



**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 circuit.
PO4	To understand the implementation, Analysis fundamental process to recognizing experimental applying relevant.
PO5	The course built a foundation of various applied field and technology to enhance the student accordance ability.

Staff Name Dr.S.SATHEESKUMAR

16SCCPH3- Thermal physics

COURSE OUTCOME

CO1	Learn fundamental laws, specific heat of matter.
CO2	Known about Laws of heat, properties of metals and uses conclusion of heat.
CO3	Learn Laws of Radiation, Experiment, conclusion of temperature of sun, uses of solar energy.
CO4	Principles of law Temperature, experimental, application of law temperature, cooling energy
CO5	Laws of Thermodynamics, change of reversible and irreversible processes, Thermodynamical relations.

Course Code &	PO→	PO1	PO2	PO3	PO4	PO5
	CO↓					
16SCCPH3 Thermal physics	CO1	0	2	0	0	2
	CO2	2	2	0	1	1
	CO3	0	0	1	2	1
	CO4	1	1	0	1	2
	CO5	0	1	1	0	0
	Average	0.6	1.2	0.4	0.8	1.2

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

Register No	Name	CO1	CO2	CO3	CO4	CO5	Total	PERCENTAGE
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CB19S 44255	ABINAYA.K	4	5	5	5	5	24	96
CB19S 44255	ANUSHIYA.U	5	4	5	4	4	22	88
CB19S 44255	BAVITHRA.N	4	4	4	4	4	20	80
CB19S 44255	ELAKKIYA.R	5	5	5	5	4	23	92
CB19S 44256	KALEESWARL.S	4	4	4	4	4	20	80
CB19S 44256	KARTHIKA.V	4	4	4	5	5	22	88
CB19S 44256	KOPPERUNDEVLM	5	5	5	4	4	23	92
CB19S 44256	LAVANYA.I	4	4	4	4	4	20	80
CB19S 44256	MAHALAKSHMIT	3	3	4	4	4	18	72
CB19S 44256	NAGALAKSMLS	5	4	5	4	4	22	88
CB19S 44256	NARUMUGALR	5	5	5	5	4	24	96
CB19S 44256	PRAVEENA.R	4	4	4	4	4	20	80
CB19S 44256	PRIYA.V	5	5	5	5	5	25	100
CB19S 44256	PRIYADHARSHINLG	4	4	4	4	4	20	80
CB19S 44257	PRIYATHATCHINLM	4	4	4	5	5	22	88
CB19S 44257	SINDHU.N	5	5	5	4	4	23	92
CB19S 44257	SINDHUJA.T	4	4	4	4	4	20	80
CB19S 44257	SOWMIYA.S	3	3	4	4	4	18	72
CB19S 44257	THULASLM	5	4	5	4	4	22	88
CB19S 44257	VENNILA.B	5	5	5	5	4	24	96
Average		4.373684211	4.131579	4.468421053	4.29474	4.089473684		

Expected Attainment in each CO - 85%

CO	Internal Exam	External Exam	Total	%
CO1	4.37	75	79.37	93.38
CO2	4.13	75	79.13	93.09
CO3	4.47	75	79.47	93.49
CO4	4.29	75	79.29	93.28
CO5	4.08	75	79.08	93.04

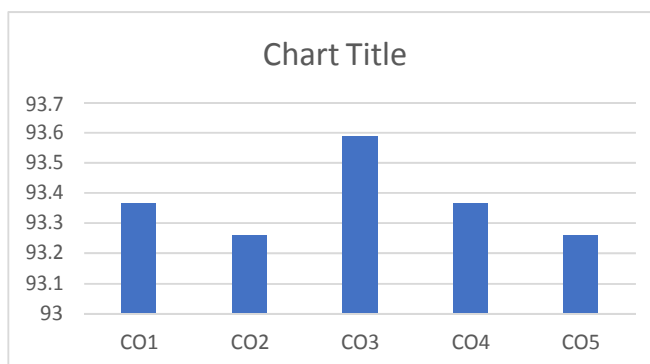
Course Attainment for B.Sc Physics

Subject Name: Thermal Physics

Subject Code: 16SCCPH3

Number of Students:20

Course Out	Percentage of Attainment
CO1	93.38
CO2	93.09
CO3	93.49
CO4	93.28
CO5	93.04



Course Attainment for B.Sc Physics

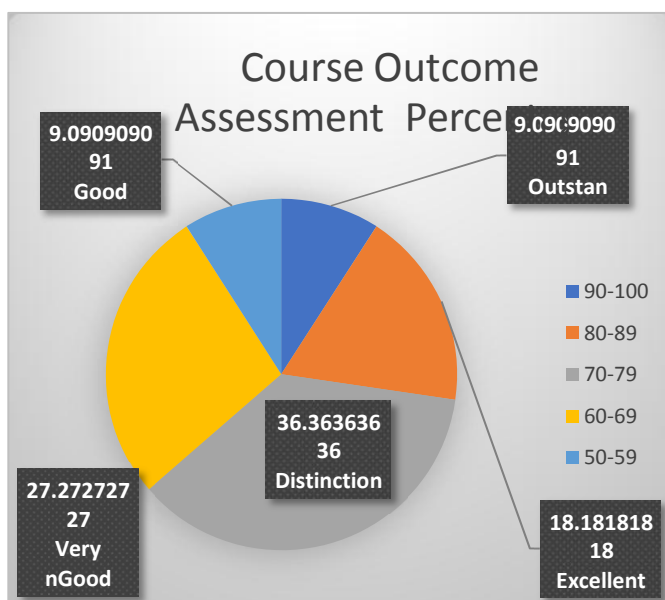
Subject Name: Thermal Physics

Subject Code: 16SCCPH3

Number of Students: 20

Course Outcome Assessment		
Category (Marks)	Number of Students	Status
90-100	1	Outstanding
80-89	2	Excellent
70-79	4	Distinction
60-69	3	Very Good
50-59	1	Good
40-49	0	Average
0-39	0	Reappear

Course Outcome Assessment Percentage		
Category (Marks)	Percentage	Status
90-100	9.09	Outstanding
80-89	18.18	Excellent
70-79	36.36	Distinction
60-69	27.27	Very Good
50-59	9.09	Good



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, applications.
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	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

Register No	Name	CO1	CO2	CO3	CO4	CO5	Total	PERCENTAGE
CB18S 43931	ABIRAMI.K	3	5	3	5	3	19	76
CB18S 43931	ABITHA.T	4	4	5	5	5	23	92
CB18S 43932	AHAMED NAIMA.S	5	3	5	3	3	19	76
CB18S 43932	ARCHANA.A	5	4	3	4	4	20	80
CB18S 43932	ARCHANA.S	4	5	4	5	4	22	88
CB18S 43932	ELAKKIYA.V	5	3	4	4	4	20	80
CB18S 43932	ELAVARASI.K	4	5	4	4	4	21	84
CB18S 43932	HARISRI.S	4	4	5	5	4	22	88
CB18S 43932	INIYA.T	4	4	3	4	5	20	80
CB18S 43932	KAVITHA.B	5	5	5	5	4	24	96
CB18S 43933	MAHARA JOTHI.R	5	4	5	4	5	23	92
CB18S 43933	MALAVIHA.M	3	5	3	5	3	19	76
CB18S 43933	MALINI.V	3	5	3	5	3	19	76
CB18S 43933	MEGA.K	4	4	5	5	5	23	92
CB18S 43933	NIROJA.S	5	3	5	3	3	19	76
CB18S 43933	NIVETHA.S	5	4	3	4	4	20	80
CB18S 43933	PAVITHRA.P	4	5	4	5	4	22	88
CB18S 43933	RAAHATH MAIESHA.I	5	3	4	4	4	20	80
CB18S 43933	RAJASRI.D	4	5	4	4	4	21	84
CB18S 43934	RAKAVI.M	4	4	5	5	4	22	88
CB18S 43934	SARAYU.K	4	4	3	4	5	20	80
CB18S 43934	SOWMIYA.P	5	5	5	5	4	24	96
CB18S 43934	VINITHA.V	5	4	5	4	5	23	92
Average		4.36	4.18	4.18	4.36	4.09		

Expected Attainment in each CO - 85%

CO	Internal Exam	External Exam	Total	%

CO1	4.36	75	79.36	93.36
CO2	4.18	75	79.18	93.15
CO3	4.18	75	79.18	93.15
CO4	4.36	75	79.36	93.36
CO5	4.09	75	79.09	93.05

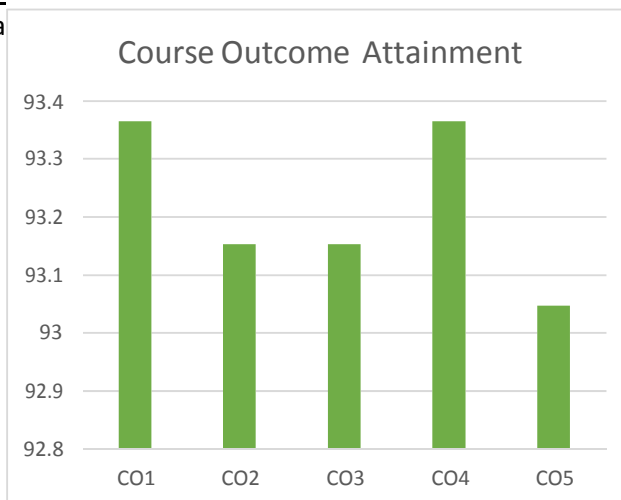
Course Attainment for B.Sc Physics

Subject Name: Atomic and Molecular Physics

Subject Code: 16SCCPH6

Number of Students: 23

Course Outcome	Percentage of Attainment
CO1	93.36
CO2	93.15
CO3	93.15
CO4	93.36
CO5	93.05



Course Attainment for B.Sc Physics

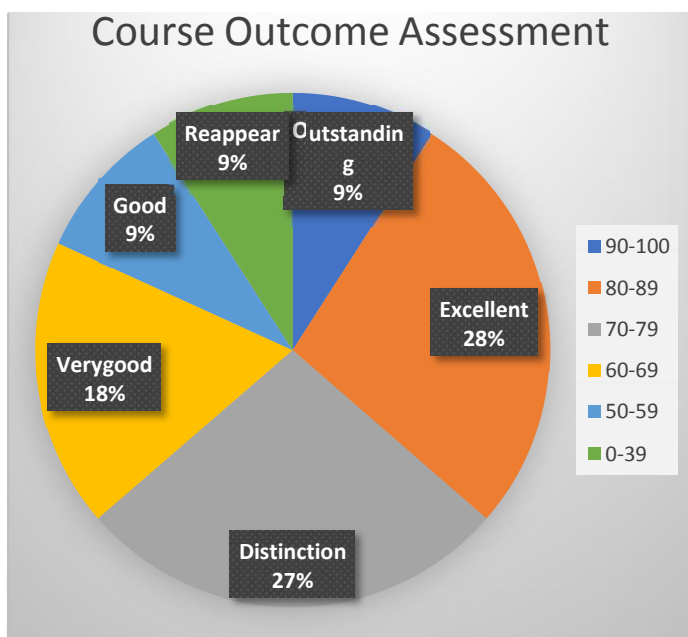
Subject Name: Atomic and Molecular Physics

Subject Code: 16SCCPH6

Number of Students: 11

Course Outcome Assessment		
Category (Marks)	Number of Students	Status
90-100	1	Outstanding
80-89	3	Excellent
70-79	3	Distinction
60-69	2	Very Good
50-59	1	Good
40-49	0	Average
0-39	1	Reappear

Course Outcome Assessment Percentage		
Category (Marks)	Percentage	Status
90-100	9.09	Outstanding
80-89	27.27	Excellent
70-79	27.27	Distinction
60-69	18.18	Very Good
50-59	9.09	Good
0-39	9.09	Reappear



16SCCPH4- ELECTRICITY,MAGNETISM AND ELECTROMAGNETISM

COURSE OUTCOME

CO1	Coulombs law, Gauss's Law, Principle of Capacity and Loss of Energy Calculation
CO2	Critical Law,Kirchhoff's Law,Calibration of Ammeter and Voltmeter
CO3	Laws of Electromagnetic indution,Self and Mutual indution Decay of Current in a c
CO4	Series Circuit,Q-factor Calculation, Power in AC Circuits and Ueses of Transformers
CO5	Propertites of magnetic matrial ,Energy loss due to magnetic.

Course Code & Course Code	PO→	PO1	PO2	PO3	PO4	PO5
	CO↓					
16SCCPH4- ELECTRICITY,MAGN ETISM AND ELECTROMAGNETIS M	CO1	2	0	1	1	0
	CO2	2	1	1	1	1
	CO3	1	0	0	0	1
	CO4	1	1	1	0	2
	CO5	0	2	0	1	1
	Average		1.2	0.8	0.6	0.6

Internal Examination Mark Distribution for each Course outcom

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	Register No	Name	CO1	CO2	CO3	CO4	CO5	Total	PERCENTAGE
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1	CB19S 442556	ABINAYA.K	5	5	4	4	4	23	92
2	CB19S 442557	ANUSHIYA.U	4	4	4	4	4	20	80
3	CB19S 442558	BAVITHRA.N	4	4	4	5	3	20	80
4	CB19S 442559	ELAKKIYA.R	5	5	5	5	4	24	96
5	CB19S 442560	KALEESWARIS	3	5	4	4	4	20	80
6	CB19S 442561	KARTHIKA.V	5	5	4	4	4	22	88
7	CB19S 442562	KOPPERUNDEV I.M	5	4	4	4	4	21	84
8	CB19S 442563	LAVANYA.I	5	5	4	4	4	22	88
9	CB19S 442564	MAHALAKSHM I.T	5	4	4	4	4	21	84
10	CB19S 442565	NAGALAKSMLS	5	5	5	4	4	23	92
11	CB19S 442566	NARUMUGAL.R	4	5	5	5	3	22	88
12	CB19S 442567	PRAVEENA.R	4	4	4	5	3	20	80
13	CB19S 442568	PRIYA.V	5	5	5	5	4	24	96
14	CB19S 442569	PRIYADHARSHI N.I.G	3	5	4	4	4	20	80
15	CB19S 442570	PRIYATHATCHI N.I.M	5	5	4	4	4	22	88
16	CB19S 442571	SINDHU.N	5	4	4	4	4	21	84
17	CB19S 442572	SINDHUJA.T	5	5	4	4	4	22	88
18	CB19S 442573	SOWMIYA.S	5	4	4	4	4	21	84
19	CB19S 442575	THULASIM	5	5	5	4	4	23	92
20	CB19S 442576	VENNILA.B	4	5	5	5	3	22	88
Average			4.55	4.73	4.45	4.36	3.73		

Expected Attainment in each CO - 85%

CO	Internal Exam	External Exam	Total	%
CO1	4.55	75	79.55	93.59
CO2	4.64	75	79.64	93.69
CO3	4.27	75	79.27	93.26
CO4	4.27	75	79.27	93.26
CO5	3.82	75	78.82	92.73

Course Attainment for B.Sc Physics

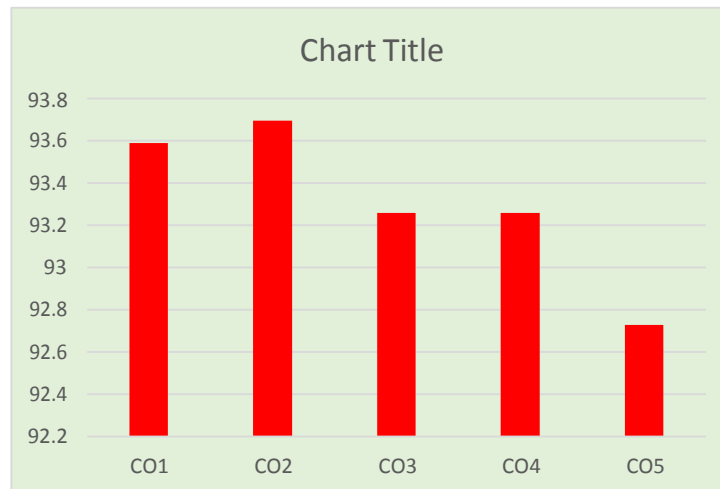
Subject Name: ELECTRICITY,MAGNETISM AND ELECTROMAGNETISM

Subject Code: 16SCCPH4

Number of Students: 20

Course Outcome	Percentage of Attainment
CO1	93.59
CO2	93.69
CO3	93.26

CO4	93.26
CO5	92.73



Course Attainment for B.Sc Physics

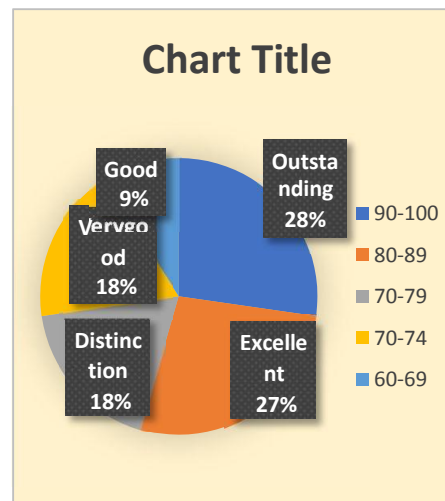
Subject Name: ELECTRICITY, MAGNETISM AND ELECTROMAGNETISM

Subject Code: 16SCCPH4

Number of Students: 20

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

Course Outcome Assessment Percent		
Category (Mark)	Percentage	Status
90-100	27.27	Outstanding
80-89	27.27	Excellent
70-79	18.18	Distinction
70-74	18.18	Very Good
60-69	9.09	Good



16SCCPH8- Nuclear physics

COURSE OUTCOME

CO1	The basic nuclear properties, Nuclear models
CO2	Radioactive decay law, types of decay and properties of neutrino.
CO3	Describe particle detectors and accelerators.
CO4	Nuclear reactions, conservation laws, Q-value calculations, Nuclear reactor.
CO5	Elementary particles, conservation laws, Quark model.

PO→					
CO↓	PO1	PO2	PO3	PO4	PO5
CO1	0	2	0	0	2
CO2	2	2	0	1	1
CO3	0	0	1	2	1
CO4	1	1	0	1	2
CO5	0	1	1	0	0
Average	0.6	1.2	0.4	0.8	1.2

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

Register No	Name	CO1	CO2	CO3	CO4	CO5	Total	PERCENTAGE
CB18S 439317	ABIRAMI.K	5	5	4	5	5	24	96
CB18S 439318	ABITHA.T	3	4	3	5	5	20	80
CB18S 439320	AHAMED NAIMA.S	5	5	4	4	4	22	88
CB18S 439321	ARCHANA.A	4	5	4	4	5	22	88
CB18S 439323	ARCHANA.S	5	4	4	4	4	21	84
CB18S 439324	ELAKKIYA.V	4	4	4	4	5	21	84
CB18S 439325	ELAVARASI.K	4	4	5	5	4	22	88

CB18S 439326	HARISRI.S	5	5	4	4	4	22	88
CB18S 439328	INIYA.T	5	5	5	5	5	25	100
CB18S 439329	KAVITHA.B	5	5	4	5	5	24	96
CB18S 439330	MAHARA JOTHL.R							
CB18S 439331	MALAVIHA.M							
CB18S 439332	MALINI.V	5	5	4	5	5	24	96
CB18S 439333	MEGA.K	3	4	3	5	5	20	80
CB18S 439335	NIROJA.S	5	5	4	4	4	22	88
CB18S 439336	NIVETHA.S	4	5	4	4	5	22	88
CB18S 439337	PAVITHRA.P	5	4	4	4	4	21	84
CB18S 439338	RAAHATH MAIESHA.I	4	4	4	4	5	21	84
CB18S 439339	RAJASRI.D	4	4	5	5	4	22	88
CB18S 439340	RAKAVI.M	5	5	4	4	4	22	88
CB18S 439341	SARAYU.K	5	5	5	5	5	25	100
CB18S 439342	SOWMIYA.P	5	5	4	5	5	24	96
CB18S 439343	VINITHA.V	4.50	4.60	4.10	4.50	4.60		

Expected Attainment in each CO - 85%

CO	Internal Exam	External Exam	Total	%
CO1	4.50	75	79.50	93.53
CO2	4.6	75	79.60	93.65
CO3	4.1	75	79.10	93.06
CO4	4.5	75	79.50	93.53
CO5	4.6	75	79.60	93.65

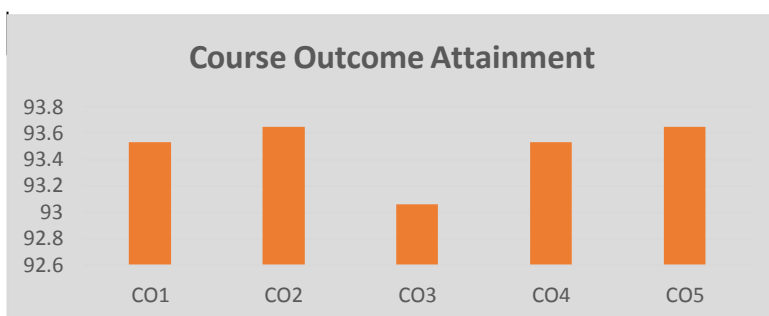
Course Attainment for B.Sc Physics

Subject Name: Nuclear physics

Subject Code: 16SCCPH8

Number of Students: 23

Course Outcome	Percentage of Attainment
CO1	93.53
CO2	93.65
CO3	93.06
CO4	93.53
CO5	93.65



Course Attainment for B.Sc Physics

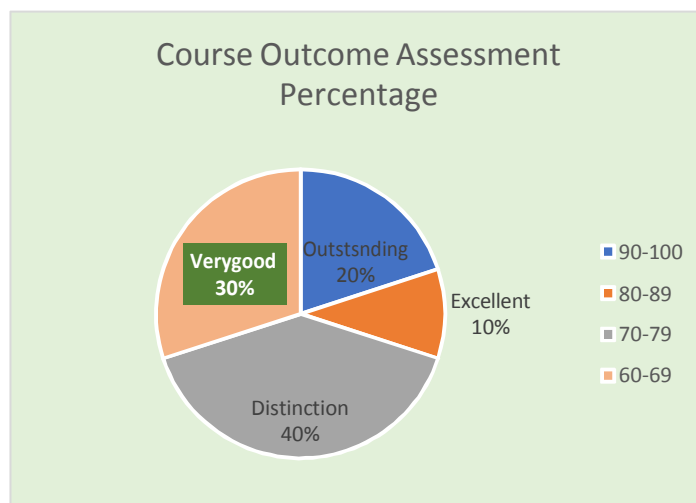
Subject Name: Nuclear physics

Subject Code: 16SCCPH8

Number of Students: 23

Course Outcome Assessment		
Category (Mark	er of Stu	Status
90-100	2	Outstanding
80-89	1	Excellent
70-79	4	Distinction
60-69	3	Very Good
50-59	0	Good
40-49	0	Average
0-39	0	Reappear

Course Outcome Assessment Percentage		
Category (Mark	ercentage	Status
90-100	20	Outstanding
80-89	10	Excellent
70-79	40	Distinction
60-69	30	Very Good



16SCCPH7- ELECTRONICS

COURSE OUTCOME

CO1	To understand the features of semiconductor and zener diode and their fundamental co
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	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

Register No	Name	CO1	CO2	CO3	CO4	CO5	Total	PERCENTAGE
CB18S 43	ABIRAMI.K	4	5	5	5	5	24	96
CB18S 43	ABITHA.T	5	4	5	3	4	21	84
CB18S 43	AHAMED NAIMA.S	5	4	4	4	4	21	84
CB18S 43	ARCHANA.A	4	5	4	5	4	22	88
CB18S 43	ARCHANA.S	5	3	4	5	5	22	88
CB18S 43	ELAKKIYA.V	4	5	5	5	5	24	96
CB18S 43	ELAVARASI.K	4	4	5	4	4	21	84
CB18S 43	HARISRI.S	4	4	4	5	5	22	88
CB18S 43	INIYA.T	5	5	5	5	5	25	100
CB18S 43	KAVITHA.B	5	5	5	5	5	25	100
CB18S 43	MAHARA JOTHI.R	4	5	5	5	5	24	96
CB18S 43	MALAVIHA.M	5	4	5	3	4	21	84
CB18S 43	MALINI.V	5	4	4	4	4	21	84
CB18S 43	MEGA.K	4	5	5	5	5	24	96
CB18S 43	NIROJA.S	5	4	5	3	4	21	84
CB18S 43	NIVETHA.S	5	4	4	4	4	21	84
CB18S 43	PAVITHRA.P	4	5	4	5	4	22	88
CB18S 43	RAAHATH MAIESHA.	5	3	4	5	5	22	88
CB18S 43	RAJASRI.D	4	5	5	5	5	24	96
CB18S 43	RAKAVI.M	4	4	5	4	4	21	84
CB18S 43	SARAYU.K	4	4	4	5	5	22	88
CB18S 43	SOWMIYA.P	5	5	5	5	5	25	100
CB18S 43	VINITHA.V	5	5	5	5	5	25	100
Average		4.52	4.39	4.61	4.52	4.57		

Expected Attainment in each CO - 85%

CO	Internal Exam	External Exam	Total	%

CO1	4.55	75	79.55	93.59
CO2	4.45	75	79.45	93.47
CO3	4.36	75	79.36	93.36
CO4	4.64	75	79.64	93.69
CO5	4.45	75	79.45	93.47

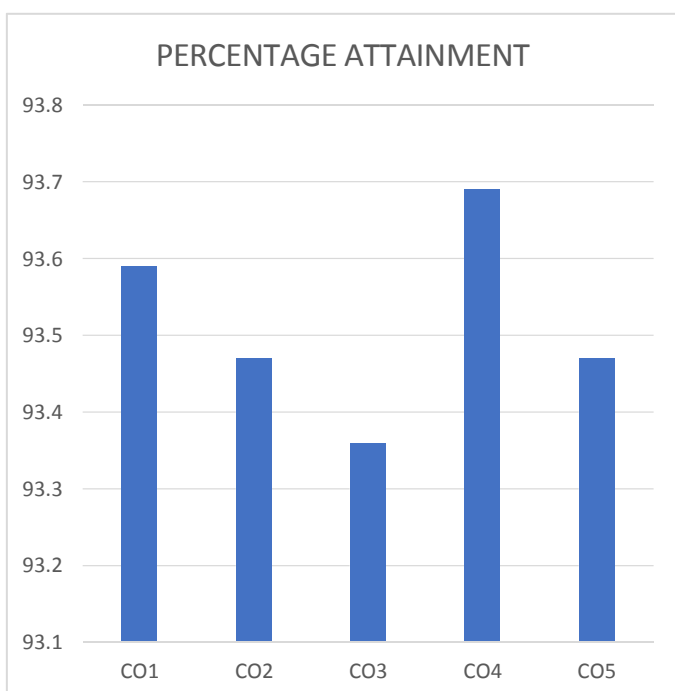
COURSE ATTAINMENT FOR B.Sc physics

SUBJECT NAME: ELECTRONICS

SUBJECT CODE :16SCCPH7

NO OF STUDENTS:23

COURSE OUTCOME	PERCENTAGE ATTAINMENT
CO1	93.59
CO2	93.47
CO3	93.36
CO4	93.69
CO5	93.47



COURSE ATTAINMENT FOR B.Sc PHYSICS

SUBJECT NAME:ELECTRONICS

SUBJECT CODE:16SCCPH7

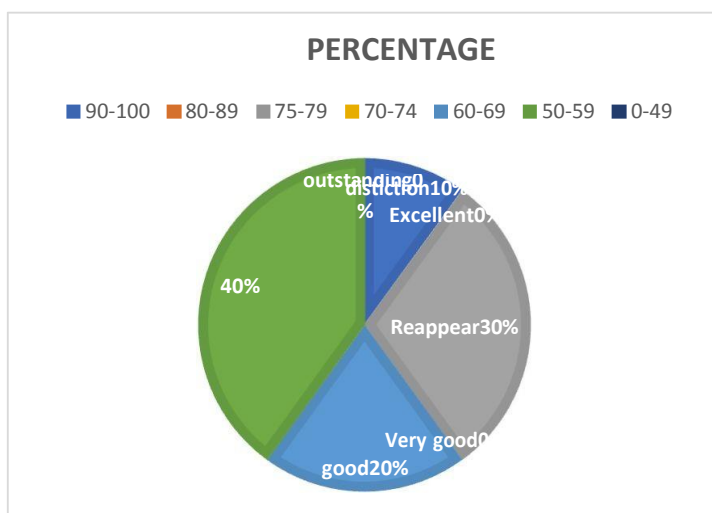
NO OF STUDENTS:23

CATEGORY	COURSE OUTCOME ASSESSMENT	
	PERCENTAGE	STATUS
90-100	1	OUTSTANDING
80-89	4	EXCELLENT
75-79	1	DISTINCTION

70-74	1	VERY GOOD
60-69	3	GOOD
50-59	0	AVERAGE
0-49	1	REAPPEAR

COURSE OUTCOME ASSESSMENT

CATEGORY	PERCENTAGE	STATUS
90-100	9%	OUTSTANDING
80-89	36.30%	EXCELLENT
75-79	9%	DISTINCTION
70-74	9%	VERY GOOD
60-69	27%	GOOD
0-49	9%	REAPPEAR



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 youngs modulus.
CO3	To understand the experimental study of surface tension and variation of surface tension.
CO4	To understand the fundamental process of Newtons law and recognizing mayers formula to this problems.
CO5	To study the factors affecting the acoustics of building

PO→ CO↓	PO1	PO2	PO3	PO4	PO5
CO1	1	1	2	3	0
CO2	2	1	1	1	1
CO3	1	3	3	0	2
CO4	3	1	1	2	2
CO5	0	2	0	1	1
Average	1.4	1.6	1.4	1.4	0.8

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

Register No	Name	CO1	CO2	CO3	CO4	CO5	Total	PERCENTAGE
		4	4	4	4	4	20	80
		5	4	4	4	4	21	84
		2	5	5	5	5	22	88
Average		3.67	4.33	4.33	4.33	4.33		

Expected Attainment in each CO - 85%

CO	Internal Exam	External Exam	Total	%
CO1	3.67	75	78.67	92.55
CO2	4.33	75	79.33	93.33
CO3	4.33	75	79.33	93.33
CO4	4.33	75	79.33	93.33
CO5	4.33	75	79.33	93.33

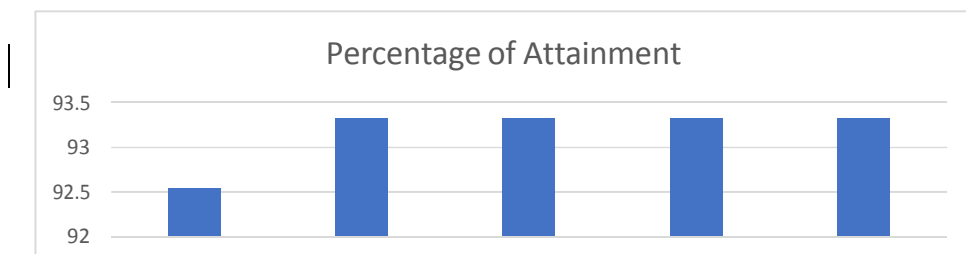
Course Attainment for B.Sc Physics

Subject Name: PROPERTIES OF MATTER & ACOUSTICS

Subject code : 16SCCPH1

Number of Students: 3

Course O	Percentage of Attainment
CO1	92.55
CO2	93.33
CO3	93.33
CO4	93.33
CO5	93.33



CO1

CO2

CO3

CO4

CO5

Course Attainment for B.Sc Physics

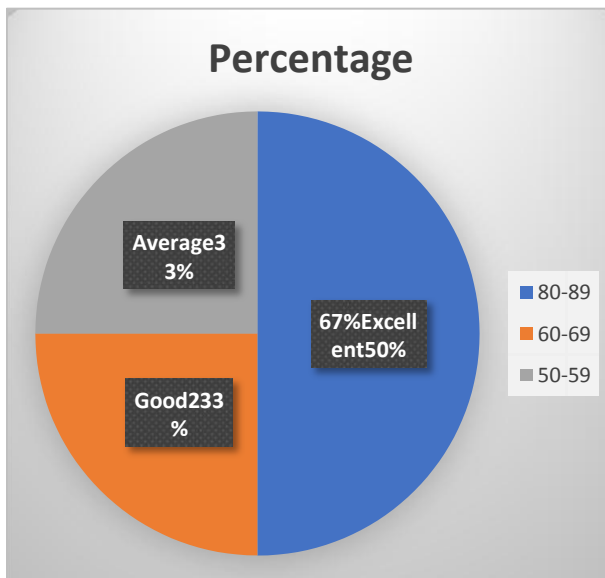
subject Name: Properties of matter & Acoustics


Subject Code: 16SCCPH1

Number of Students: 3

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

Course Outcome Assessment Percentage		
Category (Marks)	Percentage	Status
80-89	66.67	Excellent
60-69	33.33	Good
50-59	33.33	Average




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