

COURSE FILE

ON

APPLIED PHYSICS LAB

Course Code - AP105BS

I B. Tech Semester-I

A.Y.2022-2023

Prepared by

M. JANAIAH

Asst. Professor

Head of the Department Department of H&S SRI INDU INSTITUTE OF ENGG & TECH beriouda(M) Ibrahimoatnam (M) R.R. Dist-501 51(

PRINCIPAL

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

https://siiet.ac.in



Sri Indu Institute of Engineering and Technology (Autonomous)

(Formerly RVR Institute of Engineering & Technology)

An Autonomous Institution Under UGC

EAMCET CODE: INDI Approved by Al

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ESTD: 2007

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

Approved by AICTE, New Delhi, & Affiliated to JNTUH, Hyderabad.

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	M. JANAIAH

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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.

Head of the Department

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

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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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B. Tech. in ARTIFICIAL INTELLIGENCE AND DATA SCIENCE 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	0	2	1
9.	CS105ES	C Programming for Engineers Laboratory	0	0	2	1
10.	*MC101ES	Environmental Science		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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A.Y: 2022-23

SEMESTERS: I

CLASS: AI&DS

Course Outcomes

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

C117.1	Demonstrate Photoelectric Effect and Determine the we constant. (I	ork Function and planks U nderstanding)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 of	
C117.5	Find the properties of Laser and Optical fiber.	(Applying)L3 (Remembering) L1
C117.6	Explain the properties of least squares, Dielectric and n	nagnetic 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	PSO1	PSO2
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	СО	PO'S
To determine the work function " W_0 " 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 jnfnand Zener diodes	C117.3	PO1, PO2, PO12
Observe the i/p and o/p characteristics of BJT (CE, CB and CC)	The student observes the c BJT (CE, CB and CC)	C117.3	PO1, PO2, PO12
 1. To Plot the V/I characteristics of Solar Cell 2. 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 theCharging and Discharging of a Capacitor/Condenser	C117.5	PO1, PO2, PO12

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Class: Al &DS

Semester: I W.E.F-14-11-2022

LH:-D-210

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	1 9:40- 10:30	11 10:30 - 11:20	III 11:20- 12:10	12:10- 12.45	IV 12.45- 1.35	V 1.35- 2.25	VI 2.25- 3.15	VII 3.15-4.00
MON	E	WS/ELCS	LAB		AP	PPS	M&C	PPS(T)/AP(T)
TUE	ENG	ES	M&C		PPS	AP	ES	ENG(T)/M&C(T)
WED	ECSE	PPS	ES	N C	AP	M&C	ENG	AP(T)/PPS(T)
THU		PPS LAI	В	н	ECSE	AP	ENG	M&C(T)/ENG(T)
FRI	ENG	PPS	M&C	1	A	AP LAB	-	ECSE(T)
SAT	PPS	AP	M&C		EW	S/ELCS L	AB	LIB

Course Code	Course Name	Name of the Faculty	Course Code	Course Name	Name of the Faculty
MA101BS	Matrices and Calculus	V.SUJATHA	ME102ES	Engineering Workshop	B.SRINU NAIK/A.MALLESH
AP102BS	Applied Physics	R.YADAGIRI RAO	AP105BS	Applied Physics -Lab	P.SRINIVASA CHARY /M.MANISHA/ R.YADAGIRI RAO /M.JANAIAH
CS103ES	Programming for Problem Solving	G.KALYANI	CS107ES	Programming for Problem Solving Lab	G.KALYANI /U.NARESH
EN104HS	English for Skill Enhancement	G.VENKAT REDDY	EN107HS	English Language and Communicatio n Skills Lab	G.VENKAT REDDY/S.SWAPNA
CS106ES	Elements of Computer Science & Engineering	J.PUJITHA	MC101ES	Environment al Science	O.SUBHASHINI



ch. Saitha Time Table Coordinator HERIGUD!

Head of The Department CDr. R. YADAGIRI RAO M.Sc., B.Ed., M. Tech(CSE)., Ph. P. Head of the Department Department of H&S SRI INDU INSTITUTE OF ENGINE TEL sriguda(1 hrahimostnam (14) R :.



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Year & Semester: I-I

Branch: AI&DS

Subject Name: Applied Physics Lab

Faculty Name: M Janaiah

EXTERNAL EXAM OUESTION PAPER

- 1. Determine the dielectric constant of a given material.
- 2. Plot the V –I Characteristics of Solar Cell.
- 3. Determine the work function of given metal by using photoelectric effect.
- 4. Plot the V –I Characteristics of LED.
- 5. Determine the energy gap of a given semiconductor.
- 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. Derive the values of i) Resonance Frequency ii) Band width iii) Quality Factor of the given LCR circuit.
- 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	M.JANAIAH (9291513934)	Dr.B.Rajinikanth (7893092879)
11-3-2023	SATURDAY	IOT	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)	Dr B.Narasimha (9952583969
13-3-2003	MONDAY	CIVIL	FN	22X31A0101 TO 22X31A0103	3	B. SANTHI (9493978954)	Dr B.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	M	AINTAINAN	CE						
Tuesday				L	А				
Wednesday	Ι	OT(BATCH-I	[)	U		AIML-B(BATCH-II)			
Thursday	E	CE(BATCH-II	[)	N		CIVIL			
Friday				C H		AIDS(BA7	TCH-II)		
Saturday		AIML-A(BAT	CH-II)]	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	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	IAINTAIN	ANCE					
Tuesday				L	A			
Wednesday	IC	T(BATCH	-I)	U N				
Thursday	EC	CE(BATCH	-I)	С				
Friday				Н		AIDS(BAT	CH-I)	
Saturday	A	IML-A(BA'	TCH-I)		Ν	IAINTAIN	ANCE	

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APPLIED PHYSICS LAB

Course: B. Tech. I Year

SUB CODE: AP105BS

Do's

- 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.

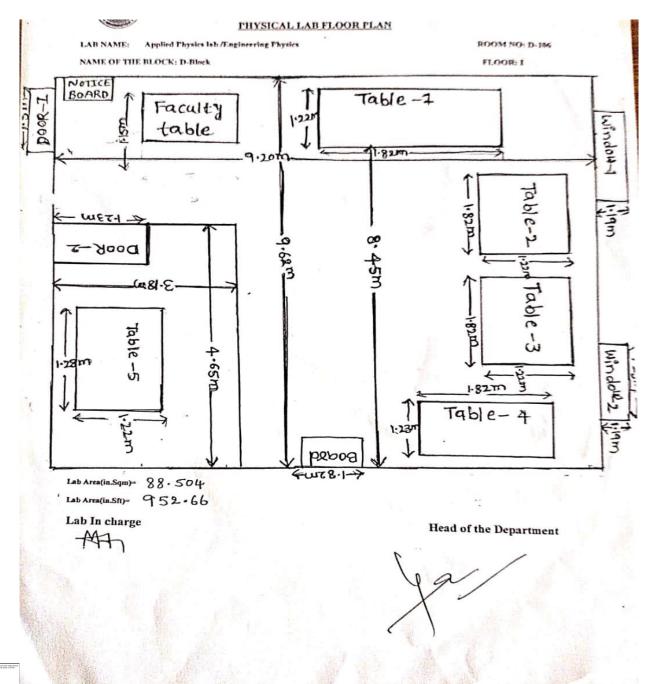
Don't s

- 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

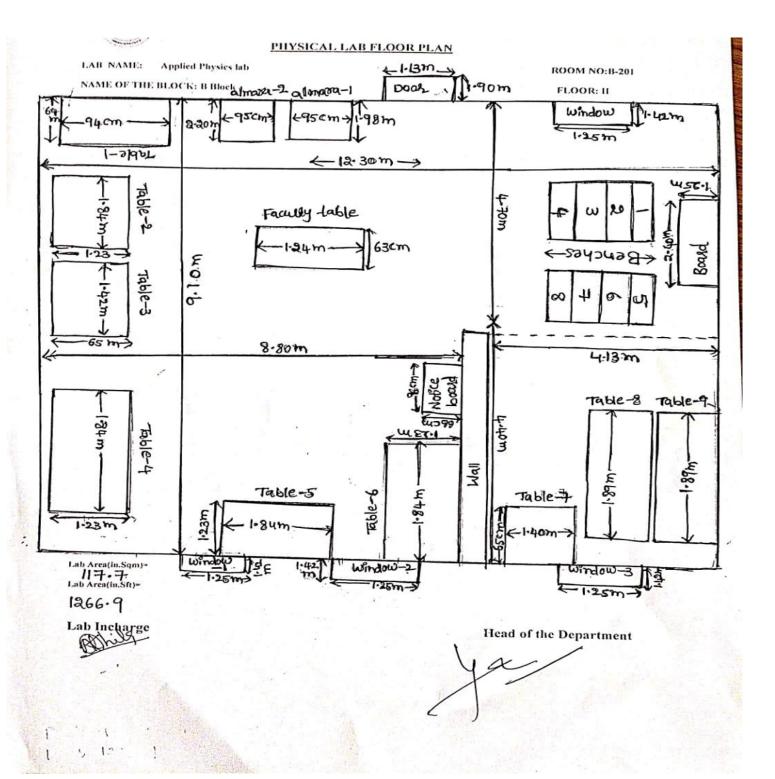




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APPLIED PHYSICS LAB - 2 FLOOR PLAN





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Lab manual link

https://drive.google.com/file/d/1UTyWcm6bNeIw5qa 7CrdjE7PxMdQmHJ/view? u sp=sharing

OF ENGINES	SRI INDU IN			s and Sciences	
(Suns)		Departmer	n of Humanitie	s and Sciences	
County -	Course Outcon	ne Attainment (- Internal Exa	mination-1)	
Name o	f the faculty :	M JAHAIAH	Internal Exa	Academic Year:	2022 - 23
	& Section:	AI&DS		Examination:	LAB INTERNAL-I
	urse Name:	APPLIED PHYS	ICS	Year/semester	
Labet	dise i valle.			1 cal/sellester	1/1
S.No	HT No.	R+O+A	V+V	E+E+R	
	rks ==>	10	10	10	1
1	22X31A7201	10	7	10	1
2	22X31A7202	10	7	7	
3	22X31A7203	10	8	9	
4	22X31A7204	10	7	8	
5	22X31A7205	8	6	5	
6	22X31A7206	10	8	10	
7 8	22X31A7207 22X31A7208	10	9	10	1
8 9	22X31A7208 22X31A7209	10	8	8	
10	22X31A7209 22X31A7210	9	7	6	1
11	22X31A7210 22X31A7211	9	6	5	
12	22X31A7212	10	7	7	
13	22X31A7213	10	8	8	
14	22X31A7214	10	7	7	
15	22X31A7215	10	9	8	
16	22X31A7216	10	7	8	
17 18	22X31A7217 22X31A7218	10 10	<u> </u>	<u> </u>	
18 19	22X31A7218 22X31A7219	10	5	8	{
20	22X31A7219 22X31A7220	10	6	8	1
21	22X31A7221	8	5	6	
22	22X31A7222	10	6	7	
23	22X31A7223	10	6	7	
24	22X31A7224	9	7	6	
25	22X31A7225	10	6	7	
26	22X31A7226	10	7	8 7	
27	22X31A7227	10	6 7	8	
28 29	22X31A7228 22X31A7229	10	6	7	
30	22X31A7230	10	6	7	
31	22X31A7231	10	5	7	
32	22X31A7232	7	4	8	
33	22X31A7233	10	8	9	
34	22X31A7234	8	3	7	
35	22X31A7235	10	7	8	1
36	22X31A7236	10	8	8 7	1
37 38	22X31A7237 22X31A7238	10	8	8	
39	22X31A7238	10	6	8	<u> </u>
40	22X31A7240	10	8	8	
41	22X31A7241	10	6	8	
42	22X31A7242	10	9	10]
43	22X31A7243	10	8	7	
44	22X31A7244	10	8	8	
45	22X31A7245	9	8	7	4
46 47	22X31A7246	8	<u>6</u> 7	7 8	
47	22X31A7247 22X31A7248	10	9	9	{
40	22X31A7248 22X31A7249	10	8	9	1
50	22X31A7250	10	8	8	1
51	22X31A7251	10	6	6	
52	22X31A7252	10	8	7	
53	22X31A7253	10	8	8	
54	22X31A7254	10	8	9	
55	22X31A7255	10	8 7	8	4
56 57	22X31A7256 22X31A7257	10	10	8	1
57	22X31A7257 22X31A7258	10	8	8	
58 59	22X31A7259	10	8	8	1
60	22X31A7260	10	7	7	
61	22X31A7261	9	6	7	1
62	22X31A7262	10	8	8	
63	22X31A7263	10	7	7	
64	22X31A7264	10	7	6	
Т					

Target set by the faculty / HoD	6.00	6.00	6.00			
Number of students performed above the target	64	59	62			
Number of students attempted	64	64	64			
Percentage of students scored more than target	100%	92%	97%			
<u>CO Mapping with Exam Qu</u>	estions:					
CO - 1	у	У	Y			
CO - 2	y	У	Y			
CO - 3	y	y	Y			
CO - 4		-				
CO - 5						
CO - 6						
CO Attainment based on Ex	am Questions:					
CO - 1	100%	100%	97%			
CO - 2	100%	100%	97%			
CO - 3	100%	100%	97%			
CO - 4						
CO - 5						
CO - 6						
СО	Intrnal practica	E+E+R	OveralI	Level	Attainm	ent Level
CO-1	100%	97%	98%	3	1	40%
CO-2	100%	97%	98%	3	2	50%
CO-3	100%	97%	98%	3	3	60%
CO-4						
CO-5						
CO-6						
	(Internal 1 Ex	(amination)) =	3		
		,				

San Andrew Contraction		Departmen	t of Humanit	ies and Sciences	
STRAIGMONTON .					
[omo c	Course Outcon of the faculty :	ne Attainment (I M JAHAIAH	nternal Exa	Academic Year:	2022 - 23
	& Section:	AI&DS		Examination:	LAB INERNAL-II
	ourse Name:	APPLIED PHYSIC	27	Year/semester	I/I
	Juise Ivanie.			1 cul/sellester	1/1
S.No	HT No.	R+O+A	V+V	E+E+R	ppt
/lax. Ma	rks ==>	10	10	10	10
1	22X31A7201	10	7	8	10
2	22X31A7202	10	6	8	10
3	22X31A7203 22X31A7204	10	7 5	8 7	10
4 5	22X31A7204 22X31A7205	10	8	8	10
6	22X31A7206	10	9	8	10
7	22X31A7207	10	4	7	10
8	22X31A7208	10	6	7	10
9 10	22X31A7209	10	7 5	7	10
10	22X31A7210 22X31A7211	10	8	10	10
12	22X31A7211 22X31A7212	7	7	7	10
13	22X31A7213	10	8	10	10
14	22X31A7214	10	7	7	10
15	22X31A7215	8 7	8	<u> </u>	10
16 17	22X31A7216 22X31A7217	10		8	10
17	22X31A7217 22X31A7218	7	5	6	10
19	22X31A7219	10	5	7	10
20	22X31A7220	10	7	7	10
21	22X31A7221	10	4	7	10
22 23	22X31A7222 22X31A7223	10	7	9 6	10
23 24	22X31A7223 22X31A7224	10	4	6	10
25	22X31A7225	9	5	7	10
26	22X31A7226	10	8	10	10
27	22X31A7227	9	7	10	10
28 29	22X31A7228 22X31A7229	9 10	5	6 8	10
30	22X31A7229 22X31A7230	7	6	7	10
31	22X31A7231	10	5	7	10
32	22X31A7232	9	4	7	10
33	22X31A7233	10	8	10	10
34 35	22X31A7234 22X31A7235	9 10	5 8	7 10	10
36	22X31A7236	10	8	5	10
37	22X31A7237	8	6	8	10
38	22X31A7238	10	4	6	10
39	22X31A7239	10	7	7	10
40	22X31A7240	9	2	6	10
41 42	22X31A7241 22X31A7242	10	7	9	10
43	22X31A7242 22X31A7243	10	6	7	10
44	22X31A7244	7	6	7	10
45	22X31A7245	10	8	9	10
46	22X31A7246	10	4	6	10
47 48	22X31A7247 22X31A7248	10	4 5	7 9	10
48 49	22X31A7248 22X31A7249	10	8	10	10
50	22X31A7250	10	7	8	10
51	22X31A7251	10	8	10	10
52	22X31A7252	9	4	7	10
53 54	22X31A7253 22X31A7254	10	8	8	10
54 55	22X31A7254 22X31A7255	7	4	6	10
56	22X31A7255	10	4	6	10
57	22X31A7257	10	9	10	10
58	22X31A7258	10	8	8	10
59	22X31A7259	10	9	10	10
60 61	22X31A7260 22X31A7261	10	8	10	10
61 62	22X31A7261 22X31A7262	8	5	7	10
63	22X31A7262 22X31A7263	10	6	7	10
64	22X31A7264	9	4	7	10

Target set by the faculty / HoD	6.00	6.00	6.00	6.00			
Number of students performed above the target	64	40	63	64			
Number of students attempted	64	64	64	64			
Percentage of students cored more than target	100%	63%	98%	100%			
<u>CO Mapping with Exam Que</u>	estions:						
CO - 1							
CO - 2							
CO - 3							
CO - 4	y	у	Y	у			
CO - 5	У	у	Y	У			
CO - 6	у	у	Y	У			
CO Attainment based on Ex	am Questions:						
CO - 1							
CO - 2							
CO - 3							
CO - 4	100%	63%	98%	98%			
CO - 5	100%	63%	98%	98%			
CO - 6	100%	63%	98%	98%			
СО	Intrnal practical	E+E+R	ppt	OveralI	Level	Attainn	ent Level
CO-1		LILIK				1	40%
CO-2	1					2	50%
CO-3	1					3	60%
CO-4	81%	98%	98%	93%	3	-	
CO-5	81%	98%	98%	93%	3		
CO-6	81%	98%	98%	93%	3		
	(Internal 2 Ex				3		
		summation.	·/ —		3		



SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY Department of Humanities and Sciences

ANNO AND	100 Log	Department of	Humanitie	es and Scie	ences	
1977 AMARPATNAN		Course Outcome Attainme	nt (Unive	ersity Exa	<u>minations)</u>	
Name	of the faculty :	M JAHAIAH		Academic	Year:	2022 - 23
	1 & Section:	AI&DS		Year / Ser	nester:	I/I
	ourse Name:	APPLIED PHYSICS				
S.No	Roll Number	Marks Secured		S.No	Roll Number	Marks Secured
1	22X31A7201	48		35	22X31A7235	48
2	22X31A7202	42		36	22X31A7236	46
3	22X31A7203	52		37	22X31A7237	43
4	22X31A7204	40		38	22X31A7238	42
5	22X31A7205	50		39	22X31A7239	45
6	22X31A7206	46		40	22X31A7240	35
7	22X31A7207	44		41	22X31A7241	50
8	22X31A7208	47		42	22X31A7242	57
9	22X31A7209	46		43	22X31A7243	46
10	22X31A7210	43		44	22X31A7244	44
11	22X31A7211	51		45	22X31A7245	53
12	22X31A7212	40		46	22X31A7246	46
13	22X31A7213	54		47	22X31A7247	42
14	22X31A7214	42		48	22X31A7248	45
15	22X31A7215	48		49	22X31A7249	52
16	22X31A7216	40		50	22X31A7250	47
17	22X31A7217	50		51	22X31A7251	48
18	22X31A7218	46		52	22X31A7252	44
19	22X31A7219	47		53	22X31A7253	51
20	22X31A7220	41		54	22X31A7254	45
21	22X31A7221	42		55	22X31A7255	52
22	22X31A7222	44		56	22X31A7256	47
23	22X31A7223	43		57	22X31A7257	53
24	22X31A7224	44		58	22X31A7258	46
25	22X31A7225	47		59	22X31A7259	57
26	22X31A7226	55		60	22X31A7260	55
27	22X31A7227	56		61	22X31A7261	54
28	22X31A7228	46		62	22X31A7262	55
29	22X31A7229	42		63	22X31A7263	41
30	22X31A7230	40		64	22X31A7264	48
31	22X31A7231	45				
32	22X31A7232	41				
33	22X31A7233	53				
34	22X31A7234	40				
	verage mark		47		Attainment Level	% students
		med above the target	29		1	40%
Number	of successful stud	lents	64		2	50%
Percenta	age of students sco	bred more than target	45%		3	60%
Attai	nment level		2			
						1

		OUTER								
Departme	ent of Humanities	and Scier	nces							
Course Outcome Attainment										
M JAHA	IAH		Academic Year:	2022 - 23						
AI&DS			Year / Semester:	I/I						
APPLIED	PHYSICS	Utcome Attainment Academic Year: 2022 - 23 Year / Semester: I/1 Internal University Exam Attainment Level 3.00 2.00 2.70 3.00 2.00 2.70 3.00 2.00 2.70 3.00 2.00 2.70 3.00 2.00 2.70 3.00 2.00 2.70 3.00 2.00 2.70 3.00 2.00 2.70 3.00 2.00 2.70 3.00 2.00 2.70 3.00 2.00 2.70 3.00 2.00 2.70 3.00 2.00 2.70 3.00 2.00 2.70 3.00 2.00 2.70 1 3.00 2.00 2.70 1 3.00 2.00 2.70 1 3.00 2.00 2.70 1 3.00 2.00 2.70 1 3.00 2.00 2.70 1 3.00 2.								
1st Internal Exam	2nd Internal Exam		University Exam	Attainment Level						
3.00		3.00	2.00	2.70						
3.00		3.00	2.00	2.70						
3.00	3.00 3.00 2.00		2.00	2.70						
	3.00	3.00	2.00	2.70						
	3.00	3.00	2.00	2.70						
	3.00	3.00	2.00	2.70						
nal & Univ	ersity Attainment:	3.00	2.00							
	Weightage	70%	30%							
course (In	ternal, University)	2.10	0.60							
the course	(Direct Method)		2.70							
urse a	attainmer	nt leve	el	2.70						
	M JAHA AI&DS APPLIED Ist Internal Exam 3.00 3.00 3.00 3.00 a.00	Course Ou Course Ou M JAHAIAH AI& D APPLIED PHYSICS Ist Internal Exam 3.00 3.00 3.00 3.00 3.00 3.00 3.00 3.00 3.00 3.00 3.00 3.00 Weightage Course (Internal, University) the course (Direct Method)	Course Outcome AtCourse Outcome AtM JAHAIAHAI&DSAPPLIED PHYSICSIst Internal ExamInternal Exam3.00113.003.0011 <t< td=""><td>M JAHAIAH Academic Year: AI&DS Year / Semester: APPLIED PHYSICS Year / Semester: 1st Internal Internal Exam 2nd Internal Internal Exam 3.00 3.00 2.00 3.00 3.00 2.00 3.00 3.00 2.00 3.00 3.00 2.00 3.00 3.00 2.00 3.00 3.00 2.00 3.00 3.00 2.00 3.00 3.00 2.00 1st 3.00 3.00 2.00 3.00 3.00 3.00 2.00 1st 1st 3.00 2.00 1st 1st 1st 1st</td></t<>	M JAHAIAH Academic Year: AI&DS Year / Semester: APPLIED PHYSICS Year / Semester: 1st Internal Internal Exam 2nd Internal Internal Exam 3.00 3.00 2.00 3.00 3.00 2.00 3.00 3.00 2.00 3.00 3.00 2.00 3.00 3.00 2.00 3.00 3.00 2.00 3.00 3.00 2.00 3.00 3.00 2.00 1st 3.00 3.00 2.00 3.00 3.00 3.00 2.00 1st 1st 3.00 2.00 1st 1st 1st 1st						

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STATES STATES	& TECH				-		of Hur					5			
	13010M		<u>I</u>	Progra	am Out	tcome	Attair	<u>ime nt</u>	(from	Cours	<u>se)</u>				
Name of	- Facu	ltv	ΜΙΔΙ	 A A				Acad	emic Y	Year:	2022 -	. 23			
Branch &		-	AI&D							ester:					
Course N					IYSICS										
CO-PO n															
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11		PSO1	PSO2	
CO1	3	2										1			
CO2	3	2										1			
CO3	3	2										1			
CO4	3	2										1			
CO5	3	2										1			
CO6	3	2										1			
Course	3.00	2.00										1.00			
со					Соп	urse O) Jutcom	e Atta	inme	nt					
	Course Outcome Attainment 2.70														
							2.70	J							
CO1															
603							2.70)							
CO2							2.70)							
							2.70	J							
CO3							0.7	<u> </u>							
CO4							2.70)							
							2.70)							
CO5							2.7	<i>,</i>							
							2.70)							
CO6						r –	2.70	,							
Overall	cour	se att	tainm	ent l	evel				2	2.70	1				
PO-ATTA			PO3	DO 4	DOF	PO6	PO7	PO8	DO0	PO10	DO11	DO12			
<u> </u>	101	PUZ	PU3	P04	105	PU6	107	PU8	P09	1010	1011	P012			
CO Attainm															
ent	2.70	1.80										0.90			
			220/	670/	1000/ /1	oval 1	(2/2)								
CO contri	JULIOF		- 33%	, 01%,	100% (L	ever 1/	2/3/								