

EAMCET CODE: INDI

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JNTUH CODE: X3

COURSE FILE

ON

APPLIED PHYSICS LAB

Course Code - AP105BS

I B. Tech Semester-I

A.Y. 2022-2023

Prepared by

B. SANTHI

Asst. Professor

Head of the Department Department of H&S SRI INDU INSTITUTE OF ENGG & TECH beriouda(M Ibrahimoatnam (M) R.R. Dist-501 516

PRINCIPAL

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



Main Road, Sheriguda, Ibrahimpatnam, R.R. Dist. 501 510, Telangana. Campus Ph: 9640590999, 9347187999.



Sri Indu Institute of Engineering and Technology (Autonomous)

(Formerly RVR Institute of Engineering & Technology)

An Autonomous Institution Under UGC

NAAC Accredited. Recognized Under 2(f) of UGC Act 1956

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NUN

ESTD: 2007

JNTUH CODE: X3

Name of the Physical	
laboratory:	APPLIED PHYSICS LAB
Course code	AP105BS
Room No	B-201&D-106
Name of the lab in charge	B. SANTHI
Name of the faculty in charge	B. SANTHI

Index of Lab File

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INSTITUTE VISION & 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 instituteindustry 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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PROGRAM OUTCOMES

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, research literature, and analyze 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 modeling to complex engineering activities with an understanding of the limitations.

PO6: **THE ENGINEER AND SOCIETY**: Apply reasoning informed by the contextual knowledge to associate, 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, 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

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SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY B.Tech. in ELECTRONICS AND COMMUNICATION ENGINEERING COURSE STRUCTURE, I YEAR SYLLABUS (BR22 Regulations)

Applicable from Academic Year: 2022-23 Batch

I Year I Semester

S. No.	Course Code	Course Title	L	Т	Р	Credits
1.	MA101BS	Matrices and Calculus	3	1	0	4
2.	AP102BS	Applied Physics	3	1	0	4
3.	CS102ES	C Programming for Engineers	3	0	0	3
4.	ME102ES	Engineering Workshop	0	1	3	2.5
5.	EN104HS	English for Skill Enhancement	2	0	0	2
6.	EC101ES	Elements of Electronics and Communication Engineering	0	0	2	1
7.	AP105BS	Applied Physics Laboratory	0	0	3	1.5
8.	EN107HS	English Language and Communication Skills Laboratory		0	2	1
9.	CS105ES	C Programming for Engineers Laboratory	0	0	2	1
10.	*MC101ES	Environmental Science	3	0	0	0
11.		Induction Programme				
		Total	14	3	12	20

I Year II Semester

S. No.	Course Code	Course Title	L	Т	Р	Credits
1.	MA201BS	Ordinary Differential Equations and Vector Calculus	3	1	0	4
2.	CH203BS	Engineering Chemistry	3	1	0	4
3.	ME201ES	Computer Aided Engineering Graphics	1	0	4	3
4.	EE201ES	Basic Electrical Engineering	2	0	0	2
5.	EC201ES	Electronic Devices and Circuits	2	0	0	2
6.	CS202ES	Applied Python Programming Laboratory	0	1	2	2
7.	CH206BS	Engineering Chemistry Laboratory	0	0	2	1
8.	EE202ES	Basic Electrical Engineering Laboratory		0	2	1
9.	EC202ES	Electronic Devices and Circuits Laboratory	0	0	2	1
		Total	11	3	12	20

APPLIED PHYSICS LABORATORY (Course Code: AP105BS)

B.Tech. I Year I Sem.

Course Objectives: The objectives of this course for the student to

1. Capable of handling instruments related to the Hall effect and photoelectric effect

Experiments and their measurements.

2. Understand the characteristics of various devices such as PN junction diode, Zener diode,

BJT, LED, solar cell, lasers and optical fiber and measurement of energy gap and Resistivity of semiconductor materials.

- 3. Able to measure the characteristics of dielectric constant of a given material.
- 4. Study the behavior of B-H curve of ferromagnetic materials.
- 5. Understanding the method of least squares fitting.

Course Outcomes: The students will be able to:

1. Know the determination of the Planck's constant using Photo electric effect and identify

the material whether it is n-type or p-type by Hall experiment.

- 2. Appreciate quantum physics in semiconductor devices and opto electronics.
- 3. Gain the knowledge of applications of dielectric constant.
- 4. Understand the variation of magnetic field and behavior of hysteresis curve.
- 5. Carried out data analysis.

LIST OF EXPERIMENTS:

- 1. Determination of work function and Planck's constant using photoelectric effect.
- 2. Determination of Hall co-efficient and carrier concentration of a given semiconductor.
- 3. Characteristics of series and parallel LCR circuits.
- 4. V-I characteristics of a p-n junction diode and Zener diode
- 5. Input and output characteristics of BJT (CE, CB & CC configurations)
- 6. a) V-I and L-I characteristics of light emitting diode (LED)
 - b) V-I Characteristics of solar cell
- 7. Determination of Energy gap of a semiconductor.
- 8. Determination of the resistivity of semiconductor by two probe method.
- 9. Study B-H curve of a magnetic material.
- 10. Determination of dielectric constant of a given material
- 11. a) Determination of the beam divergence of the given LASER beam
 - b) Determination of Acceptance Angle and Numerical Aperture of an optical fiber.
- 12. Understanding the method of least squares torsional pendulum as an example.

Note: Any 8 experiments are to be performed.

REFERENCE BOOK:

1. S. Balasubramanian, M.N. Srinivasan "A Text book of Practical Physics"- S Chand Publishers 2017

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

A.Y: 2022-23

SEMESTERS: I

CLASS: ECE

Course Outcomes

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

C117.1	Demonstrate Photoelectric Effect and Determine the work Function and planks constant (Understanding)L2
C117.2	Analyzing the properties of semiconductor materials .(Analyzing)L4
C117 3	Illustrate the characteristics of semiconductors devices (Understanding)L2
C117.4	Construct LCR and RC circuit and evaluate their characteristics (Applying)L3
C117.5	Find the properties of Laser and Optical fibre(Remembering) L1
C117.6	Explain the properties of least squares, Dielectric and magnetic materials. (Evaluating) L5

Mapping of course outcomes with program outcomes:

High -3 Medium -2 Low-1

PO/CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO 10	PO 11	PO 12
C117.1	3	2	-	-	-	-	-	-	-	-	-	1
C117.2	3	2	-	-	-	-	-	-	-	-	-	1
C117.3	3	2	-	-	-	-	-	-	-	-	-	1
C117.4	3	2	-	-	-	-	-	-	-	-	-	1
C117.5	3	2	-	-	-	-	-	-	-	-	-	1
C117.6	3	2	-	-	-	-	-	-	-	-	-	1
AVE	3	2	-	-	-	-	-	-	-	-	-	1



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MAPPING OF EXPERIMENT OUTCOMES WITH CO/PO'S/PSO

EXPERIMENT OBJECTIVES	EXPERIMENT OUTCOMES	CO	PO'S
To determine the work function "φ" of a metal.	The student determinesthe work function in a given material using photoelectric effect	C117.1	PO1,PO2, PO12
1. To determine the Hallvoltage developed acrossthe sample material. 2.To calculate the Hall coefficient and the carrier concentration of the samplematerial	The student determinesthe hall voltage across the given sample and calculates the hall coefficient	C117.2	PO1,PO2,PO12
To study the frequency response and to find resonant frequency of L-C-R series and parallel Circuits.	The student studies the frequencyand to find resonant frequency of L-C-R series and parallel Circuits.	C117.4	PO1, PO2, PO12
To draw the characteristics of Zener diode	The student draws the characteristics of junction and Zener diodes	C117.3	PO1,PO2, PO12
Observe the i/p and o/p characteristics of BJT(CE,CB and CC)	The student observe the c BJT(CE,CB and CC)	C117.3	PO1,PO2, PO12
 To Plot the V/I characteristics of Solar Cell To study the volt-ampere characteristics of a given LED source 	The student can able toplot the V/I characteristics of SolarCell, LED	C117.3	PO1,PO2, PO12
To determine the energygap of a junction diode	The student will be ableto evaluate the energy gap between two allowed bands forisolated atoms and recognizing the resistivity of Semiconductor varies with temperature.	C117.2	PO1, PO2,PO12

To determine the resistivity of semiconductor by twoprobe method	The student will determine the resistivityof semiconductor by two probe method	C117.2	PO1,PO2,PO12
To study B-H of a magnetic material	The student will study B-H of a magnetic material	C117.6	PO1,PO2,PO12
To determine the dielectric constant of a given material	The student will determine the dielectricconstant	C117.6	PO1,PO2,PO12
To determine the beam divergence of the given LASER beam and Numerical Aperture of anoptical fiber	The student will Determines the wave length of laser sourceusing single slit diffraction grating.	C117.5	PO1,PO2, PO12
Understanding the method of Least squares – torsional pen	The student Understanding Least squares – torsional	C117.6	PO1,PO2,PO12
To study the Charging and Discharging of a Capacitor	The student studies the Charging and Discharging of a Capacitor/Condenser	C117.5	PO1,PO2, PO12

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Class: ECE		Semes	ter: I	W.E.F	W.E.F-14-11-2022			-209
	1 9:40- 10:30	11 10:30 - 11:20	111 11:20- 12:10	12:10-	IV 12.45- 1.35	V 1.35- 2.25	VI 2.25- 3.15	VII 3.15-4.00
MON	CPE	ES	M&C		AP	ENG	M&C	LIB
TUE	AP	M&C	ENG		CPE LAB		PPS(T)/AP(T)	
WED	F	EWS/ELCS I	AB	N C	M&C	AP	CPE	ENG(T)/M&C(T)
THU		AP LAB		н	CPE	ENG	ES	AP(T)/CPE(T)
FRI	AP	CPE	ES		EWS/ELCS LAB		AB	M&C(T)/ENG(T)
SAT	ENG	E-EC	ELAB		CPE	M&C	AP	E-ECE(T)

Course Code	Course Name	Name of the Faculty	Course Code	Course Name	Name of the Faculty
MA101BS	Matrices and Calculus	T.THIRUPATHI REDDY	ME102ES	EWS LAB	M.V.B. KALYAN/B.SRINU NAIK
AP102BS	Applied Physics	B.SANTHI	AP105BS	Applied Physics - Lab	B.SANTHI/M.JANAIAH/ R. YADAGIRI RAO /M.MANISHA
CS102ES	C Programming for Engineers	B.RAJASHWARI	CS105ES	C Programming for Engineers Lab	B.RAJASHWARI/ D.SWAPNA
EN104 HS	English for Skill Enhancement	English for Skill Enhancement G.VENKAT REDDY		English Language and Communication Skills Lab	G.VENKAT REDDY/E.PRARTHANA
MC101ES Environmental Sciences		V.MOUNIKA	EC101ES	Elements of Electronics and Communication Engineering	Dr.S.SURESH/Dr.K.SRINIVAS A REDDY

ch B Time Table Coordinator **Class In-Charge** Head of The Department Dr. R. YADAGIRI RAO M.Sc., B.Ed., M.Tech(CSE)., Ph.D. SHERIGUE Head of the Department Department of H&S 3RI INDU INSTITUTE OF ENGG & TECH 01 510* heriguda(M) Ibrahimpatham (M), R.R. Dist 501 51.1



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Year & Semester: I-I

Branch: ECE

Subject Name: Applied Physics Lab

Faculty Name: B. SANTHI

EXTERNAL EXAM OUESTION PAPER

- 1. Determine the work function of given metal by using photoelectric effect.
- 2. Derive the values of i) Resonance Frequency ii) Band width iii) Quality Factor of the given LCR circuit.
- 3. Plot the V –I Characteristics of LED.
- 4. Determine the energy gap of a given semiconductor.
- 5. Determine the dielectric constant of a given material.
- 6. Determine the beam divergence of the given LASER light.
- 7. Determine the acceptance angle and numerical aperture of an optical fiber.
- 8. Find Hall coefficient and carrier concentration of a given semiconductor.
- 9. Plot the V –I Characteristics of Solar Cell.
- 10. Find Rigidity modulus of given wire using Torsional Pendulum

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AP Lab External Time Table Examination Branch

A.Y.: 2022-23

SEM-I

DATE	Day	Branch	Session	HT.No	Total No of Students
10-3-2023	FRIDAY	AI&ML-A	FN	22X31A6601TO 22X31A6650	50
10-3-2023	FRIDAY	AI&ML-B	AN	22X31A6651TO 22X31A6697	47
11-3-2023	SATURDAY	AI&DS	FN	22X31A7201TO 22X31A7264	64
11-3-2023	SATURDAY	IOT	AN	22X31A6901TO 22X31A6963	63
13-3-2003	MONDAY	ECE	FN	22X31A0401 TO 22X31A0464	64
13-3-2003	MONDAY	CIVIL	FN	22X31A0101 TO 22X31A0103	3

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AP Lab External Time Table Examination Branch

A.Y.: 2022-23

SEM-I

					Total No	Re	marks
Date	Day	Branch	Session	HT. No	of Students	Internal Examiner	External Examiner
10-3-2023	FRIDAY	AI&ML-A	FN	22X31A6601 TO 22X31A6650	50	M.JANAIAH (9291513934)	Mr.M.Venkateswarlu (9490189395)
10-3-2023	FRIDAY	AI&ML-B	AN	22X31A6651 TO 22X31A6697	47	M.JANAIAH (9291513934)	Mr.M.Venkateswarlu (9490189395)
11-3-2023	SATURDAY	AI&DS	FN	22X31A7201 TO 22X31A7264	64	B. SANTHI (9493978954)	Dr.B.Rajinikanth (7893092879)
11-3-2023	SATURDAY	ΙΟΤ	AN	22X31A6901 TO 22X31A6963	63	P. SRINIVASA CHARY (9848662600)	Dr.B. Rajinikanth (7893092879)
13-3-2003	MONDAY	ECE	FN	22X31A0401 TO 22X31A0464	64	B. SANTHI (9493978954)	Narasimha (9952583969)
13-3-2003	MONDAY	CIVIL	FN	22X31A0101 TO 22X31A0103	3	B. SANTHI (9493978954)	Narasimha (9952583969)

FN: 9.40 am to 12.25 pm

AN: 1.00 pm to 4.00 pm

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DEPARTMENT OF HUMANITIES AND SCIENCES

Lab Occupancy Time Table for AY 2022-2023

Class: IB. Tech

Semester: I

W.E.F-14-11-2022

LH: B-201

	1 2 3		12.10	4	5	6	7	
Period/ Day	9:40- 10:30	10:30-11:20	11:20- 12:10	12:45	12.45-1.35	1:35- 2.25	2:25- 3:15	3:15-4:00
Monday	М	AINTAINAN	CE					
Tuesday				L	А			
Wednesday	I	OT(BATCH-I	I)	U				
Thursday	E	CE(BATCH-I	[)	Ν		CIVIL		
Friday				С Ц				
Saturday		AIML-A(BAT	CH-II)	п		MAINTAIN	NANCE	

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DEPARTMENT OF HUMANITIES AND SCIENCES

Lab Occupancy Time Table for AY 2022-2023

Class: IB. Tech

Semester: I

W.E.F-14-11-2022

LH: D-106

	1	2	2 3		4	5	6	7
Period/ Day	9:40- 10:30	10:30- 11:20	11:20- 12:10	12:10- 12:45	12.45- 1.35	1:35- 2.25	2:25- 3:15	3:15- 4:00
Monday	Ν	MAINTAIN	ANCE					
Tuesday				L	A			
Wednesday	IC	T(BATCH	-I)	N				
Thursday	EC	CE(BATCH	-I)	С				
Friday				Н				
Saturday	A	IML-A(BA'	TCH-I)		MAINTAINANCE			

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APPLIED PHYSICS LAB

Course: B.Tech. I Year

SUB CODE: AP105BS

<u>Do's</u>

- 1. Conduct in a responsible manner at all times in the laboratory.
- 2. Keep the work area clean, neat and free of any unnecessary objects.
- 3. Read the description, procedure and precautions of the experiment in the lab manual.
- 4. Place all sensitive electronic equipment safely on experimental table.
- 5. Before using the equipment one must read the labels and instructions carefully.
- 6. Set up and use the equipment as directed by the lab instructor.
- 7. Circuit connections are to be done only in power off mode.
- 8. Checkout the circuit connections before switching on the power.
- 9. Increase the power readings from minimum to maximum.
- 10. All procedures and experimental data should be recorded in the lab observation notebook.
- 11. Switch of the power in the circuit after completion of the experiment.
- 12. Any failure / break-down of equipment must be reported to the instructor.
- 13. Return the material properly after the completing the experiment.
- 14. Replace the materials in proper place after work.
- 15. Be careful when handling optical items like prisms, gratings etc.

Don't s

- 1. Do not wear loose clothing and do not hold any conducting materials in contact with skin when the power is on.
- 2. Do not touch any equipment or other materials in the laboratory area until instructed by instructor.
- 3. Do not modify or damage the laboratory equipment in any way unless the modification is directed by the instructor.
- 4. Do not handle electrical equipment and connections with wet hands.
- 5. Do not try to connect power in to the circuit without proper understanding of the circuit diagram.
- 6. Do not look directly into laser source.
- 7. Do not short any battery box or power supply, it may damage retina in your eye.
- 8. Never switch on the power button of the circuit until it has been approved by instruction



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APPLIED PHYSICS LAB - 1 FLOOR PLAN





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APPLIED PHYSICS LAB - 2 FLOOR PLAN





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Lab manual link

https://drive.google.com/file/d/1UTyWcm6bNeIw5qa_7CrdjE7PxMdQmHJ/view?u sp=sharing

SR	I INDU INSTITUTE O Department of	F ENGINEERING AN f Humanities and Science	ND TECHNOLOGY	<u></u>		
	· • • • • • • • • • • • • • • • • • • •					
Course Or	itcome Attainment (Inte	ernal Examination-1)				
Name of th	e faculty :	B.SANTHI		Academic Year:	2022 - 23	
Branch & S	section:	ECE		Examination:	LAB INTERNAL-I	
Lab Cours	e Name:	APPLIED PHYSICS		Year/semester	I/I	
S.No	HT No.	R+O+A	V+V	E+E+R		
Max. Marks	==>	10	10	10		
1	22X31A0401	10	6	8		
2	22X31A0402	10	8	10		
3	22X31A0403	10	6	10		
4	22X31A0404 22X31A0405	10	7	9		
6	22X31A0406	10	7	10		
7	22X31A0407	10	6	9		
8	22X31A0408	10	6	10		
9	22X31A0409	10	8	10		
10	22X31A0410	10	7	10		
11	22X31A0411	10	6	9		
12	22X31A0412	10	5	9		
15	22X31A0413	10	4	10		
14	22X31A0414	10	8	10		
16	22X31A0416	10	5	8	[[
17	22X31A0417	10	5	9		
18	22X31A0418	10	5	10		
19	22X31A0419	10	6	10		
20	22X31A0420	9	5	9		
21	22X31A0421	9	7	10		
22	22X31A0422	9	4	7		
23	22X31A0423	10	5	9		
24	22X31A0424	10	5	10		
25	22X31A0425	10	7	10		
20	22X31A0420 22X31A0427	10	5	9		
28	22X31A0428	8	4	8		
29	22X31A0429	10	6	9		
30	22X31A0430	8	4	8		
31	22X31A0431	10	5	10		
32	22X31A0432	10	5	9		
33	22X31A0433	10	6	10		
34	22X31A0434	10	3	10		
36	22X31A0435	9	4	10		
37	22X31A0437	7	4	9		
38	22X31A0438	10	6	10		
39	22X31A0439	10	5	9		
40	22X31A0440	10	4	10		
41	22X31A0441	10	5	10		
42	22X31A0442	10	5	10		
43	22X31A04443	10	6	10		
44	22X31A0444	10	6	10		
46	22X31A0446	10	7	10		
47	22X31A0447	10	5	10		
48	22X31A0448	10	5	10		
49	22X31A0449	10	6	9		
50	22X31A0450	10	7	10		
51	22X31A0451	10	5	9		
52	22X31A0452	10	5	9		
53	22X31A0453	10	8	10		
55	22A31A0454 22X31A0455	10	2	9		
56	22X31A0455	10	4	R		
57	22X31A0457	10	4	8		
58	22X31A0458	10	7	10		
59	22X31A0459	10	7	10		
60	22X31A0460	10	6	10		
61	22X31A0461	10	5	9		
62	22X31A0462	10	8	10		
63	22X31A0463	10	5	10		
04	22A31A0404	10	4	10		

Target set by the faculty / HoD	6.00	6.00	6.00			
Number of students performed above the target	64	31	64			
Number of students attempted	64	64	64			
Percentage of students scored more than target	100%	48%	100%			
CO Mapping with Exam Que	estions:					
CO - 1	Y	Y	Y	ł		
CO - 2	Y	Y	Y			
CO - 3	Y	Y	Y			
CO - 4						
CO - 5						
CO - 6						
CO Attainment based on Exa	am Questions:					
CO - 1	100%	100%	100%			
CO - 2	100%	100%	100%	1		
CO - 3	100%	100%	100%	1		
CO-4	10070	100%	100 %	1		
CO-5				1		
CO - 6						
СО	Intr nal pr actica	E+E+R	OveralI	Level	Attainmen	Level
CO-1	100%	100%	100%	3	1	40%
CO-2	100%	100%	100%	3	2	50%
CO-3	100%	100%	100%	3	3	60%
CO-4						
CO-5				ĺ		
CO-6						
Attainment (Internal 1 Ex	xamination) =	3		

SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY										
1 Sun	.9	Dep	bartment of Humanities	and Sciences						
	Course Outcome Attain	nment (Internal Exa	amination-2)							
Name of the	he faculty :	B.SANTHI		Academic Year:	2022 - 23					
Branch &	Section:	ECE		Examination:	LAB INTERNAL-II					
Lab Cours	se Name:	APPLIED PHYSICS		Year/semester	I/I					
6 N				E · E · D						
S.No May Marka	HT No.	R+O+A 10	V+V 10	10 E+E+K	10					
1 1	22X31A0401	10	5	10	10					
2	22X31A0402	10	8	10	10					
3	22X31A0403	10	6	10	10					
4	22X31A0404	10	5	10	10					
5	22X31A0405	9	5	10	10					
6	22X31A0406	10	7	10	10					
/	22X31A0407 22X31A0408	9	5	10	10					
9	22X31A0408	10	8	10	10					
10	22X31A0410	10	5	10	10					
11	22X31A0411	10	8	10	10					
12	22X31A0412	9	4	10	10					
13	22X31A0413	9	5	10	10					
14	22X31A0414	10	6	10	10					
15	22X31A0415	9	5	10	10					
10	22X31A0410 22X31A0417	7	5	8	10					
18	22X31A0418	9	6	10	10					
19	22X31A0419	10	8	9	10					
20	22X31A0420	9	4	10	10					
21	22X31A0421	8	3	9	10					
22	22X31A0422	А	А	А	10					
23	22X31A0423	9	6	10	10					
24	22X31A0424	9	3	10	10					
25	22X31A0425 22X31A0425	10	6	10	10					
20	22X31A0420 22X31A0427	10	7	10	10					
28	22X31A0428	9	2	9	10					
29	22X31A0429	9	5	10	10					
30	22X31A0430	8	4	8	10					
31	22X31A0431	9	4	10	10					
32	22X31A0432	10	5	10	10					
33	22X31A0433	10	8	10	10					
35	22X31A0435	9	5	10	10					
36	22X31A0436	9	4	10	10					
37	22X31A0437	А	А	А	10					
38	22X31A0438	10	4	10	10					
39	22X31A0439	10	8	10	10					
40	22X31A0440	9	4	10	10					
42	22A31A0441 22X31A0442	10	5	10	10					
43	22X31A0443	10	5	10	10					
44	22X31A0444	9	4	10	10					
45	22X31A0445	10	7	10	10					
46	22X31A0446	10	6	10	10					
47	22X31A0447	10	5	10	10					
48	22X31A0448	9	5 °	10	10					
49 50	22X31A0449	10	8	10	10					
51	22X31A0451	10	5	10	10					
52	22X31A0452	9	5	10	10					
53	22X31A0453	10	7	10	10					
54	22X31A0454	10	5	10	10					
55	22X31A0455	10	9	10	10					
56	22X31A0456	10	4	10	10					
57	22X31A0457	9	4	10	10					
59	22A31A0458 22X31A0459	10	5	10	10					
60	22X31A0459	10	7	10	10					
61	22X31A0461	9	5	10	10					
62	22X31A0462	10	8	10	10					
63	22X31A0463	10	5	10	10					
64	22X31A0464	10	7	10	10					

Target s HoD	et by the faculty /	6.00	6.00	6.00	6.00			
Number perform	of students ed above the target	62	25	62	64			
Number attempte	of students ed	64	64	64	64			
Percenta scored r	age of students nore than target	97%	39%	97%	100%			
<u>CO Ma</u>	oping with Exam Que	estions:						
	CO - 1							
	CO - 2							
	CO - 3							
	CO - 4	Y	Y	Y	Y			
	CO - 5	Y	Y	Y	Y			
	CO - 6	Y	Y	Y	Y			
CO Atta	ainment based on Exa	am Questions.						
<u>00 ma</u>		<u>un questions.</u>						
	c_0							
	CO-2							
	CO - 3	070/	200/	070/	070/	-		
	CO-4	97%	39%	97%	97%	_		
	CO-6	97%	39%	97%	97%			
	00 0	5170	3770	2170	2170			
	со	Intr nal pr actica	E+E+R	ppt	OveralI	Level	Attainment	Level
	CO-1	1		* *			1	40%
	CO-2						2	50%
	CO-3						3	60%
	CO-4	68%	97%	97%	87%	3		
	CO-5	68%	97%	97%	87%	3		
	CO-6	68%	97%	97%	87%	3		
	A t t a i m a m t d		<i>7170</i>)	0770	5		
	Allainment (mernal 2 E	xamination	U=		3		

SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY											
Department of Humanities and Sciences Course Outcome Attainment (University Examinations)											
MRAJOMPATNISH		Course Outcome Attainment	(Univ	ersity Exai	minations)						
Name of	of the faculty :	B.SANTHI		Academic	Year:	2022 - 23					
Branch	& Section:	ECE		Year / Sem	nester:	I/I					
Lab C	ourse Name:	APPLIED PHYSICS									
S.No	Roll Number	Marks Secured		S.No	Roll Number	Marks Secured					
1	22X31A0401	50	1	35	22X31A0435	42					
2	22X31A0402	57		36	22X31A0436	51					
3	22X31A0403	56		37	22X31A0437	А					
4	22X31A0404	51		38	22X31A0438	40					
5	22X31A0405	49		39	22X31A0439	44					
6	22X31A0406	57		40	22X31A0440	41					
7	22X31A0407	48		41	22X31A0441	56					
8	22X31A0408	55		42	22X31A0442	51					
9	22X31A0409	58		43	22X31A0443	50					
10	22X31A0410	57		44	22X31A0444	44					
11	22X31A0411	56		45	22X31A0445	54					
12	22X31A0412	50		46	22X31A0446	44					
13	22X31A0413	52		47	22X31A0447	52					
14	22X31A0414	54		48	22X31A0448	42					
15	22X31A0415	50		49	22X31A0449	55					
16	22X31A0416	55		50	22X31A0450	49					
17	22X31A0417	41		51	22X31A0451	42					
18	22X31A0418	48		52	22X31A0452	40					
19	22X31A0419	50		53	22X31A0453	50					
20	22X31A0420	41		54	22X31A0454	41					
21	22X31A0421	50		55	22X31A0455	58					
22	22X31A0422	А		56	22X31A0456	42					
23	22X31A0423	55		57	22X31A0457	40					
24	22X31A0424	51		58	22X31A0458	52					
25	22X31A0425	54		59	22X31A0459	53					
26	22X31A0426	55		60	22X31A0460	54					
27	22X31A0427	58		61	22X31A0461	48					
28	22X31A0428	52		62	22X31A0462	59					
29	22X31A0429	53		63	22X31A0463	58					
30	22X31A0430	40		64	22X31A0464	51					
31	22X31A0431	45		65							
32	22X31A0432	43									
33	22X31A0433	49									
34	22X31A0434	52									
Class A	verage mark		50		Attainment Level	% students					
Number	of students perform	ned above the target	39		1	40%					
Number	of successful stude	ents	64		2	50%					
Percenta	age of students scor	ed more than target	61%		3	60%					
Attain	nment level		3								

SRI INDU I	NSTITU	TE OF EN	GINEER	RING AND 7	FECHNOLOG	Y
AND	Departme	nt of Humanities	and Science	ces		
ALLON DE LA		Course Ou	itcome Att	<u>ainment</u>		
BRAHIMPATHAN						
Name of the faculty	B.SANTH	HI		Academic Year:	2022 - 23	
Branch & Section:	ECE			Year / Semester	I/I	
Lab Course Name:	APPLIED F	PHYSICS				
						1
Cour se Outcomes	1st Inter nal Exam	2nd Inter nal Exam	Inter nal Exam	Univer sity Exam	Attainment Level	
CO1	3.00		3.00	3.00	3.00	
CO2	3.00		3.00	3.00	3.00	
CO3	3.00		3.00	3.00	3.00	
CO4		3.00	3.00	3.00	3.00	
CO5		3.00	3.00	3.00	3.00	
CO6		3.00	3.00	3.00	3.00	
Inter	nal & Univ	er sity Attainment:	3.00	3.00		
		Weightage	70%	30%		
CO Attainment for the	cour se (Int	er nal, Univer sity)	2.10	0.90		
CO Attainment for t	the course (Direct Method)		3.00		
Overall co	urse a	ttainmer	nt leve	21	3.00	

SRI INDU INSTITUTE OF ENGINEERING & TECHNOLOGY															
STUTE OF ENGINEERIN	6811			De	epartn	nent	of Hu	manit	ies a	nd Sc	ience	es			
SUN SUN	Program Outcome Attainment (from														
ALANDATI'	<u>Course</u>														
Name o	f Facu	ilty:	B.SAI	NTHI				Acad	emic	Year:	2022	- 23			
Branch &	& Sect	ion:	ECE					Year	/ Sem	ester:	I/I				
Course	Name	:	APPL	IED PH	IYSICS										
CO-PO r	nappi	ng													
		PO2	PO3			POG		POS	POQ	PO10	P ∩11	P ∩12			
CO1	3	2	105	104	105	100	107	100	105	1010	1011	1			
CO1	ך ר	2										1			
CO2	3	2										1			
CO4	3	2										1			
C05	3	2										1			
CO6	3	2										1			
Course	3.00	2.00				1			1			1.00			
	2.00	2.00										1.00			
CO	Course Outcome														
00	Attainment														
							3.0	0					1		
								-							
CO1													4		
CO 2							3.0	0							
02							•	0							
							3.0	0							
CO3													<u> </u>		
60 4							3.0	0							
CO4							• •	-							
							3.0	0							
CO5													<u> </u>		
CO6							3.0	0							
Overall	cour	se at	tainm	ent l	evel					3.0			1		
overail			cannin							0					
													-		
PO-ATT	AINM	ENT													
	PO1	PO2	PO3	PO4	PO5	P06	PO7	PO8	PO9	PO10	PO11	PO12			
со															
Attainm															
ent	3.00	2.00										1.00			
CO contr	ibutio	n to Pr	220 - ר	67%	100% /	1 امريما 1	12/21								
	Julio		- 337	u, U770,	100%(LEVELI	., 2, 3)								