



Sri Indu Institute of Engineering & Technology

Recognized Under 2(f) of UGC Act 1956

Approved by AICTE, New Delhi

Affiliated to JNTUH, Hyderabad.

COURSE FILE

ON

Data Structures Lab

Course Code –CS307PC

II B.Tech I-SEMESTER

A.Y.: 2022-2023

Prepared by

Mrs.D.Rajeshwari
Assistant Professor

B. Rakha Kaul
Computer Science & Engg. Dept.
SRI INDU INSTITUTE OF ENGG & TECH.
Sheriguda(V), Ibrahimpatnam(M), R.R.Dist-501 10.

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



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Academic Year	2022-2023
Course Title	DATA STRUCTURES LAB
Course Code	CS307PC
Room No	A-102
Name of the lab incharge	Mrs.M. Sujatha
Name of the faculty incharge	Mrs.D.Rajeshwari, Assistant Professor

Index of Course File

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

INSTITUTE VISION AND MISSION

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: To offer outcome-based education and enhancement of technical and practical skills.

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

IM3: To be a centre of excellence for innovative and emerging fields in technology development with state-of-art facilities to faculty and students fraternity.

IM4: To create an enterprising environment to ensure culture, ethics and social responsibility among the stakeholders

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

DEPARTMENT VISION AND MISSION

Vision:

To become a prominent knowledge hub for learners, strive for educational excellence with innovative and industrial techniques so as to meet the global needs.

Mission:

- DM1 :** To provide ambience that enhances innovations, problem solving skills, leadership qualities, decision making, team-spirit and ethical responsibilities.
- DM2 :** To impart quality education with professional and personal ethics, so as to meet the challenging technological needs of the industry and society.
- DM3 :** To provide academic infrastructure and develop linkage with the world class organizations to strengthen industry-academia relationships for learners.
- DM4 :** To provide and strengthen new concepts of research in the thrust area of Computer Science and Engineering to reach the needs of Government and Society.

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

PROGRAM EDUCATIONAL OBJECTIVES

- PEO1:** To develop trained graduates with strong academic and technical skills of modern computer science and engineering.
- PEO2:** To promote trained graduates with leadership qualities and the ability to solve real time problems using current techniques and tools in interdisciplinary environment.
- PEO3:** To motivate the graduates towards lifelong learning through continuing education and professional development.

PROGRAM SPECIFIC OUTCOMES

- PSO1 : Professional Skills:** To implement computer programs of varying complexity in the areas related to Web Design, Cloud Computing, Network Security and Artificial Intelligence.
- PSO2: Problem-Solving Skills:** To develop quality products using open ended programming environment.

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PROGRAMME OUTCOMES (POs)

- PO1: Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- PO2: Problem analysis:** Identify, formulate, review research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- PO3: 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.
- PO4: 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.
- PO5: Modern tool usage:** 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.
- PO6: 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.
- PO7: 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.
- PO8: Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- PO9: Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- PO10: Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- PO11: Project management and finance:** 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.
- PO12: Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

COURSE STRUCTURE
II YEAR SYLLABUS (R18 Regulations)
 Applicable from Academic Year: 2022-23 Batch

II Year I Semester

S.No.	Course Code	Course Title	L	T	P	Credits
1	CS301ES	AnalogandDigitalElectronics	3	0	0	3
2	CS302PC	DataStructures	3	1	0	4
3	MA303BS	ComputerOrientedStatisticalMethods	3	1	0	4
4	CS304PC	ComputerOrganizationandArchitecture	3	0	0	3
5	CS305PC	ObjectOrientedProgrammingusingC++	2	0	0	2
6	CS306ES	AnalogandDigitalElectronicsLab	0	0	2	1
7	CS307PC	DataStructuresLab	0	0	3	1.5
8	CS308PC	ITWorkshopLab	0	0	3	1.5
9	CS309PC	C++Programming Lab	0	0	2	1
10	*MC309	GenderSensitizationLab	0	0	2	0
		TotalCredits	14	2	12	21

II Year IISemester

S.No.	Course Code	Course Title	L	T	P	Credits
1	CS401PC	Discrete Mathematics	3	0	0	3
2	SM402MS	BusinessEconomics&FinancialAnalysis	3	0	0	3
3	CS403PC	OperatingSystems	3	0	0	3
4	CS404PC	DatabaseManagementSystems	3	1	0	4
5	CS405PC	JavaProgramming	3	1	0	4
6	CS406PC	OperatingSystemsLab	0	0	3	1.5
7	CS407PC	DatabaseManagementSystemsLab	0	0	3	1.5
8	CS408PC	JavaProgrammingLab	0	0	2	1
9	*MC409	ConstitutionofIndia	3	0	0	0
		TotalCredits	18	2	8	21



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DATA STRUCTURES LABORATORY

(Course Code: CS307PC)

B.Tech. II Year I Sem.

L T P C
0 0 31.5

- **Prerequisites:** A Course on “Programming for problem solving”.

Course Objectives:

- It covers various concepts of C programming language
- It introduces searching and sorting algorithms
- It provides an understanding of data structures such as stacks and queues.

Course Outcomes: After learning the contents of this paper the student must be able to

- Ability to develop C programs for computing and real-life applications using basic elements like control statements, arrays, functions, pointers and strings, and data structures like stacks, queues and linked lists.
- Ability to Implement searching and sorting algorithms.

List of experiments:

1. Write a program that uses functions to perform the following operations on singly linked list.:
i) Creation ii) Insertion iii) Deletion iv) Traversal
2. Write a program that uses functions to perform the following operations on doubly linked list.
i) Creation ii) Insertion iii) Deletion iv) Traversal
3. Write a program that uses functions to perform the following operations on circular linked list
i) Creation ii) Insertion iii) Deletion iv) Traversal
4. Write a program that implement stack (its operations) using
i) Arrays ii) Pointers
5. Write a program that implement Queue (its operations) using
i) Arrays ii) Pointers
6. Write a program that implements the following sorting methods to sort a given list of integers in ascending order
i) Bubble sort ii) Selection sort iii) Insertion sort
7. Write a program that use both recursive and non-recursive functions to perform the following searching operations for a Key value in a given list of integers:
i) Linear search ii) Binary search
8. Write a program to implement the tree traversal methods.
9. Write a program to implement the graph traversal methods.



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 501 510 Website: <https://siiet.ac.in/>

COURSE OUT COMES

Course Name: Data Structures Lab(C217)

At the End of the course , student will be able to

CO No	DESCRIPTION
C217.1	Develop C programs for computing and real-life applications using basic elements on data structures like linked lists-Singly, Doubly, Circular. (Applying) .
C217.2	Construct and implement the following operations on stacks, queues. (Applying)
C217.3	Evaluate and analyze with implementation of various kinds of data structures trees AVL Trees, Red-black Tree (Evaluating) .
C217.4	Develop and execute programs that use recursive and non recursive functions to implement tree traversal method (Creating) .
C217.5	Solve and execute functions to perform on various sorting methods. (Applying)
C217.6	Simplify by implementing the Graph traversal methods and various kinds of pattern matching techniques (Analyzing) .

Cos and Pos & PSOs Mapping

Course Outcome	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS 01	PS 02
C217.1	1	-	2	-	3	-	-	-	-	-	-	2	-	2
C217.2	1	2	3	-	3	1	-	-	-	-	-	2	-	2
C217.3	1	2	-	-	3	-	-	-	-	-	-	2	1	2
C217.4	1	2	3	2	3	-	-	-	-	-	-	2	-	2
C217.5	1	3	2	-	3	-	-	-	-	-	-	2	1	2
C217.6	3	2	2	1	3	-	-	-	-	-	-	2	-	2
C217	1.3	1.8	2	1.5	3	1	-	-	-	-	-	2	1	2

3-High

2-Medium

1-Low



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Data Structures LAB

LIST OF EXPERIMENTS AND THEIR CO,PO MAPPING

SNO	Name of the program	CO	PO/PSO	
			PO	PSO
1	Write a program that uses functions to perform the following operations on singly linked list. : i) Creation ii) Insertion iii) Deletion iv) Traversal	C217.1	PO1,P03,PO5, PO12	PSO2
2	Write a program that uses functions to perform the following operations on doubly linked list: i) Creation ii) Insertion iii) Deletion iv) Traversal	C217.1	PO1,P03,PO5, PO12	PSO2
3	Write a program that uses functions to perform the following operations on circular linked list.: i) Creation ii) Insertion iii) Deletion iv) Traversal	C217.1	PO1,P03,PO5, PO12	PSO2
4	Write a program that implement stack (its operations) using i) Arrays ii) Pointers	C217.2	PO1,PO2,PO3, PO5,PO6,PO12	PSO2
5	Write a program that implement Queue (its operations) using	C217.2	PO1,PO2,PO3,	PSO2

	i) Arrays ii) Pointers		PO5,PO6,PO12	
6	Write a program that implements the following sorting methods to sort a given list of Integers in ascending order i) Quick sort ii) Heap sort iii) Merge sort.	C217.5	PO1,PO2,PO3, PO5,PO12	PSO1, PSO2
7	Write a program to implement the tree traversal methods(Recursive and Non Recursive). i) Linear search ii) Binary search	C217.4	PO1,PO2,PO3, PO4,PO5	PSO2
8	Write a program to implement the tree traversal methods.	C217.3	PO1,PO2,PO5, PO12	PSO1,PSO2
9	Write a program to implement the graph traversal methods	C217.3	PO1,PO2,PO5, PO12	PSO1,PSO2



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TIME TABLE FOR A.Y 2022-23

Class: II-B. Tech CSE -A

Semester: I

LH. NO: A-301

W.E.F: 28-11-2022

Period/ Day	1 9:40-10:30	2 10:30-11:20	3 11:20-12:10	4 12:10-1:00	1:00- 1:30	5 1:30-2:20	6 2:20-3:10	7 3:10-4:00
Monday	COSM	ITWS LAB(BATCH-I)/ A&DE LAB(BATCH-II)			L U N C H	A&DE	DS	C++
Tuesday	COSM	C++	COA	DS		A&DE	CO-C/SS/DAA	
Wednesday	C++	COSM	INT	COA		DS LAB(BATCH-I)/ C++ LAB(BATCH-II)		
Thursday	DS	GS LAB		COSM/DS(T)		C++	A&DE	SPORTS
Friday	COA	DS LAB(BATCH-II)/ C++ LAB(BATCH-I)				A&DE	LIB	DS/COSM(T)
Saturday	C++	DS	COUN	COA		ITWS LAB(BATCH-II)/ A&DE LAB(BATCH-I)		

(T) – Tutorial (concern faculty)

Subject Code	Subject Name	Name of the Faculty	Subject Code	Subject Name	Name of the Faculty
CS301ES	Analog and Digital Electronics	Mrs. S.Alekhyia	CS309PC	C++ Programming Lab	Mrs P H Swarna Rekha/ Mrs.P.Souwjanya/ Mrs.G.Swapna
CS302PC	Data Structures	Mrs. D.Rajeshwari	MC309	Gender Sensitization Lab	Mrs S Swapna
MA303BS	Computer Oriented Statistical Methods	Mrs. B.Ramadevi		CO-C/SS/DAA	Mrs. D.Rajeshwari
CS304PC	Computer Organization and Architecture	Dr. Sasikumar D	Sports	Sports	Mr K Veera Kishore
CS305PC	Object Oriented Programming Using C++	Mrs P H Swarna Rekha	Internet	Internet	Mrs. Ch Sai Vijaya
CS306ES	Analog and Digital Electronics Lab	Mrs. S.Alekhyia	LIB	Library	Mrs P H Swarna Rekha
CS307PC	Data Structures Lab	Mrs. D.Rajeshwari/ Mrs D.Uma/ Mrs.A.Sudha	COUN	Counselling	Mrs.R.Sravanthi
CS308PC	IT Workshop Lab	Mrs I Kamyia Priya/ Mrs.Ch.Sai Vijaya/ Mrs. Jakkala Priyanka			
Class In-Charge : Mrs. D.Rajeshwari		Mentor 1 : Mrs. D.Rajeshwari	Mentor 2: Mrs P H Swarna Rekha		

Class In-Charge: *[Signature]*

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Lab External Question paper

Year & Semester: II-I

Branch: CSE

Subject Name: Data Structures Lab

Faculty Name: D.Rajeshwari

S.No. QUESTIONS

1. Write a program that uses functions to perform the following operations on singly linked list.:
i) Creation ii) Insertion iii) Deletion iv) Traversal
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DS Lab External Time-Table Examination Branch

A.Y.: 2022-23

SEM-I

Date	Day	Branch	Session	HT.No	Total No. of Students
12/04/2023	WEDNESDAY	CSE-A	AN	21X31A0501 TO 21X31A0565 & 22X35A0501 TO 21X35A0508	69
13/04/2023	THURSDAY	CSE-B	FN	21X31A0566 TO 21X31A05D0 & 22X35A0509 TO 22X35A0516	69
13/04/2023	THURSDAY	CSE-C	AN	21X31A05D1 TO 21X31A05J4 & 22X35A0517 TO 22X35A0522	69

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DS Lab External Time-Table With Examiner

A.Y.: 2022-23

SEM-I

SRI INDU INSTITUTE OF ENGINEERING & TECHNOLOGY LAB EXTERNAL EXAMINATIONS TIME-TABLE, APR-2023 (I SEM) DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING (IOT, CS, AIML, AI&DS) TIMINGS FN: 10:00 AM TO 1:00 PM AN: 1:00 PM TO 4:00 PM Date: 04/04/2023

S.NO	YEAR/SEC	NAME OF THE LAB	DATE	SESSION	LOCATION	NAME OF THE INTERNAL EXAMINER	NAME OF THE EXTERNAL EXAMINER
1	II-I-CSE-A	A&DE LAB	15/4/2023	FN	LAB NO-A-114	Mrs.K.Padma	Mr. S. Kranthi Reddy (9573013861)
2		DATA STRUCTURES LAB	04-12-23	AN	LAB NO-1,2	Mrs.D.Rajeshwari	Mr.G. Harish Reddy (9963992727) Mrs. R
3		IT WORKSHOP LAB	04-11-23	FN	LAB NO-10A	Mrs.S.Sandhya	Akshara(9177841919) Dr.
4		PROGRAMMING	13/4/2023	AN	LAB NO-4,6	Mrs.M.Swapna	B.Srinu(8185924275)
5	II-I-CSE-B	A&DE LAB	04-11-23	FN	LAB NO-A-114	Mrs.K.Padma	Mr.G. Harish Reddy (9963992727)
6		DATA STRUCTURES LAB	13/4/2023	FN	LAB NO-1,2	Mrs.D.Uma	Mr. S. Kranthi Reddy (9573013861)
7		IT WORKSHOP LAB	04-12-23	AN	LAB NO-4,6	Mrs.S.Sandhya	Mr. CH. Chaitanya kumar(8500330546)
8		PROGRAMMING	15/4/2023	FN	LAB NO-4,6	Mrs.M.Karuna	Mrs.K.L. Anusha(9704446862)
9	II-I-CSE-C	A&DE LAB	04-12-23	AN	LAB NO-A-114	Mrs.K.Padma	Mr. S. Kranthi Reddy (9573013861)
10		DATA STRUCTURES LAB	13/4/2023	AN	LAB NO-1,2	Mr.P.Sri Ramulu	Mrs. Durga Devi(9948353838)
11		IT WORKSHOP LAB	15/4/2023	FN	LAB NO-10A	Mrs.S.Sandhya	Mrs.K.L. Anusha(9704446862)
12		PROGRAMMING	04-11-23	FN	LAB NO-4,6	Mrs.M.Swapna	Mr. U.Nehru(9912226377)

HOD

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LAB OCCUPANCY CHART

Data Structures LAB

ROOM NO: A-107

BLOCK: A

FLOOR: 1

	I 9:40-10:30	II 10:30-11:20	III 11:20-12:10	IV 12:10-1:00	LUNCH	V 1:30-2:20	VI 2:20-3:10	VII 3:10-4:00
MON		II BTECH I SEM CSE-B						
TUE						II BTECH I SEM CSE-C		
WED						II BTECH I SEM CSE-A		
THU						II BTECH I SEM CSE-B		
FRI		II BTECH I SEM CSE-A						
SAT		II BTECH I SEM CSE-C						

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Data Structures LAB

Do's and Don'ts

Do's

1. Come with completed observation and record.
2. Remove your shoes or wear foot socks before you enter the lab.
3. Always keep quiet. Be considerate to other lab users.
4. Report any problems with the computer to the person in charge.
5. Shut down the computer properly.
6. Wear ID card before entering into the lab.
7. Read and understand how to carry out an activity thoroughly before coming to the lab.
8. Write In time, Out time and system details in the login register

Don'ts

1. Do not touch any part of the computer with wet hands.
2. Do not change system settings.
3. Do not hit the keys on the computer too hard.
4. Don't damage, remove, or disconnect any labels, parts, cables or equipment.
5. Do not install or download any software or modify or delete any system files on any lab computers
6. Do not disturb your neighbouring students. They may be busy in completing tasks.
7. Do not remove anything from the computer laboratory without permission.
8. Do not use pen drives.



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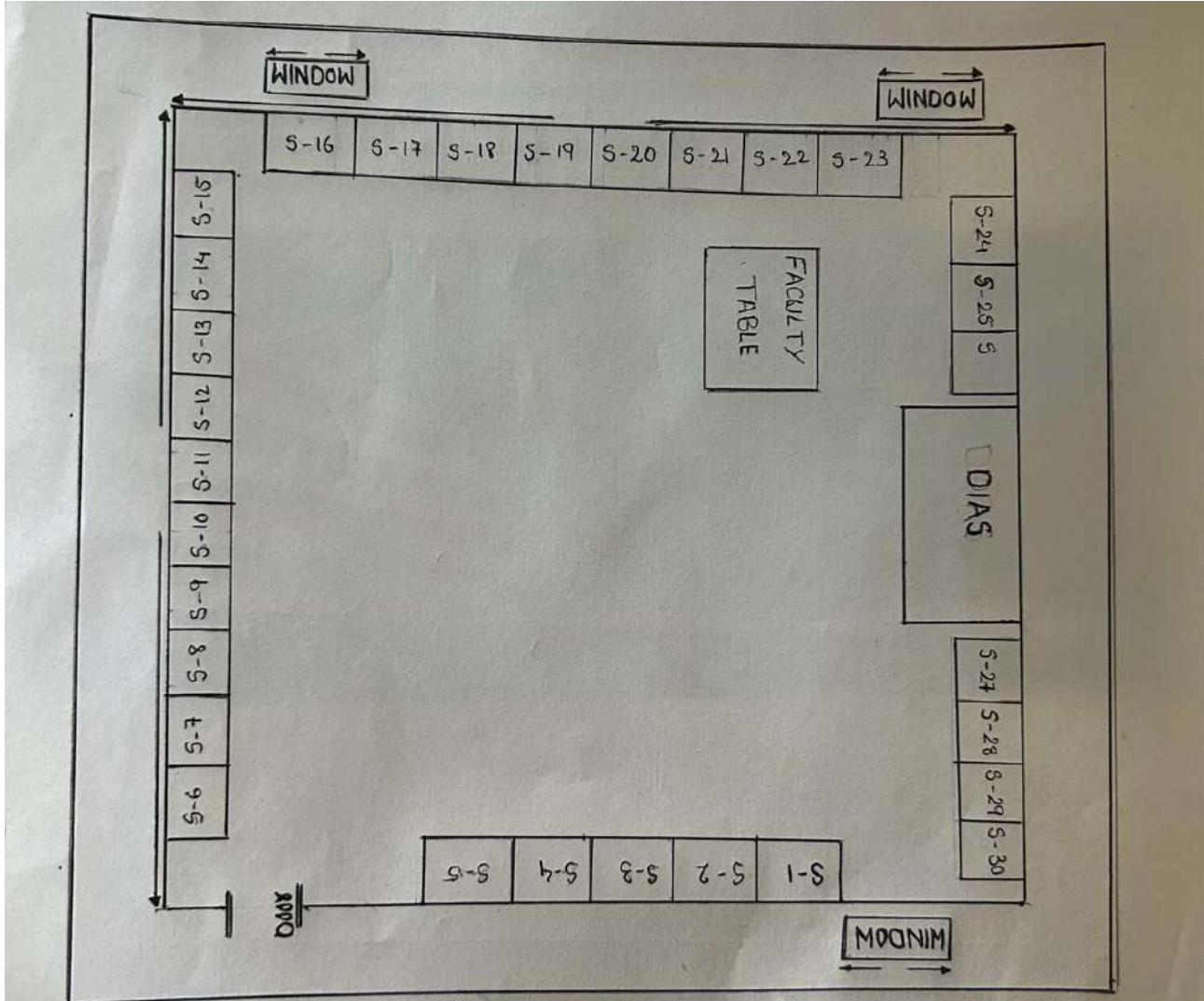
DATA STRUCTURES LAB

PHYSICAL LAB-3 FLOOR PLAN

ROOM NO:A-102

BLOCK:A

FLOOR:1



Lab Area (In. Sqm.) = $9.45 \times 7.94 = 75.033 \text{ Sqm}$

Lab Area (In. Sft.) = $101.72 \times 85.47 = 807.65 \text{ Sft}$

M. Sujatha
LAB In-charge

B. Lakshmi
Head of the Department

Computer Science & Engg. Dept.
SRI INDU INSTITUTE OF ENGG & TECH.
Sheriguda(V), Ibrahimpatnam(M), R.R.Dist-501 16



SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

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1956 (Approved by AICTE, New Delhi and Affiliated to JNTUH, Hyderabad)

Khalsa Ibrahimpatnam, Sheriguda (V), Ibrahimpatnam (M), Ranga Reddy Dist., Telangana – 501

510 Website: <https://siiet.ac.in/>

Lab manual link

<https://drive.google.com/file/d/1qeU2gBP3e2PtTqFipGPjI5nmHKJ8cLnO/view?usp=sharing>

SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

Department of Computer Science and Engineering



Course Outcome Attainment (Internal Examination-1)

Name of the faculty : D. RAJESHWARI 2022-23
 Branch & Section: CSE - A I Internal
 Course Name: DATA STRUCTURE Year/Semester: II/I

S.No	HT No.	A+A+CD+MG	T+P+C+R	DDE
Max. Marks ==>		5	5	15
1	21X31A0501	4	5	13
2	21X31A0502	5	5	14
3	21X31A0503	4	4	10
4	21X31A0504	5	5	15
5	21X31A0505	3	4	13
6	21X31A0506	5	5	15
7	21X31A0507	3	4	12
8	21X31A0508	5	5	14
9	21X31A0509	4	4	14
10	21X31A0510	2	3	9
11	21X31A0511	5	5	13
12	21X31A0512	3	2	11
13	21X31A0513	3	3	13
14	21X31A0514	4	4	14
15	21X31A0515	4	4	15
16	21X31A0516	3	3	13
17	21X31A0517	3	3	13
18	21X31A0518	4	3	13
19	21X31A0519	4	4	12
20	21X31A0520	3	3	10
21	21X31A0521	5	4	14
22	21X31A0522	3	4	9
23	21X31A0523	4	5	15
24	21X31A0524	4	3	15
25	21X31A0525	5	5	15
26	21X31A0526	5	5	15
27	21X31A0527	4	5	15
28	21X31A0528	4	3	12
29	21X31A0529	5	4	14
30	21X31A0530	4	4	14
31	21X31A0531	3	4	12
32	21X31A0532	3	3	10
33	21X31A0533	4	5	14
34	21X31A0534	5	5	15
35	21X31A0535	3	3	11
36	21X31A0536	3	3	10
37	21X31A0537	4	4	15
38	21X31A0538	4	5	14
39	21X31A0539	3	3	10
40	21X31A0540	5	5	15
41	21X31A0541	3	5	13
42	21X31A0542	4	4	15
43	21X31A0543	4	5	14
44	21X31A0544	3	3	8
45	21X31A0545	5	4	15
46	21X31A0546	3	3	10
47	21X31A0547	3	3	8
48	21X31A0548	5	4	14

49	21X31A0549	2	3	11
50	21X31A0550	4	3	14
51	21X31A0552	4	5	14
52	21X31A0554	5	4	15
53	21X31A0555	4	4	12
54	21X31A0556	3	3	10
55	21X31A0557	5	5	15
56	21X31A0559	4	5	14
57	21X31A0560	5	5	15
58	21X31A0561	4	4	13
59	21X31A0562	4	4	13
60	21X31A0563	5	4	14
61	21X31A0564	5	4	15
62	21X31A0565	4	3	14
63	22X35A0501	3	4	13
64	22X35A0502	5	4	15
65	22X35A0503	3	4	10
66	22X35A0504	4	3	12
67	22X35A0505	4	5	14
68	22X35A0506	3	4	12
69	22X35A0507	4	3	14
70	22X35A0508	5	5	15
Target set by the faculty / HoD		3.00	3.00	9.00
Number of students performed above the target		58	59	58
Number of students attempted		60	60	60
Percentage of students scored more than target		97%	98%	97%

CO Mapping with Exam 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

CO Attainment based on Exam Questions:

CO - 1	97%	97%	97%
CO - 2	97%	98%	97%
CO - 3	97%	98%	97%
CO - 4	97%	98%	97%
CO - 5	97%	98%	97%
CO - 6	97%	98%	97%

CO	Intrnal practica	DDE	Overall	Level
CO-1	97%	97%	97%	3
CO-2	98%	97%	97%	3
CO-3	98%	97%	97%	3
CO-4	98%	97%	97%	3
CO-5	98%	97%	97%	3
CO-6	98%	97%	97%	3

Attainment Level	
1	40%
2	50%
3	60%

Attainment (Internal 1 Examination) = 3

SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOG

Department of Computer Science and Engineering



Course Outcome Attainment (Internal Examination-2)

Name of the faculty : D. RAJESHWARI 2022-23
 Branch & Section: CSE- A II Internal
 Course Name: DATA STRUCTURE Semester: I

S.No	HT No.	A+A+CD+MG	T+P+C+R	DDE
Max. Marks ==>		5	5	15
1	21X31A0501	4	5	14
2	21X31A0502	4	5	15
3	21X31A0503	3	4	14
4	21X31A0504	4	4	15
5	21X31A0505	4	3	14
6	21X31A0506	5	5	15
7	21X31A0507	3	3	12
8	21X31A0508	4	3	13
9	21X31A0509	5	4	15
10	21X31A0510			0
11	21X31A0511	4	3	13
12	21X31A0512			0
13	21X31A0513	4	3	14
14	21X31A0514	3	3	13
15	21X31A0515	3	4	13
16	21X31A0516	4	4	12
17	21X31A0517	4	3	12
18	21X31A0518	4	3	14
19	21X31A0519	5	4	14
20	21X31A0520	3	3	12
21	21X31A0521			0
22	21X31A0522	3	4	13
23	21X31A0523	5	4	15
24	21X31A0524	4	4	15
25	21X31A0525	5	5	15
26	21X31A0526	4	5	15
27	21X31A0527	4	3	14
28	21X31A0528	3	4	12
29	21X31A0529	4	3	11
30	21X31A0530	3	3	13
31	21X31A0531			0
32	21X31A0532	3	4	12
33	21X31A0533	4	4	14
34	21X31A0534	5	5	15
35	21X31A0535			0
36	21X31A0536	3	3	13
37	21X31A0537	3	2	11
38	21X31A0538	4	4	15
39	21X31A0539	3	4	11
40	21X31A0540	5	5	15
41	21X31A0541			0

42	21X31A0542	4	4	15
43	21X31A0543	4	4	14
44	21X31A0544			0
45	21X31A0545	5	4	15
46	21X31A0546			0
47	21X31A0547			0
48	21X31A0548	5	4	14
49	21X31A0549	3	3	13
50	21X31A0550	3	3	13
51	21X31A0552			0
52	21X31A0554	5	5	15
53	21X31A0555	4	3	12
54	21X31A0556	4	3	9
55	21X31A0557	4	4	14
56	21X31A0559	4	4	14
57	21X31A0560	5	4	15
58	21X31A0561	4	4	12
59	21X31A0562	3	4	15
60	21X31A0563			0
61	21X31A0564	5	4	14
62	21X31A0565	4	4	14
63	22X35A0501	3	4	12
64	22X35A0502			0
65	22X35A0503	4	4	10
66	22X35A0504	4	3	11
67	22X35A0505	5	4	14
68	22X35A0506	4	3	12
69	22X35A0507			0
70	22X35A0508	4	4	15
Target set by the faculty / HoD		3.00	3.00	9.00
Number of students performed above the target		40	39	40
Number of students attempted		40	40	51
Percentage of students scored more than target		100%	98%	78%

CO Mapping with Exam 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

CO Attainment based on Exam Questions:

CO - 1	100%	100%	78%
CO - 2	100%	98%	78%
CO - 3	100%	98%	78%
CO - 4	100%	98%	78%
CO - 5	100%	98%	78%
CO - 6	100%	98%	78%

CO	Intrnal practical	DDE	Overall	Level
CO-1	100%	78%	89%	3
CO-2	99%	78%	89%	3
CO-3	99%	78%	89%	3
CO-4	99%	78%	89%	3
CO-5	99%	78%	89%	3
CO-6	99%	78%	89%	3

Attainment Level	
1	40%
2	50%
3	60%

Attainment (Internal 2 Examination) =

3

SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

Department of Computer Science and Engineering

Course Outcome Attainment (University Examinations)

Name of the faculty : D. RAJESHWARI

Academic Year:

2022-23

Branch & Section: CSE - A

Year / Semester:

II/I

Course Name: DATA STRUCTURE

S.No	Roll Number	Marks Secured
1	21X31A0501	70
2	21X31A0502	71
3	21X31A0503	66
4	21X31A0504	68
5	21X31A0505	66
6	21X31A0506	74
7	21X31A0507	65
8	21X31A0508	62
9	21X31A0509	70
10	21X31A0510	62
11	21X31A0511	68
12	21X31A0512	65
13	21X31A0513	66
14	21X31A0514	70
15	21X31A0515	70
16	21X31A0516	63
17	21X31A0517	67
18	21X31A0518	68
19	21X31A0519	68
20	21X31A0520	66
21	21X31A0521	70
22	21X31A0522	65
23	21X31A0523	71
24	21X31A0524	72
25	21X31A0525	73
26	21X31A0526	70
27	21X31A0527	68
28	21X31A0528	65
29	21X31A0529	68
30	21X31A0530	66
31	21X31A0531	65
32	21X31A0532	65
33	21X31A0533	73
34	21X31A0534	72
35	21X31A0535	60

S.No	Roll Number	Marks Secured
36	21X31A0536	62
37	21X31A0537	66
38	21X31A0538	72
39	21X31A0539	61
40	21X31A0540	73
41	21X31A0541	68
42	21X31A0542	70
43	21X31A0543	71
44	21X31A0544	63
45	21X31A0545	72
46	21X31A0546	62
47	21X31A0547	Ab
48	21X31A0548	68
49	21X31A0549	63
50	21X31A0550	65
51	21X31A0552	68
52	21X31A0554	71
53	21X31A0555	65
54	21X31A0556	62
55	21X31A0557	68
56	21X31A0559	68
57	21X31A0560	70
58	21X31A0561	65
59	21X31A0562	65
60	21X31A0563	70
61	21X31A0564	72
62	21X31A0565	65
63	22X35A0501	65
64	22X35A0502	68
65	22X35A0503	65
66	22X35A0504	60
67	22X35A0505	71
68	22X35A0506	62
69	22X35A0507	55
70	22X35A0508	70

Max Marks	75
Class Average mark	67
Number of students performed above the target	35
Number of successful students	68
Percentage of students scored more than target	51%
Attainment level	3

Attainment Level	% students
1	40%
2	50%
3	60%



SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

Department of Computer Science and Engineering

Course Outcome Attainment

Name of the faculty D. RAJESHWARI

Academic Year 2022-23

Branch & Section: CSE - A

Examination: I Internal

Course Name: DATA STRUCTURES

Year: II

Semester: I

Course Outcomes	1st Internal Exam	2nd Internal 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			70%	30%	
CO Attainment for the course (Internal, University)			2.10	0.90	
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. RAJESHWARI Academic Year: 2022-23
Branch & Section: CSE - A Year: II
Course Name: DATA STRUCTURE Semester: I

CO-PO mapping

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	1	-	2	-	3	-	-	-	-	-	-	2
CO2	1	2	3	-	3	1	-	-	-	-	-	2
CO3	1	2	-	-	3	-	-	-	-	-	-	2
CO4	1	2	3	2	3	-	-	-	-	-	-	2
CO5	1	3	2	-	3	-	-	-	-	-	-	2
CO6	3	2	2	1	3	-	-	-	-	-	-	2
Course	1.3	1.8	2	1.5	3	1	-	-	-	-	-	2

CO	Course Outcome Attainment
	3.00
CO1	3.00
CO2	3.00
CO3	3.00
CO4	3.00
CO5	3.00
CO6	3.00
Overall course attainment level	3.00

PO-ATTAINMENT

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO Attainment	1.30	1.80	2.00	1.50	3.00	1.00						2.00

CO contribution to PO - 33%, 67%, 100% (Level 1/2/3)