

ODD SEM-2019-20

**Department of Physics****Course Outcomes and COs-POs Mapping****Batch 2019-20****Semester – I**

Subject: Engineering Physics		Subject Code: 18PHY12
Course Outcomes		
CO1	Understand various types of oscillations and their implications, the role of Shock waves in various fields and Recognize the elastic properties of materials for engineering applications.	
CO2	Realize the interrelation between time varying electric field and magnetic field, the transverse nature of the EM waves and their role in optical fiber communication.	
CO3	Compute Eigenvalues, Eigenfunctions, the momentum of Atomic and subatomic particles using Time independent 1-D Schrodinger's wave equation.	
CO4	Apprehend the theoretical background of laser, construction, and working of different types of laser and its applications in different fields.	
CO5	Understand various electrical and thermal properties of materials like conductors, semiconductors and dielectrics using different theoretical models.	

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.

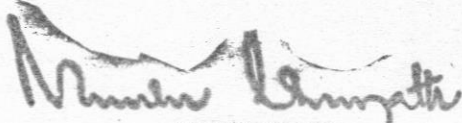
COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY											
FACULTY NAME	Dr. SADASHIVAIAH P J											
BRANCH	CSE/ISE	ACADEMIC YEAR						2019-20				
COURSE	B.E	SEMESTER	I	SECTION				A & B				
SUBJECT	ENGINEERING PHYSICS						SUBJECT CODE			18PHY12		
CO & PO MAPPING												
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3										2
CO2	3	3										2
CO3	3	3										2
CO4	3	3										2
CO5	3	3										2
AVERAGE	3	3										2
OVERALL MAPPING OF SUBJECT											2.66	

CO AND PO ATTAINMENT

CO	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	62.52662	1.87	1.87										1.25
CO2	58.30382	1.75	1.75										1.17
CO3	55.50792	1.66	1.66										1.11
CO4	55.41473	1.66	1.66										1.11
CO5	59.20472	1.78	1.78										1.18
AVERAGE	58.19156	1.74	1.74										1.16
FINAL ATTAINMENT LEVEL												1.55	


FACULTY


HOD
H.O.D
Dept. of Physics
S.I.E.T., TUMKUR - 5


PRINCIPAL
PRINCIPAL
SHRIDEVI INSTITUTE OF
ENGINEERING AND TECHNOLOGY
TUMKUR - 572106.

EVEN SEM-2019-20

**Department of Physics****Course Outcomes and COs-POs Mapping****Batch 2019-20****Semester – II**

Subject: Engineering Physics		Subject Code: 18PHY22
Course Outcomes		
CO1	Understand various types of oscillations and their implications, the role of Shock waves in various fields and Recognize the elastic properties of materials for engineering applications.	
CO2	Realize the interrelation between time varying electric field and magnetic field, the transverse nature of the EM waves and their role in optical fiber communication.	
CO3	Compute Eigenvalues, Eigenfunctions, the momentum of Atomic and subatomic particles using Time independent 1-D Schrodinger's wave equation.	
CO4	Apprehend the theoretical background of laser, construction, and working of different types of laser and its applications in different fields.	
CO5	Understand various electrical and thermal properties of materials like conductors, semiconductors and dielectrics using different theoretical models.	

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.

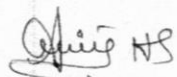
PO11 Project management and finance: An ability to use the modern engineering tools, techniques, skills and management principles to do work as a member and leader in a team, to manage projects in multidisciplinary environments.


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

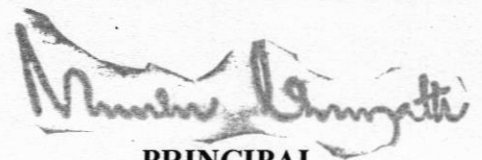
COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY											
FACULTY NAME	Dr. SADASHIVAIAH P J/ ARPITHA H S											
BRANCH	EC/EE/CV/ME			ACADEMIC YEAR				2019-20				
COURSE	B.E	SEMESTER			II	SECTION			C & D			
SUBJECT	ENGINEERING PHYSICS					SUBJECT CODE			18PHY22			
CO & PO MAPPING												
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3										2
CO2	3	3										2
CO3	3	3										2
CO4	3	3										2
CO5	3	3										2
AVERAGE	3	3										2
OVERALL MAPPING OF SUBJECT												2.66

CO AND PO ATTAINMENT

CO	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	81.6986	2.45	2.45										1.63
CO2	75.06944	2.25	2.25										1.50
CO3	74.09722	2.22	2.22										1.48
CO4	75.17361	2.25	2.25										1.50
CO5	79.86733	2.40	2.40										1.60
AVERAGE	77.18124	2.31	2.31										1.54
FINAL ATTAINMENT LEVEL													2.05


FACULTY


HOD
H.O.D
Dept. of Physics
S.I.E.T., TUMKUR -6.


PRINCIPAL
SHRIDEVI INSTITUTE OF
ENGINEERING AND TECHNOLOGY
TUMKUR - 572106.

1SV19EE013	14	11	25	20	20	20	60	11	11	11	11	12	56	2	2	2	2	2	6.4	6.4	6.4	6.4	6.4	6.4	64.4	19.4	28.4	19.4	51.4	74.02299	60.625	88.75	60.625	76.71642
1SV19EE014	15	15	30	0	0	0	0	20	20	20	20	20	100	1.2	1.2	1.2	1.2	1.2	2.6	2.6	2.6	2.6	2.6	2.6	58.8	23.8	3.8	23.8	38.8	67.58621	74.375	11.875	74.375	57.91045
1SV19EE015			0	20	20	19	59	20	20	20	20	20	100	1.6	1.6	1.6	1.6	1.6	4	4	4	4	4	4	65.6	25.6	25.6	25.6	44.6	75.4023	80	80	80	66.56716
1SV19EE016	13	12	25	13	13	14	40	16	16	16	16	16	80	2	2	2	2	2	4.4	4.4	4.4	4.4	4.4	4.4	64.4	22.4	19.4	22.4	48.4	74.02299	70	60.625	70	72.23881
1SV19EE017	15	15	30	20	20	20	60	20	20	20	20	20	100	2	2	2	2	2	7	7	7	7	7	7	84	29	29	29	64	96.55172	90.625	90.625	90.625	95.52239
1SV19EE018	15	15	30	20	20	20	60	20	20	20	20	20	100	2	2	2	2	2	5.4	5.4	5.4	5.4	5.4	5.4	82.4	27.4	27.4	27.4	62.4	94.71264	85.625	85.625	85.625	93.13433
1SV19EE019			0	20	20	19	59	0	0	0	0	0	0	1.8	1.8	1.8	1.8	1.8	4.2	4.2	4.2	4.2	4.2	4.2	26	6	6	6	25	29.88506	18.75	81.25	18.75	37.31343
1SV19EE020	14	14	28	20	20	19	59	20	20	20	20	20	100	2	2	2	2	2	5.4	5.4	5.4	5.4	5.4	5.4	81.4	27.4	27.4	27.4	60.4	93.56322	85.625	85.625	85.625	90.14925
1SV19ME001	15	15	30	20	20	20	60	20	20	20	20	20	100	2	2	2	2	2	5.4	5.4	5.4	5.4	5.4	5.4	82.4	27.4	27.4	27.4	62.4	94.71264	85.625	85.625	85.625	93.13433
1SV19ME002	14	13	27	20	20	20	60	10	10	10	11	11	52	2	2	2	2	2	5.6	5.6	5.6	5.6	5.6	5.6	61.6	17.6	27.6	18.6	51.6	70.8046	55	86.25	58.125	77.01493
1SV19ME003	15	14	29	20	20	20	60	20	20	20	20	20	100	2	2	2	2	2	4.2	4.2	4.2	4.2	4.2	4.2	81.2	26.2	26.2	26.2	60.2	93.33333	81.875	81.875	81.875	89.85075
1SV19ME004	14	11	25	20	20	19	59	20	20	20	20	20	100	1.2	1.2	1.2	1.2	1.2	3.4	3.4	3.4	3.4	3.4	3.4	78.6	24.6	24.6	24.6	54.6	90.34483	76.875	76.875	76.875	81.49254
1SV19ME005	15	15	30	20	19	19	58	20	20	20	20	20	100	0.4	0.4	0.4	0.4	0.4	4.4	4.4	4.4	4.4	4.4	4.4	79.8	24.8	23.8	24.8	58.8	91.72414	77.5	74.375	77.5	87.76119
1SV19ME006			0	20	20	20	60	20	20	20	20	20	100	1.6	1.6	1.6	1.6	1.6	6.2	6.2	6.2	6.2	6.2	6.2	67.8	27.8	27.8	27.8	47.8	77.93103	86.875	86.875	86.875	71.34328
1SV19ME008	15	15	30	20	20	20	60	20	20	20	20	20	100	2	2	2	2	2	6.2	6.2	6.2	6.2	6.2	6.2	83.2	28.2	28.2	28.2	63.2	95.63218	88.125	88.125	88.125	94.32836
1SV19ME010	14	11	25	20	20	19	59	20	20	20	20	20	100	1.2	1.2	1.2	1.2	1.2	4.8	4.8	4.8	4.8	4.8	4.8	80	26	26	26	56	91.95402	81.25	81.25	81.25	83.58209
1SV19ME011			0	12	12	12	36	14	14	14	15	15	72	1	1	1	1	1	3.2	3.2	3.2	3.2	3.2	3.2	44.2	18.2	16.2	19.2	31.2	50.8046	56.875	50.625	60	46.56716
1SV19ME012	13	13	26	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2	5.6	5.6	5.6	5.6	5.6	5.6	20.6	7.6	7.6	7.6	20.6	23.67816	23.75	23.75	23.75	30.74627
1SV19ME013	13	14	27	9	9	9	27	12	12	12	12	12	60	2	2	2	2	2	2.6	2.6	2.6	2.6	2.6	2.6	50.6	16.6	13.6	16.6	39.6	58.16092	51.875	42.5	51.875	59.10448
1SV19ME014	15	15	30	0	0	0	0	0	0	0	0	0	0	1.8	1.8	1.8	1.8	1.8	3.2	3.2	3.2	3.2	3.2	3.2	20	5	5	5	20	22.98851	15.625	15.625	15.625	29.85075
1SV19ME015	11	11	22	0	0	0	0	20	20	20	20	20	100	0.4	0.4	0.4	0.4	0.4	4	4	4	4	4	4	55.4	24.4	4.4	24.4	35.4	63.67816	76.25	13.75	76.25	52.83582
1SV19IS002	14	14	28	20	20	20	60	20	20	20	20	20	100	2	2	2	2	2	4.8	4.8	4.8	4.8	4.8	4.8	80.8	26.8	26.8	26.8	60.8	92.87356	83.75	83.75	83.75	90.74627
81.6986																																		
75.06944																																		
74.09722																																		
75.17361																																		
79.86733																																		

Anu HS
FACULTY

e.d
HOD

H.O.D
Dept. of Physics
S.I.E.T., TUMKUR -6.

Munish Channath
PRINCIPAL
PRINCIPAL
SHRIDEVI INSTITUTE OF
ENGINEERING AND TECHNOLOGY
TUMKUR - 572106.