrollers Lab	III CSE (IOT)	25.01.2023(FN)	Mrs.A.Vaani	Mr MEENAIAH BATTA (9912271372)

HOD/ECE

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LAB OCCUPANCY FOR AY-2022-23
DCCN LAB

Name of the Lab: III **Semester: I** **LH. NO: A-107**

Period/ Day	1	2	3	4	1:00-1:30	5	6	7
	9:40-10:30	10:30-11:20	11:20-12:10	12:10-1:00		1:30-2:20	2:20-3:10	3:10-4:00
Monday					L	DCCN LAB(BATCH-I)ECE		
Tuesday					U			
Wednesday					N	DCCN LAB(BATCH-II)ECE		
Thursday						LAB MAINTENANCE		
Friday					C			
Saturday		LAB MAINTENANCE			H			

Akhila
LAB INCHARGE

B. Rahul Head
HOD
Computer Science & Engg. Dept.
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DATA COMMUNICATIONS & NETWORKS LAB

A.Y.2022-23 **CLASS:III** **SEMESTER: I**

Data Communication Network Experiments

1. Writing a TCL Script to create two nodes and links between nodes
2. Writing a TCL Script to transmit data between nodes
3. Evaluate the performance of various LAN Topologies
4. Evaluate the performance of Drop Tail and RED queue management schemes
5. Evaluate the performance of CBQ and FQS cheduling Mechanisms
6. Evaluate the performance of TCP and UDP Protocols
7. Evaluate the performance of TCP ,NewReno and Vegas
8. Evaluate the performance of AODV and DSR routing protocols
9. Evaluate the performance of AODV and DSDV routing protocols
10 .Evaluate the performance of IEEE802.11andIEEE802.15.4
11. Evaluate the performance of IEEE802.11andSMAC
12. Capturing and Analysis of TCP and IP Packets
13. Simulation and Analysis of ICMP and IGMP Packets
14. Analyze the Protocols SCTP ,ARP, Net BIOS,IPXVINES
15. Analysis of HTTP, DNS and DHCP Protocols

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DATA COMMUNICATIONS & NETWORKS LAB

DO'S AND DONT'S

- All students must observe the dress code while in the laboratory
- Foods drinks and smoking are NOT allowed
- All bags must be left at the indicated place.
- The lab time table must be strictly followed.
- Be PUNCTUAL for your laboratory session.
- Experiment must be completed with in the given time.
- No is e must be kept to minimum.
- Workspace must bekept clean and tidy at all time.
- Handle all apparatus with care.
- All students are liable for any damage to equipment due to their own negligence.
- All equipment,apparatus,tools and components must be RETURNED to the iroriginal place after use.
- Students are strictly PROHIBITED from taking out any it ems from the laboratory.
- Report immediately to the labs upper visor if any injury occurred.
- Report immediately to the lab supervisor if any damages to equipment.

BEFORELEAVINGLAB

- Placethestoolsunderthelabbench.
- Turnoffthepowertoallinstruments.
- Pleasecheckthelaboratorynoticeboardregularlyforupdates.

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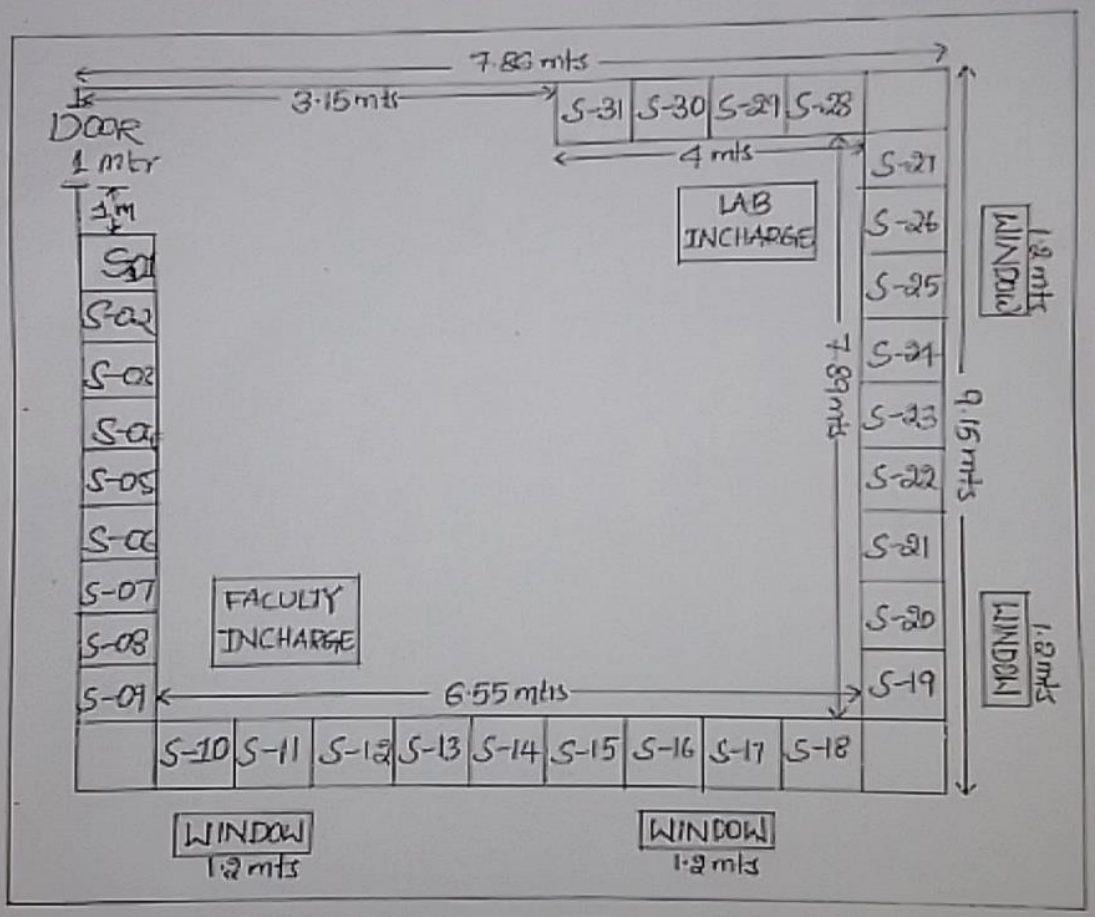
Website : https://siiet.ac.in/

Lab Name: Lab-VI Room No: A-107 Block: A Floor: I Date:03-03-2022



Lab Area(In. Sqm.)= 7.86 × 9.15 = 71.919

Lab Area (In. Sft.)= 84.6 × 9.85 774.1296

Akhila
LAB In-charge

B Rahul Kumar
Head of the Department

Computer Science & Engg. Dept.
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DATA COMMUNICATIONS & NETWORKS LAB

Lab Manual Link: https://drive.google.com/file/d/1aobIXJ5iUo_5gI3FIbERL2_TEh4g-Mxy/view?usp=sharing

SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

Department of Electronics and Communication Engineering

Course Outcome Attainment(InternalExamination-1)

Name of the faculty: D.UMA A.Y: 2022-23

Branch & Section: ECE - A Internal: I

Course Name DATA COMMUNICATION NETWORK Year/Semester:III/I

S.No	Roll Number	MarksSecured
1	20X31A0401	23
2	20X31A0402	22
3	20X31A0403	14
4	20X31A0404	24
5	20X31A0405	24
6	20X31A0406	24
7	20X31A0407	21
8	20X31A0408	23
9	20X31A0409	24
10	20X31A0410	22
11	20X31A0411	24
12	20X31A0412	23
13	20X31A0413	23
14	20X31A0414	24
15	20X31A0415	24
16	20X31A0416	24
17	20X31A0417	23
18	20X31A0418	14
19	20X31A0419	23
20	20X31A0420	23
21	20X31A0421	22
22	20X31A0422	14
23	20X31A0423	21
24	20X31A0424	24
25	20X31A0425	23
26	20X31A0426	23
27	20X31A0427	24
28	20X31A0428	23
29	20X31A0429	24
30	20X31A0430	24
31	20X31A0431	23
32	20X31A0432	23
33	20X31A0434	14
34	20X31A0435	23

S.No	Roll Number	Marks Secured
35	20X31A0436	23
36	20X31A0437	21
37	20X31A0438	24
38	20X31A0439	24
39	20X31A0440	20
40	20X31A0441	21
41	20X31A0442	24
42	20X31A0444	25
43	20X31A0445	21
44	20X31A0446	22
45	20X31A0447	22
46	20X31A0448	23
47	20X31A0449	24
48	20X31A0450	24
49	20X31A0451	23
50	20X31A0452	24
51	20X31A0453	22
52	20X31A0454	20
53	20X31A0455	14
54	20X31A0456	14
55	20X31A0458	23
56	20X31A0459	24
57	20X31A0460	22
58	20X31A0461	23
59	20X31A0462	24

COMappingwithExamQuestions:

CO-1	**y**	**y**	**y**
CO-2	**y**	**y**	**y**
CO-3	**y**	**y**	**y**
CO-4	**y**	**y**	**y**
CO-5	**y**	**y**	**y**
CO-6	**y**	**y**	**y**

Targetsetbythefaculty/HoD	3.00	3.00	9.00
Numberofstudentsperformed abovethe target	59	59	59
Numberofstudentsattempted	59	59	59
Percentageofstudentsscored morethantarget	100%	98%	100%

%StudentsScored>Target%	100%	98%	100%

COAttainmentbasedonExamQuestions:

Co-1	100%	98%	100%
CO-2	100%	98%	100%
CO-3	100%	98%	100%
CO-4	100%	98%	100%
CO-5	100%	98%	100%
CO-6	100%	98%	100%

CO	**Intrnalpractical**	**DDE**	**OveralI**	**Level**
CO-1	99%	100%	100%	3.00
CO-2	99%	100%	100%	3.00
CO-3	99%	100%	100%	3.00
CO-4	99%	100%	100%	3.00
CO-5	99%	100%	100%	3.00
CO-6	99%	100%	100%	3.00

AttainmentLevel	
1	40%
2	50%
3	60%

Attainment(Internal1Examination)= **3.00**

NOTE:

A+A+CD+MG:AIM+APPARATUS+CIRCUITDIAGRAM+MODELGRAPHT+P+C+R: THEORY+PROCEDURE+CALCULATION+RESULT

DDE:DaytoDayEvaluation

SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

Department of Electronics and Communication Engineering

Course Outcome Attainment(InternalExamination-2)

Name D.UMA A.Y 2022-23

Branch & Section: ECE - A Internal : II

Course Name: DATA COMMUNICATION NETWORK Semester: III/I

S.No	Roll Number	Marks Secured
1	20X31A0401	23
2	20X31A0402	22
3	20X31A0403	14
4	20X31A0404	24
5	20X31A0405	24
6	20X31A0406	24
7	20X31A0407	21
8	20X31A0408	23
9	20X31A0409	24
10	20X31A0410	22
11	20X31A0411	24
12	20X31A0412	23
13	20X31A0413	23
14	20X31A0414	24
15	20X31A0415	24
16	20X31A0416	24
17	20X31A0417	23
18	20X31A0418	14
19	20X31A0419	23
20	20X31A0420	23
21	20X31A0421	22
22	20X31A0422	14
23	20X31A0423	21
24	20X31A0424	24
25	20X31A0425	23
26	20X31A0426	23
27	20X31A0427	24
28	20X31A0428	23
29	20X31A0429	24
30	20X31A0430	24
31	20X31A0431	23
32	20X31A0432	23
33	20X31A0434	14

S.No	Roll Number	Marks Secured
35	20X31A0436	23
36	20X31A0437	21
37	20X31A0438	24
38	20X31A0439	24
39	20X31A0440	20
40	20X31A0441	21
41	20X31A0442	24
42	20X31A0444	25
43	20X31A0445	21
44	20X31A0446	22
45	20X31A0447	22
46	20X31A0448	23
47	20X31A0449	24
48	20X31A0450	24
49	20X31A0451	23
50	20X31A0452	24
51	20X31A0453	22
52	20X31A0454	20
53	20X31A0455	14
54	20X31A0456	14
55	20X31A0458	23
56	20X31A0459	24
57	20X31A0460	22
58	20X31A0461	23
59	20X31A0462	24

Target setbythe faculty/HoD	3.00	3.00	9.00
Numberofstudentsperformed abovethetarget	57	56	57
Numberofstudentsattempted	57	57	57
Percentage ofstudents scored morethantarget	100%	98%	100%

COMappingwithExam Questions:

CO-1	**y**	**y**	**y**
CO-2	**y**	**y**	**y**
CO-3	**y**	**y**	**y**
CO-4	**y**	**y**	**y**
CO-5	**y**	**y**	**y**
CO-6	**y**	**y**	**y**

%StudentsScored>Target%	100%	98%	100%

COAttainmentbasedonExamQuestions:

CO-1	100%	100%	100%
CO-2	100%	98%	100%
CO-3	100%	98%	100%
CO-4	100%	98%	100%
CO-5	100%	98%	100%
CO-6	100%	98%	100%

CO	**Intrnalpractical**	**DDE**	**OverallI**	**Level**
CO-1	100%	100%	100%	3.00
CO-2	99%	100%	100%	3.00
CO-3	99%	100%	100%	3.00
CO-4	99%	100%	100%	3.00
CO-5	99%	100%	100%	3.00
CO-6	99%	100%	100%	3.00

AttainmentLevel	
1	40%
2	50%
3	60%

Attainment(Internal2Examination)= **3.00**

NOTE:

A+A+CD+MG:AIM+APPARATUS+CIRCUITDIAGRAM+MODELGRAPHT

+P+C+R:THEORY+PROCEDURE+CALCULATION+RESULT

DDE:DaytoDayEvaluation

SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

Department of Electronics and Communication Engineering

Course Outcome Attainment (UniversityExaminations)

Name of the faculty:D.UMA AcademicYear: 2022-23

Branch & Section: ECE - A Year / Semester: III/I

Course Name: DATA COMMUNICATION AND NETWORK LAB

S.No	Roll Number	MarksSecured
1	20X31A0401	66
2	20X31A0402	65
3	20X31A0403	-1
4	20X31A0404	70
5	20X31A0405	69
6	20X31A0406	68
7	20X31A0407	66
8	20X31A0408	65
9	20X31A0409	71
10	20X31A0410	68
11	20X31A0411	71
12	20X31A0412	68
13	20X31A0413	68
14	20X31A0414	69
15	20X31A0415	71
16	20X31A0416	70
17	20X31A0417	69
18	20X31A0418	-1
19	20X31A0419	67
20	20X31A0420	66
21	20X31A0421	68
22	20X31A0422	66
23	20X31A0423	67
24	20X31A0424	69
25	20X31A0425	68
26	20X31A0426	65
27	20X31A0427	69
28	20X31A0428	68
29	20X31A0429	69
30	20X31A0430	68
31	20X31A0431	67
32	20X31A0432	69
33	20X31A0434	68
34	20X31A0435	67
MaxMarks		75

S.No	Roll Number	Marks Secured
35	20X31A0436	68
36	20X31A0437	68
37	20X31A0438	70
38	20X31A0439	68
39	20X31A0440	67
40	20X31A0441	66
41	20X31A0442	67
42	20X31A0443	70
43	20X31A0444	68
44	20X31A0445	66
45	20X31A0446	66
46	20X31A0447	67
47	20X31A0448	70
48	20X31A0449	71
49	20X31A0450	68
50	20X31A0451	70
51	20X31A0452	68
52	20X31A0453	67
53	20X31A0454	66
54	20X31A0455	66
55	20X31A0456	68
56	20X31A0457	69
57	20X31A0458	68

ClassAverage mark	69
Numberofstudentsperformedabovethetarget	67
Numberofsuccessfulstudents	67
Percentageofstudentsscoredmorethantarget	98%
Attainmentlevel	**3**

AttainmentLevel	%students
1	40%
2	50%
3	60%

SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

Department of Electronics and Communication Engineering

Course Outcome Attainment

Name of thefaculty D.UMA Academic Year 2022-23

Branch & Section: ECE - A Examination: IInternal

Course Name: Year:III-1Semester:

DCN

Course Outcomes	1st Internal Exam	2ndInternal Exam	Internal Exam	University Exam	Attainment Level
CO1	3.00	3.00	3.00	3.00	3.00
CO2	3.00	3.00	3.00	3.00	3.00
CO3	3.00	3.00	3.00	3.00	3.00
CO4	3.00	3.00	3.00	3.00	3.00
CO5	3.00	3.00	3.00	3.00	3.00
CO6	3.00	3.00	3.00	3.00	3.00
Internal &University Attainment:			3.00	3.00	
Weightage			25%	75%	
CO Attainment for the course(Internal,University			0.75	2.25	
CO Attainment for the course(Direct Method)			3.00		

Overall course attainment level **3.00**

SRI INDU INSTITUTE OF ENGINEERING & TECHNOLOGY

Department of Electronics and Communication Engineering

Program Outcome Attainment (from Course)

Name of Faculty: D.UMA | Academic Year: 2022-23

Branch & Section: ECE-A | Year: III

Course Name: DATA COMMUNICATION AND NETWORK LAB | Semester: I

CO-PO mapping

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	2	2	2	2	2	-	-	-	-	-	-	2	-	-
CO2	2	2	2	2	2	-	-	-	-	-	-	2	-	-
CO3	2	-	2	2	2	-	-	-	-	-	-	2	-	--
CO4	-	2	-	-	2	-	-	-	-	-	2	2	-	-
CO5	-	-	-	-	2	-	-	-	-	-	-	2	-	-
CO6	2	-	2	-	2	-	-	-	-	-	2	2	-	-
Course	**2**	**2**	**2**	**2**	**2**	**-**	**-**	**-**	**-**	**-**	**2.00**	**2**	**-**	**-**

CO	**CourseOutcomeAttainment**
CO1	3.00
CO2	3.00
CO3	3.00
CO4	3.00
CO5	3.00
CO6	3.00
Overallcourseattainmentlevel	**3.00**

PO-ATTAINMENT

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO Attainment	**2**	**2**	**2**	**2**	2						**2**	**2**		

COcontributiontoPO-33%,67%,100%(Level 1/2/3)