



**MEENAKSHI CHANDRASEKARAN
COLLEGE OF ARTS AND SCIENCE**
(Affiliated to Bharathidasan University, Tiruchirappalli)
(UGC Recognized 2(f) & 12(B) Institution)

**Attainment of program outcomes and course outcomes
Course Outcome-Programme Outcome Mapping**

Department of Physics

PROGRAM OUTCOME

PO1	To understand the fundamentals of laws, principles and concepts.
PO2	To understand the structure, characteristics of various physical phenomena and their properties.
PO3	An ability to design analysis of circuit and interrupt data, testing of different electronics components and circuits.
PO4	To understand the implementation, Analysis fundamental process to recognizing experimental applying relevant law
PO5	The course built a foundation of various applied field and technology to enhance the student accordance ability & pe

**16SCCPH1-PROPERTIES OF MATTER AND ACOUSTICS
COURSE OUTCOME**

CO1	Study the different modulus of elasticity and determine the rigidity modulus and moment of inertia.
CO2	To understand the expression for bending moment and determination of young's modulus.
CO3	To understand the experimental study of surface tension and variation of surface tension.
CO4	To understand the fundamental process of Newton's law and recognizing Mayer's formula to this pr
CO5	To study the factors affecting the acoustics of building.

PO→ CO↓	PO1	PO2	PO3	PO4	PO5
CO1	2	2	0	1	0
CO2	1	2	0	2	0
CO3	0	2	2	2	2
CO4	3	1	1	2	2
CO5	1	2	2	0	1
Average	1.4	1.8	1	1.4	1

Internal Examination Mark Distribution for each Course outcome

CO	Internal(15)	Semir Assignm nt(5)
CO1	3	1
CO2	3	1
CO3	3	1
CO4	3	1
CO5	3	1
Total	15	5

S.NO	Register No	Name	CO1	CO2	CO3	CO4	CO5	Total	PERCENTAG
1	CB18S 439316	ABIRAMI.K	4	4	4	4	4	18	74
2	CB18S 439317	ABITHA.T	4	5	5	5	5	24	96
3	CB18S 439318	NAIMA.S	3	3	3	3	4	16	64
4	CB18S 439320	ARCHANA.A	3	4	3	5	3	15	60
5	CB18S 439321	ARCHANA.S	4	3	3	5	4	19	76
6	CB18S 439323	ELAKKIYA.V	4	4	4	4	4	20	80

7	CB18S 439324	ELAVARASIK	5	5	5	3	3	21	84
8	CB18S 439325	HARISRLS	5	4	4	3	3	19	76
9	CB18S 439326	INIYA.T	3	4	3	3	4	17	68
10	CB18S 439328	KAVITHA.B	5	5	4	5	5	24	96
11	CB18S 439329	JOTHIR	4	5	5	5	5	24	96
12	CB18S 439330	MALAVIHA.M	5	5	4	5	5	24	96
13	CB18S 439331	MALINI.V	3	5	5	5	5	23	92
14	CB18S 439332	MEGA.K	4	4	4	4	3	18	74
15	CB18S 439333	NIROJA.S	3	5	5	5	5	23	92
16	CB18S 439335	NIVETHA.S	3	3	3	3	4	16	64
17	CB18S 439336	PAVITHRA.P	3	3	3	3	3	15	60
18	CB18S 439337	MAIESHA.I	4	3	3	5	4	19	76
19	CB18S 439338	RAJASRID	4	4	4	4	4	20	80
20	CB18S 439339	RAKAVIM	5	5	5	3	3	21	84
21	CB18S 439340	SARAYU.K	5	4	4	3	3	19	76
22	CB18S 439341	SOWMIYA.P	3	3	3	3	3	15	60
23	CB18S 439342	VINITHA.V	5	5	4	5	5	24	96
24	CB18S 439343	VINOTHINIM	3	5	5	5	5	23	92
Average			3.80	4.00	3.90	3.90	3.90		

Expected Attainment in each CO - 85%

CO	Internal Exam	External Exam	Total	%
CO1	3.8	75	78.8	92.71
CO2	4	75	79	92.94
CO3	3.9	75	78.9	92.82
CO4	3.9	75	78.9	92.82
CO5	3.9	75	78.9	92.82

COURSE ATTAINMENT IN B.SC PHYSICS

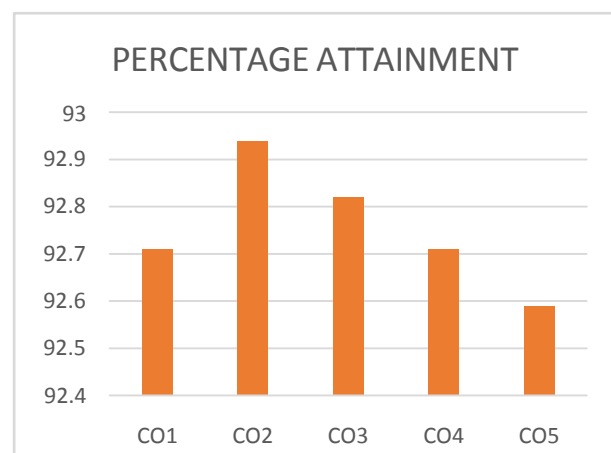
COURSE ATTAINMENT IN B.SC PHYSICS

SUBJECT NAME : PROPERTIES OF MATTER & ACOUSTICS

SUBJECT CODE : 16SCCPH1

NO OF STUDENTS:24

COURSE	PERCENTAGE ATTAINMENT
CO1	92.71
CO2	92.94
CO3	92.82
CO4	92.82
CO5	92.82



COURSE ATTAINMENT IN B.SC PHYSICS

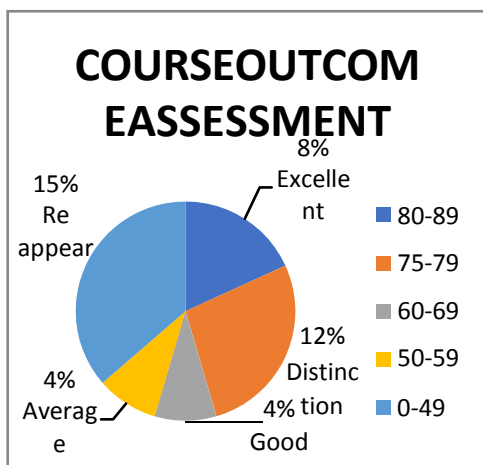
SUBJECT NAME : PROPERTIES OF MATTER & ACOUSTICS

SUBJECT CODE : 16SCCPH1

NO OF STUDENTS: 24

Course Outcome Assessment		
Category (Marks)	Number of Students	Status
90-100	0	Outstanding
80-89	2	Excellent
75-79	3	Distinction
70-74	0	Very Good
60-69	1	Good
50-59	1	Average
0-49	4	Reappear

Course Outcome Assessment		
CATEGORY	PERCENTAGE	STATUS
80-89	7.69	Excellent
75-79	11.54	Distinction
60-69	3.85	Good
50-59	3.85	Average
0-49	15.38	Reappear



PROGRAM OUTCOME

PO1	To understand the fundamentals of laws, principles and concepts.
PO2	To understand the structure, characteristics of various physical phenomena and their properties.
PO3	An ability to design analysis of circuit and interpret data, testing of different electronics components and
PO4	To understand the implementation, Analysis fundamental process to recognizing experimental applying
PO5	The course built a foundation of various applied field and technology to enhance the student accordance

16SCCPH2 - MECHANICS

COURSE OUTCOME

CO1	To understand the fundamentals laws of impact, particle projected in any direction & concept of Direct &
CO2	To understand the expression for normal acceleration & variation of g with altitude, latitude and depth
CO3	To understand the determine the Newton's law of gravitation and analysis of gravitational potential
CO4	To understand laws of friction, fundamental process of moment of inertia recognizing Kater's pendulum

CO5	The course foundation of centre of gravity in accordance with atmospheric pressure.
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PO\CO↓	PO1	PO2	PO3	PO4	PO5
CO1	3	2	0	1	0
CO2	3	3	0	2	0
CO3	2	2	2	3	2
CO4	0	2	3	3	3
CO5	2	3	3	0	2
Aver	2	2.4	1.6	1.8	1.4

Internal Examination Mark Distribution for each Course outcome

CO	Internal	Seminar	Assignment
CO1	3	1	1
CO2	3	1	1
CO3	3	1	1
CO4	3	1	1
CO5	3	1	1
Total	15	5	5

S.NO	Name	Register No	CO1	CO2	CO3	CO4	CO5	Total	PERCENTAGE
1	ABIRAMI.K	CB18S 439316	4	4	4	4	4	20	80
2	ABITHA.T	CB18S 439317	5	5	5	5	4	23	92
3	NAIMA.S	CB18S 439318	5	5	4	3	3	20	80
4	ARCHANA.A	CB18S 439320	3	3	4	3	3	16	64
5	ARCHANA.S	CB18S 439321	3	5	3	4	4	19	76
6	ELAKKIYA.V	CB18S 439323	4	4	5	4	4	21	84
7	ELAVARASLK	CB18S 439324							
8	HARISRIS	CB18S 439325	5	4	4	4	4	21	84
9	INIYA.T	CB18S 439326	4	4	4	4	3	19	76
10	KAVITHA.B	CB18S 439328	4	4	4	4	3	19	76
11	JOTHLR	CB18S 439329	5	5	5	5	4	24	96
12	MALAVIHA.M	CB18S 439330	4	5	5	4	5	23	92
13	MALINI.V	CB18S 439331	4	4	4	4	4	20	80
14	MEGA.K	CB18S 439332	5	5	5	5	4	23	92
15	NIROJA.S	CB18S 439333	5	5	4	3	3	20	80
16	NIVETHA.S	CB18S 439335	3	3	3	4	3	16	64
17	PAVITHRA.P	CB18S 439336	3	5	3	4	4	19	76
18	MAIESHA.I	CB18S 439337	4	4	5	4	4	21	84
19	RAJASRLD	CB18S 439338							
20	RAKAVLM	CB18S 439339	5	4	4	4	4	21	84
21	SARAYU.K	CB18S 439340	4	4	4	4	3	19	76
22	SOWMIYA.P	CB18S 439341	4	4	4	4	3	19	76
23	VINITHA.V	CB18S 439342	5	5	5	5	4	24	96
24	VINOTHINI.M	CB18S 439343	4	5	5	4	5	23	92
	Average		4.20	4.40	4.20	4.10	3.70		

Expected Attainment in each CO - 85%

CO	Internal Exam	External Exam	Total	%
CO1	4.2	75	79.1	93.06
CO2	4.4	75	79.4	93.41
CO3	4.2	75	79.2	93.18

CO4	4.1	75	79.1	93.06
CO5	3.7	75	78.7	92.59

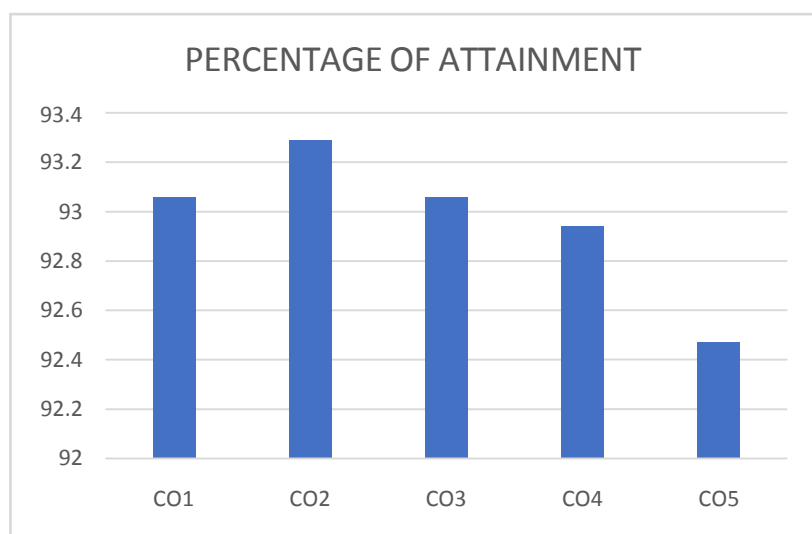
COURSE ATTAINMENT FOR B.Sc Physics

SUBJECT NAME:MECHANICS

SUBJECT CODE :16SCCPH2

NO.OF STUDENTS :24

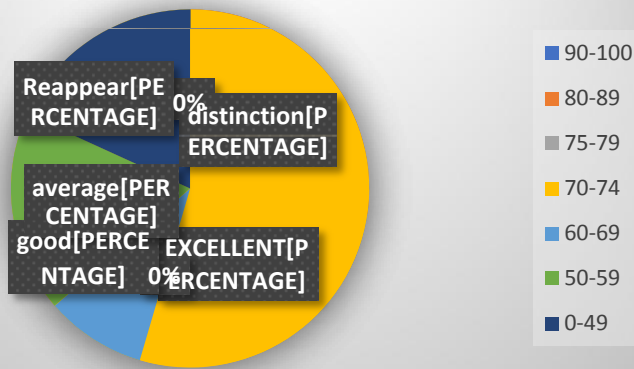
OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.06
CO2	93.41
CO3	93.18
CO4	93.06
CO5	92.59



COURSE OUTCOME ASSESSMENT		
CATEGORY	NO.OF STUDEN	STATUS
90-100	0	OUTSTANDING
80-89	3	EXCELLENT
75-79	3	DISTINCTION
70-74	0	VERY GOOD
60-69	1	GOOD
50-59	2	AVERAGE
0-49	2	RE-APPEAR

COURSE OUTCOME ASSESSMENT		
CATEGORY	PERCENTAGE	STATUS
80-89	27.27	EXCELLENT
75-79	27.27	DISTINCTION
60-69	9.09	GOOD
50-59	18.18	AVERAGE
0-49	18.18	RE-APPEAR

course outcome assessment



PROGRAM OUTCOME

PO1	To understand the fundamentals of laws, principles and concepts.
PO2	To understand the structure, characteristics of various physical phenomena and their properties.
PO3	An ability to design analysis of circuit and interrupt data, testing of different electronics component
PO4	To understand the implementation, Analysis fundamental process to recognizing experimental apply
PO5	The course built a foundation of various applied field and technology to enhance the student accord

16SCCPH7 - ELECTRONICS

COURSE OUTCOME

CO1	To understand the features of semiconductor and zener diode and their fundamental concepts
CO2	Design different types of oscillator.
CO3	Understand the working of basic gates.
CO4	Choose flip flop for a particular application.
CO5	Design operational amplifier circuits and to analyse their properties.

PO→	PO1	PO2	PO3	PO4	PO5
CO↓					
CO1	3	3	0	1	2
CO2	1	3	2	2	1
CO3	0	1	1	3	2
CO4	0	1	2	1	3
CO5	0	0	0	2	2
Average	0.8	1.6	1	1.8	2

Internal Examination Mark Distribution for each Course outcome

CO	Internal(15)	Seminar(5)	Assignment(5)
CO1	3	1	1
CO2	3	1	1
CO3	3	1	1
CO4	3	1	1
CO5	3	1	1
Total	15	5	5

S.NO	Register No	Name	CO1	CO2	CO3	CO4	CO5	Total	PERCENTAGE
1	CB18S 439316	ABIRAMI.K	4	3	4	4	3	18	72
2	CB18S 439317	ABITHA.T	3	3	4	4	4	18	72
3	CB18S 439318	NAIMA.S	3	4	4	3	3	17	68
4	CB18S 439320	ARCHANA.A	3	4	4	4	4	19	76
5	CB18S 439321	ARCHANA.S	4	4	4	4	4	20	80
6	CB18S 439323	ELAKKIYA.V	5	5	3	5	5	23	92
7	CB18S 439324	ELAVARASI.K	5	5	5	5	5	25	100
8	CB18S 439325	HARISRI.S	4	3	4	4	3	18	72
9	CB18S 439326	INIYA.T	5	5	4	5	5	24	96
10	CB18S 439328	KAVITHA.B	3	3	3	4	4	17	68
11	CB18S 439329	JOTHL.R	4	4	4	4	4	20	80
12	CB18S 439330	MALAVIHA.M	4	5	5	4	4	22	88
13	CB18S 439331	MALINI.V	4	4	4	4	3	19	76
14	CB18S 439332	MEGA.K	5	4	5	4	4	22	88
15	CB18S 439333	NIROJA.S	4	4	5	5	5	23	92
16	CB18S 439335	NIVETHA.S	4	3	4	3	3	17	68
17	CB18S 439336	PAVITHRA.P	4	3	3	4	4	18	72
18	CB18S 439337	MAIESHA.I	4	3	4	4	4	19	76
19	CB18S 439338	RAJASRI.D	4	4	3	3	3	17	68
20	CB18S 439339	RAKAVI.M	4	3	4	4	4	19	76
21	CB18S 439340	SARAYU.K	4	3	4	4	4	19	76
22	CB18S 439341	SOWMIYA.P	3	4	3	3	3	16	64
23	CB18S 439342	VINITHA.V	3	3	3	4	4	17	68
24	CB18S 439343	VINOTHINI.M	4	4	4	5	4	21	84
Average			3.92	3.75	3.92	4.04	3.88		

Expected Attainment in each CO - 85%

CO	Internal Exam	External Exam	Total	%
CO1	3.92	75.00	78.48	92.33
CO2	3.75	75.00	78.45	92.29
CO3	3.92	75.00	78.64	92.52
CO4	4.04	75.00	78.85	92.76
CO5	3.88	75.00	78.73	92.62

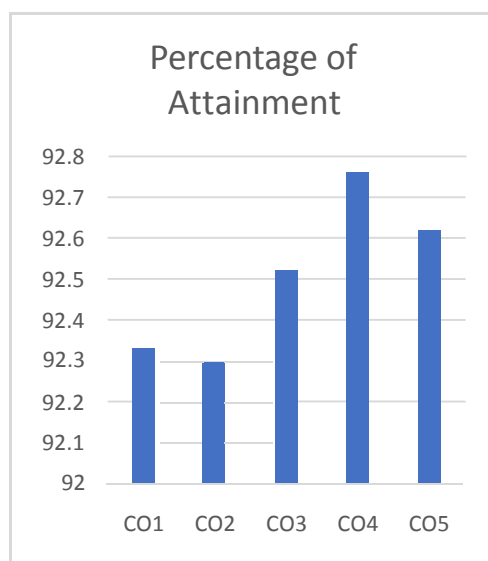
COURSE ATTAINMENT FOR B.Sc PHYSICS

SUBJECT NAME:ELECTRONI

SUBJECT CODE:16SCCPH7

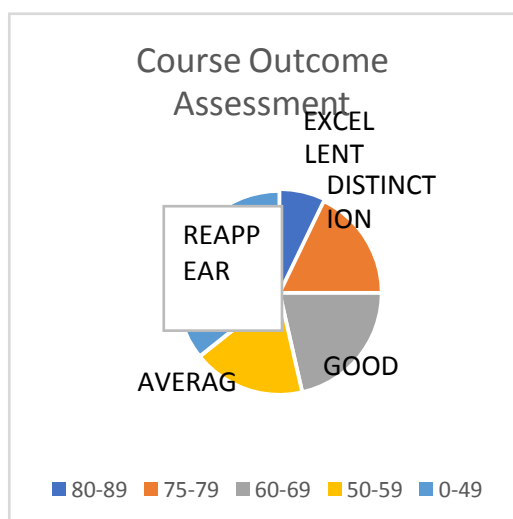
NO OF STUDENTS:24

Course Outcome	Percentage of Attainment
CO1	92.33
CO2	92.29
CO3	92.52
CO4	92.76
CO5	92.62



Course Outcome Assessment		
Category (Mark)	Number of Students	Status
90-100	0	Outstanding
80-89	2	Excellent
75-79	5	Distinction
70-74	5	Very Good
60-69	6	Good
50-59	5	Average
0-49	10	Reappear

Course Outcome Assessment		
CATEGORY	PERCENTAGE	STATUS
80-89	7.69	Excellent
75-79	19.23	Distinction
60-69	23.08	Good
50-59	19.23	Average
0-49	38.46	Reappear



16SCCPH5 - Optics**COURSE OUTCOME**

CO1	Study different types of Spherical aberration and Chromatic aberration in a lens
CO2	Fundamental of Stationary waves and its applications of interference

O→	PO1	PO2	PO3	PO4	P05
CO↓					
CO1	1	2	0	1	1
CO2	2	2	0	2	1
CO3	2	2	1	1	2
CO4	2	3	2	3	2
CO5	3	3	0	2	2
Average	2	2.4	0.6	1.8	1.6

Internal Examination Mark Distribution for each Course outcome

CO	Internal(15)	Seminar(5)	Assignment(5)
CO1	3	1	1
CO2	3	1	1
CO3	3	1	1
CO4	3	1	1
CO5	3	1	1
Total	15	5	5

CO3	To study differentiate Fresnel's diffraction and Fraunhofer diffraction.	
CO4	To understand fundamental process of double image polarizing prism and experim	
CO5	To understand various types of Eyepieces and accordance with microscope and Te	

S.NO	Name	Register No	CO1	CO2	CO3	CO4	CO5	Total	PERCENTAGE
1	ABIRAM.LK	CB18S 439316	4	3	3	3	3	16	64
2	ABITHA.T	CB18S 439317	3	4	3	3	3	16	64
3	AHAMED NAIMA.S	CB18S 439318	3	3	4	3	3	16	64
4	ARCHANA.A	CB18S 439320	3	3	4	3	3	16	64
5	ARCHANA.S	CB18S 439321	4	3	3	4	3	17	68
6	ELAKKIYA.V	CB18S 439323	5	4	3	4	4	20	80
7	ELAVARAS.LK	CB18S 439324	4	4	5	4	4	21	84
8	HARIS.RLS	CB18S 439325	3	3	3	3	3	15	60
9	INIYA.T	CB18S 439326	4	5	4	4	4	21	84
10	KAVITHA.B	CB18S 439328	3	3	4	3	3	16	64
11	JOTHL.R	CB18S 439329	3	4	3	3	3	16	64
12	MALAVIHA.M	CB18S 439330	4	3	4	3	4	18	72
13	MALINI.V	CB18S 439331	3	4	3	3	3	16	64
14	MEGA.K	CB18S 439332	3	4	3	4	3	17	68
15	NIROJA.S	CB18S 439333	4	4	4	4	4	20	80
16	NIVETHA.S	CB18S 439335	4	3	3	3	3	16	64
17	PAVITHRA.P	CB18S 439336	3	3	3	3	3	15	60
18	MAIESHA.I	CB18S 439337	4	3	3	4	4	18	72
19	RAJAS.RLD	CB18S 439338	3	3	3	3	3	15	60
20	RAKAVI.M	CB18S 439339	3	4	3	3	3	16	64
21	SARAYU.K	CB18S 439340	3	3	3	3	4	16	64
22	SOWMIYA.P	CB18S 439341	3	4	3	3	4	17	68
23	VINITHA.V	CB18S 439342	3	3	3	4	3	16	64
24	VINOTHINI.M	CB18S 439343	3	3	3	4	3	16	64
25	Average		3.42	3.46	3.33	3.38	3.33		

Expected Attainment in each CO - 85%

28	CO	Internal Exam	External Exam	Total	%
29	CO1	3.42	75	78.4	92.26
30	CO2	3.46	75	78.5	92.31
31	CO3	3.33	75	78.3	92.15
32	CO4	3.38	75	78.4	92.21
33	CO5	3.33	75	78.3	92.15

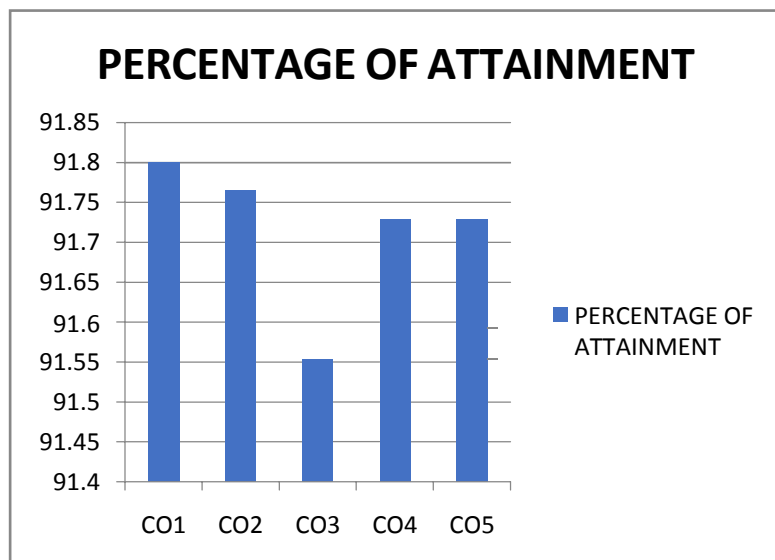
COURSE ATTAINMENT FOR B.Sc Physics

SUBJECT NOptics

SUBJECT C16SCCPH5

NO.OF STU24

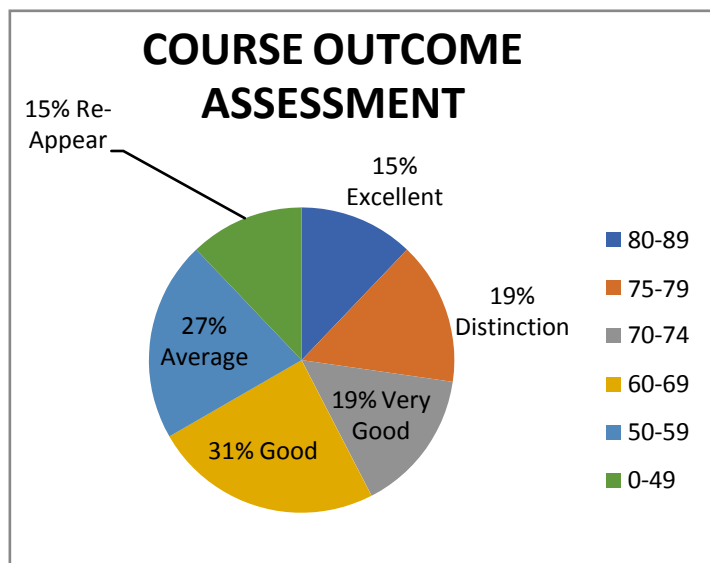
COURSE OUTCOM	PERCENTAGE OF
CO1	92.26
CO2	92.31
CO3	92.15
CO4	92.21
CO5	92.15



COURSE ATTAINMENT FOR B.Sc Physics
 SUBJECT NOptics
 SUBJECT C16SCCPH5
 NO.OF STU24

COURSE OUTCOME ASSESSMENT		
ATEGORY (MA.	OF STUDEN	STATUS
90-100	0	OUTSTANDING
80-89	4	EXCELLENT
75-79	5	DISTINCTION
70-74	5	VERY GOOD
60-69	8	GOOD
50-59	7	AVERAGE
0-49	4	RE-APPEAR

CATEGORY	PERCENTAGE	STATUS
80-89	15.38	EXCELLENT
75-79	19.23	DISTINCTION
70-74	19.23	VERY GOOD
60-69	30.77	GOOD
50-59	26.92	AVERAGE
0-49	15.38	RE-APPEAR



PROGRAM OUTCOME

PO1	To understand the fundamentals of laws, principles and concepts.
PO2	To understand the structure, characteristics of various physical phenomena and their
PO3	An ability to design analysis of circuit and interpret data, testing of different
PO4	To understand the implementation, Analysis fundamental process to recognizing
PO5	The course built a foundation of various applied field and technology to enhance

16SCCPH6 - Atomic and Molecular physics

COURSE OUTCOME

CO1	Study properties of rays, production, charge calculation by experimental.
CO2	Fundamental of atom, structure, principles and effect of experiments.
CO3	Production and detection of x-rays, Laws of x-rays and characteristics of x-rays.
CO4	Properties of metals, photo electric effect, experimental arrangement and verification
CO5	LASER properties, concepts, experimental and applications.

PO→ CO↓	PO1	PO2	PO3	PO4	PO5
CO1	1	2	0	1	1
CO2	3	3	0	2	1
CO3	2	1	1	1	2
CO4	2	3	2	3	3
CO5	3	3	0	2	2
Average	2.2	2.4	0.6	1.8	1.8

Internal Examination Mark Distribution for each Course outcome

CO	Internal	Examination	Assignment
CO1	3	1	1

CO2	3	1	1
CO3	3	1	1
CO4	3	1	1
CO5	3	1	1
Total	15	5	5

S.No	Register No	Name	CO1	CO2	CO3	CO4	CO5	Total	PERCENTAGE
1	CB18S 439316	ABIRAMI.K	4	3	3	3	3	16	64
2	CB18S 439317	ABITHA.T	3	4	3	3	3	16	64
3	CB18S 439318	AHAMED NAIMA.S	3	3	4	3	4	17	68
4	CB18S 439320	ARCHANA.A	3	3	4	3	3	16	64
5	CB18S 439321	ARCHANA.S	3	3	3	4	3	16	64
6	CB18S 439323	ELAKKIYA.V	5	4	4	4	4	21	84
7	CB18S 439324	ELAVARASI.K	4	4	5	4	4	21	84
8	CB18S 439325	HARISRI.S	3	3	3	3	3	15	60
9	CB18S 439326	NIYA.T	4	5	4	4	4	21	84
10	CB18S 439328	KAVITHA.B	3	3	4	3	3	16	64
11	CB18S 439329	POTHLR	3	3	3	3	3	15	60
12	CB18S 439330	MALAVIHA.M	4	3	4	3	4	18	72
13	CB18S 439331	MALINI.V	3	4	3	3	3	16	64
14	CB18S 439332	MEGA.K	3	4	3	4	3	17	68
15	CB18S 439333	NIROJA.S	4	4	4	4	4	20	80
16	CB18S 439335	NIVETHA.S	3	3	3	4	3	16	64
17	CB18S 439336	PAVITHRA.P	3	3	3	3	3	15	60
18	CB18S 439337	RAAHATH MAIESHA.I	4	3	3	4	4	18	72
19	CB18S 439338	RAJASRI.D	4	3	3	3	3	16	64
20	CB18S 439339	RAKAVLM	4	3	3	3	3	16	64
21	CB18S 439340	SARAYU.K	3	3	3	3	4	16	64
22	CB18S 439341	SOWMIYA.P	4	3	3	3	3	16	64
23	CB18S 439342	VINITHA.V	3	3	3	4	3	16	64
24	CB18S 439343	VINOTHINI.M	3	3	3	4	3	16	64
Average			3.46	3.33	3.38	3.42	3.33		

Expected Attainment in each CO - 85%

CO	Internal Exam	External	Total	%
CO1	3.46	75	78.46	92.31
CO2	3.33	75	78.33	92.15
CO3	3.38	75	78.38	92.21
CO4	3.42	75	78.42	92.26
CO5	3.33	75	78.33	92.15

Course Attainment for B.Sc Physics

28 Subject Name: Atomic and Molecular Physics

29 Subject Code: 16SCCPH6

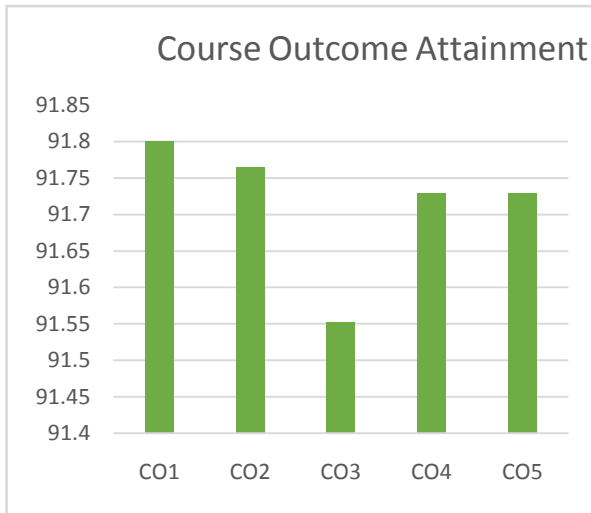
30 Number of Students: 24

31

32 Course Outcome Percentage of Attainment

33 CO1	92.31
CO2	92.15

CO3	92.21
CO4	92.26
CO5	92.15



Course Outcome Assessment		
Category (Mark	mber of Stude	Status
90-100	0	Outstanding
80-89	0	Excellent
70-79	0	Distinction
60-69	7	Very Good
50-59	10	Good
40-49	13	Average
0-39	3	Reappear

Course Outcome Assessment Percentage		
Category (Mark	Percentage	Status
60-69	21.21	Very Good
50-59	30.30	Good
40-49	39.39	Average
0-39	9.09	Reappear

Course Outcome Assessment



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