Sri Indu Institute of Engineering & Technology
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Affiliated to JNTUH, Hyderabad.

COURSE FILE

ON

Compiler Design Lab

Course Code - CS605PC

III B.Tech II-SEMESTER

A.Y.: 2022-2023

Prepared by

Dr. Sasikumar D
Associate Professor

B. Rahma Kaur
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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Academic Year	2022-2023
Course Title	COMPILER DESIGN LAB
Course Code	CS605PC
Room No	A-207
Name of the lab incharge	Mr.K.Anup Kumar, Assistant Professor
Name of the faculty incharge	Dr. SASIKUMAR D, Associate Professor

Index of Course File

S. No.	Name of the content
1	Institute vision and mission
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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 solvereal 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 andreceive 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

III YEAR SYLLABUS (R18 Regulations)

Applicable from Academic Year: 2022-23 Batch

III Year I Semester

S.No.	Course Code	Course Title	L	T	P	Credits
1	CS501PC	Formal Languages & Automata Theory	3	0	0	3
2	CS502PC	Software Engineering	3	0	0	3
3	CS503PC	Computer Networks	3	0	0	3
4	CS504PC	Web Technologies	3	0	0	3
5		Professional Elective-I	3	0	0	3
6		Professional Elective-II	3	0	0	3
7	CS505PC	Software Engineering Lab	0	0	3	1.5
8	CS506PC	Computer Networks & Web Technologies Lab	0	0	3	1.5
9	EN508HS	Advanced Communication Skills Lab	0	0	2	1
10	*MC510	Intellectual Property Rights	3	0	0	0
		Total Credits	**21**	**0**	**8**	**22**

III Year II Semester

S.No.	Course Code	Course Title	L	T	P	Credits
1	CS601PC	Machine Learning	3	1	0	4
2	CS602PC	Compiler Design	3	1	0	4
3	CS603PC	Design and Analysis of Algorithms	3	1	0	4
4		Professional Elective – III	3	0	0	3
5		Open Elective-I	3	0	0	3
6	CS604PC	Machine Learning Lab	0	0	3	1.5
7	CS605PC	Compiler Design Lab	0	0	3	1.5
8		Professional Elective-III Lab	0	0	2	1
9	*MC609	Environmental Science	3	0	0	0
			18	3	8	22

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COMPILER DESIGN LABORATORY
(Course Code: CS605PC)

B.Tech. III Year II Sem.

CS605PC: COMPILER DESIGN LAB

L	T	P	C
0	0	3	1.5

Prerequisites
1. A Course on "Objected Oriented Programming through Java"

Co-requisites:
1. A course on "Web Technologies"

Course Objectives:

- To provide hands-on experience on web technologies
- To develop client-server application using web technologies
- To introduce server-side programming with Java servlets and JSP To understand the various phases in the design of a compiler.
- To understand the design of top-down and bottom-up parsers.
- To understand syntax directed translation schemes.

To introduce lex and yacc tools.

Course Outcomes:

- Design and develop interactive and dynamic web applications using HTML, CSS, JavaScript and XML
- Apply client-server principles to develop scalable and enterprise web applications.
- Ability to design, develop, and implement a compiler for any language.
- Able to use lex and yacc tools for developing a scanner and a parser. Able to design and implement LL and LR parsers.

List of Experiments
Compiler Design Experiments

1. Write a LEX Program to scan reserved word & Identifiers of C Language
2. Implement Predictive Parsing algorithm
3. Write a C program to generate three address code.
4. Implement SLR(1) Parsing algorithm
5. Design LALR bottom up parser for the given language

<program> ::= <block>
<block> ::= { <variabledefinition> <slist> }
| { <slist> }
<variabledefinition> ::= int <vardeflist> ;
<vardeflist> ::= <vardec> | <vardec> , <vardeflist>
<vardec> ::= <identifier> | <identifier> [<constant>]
<slist> ::= <statement> | <statement> ; <slist>
<statement> ::= <assignment> | <ifstatement> | <whilestatement>
| <block> | <printstatement> | <empty>
<assignment> ::= <identifier> = <expression>
| <identifier> [<expression>] = <expression>

<ifstatement> ::= if <bexpression> then <slist> else <slist> endif
| if <bexpression> then <slist> endif
<whilestatement> ::= while <bexpression> do <slist> enddo
<printstatement> ::= print (<expression>)
<expression> ::= <expression> <addingop> <term> | <term> | <addingop> <term> <bexpression> ::=
<expression> <relop> <expression>

<relop> ::= < | <= | == | >= | > | !=
<addingop> ::= + | -
<term> ::= <term> <multop> <factor> | <factor>
<multop> ::= * | /
<factor> ::= <constant> | <identifier> | <identifier> [<expression>]
| (<expression>)
<constant> ::= <digit> | <digit> <constant>
<identifier> ::= <identifier> <letterordigit> | <letter>
<letterordigit> ::= <letter> | <digit>
<letter> ::= a|b|c|d|e|f|g|h|i|j|k|l|m|n|o|p|q|r|s|t|u|v|w|x|y|z
<digit> ::= 0|1|2|3|4|5|6|7|8|9
<empty> has the obvious meaning
Comments (zero or more characters enclosed between the standard C/Java-style comment brackets /*...*/) can be inserted. The language has rudimentary support for 1-dimensional arrays. The declaration int a[3] declares an array of three elements, referenced as a[0], a[1] and a[2]. Note also that you should worry about the scoping of names.
A simple program written in this language is:

```
{ int a[3],t1,t2;   t1=2;   a[0]=1; a[1]=2; a[t1]=3;   t2=-
(a[2]+t1*6)/(a[2]-t1);   if t2>5 then     print(t2);   else
{     int t3;     t3=99;     t2=-25;     print(-t1+t2*t3);   /*
this is a comment                         on 2 lines */
  }
 endif
}
```

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COURSE OUTCOMES

Course Name: COMPILER DESIGN LAB(C327)

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

CO No	DESCRIPTION
C327.1	Introduce Lex and Yacc tools for developing a scanner and a parser. (Synthesis)
C327.2	Ability to design, develop, and implement a compiler for any language. (Knowledge)
C327.3	Able to use lex and yacc tools for developing a scanner and a parser. (Knowledge)
C327.4	Able to design and implement LL parsers. (Synthesis)
C327.5	Able to design and implement LR parsers. (Synthesis)

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 O2
C327.1	2	2		2	1						3	2	-	2
C327.2	2		2									2	-	2
C327.3	3	3	3		3				2		1	3	-	2
C327.4	2	3		3	2				2		3	3	-	2
C327.5	3	3		3	3				2		2	2	-	2
AVG	**2.3**	**2.8**	**2.5**	**2.5**	**2.3**				**2.0**		**2.3**	**2.3**	-	**2**

3-High 2-Medium 1-Low

COMPILER DESIGN LAB

LIST OF EXPERIMENTS AND THEIR CO, PO MAPPING

S.No	Name of The Experiment	CO	PO
1.	Write a LEX Program to scan reserved word & Identifiers of C Language	1	PO1,2,4,5,11,12, PSO2
2.	Implement Predictive Parsing algorithm	2	PO1,3,12,PSO2
3.	Write a C program to generate three address code.	2	PO1,2,3,5,9,11,12,PSO2
4.	Implement SLR(1) Parsing algorithm	3	PO1,2,4,5,9.11,12,PSO2
4.	Implement SLR(1) Parsing algorithm	4	PO1,2,4,5,9.11,12,PSO2
5.	Design LALR bottom up parser for the given language	2	PO1,2,4,5,9.11,12,PSO2

<program> ::= <block>
<block> ::= { <variabledefinition> <slist> }
| { <slist> }
<variabledefinition> ::= int <vardeflist> ;
<vardeflist> ::= <vardec> | <vardec> , <vardeflist>
<vardec> ::= <identifier> | <identifier> [<constant>]
<slist> ::= <statement> | <statement> ; <slist>
<statement> ::= <assignment> | <ifstatement> | <whilestatement>
| <block> | <printstatement> | <empty>
<assignment> ::= <identifier> = <expression>
| <identifier> [<expression>] = <expression>
<ifstatement> ::= if <bexpression> then <slist> else <slist> endif
| if <bexpression> then <slist> endif
<whilestatement> ::= while <bexpression> do <slist> enddo
<printstatement> ::= print (<expression>)
<expression> ::= <expression> <addingop> <term> | <term> | <addingop> <term> <bexpression> ::=
<expression> <relop> <expression>

<relop> ::= < | <= | == | >= | > | !=
<addingop> ::= + | -
<term> ::= <term> <multop> <factor> | <factor>
<multop> ::= * | /
<factor> ::= <constant> | <identifier> | <identifier> [<expression>]
| (<expression>)
<constant> ::= <digit> | <digit> <constant>
<identifier> ::= <identifier> <letterordigit> | <letter>
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<letter> ::= a|b|c|d|e|f|g|h|i|j|k|l|m|n|o|p|q|r|s|t|u|v|w|x|y|z
<digit> ::= 0|1|2|3|4|5|6|7|8|9

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TIME TABLE FOR A.Y 2022-23

Class: III-B. Tech CSE -A **Semester: II** **LH. NO: A-201** **W.E.F:13-02-2023**

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	DAA	CD	LIB	STM	L U N C H	STM LAB(BATCH-I)/CD LAB(BATCH-II)		
Tuesday	STM	DAA	DAA/ML(T)	ML		FIOT	STM	SPORTS
Wednesday	FIOT	CD	INT	STM		ML/CD(T)	CO-C/SS/DAA	
Thursday	FIOT	ML LAB(BATCH-I)/STM LAB(BATCH-II)				DAA	CD	STM
Friday	CD	COUN	ML	FIOT		ML LAB(BATCH-II)/CD LAB(BATCH-I)		
Saturday	CD	FIOT	CD/DAA(T)	DAA		ML		DAA

(T) – Tutorial (concern faculty)

Subject Code	Subject Name	Name of the Faculty	Subject Code	Subject Name	Name of the Faculty
CS601PC	Machine Learning	Mrs N Shilpa		Fundamentals of Internet of Things	Mrs. M.Sruthi
CS602PC	Compiler Design	Dr. Sasikumar D	CS604PC	Machine Learning Lab	Mrs N Shilpa/ K.Manmadha / V. Divya
CS603PC	Design and Analysis of Algorithms	Mr A Vijay Kumar	CS605PC	Compiler Design Lab	Dr. Sasikumar D / Ms K Mounika/ P.Swathi
CS615PE	Software Testing Methodologies	Mrs E Rupa	CS625PE	Software Testing Methodologies Lab	Mrs E Rupa/ Mrs S Akhila / Mrs. M.Sruthi
	CO-C/SS/DAA/ Cyber Security	Mrs. M.Sruthi	LIB	Library	Mrs K.Manmadha
Sports	Sports	Mr A Vijay Kumar	COUN	Counselling	Mrs.A.Sudha
Internet	Internet	Mrs.A.Sudha	CS601PC	Machine Learning	Mr M Dattatreya Goud (Adjunct)
			MC609	Environmental Science(LE)	Mr D Nagaraju
Class In-Charge : Mrs N Shilpa		**Mentor 1 :** Mrs N Shilpa		**Mentor 2:** Mrs E Rupa	

Class In-Charge **HOD** **PRINCIPAL**

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X3

BR22

Lab External Question paper

Year & Semester: I I I-II Branch: CSE

Subject Name: COMPILER DESIGN Lab Faculty Name: Dr. SasiKumar D

S. No. QUESTIONS

1. Write a LEX Program to scan reserved word & Identifiers of C Language

2. Implement Predictive Parsing algorithm

3. Write a C program to generate three address code.

4. Implement SLR(1) Parsing algorithm.

5. Design LALR bottom up parser for the given language

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<slist> ::= <statement> | <statement> ; <slist>
<statement> ::= <assignment> | <ifstatement> | <whilestatement>
| <block> | <printstatement> | <empty>
<assignment> ::= <identifier> = <expression>
| <identifier> [<expression>] = <expression>
<ifstatement> ::= if <bexpression> then <slist> else <slist> endif
| if <bexpression> then <slist> endif
<whilestatement> ::= while <bexpression> do <slist> enddo
<printstatement> ::= print (<expression>)
<expression> ::= <expression> <addingop> <term> | <term> | <addingop> <term> <bexpression> ::= <expression> <relop> <expression>
<relop> ::= < | <= | == | >= | > | !=
<addingop> ::= + | -
<term> ::= <term> <multop> <factor> | <factor>
<multop> ::= * | /
<factor> ::= <constant> | <identifier> | <identifier> [<expression>]
| (<expression>)
<constant> ::= <digit> | <digit> <constant>
<identifier> ::= <identifier> <letterordigit> | <letter>
<letterordigit> ::= <letter> | <digit>
<letter> ::= a|b|c|d|e|f|g|h|i|j|k|l|m|n|o|p|q|r|s|t|u|v|w|x|y|z
<digit> ::= 0|1|2|3|4|5|6|7|8|9
<empty> has the obvious meaning
Comments (zero or more characters enclosed between the standard C/Java-style comment brackets /*...*/) can be inserted. The language has rudimentary support for 1-dimensional arrays. The declaration int a[3] declares an array of three elements, referenced as a[0], a[1] and a[2]. Note also that you should worry about the scoping of names.
A simple program written in this language is:

```
{ int a[3],t1,t2; t1=2; a[0]=1; a[1]=2; a[t1]=3; t2=-
(a[2]+t1*6)/(a[2]-t1); if t2>5 then print(t2); else { int t3; t3=99;
t2=-25; print(-t1+t2*t3); /* this is a comment on
2 lines */
}
endif
}
```

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COMPILER DESIGN Lab External TimeTable
Examination Branch

A.Y. : 2022-23 **SEM-II**

Date	Day	Branch	Session	HT.No	Total No. of Students
3/7/2023	MONDAY	CSE-A	FN	**20X31A0501 TO 20X31A0560 & 21X35A0501 TO 21X35A0505**	63
30/6/2023	FRIDAY	CSE-B	FN	**20X31A0561 TO 20X31A05C0 & 21X35A0506 TO 21X35A0510**	65
3/7/2023	MONDAY	CSE-C	FN	**20X31A05C1 TO 20X31A05H4 & 21X35A0511 TO 21X35A0517**	56

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COMPILER DESIGN Lab External TimeTable
With Examiner

A.Y. : 2022-23 **SEM-II**

SRI INDU INSTITUTE OF ENGINEERING & TECHNOLOGY					
III-B.TECH II-SEM LAB EXTERNAL EXAMINATIONS EXAMS, JULY-2023					
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING					
TIMINGS FN: 10:00 AM TO 12:30 PM AN: 1:30PM TO 4:00PM					
S.NO	YEAR/ SEC	NAME OF THE LAB	DATE & SESSION	NAME OF THE INTERNAL EXAMINER	NAME OF THE EXTERNAL EXAMINER & COLLEGE
1	CSE-A	Compiler Design Lab	4/7/2023-FN	Dr.D.Sasi Kumar	Mr.P.Thirumal Reddy-VIGNAN
2		STM Lab	3/7/2023-FN	Mrs.E.Rupa	Mr.L.Balaji -VIGNAN
3		Machine learning Lab	30/06/2023-FN	Mrs.N.Shilpa	Dr.Muralidhar -VIGNAN
4	CSE-B	Compiler Design Lab	3/7/2023-AN	Ms.S.Anitha	Dr.G.Janardhan--VIGNAN
5		STM Lab	30/06/2023-FN	Mrs.R.Sravanthi	Mrs.Archana--VIGNAN
6		Machine learning Lab	4/7/2023-AN	Dr.B.G. obula Reddy	Dr.Manoj Kumar -VIGNAN
7	CSE-C	Compiler Design Lab	4/7/2023-AN	Ms.K.Mounika	Mr.K.Srinivas -VIGNAN
8		STM Lab	3/7/2023-FN	Mrs.S.Akhila	Mrs.Ravali -VIGNAN
9		Machine learning Lab	30/06/2023-AN	Mrs.P H Swarna Rekha	Mr.R.Mahesh -VIGNAN

B. Rahul Kand
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LAB OCCUPANCY CHART

COMPILER DESIGN LAB

ROOM NO:A-207 **BLOCK:A** **FLOOR:2**

	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		**III BTECH II SEM CSE-C**				**III BTECH II SEM CSE-A**		
TUE						**III BTECH II SEM CSE-B**		
WED						**III BTECH II SEM CSE-B**		
THU						**III BTECH II SEM CSE-C**		
FRI		**III BTECH II SEM CSE-C**				**III BTECH II SEM CSE-A**		
SAT								

B. Rahul Kamal
Computer Science & 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

COMPILER DESIGN 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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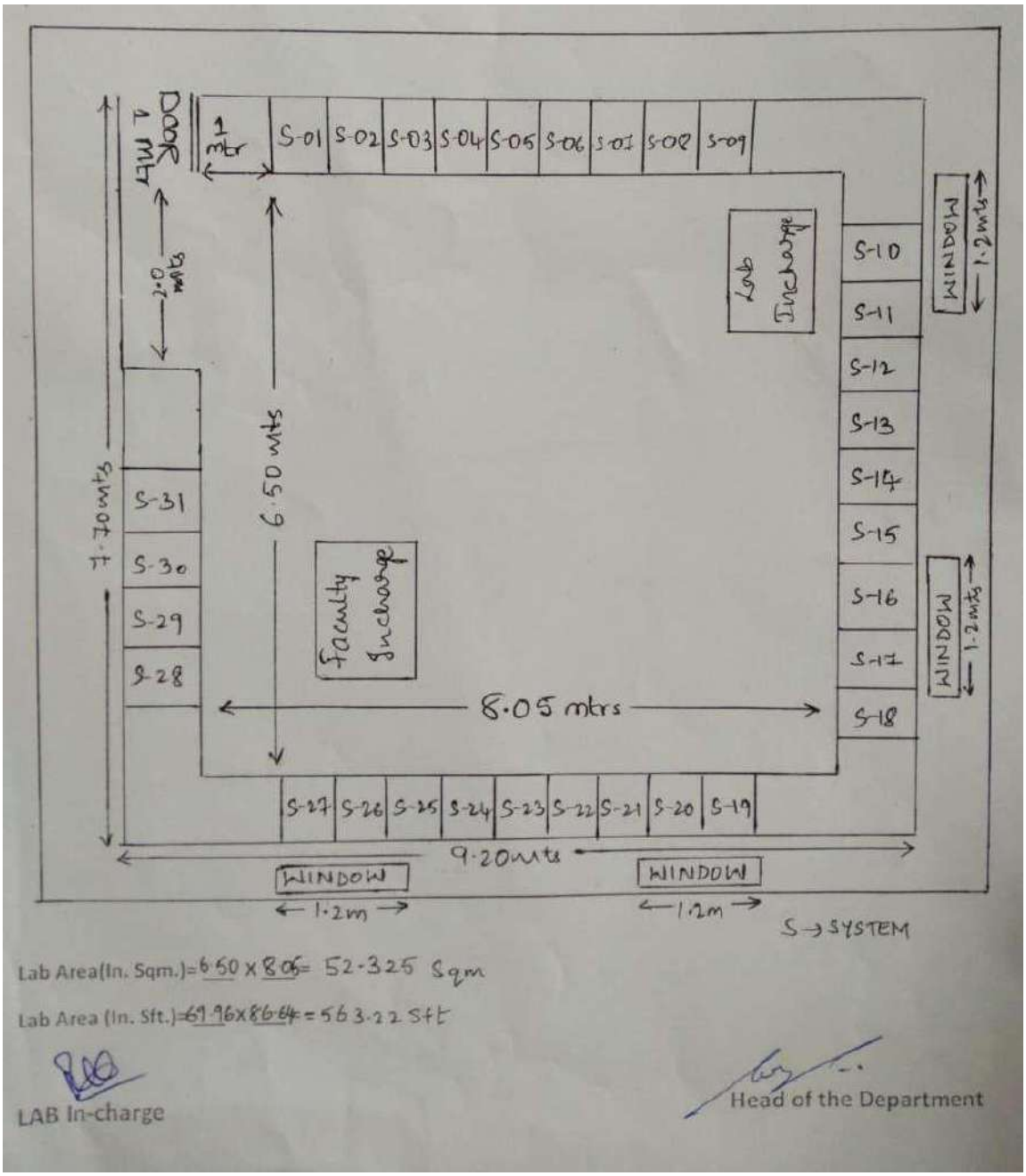
Khalsa Ibrahimpatnam, Sheriguda (V), Ibrahimpatnam (M), Ranga Reddy Dist., Telangana – 501 510
Website: https://siiet.ac.in/

COMPILER DESIGN LAB PHYSICAL LAB-IX FLOOR

PLAN

ROOM NO:A-207 **BLOCK:A** **FLOOR:2**



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

Lab manual link

https://docs.google.com/document/d/1kdgXHTChJowj1UMGN5YMnuKzUND9qsUZ/edit?usp=sharing&ouid=114024940021959755534&rtpof=true&sd=true

SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

Department of Computer Science And Engineering

Course Outcome Attainment (Internal Examination-1)

Name of the faculty : Dr.Sasikumar D 2022-23

Branch & Section: CSE-A I Internal

Course Name: COMPILER DESIGNLAB Year/Semester: III/II

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

41	20X31A0541	5	5	12
42	20X31A0542	5	5	13
43	20X31A0543	5	5	12
44	20X31A0544	5	5	13
45	20X31A0545	5	5	13
46	20X31A0546	5	5	10
47	20X31A0547	5	5	13
48	20X31A0548	5	5	12
49	20X31A0549	5	5	12
50	20X31A0550	5	5	13
51	20X31A0551	5	5	13
52	20X31A0552	5	5	13
53	20X31A0553	5	5	12
54	20X31A0554	5	5	12
55	20X31A0555	5	5	13
56	20X31A0556	5	5	10
57	20X31A0557	5	4	10
58	20X31A0558	5	4	6
59	20X31A0559	5	5	13
60	20X31A0560	5	5	14
61	21X31A0501	5	4	6
62	21X31A0502	5	5	13
63	21X31A0503	5	5	14
64	21X31A0504	5	5	10
Target set by the faculty / HoD		3.00	3.00	9.00
Number of students performed above the target		55	55	46
Number of students attempted		56	56	56
Percentage of students scored more than target		98%	98%	82%

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	98%	98%	82%
CO - 2	98%	98%	82%
CO - 3	98%	98%	82%
CO - 4	98%	98%	82%
CO - 5	98%	98%	82%
CO - 6	98%	98%	82%

CO	Intrnal practica	DDE	OverallI	Level	Attainment Level	
CO-1	98%	82%	90%	3	1	40%
CO-2	98%	82%	90%	3	2	50%
CO-3	98%	82%	90%	3	3	>60%
CO-4	98%	82%	90%	3		
CO-5	98%	82%	90%	3		
CO-6	98%	82%	90%	3		

Attainment (Internal 1 Examination) = **3**

SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

Department of Computer Science And Engineering

Course Outcome Attainment (Internal Examination-2)

Name of the faculty : Dr.SasikumarD 2022-23

Branch & Section: CSE-A II Internal

Course Name: COMPILER DESIGNLAB Semester: III/II

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

41	20X31A0541	5	5	12
42	20X31A0542	5	5	13
43	20X31A0543	5	5	12
44	20X31A0544	5	5	13
45	20X31A0545	5	5	13
46	20X31A0546	5	5	10
47	20X31A0547	5	5	13
48	20X31A0548	5	5	12
49	20X31A0549	5	5	12
50	20X31A0550	5	5	13
51	20X31A0551	5	5	13
52	20X31A0552	5	5	13
53	20X31A0553	5	5	12
54	20X31A0554	5	5	12
55	20X31A0555	5	5	13
56	20X31A0556	5	5	10
57	20X31A0557	5	4	10
58	20X31A0558	5	4	6
59	20X31A0559	5	5	13
60	20X31A0560	5	5	14
61	21X31A0501	5	4	6
62	21X31A0502	5	5	13
63	21X31A0503	5	5	14
64	21X31A0504	5	5	10
Target set by the faculty / HoD			3.00	9.00
Number of students performed above the target			55	46
Number of students attempted			56	56
Percentage of students scored more than target		98%	98%	82%

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	98%	98%	82%
CO - 2	98%	98%	82%
CO - 3	98%	98%	82%
CO - 4	98%	98%	82%
CO - 5	98%	98%	82%
CO - 6	98%	98%	82%

CO	Intrnal practica	DDE	OverallI	Level
CO-1	98%	82%	90%	3
CO-2	98%	82%	90%	3
CO-3	98%	82%	90%	3
CO-4	98%	82%	90%	3
CO-5	98%	82%	90%	3
CO-6	98%	82%	90%	3

Attainment (Internal 2 Examination) = **3**

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

SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

Department of Computer Science And Engineering

Course Outcome Attainment (University Examinations)

Name of the faculty : Dr.Sasikumar D Academic Year: 2022-23

Branch & Section: CSE-A Year / Semester: III/II

Course Name: COMPILER DESIGN LAB

S.No	Roll Number	Marks Secured
1	20X31A0501	68
2	20X31A0502	73
3	20X31A0503	65
4	20X31A0504	73
5	20X31A0505	67
6	20X31A0507	66
7	20X31A0508	69
8	20X31A0509	68
9	20X31A0510	69
10	20X31A0511	69
11	20X31A0512	67
12	20X31A0513	70
13	20X31A0514	69
14	20X31A0515	69
15	20X31A0516	71
16	20X31A0517	70
17	20X31A0518	73
19	20X31A0519	71
20	20X31A0520	71
21	20X31A0521	68
22	20X31A0522	70
23	20X31A0523	75
24	20X31A0524	69
25	20X31A0525	69
26	20X31A0526	70
27	20X31A0527	67
28	20X31A0528	66
29	20X31A0529	75
30	20X31A0530	60
31	20X31A0531	67
32	20X31A0532	63
33	20X31A0533	65
34	20X31A0534	69
35	20X31A0535	70
Max Marks		75

Class Average mark	#DIV/0!
Number of students performed above the target	0
Number of successful students	55
Percentage of students scored more than target	0%

S.No	Roll Number	Marks Secured
36	20X31A0536	67
37	20X31A0537	73
38	20X31A0538	71
39	20X31A0539	72
40	20X31A0540	68
41	20X31A0541	67
42	20X31A0542	72
43	20X31A0543	69
44	20X31A0544	73
45	20X31A0545	72
46	20X31A0546	68
47	20X31A0547	71
48	20X31A0548	72
49	20X31A0549	69
50	20X31A0550	67
51	20X31A0551	73
52	20X31A0552	67
54	20X31A0553	73
55	20X31A0554	62
56	20X31A0555	68
57	20X31A0556	61
58	20X31A0557	70
59	20X31A0558	60
60	20X31A0559	69
61	20X31A0560	75
62	21X31A0501	-1
63	21X31A0502	72
64	21X31A0503	74
65		
66		
67		
68		
69		
70		

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 Dr.SasiKumar D
Academic Year: 2022-23
Branch & Section: CSE-A
Examination: I Internal

Course Name: Compiler Design Lab
Year: III
Semester: II

Course Outcomes	1st Internal Exam	2nd Internal Exam	Internal Exam	University Exam	Attainment Level
CO1	3.00	3.00	3.00	1.00	2.40
CO2	3.00	3.00	3.00	1.00	2.40
CO3	3.00	3.00	3.00	1.00	2.40
CO4	3.00	3.00	3.00	1.00	2.40
CO5	3.00	3.00	3.00	1.00	2.40
CO6	3.00	3.00	3.00	1.00	2.40
Internal & University Attainment:			3.00	1.00	
Weightage			70%	30%	
CO Attainment for the course (Internal, University)			2.10	0.30	
CO Attainment for the course (Direct Method)			2.40		

Overall course attainment level **2.40**

SRI INDU INSTITUTE OF ENGINEERING & TECHNOLOGY

Department of Computer Science And Engineering

Program Outcome Attainment (from Course)

Name of Faculty:	Dr. Sasikumar D	Academic Year:	2022-23
Branch & Section:	CSE-A	Year:	III
Course Name:	Compiler Design Lab	Semester:	II

CO-PO 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 O2
C327.1	2	2		2	1						3	2	-	2
C327.2	2		2									2	-	2
C327.3	3	3	3		3				2		1	3	-	2
C327.4	2	3		3	2				2		3	3	-	2
C327.5	3	3		3	3				2		2	2	-	2
AVG	2.3	2.8	2.5	2.5	2.3				2.0		2.3	2.3	-	2

CO	Course Outcome Attainment
CO1	2.40
CO2	2.40
CO3	2.40
CO4	2.40
CO5	2.40
CO6	2.40
Overall course attainment level	2.40

PO-ATTAINMENT

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Attainment	1.76	1.76	2.00		1.60				2.00		1.60	2.00

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