

ODD SEM-2023-24

**Department of Physics****Course Outcomes and COs-POs Mapping****Batch 2023-24****Semester – I**

Subject: Applied Physics for CS Stream		Subject Code: BPHYS102
Course Outcomes		
CO1	Describe the principles of LASERS and Optical fibers and their relevant applications.	
CO2	Discuss the basic principles of the Quantum Mechanics and its application in Quantum Computing.	
CO3	Summarize the essential properties of superconductors and its applications in qubits.	
CO4	Illustrate the application of physics in design and data analysis.	
CO5	Practice working in groups to conduct experiments in physics and perform precise and honest measurements.	

PROGRAM OUTCOMES

PO1 Engineering knowledge: An ability to apply knowledge of mathematics (including probability, statistics and discrete mathematics), science, and engineering for solving Engineering problems and Knowledge.

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: An ability to design solution for engineering problems and design system components or process to meet desired specifications and needs.

PO4 Conduct investigations of complex Problem: An ability to identify, formulate, comprehend, analyze, design synthesis of the information to solve complex engineering problems and 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.

PO6 The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues.

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 the society.

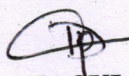
PO11 Project management and finance: An ability to use the modern engineering tools, techniques, skills and management principles to do work as a member and leader in a team, to manage projects in multidisciplinary environments.

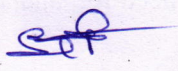
PO12 Life-long learning: A recognition of the need for, and an ability to engage in, to resolve contemporary issues and acquire lifelong learning.

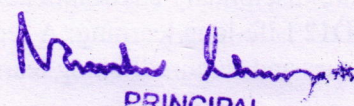
COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY											
FACULTY NAME	Dr SADASHIVAIAHA P J / DERA PUSHPALATHA H											
BRANCH	CS	ACADEMIC YEAR						2023-24				
COURSE	B.E	SEMESTER	I	SECTION				A & B				
SUBJECT	APPLIED PHYSICS FOR CSE STREAM						SUBJECT CODE		BPHYS102			
CO & PO MAPPING												
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2										2
CO2	3	3										2
CO3	3	3										2
CO4	3	2	1		1							2
CO5	3	2	1		2			3	3			2
AVERAGE	3	2.4	1		1.5			3	3			2
OVERALL MAPPING OF SUBJECT												2.27

CO AND PO ATTAINMENT

	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	59.44	1.78	1.19										1.19
CO2	74.15	2.22	2.22										1.48
CO3	43.76	1.31	1.31										0.87
CO4	66.32	1.99	1.33	0.66		0.66							1.33
CO5	88.39	2.65	1.77	0.88		1.77			2.65	2.65			1.77
AVERAGE	66.41	1.99	1.56	0.77		1.21			2.65	2.65			1.33
FINAL ATTAINMENT LEVEL													1.74


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**Department of Physics****Course Outcomes and COs-POs Mapping****Batch 2023-24****Semester – I**

Subject: Applied Physics for CV Stream		Subject Code: BPHYC102
Course Outcomes		
CO1	Elucidate the concepts in oscillations, waves, elasticity and material failures	
CO2	Summarize concepts of acoustics in buildings and explain the concepts in radiation and photometry	
CO3	Discuss the principles photonic devices and their application relevant to civil engineering	
CO4	Describe the various natural hazards and safety precautions	
CO5	Practice working in groups to conduct experiments in physics and perform precise and honest measurements	

PROGRAM OUTCOMES

PO1 Engineering knowledge: An ability to apply knowledge of mathematics (including probability, statistics and discrete mathematics), science, and engineering for solving Engineering problems and Knowledge.

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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.

PO6 The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues.

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 the society.


PO11 Project management and finance: An ability to use the modern engineering tools, techniques, skills and management principles to do work as a member and leader in a team, to manage projects in multidisciplinary environments.

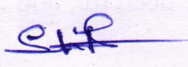
PO12 Life-long learning: A recognition of the need for, and an ability to engage in, to resolve contemporary issues and acquire lifelong learning.

COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY											
FACULTY NAME	Dr SADASHIVAIAHA P J / DERA PUSHPALATHA H											
BRANCH	CIVIL			ACADEMIC YEAR				2023-24				
COURSE	B.E	SEMESTER		I	SECTION			C				
SUBJECT	APPLIED PHYSICS FOR CV STREAM					SUBJECT CODE			BPHYC102			
CO & PO MAPPING												
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2			1							2
CO2	3	2										2
CO3	3	2										2
CO4	3	3				1						2
CO5	3	2	1		2			3	3			2
AVERAGE	3	2.2	1		1.5			3	3			2
OVERALL MAPPING OF SUBJECT												2.24

CO AND PO ATTAINMENT


	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	57.63	1.73	1.15		0.58								1.15
CO2	61.97	1.86	1.24										1.24
CO3	61.67	1.85	1.23										1.23
CO4	70.24	2.11	2.11										1.40
CO5	79.33	2.38	1.59	0.79		1.59			2.38	2.38			1.59
AVERAGE	66.17	1.98	1.46	0.79	0.58	1.59			1.98	1.98			1.32
FINAL ATTAINMENT LEVEL													1.46

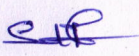

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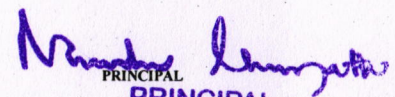

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SEM: I	Total Strength						6	Course: Applied Physics for Civil Stream						BPHYC102	2022-2023																
SEC: C	IA TEST 1			IA TEST 2			IA TEST 3					PRACTICAL COMPONENT (25)	ASSIGNMENT (10M)				SEE MARKS(50)				Total Cos ATTAINMENT					% of Individual CO					
USN	CO1	CO1	TOTAL	CO1	CO2	TOTAL	CO1	CO2	CO3	CO4	TOTAL	CO5	CO1	CO2	CO3	CO4	CO1	CO2	CO3	CO4	CO1=95	CO2=55	CO3=35	CO4=35	CO5=25	CO1	CO2	CO3	CO4	CO5	
15V23CV001	20	20	40	19	20	39	20		20	20	60	21	2.5	2.5	2.5	2.5	8	8	8	8	89.5	30.5	30.5	30.5	21	94.210526	55.45455	87.14286	87.14286	84	
15V23CV002	18	17	35	19	20	39		19	18	13	50	15	2.5	2.5	2.5	2.5	7.5	7.5	7.5	7.5	64	49	28	23	15	67.368421	89.09091	80	65.71429	60	
15V23CV003	13	14	27	12	20	32	20		11	16	47	23	2.5	2.5	2.5	2.5	5.25	5.25	5.25	5.25	66.75	27.75	18.75	23.75	23	70.263158	50.45455	53.57143	67.85714	92	
15V23CV004	3	2	5	5	15	20		10	6	12	28	18	2.5	2.5	2.5	2.5	7	7	7	7	19.5	34.5	15.5	21.5	18	20.526316	62.72727	44.28571	61.42857	72	
15V23CV005	17	12	29	13	20	33		20	7	20	47	25	2.5	2.5	2.5	2.5	7.25	7.25	7.25	7.25	51.75	49.75	16.75	29.75	25	54.473684	90.45455	47.85714	85	100	
15V23CV006	7	0	7	9	6	15	14		13	12	39	17	2.5	2.5	2.5	2.5	4.5	4.5	4.5	4.5	37	13	20	19	17	38.947368	23.63636	57.14286	54.28571	68	
																											57.63158	61.9697	61.6667	70.2381	79.3333


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**Department of Physics****Course Outcomes and COs-POs Mapping****Batch 2023-24****Semester – I**

Subject: Applied Physics for ME Stream		Subject Code: BPHYM102
Course Outcomes		
CO1	Elucidate the concepts in oscillations, waves, elasticity and material failures	
CO2	Discuss the fundamentals of Thermoelectric materials and their application	
CO3	Summarize the low temperature phenomena and generation of low temperature	
CO4	Explain the various material characterization techniques	
CO5	Practice working in groups to conduct experiments in physics and perform precise and honest measurements.	

PROGRAM OUTCOMES

PO1 Engineering knowledge: An ability to apply knowledge of mathematics (including probability, statistics and discrete mathematics), science, and engineering for solving Engineering problems and Knowledge.

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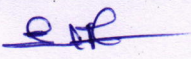
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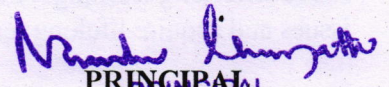
COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY											
FACULTY NAME	Dr SADASHIVAIAHA P J / DERA PUSHPALATHA H											
BRANCH	MECHANICAL			ACADEMIC YEAR				2023-24				
COURSE	B.E	SEMESTER			I	SECTION			D			
SUBJECT	APPLIED PHYSICS FOR ME STREAM					SUBJECT CODE			BPHYM102			
CO & PO MAPPING												
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2			2							2
CO2	3	2										2
CO3	3	2										2
CO4	3	2										2
CO5	3	2	1		2			3	3			2
AVERAGE	3	2	1		2			3	3			2
OVERALL MAPPING OF SUBJECT												2.28

CO AND PO ATTAINMENT

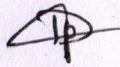
	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	43.65	1.31	0.87			0.87							0.87
CO2	26.30	0.79	0.53										0.53
CO3	53.98	1.62	1.80										1.80
CO4	56.43	1.69	1.13										1.13
CO5	81.14	2.43	1.62	0.81		1.62			2.43	2.43			1.62
AVERAGE	52.30	1.57	1.19	0.81		1.24			2.43	2.43			1.19
FINAL ATTAINMENT LEVEL													1.55

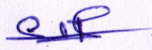

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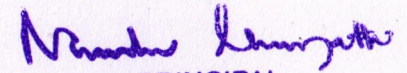

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SEM: I	Total Strength						7	Course: Applied Physics for Mechanical Stream						BPHYM102	2023-2024																
SEC: D	IA TEST 1			IA TEST 2			IA TEST 3					PRACTICAL COMPONENT (25)	ASSIGNMENT (10M)				SEE MARKS(50)				Total Cos ATTAINMENT					% of Individual CO					
USN	CO1	CO1	TOTAL	CO1	CO2	TOTAL	CO1	CO2	CO3	CO4	TOTAL	CO5	CO1	CO2	CO3	CO4	CO1	CO2	CO3	CO4	CO1=95	CO2=55	CO3=35	CO4=35	CO5=25	CO1	CO2	CO3	CO4	CO5	
15V23ME001	8	3	11	0	5	5	12		11	14	37	27	2.5	2.5	2.5	2.5	4.5	4.5	4.5	4.5	30	12	18	21	27	31.578947	21.81818	51.42857	60	108	
15V23ME002	14	5	19	4	4	8	17		8	14	39	20	2.5	2.5	2.5	2.5	6	6	6	6	48.5	12.5	16.5	22.5	20	51.052632	22.72727	47.14286	64.28571	80	
15V23ME003	10	16	26	11	18	29	16		20	20	56	22	2.5	2.5	2.5	2.5	4.5	4.5	4.5	4.5	60	25	27	27	22	63.157895	45.45455	77.14286	77.14286	88	
15V23ME004	8	15	23	6	15	21	8		3	7	18	17	2.5	2.5	2.5	2.5	2.75	2.75	2.75	2.75	42.25	20.25	8.25	12.25	17	44.473684	36.81818	23.57143	35	68	
15V23ME005	10	12	22	3	2	5	8		6	16	30	18	2.5	2.5	2.5	2.5	4.5	4.5	4.5	4.5	40	9	13	23	18	42.105263	16.36364	37.14286	65.71429	72	
15V23ME006	13	9	22			A	7		17	0	24	15	2.5	2.5	2.5	2.5	0.75	0.75	0.75	0.75	32.25	3.25	20.25	3.25	15	33.947368	5.909091	57.85714	9.285714	60	
15V23ME007	16	12	28	0	6	6		4	20	20	44	23	2.5	2.5	2.5	2.5	6.75	6.75	6.75	6.75	37.25	19.25	29.25	29.25	23	39.210526	35	83.57143	83.57143	92	
																															52.29927


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