

**BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
THANJAVUR-5**

**(UGC Recognized 2(f) & 12(B) Institution)
(Affiliated to Bharathidasan University, Tiruchirappalli – 24)**



DEPARTMENT OF MATHEMATICS

PO – CO ATTAINMENT

2017-2018



BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
(UGC Recognized 2(f) & 12(B) Institution)
THANJAVUR-5
DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Identify and enhance mathematical and computational strategies in order to solve mathematical problems.
PO2	Know various specialized areas of advanced mathematics and its applications.
PO3	Work as Professional mathematicians either in academia or elsewhere.
PO4	Inculcate knowledge of formulation and apply mathematical concepts which are suitable for real life applications.
PO5	Crack lectureship and fellowship exams affirmed by UGC like CSIR – NET and SET.

NAME OF THE PROGRAMME: M.Sc., MATHEMATICS		
COURSE CODE & COURSE TITLE	COURSE OUTCOME	
P16MA11 - ALGEBRA	CO1	Summarize the concepts of Cayley's theorem, Sylow's theorem.
	CO2	Give a detailed knowledge about Euclidean Rings.
	CO3	Differentiate polynomial rings over the rational field and polynomial rings over the commutative rings.
	CO4	Understand Extension fields, Roots of Polynomials.
	CO5	Explain the concepts of Galois Theory.



PO → CO ₁	PO1	PO2	PO3	PO4	PO5
CO1	3	3	2	3	3
CO2	3	2	3	2	3
CO3	3	3	2	2	3
CO4	3	3	2	3	3
CO5	3	2	2	3	3
AVERAGE	3	2.6	2.2	2.6	3

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	P 17191501	AARTHI G	5	4	5	5	5	24	96
2	P 17191502	DEVENDRAN S	4	4	4	4	4	20	80
3	P 17191503	HEMA P	4	4	4	4	4	20	80
4	P 17191504	KALPANA J	5	4	5	5	5	24	96
5	P 17191505	KAVIYA K	4	4	4	4	5	21	84
6	P 17191506	MAHALAKSHMI C	4	5	4	4	4	21	84
7	P 17191507	MANGALANAYAKI K	4	5	5	5	5	24	96
8	P 17191508	NANDHINI M	4	4	4	4	4	20	80
9	P 17191509	PORTIA HELEN V	5	5	5	5	4	24	96
10	P 17191510	PRIYA P	5	4	5	4	4	22	88
11	P 17191511	RAMACHANDRAN M G	4	4	4	4	4	20	80
12	P 17191512	SRIPRIYA T	5	4	4	4	5	22	88



13	P 17191513	VAISHNAVI A	4	5	5	4	4	22	88
14	P 17191514	VARALAKSHMI K	5	5	4	5	5	24	96
15	P 17191515	VIDHYA R	5	4	5	4	4	22	88
16	P 17191516	VIJAYAKANI T	4	4	5	4	4	21	84
AVERAGE			4.44	4.31	4.50	4.313	4.375		

EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.44	75	79.44	93.46
CO2	4.31	75	79.31	93.31
CO3	4.50	75	79.50	93.53
CO4	4.31	75	79.31	93.31
CO5	4.38	75	79.38	93.39



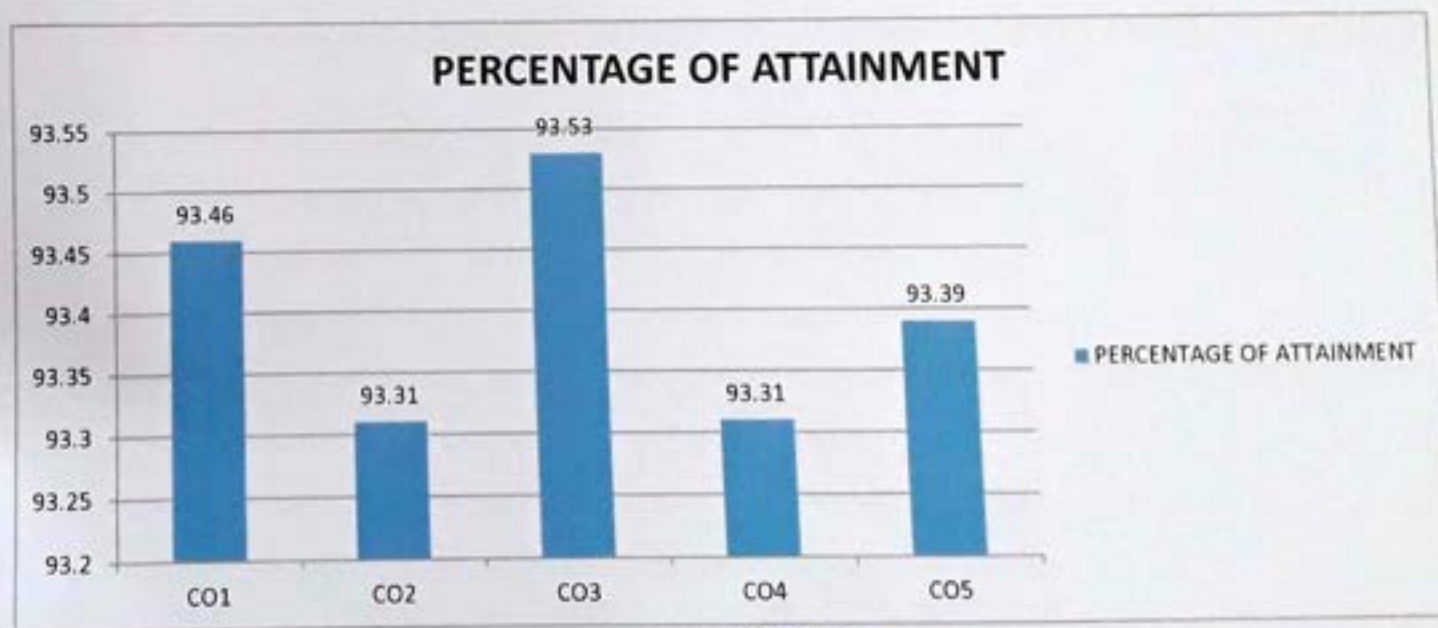
COURSE ATTAINMENT FOR M.Sc., MATHEMATICS

SUBJECT NAME: ALGEBRA

SUBJECT CODE: P16MA11

NO. OF STUDENTS: 16

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.46
CO2	93.31
CO3	93.53
CO4	93.31
CO5	93.39



SUBJECT NAME: ALGEBRA
SUBJECT CODE: P16MA11
NO. OF STUDENTS: 16

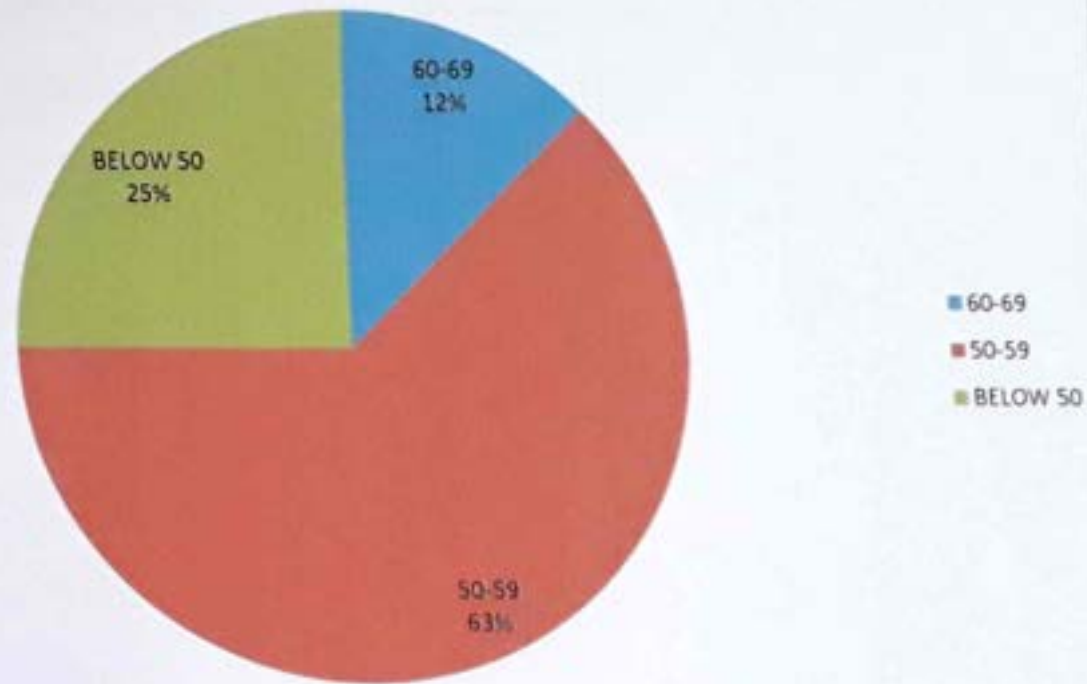
COURSE ATTAINMENT FOR M.Sc., MATHEMATICS

COURSE OUTCOME ASSESSMENT		
CATEGORY(MARKS)	NO. OF STUDENTS	STATUS
90 AND ABOVE	0	OUTSTANDING
80-80	0	EXCELLENT
70-79	0	VERY GOOD
60-69	2	GOOD
50-59	10	ABOVE AVERAGE
BELOW 50	4	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
60-69	12.5	GOOD
50-59	62.5	ABOVE AVERAGE
BELOW 50	25	RE - APPEAR



COURSE OUTCOME ASSESSMENT IN PERCENTAGE



PRINCIPAL

Bharath College of Science and Management
Bharath Avenue (Near New Bus Stand)
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Name of the Programme : M.Sc Mathematics		
Course Code & Course Title	Course Outcome	
P16MA14 GRAPH THEORY	CO1	Concept of Subgraphs, Degrees of Vertices, Paths and Connectedness, Operations on Graphs.
	CO2	Learn the Vertex Cuts and Edge Cuts, Connectivity, Trees, Definitions, Characterization and Simple Properties.
	CO3	Compute the Vertex Independent Sets and Vertex Coverings, Edge Independent Sets, Matchings and Factors, Eulerian Graphs.
	CO4	Ability to Vertex Colouring, Critical Graphs, Triangle-Free Graphs, Edge Colourings of Graphs, Chromatic Polynomials.
	CO5	Learn Planar and Nonplanar Graphs, Euler Formula and its Consequences, K_5 and K_3 are Nonplanar Graphs, Dual of a Plane Graph.



PO → CO _i	PO1	PO2	PO3	PO4	PO5
CO1	3	2	1	2	3
CO2	3	1	3	1	2
CO3	2	2	2	3	1
CO4	3	2	1	2	2
CO5	1	3	3	1	3
AVERAGE	2.4	2	2	1.8	2.2

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	UNIT TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	P 17191501	AARTHI G	5	5	5	5	4	24	96
2	P 17191502	DEVENDRAN S	4	3	5	4	4	20	80
3	P 17191503	HEMA P	4	4	5	5	3	21	84
4	P 17191504	KALPANA J	5	4	4	5	5	23	92
5	P 17191505	KAVIYA K	3	5	4	4	4	20	80
6	P 17191506	MAHALAKSHMI K	3	4	5	4	4	20	80
7	P 17191507	MANGALANAYAKI K	5	4	5	5	5	24	96
8	P 17191508	NANDHINI M	4	3	5	4	4	20	80
9	P 17191509	PORTIA HELEN V	5	5	4	5	4	23	92
10	P 17191510	PRIYA P	4	5	4	3	4	20	80
11	P 17191511	RAMACHANDRAN M G	4	4	5	4	3	20	80
12	P 17191512	SRIPRIYA T	5	4	5	5	3	22	88
13	P 17191513	VAISHNAVI A	5	4	5	4	3	21	84
14	P 17191514	VARALAKSHMI K	4	4	5	5	5	23	92
15	P 17191515	VIDHYA R	5	5	4	5	4	23	92
16	P 17191516	VIJAYAKANI T	5	5	5	5	4	24	96
		Average	4.38	4.25	4.69	4.50	3.94		



EXPECTED ATTAINMENT IN EACH CO - 85%

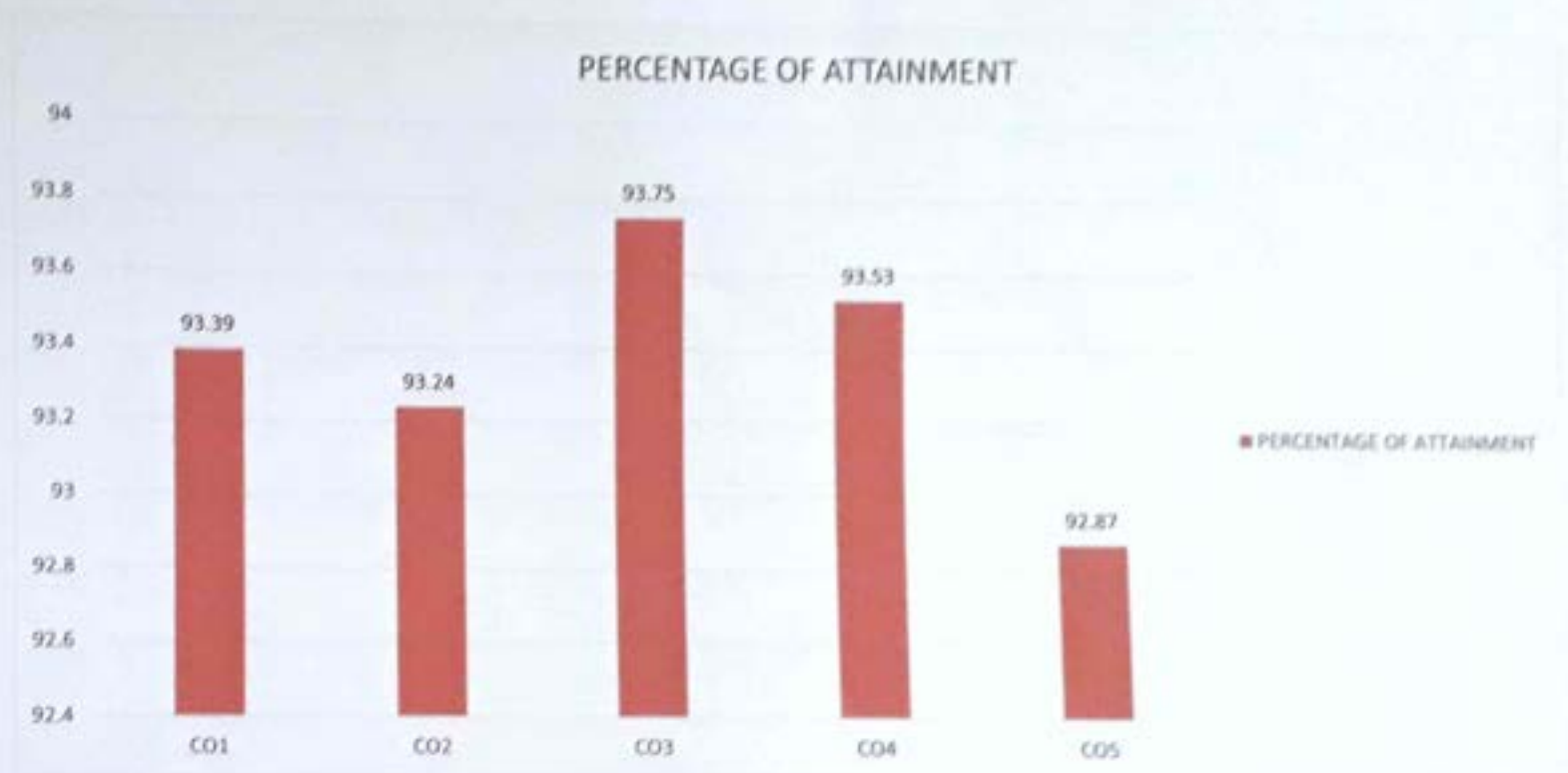
CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.38	75	79.38	93.388
CO2	4.25	75	79.25	93.235
CO3	4.69	75	79.69	93.753
CO4	4.50	75	79.5	93.529
CO5	3.94	75	78.94	92.871

COURSE ATTAINMENT FOR M.Sc MATHEMATICS

SUBJECT NAME : GRAPH THEORY
SUBJECT CODE : P16MA14
NO.OF STUDENTS : 16

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.39
CO2	93.24
CO3	93.75
CO4	93.53
CO5	92.87





COURSE ATTAINMENT FOR M.Sc MATHEMATICS

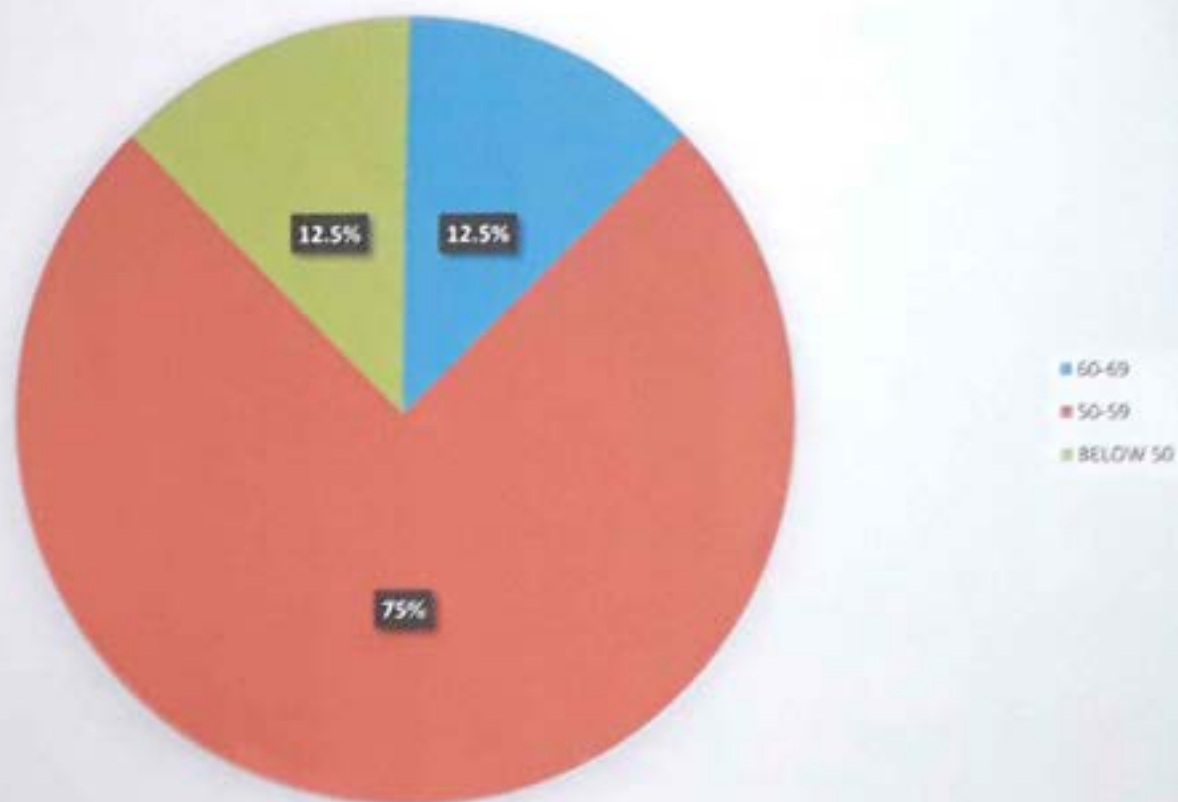
SUBJECT NAME : GRAPH THEORY
 SUBJECT CODE : P16MA14
 NO.OF STUDENTS : 16

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO.OF. STUDENTS	STATUS
90 and above(100)	0	OUTSTANDING
80-89	0	EXCELLENT
70-79	0	VERY GOOD
60-69	2	GOOD
50-59	12	ABOVE AVERAGE
Below 50	2	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
(MARKS)	PERCENTAGE	STATUS
60-69	12.5	GOOD
50-59	75	ABOVE AVERAGE
BELOW 50	12.5	RE-APPEAR



Chart Title




PRINCIPAL

Sharath College of Science and Management
Bharath Avenue (Near New Bus Stand)
Tiruvallur - 601305.



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NAME OF THE PROGRAMME: M.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
P16MA15 - INTEGRAL EQUATIONS, CALCULUS OF VARIATIONS AND TRANSFORMS	CO1	Apply the concepts of calculus of variations to find the maxima and minima of quantities defined as integrals containing unknown functions.
	CO2	Classify various kinds of Fourier sine and cosine transforms with their properties and simple problems.
	CO3	Examine some of Hankel transform and its inverse transform.
	CO4	Determine the solution of Integral equations.
	CO5	Evaluate the integral equations by the method of successive approximations.



PO → CO ↓	PO1	PO2	PO3	PO4	PO5
CO1	3	3	3	3	3
CO2	3	2	3	2	3
CO3	3	3	2	3	2
CO4	3	2	2	3	3
CO5	2	3	3	3	2
AVERAGE	2.8	2.6	2.6	2.8	2.6

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	UNIT TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	% TO TOTAL INTERNAL MARK
1	P17191501	AARTHI.G	5	5	5	5	5	25	100
2	P17191502	DEVENDRAN.S	4	4	4	4	4	20	80
3	P17191503	HEMA.P	5	4	5	4	4	22	88
4	P17191504	KALPANA.J	5	4	5	4	5	23	92
5	P17191505	KAVIYA.K	4	4	4	4	4	20	80
6	P17191506	MAHALAKSHMLC	5	4	5	4	4	22	88
7	P17191507	MANKALANAYAGI.K	5	5	5	5	5	25	100
8	P17191508	NANDHINLM	4	4	4	4	4	20	80
9	P17191509	PORTIA HELEN.V	5	5	5	5	5	25	100
10	P17191510	PRIYA.P	5	4	4	4	4	21	84
11	P17191511	RAMACHANDRAN.M.G	4	4	4	4	4	20	80
12	P17191512	SRIPRIYA.T	4	5	4	4	4	21	84
13	P17191513	VAISHNAVLA	5	4	5	4	4	22	88
14	P17191514	VARALAKSHMI.K	5	4	5	4	5	23	92
15	P17191515	VIDHYA.R	5	4	5	4	4	22	88
16	P17191516	VIJAYAKANLT	5	5	5	5	5	25	100
AVERAGE			4.68	4.31	4.62	4.25	4.37		



EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST + SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.68	75	79.68	93.7412
CO2	4.31	75	79.31	93.3059
CO3	4.62	75	79.62	93.6706
CO4	4.25	75	79.25	93.2353
CO5	4.37	75	79.37	93.3765

COURSE ATTAINMENT FOR M.SC MATHEMATICS

SUBJECT CODE : P16MA15

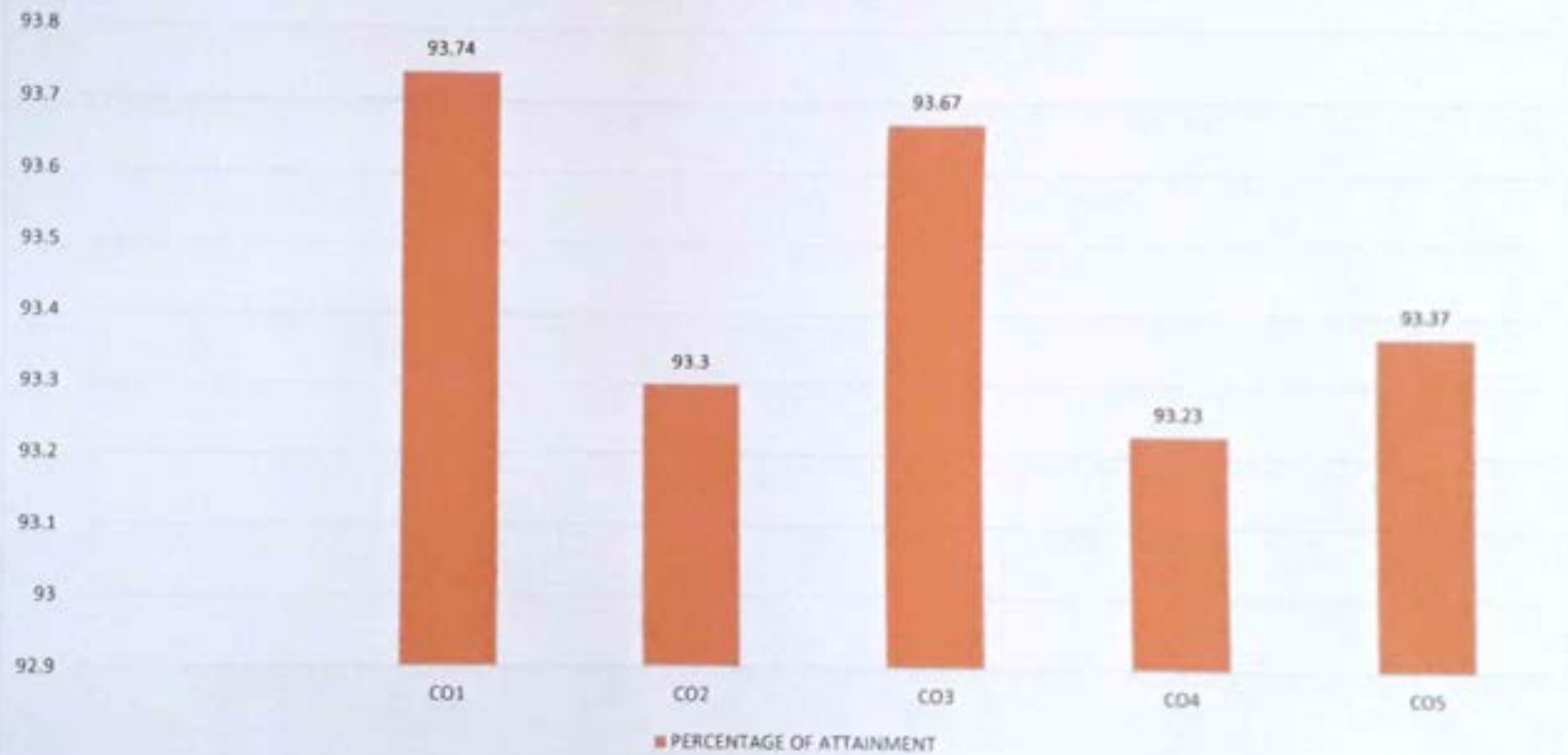
SUBJECT NAME : INTEGRAL EQUATIONS, CALCULUS OF VARIATION AND TRANSFORMS

NO.OF STUDENT: 16

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.74
CO2	93.3
CO3	93.67
CO4	93.23
CO5	93.37



PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR M.SC MATHEMATICS

SUBJECT CODE : P16MA15

SUBJECT NAME : INTEGRAL EQUATIONS, CALCULUS OF VARIATION AND TRANSFORMS

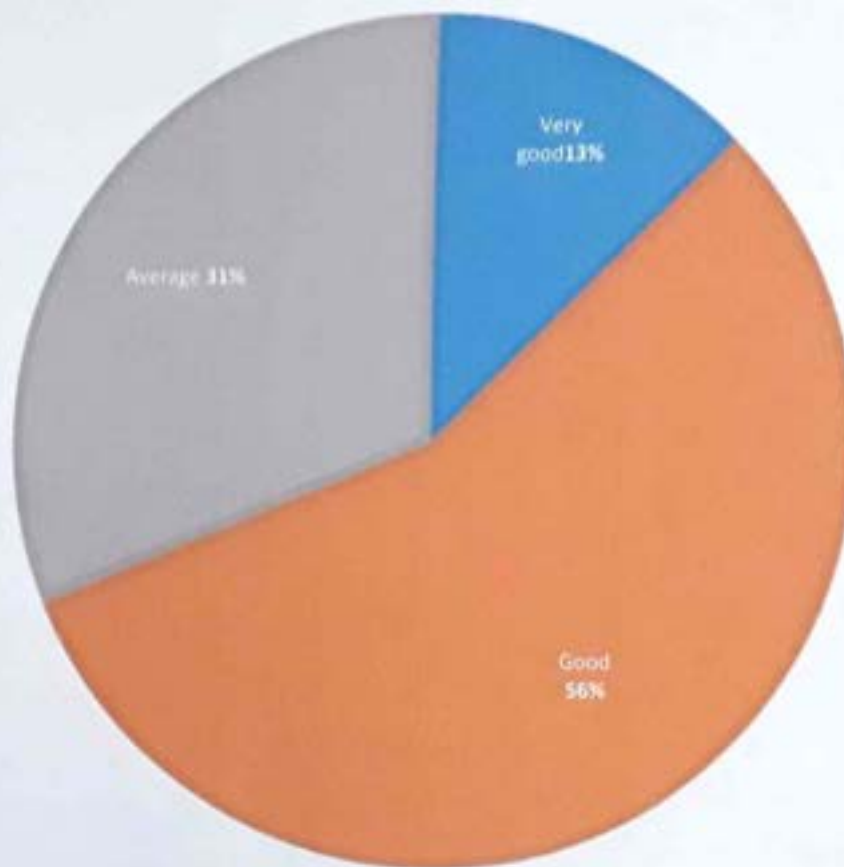
NO.OF STUDENT : 16

COURSE OUTCOME ASSESSMENT		
CATEGORY(MARKS)	NO.OF STUDENTS	STATUS
90 AND ABOVE	0	Out standing
80-89	0	Excellent
70-79	2	Very good
60-69	9	Good
50-59	5	Average
BELOW 49	0	Reappear

COURSE OUTCOME ASSESSMENT		IN PERCENTAGE
CATEGORY(MARKS)	PERCENTAGE	STATUS
70-79	12.5	Very good
60-69	56.25	Good
50-59	31.25	Average



COURSE OUTCOME ASSESSMENT



■ 70-79
■ 60-69
■ 50-59



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PROGRAM OUTCOME

PO1	Identify and enhance mathematical and computational strategies in order to solve mathematical problems.
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Name of the Programme: M.Sc Mathematics

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
P16MA23 PARTIAL DIFFERENTIAL EQUATIONS	CO1	Concept of origins of first order Partial differential equations, Cauchy's problem for first order equations
	CO2	Learn the Cauchy's method of characteristics, compatible systems of first order equations, Charpit's method
	CO3	Compute the origin of second order equations, second order equations in Physics
	CO4	Ability to understand The solution of Linear Hyperbolic equations, Separation of variables.
	CO5	Learn Laplace equation, Elementary solutions of Laplace's equations, Families of equipotential Surfaces.



PO → CO _i	PO1	PO2	PO3	PO4	PO5
CO1	3	2	1	2	3
CO2	3	2	3	2	2
CO3	3	1	1	3	2
CO4	3	3	2	3	2
CO5	3	3	3	3	1
AVERAGE	3	2.2	2	2.6	2

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	P17191501	AARTHI.G	4	4	4	4	4	20	80
2	P 17191502	DEVENDRAN.S	4	4	4	4	4	20	80
3	P 17191503	HEMA.P	4	4	4	4	4	20	80
4	P 17191504	KALPANA.J	4	5	4	4	4	21	84
5	P 17191505	KAVIYA.K	4	4	4	4	4	20	80
6	P 17191506	MAHALAKSHMI.C	4	4	4	4	4	20	80
7	P 17191507	MANGALANAYAKI.K	5	5	5	5	5	25	100
8	P 17191508	NANDHINI.M	4	4	4	4	4	20	80
9	P 17191509	PORTIA HELEN.V	5	5	5	5	4	24	96
10	P 17191510	PRIYA.P	3	5	5	5	4	22	88
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12	P 17191512	SRIPRIYA.T	4	4	4	4	4	20	80
13	P 17191513	VAISHNAVI.A	4	5	5	4	5	23	92
14	P 17191514	VARALAKSHMI.K	5	5	4	5	4	23	92
15	P 17191515	VIDHYA.R	4	5	4	5	4	22	88
16	P 17191516	VIJAYAKANTI	4	4	4	4	4	20	80
AVERAGE			4.13	4.44	4.25	4.313	4.125		



EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST + SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.13	75	79.13	93.09
CO2	4.44	75	79.44	93.46
CO3	4.25	75	79.25	93.24
CO4	4.31	75	79.31	93.31
CO5	4.13	75	79.13	93.09

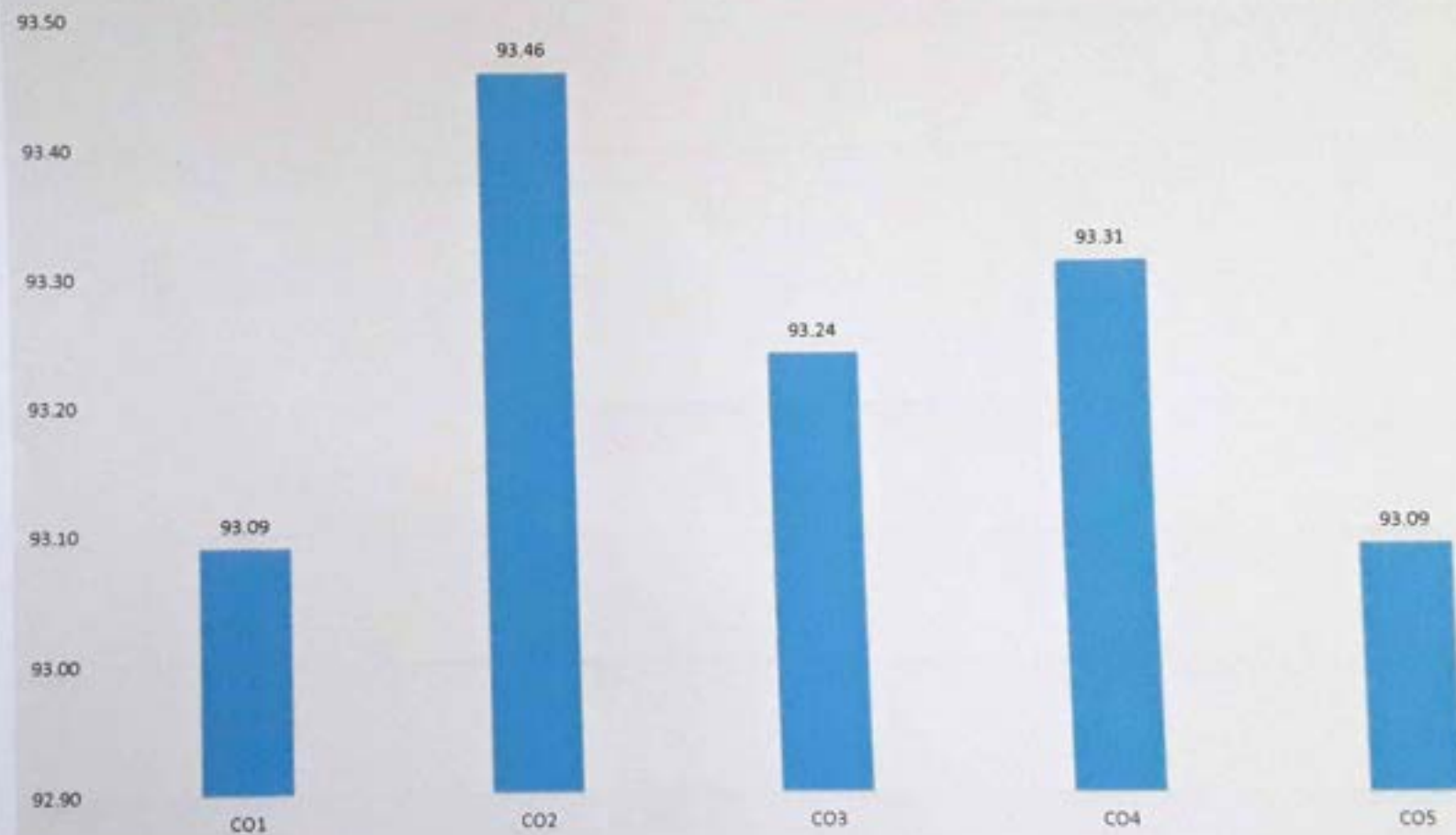
COURSE ATTAINMENT FOR M.Sc MATHEMATICS

SUBJECT NAME : PARTIAL DIFFERENTIAL EQUATIONS
 SUBJECT CODE : P16MA23
 NO.OF STUDENTS : 16

COURSE OUTCOME	PERCENTAG E OF ATTAINMENT
CO1	93.09
CO2	93.46
CO3	93.24
CO4	93.31
CO5	93.09



PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR M.Sc MATHEMATICS

SUBJECT NAME : PARTIAL DIFFERENTIAL EQUATIONS

SUBJECT CODE : P16MA23

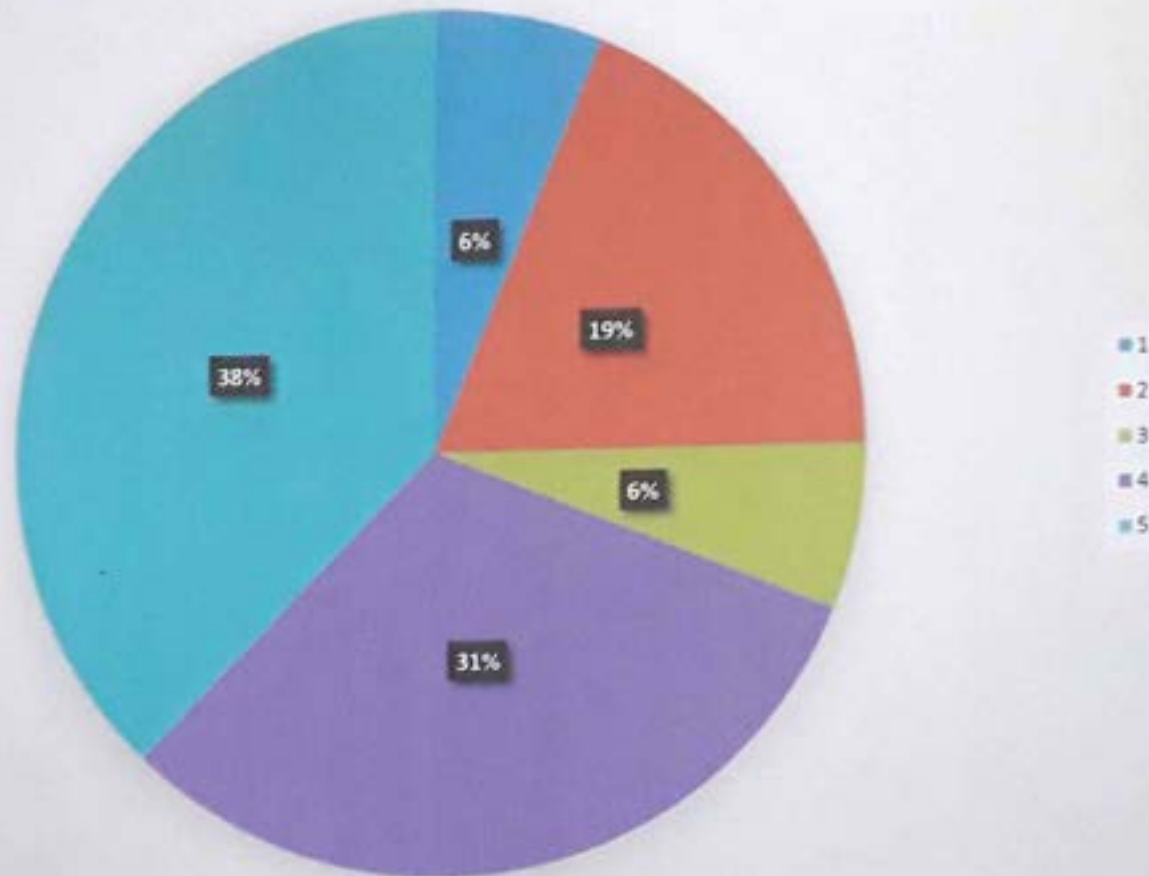
NO.OF STUDENTS : 16

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO.OF. STUDENTS	STATUS
90 and above(100)	1	OUTSTANDING
80-89	3	EXCELLENT
70-79	1	VERY GOOD
60-69	5	GOOD
50-59	6	ABOVE AVERAGE
Below 50	0	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
90 and above(100)	6	OUTSTANDING
80-89	19	EXCELLENT
70-79	6	VERY GOOD
60-69	31	GOOD
50-59	38	ABOVE AVERAGE



COURSE OUTCOME ASSESMENT IN PERCENTAGE



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NAME OF THE PROGRAMME: M.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
P16MA43 - ADVANCED NUMERICAL ANALYSIS	CO1	Apply various methods to solve transcendental and polynomial equations
	CO2	Solve system of linear algebraic equations and Eigen value problems
	CO3	Classify the various techniques of interpolation and approximation.
	CO4	Compute the integration and differentiation problems.
	CO5	Determine the various methods to solve ordinary differential equations



PO → CO↓	PO1	PO2	PO3	PO4	PO5
CO1	3	3	3	3	3
CO2	3	3	3	2	3
CO3	3	2	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
AVERAGE	3	2.8	3	2.8	3

CO	INTERNAL (25)		
	UNIT TEST (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

SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	% TO TOTAL INTERNAL MARK
1	P 16191301	ADHISESHAN.A	5	4	4	4	4	21	84
2	P 16191302	ANUPRIYA.A	5	4	4	4	4	21	84
3	P 16191303	ANUSUYA.P	5	4	4	4	4	21	84
4	P 16191304	ARTHIA	5	5	5	4	4	23	92
5	P 16191305	DHANALAKSHMI.S	5	4	4	4	4	21	84
6	P 16191306	KUMARESAN.R	5	4	4	4	4	21	84
7	P 16191307	PRAKASH.P	4	4	4	4	4	20	80
8	P 16191308	RATHIKA.K	5	4	4	4	4	21	84
9	P 16191309	VINOTHKUMAR.B	5	4	4	4	4	21	84
10	P 16191310	WESLIN CLARA.V	5	5	5	5	4	24	96
11	P 16191311	YOGAVARSHINI.S	5	4	4	4	4	21	84
AVERAGE			4.91	4.18	4.18	4.09	4.00		



EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.91	75	79.91	94.01
CO2	4.18	75	79.18	93.16
CO3	4.18	75	79.18	93.16
CO4	4.09	75	79.09	93.05
CO5	4.00	75	79.00	92.94

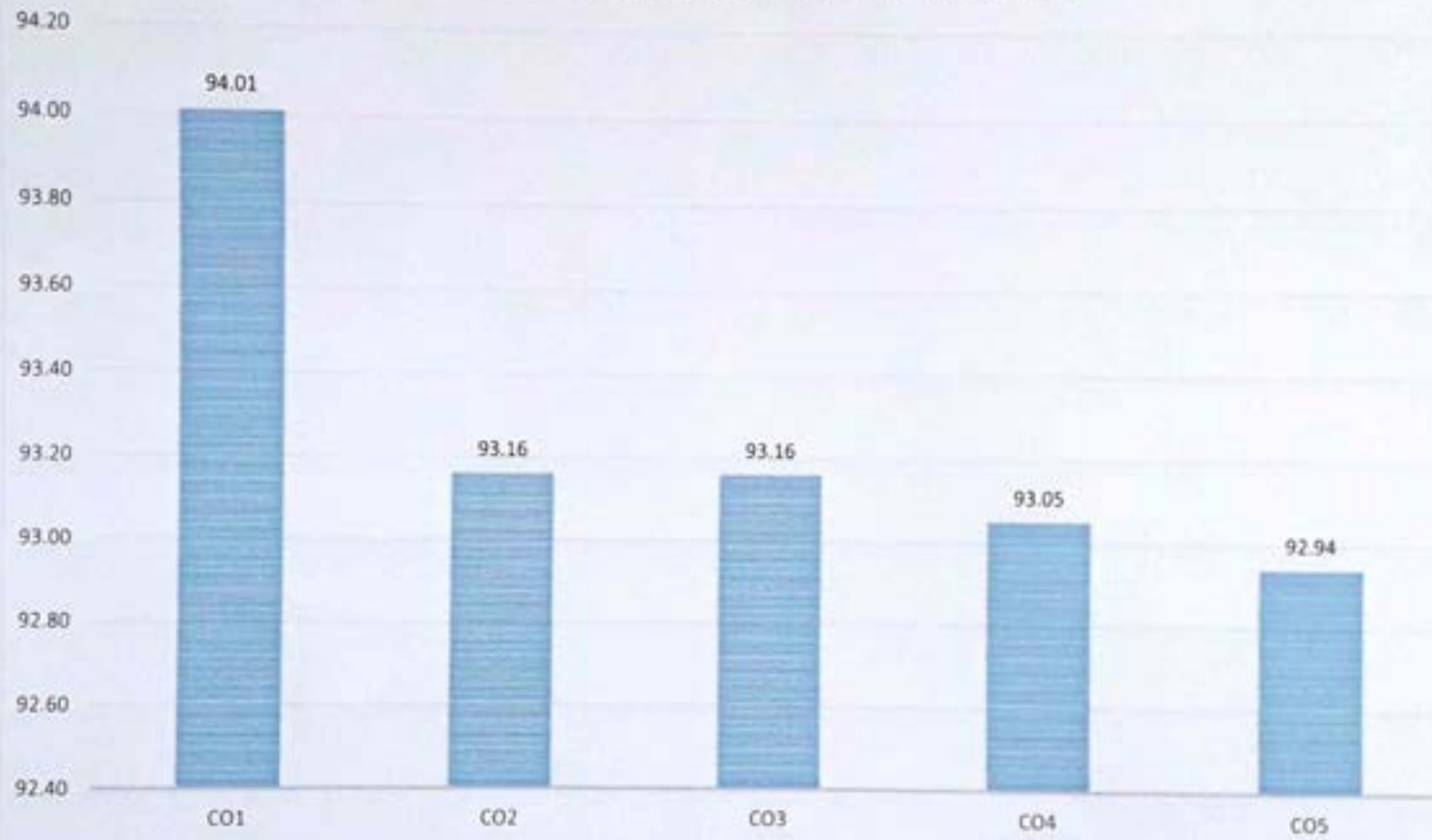
COURSE ATTAINMENT FOR M.Sc MATHEMATICS

SUBJECT NAME : ADVANCED NUMERICAL ANALYSIS
SUBJECT CODE : P16MA43
NO OF STUDENTS : 11

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	94.01
CO2	93.16
CO3	93.16
CO4	93.05
CO5	92.94



PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR M.Sc MATHEMATICS

SUBJECT NAME : ADVANCED NUMERICAL ANALYSIS
SUBJECT CODE : P16MA43
NO OF STUDENTS : 11

COURSE OUTCOME ASSESSMENT

CATEGORY MARKS	NO OF STUDENTS	STATUS
90 and above	0	OUTSTANDING
80-89	1	EXCELLENT
70-79	3	VERY GOOD
60-69	4	GOOD
50-59	3	ABOVE AVERAGE
Below 50	0	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE (%)

CATEGORY MARKS	PERCENTAGE	STATUS
80-89	9	EXCELLENT
70-79	27	VERY GOOD
60-69	37	GOOD
50-59	27	ABOVE AVERAGE



COURSE OUTCOME ASSESSMENT IN PERCENTAGE



9% EXCELLENT
27% VERY GOOD
37% GOOD
27% ABOVE AVERAGE



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THANJAVUR-5
DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Identify and enhance mathematical and computational strategies in order to solve mathematical problems.
PO2	Know various specialized areas of advanced mathematics and its applications.
PO3	Work as Professional mathematicians either in academia or elsewhere.
PO4	Inculcate knowledge of formulation and apply mathematical concepts which are suitable for real life applications.
PO5	Crack lectureship and fellowship exams affirmed by UGC like CSIR – NET and SET.

Name of the Programme: M.Sc Mathematics

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
P16MAE4B ADVANCED OPERATIONS RESEARCH	CO1	Concept of Integer Programming Problems and Cutting plane method, Mixed IPP, Branch and Bound method
	CO2	Learn the Dynamic (multistage) algorithm, applications of Dynamic Programming.
	CO3	Compute the Decision theory and Value of the game, Dominance property and Graphical method by Game theory.
	CO4	Ability to understand Deterministic inventory and Probability inventory, EOQ and Material Requirement planning.
	CO5	Learn Non-Linear Programming Algorithm, Direct method, constrained Algorithms, Separable, Quadratic, Geometric, Stochastic Programming, Linear Combination method and SUMT algorithm.



PO → CO ↓	PO1	PO2	PO3	PO4	PO5
CO1	3	2	2	2	2
CO2	1	2	3	2	3
CO3	3	1	1	3	2
CO4	3	3	2	3	2
CO5	2	3	3	3	1
AVERAGE	2.4	2.2	2.2	2.6	2

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	P 16191301	ADHISESHAN A	4	4	4	4	4	20	80
2	P 16191302	ANU PRIYA A	5	5	4	4	5	23	92
3	P 16191303	ANUSUYA P	4	4	4	4	4	20	80
4	P 16191304	ARTHI A	5	4	5	4	5	23	92
5	P 16191305	DHANALAKSHMI S	4	4	4	4	5	21	84
6	P 16191306	KUMARESAN R	4	4	4	4	4	20	80
7	P 16191307	PRAKASH P	4	4	4	4	2	20	80
8	P 16191308	RATHIKA K	5	5	5	5	5	25	100
9	P 16191309	VINOTH KUMAR B	4	4	4	4	4	20	80
10	P 16191310	WESLIN CLARA V	4	5	4	5	4	22	88
11	P 16191311	YOGAVARSHINI S	5	5	5	5	5	25	100
AVERAGE			4.36	4.36	4.27	4.27	4.27		

EXPECTED ATTAINMENT IN EACH CO - 85%

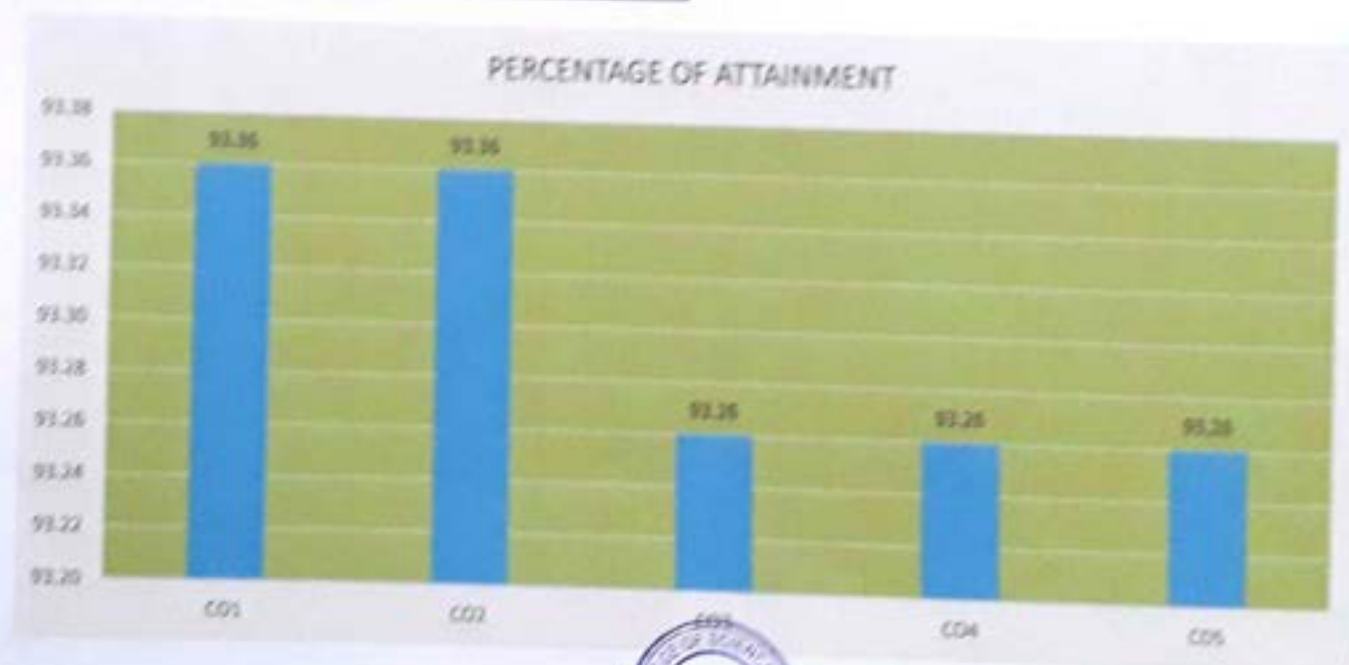
CO	TEST + SEMINAR + ASSIGNMENT	END SEM	TOTAL	%
CO1	4.36	75	79.36	93.36
CO2	4.36	75	79.36	93.36
CO3	4.27	75	79.27	93.26
CO4	4.27	75	79.27	93.26
CO5	4.27	75	79.27	93.26



COURSE ATTAINMENT FOR M.Sc MATHEMATICS

SUBJECT NAME : ADVANCED OPERATIONS RESEARCH
 SUBJECT CODE : P16MAE4B
 NO.OF STUDENTS : 11

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.36
CO2	93.36
CO3	93.26
CO4	93.26
CO5	93.26



COURSE ATTAINMENT FOR M.Sc MATHEMATICS

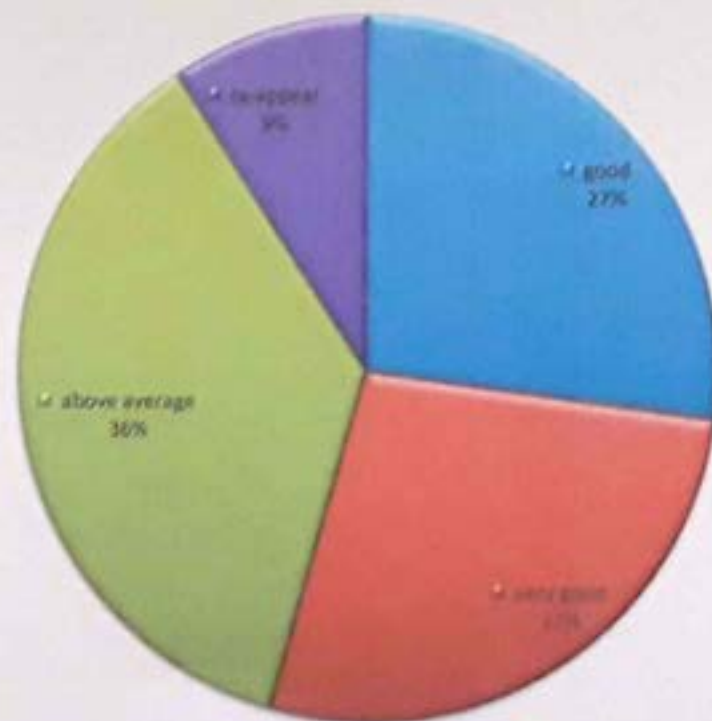
SUBJECT NAME : ADVANCED OPERATIONS RESEARCH
SUBJECT CODE : P16MAE4B
NO.OF STUDENTS : 11

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO.OF. STUDENTS	STATUS
90 and above(100)	0	OUTSTANDING
80-89	0	EXCELLENT
70-79	3	VERY GOOD
60-69	3	GOOD
50-59	4	ABOVE AVERAGE
Below 50	1	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
70-79	27	VERY GOOD
60-69	27	GOOD
50-59	36	ABOVE AVERAGE
Below 50	9	RE-APPEAR



COURSE OUTCOME ASSESSMENT IN PERCENTAGE



■ 70-79 ■ 60-69 ■ 50-59 ■ Below 50



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THANJAVUR-5
PG DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Remember the fundamental concepts of Mathematics
PO2	Imbibe the skills necessary to effectively translate mathematical aspects to the general public
PO3	Develop Critical thinking ability so as to improve Employability and Decision making.
PO4	Apply Mathematical Models to solve critical problems.
PO5	Apply the concepts studied, in real life situations.

NAME OF THE PROGRAMME: B.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
(RCCSMM7)- VECTOR CALCULUS & FOURIER SERIES	CO1	Learn Vector differentiation.
	CO2	Learn Vector integration.
	CO3	Learn verifications of the theorems for Simple problems .
	CO4	Acquire the knowledge about Fourier series for periodic signals.
	CO5	Learn the development of Fourier Series in cosine and sine series.



PO → CO ↓	PO1	PO2	PO3	PO4	PO5
CO1	3	2	2	3	2
CO2	2	2	3	3	3
CO3	3	3	2	2	2
CO4	3	3	2	2	3
CO5	3	2	3	3	3
AVERAGE	2.8	2.4	2.4	2.6	2.6

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	CB15S 354050	ABARNA S	5	5	5	5	4	24	96
2	CB15S 354051	ABDUL RAHMAN G	4	4	4	4	4	20	80
3	CB15S 354052	ABINAYA R	5	5	5	5	4	24	96
4	CB15S 354053	AHMEDFARVEES M	4	3	3	3	3	16	64
5	CB15S 354054	AJITHARANI S	5	5	5	5	5	25	100
6	CB15S 354055	ANUSUYA R	4	4	4	3	3	18	72
7	CB15S 354056	BALASANTHIYA A	5	5	5	5	4	24	96
8	CB15S 354058	DHANABAL R	5	5	4	4	4	22	88
9	CB15S 354059	DHIVASKAR B	4	4	3	3	3	17	68
10	CB15S 354060	DURGA M	4	4	4	4	4	20	80
11	CB15S 354061	GNANADEVAN C	4	4	4	4	3	19	76
12	CB15S 354062	GOWTHAMI M	5	5	5	5	5	25	100
13	CB15S 354063	HARI PRIYA T	5	5	5	5	4	24	96
14	CB15S 354064	HARISHRAJA G	5	5	4	4	4	23	92
15	CB15S 354065	INDUMATHI S	5	5	5	5	4	24	96
16	CB15S 354066	JAYABHARATHI S	5	5	5	5	4	24	96



17	CB15S 354067	KALAIVAANI Y	4	4	4	4	3	19	76
18	CB15S 354068	KARTHIKA G	5	5	5	5	4	24	96
19	CB15S 354069	KEERTHANA M	5	5	5	5	4	24	96
20	CB15S 354070	MAGESHWARI K	5	5	5	5	4	24	96
21	CB15S 354071	MANIKANDAN B	5	5	5	5	5	25	100
22	CB15S 354072	MANIKANDAN D	4	4	4	4	4	20	80
23	CB15S 354073	MANISHABHAVANI Y	5	5	5	5	4	24	96
24	CB15S 354074	MEENA M	4	4	4	4	4	20	80
25	CB15S 354075	MUTHUKUMAR M	4	4	4	4	4	20	80
26	CB15S 354076	NIVETHA R	5	5	4	4	4	22	88
27	CB15S 354077	PARTHIBAN V	5	4	4	4	4	21	84
28	CB15S 354078	POOVATHI A	5	5	5	5	4	24	96
29	CB15S 354079	PRADEEPA S	5	5	5	5	5	25	100
30	CB15S 354080	PRAGADEESWARI R	4	4	4	4	4	20	80
31	CB15S 354082	PRIYADHARSHINI P	4	4	4	4	4	20	80
32	CB15S 354083	PRIYADHARSHINI R	5	5	5	5	5	25	100
33	CB15S 354084	PRIYADHARSHINI R	5	5	4	4	4	22	88
34	CB15S 354085	RAJESHWARI R	5	5	5	4	4	23	92
35	CB15S 354086	RAJKUMAR S	5	4	4	4	4	21	84
36	CB15S 354087	RAMYA R	5	5	5	5	4	24	96
37	CB15S 354088	SABARIESWARAN S	5	5	5	5	5	25	100
38	CB15S 354089	SARA VANA PRIYA A	5	5	5	5	4	24	96
39	CB15S 354090	SARAVANAN T	3	3	3	3	3	15	60
40	CB15S 354091	SATHIYAPRIYA P	5	5	5	5	4	24	96
41	CB15S 354092	SHEELA R	5	5	5	5	4	24	96
42	CB15S 354093	SRINATH M	3	3	3	3	3	15	60
43	CB15S 354095	VEERAMMAL R	5	5	5	4	4	23	92
44	CB15S 354096	VENKATESAN M	4	4	3	3	3	17	68
45	CB15S 354097	VINOTH KUMAR R	4	4	4	4	3	19	76
46	CB15S 354098	VIVEK S	4	4	4	4	4	20	80



47	CB15S 354099	YAMINI UDHAYA S	4	4	4	4	4	20	80
48	CB15S 354100	YOGESWARI B	5	5	5	4	4	23	92
49	UN15021017	DHANALAKSHMI S	5	5	5	5	4	24	96
AVERAGE			4.59	4.53	4.41	4.33	3.94		

EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL
CO1	4.59	75	79.59
CO2	4.53	75	79.53
CO3	4.41	75	79.41
CO4	4.33	75	79.33
CO5	3.94	75	78.94

PG DEPARTMENT OF MATHEMATICS

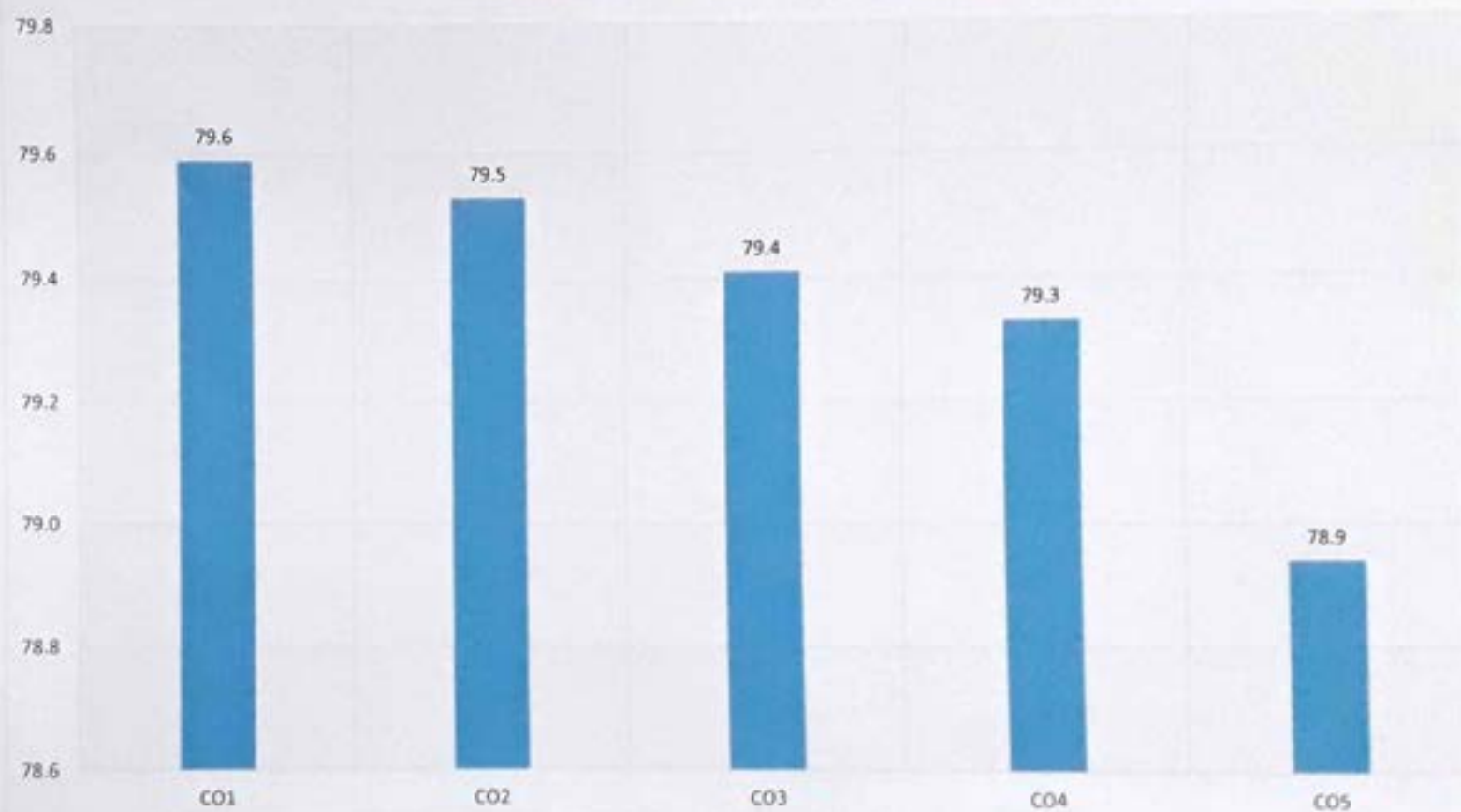
COURSE ATTAINMENT FOR B.SC MATHEMATICS

SUBJECT NAME : VECTOR CALCULUS AND FOURIER SERIES
SUBJECT CODE : RCCSMM7
NO OF STUDENTS : 49

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	79.6
CO2	79.5
CO3	79.4
CO4	79.3
CO5	78.9



PERCENTAGE OF ATTAINMENT



PG DEPARTMENT OF MATHEMATICS
COURSE ATTAINMENT FOR B.SC MATHEMATICS

SUBJECT NAME : VECTOR CALCULUS AND FOURIER SERIES
SUBJECT CODE : RCCSMM7
NO OF STUDENTS : 49

COURSE OUTCOME ASSESSMENT

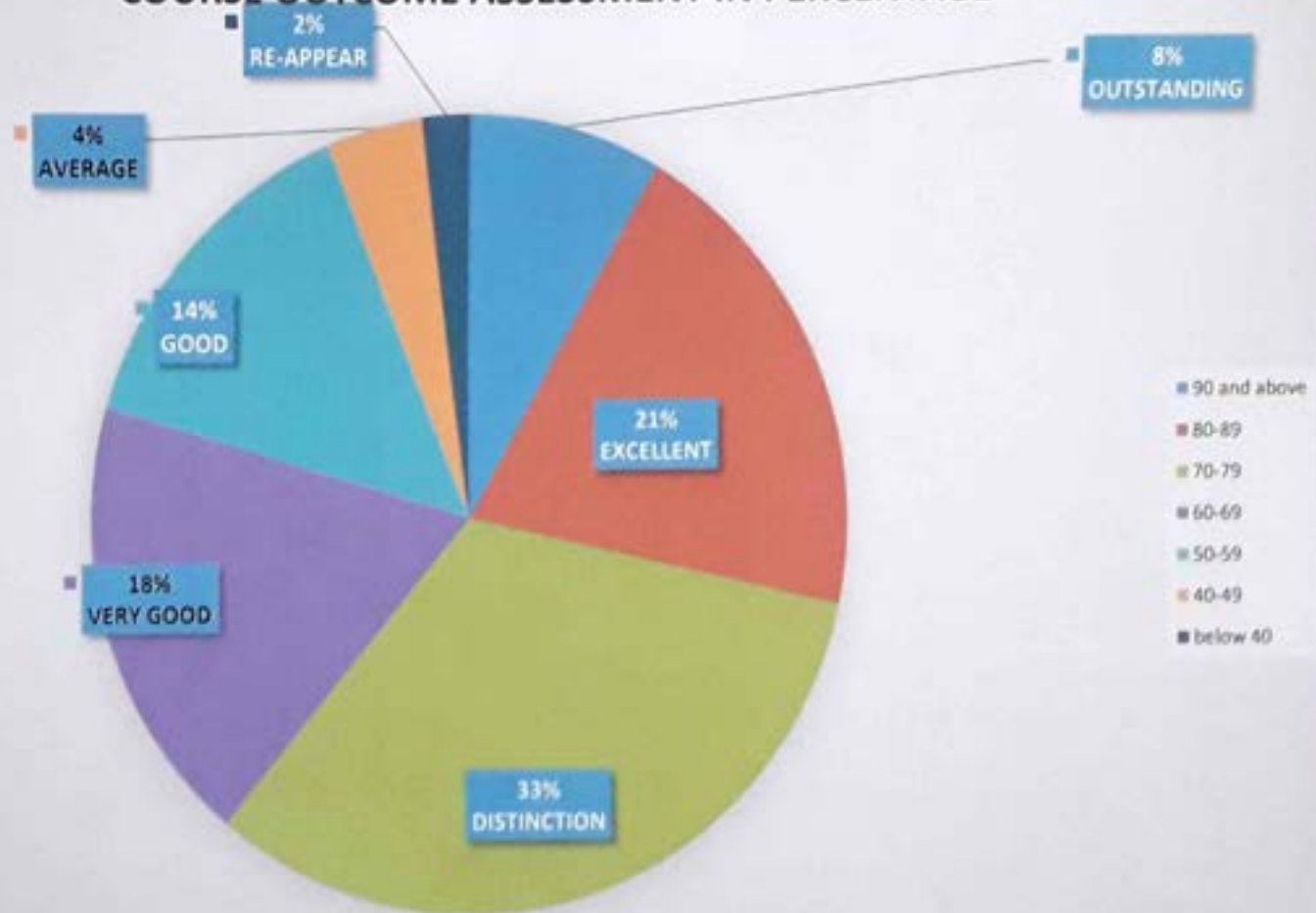
CATEGORY MARKS	NO OF STUDENTS	STATUS
90 and above	4	OUTSTANDING
80-89	10	EXCELLENT
70-79	16	DISTINCTION
60-69	9	VERY GOOD
50-59	7	GOOD
40-49	2	AVERAGE
below 40	1	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE (%)

CATEGORY MARKS	PERCENTAGE	STATUS
90 and above 100	8	OUTSTANDING
80-89	21	EXCELLENT
70-79	33	DISTINCTION
60-69	18	VERY GOOD
50-59	14	GOOD
40-49	4	AVERAGE
below 40	2	RE-APPEAR



COURSE OUTCOME ASSESSMENT IN PERCENTAGE



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DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Remember the fundamental concepts of Mathematics
PO2	Imbibe the skills necessary to effectively translate mathematical aspects to the general public
PO3	Develop Critical thinking ability so as to improve Employability and Decision making.
PO4	Apply Mathematical Models to solve critical problems.
PO5	Apply the concepts studied, in real life situations

NAME OF THE PROGRAMME: B.Sc., MATHEMATICS		
COURSE CODE & COURSE TITLE	COURSE OUTCOME	
RCCSMM10 - STATICS	CO1	Gains knowledge about the nature of forces.
	CO2	Acquire knowledge regarding the objects at rest.
	CO3	Be aware of friction and its various forms.
	CO4	Be familiar with Principle of virtual work.
	CO5	Explain Types of forces and Equilibrium of a uniform homogeneous string.



PO → CO ₁	PO1	PO2	PO3	PO4	PO5
CO1	3	2	3	3	3
CO2	3	3	3	2	2
CO3	3	3	3	3	3
CO4	3	2	3	3	3
CO5	3	2	3	3	3
AVERAGE	3	2.4	3	2.8	2.8

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	% TO TOTAL
1	CB15S 354050	S. ABARNA	5	4	5	5	5	24	96
2	CB15S 354051	G. ABDUL RAHMAN	3	4	3	4	4	18	72
3	CB15S 354052	R. ABINAYA	5	5	4	5	4	23	92
4	CB15S 354053	M. AHMEDFARVEES	3	3	3	3	3	15	60
5	CB15S 354054	S. AJITHARANI	5	5	5	5	5	25	100
6	CB15S 354055	R. ANUSUYA	4	4	3	3	3	17	68
7	CB15S 354056	A. BALASANTHIYA	5	5	4	5	5	24	96
8	CB15S 354058	R. DHANABAL	5	5	4	5	5	24	96
9	CB15S 354059	B. DHIVASKAR	3	3	3	4	4	17	68
10	CB15S 354060	M. DURGA	4	4	4	4	4	20	80
11	CB15S 354061	C. GNANADEVAN	4	3	3	5	5	20	80
12	CB15S 354062	M. GOWTHAMI	5	5	4	4	5	23	92
13	CB15S 354063	T. HARIPRIYA	5	5	5	5	5	25	100
14	CB15S 354064	G. HARISHRAJA	4	4	4	3	3	18	72
15	CB15S 354065	S. INDUMATHI	5	4	4	4	4	21	84
16	CB15S 354066	S. JAYABHARATHI	4	4	3	4	4	19	76
17	CB15S 354067	Y. KALAIVANI	3	4	4	3	4	18	72
18	CB15S 354068	G. KARTHIKA	5	5	5	5	4	24	96
19	CB15S 354069	M. KEERTHIKA	5	5	5	5	5	25	100
20	CB15S 354070	K. MAGESHWARI	5	5	5	5	5	25	100
21	CB15S 354071	B. MANIKANDAN	5	5	4	4	4	22	88
22	CB15S 354072	D. MANIKANDAN	4	4	4	4	4	20	80
23	CB15S 354073	Y. MANISHABHAVANI	5	5	5	5	3	23	92
24	CB15S 354074	M. MEENA	4	4	4	4	5	21	84
25	CB15S 354075	M. MUTHUKUMAR	3	4	4	3	3	17	68
26	CB15S 354076	R. NIVETHA	5	5	5	4	4	23	92
27	CB15S 354077	V. PARTHIBAN	3	4	4	3	3	17	68
28	CB15S 354078	A. POOVATHI	4	4	4	4	4	20	80
29	CB15S 354079	S. PRADEEPA	5	5	5	4	5	24	96
30	CB15S 354080	R. PRAGADEESWARI	4	5	5	5	4	23	92
31	CB15S 354082	P. PRIYADHARSHINI	5	5	5	5	5	25	100



32	CB15S 354083	R. PRIYADHARSHINI	5	5	5	5	5	25	100
33	CB15S 354084	R. PRIYATHARSHINI	5	5	5	4	4	23	92
34	CB15S 354085	R. RAJESHWARI	4	5	4	5	5	23	92
35	CB15S 354086	S. RAJKUMAR	5	4	4	4	4	21	84
36	CB15S 354087	R. RAMYA	5	5	5	4	5	24	96
37	CB15S 354088	S. SABARIESWARAN	5	4	5	4	4	22	88
38	CB15S 354089	A. SARAVANA PRIYA	5	4	4	4	4	21	84
39	CB15S 354090	T. SARAVANAN	3	3	3	3	3	15	60
40	CB15S 354091	P. SATHIYAPRIYA	4	4	5	5	5	23	92
41	CB15S 354092	R. SHEELA	5	5	5	5	4	24	96
42	CB15S 354093	M. SRINATH	4	3	3	3	3	16	64
43	CB15S 354095	R. VEERAMMAL	4	4	4	4	4	20	80
44	CB15S 354096	M. VENKATESAN	5	4	3	3	3	18	72
45	CB15S 354097	R. VINOTHKUMAR	4	4	4	4	4	20	80
46	CB15S 354098	S. VIVEK	4	4	4	4	5	21	84
47	CB15S 354099	S. YAMINI UDHAYA	5	4	5	5	5	24	96
48	CB15S 354100	B. YOGESWARI	4	4	4	4	3	19	76
49	UN 15021017	B. DHANALAKSHMI	5	5	5	5	5	25	100
AVERAGE			4.388	4.327	4.204	4.204	4.184		

EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.39	75	79.39	93.40
CO2	4.33	75	79.33	93.325
CO3	4.20	75	79.20	93.181
CO4	4.20	75	79.20	93.181
CO5	4.18	75	79.18	93.157

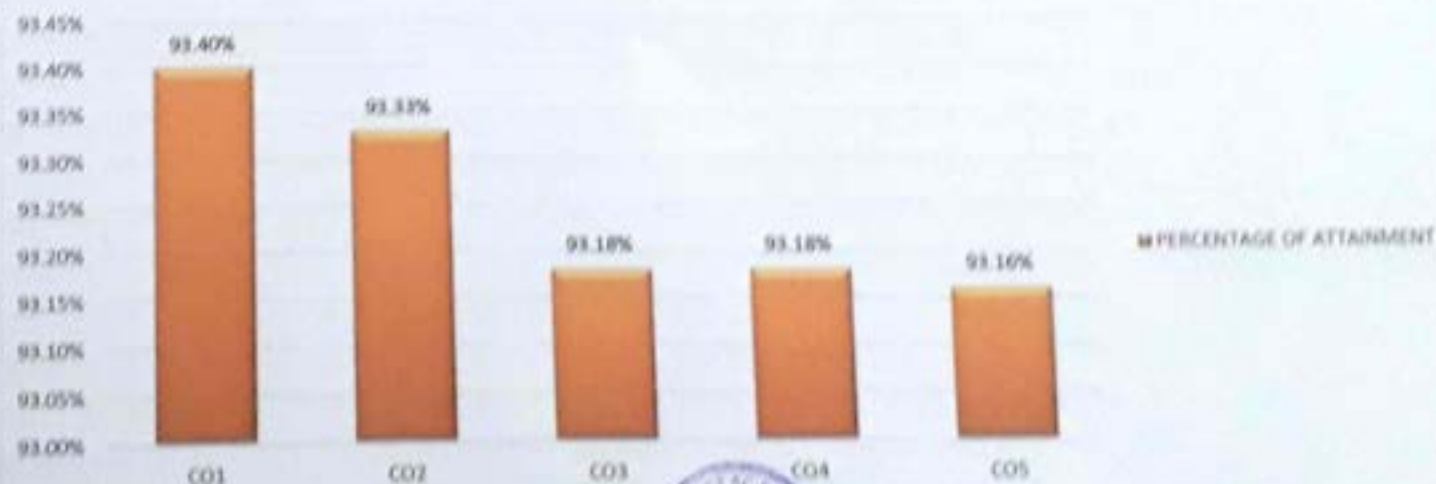


COURSE ATTAINMENT FOR B.Sc., MATHEMATICS

SUBJECT NAME: STATICS
SUBJECT CODE: RCCSMM10
NO. OF STUDENTS: 49

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.40%
CO2	93.33%
CO3	93.18%
CO4	93.18%
CO5	93.16%

PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR B.Sc., MATHEMATICS

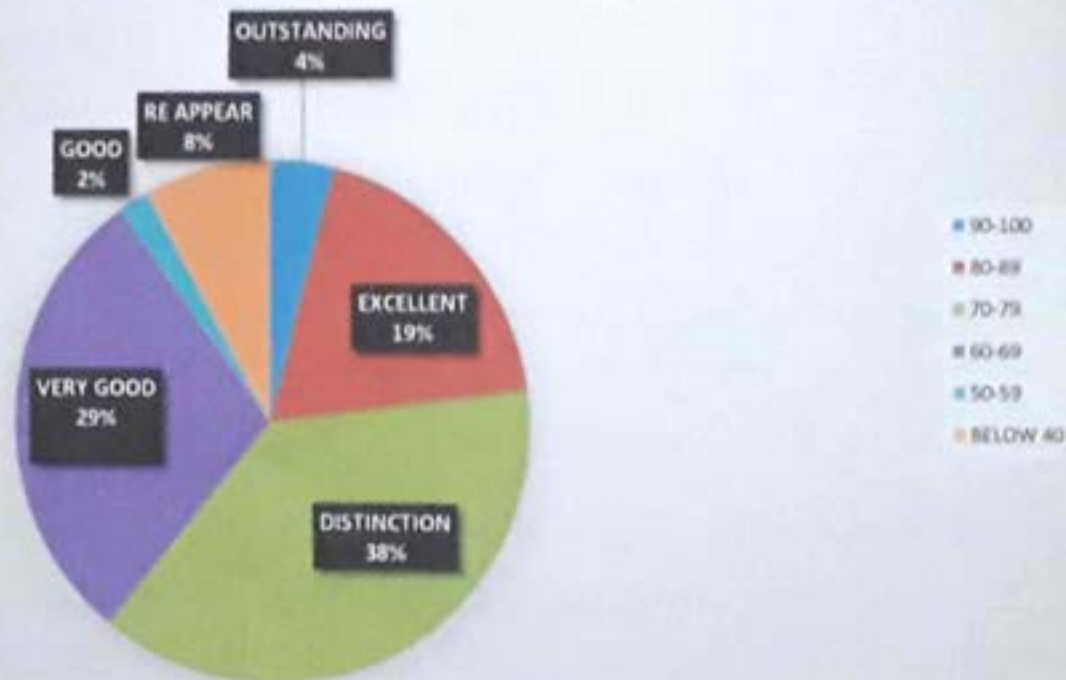
SUBJECT NAME: STATICS
 SUBJECT CODE: RCCSMM10
 NO. OF STUDENTS: 49

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO. OF STUDENTS	STATUS
90 AND ABOVE	2	OUTSTANDING
80-89	9	EXCELLENT
70-79	17	DISTINCTION
60-69	15	VERY GOOD
50-59	2	GOOD
40-49	0	AVERAGE
BELOW 40	4	RE APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
90-100	4	OUTSTANDING
80-89	19	EXCELLENT
70-79	38	DISTINCTION
60-69	29	VERY GOOD
50-59	2	GOOD
BELOW 40	8	RE APPEAR



COURSE OUTCOME ASSESSMENT



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DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME	
PO1	Remember the fundamental concepts of Mathematics
PO2	Imbibe the skills necessary to effectively translate mathematical aspects to the general public
PO3	Develop Critical thinking ability so as to improve Employability and Decision making.
PO4	Apply Mathematical Models to solve critical problems.
PO5	Apply the concepts studied, in real life situations.

NAME OF THE PROGRAMME: B.Sc., MATHEMATICS

COURSE CODE & COURSE	COURSE OUTCOME	
RCCSMM12 - COMPLEX ANALYSIS	CO1	Understanding and significance of Limits, Continuous functions and Differentiability for complex function and be familiar with the CR-equation.
	CO2	Define Conformal Mapping, Bilinear transformations, Cross ratio and Fixed points.
	CO3	Use Cauchy's integral Theorem and formula to compute line integral.
	CO4	Represent functions as Taylor's series and Laurent's series.
	CO5	Find Residues and evaluate complex integral using Cauchy's Residue Theorem.



PO → CO _i	PO1	PO2	PO3	PO4	PO5
CO1	3	2	3	3	3
CO2	3	3	3	2	2
CO3	3	3	3	3	3
CO4	3	2	3	3	3
CO5	3	2	3	3	2
AVERAGE	3	2.4	3	2.8	2.6

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	% TO TOTAL INTERNAL MARK
1	CB15S 354050	S. ABARNA	4	4	4	4	4	20	80
2	CB15S 354051	G. ABDUL RAHMAN	3	3	3	3	3	15	60
3	CB15S 354052	R. ABINAYA	3	4	4	4	3	18	72
4	CB15S 354053	M. AHMEDFARVEES	2	2	2	2	2	10	40
5	CB15S 354054	S. AJITHARANI	4	4	4	4	5	21	84
6	CB15S 354055	R. ANUSUYA	3	3	3	3	3	15	60
7	CB15S 354056	A. BALASANTHIYA	4	4	4	4	4	20	80
8	CB15S 354058	R. DHANABAL	3	3	4	4	3	17	68
9	CB15S 354059	B. DHIVASKAR	3	3	2	4	3	15	60
10	CB15S 354060	M. DURGA	4	2	3	3	3	15	60
11	CB15S 354061	C. GNANADEVAN	3	3	3	2	4	15	60
12	CB15S 354062	M. GOWTHAMI	4	4	4	4	4	20	80
13	CB15S 354063	T. HARIPRIYA	5	5	4	4	4	22	88
14	CB15S 354064	G. HARISHRAJA	3	3	3	3	3	15	60
15	CB15S 354065	S. INDUMATHI	3	3	4	4	4	18	72
16	CB15S 354066	S. JAYABHARATHI	4	3	3	3	3	16	64
17	CB15S 354067	Y. KALAIVANI	3	3	3	3	3	15	60
18	CB15S 354068	G. KARTHIKA	3	4	3	3	3	16	64
19	CB15S 354069	M. KEERTHIKA	4	3	4	3	4	18	72
20	CB15S 354070	K. MAGESHWARI	4	4	3	4	3	18	72
21	CB15S 354071	B. MANIKANDAN	4	4	4	4	4	20	80
22	CB15S 354072	D. MANIKANDAN	3	3	3	3	3	15	60
23	CB15S 354073	Y. MANISHABHAVANI	3	3	4	4	3	17	68
24	CB15S 354074	M. MEENA	3	3	3	3	3	15	60



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	% TO TOTAL INTERNAL MARK
25	CB15S 354075	M. MUTHUKUMAR	3	4	4	3	2	16	64
26	CB15S 354076	R. NIVETHA	3	3	3	3	4	16	64
27	CB15S 354077	V. PARTHIBAN	3	3	3	3	3	15	60
28	CB15S 354078	A. POOVATHI	3	3	3	3	4	16	64
29	CB15S 354079	S. PRADEEPA	4	4	4	4	4	20	80
30	CB15S 354080	R. PRAGADEESWARI	3	3	3	4	3	16	64
31	CB15S 354082	P. PRIYADHARSHINI	3	3	3	3	3	15	60
32	CB15S 354083	R. PRIYADHARSHINI	5	4	4	4	4	21	84
33	CB15S 354084	R. PRIYATHARSHINI	3	3	3	3	3	15	60
34	CB15S 354085	R. RAJESHWARI	4	4	4	4	4	20	80
35	CB15S 354086	S. RAJKUMAR	3	3	3	3	3	15	60
36	CB15S 354087	R. RAMYA	4	4	3	3	4	18	72
37	CB15S 354088	S. SABARIESWARAN	3	3	3	3	3	15	60
38	CB15S 354089	A. SARAVANA PRIYA	3	4	3	4	3	17	68
39	CB15S 354090	T. SARAVANAN	3	3	3	3	3	15	60
40	CB15S 354091	P. SATHIYAPRIYA	3	3	3	3	3	15	60
41	CB15S 354092	R. SHEELA	4	3	4	3	4	18	72
42	CB15S 354093	M. SRINATH	2	2	2	2	2	10	40
43	CB15S 354095	R. VEERAMMAL	5	4	4	4	4	19	76
44	CB15S 354096	M. VENKATESAN	3	3	4	3	2	15	60
45	CB15S 354097	R. VINOTHKUMAR	2	4	3	3	3	15	60
46	CB15S 354098	S. VIVEK	3	2	4	3	3	15	60
47	CB15S 354099	S. YAMINI UDHAYA	3	4	3	3	3	16	64
48	CB15S 354100	B. YOGESWARI	3	3	3	3	3	15	60
49	UN 15021017	B. DHANALAKSHMI	4	4	4	3	3	18	72
AVERAGE			3.35	3.33	3.35	3.31	3.29		



EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	3.35	75	78.35	92.17
CO2	3.33	75	78.33	92.15
CO3	3.35	75	78.35	92.17
CO4	3.31	75	78.31	92.12
CO5	3.29	75	78.29	92.10

COURSE ATTAINMENT FOR B.Sc., MATHEMATICS

SUBJECT NAME: COMPLEX ANALYSIS

SUBJECT CODE: RCCSMM12

NO. OF STUDENTS: 49

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	92.17%
CO2	92.15%
CO3	92.17%
CO4	92.12%
CO5	92.10%



PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR B.Sc., MATHEMATICS

SUBJECT NAME: COMPLEX ANALYSIS

SUBJECT CODE: RCCSMM12

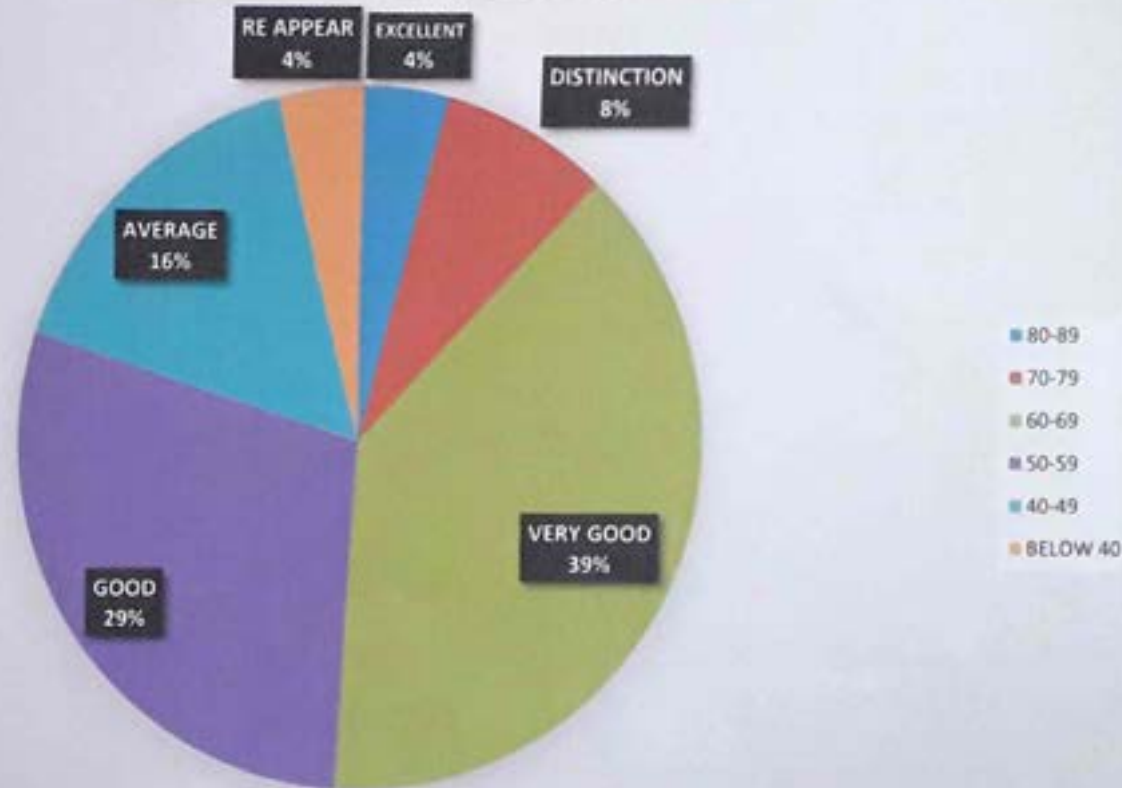
NO. OF STUDENTS: 49

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO. OF STUDENTS	STATUS
90 AND ABOVE	0	OUTSTANDING
80-89	2	EXCELLENT
70-79	4	DISTINCTION
60-69	19	VERY GOOD
50-59	14	GOOD
40-49	8	AVERAGE
BELOW 40	2	RE APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
80-89	4	EXCELLENT
70-79	8	DISTINCTION
60-69	39	VERY GOOD
50-59	29	GOOD
40-49	16	AVERAGE
BELOW 40	4	RE APPEAR



COURSE OUTCOME ASSESSMENT



PRINCIPAL

Bharath College of Science and Management
Bharath Avenue (Near New Bus Stand)
THANJAVUR - 613 005.



BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
(UGC Recognized 2(f) & 12(B) Institution)
THANJAVUR-5
PG DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Remember the fundamental concepts of Mathematics
PO2	Imbibe the skills necessary to effectively translate mathematical aspects to the general public
PO3	Develop Critical thinking ability so as to improve Employability and Decision making.
PO4	Apply Mathematical Models to solve critical problems.
PO5	Apply the concepts studied, in real life situations.

NAME OF THE PROGRAMME : B.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOMES	
RCCSMM13 - DYNAMICS	CO1	Acquire the knowledge of velocity and Acceleration.
	CO2	Understand the path of Projectiles and characteristics of a motion of Projectiles.
	CO3	Study the Fundamental laws of impact.
	CO4	Derive the formulae for simple harmonic motion.
	CO5	Find out the pedal equation of central orbit.



PO → CO _i	PO1	PO2	PO3	PO4	PO5
CO1	3	2	1	2	3
CO2	3	2	3	2	2
CO3	3	1	1	3	2
CO4	3	3	2	3	2
CO5	3	3	3	3	1
AVERAGE	3	2.2	2	2.6	2

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	UNIT TEST (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

SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	CB15S 354050	ABARNA.S	5	5	5	5	5	25	100
2	CB15S 354051	ABDUL RAHMAN.G	4	4	3	3	3	17	68
3	CB15S 354052	ABINAYA R	5	5	5	5	5	25	100
4	CB15S 354053	AHMEDFARVEES M	3	3	3	3	3	15	60
5	CB15S 354054	AJITHARANI S	5	5	5	5	5	25	100
6	CB15S 354055	ANUSUYA R	4	4	4	3	3	18	72
7	CB15S 354056	BALASANTHIYA A	5	5	5	5	5	25	100
8	CB15S 354058	DHANABAL R	5	5	5	5	5	25	100
9	CB15S 354059	DHIVASKAR B	5	4	4	4	4	21	84
10	CB15S 354060	DURGA M	4	3	3	3	3	16	64
11	CB15S 354061	GNANADEVAN C	4	3	3	3	3	15	60



12	CB15S 354062	GOWTHAMI M	5	5	5	5	5	25	100
13	CB15S 354063	HARI PRIYA T	5	5	5	4	4	23	92
14	CB15S 354064	HARISHRAJA G	3	3	3	3	3	15	60
15	CB15S 354065	INDUMATHI S	5	5	4	4	4	22	88
16	CB15S 354066	JAYABHARATHI S	5	5	4	4	4	22	88
17	CB15S 354067	KALAIVAANI Y	5	4	4	4	4	21	84
18	CB15S 354068	KARTHIKA G	5	5	5	4	4	23	92
19	CB15S 354069	KEERTHANA M	5	5	5	5	4	24	96
20	CB15S 354070	MAGESHWARI K	5	5	5	5	5	25	100
21	CB15S 354071	MANIKANDAN B	5	5	5	5	5	25	100
22	CB15S 354072	MANIKANDAN D	4	4	4	3	3	18	72
23	CB15S 354073	MANISHABHAVANI Y	5	5	5	5	5	25	100
24	CB15S 354074	MEENA M	4	4	4	3	3	18	72
25	CB15S 354075	MUTHUKUMAR M	5	4	4	4	4	21	84
26	CB15S 354076	NIVETHA R	5	5	5	4	4	23	92
27	CB15S 354077	PARTHIBAN V	4	4	4	4	3	19	76
28	CB15S 354078	POOVATHI A	5	5	5	5	5	25	100
29	CB15S 354079	PRADEEPA S	5	5	5	5	5	25	100
30	CB15S 354080	PRAGADEESWARI R	5	4	4	4	4	21	84
31	CB15S 354082	PRIYADHARSHINI P	4	4	4	3	3	18	72
32	CB15S 354083	PRIYADHARSHINI R	5	5	5	5	5	25	100
33	CB15S 354084	PRIYADHARSHINI R	5	5	4	4	4	22	88
34	CB15S 354085	RAJESHWARI R	5	5	5	5	5	25	100
35	CB15S 354086	RAJKUMAR S	4	4	4	4	4	20	80
36	CB15S 354087	RAMYA R	5	5	5	5	5	25	100
37	CB15S 354088	SABARIESWARAN S	5	5	5	5	5	25	100
38	CB15S 354089	SARA VANA PRIYA A	5	5	5	4	4	23	92
39	CB15S 354090	SARAVANAN T	4	4	4	3	3	18	72
40	CB15S 354091	SATHIYAPRIYA P	5	5	5	4	4	23	92
41	CB15S 354092	SHEELA R	5	5	5	5	4	24	96
42	CB15S 354093	SRINATH M	2	2	2	2	2	10	40
43	CB15S 354095	VEERAMMAL R	5	5	5	4	4	23	92
44	CB15S 354096	VENKATESAN M	3	3	3	3	3	16	64



45	CB15S 354097	VINOTH KUMAR R	5	4	4	4	4	21	84
46	CB15S 354098	VIVEK S	4	4	4	4	3	19	76
47	CB15S 354099	YAMINI UDHAYA S	5	5	4	4	4	22	88
48	CB15S 354100	YOGESWARI B	5	5	4	4	4	22	88
49	UN15021017	DHANALAKSHMI S	5	5	5	5	5	25	100
AVERAGE			4.59	4.45	4.33	4.10	4.02		

EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.59	75	79.59	93.64
CO2	4.45	75	79.45	93.47
CO3	4.33	75	79.33	93.33
CO4	4.10	75	79.10	93.06
CO5	4.02	75	79.02	92.96

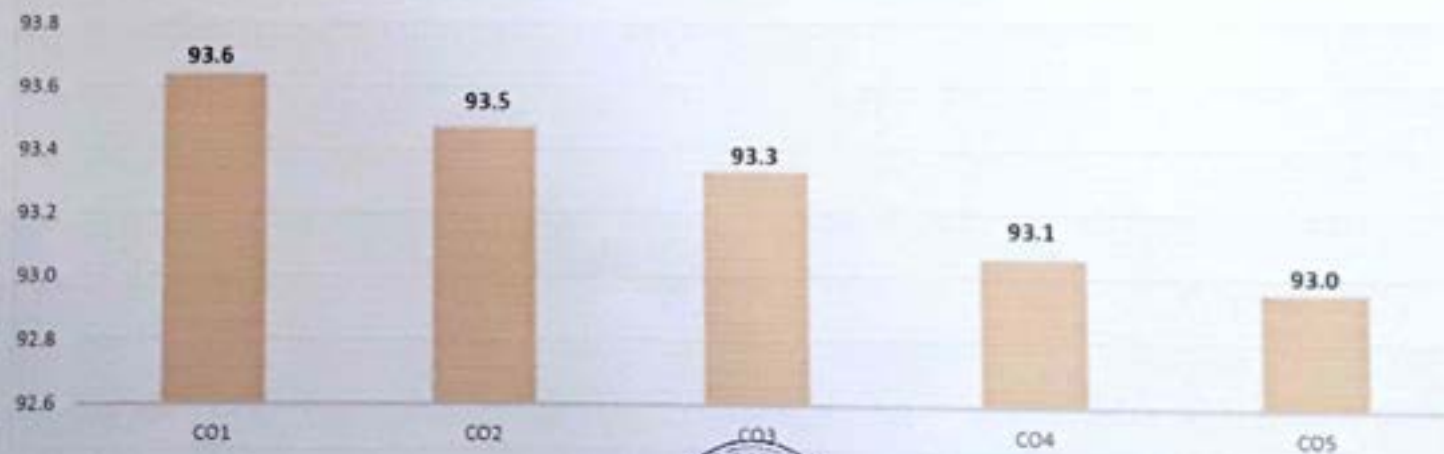


COURSE ATTAINMENT FOR B.SC MATHEMATICS

SUBJECT NAME : DYNAMICS
SUBJECT CODE : RCCSMM13
NO OF STUDENTS : 49

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.6
CO2	93.5
CO3	93.3
CO4	93.1
CO5	93.0

PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR B.SC MATHEMATICS

SUBJECT NAME : DYNAMICS
SUBJECT CODE : RCCSMM13
NO OF STUDENTS : 49

COURSE OUTCOME ASSESSMENT

CATEGORY MARKS	NO OF STUDENTS	STATUS
90 and above		
100	13	OUTSTANDING
80-89	8	EXCELLENT
70-79	4	DISTINCTION
60-69	13	VERY GOOD
50-59	9	GOOD
40-49	1	AVERAGE
below 40	1	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE (%)

CATEGORY MARKS	PERCENTAGE	STATUS
90 and above		
100	27	OUTSTANDING
80-89	16	EXCELLENT
70-79	8	DISTINCTION
60-69	27	VERY GOOD
50-59	18	GOOD
40-49	2	AVERAGE
below 40	2	RE-APPEAR



COURSE OUTCOME ASSESSMENT IN PERCENTAGE



[Signature]
PRINCIPAL

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(UGC Recognized 2(f) & 12(B) Institution)
THANJAVUR-5
DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Remember the fundamental concepts of Mathematics
PO2	Imbibe the skills necessary to effectively translate mathematical aspects to the general public
PO3	Develop Critical thinking ability so as to improve Employability and Decision making.
PO4	Apply Mathematical Models to solve critical problems.
PO5	Apply the concepts studied, in real life situations.

NAME OF THE PROGRAMME: B.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
MBEMM2:1 - GRAPH THEORY	CO1	Understand the knowledge of graphs and its applications.
	CO2	List and relate special graphs
	CO3	Learn about cut set and properties of cut set.
	CO4	study the vector space of a graph.
	CO5	Acquire the knowledge of Matrix representation of a graphs, chromatic number.



11	CB15S 354061	GNANADEVAN C	3	3	3	3	3	15	60
12	CB15S 354062	GOWTHAMI M	5	5	4	4	4	22	88
13	CB15S 354063	HARIPRIYA T	5	5	4	4	4	22	88
14	CB15S 354064	HARISHRAJA G	3	3	3	3	3	15	60
15	CB15S 354065	INDUMATHI S	4	4	3	3	4	18	72
16	CB15S 354066	JAYABHARATHI S	4	3	4	3	3	17	68
17	CB15S 354067	KALAIVANI Y	3	3	3	3	3	15	60
18	CB15S 354068	KARTHIKA G	4	4	5	4	4	21	84
19	CB15S 354069	KEERTHANA M	4	4	4	4	4	20	80
20	CB15S 354070	MAGESHWARI K	5	5	4	5	4	23	92
21	CB15S 354071	MANIKANDAN B	5	5	4	4	4	22	88
22	CB15S 354072	MANIKANDAN D	4	4	4	4	4	20	80
23	CB15S 354073	MANISHABHAVANI Y	5	5	5	5	5	25	100
24	CB15S 354074	MEENA M	5	4	5	4	4	22	88
25	CB15S 354075	MUTHUKUMAR M	3	4	4	3	4	18	72
26	CB15S 354076	NIVETHA R	4	4	4	4	4	20	80
27	CB15S 354077	PARTHIBAN V	3	3	3	3	3	15	60
28	CB15S 354078	POOVATHI A	3	3	3	4	4	17	68
29	CB15S 354079	PRADEEPA S	5	5	5	4	4	23	92
30	CB15S 354080	PRAGADEESWARI R	4	4	4	4	4	20	80
31	CB15S 354082	PRIYADHARSHINI P	4	4	4	4	4	20	80
32	CB15S 354083	PRIYADHARSHINI R	5	5	5	5	5	25	100
33	CB15S 354084	PRIYATHARSHINI R	4	4	4	4	4	20	80
34	CB15S 354085	RAJESHWARI R	5	5	4	5	4	23	92
35	CB15S 354086	RAJKUMAR S	4	3	4	3	4	18	72
36	CB15S 354087	RAMYA R	5	4	5	4	4	22	88
37	CB15S 354088	SABARIESWARAN S	4	4	4	4	4	20	80
38	CB15S 354089	SARAVANA PRIYA A	5	4	4	4	4	21	84
39	CB15S 354090	SARAVANAN T	3	3	3	3	3	15	60
40	CB15S 354091	SATHIYAPRIYA P	5	4	4	4	4	21	84
41	CB15S 354092	SHEELA R	5	4	4	4	4	21	84



42	CB15S 354093	SRINATH M	2	2	2	2	2	10	40
43	CB15S 354095	VEERAMMAL R	3	3	3	3	3	15	60
44	CB15S 354096	VENKATESAN M	2	2	2	2	2	10	40
45	CB15S 354097	VINOTH KUMAR R	3	3	3	3	3	15	60
46	CB15S 354098	VIVEK S	2	2	2	2	2	10	40
47	CB15S 354099	YAMINI UDHAYA S	3	3	3	3	4	16	64
48	CB15S 354100	YOGESWARI B	4	3	4	3	3	17	68
49	UN15021017	DHANALAKSHMI S	5	4	4	5	4	22	88
AVERAGE			3.80	3.61	3.59	3.53	3.59		

EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	3.80	75	78.80	92.71
CO2	3.61	75	78.61	92.48
CO3	3.59	75	78.59	92.46
CO4	3.53	75	78.53	92.39
CO5	3.59	75	78.59	92.46

COURSE ATTAINMENT FOR B.Sc., MATHEMATICS

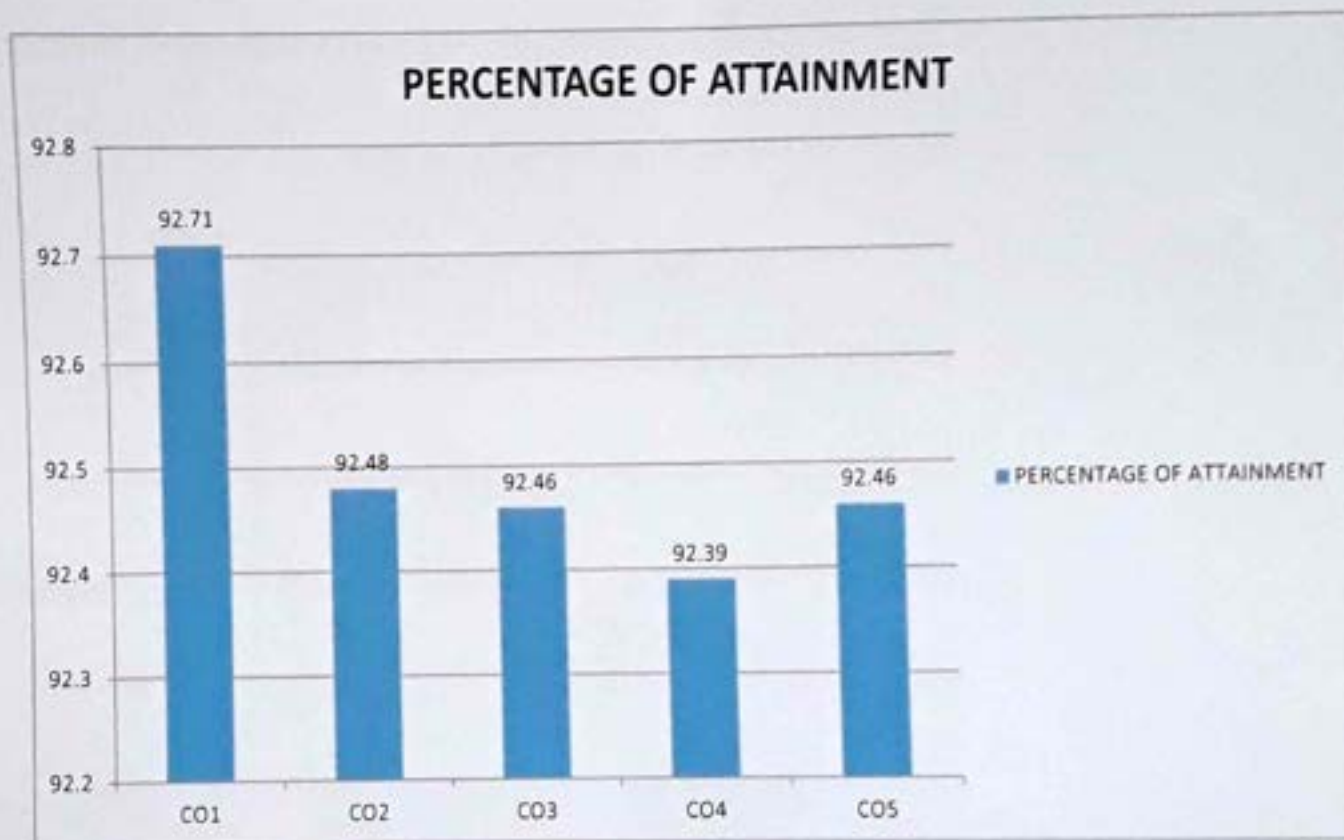
SUBJECT NAME: GRAPH THEORY

SUBJECT CODE: MBEMM2:1

NO. OF STUDENTS: 49

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	92.71
CO2	92.48
CO3	92.46
CO4	92.39
CO5	92.46





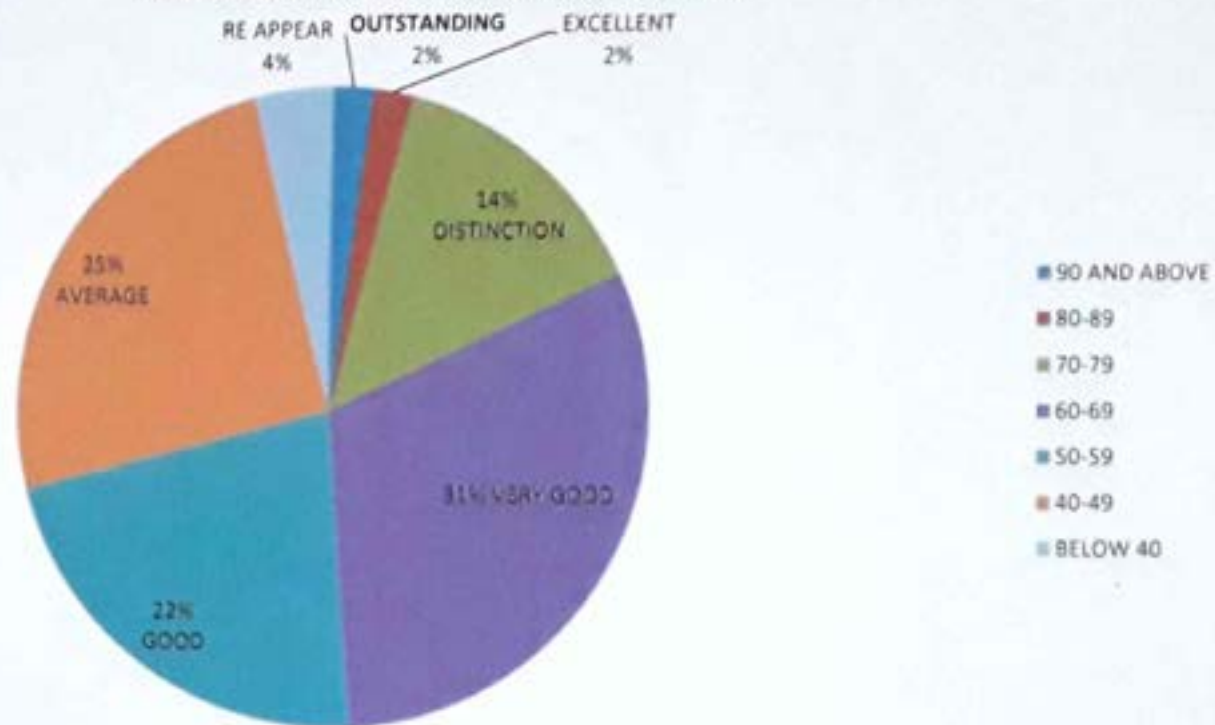
COURSE ATTAINMENT FOR B.Sc., MATHEMATICS
SUBJECT NAME: GRAPH THEORY
SUBJECT CODE: MBEMM2:1
NO. OF STUDENTS: 49

COURSE OUTCOME ASSESSMENT		
CATEGORY(MARKS)	NO. OF STUDENTS	STATUS
90 AND ABOVE	1	OUTSTANDING
80-89	1	EXCELLENT
70-79	7	DISTINCTION
60-69	15	VERY GOOD
50-59	11	GOOD
40-49	12	AVERAGE
BELOW 40	2	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
90 AND ABOVE	2%	OUTSTANDING
80-89	2%	EXCELLENT
70-79	14%	DISTINCTION
60-69	31%	VERY OOD
50-59	22%	GOOD
40-49	25%	AVERAGE
BELOW 40	4%	RE -APPEAR



COURSE OUTCOME ASSESSMENT



[Signature]

PRINCIPAL

Bharath College of Science and Management
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(UGC Recognized 2(f) & 12(B) Institution)
THANJAVUR-5
DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Remember the fundamental concepts of Mathematics
PO2	Imbibe the skills necessary to effectively translate mathematical aspects to the general public
PO3	Develop Critical thinking ability so as to improve Employability and Decision making.
PO4	Apply Mathematical Models to solve critical problems.
PO5	Apply the concepts studied, in real life situations.

Name of the Programme : B.Sc Mathematics		
Course Code & Course Title	Course Outcome	
MBEMM3:2 ASTRONOMY	CO1	To demonstrate the theory of celestial sphere and diurnal motion.
	CO2	To arrange circumpolar stars, diagram of the celestial sphere and zones of earth.
	CO3	To assess the application of mathematics in astronomy Cassini's formula, horizontal refraction and parallex.
	CO4	To analyze the Anomalies Kepler's equations and kinds of years.
	CO5	To describe the moon - sidereal and synodic months, lunar and solar eclipses, maximum and minimum number of eclipses.



PO → CO ₁	PO1	PO2	PO3	PO4	PO5
CO1	3	2	2	2	3
CO2	3	3	3	2	2
CO3	3	2	3	3	2
CO4	3	3	3	2	2
CO5	3	3	3	3	2
AVERAGE	3	2.6	2.8	2.4	2.2

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	UNIT TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	CB15S 354050	ABARNA S	5	4	5	5	5	24	96
2	CB15S 354051	ABDUL RAHMAN G	3	2	4	3	3	15	60
3	CB15S 354052	ABINAYA R	4	4	5	5	5	23	92
4	CB15S 354053	AHAMED FARVEES M	3	2	3	4	3	15	60
5	CB15S 354054	AJITHARANI S	5	4	5	4	5	23	92
6	CB15S 354055	ANUSUYA R	4	4	4	4	4	20	80
7	CB15S 354056	BALASANTHIYA A	4	5	5	4	4	22	88
8	CB15S 354058	DHANABAL R	5	4	4	5	5	23	92
9	CB15S 354059	DHIVASKAR B	3	4	4	3	4	18	72
10	CB15S 354060	DURGA M	4	4	4	4	4	20	80
11	CB15S 354061	GNANADEVAN C	4	4	3	3	3	17	68
12	CB15S 354062	GOWTHAMI M	4	5	5	5	4	23	92
13	CB15S 354063	HARIPRIYA T	5	4	5	5	5	24	96
14	CB15S 354064	HARISH RAJA G	3	3	3	4	3	16	64
15	CB15S 354065	INDUMATHI S	5	4	4	4	4	21	84
16	CB15S 354066	JAYABHARATHI S	5	4	4	4	5	22	88
17	CB15S 354067	KALAIYANI Y	4	4	4	4	4	20	80
18	CB15S 354068	KARTHIKA G	4	5	4	5	4	22	88
19	CB15S 354069	KEERTHANA M	4	4	4	4	4	20	80
20	CB15S 354070	MAGESHWARI K	4	4	5	5	4	22	88
21	CB15S 354071	MANIKANDAN B	4	4	4	4	4	20	80
22	CB15S 354072	MANIKANDAN D	4	4	4	3	3	18	72
23	CB15S 354073	MANISHABHAVANI Y	5	5	4	5	4	23	92
24	CB15S 354074	MEENA M	4	3	4	4	4	19	76
25	CB15S 354075	MUTHUKUMAR M	3	4	4	3	3	17	68
26	CB15S 354076	NIVETHA R	4	4	3	3	4	18	72
27	CB15S 354077	PARTHIBAN V	3	3	3	3	3	15	60
28	CB15S 354078	POOVATHI A	4	5	5	5	4	23	92
29	CB15S 354079	PRADEEPA S	5	5	4	5	4	23	92
30	CB15S 354080	PRAGADEESWARI R	5	4	5	4	4	22	88



31	CB15S 354082	PRIYADHARSHINI P	4	4	4	4	4	20	80
32	CB15S 354083	PRIYADHARSHINI R	5	5	5	4	5	24	96
33	CB15S 354084	PRIYATHARSHINI R	4	3	3	4	4	18	72
34	CB15S 354085	RAJESHWARI R	4	4	4	4	5	21	84
35	CB15S 354086	RAJAKUMARI S	3	4	4	3	4	18	72
36	CB15S 354087	RAMYA R	4	4	5	4	5	22	88
37	CB15S 354088	SABARIESHWARAN S	3	4	4	3	3	17	68
38	CB15S 354089	SARAVANA PRIYA A	4	4	5	5	4	22	88
39	CB15S 354090	SARAVANAN T	3	3	3	3	3	15	60
40	CB15S 354091	SATHYAPRIYA P	4	4	4	4	5	21	84
41	CB15S 354092	SHEELA R	5	4	4	5	4	22	88
42	CB15S 354093	SRINATH M	2	2	2	2	2	10	40
43	CB15S 354095	VEERAMMAL R	4	4	4	4	4	20	80
44	CB15S 354096	VENKATESAN M	3	3	3	3	3	15	60
45	CB15S 354097	VINOTHKUMAR R	4	3	3	4	4	18	72
46	CB15S 354098	VIVEK S	3	3	3	3	3	15	60
47	CB15S 354099	YAMINI UDHAYA S	4	5	4	4	4	21	84
48	CB15S 354100	YOGESWARI B	5	4	5	4	5	23	92
49	UN15021017	DHANALAKSHMI S	5	5	4	4	4	22	88
		Average	4.00	3.90	4.02	3.959	3.959		

EXPECTED ATTAINMENT IN EACH CO - 85%

CO	INT. EXAM+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.00	75	79	92.941
CO2	3.90	75	78.9	92.824
CO3	4.02	75	79.02	92.965
CO4	3.96	75	78.96	92.894
CO5	3.96	75	78.96	92.894

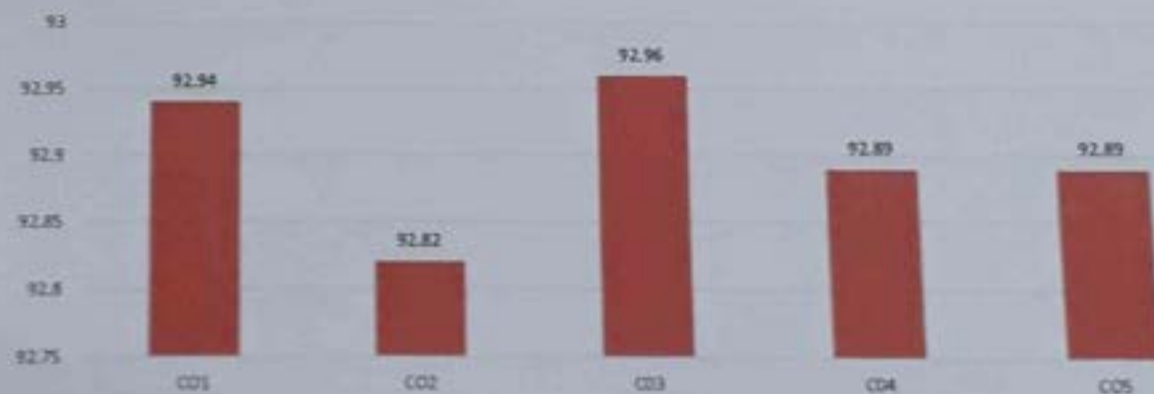


COURSE ATTAINMENT FOR B.Sc., MATHEMATICS

SUBJECT NAME : ASTRONOMY
SUBJECT CODE : MBEMM3.2
NO OF STUDENTS : 49

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	92.94
CO2	92.82
CO3	92.96
CO4	92.89
CO5	92.89

PERCENTAGE OF ATTAINMENT



■ PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR B.Sc., MATHEMATICS

SUBJECT NAME : ASTRONOMY

SUBJECT CODE : MBEMM3-2

NO OF STUDENTS : 49

COURSE OUTCOME ASSESSMENT

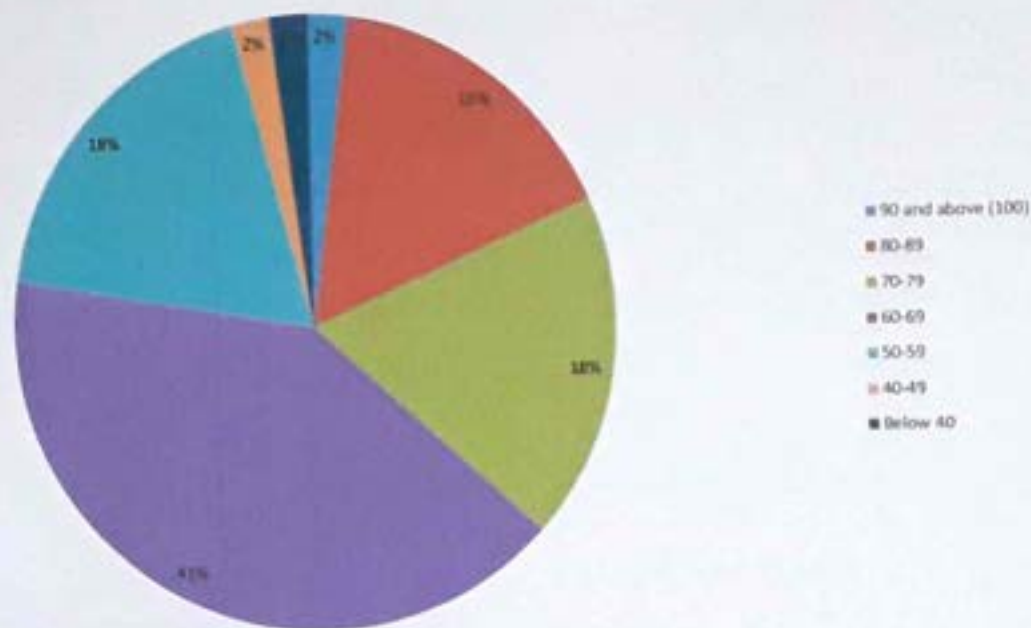
CATEGORY (MARKS)	NO OF STUDENTS	STATUS
90 and above (100)	1	OUTSTANDING
80-89	8	EXCELLENT
70-79	9	DISTINCTION
60-69	20	VERY GOOD
50-59	9	GOOD
40-49	1	AVERAGE
below 40	1	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE

CATEGORY (MARKS)	PERCENTAGE	STATUS
90 and above (100)	2%	OUTSTANDING
80-89	16%	EXCELLENT
70-79	18%	DISTINCTION
60-69	41%	VERY GOOD
50-59	18%	GOOD
40-49	2%	AVERAGE
Below 40	2%	RE-APPEAR



COURSE OUTCOME ASSESSMENT IN PERCENTAGE



[Signature]

PRINCIPAL

Bharath College of Science and Management
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THANJAVUR - 613 005.



BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
(UGC Recognized 2(f) & 12(B) Institution)
THANJAVUR-5
DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Remember the fundamental concepts of Mathematics
PO2	Imbibe the skills necessary to effectively translate mathematical aspects to the general public
PO3	Develop Critical thinking ability so as to improve Employability and Decision making.
PO4	Apply Mathematical Models to solve critical problems.
PO5	Apply the concepts studied, in real life situations.

NAME OF THE PROGRAMME: B.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
16SCCMM1 - DIFFERENTIAL CALCULUS AND TRIGONOMETRY	CO1	Learn the basics of differentiation and their applications
	CO2	Understand and apply the concepts of envelopes using the cartesian formula for radius of curvature.
	CO3	Evaluate the expansions of trigonometric functions.
	CO4	Evaluate the expansions of hyperbolic functions and inverse hyperbolic functions..
	CO5	Learn about the logarithm of a complex number, summation and angles.



PO → CO _i	PO1	PO2	PO3	PO4	PO5
CO1	3	2	3	3	3
CO2	3	3	3	2	2
CO3	3	3	3	3	3
CO4	3	2	3	3	3
CO5	3	2	3	3	3
AVERAGE	3	2.4	3	2.8	2.8

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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



SNO	REGISTER NUMBER	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	CB17S 366511	ABINAYA M	3	3	3	3	3	15	60
2	CB17S 366512	ABINAYA R	3	3	3	3	3	15	60
3	CB17S 366513	ABINESH P	4	3	3	3	4	17	68
4	CB17S 366514	AFFRIN A	3	3	2	2	2	12	48
5	CB17S 366515	AKASH P	3	2	2	2	2	11	44
6	CB17S 366516	AMARNATH J	4	4	4	4	4	20	80
7	CB17S 366517	ANBARASAN M	3	3	3	3	3	15	60
8	CB17S 366518	ARUN KUMAR K	3	3	3	3	3	15	60
9	CB17S 366519	BALAJI S	4	4	4	4	4	20	80
10	CB17S 366520	BHARATHI KANNAN K	2	2	2	2	2	10	40
11	CB17S 366521	GOPINATH S	2	2	2	2	2	10	40
12	CB17S 366522	JAYAPRAKASH K	3	3	3	3	3	15	60
13	CB17S 366523	JEFRE GUDWIN J	4	3	3	3	3	16	64
14	CB17S 366524	KANIMOZHI B	3	3	3	3	3	15	60
15	CB17S 366525	KEERTHANA R	3	3	4	4	4	18	72
16	CB17S 366526	KEERTHIGA V	5	5	4	5	4	23	92
17	CB17S 366527	MARIMUTHU T	2	2	2	2	2	10	40
18	CB17S 366528	NESAMANI K		4	4	4	4	21	84



19	CB17S 366529	NISHANTHI F	3	3	3	3	3	15	60
20	CB17S 366530	PRAGATHI E	4	4	4	4	3	19	76
21	CB17S 366531	PRASANTH K	2	2	2	2	2	10	40
22	CB17S 366532	PUNITHA R	5	5	5	4	5	24	96
23	CB17S 366533	RAMKUMAR N	5	4	5	5	5	24	96
24	CB17S 366534	RAMYANJALI V	5	5	4	5	4	23	92
25	CB17S 366535	RAYMOND C	3	3	4	4	4	18	72
26	CB17S 366536	SENTIL G	3	3	3	3	3	15	60
27	CB17S 366537	SNEHA A	5	5	4	5	4	23	92
28	CB17S 366538	SOWMIYA R	4	4	3	3	4	18	72
29	CB17S 366539	SUGANTHI B	3	3	3	3	3	15	60
30	CB17S 366540	SURUTHI M	4	4	3	4	3	18	72
31	CB17S 366541	SURYA C	4	4	3	3	3	17	68
32	CB17S 366542	VARTHANI V	3	3	2	2	2	12	48
33	CB17S 366543	VIGNESH R	4	4	4	4	5	21	84
34	CB17S 366544	YUVASHREE M	4	3	3	3	3	16	64
AVERAGE			3.53	3.35	3.21	3.29	3.26		



EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST + SEMINAR + ASSIGNMENT	END SEM	TOTAL	%
CO1	3.53	75	78.53	92.39
CO2	3.35	75	78.35	92.18
CO3	3.21	75	78.21	92.01
CO4	3.29	75	78.29	92.11
CO5	3.26	75	78.26	92.07

COURSE ATTAINMENT FOR B.Sc., MATHEMATICS

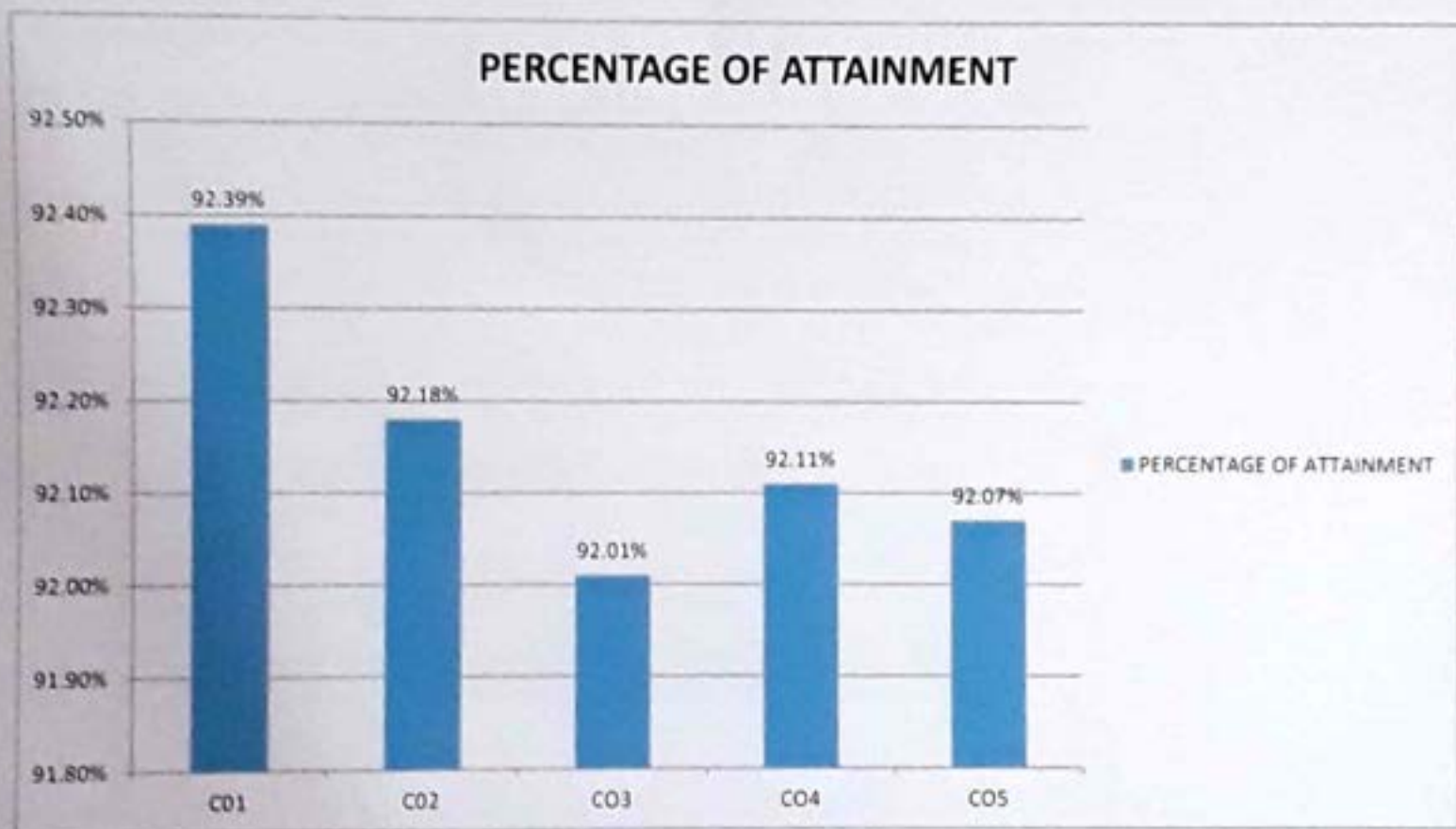
SUBJECT NAME: DIFFERENTIAL CALCULUS AND TRIGONOMETRY

SUBJECT CODE:16SCCMM1

NO. OF STUDENTS: 34

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
C01	92.39%
C02	92.18%
CO3	92.01%
CO4	92.11%
CO5	92.07%





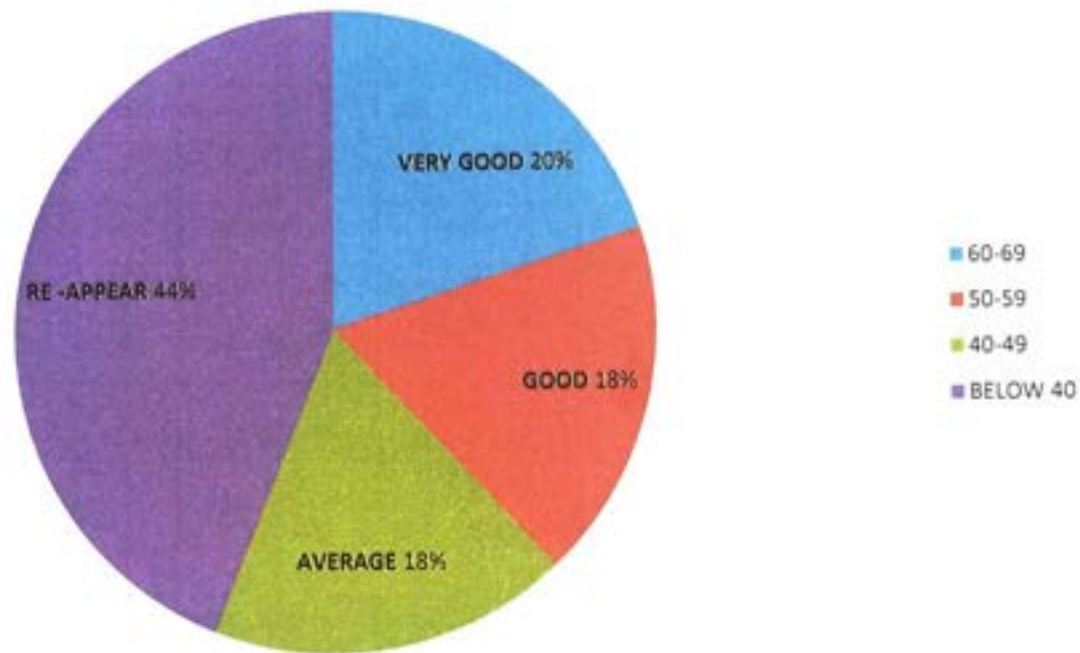
COURSE ATTAINMENT FOR B.Sc., MATHEMATICS
 SUBJECT NAME: DIFFERENTIAL CALCULUS AND TRIGONOMETRY
 SUBJECT CODE: 16SCMM1
 NO. OF STUDENTS: 34

COURSE OUTCOME ASSESSMENT		
CATEGORY(MARKS)	NO. OF STUDENTS	STATUS
90 AND ABOVE	0	OUTSTANDING
80-89	0	EXCELLENT
70-79	0	DISTINCTION
60-69	7	VERY GOOD
50-59	6	GOOD
40-49	6	AVERAGE
BELOW 40	15	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
60-69	20%	VERY GOOD
50-59	18%	GOOD
40-49	18%	AVERAGE
BELOW 40	44%	RE -APPEAR



COURSE OUTCOME ASSESSMENT IN PERCENTAGE



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THANJAVUR-5
DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Remember the fundamental concepts of Mathematics
PO2	Know various specialized areas of advanced mathematics and its applications.
PO3	Develop Critical thinking ability so as to improve Employability and Decision making.
PO4	Apply Mathematical Models to solve critical problems
PO5	Apply the concepts studied, in real life situations

NAME OF THE PROGRAMME: B.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
16SCMM3- DIFFERENTIAL EQUATIONS AND LAPLACE TRANSFORMS	CO1	Define first order, higher order differential equations solvable for dy/dx , x and y .
	CO2	Discuss and demonstrate the Linear equations with variable coefficients and Variation of parameters.
	CO3	Describe the origin of Partial differential equation
	CO4	Explain PDE of second order homogeneous equations with constant coefficients
	CO5	Understand the concepts of differential equations and laplace transforms



PO → CO↓	PO1	PO2	PO3	PO4	PO5
CO1	3	2	2	2	3
CO2	3	3	3	2	2
CO3	3	3	3	3	2
CO4	2	2	2	3	3
CO5	3	2	3	3	3
AVERAGE	2.8	2.4	2.6	2.6	2.6

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	UNIT TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	% TO TOTAL INTERNAL MARK
1	CB17S366511	ABINAYA.M	4	3	3	3	3	16	64
2	CB17S366512	ABINAYA.R	3	3	3	3	3	15	60
3	CB17S366513	ABINESH.P	3	3	3	3	3	15	60
4	CB17S366514	AFFRIN.A	3	3	3	3	3	15	60
5	CB17S366515	AKASH.P	3	3	3	3	3	15	60
6	CB17S366516	AMARNATH.J	3	4	3	3	3	16	64
7	CB17S366517	ANBARASAN.M	4	4	4	4	4	16	64
8	CB17S366518	ARUNKUMAR.K	4	4	3	4	4	19	76
9	CB17S366519	BALAJI.S	3	3	3	3	3	15	60
10	CB17S366521	GOPINATH.S	2	2	2	2	2	10	40
11	CB17S366522	JAYAPRAKASH.K	4	3	3	3	3	16	64
12	CB17S366523	JEFREE GUDWIN.J	4	3	3	3	4	17	68
13	CB17S366524	KANIMOZHI.B	4	4	4	3	3	18	72
14	CB17S366525	KEERTHANA.R	4	4	4	4	3	19	76
15	CB17S366526	KEERTHIGA.V	5	5	5	5	5	25	100
16	CB17S366527	MARIMUTHU.T	2	2	2	2	2	10	40
17	CB17S366528	NESAMANIK	3	3	3	3	3	15	60
18	CB17S366529	NISHANTHI.F	3	4	3	3	3	16	64
19	CB17S366530	PRAGATHI.E	3	3	3	3	3	15	60
20	CB17S366531	PRASANTH.K	2	2	2	2	2	10	40
21	CB17S366532	PUNITHA.R	5	4	5	4	4	22	88
22	CB17S366533	RAM KUMAR.N	3	3	3	3	3	15	60
23	CB17S366534	RAMYANJALI.V	4	4	4	4	4	20	80
24	CB17S366535	RAYMOND.C	3	3	3	3	4	16	64
25	CB17S366536	SENTHIL.G	3	3	3	3	3	15	60
26	CB17S366537	SNEHA.A	3	3	3	3	3	15	60
27	CB17S366538	SOWMIYA.R	5	5	5	5	5	25	100



28	CB17S366539	SUGANTHI.B	3	3	3	3	3	15	60
29	CB17S366540	SURUTHI.M	3	3	3	3	3	15	60
30	CB17S366541	SURYA.C	2	2	2	2	2	10	40
31	CB17S366542	VARTHANI.V	5	4	5	4	4	22	88
32	CB17S366543	VIGNESH.R	3	3	3	3	3	15	60
33	CB17S366544	YUVASHREE.M	3	3	3	3	3	15	60
AVERAGE			3.36	3.27	3.24	3.18	3.21		

EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST + SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	3.36	75	78.36	92.1882
CO2	3.27	75	78.27	92.0824
CO3	3.24	75	78.24	92.0471
CO4	3.18	75	78.18	91.9765
CO5	3.21	75	78.21	92.0118

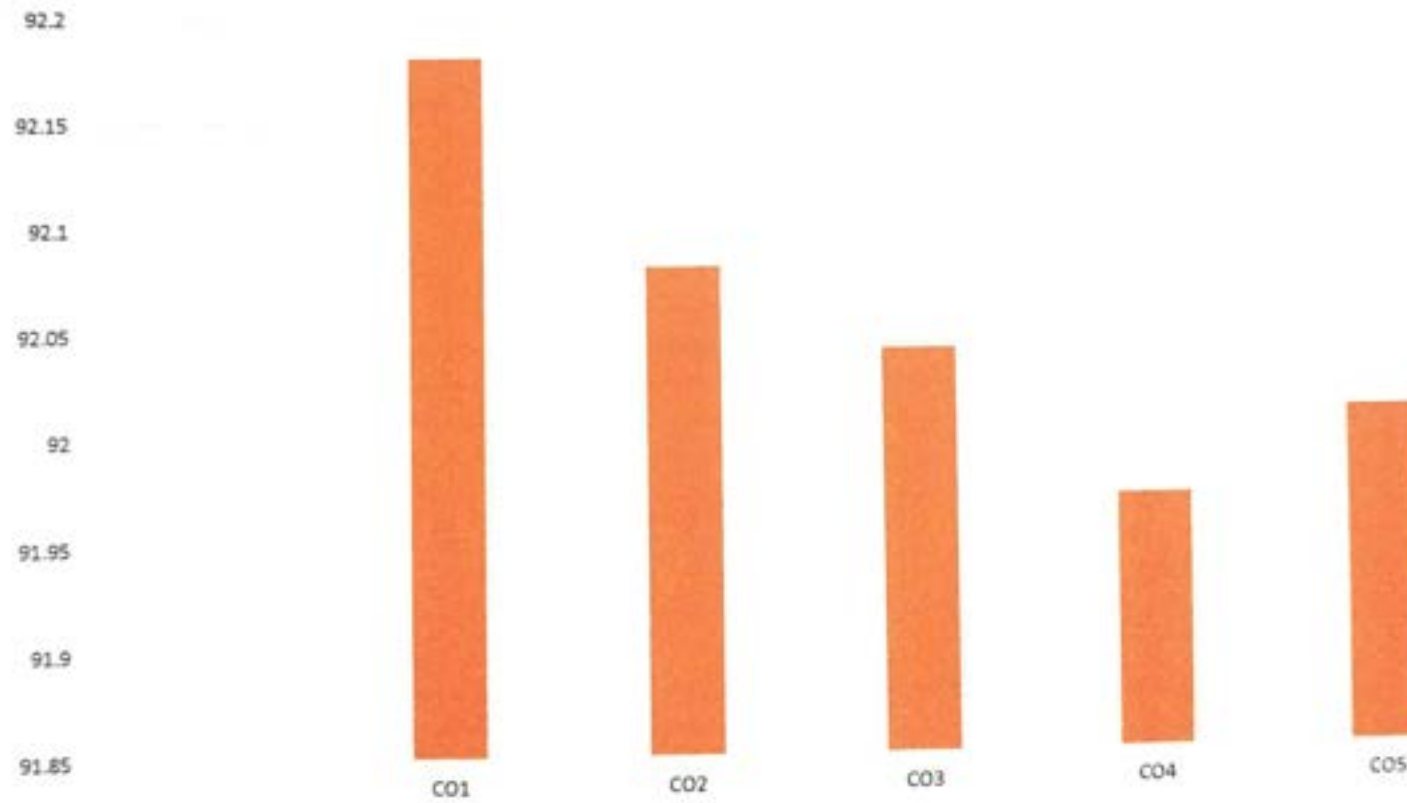
COURSE ATTAINMENT FOR B.SC MATHEMATICS

SUBJECT CODE : 16SCCMM3
SUBJECT NAME : DIFFERENTIAL EQUATIONS AND LAPLACE TRANSFORMS
NO.OF STUDENTS : 33

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	92.18
CO2	92.08
CO3	92.04
CO4	91.97
CO5	92.01



PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR B.SC MATHEMATICS

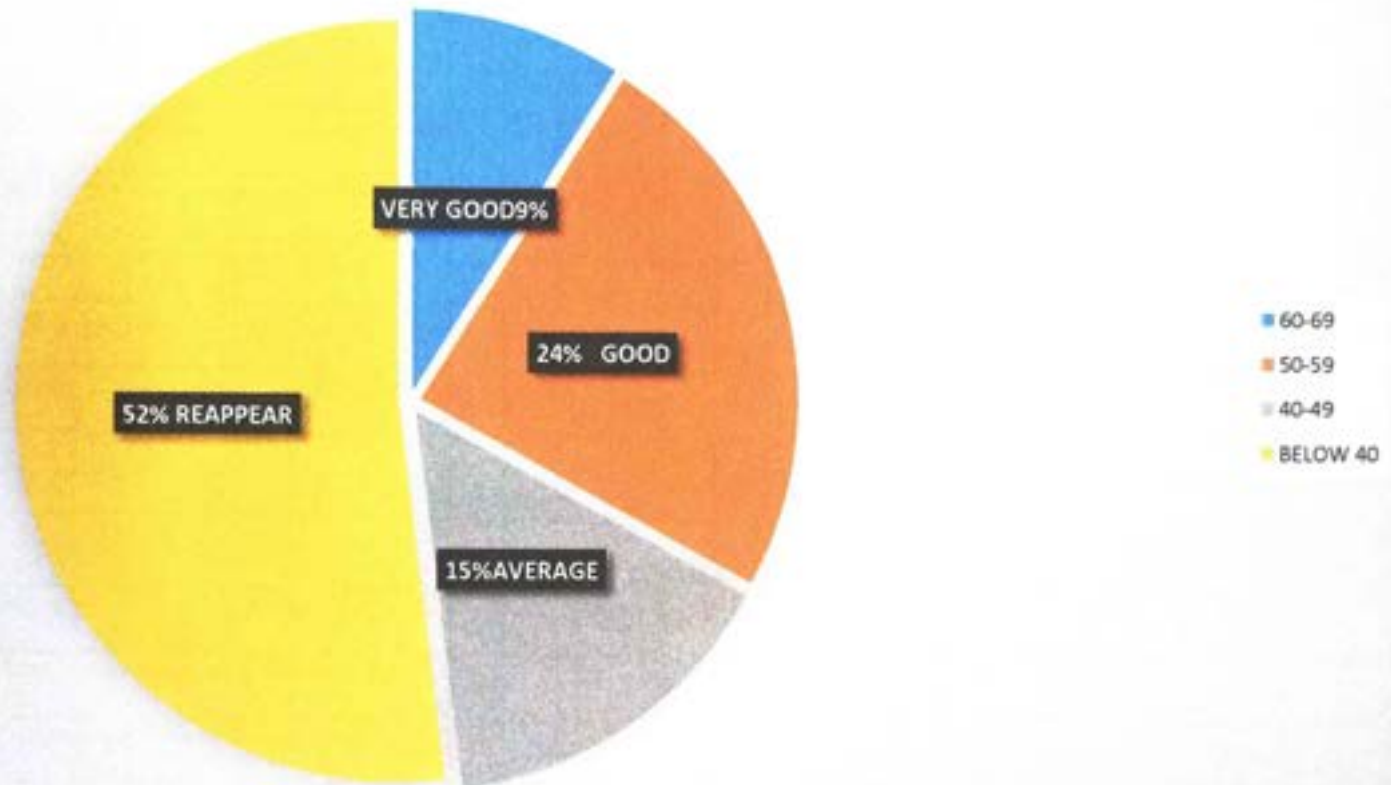
SUBJECT CODE : 16SCCMM3
SUBJECT NAME : DIFFERENTIAL EQUATIONS AND LAPLACE TRANSFORMS
NO OF STUDENTS : 33

COURSE OUTCOME ASSESSMENT		
CATEGORY(MARKS)	NO.OF STUDENTS	STATUS
90 AND ABOVE	0	Out standing
80-89	0	Excellent
70-79	0	Distinction
60-69	3	Very good
50-59	8	Good
40-49	5	Average
BELOW 40	17	Reappear

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY(MARKS)	PERCENTAGE	STATUS
60-69	9%	Very good
50-59	24%	Good
40-49	15%	Average
BELOW 40	52%	Reappear



COURSE OUTCOME ASSESSMENT



PRINCIPAL

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THANJAVUR-5
DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Remember the fundamental concepts of Mathematics
PO2	Imbibe the skills necessary to effectively translate mathematical aspects to the general public
PO3	Develop Critical thinking ability so as to improve Employability and Decision making.
PO4	Apply Mathematical Models to solve critical problems.
PO5	Apply the concepts studied, in real life situations.

NAME OF THE PROGRAMME: B.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
16SCCMM5 - SEQUENCES AND SERIES	CO1	Relate the concepts of convergent , divergent and oscillating Ssequences.
	CO2	Study the behavior of Monotonic functions.
	CO3	Evaluate the limit of the sequence.
	CO4	Apply the comparison test for the convergence series.
	CO5	Apply the D Alembert's ratio test, Cauchy's root test for the convergence series.



PO →	PO1	PO2	PO3	PO4	PO5
CO ₁	3	2	3	3	2
CO1	3	2	2	2	1
CO2	3	2	3	2	2
CO3	3	2	2	2	2
CO4	3	2	3	2	1
CO5	3	2	2.6	2.2	1.6
AVERAGE	3	2	2.6	2.2	1.6

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	CB16S 360286	AINTHAMILSELVI. T	4	3	3	3	3	16	64
2	CB16S 360287	AJITH. J	3	4	4	4	4	19	76
3	CB16S 360288	AJITH. M	4	5	4	5	5	23	92
4	CB16S 360289	AKASH. P	3	3	3	3	3	15	60
5	CB16S 360290	ALAGENDRAN. G	5	5	5	5	5	25	100
6	CB16S 360291	ANANTH.S	4	4	4	3	4	19	76
7	CB16S 360292	ANITHA. D	4	5	5	4	4	22	88
8	CB16S 360293	ARTHI. P	5	4	4	4	4	21	84
9	CB16S 360294	DEEPAN CHAKRAVARTHY. K	5	4	4	4	4	21	84
10	CB16S 360295	DEVIBALA S	4	4	3	4	4	19	76
11	CB16S 360296	DHIVYA.C	5	5	4	4	4	22	88
12	CB16S 360297	DIVYA. S	4	4	4	5	4	21	84
13	CB16S 360298	HEMALATHA. K	5	5	5	5	5	25	100
14	CB16S 360299	JANNATTHUL FIRTHOS. P	5	4	4	4	4	21	84
15	CB16S 360300	KAMALAVATHANAM. G	4	4	4	4	3	19	76
16	CB16S 360301	LATCHAYA. G	5	5	4	4	4	22	88
17	CB16S 360302	MOURIYA. B	5	5	5	5	5	25	100
18	CB16S 360303	NIRMALA. M	3	4	3	4	4	18	72
19	CB16S 360304	NITHYA. J	5	5	4	4	4	22	88
20	CB16S 360305	NIVETHA. A	4	4	4	4	4	20	80
21	CB16S 360306	PUSHKARANYA. M	5	5	5	5	5	25	100
22	CB16S 360307	SHRUTHI. M	5	5	5	5	5	25	100
23	CB16S 360308	SUGANYA. A	5	5	5	5	4	24	96
24	CB16S 360309	THAMARAISELVI. G	5	4	5	5	4	23	92
25	CB16S 360310	VIGNESH. R	4	4	4	3	3	18	72
26	CB16S 358076	VIGNESHWARI. R	5	4	5	5	5	24	96
AVERAGE			4.42	4.35	4.19	4.23	4.12		



EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.42	75	79.42	93.44
CO2	4.35	75	79.35	93.35
CO3	4.19	75	79.19	93.16
CO4	4.23	75	79.23	93.21
CO5	4.12	75	79.12	93.08

COURSE ATTAINMENT FOR B.Sc., MATHEMATICS

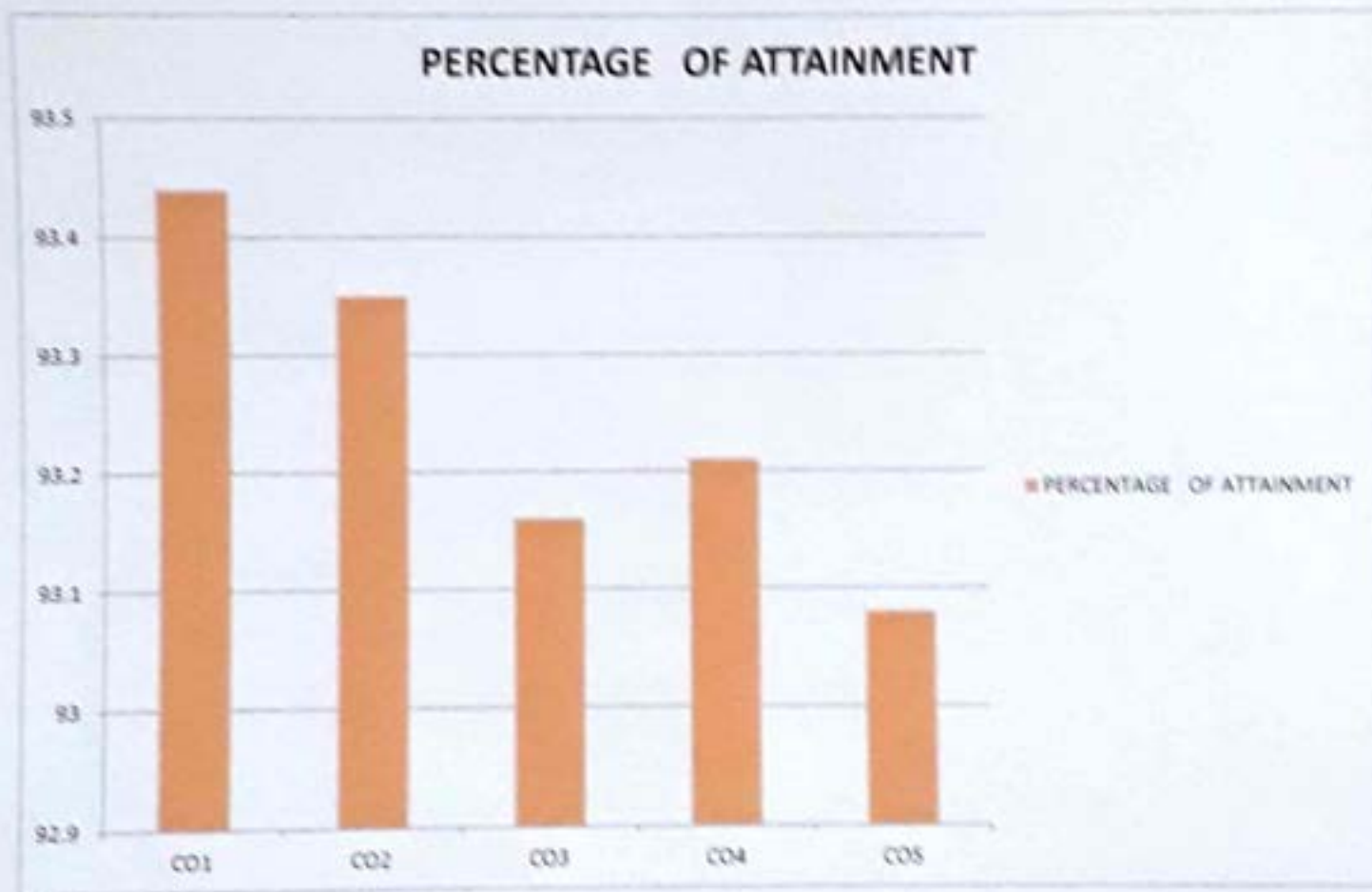
SUBJECT NAME:SEQUENCES AND SERIES

SUBJECT CODE:16SCCMM5

NO. OF STUDENTS:26

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.44
CO2	93.35
CO3	93.16
CO4	93.21
CO5	93.08





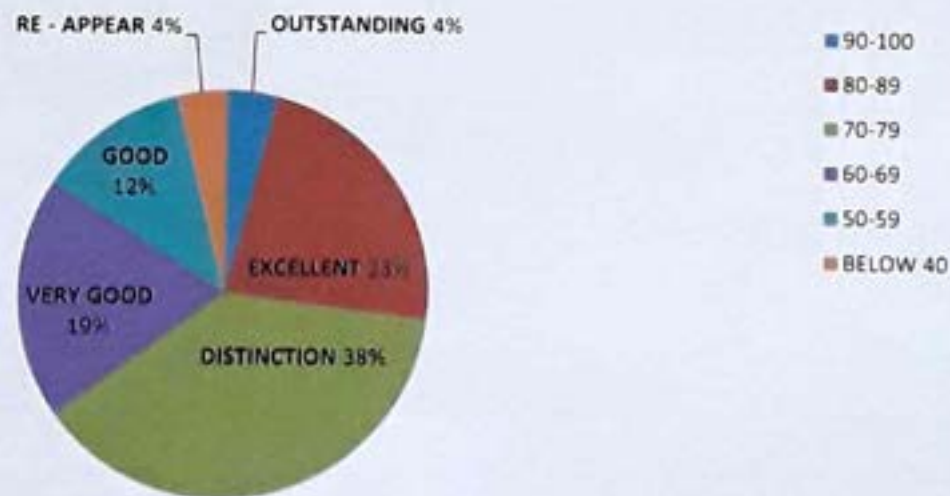
COURSE ATTAINMENT FOR B.Sc., MATHEMATICS
 SUBJECT NAME: SEQUENCES AND SERIES
 SUBJECT CODE: 16SCMM5
 NO. OF STUDENTS: 26

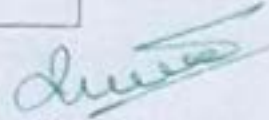
COURSE OUTCOME ASSESSMENT		
CATEGORY(MARKS)	NO. OF STUDENTS	STATUS
90 AND ABOVE	1	OUTSTANDING
80-89	6	EXCELLENT
70-79	10	DISTINCTION
60-69	5	VERY GOOD
50-59	3	GOOD
40-49	0	AVERAGE
BELOW 40	1	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY(MARKS)	PERCENTAGE	STATUS
90-100	4%	OUTSTANDING
80-89	23%	EXCELLENT
70-79	38%	DISTINCTION
60-69	19%	VERY GOOD
50-59	12%	GOOD
BELOW 40	4%	RE - APPEAR



COURSE OUTCOME ASSESSMENT IN PERCENTAGE




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BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
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THANJAVUR-5
DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Remember the fundamental concepts of Mathematics
PO2	Imbibe the skills necessary to effectively translate mathematical aspects to the general public
PO3	Develop Critical thinking ability so as to improve Employability and Decision making.
PO4	Apply Mathematical Models to solve critical problems.
PO5	Apply the concepts studied, in real life situations.

Name of the Programme: B.Sc Mathematics

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
16SCMM6 CLASSICAL ALGEBRA AND THEORY OF NUMBERS	CO1	Find Relation between roots & coefficients of Polynomial Equations, Symmetric functions of the Roots.
	CO2	Describe transformations of Equations, Reciprocal equations.
	CO3	Use Descart's rule of sign and transformation in general
	CO4	Understanding the concept of inequalities Applications.
	CO5	Understanding the concept of Euler function.



PO → CO _i	PO1	PO2	PO3	PO4	PO5
CO1	3	2	1	2	1
CO2	2	2	2	2	2
CO3	3	2	1	3	2
CO4	2	3	2	3	2
CO5	2	3	3	3	3
AVERAGE	2.4	2.4	1.8	2.6	2.25

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO			
	TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	CB16S 360286	AINTHAMILSELVI.T	4	4	5	4	4	21	84
2	CB16S 360287	AJITH. J	4	4	4	4	3	19	76
3	CB16S 360288	AJITH.M	4	4	4	5	4	21	84
4	CB16S 360289	AKASH.P	4	4	4	4	4	20	80
5	CB16S 360290	ALAGENDRAN.G	5	5	5	5	5	25	100
6	CB16S 360291	ANANTH.S	4	4	4	4	3	19	76
7	CB16S 360292	ANITHA.D	5	5	4	5	5	24	96
8	CB16S 360293	ARTHI.P	5	5	4	4	5	23	92
9	CB16S 360294	DEEPAN CHAKRAVARTHY.K	5	4	5	4	5	23	92
10	CB16S 360295	DEVIBALA.S	4	4	5	5	5	22	88
11	CB16S 360296	DHIVYA.C	4	4	4	4	4	20	80
12	CB16S 360297	DHIVYA.S	5	5	5	5	5	25	100
13	CB16S 360298	HEMALATHA.K	5	5	5	5	5	25	100
14	CB16S 360299	JANATTHUL FIRTHOS.P	5	5	4	5	5	24	96
15	CB16S 360300	KAMALAVATHANAM.G	5	5	4	5	5	24	96
16	CB16S 360301	LATCHAYA.G	5	5	5	5	5	25	100
17	CB16S 360302	MOURIYA.B	5	5	5	5	5	25	100
18	CB16S 360303	NIRMALA.M	4	5	4	4	4	21	84
19	CB16S 360304	NITHYA.J	5	4	5	4	4	22	88
20	CB16S 360305	NIVETHA.A	5	4	5	4	4	22	88
21	CB16S 360306	PUSHKARANYA.M	5	5	5	5	5	25	100
22	CB16S 360307	SHURUTHI.M	5	5	5	5	5	25	100
23	CB16S 360308	SUGANYA.A	5	4	5	5	5	24	96
24	CB16S 360309	THAMARAISELVI.G	4	4	5	4	5	22	88
25	CB16S 360310	VIGNESH.R	4	4	4	4	4	20	80
26	CB16S 358076	VIGNESHWARI.R	5	5	5	5	5	25	100
AVERAGE			4.62	4.50	4.58	4.54	4.54		



EXPECTED ATTAINMENT IN EACH CO - 85%

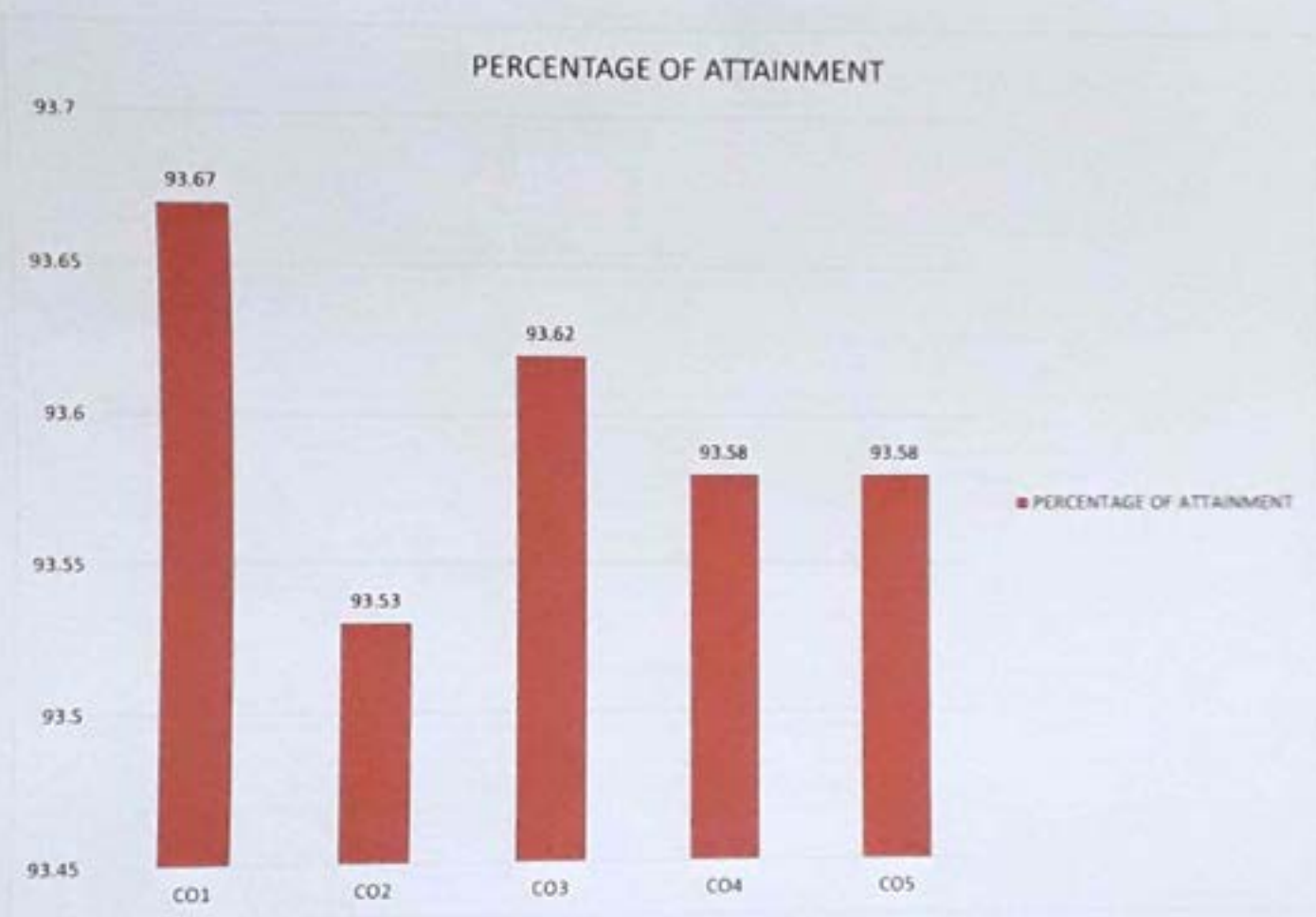
CO	TEST + SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.62	75	79.62	93.67
CO2	4.50	75	79.50	93.53
CO3	4.58	75	79.58	93.62
CO4	4.54	75	79.54	93.58
CO5	4.54	75	79.54	93.58

COURSE ATTAINMENT FOR B.Sc MATHEMATICS

SUBJECT NAME : CLASSICAL ALGEBRA AND THEORY OF NUMBERS
 SUBJECT CODE : 16SCCMM6
 NO.OF STUDENTS : 26

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.67
CO2	93.53
CO3	93.62
CO4	93.58
CO5	93.58





COURSE ATTAINMENT FOR B.Sc MATHEMATICS

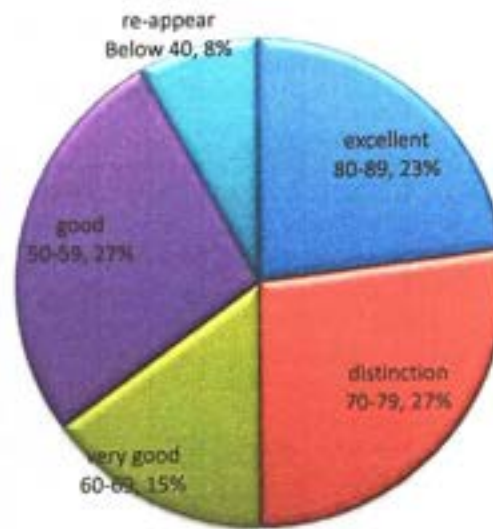
SUBJECT NAME : CLASSICAL ALGEBRA AND THEORY OF NUMBERS
 SUBJECT CODE : 16SCCMM6
 NO.OF STUDENTS : 26

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO.OF. STUDENTS	STATUS
90 and above(100)	0	OUTSTANDING
80-89	6	EXCELLENT
70-79	7	DISTINCTION
60-69	4	VERY GOOD
50-59	7	GOOD
40-49	0	AVERAGE
Below 40	2	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
80-89	23%	EXCELLENT
70-79	27%	DISTINCTION
60-69	15%	VERY GOOD
50-59	27%	GOOD
Below 40	8%	RE-APPEAR



COURSE OUTCOME ASSESSMENT IN PERCENTAGE



■ 80-89 ■ 70-79 ■ 60-69 ■ 50-59 ■ Below 40



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BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
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THANJAVUR-5
DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Remember the fundamental concepts of Mathematics
PO2	Know various specialized areas of advanced mathematics and its applications.
PO3	Develop Critical thinking ability so as to improve Employability and Decision making.
PO4	Apply Mathematical Models to solve critical problems.
PO5	Apply the concepts studied, in real life situations.

NAME OF THE PROGRAMME: B.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
16SCCMM7- VECTOR CALCULUS AND FOURIER SERIES	CO1	Learn Vector differentiation.
	CO2	Learn Vector integration.
	CO3	Learn verifications of the theorems for Simple problems .
	CO4	Acquire the knowledge about Fourier series for periodic signals.
	CO5	Learn the development of Fourier Series in cosine and sine series.



PO → CO ↓	PO1	PO2	PO3	PO4	PO5
CO1	3	2	2	3	2
CO2	2	2	3	3	3
CO3	3	3	2	2	2
CO4	3	3	2	2	3
CO5	3	2	3	3	3
AVERAGE	2.8	2.4	2.4	2.6	2.6

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	UNIT TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	% TO TOTAL INTERNAL
1	CB16S 360286	AINTHAMILSELVI.T	5	4	5	4	4	22	88
2	CB16S 360287	AJITH. J	4	4	3	3	4	18	72
3	CB16S 360288	AJITH.M	4	4	4	4	5	21	84
4	CB16S 360289	AKASH.P	4	3	3	4	3	17	68
5	CB16S 360290	ALAGENDRAN.G	5	5	5	5	4	24	96
6	CB16S 360291	ANANTH.S	4	4	3	3	4	18	72
7	CB16S 360292	ANITHA.D	5	4	4	4	4	21	84
8	CB16S 360293	ARTHI.P	5	5	4	4	4	22	88
9	CB16S 360294	DEEPAN CHAKRAVARTHI.K	4	4	4	4	3	19	76
10	CB16S 360295	DEVIBALA.S	2	2	2	2	2	10	40
11	CB16S 360296	DHIVYA.C	4	4	4	4	4	20	80
12	CB16S 360297	DIVYA.S	4	5	5	5	4	23	92
13	CB16S 360298	HEMALATHA.K	5	5	5	5	5	25	100
14	CB16S 360299	JANATTHUL FIRTHOS.P	5	4	5	4	5	23	92
15	CB16S 360300	KAMALAVATHANAM.G	4	4	4	4	4	20	80
16	CB16S 360301	LATCHAYA.G	5	4	5	4	5	23	92
17	CB16S 360302	MOURIYA.B	5	5	4	5	5	24	96
18	CB16S 360303	NIRMALA.M	5	4	5	4	4	22	88
19	CB16S 360304	NITHYA.J	4	4	5	4	4	21	84
20	CB16S 360305	NIVETHA.A	4	4	4	4	4	20	80
21	CB16S 360306	PUSHKARANYA.M	5	5	5	5	4	24	96
22	CB16S 360307	SHRUTHI.M	5	5	5	5	4	24	96
23	CB16S 360308	SUGANYA.A	5	4	5	5	4	23	92
24	CB16S 360309	THAMARAISELVI.G	4	4	4	4	4	20	80
25	CB16S 360310	VIGNESH.R	4	3	4	4	3	18	72
26	CB16S 358076	VIGNESHWAR.L.R	5	5	5	5	4	24	96
27	CB16S 360913	HAMSAVARTHIN.L.C	4	4	4	4	5	21	84
AVERAGE			4.41	4.15	4.26	4.15	4.04		



EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.41	75	79.41	93.42
CO2	4.15	75	79.15	93.12
CO3	4.26	75	79.26	93.25
CO4	4.15	75	79.15	93.12
CO5	4.04	75	79.04	92.98

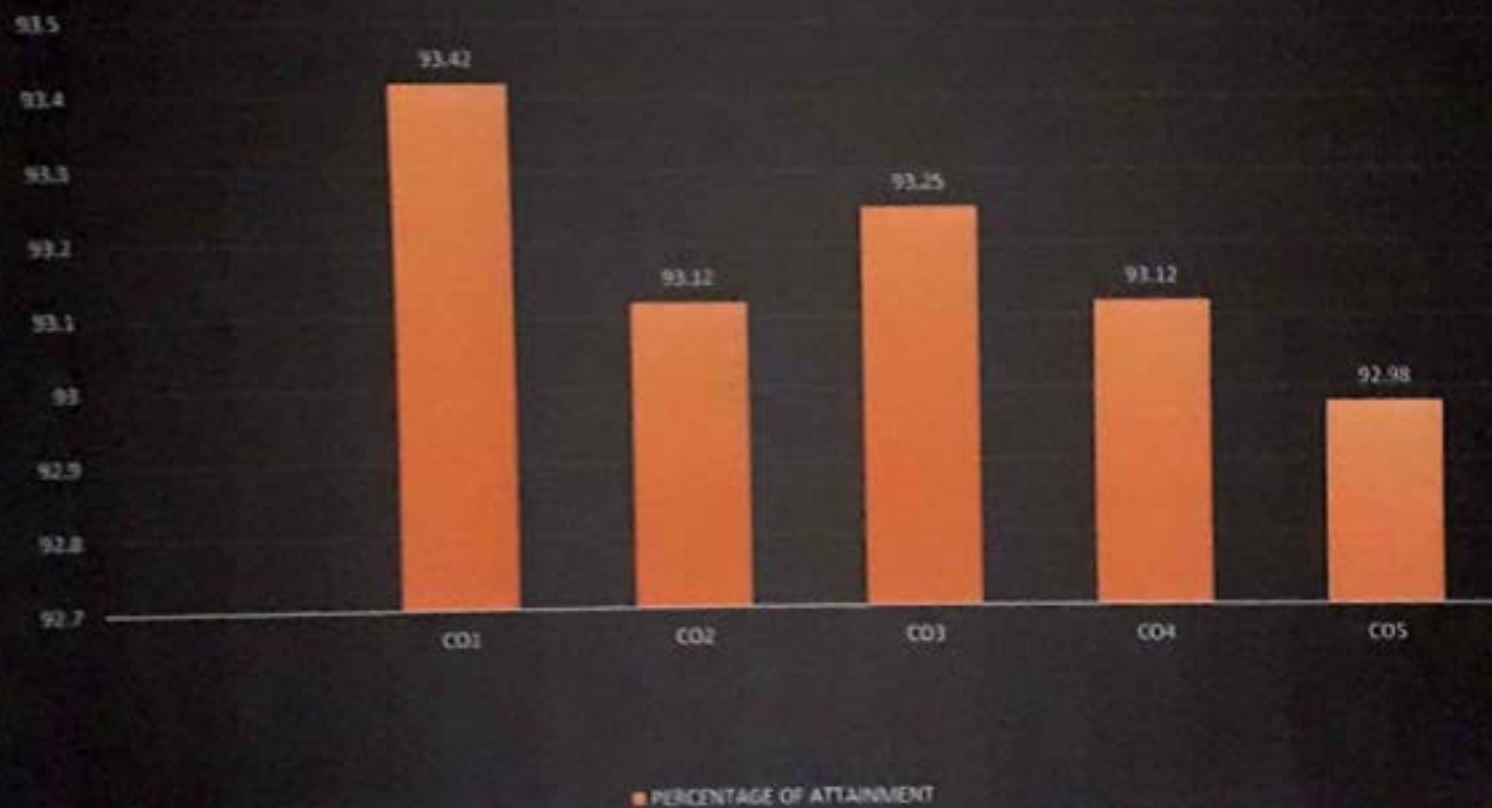
COURSE ATTAINMENT FOR B.SC MATHEMATICS

SUBJECT CODE : 16SCCMM7
 SUBJECT NAME : VECTOR CALCULUS AND FOURIER SERIES
 NO.OF STUDENTS : 27

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.42
CO2	93.12
CO3	93.25
CO4	93.12
CO5	92.98



PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR B.SC MATHEMATICS

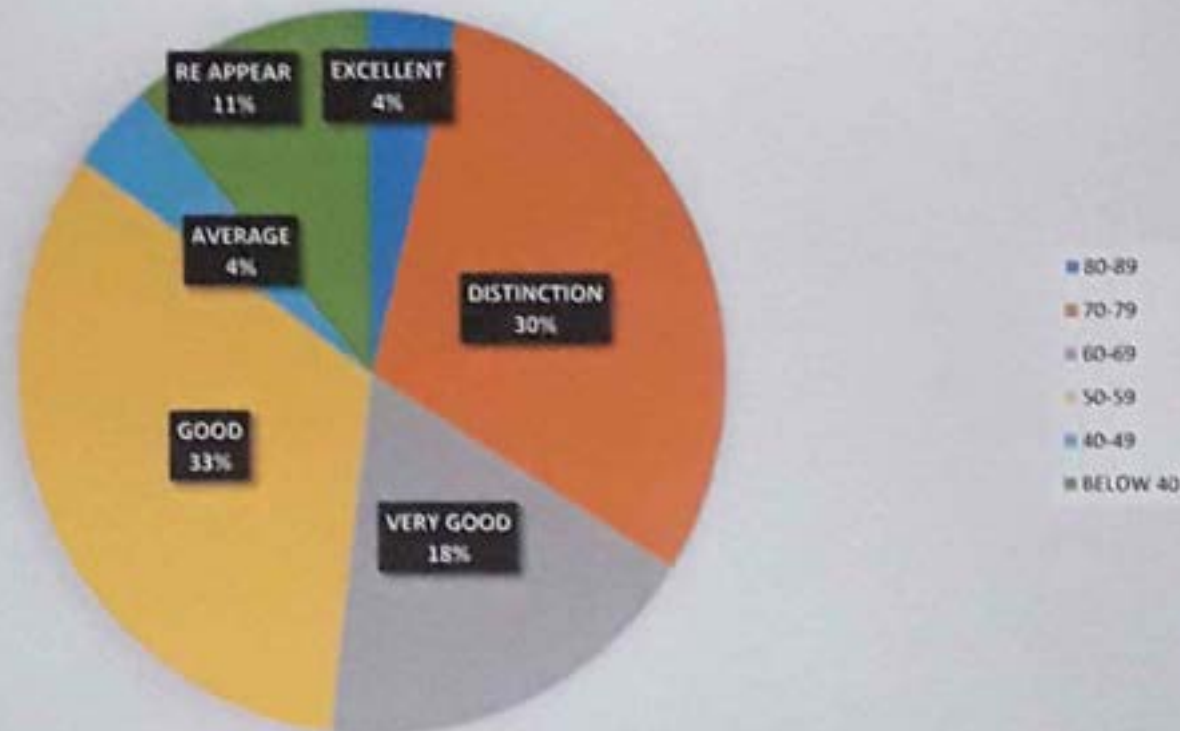
SUBJECT CODE : 16SCCMM7
SUBJECT NAME : VECTOR CALCULUS AND FOURIER SERIES
NO.OF STUDENTS : 26

COURSE OUTCOME ASSESSMENT		
CATEGORY(MARKS)	NO.OF STUDENTS	STATUS
90 AND ABOVE	0	Out standing
80-89	1	Excellent
70-79	8	Distinction
60-69	5	Very good
50-59	9	Good
40-49	1	Average
BELOW 40	3	Reappear

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY(MARKS)	PERCENTAGE	STATUS
80-89	4%	Excellent
70-79	30%	Distinction
60-69	18%	Very good
50-59	33%	Good
40-49	4%	Average
BELOW 40	11%	Reappear



COURSE OUTCOME ASSESSMENT



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**BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
THANJAVUR-5**

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(Affiliated to Bharathidasan University, Tiruchirappalli – 24)**



DEPARTMENT OF MATHEMATICS

PO – CO ATTAINMENT

2018-2019



BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
(UGC Recognized 2(f) & 12(B) Institution)
THANJAVUR-5
DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Identify and enhance mathematical and computational strategies in order to solve mathematical problems.
PO2	Know various specialized areas of advanced mathematics and its applications.
PO3	Work as Professional mathematicians either in academia or elsewhere..
PO4	Inculcate knowledge of formulation and apply mathematical concepts which are suitable for real life applications
PO5	Crack lectureship and fellowship exams affirmed by UGC like CSIR – NET and SET..

NAME OF THE PROGRAMME: M.Sc., MATHEMATICS		
COURSE CODE & COURSE TITLE	COURSE OUTCOME	
P16MA11 - ALGEBRA	CO1	Summarize the concept of Cayley's theorem, Sylow's theorem.
	CO2	Give a detailed knowledge about Euclidean Rings.
	CO3	Differentiate polynomial rings over the rational field and polynomial rings over the commutative rings.
	CO4	Understand Extension fields, Roots of Polynomials.
	CO5	Explain the concepts of Galois Theory.



PO → CO↓	PO1	PO2	PO3	PO4	PO5
CO1	3	3	2	3	3
CO2	3	2	3	2	3
CO3	3	3	2	2	3
CO4	3	3	2	3	3
CO5	3	2	2	3	3
AVERAGE	3	2.6	2.2	2.6	3

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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

SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	P 18191156	GOWTHAMI.M	5	5	5	5	5	25	100
2	P18191157	HARISHRAJA.G	5	4	4	4	4	21	84
3	P18191158	JAYABRATHI.S	4	4	4	4	4	20	80
4	P 18191159	KOKILA.N	5	5	5	5	4	24	96
5	P 18191160	MANIKANDAN.N	5	4	4	5	4	22	88
6	P 18191161	MANISHA BHAVANI.Y	5	5	5	4	4	23	92
7	P 18191162	MUTHUKUMAR.M	5	4	5	4	4	22	88
8	P 18191163	NISHA.K	5	4	5	4	4	22	88
9	P 18191164	SANKARALINGAM.K	5	5	5	4	4	23	92
10	P 18191165	VENKATARAMAN.K.S	5	5	5	4	4	23	92
11	P 18191166	VIMALA.N	5	5	5	5	5	25	100
12	P 18191167	VINOTHKUMAR.R	5	4	4	4	4	21	84
13	P 18191168	VINOTHINI.S	4	4	4	4	4	20	80
14	P 18191169	VIVEK.S	5	4	5	4	4	22	88
		AVERAGE	4.86	4.43	4.64	4.29	4.14		



EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST + SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.86	75	79.86	93.95
CO2	4.43	75	79.43	93.44
CO3	4.64	75	79.64	93.69
CO4	4.29	75	79.29	93.28
CO5	4.14	75	79.14	93.11

COURSE ATTAINMENT FOR M.SC MATHEMATICS

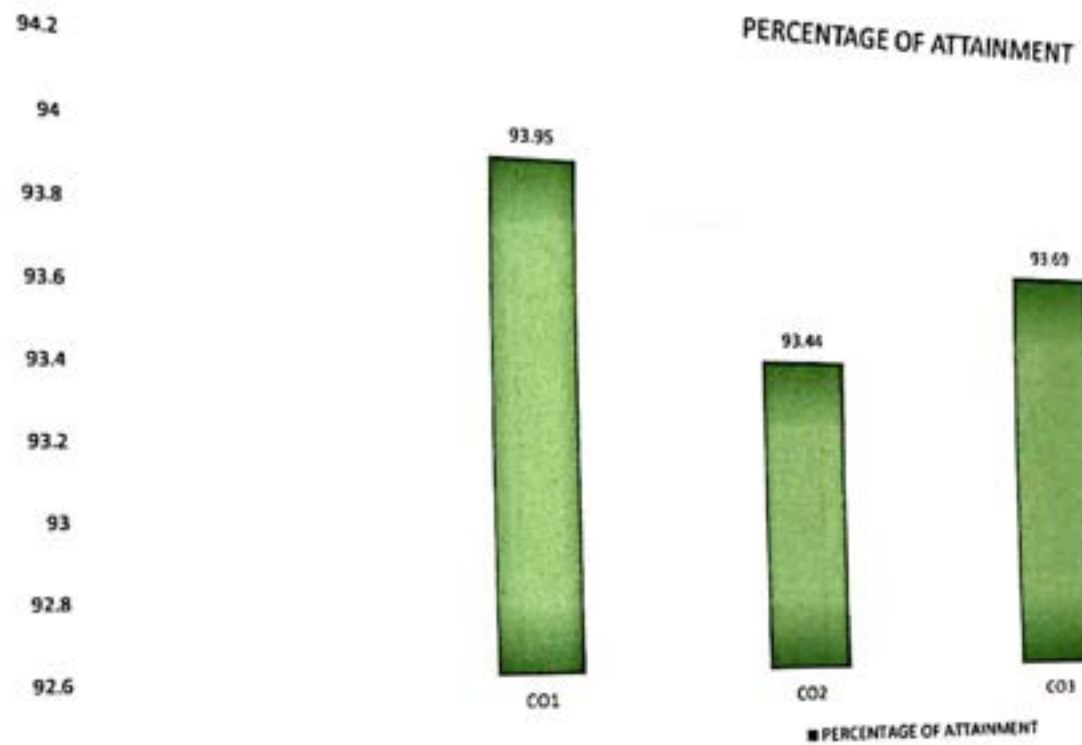
SUBJECT CODE : P16MA11

SUBJECT NAME : ALGEBRA

NO.OF STUDENT: 14

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.95
CO2	93.44
CO3	93.69
CO4	93.28
CO5	93.11





COURSE ATTAINMENT FOR M.SC MATHEMATICS

SUBJECT CODE : P16MA11

SUBJECT NAME : ALGEBRA

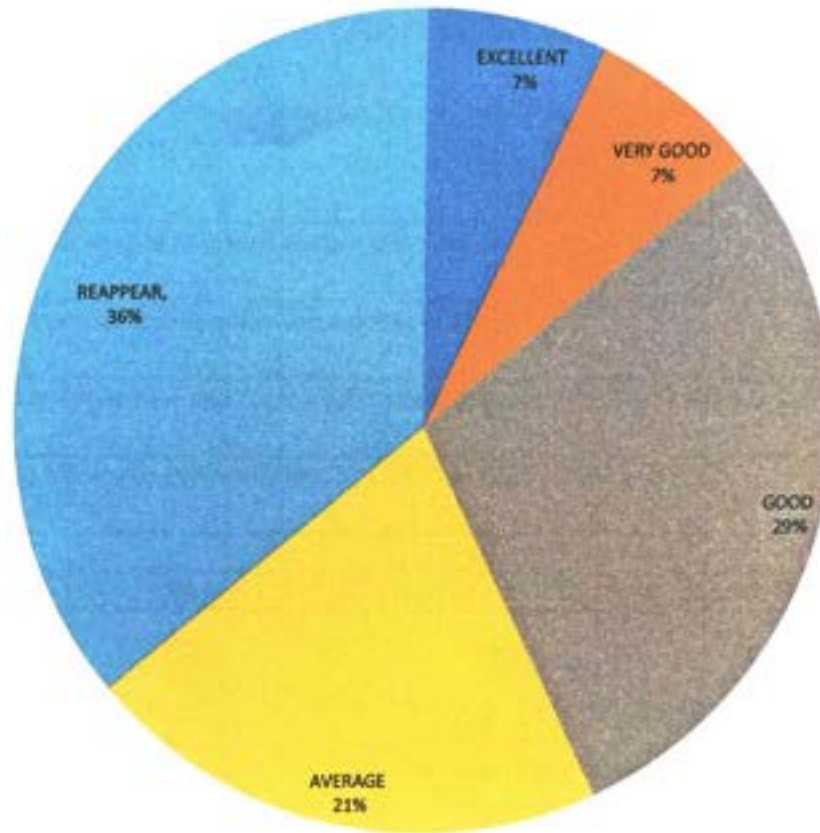
NO.OF STUDENT: 14

COURSE OUTCOME ASSESSMENT		
CATEGORY(MARKS)	NO.OF STUDENTS	STATUS
90 and above	0	Out standing
80-89	1	Excellent
70-79	1	Very good
60-69	4	Good
50-59	3	Above Average
below 50	5	Re appear

COURSE OUTCOME ASSESSMENT		
CATEGORY(MARKS)	PERCENTAGE	STATUS
80-89	7%	Excellent
70-79	7%	Very good
60-69	29%	Good
50-59	21%	Above Average
below 49	36%	Re appear



COURSE OUTCOME ASSESSMENT PERCENTAGE



- 80-89
- 70-79
- 60-69
- 50-59
- below 49




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THANJAVUR-5
DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Identify and enhance mathematical and computational strategies in order to solve mathematical problems.
PO2	Know various specialized areas of advanced mathematics and its applications.
PO3	Work as Professional mathematicians either in academia or elsewhere.
PO4	Inculcate knowledge of formulation and apply mathematical concepts which are suitable for real life applications
PO5	Crack lectureship and fellowship exams affirmed by UGC like CSIR – NET and SET.

NAME OF THE PROGRAMME: M.Sc., MATHEMATICS

COURSE OUTCOME

COURSE CODE & COURSE TITLE		
P16MA14 GRAPH THEORY	CO1	Concept of Subgraphs, Degrees of Vertices, Paths and Connectedness, Operations on Graphs
	CO2	Learn the Vertex Cuts and Edge Cuts, Connectivity and Edge, Connectivity, Trees, Definitions, Characterization and Simple Properties
	CO3	Compute the Vertex Independent Sets and Vertex Coverings, Edge Independent Sets, Matchings and Factors, Eulerian Graphs
	CO4	Ability to Vertex Colouring, Critical Graphs, Triangle, Free Graphs, Edge Colourings of Graphs, Chromatic Polynomials.
	CO5	Learn Planar and Nonplanar Graphs, Euler Formula and its Consequences, K_5 and $K_3,3$ are Nonplanar Graphs, Dual of a Plane Graph



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

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	P 18191156	Gowthami .M	5	5	5	5	5	25	100
2	P 18191157	Harishraja.G	4	5	4	4	4	21	84
3	P 18191156	Jayabharathi.S	4	4	4	4	4	20	80
4	P 18191159	Kokila.N	5	5	5	5	5	25	100
5	P 18191160	Manikandan.D	4	4	5	4	5	22	88
6	P 18191161	Manishabhavani.Y	5	5	5	4	4	23	92
7	P 18191162	Muthukumar.M	5	5	4	4	5	23	92
8	P 18191163	Nisha.K	5	4	4	5	5	23	92
9	P 18191164	Sankaralingam.K	4	5	5	4	5	23	92
10	P 18191165	Venkataraman.K.S	5	4	5	5	4	23	92
11	P 18191166	Vimala.N	5	5	5	5	5	25	100
12	P 18191167	Vinothkumar.R	4	4	5	4	5	22	88
13	P 18191168	Vinothini.S	4	4	4	4	4	20	80
14	P 18191169	Vivek.S	5	4	4	5	4	22	88
AVERAGE			4.57	4.50	4.57	4.43	4.57		



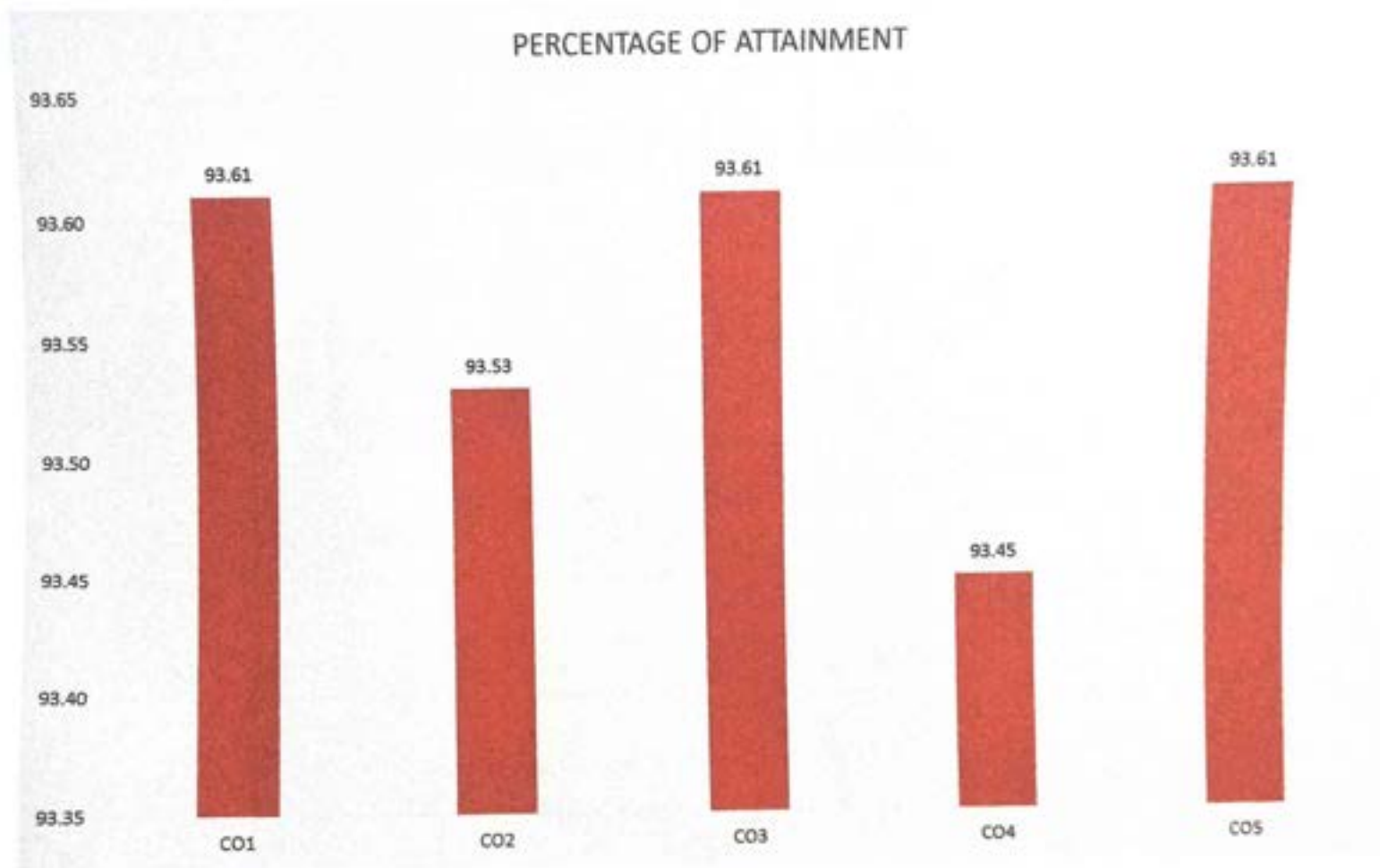
CO	TEST + SEMINAR+ ASSIGNMENT	EXPECTED ATTAINMENT IN EACH CO - 85%		
		END SEM	TOTAL	%
CO1	4.57	75	79.57	93.61
CO2	4.50	75	79.5	93.53
CO3	4.57	75	79.57	93.61
CO4	4.43	75	79.43	93.45
CO5	4.57	75	79.57	93.61

COURSE ATTAINMENT FOR M.Sc MATHEMATICS

SUBJECT NAME : GRAPH THEORY
 SUBJECT CODE : P16MA14
 NO.OF STUDENTS : 14

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.61
CO2	93.53
CO3	93.61
CO4	93.45
CO5	93.61





SUBJECT NAME
SUBJECT CODE
NO.OF STUDENTS

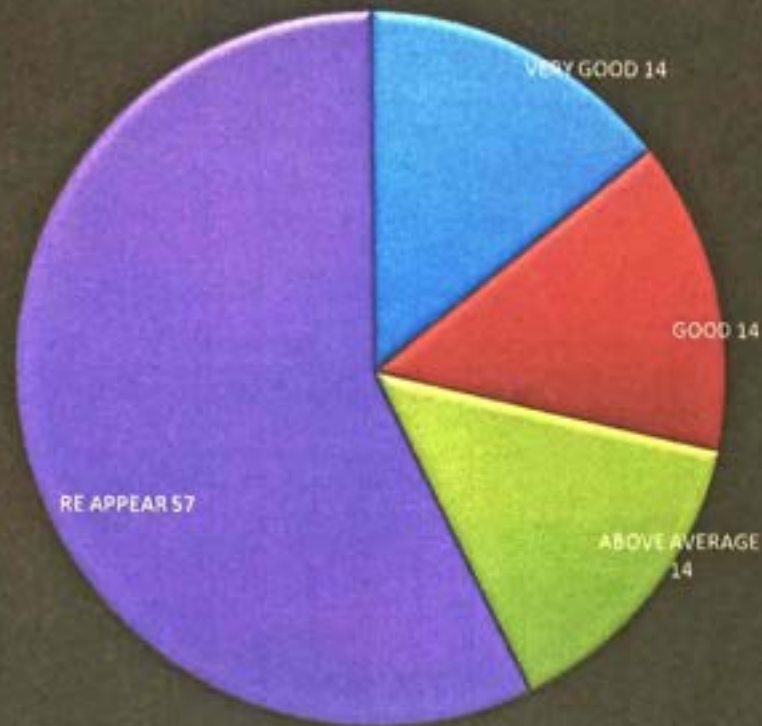
COURSE ATTAINMENT FOR M.Sc MATHEMATICS
: GRAPH THEORY
: P16MA14
: 14

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO.OF. STUDENTS	STATUS
90 and above(100)	0	OUTSTANDING
80-89	0	EXCELLENT
70-79	2	VERY GOOD
60-69	2	GOOD
50-59	2	ABOVE AVERAGE
Below 50	8	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
70-79	14	VERY GOOD
60-69	14	GOOD
50-59	14	ABOVE AVERAGE
Below 50	57	RE-APPEAR



COURSE OUTCOME ASSESSMENT IN PERCENTAGE



70-79 60-69 50-59 Below 50



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THANJAVUR-5
PG DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Remember the fundamental concepts of Mathematics
PO2	Imbibe the skills necessary to effectively translate mathematical aspects to the general public
PO3	Develop Critical thinking ability so as to improve Employability and Decision making.
PO4	Apply Mathematical Models to solve critical problems.
PO5	Apply the concepts studied, in real life situations.

Name of the Programme: M.Sc Mathematics

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
P16MA23 PARTIAL DIFFERENTIAL EQUATIONS	CO1	Concept of origins of first order Partial differential equations Cauchy's problem for first order equations, Linear equations of the first order, Integral surfaces Passing through a Given curve.
	CO2	Learn the Cauchy's method of characteristics, compatible systems of first order equations, Charpits method, Jacobi's method.
	CO3	Compute the origin of second order equations, second order equations in Physics, Higher order equations in Physics, Linear partial differential equations with constant co-efficient.
	CO4	Ability to understand The solution of Linear Hyperbolic equations, Separation of variables. The method of Integral Transforms, Non Linear equations of the second order.
	CO5	Learn Laplace equation, Elementary solutions of Laplace's equations, Families of equipotential Surfaces, Boundary value problems, Separation of variables, Problems with Axial Symmetry.



PO →	PO1	PO2	PO3	PO4	PO5
CO1	3	2	1	2	3
CO2	3	2	3	2	2
CO3	3	1	1	3	2
CO4	3	3	2	3	2
CO5	3	3	3	3	1
AVERAGE	3	2.2	2	2.6	2

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	UNIT TEST (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

SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	% TO TOTAL INTERNAL MARK
1	P18191156	GOWTHAMLM	5	5	5	5	5	25	100
2	P18191159	KOKILA.N	5	5	5	5	5	25	100
3	P18191160	MANIKANDAN.D	4	4	4	4	4	20	80
4	P18191161	MANISA BAVANLY	5	5	4	4	4	22	88
5	P18191162	MUTHUKUMAR.M	4	5	4	4	5	22	88
6	P18191163	NISHA.K	4	4	5	4	4	21	84
7	P18191164	SANKARALINGAM.K	5	4	4	4	5	22	88
8	P18191165	VENKATARAMANAN.K.S	5	4	4	4	4	21	84
9	P18191166	VIMALA.N	4	4	4	4	4	20	80
10	P18191167	VINOTHKUMAR.R	4	4	4	4	4	20	80
11	P18191168	VINOTHINI.S	5	4	4	4	5	22	88
12	P18191169	VIVEK.S	4	4	4	4	4	20	80
		AVERAGE	4.50	4.33	4.25	4.17	4.42		



EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.50	75	79.50	93.53
CO2	4.33	75	79.33	93.33
CO3	4.25	75	79.25	93.24
CO4	4.17	75	79.17	93.14
CO5	4.42	75	79.42	93.43

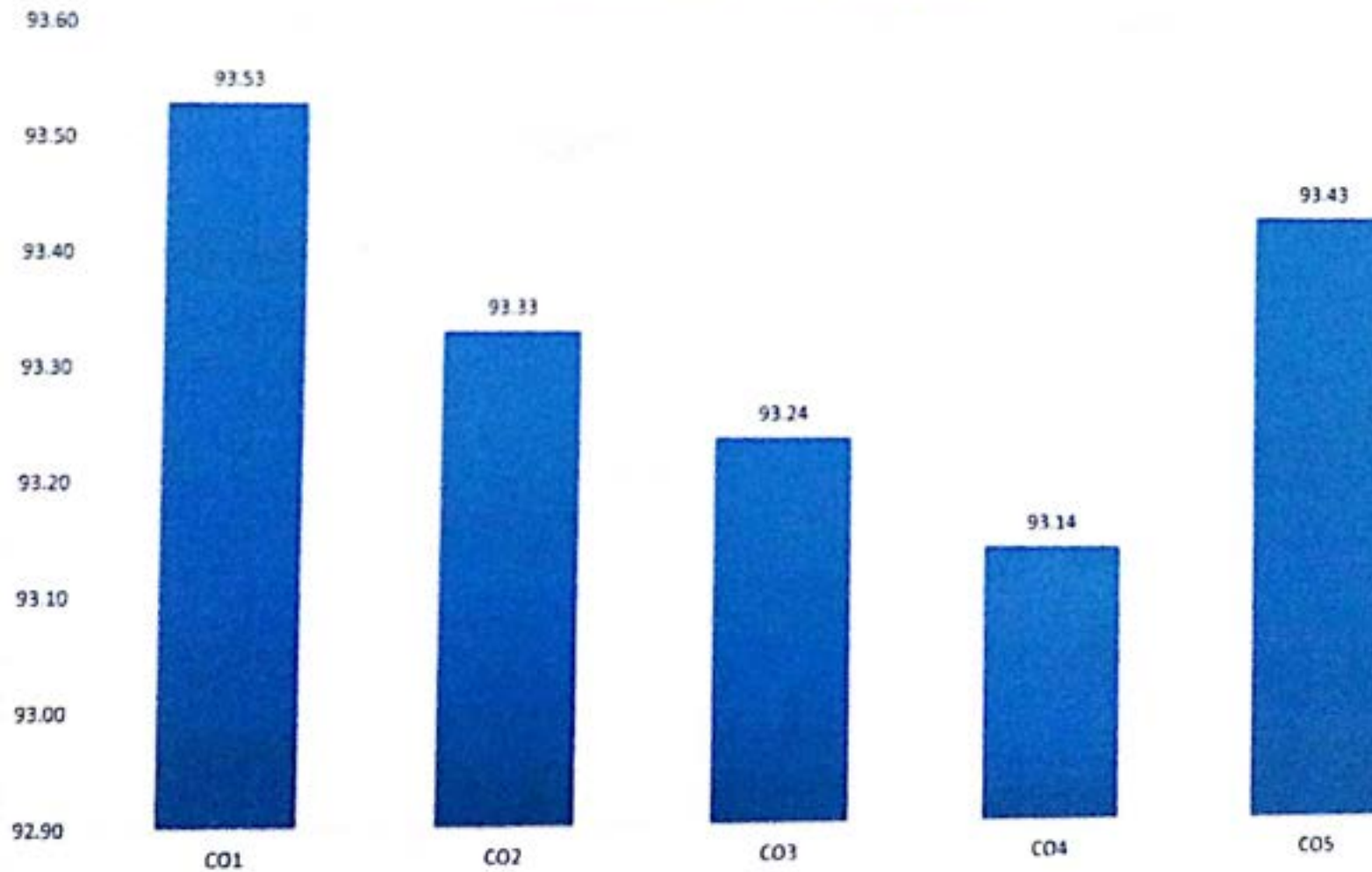
COURSE ATTAINMENT FOR M.Sc MATHEMATICS

SUBJECT NAME : PARTIAL DIFFERENTIAL EQUATIONS
 SUBJECT CODE : P16MA23
 NO OF STUDENTS : 12

COURSE OUTCOME	PERCENTAG E OF ATTAINMENT
CO1	93.53
CO2	93.33
CO3	93.24
CO4	93.14
CO5	93.43



PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR M.Sc MATHEMATICS

SUBJECT NAME : PARTIAL DIFFERENTIAL EQUATIONS
SUBJECT CODE : P16MA23
NO OF STUDENTS : 12

COURSE OUTCOME ASSESSMENT

CATEGORY MARKS	NO OF STUDENTS	STATUS
90 and above	0	OUTSTANDING
80-89	0	EXCELLENT
70-79	2	VERY GOOD
60-69	2	GOOD
50-59	6	ABOVE AVERAGE
below 50	2	RE-APPEAR

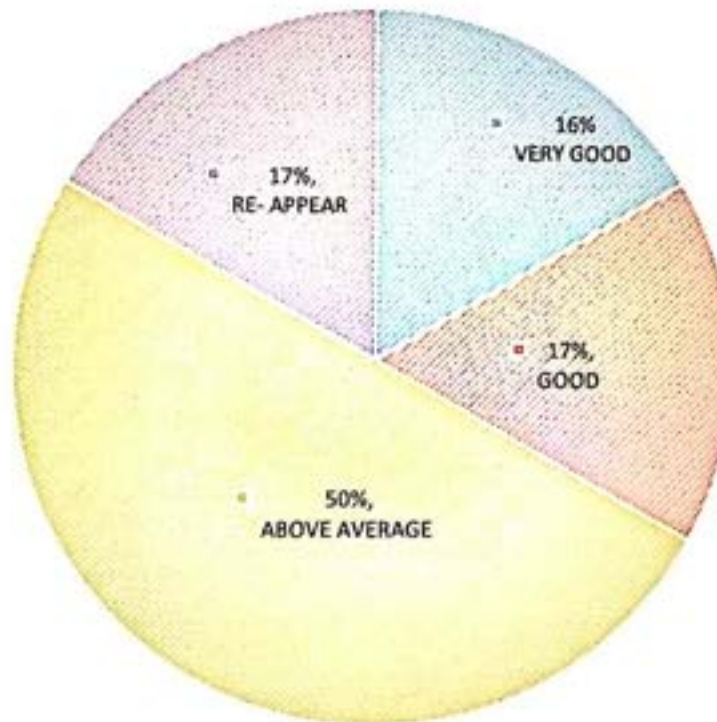
COURSE OUTCOME ASSESSMENT IN PERCENTAGE

CATEGORY MARKS	PERCENTAGE	STATUS
70-79	16	VERY GOOD
60-69	17	GOOD
50-59	50	ABOVE AVERAGE
below 50	17	RE-APPEAR



COURSE OUTCOME ASSESSMENT IN PERCENTAGE

■ 70-79 ■ 60-69 ■ 50-59 ■ below 50



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PG DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Identify and enhance mathematical and computational strategies in order to solve mathematical problems.
PO2	Know various specialized areas of advanced mathematics and its applications.
PO3	Work as Professional mathematicians either in academia or elsewhere.
PO4	Inculcate knowledge of formulation and apply mathematical concepts which are suitable for real life applications.
PO5	Crack lectureship and fellowship exams affirmed by UGC like CSIR – NET and SET.

NAME OF THE PROGRAMME: M.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
P16MA31 - CLASSICAL DYNAMICS	CO1	Define mechanical system, Generalized Co-ordinates, Constraints and Virtual work.
	CO2	Derivation of Lagrange's equation and integrals of motion
	CO3	Construct the applications of Lagrange's equations and Gyroscopic systems
	CO4	Write Hamilton's principle function and variational principles.
	CO5	The use of Hamilton-Jacobi equation and Separability.



PO → CO ↓	PO1	PO2	PO3	PO4	PO5
CO1	3	3	3	3	3
CO2	3	2	3	2	3
CO3	3	3	2	3	2
CO4	3	2	2	3	3
CO5	2	3	3	3	2
AVERAGE	2.8	2.6	2.6	2.8	2.6

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	UNIT TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	% TO TOTAL INTERNAL MARK
1	P 17191501	AARTHI.G	5	5	5	5	5	25	100
2	P 17191502	DEVENDRAN.S	4	4	4	4	4	20	80
3	P 17191503	HEMA.P	5	4	5	5	5	24	96
4	P 17191504	KALPANA.J	5	5	5	5	5	25	100
5	P 17191505	KAVIYA.K	4	4	5	5	4	23	92
6	P 17191506	MAHALAKSHMI.C	5	4	5	4	4	22	88
7	P 17191507	MANKALANAYAGI.K	5	5	5	5	5	25	100
8	P 17191508	NANDHINI.M	4	5	5	5	4	23	92
9	P 17191509	PORTIA HELEN.V	5	5	5	5	5	25	100
10	P 17191510	PRIYA.P	5	4	5	5	4	23	92
11	P 17191511	RAMACHANDRAN.M.G	4	4	4	4	4	20	80
12	P 17191512	SRIPRIYA.T	4	5	5	5	4	23	92
13	P 17191513	VAISHNAVLA	5	5	5	5	5	25	100
14	P 17191514	VARALAKSHMI.K	5	5	5	5	5	25	100
15	P 17191515	VIDHYA.R	5	5	5	5	5	25	100
16	P 17191516	VIJAYAKANIT	5	5	5	5	5	25	100
AVERAGE			4.69	4.63	4.88	4.81	4.56		

EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.69	75	79.69	93.75
CO2	4.63	75	79.63	93.68
CO3	4.88	75	79.88	93.98
CO4	4.81	75	79.81	93.89
CO5	4.56	75	79.56	93.60

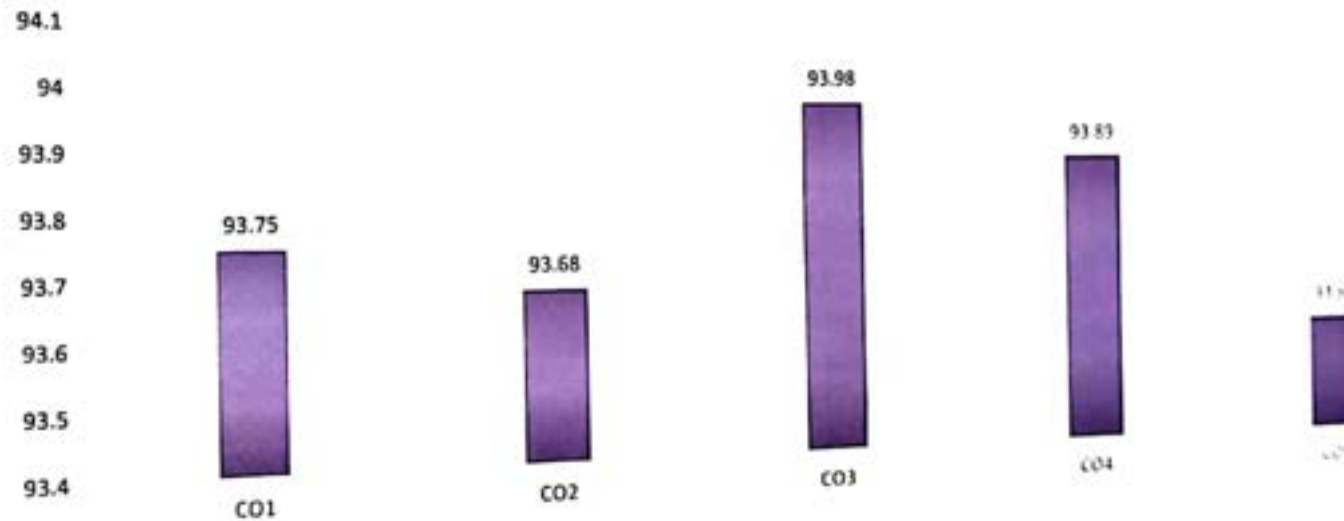


COURSE ATTAINMENT FOR M.Sc MATHEMATICS

SUBJECT NAME : CLASSICAL DYNAMICS
 SUBJECT CODE : P16MA31
 NO OF STUDENTS : 16

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.75
CO2	93.68
CO3	93.98
CO4	93.89
CO5	93.60

PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR M.Sc MATHEMATICS

SUBJECT NAME : CLASSICAL DYNAMICS
SUBJECT CODE : P16MA31
NO OF STUDENTS : 16

COURSE OUTCOME ASSESSMENT

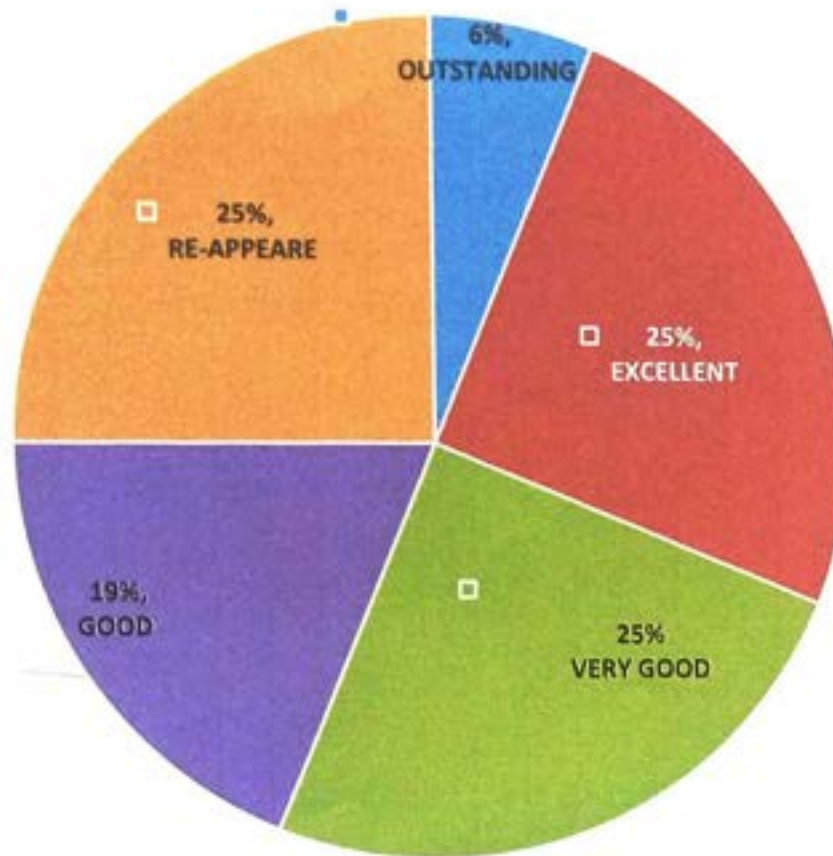
CATEGORY MARKS	NO OF STUDENTS	STATUS
90 and above	1	OUTSTANDING
80-89	4	EXCELLENT
70-79	4	VERY GOOD
60-69	3	GOOD
50-59	0	ABOVE AVERAGE
below 49	4	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE

CATEGORY MARKS	PERCENTAGE	STATUS
90 -100	6	OUTSTANDING
80-89	25	EXCELLENT
70-79	25	VERY GOOD
60-69	19	GOOD
below 49	25	RE-APPEAR



COURSE OUTCOME ASSESSMENT IN PERCENTAGE



- 90 and above
- 80-89
- 70-79
- 60-69
- below 49




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DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Identify and enhance mathematical and computational strategies in order to solve mathematical problems
PO2	Know various specialized areas of advanced mathematics and its applications.
PO3	Work as Professional mathematicians either in academia or elsewhere..
PO4	Inculcate knowledge of formulation and apply mathematical concepts which are suitable for real life applications
PO5	Crack lectureship and fellowship exams affirmed by UGC like CSIR – NET and SET..

NAME OF THE PROGRAMME: M.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
P16MA32 - MEASURE AND INTEGRATION	CO1	Classify the convergence in measures
	CO2	Ascertain the various aspects of Lebesgue measure.
	CO3	Examine about measure space and compute the integration with respect to the measure.
	CO4	Acquire the knowledge of convergence in measure. Understand the Halin decomposition theorem & Jordan decomposition theorem.
	CO5	Diagnose the measurability in product space.



PO → CO ↓	PO1	PO2	PO3	PO4	PO5
CO1	3	2	2	2	0
CO2	3	3	3	2	1
CO3	3	3	3	3	0
CO4	3	2	3	3	0
CO5	3	3	3	3	0
AVERAGE	3	2.6	2.8	2.6	0.2

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	UNIT TEST (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

SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	P17191501	AARTHI.G	5	5	5	5	5	25	100
2	P17191502	DEVENDRAN.S	4	4	4	4	4	20	80
3	P17191503	HEMA.P	5	5	5	5	4	24	96
4	P17191504	KALPANA.J	5	5	5	5	5	25	100
5	P17191505	KAVIYA.K	5	5	5	5	4	24	96
6	P17191506	MAHALAKSHMI.C	5	4	5	4	4	22	88
7	P17191507	MANKALANAYAGI.K	5	5	5	5	5	25	100
8	P17191508	NANDHINI.M	5	4	4	4	4	21	84
9	P17191509	PORTIA HELEN.V	5	5	5	5	5	25	100
10	P17191510	PRIYA.P	5	5	5	4	4	23	92
11	P17191511	RAMACHANDRAN.M.G	4	4	4	4	4	20	80
12	P17191512	SRIPRIYA.T	5	5	5	4	4	23	92
13	P17191513	VAISHNAVLA	5	5	5	5	4	24	96
14	P17191514	VARALAKSHMI.K	5	4	5	5	5	24	96
15	P17191515	VIDHYA.R	5	5	5	5	4	24	96
16	P17191516	VIJAYAKANIT	5	5	5	5	5	25	100
AVERAGE			4.88	4.69	4.81	4.63	4.38		



EXPECTED ATTAINMENT IN EACH CO - 85%

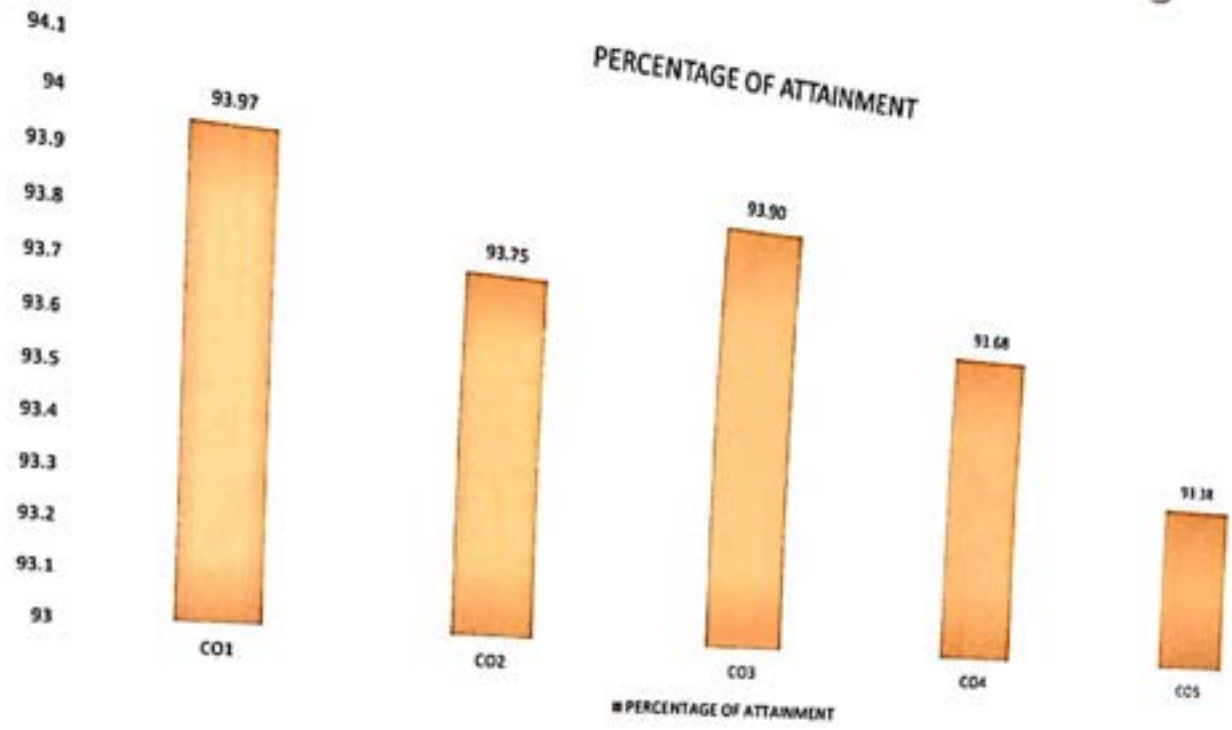
CO	TEST + SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.88	75	79.88	93.97
CO2	4.69	75	79.69	93.75
CO3	4.81	75	79.81	93.90
CO4	4.63	75	79.63	93.68
CO5	4.38	75	79.38	93.38

COURSE ATTAINMENT FOR M.SC MATHEMATICS

SUBJECT CODE : P16MA32
 SUBJECT NAME : MEASURE AND INTEGRATION
 NO.OF STUDENTS : 16

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.97
CO2	93.75
CO3	93.90
CO4	93.68
CO5	93.38





COURSE ATTAINMENT FOR M.SC MATHEMATICS

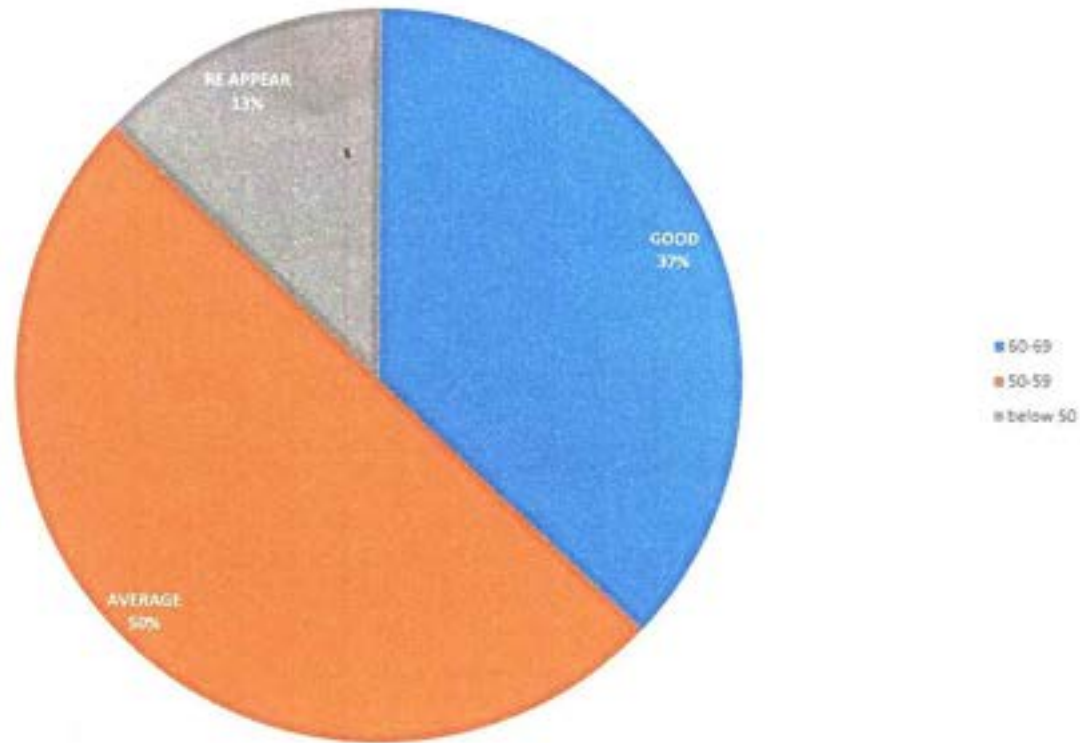
SUBJECT CODE : P16MA32
SUBJECT NAME : MEASURE AND INTEGRATION
NO.OF STUDENTS : 16

COURSE OUTCOME ASSESSMENT		
CATEGORY(MARKS)	NO.OF STUDENTS	STATUS
90 and above	0	Out standing
80-89	0	Excellent
70-79	0	Very good
60-69	6	Good
50-59	8	Average
below 50	2	Reappear

COURSE OUTCOME ASSESSME IN PERCENTAGE		
CATEGORY(MARKS)	PERCENTAGE	STATUS
60-69	37%	Good
50-59	50%	Average
below 50	13%	Reappear



COURSE OUTCOME ASSESSMENT



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DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Identify and enhance mathematical and computational strategies in order to solve mathematical problems.
PO2	Know various specialized areas of advanced mathematics and its applications.
PO3	Work as Professional mathematicians either in academia or elsewhere.
PO4	Inculcate knowledge of formulation and apply mathematical concepts which are suitable for real life applications.
PO5	Crack lectureship and fellowship exams affirmed by UGC like CSIR – NET and SET.

NAME OF THE PROGRAMME: M.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
P16MA33 - TOPOLOGY	CO1	Define topological spaces and explain the properties of order topology, product topology, subspace topology, continuous functions.
	CO2	Describe the properties on metric topology
	CO3	Gain the knowledge of connected spaces.
	CO4	Apply domain knowledge for compact space with examples.
	CO5	State and prove Urysohn lemma, Urysohn Metrization theorem and the Tietz Extension Theorem.



PO → CO ↓	PO1	PO2	PO3	PO4	PO5
CO1	3	3	3	3	3
CO2	3	3	3	2	2
CO3	3	2	3	3	3
CO4	2	3	3	3	3
CO5	3	3	2	3	3
AVERAGE	2.8	2.8	2.8	2.8	2.8

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	P 17191501	AARTHI.G	4	4	5	5	5	23	92
2	P 17191502	DEVENDRAN.S	4	4	4	4	4	20	80
3	P 17191503	HEMA.P	5	5	4	4	4	22	88
4	P 17191504	KALPANA.J	5	5	5	5	4	24	96
5	P 17191505	KAVIYA.K	5	4	5	4	5	23	92
6	P 17191506	MAHALAKSHMI.C	5	5	4	4	5	23	92
7	P 17191507	MANKALANAYAGI.K	5	4	4	5	5	23	92
8	P 17191508	NANDHINI.M	4	4	4	5	4	21	84
9	P 17191509	PORTIA HELEN.V	5	5	5	5	4	24	96
10	P 17191510	PRIYA.P	5	5	5	4	4	23	92
11	P 17191511	RAMACHANDRAN.M.G	4	4	4	4	5	21	84
12	P 17191512	VAISHNAVI.A	5	5	5	5	4	24	96
13	P 17191513	SRIPRIYA.T	5	5	5	5	5	25	100
14	P 17191514	VARALAKSHMI.K	5	5	4	5	4	23	92
15	P 17191515	VIDHYA.R	5	4	4	5	5	23	92
16	P 17191516	VIJAYAKANI.T	5	5	5	5	5	25	100
AVERAGE			4.75	4.563	4.50	4.625	4.50		

EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.75	75	79.75	93.82
CO2	4.56	75	79.56	93.60
CO3	4.50	75	79.50	93.53
CO4	4.63	75	79.63	93.68
CO5	4.50	75	79.50	93.53

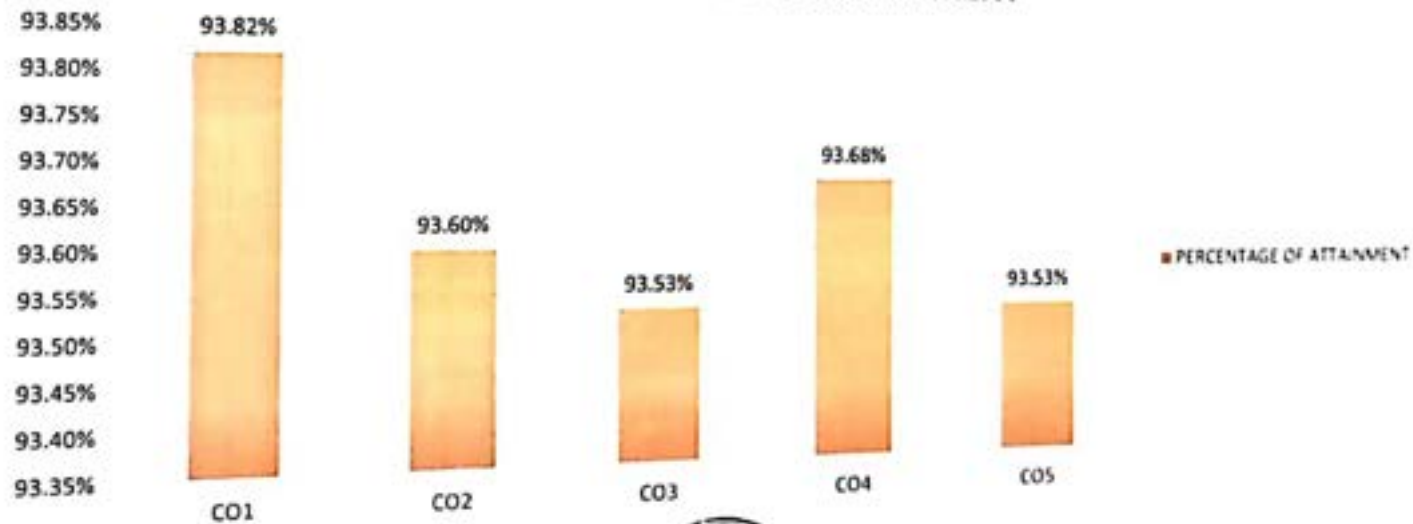


COURSE ATTAINMENT FOR M.Sc., MATHEMATICS

SUBJECT NAME: TOPOLOGY
SUBJECT CODE: P16MA33
NO. OF STUDENTS: 16

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.82%
CO2	93.60%
CO3	93.53%
CO4	93.68%
CO5	93.53%

PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR M.Sc., MATHEMATICS

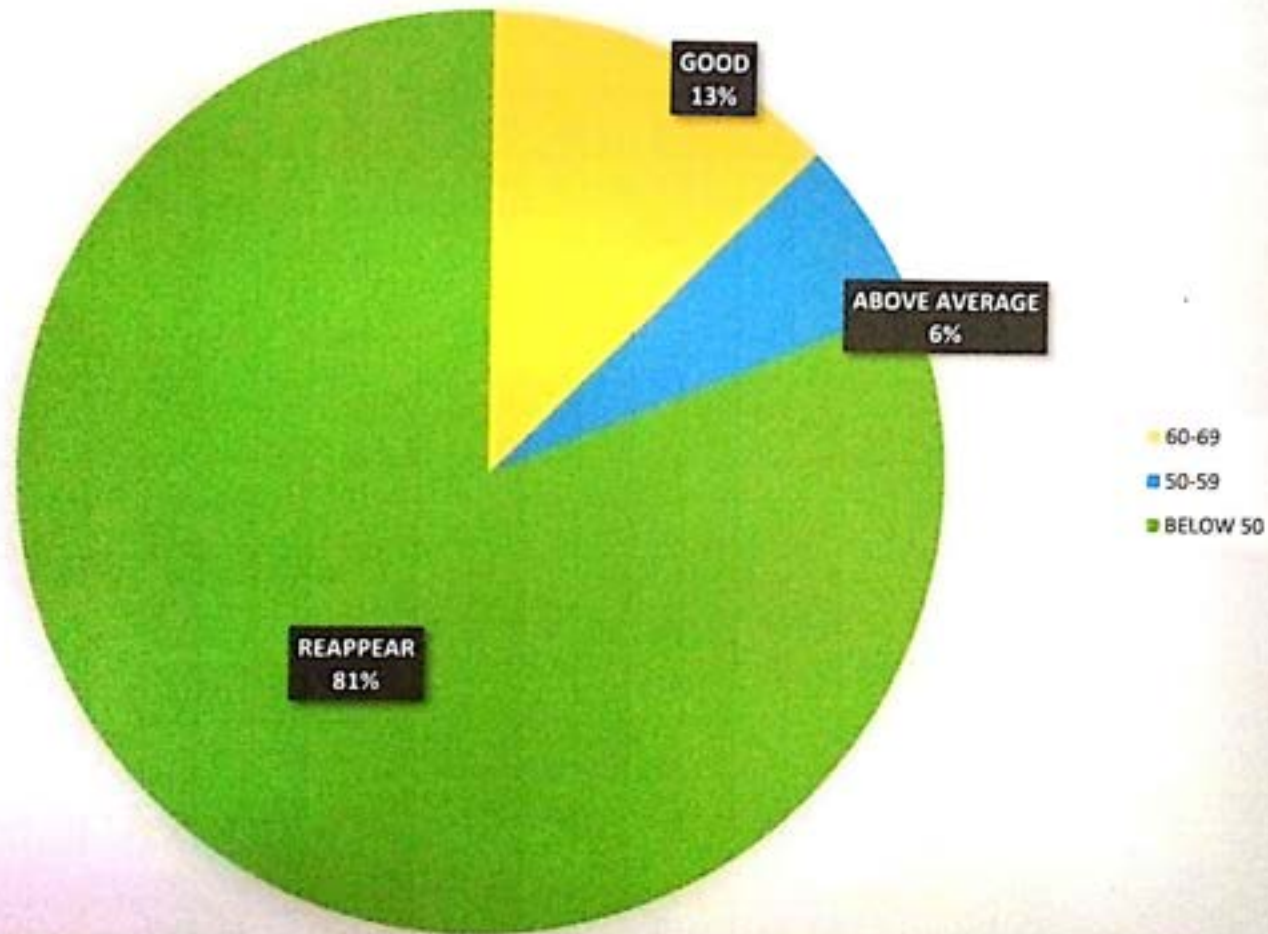
SUBJECT NAME: TOPOLOGY
 SUBJECT CODE: PI6MA33
 NO. OF STUDENTS: 16

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO. OF STUDENTS	STATUS
90 AND ABOVE	0	OUTSTANDING
80-89	0	EXCELLENT
70-79	0	VERY GOOD
60-69	2	GOOD
50-59	1	ABOVE AVERAGE
BELOW 50	13	RE APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
60-69	2	GOOD
50-59	1	ABOVE AVERAGE
BELOW 50	13	RE APPEAR



COURSE OUTCOME ASSESSMENT



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PO4	Inculcate knowledge of formulation and apply mathematical concepts which are suitable for real life applications.
PO5	Crack lectureship and fellowship exams affirmed by UGC like CSIR – NET and SET.

NAME OF THE PROGRAMME: M.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME
P16MA42 DIFFERENTIAL GEOMETRY	CO1 Concept of space curve, Arc length, tangent, normal and binormal, curvature and torsion, contact between curves and surfaces, tangent surface.
	CO2 Learn the curves on a surface, Surface of revolution, Helicoid, Metric, Direction coefficients, families of curves, Isometric correspondence, Intrinsic properties.
	CO3 Compute the Geodesics, Canonical geodesic equations, Normal property of geodesics, Geodesic parallels, Geodesics curvature, Gauss-Bonnet Theorem.
	CO4 Ability to understand the second fundamental form, Principal curvature, Lines of curvature, Developable, Developable associated with space curves and with curves on surface.
	CO5 Learn Compact surfaces whose points are umbilics, Compact surface of constant curvature, Complete surface and their characterization, Hilbert's Theorem.



PO → CO↓	PO1	PO2	PO3	PO4	PO5
CO1	3	2	2	2	3
CO2	3	2	3	2	2
CO3	2	2	2	3	2
CO4	3	2	3	2	3
CO5	3	3	3	3	3
AVERAGE	2.8	2.2	2.6	2.4	2.6

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	P 17191501	AARTHI .G	5	5	5	5	5	25	100
2	P 17191502	DEVENDRAN.S	4	4	4	4	4	20	80
3	P 17191503	HEMA.P	4	4	4	4	4	20	80
4	P 17191504	KALPANA.J	5	5	5	4	4	23	92
5	P 17191505	KAVIYA.K	4	4	4	4	4	20	80
6	P 17191507	MANGALANAYAKI	5	5	5	5	5	25	100
7	P 17191508	NANDHINI.M	4	4	4	4	4	20	80
8	P 17191509	PORTIA HELEN.V	5	5	5	5	4	24	96
9	P 17191510	PRIYA.P	4	4	5	4	4	21	84
10	P 17191511	RAMACHANDRAN.M. G	4	4	4	4	4	20	80
11	P 17191512	SRIPRIYA.T	4	4	5	4	4	21	84
12	P 17191513	VAISHNAVI.A	5	4	4	5	4	22	88
13	P 17191514	VARALAKSHMI.K	5	5	4	5	4	23	92
14	P 17191515	VIDHYA.R	5	4	4	4	5	22	88
15	P 17191516	VIJAYAKANI.T	5	4	5	4	5	23	92
AVERAGE			4.53	4.33	4.47	4.33	4.27		

EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST + SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.53	75	79.53	93.56
CO2	4.33	75	79.33	93.33
CO3	4.47	75	79.47	93.49
CO4	4.33	75	79.33	93.33
CO5	4.27	75	79.27	93.26

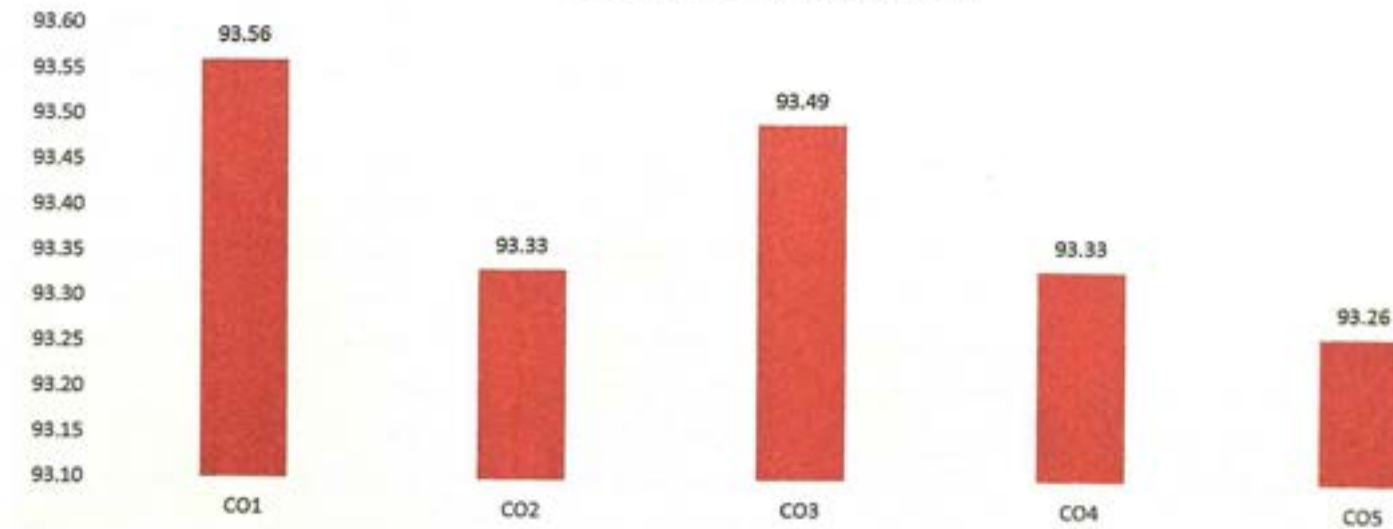


SUBJECT NAME
SUBJECT CODE
NO.OF STUDENTS

COURSE ATTAINMENT FOR M.Sc MATHEMATICS
: DIFFERENTIAL GEOMETRY
: P16MA42
: 15

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.56
CO2	93.33
CO3	93.49
CO4	93.33
CO5	93.26

PERCENTAGE OF ATTAINMENT



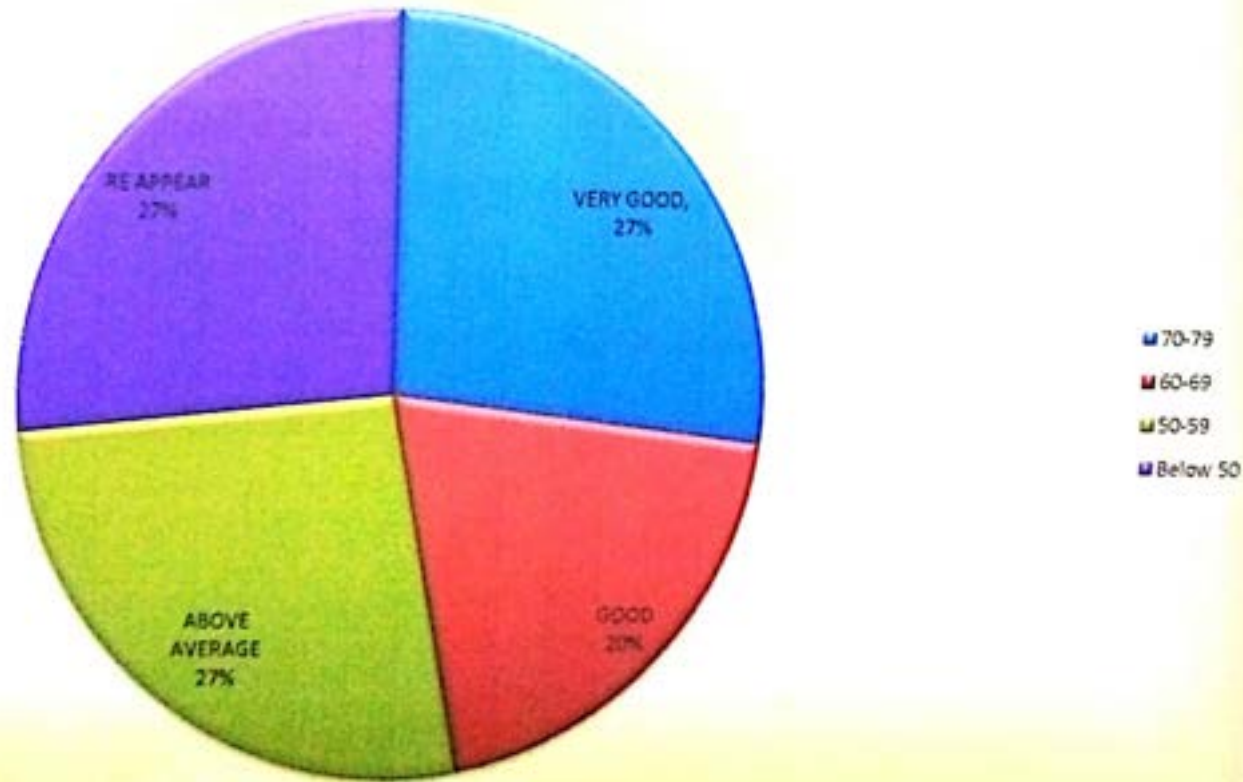
COURSE ATTAINMENT FOR M.Sc MATHEMATICS**SUBJECT NAME : DIFFERENTIAL GEOMETRY****SUBJECT CODE : P16MA42****NO.OF STUDENTS : 15**

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO.OF. STUDENTS	STATUS
90 and above(100)	0	OUTSTANDING
80-89	0	EXCELLENT
70-79	4	VERY GOOD
60-69	3	GOOD
50-59	4	ABOVE AVERAGE
Below 50	4	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
70-79	27	VERY GOOD
60-69	20	GOOD
50-59	27	ABOVE AVERAGE
Below 50	27	RE-APPEAR



COURSE OUTCOME ASSESSMENT IN PERCENTAGE




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THANJAVUR-5
DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Identify and enhance mathematical and computational strategies in order to solve mathematical problems.
PO2	Know various specialized areas of advanced mathematics and its applications.
PO3	Work as Professional mathematicians either in academia or elsewhere.
PO4	Inculcate knowledge of formulation and apply mathematical concepts which are suitable for real life applications.
PO5	Crack lectureship and fellowship exams affirmed by UGC like CSIR – NET and SET.

NAME OF THE PROGRAMME: M.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
P16MA43 - ADVANCED NUMERICAL ANALYSIS	CO1	Apply various methods to solve transcendental and polynomial equations
	CO2	Solve system of linear algebraic equations and Eigen value problems
	CO3	Classify the various techniques of interpolation and approximation.
	CO4	Compute the integration and differentiation problems.
	CO5	Determine the various methods to solve ordinary differential equations



PO → CO↓	PO1	PO2	PO3	PO4	PO5
CO1	3	3	3	3	3
CO2	3	3	3	2	3
CO3	3	2	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
AVERAGE	3	2.8	3	2.8	3

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	P 17191501	AARTHI.G	5	4	5	5	5	24	96
2	P 17191502	DEVENDRAN.S	5	5	4	4	4	22	88
3	P 17191503	HEMA.P	5	5	4	4	4	22	88
4	P 17191504	KALPANA.J	5	5	5	4	4	23	92
5	P 17191505	KAVIYA.K	5	4	5	4	5	23	92
6	P 17191507	MANKALANAYAGI.K	5	5	5	5	5	25	100
7	P 17191508	NANDHINI.M	4	5	5	5	4	23	92
8	P 17191509	PORTIA HELEN.V	5	5	5	5	5	25	100
9	P 17191510	PRIYA.P	5	5	5	4	4	23	92
10	P 17191511	RAMACHANDRAN.M.G	4	4	4	5	5	22	88
11	P 17191512	SRIPRIYA.T	5	4	4	5	5	23	92
12	P 17191513	VAISHNAVI.A	5	5	5	5	5	25	100
13	P 17191514	VARALAKSHMI.K	5	5	5	5	4	24	96
14	P 17191515	VIDHYA.R	5	5	4	5	5	24	96
15	P 17191516	VIJAYAKANLT	5	5	5	5	5	25	100
AVERAGE			4.87	4.73	4.67	4.67	4.60		

EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.87	75	79.87	93.96
CO2	4.73	75	79.73	93.80
CO3	4.67	75	79.67	93.73
CO4	4.67	75	79.67	93.73
CO5	4.60	75	79.60	93.65

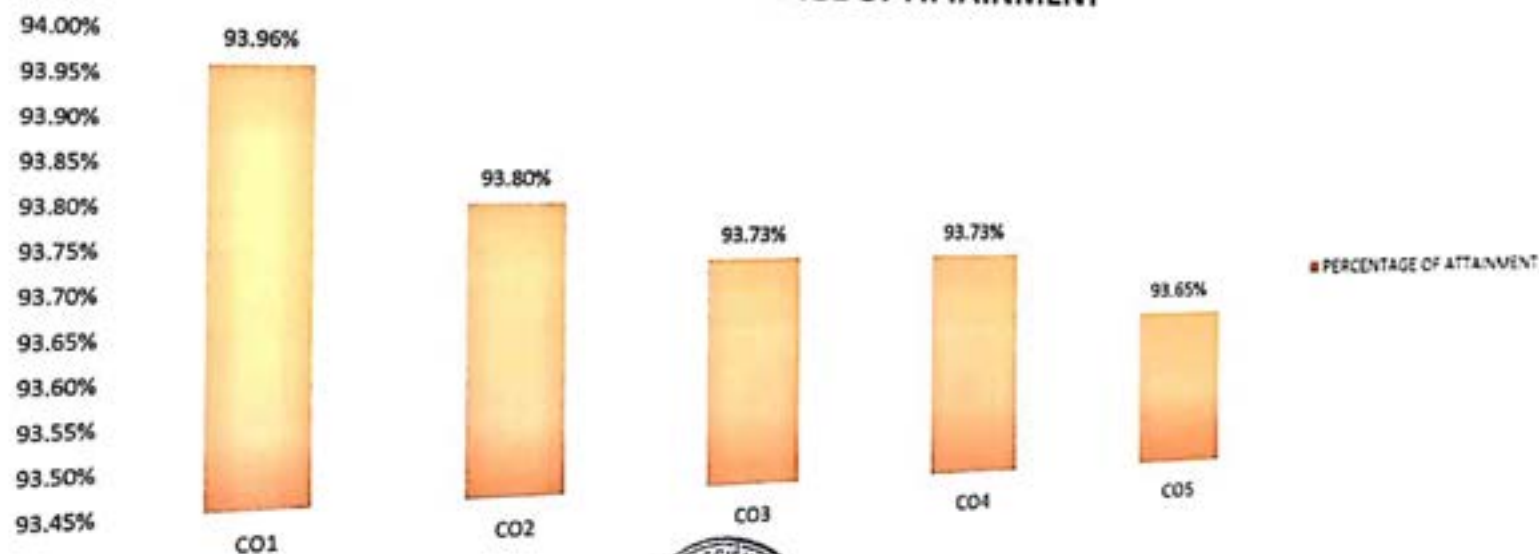


COURSE ATTAINMENT FOR M.Sc., MATHEMATICS

SUBJECT NAME: ADVANCED NUMERICAL ANALYSIS
SUBJECT CODE: P16MA43
NO. OF STUDENTS: 15

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.96%
CO2	93.80%
CO3	93.73%
CO4	93.73%
CO5	93.65%

PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR M.Sc., MATHEMATICS

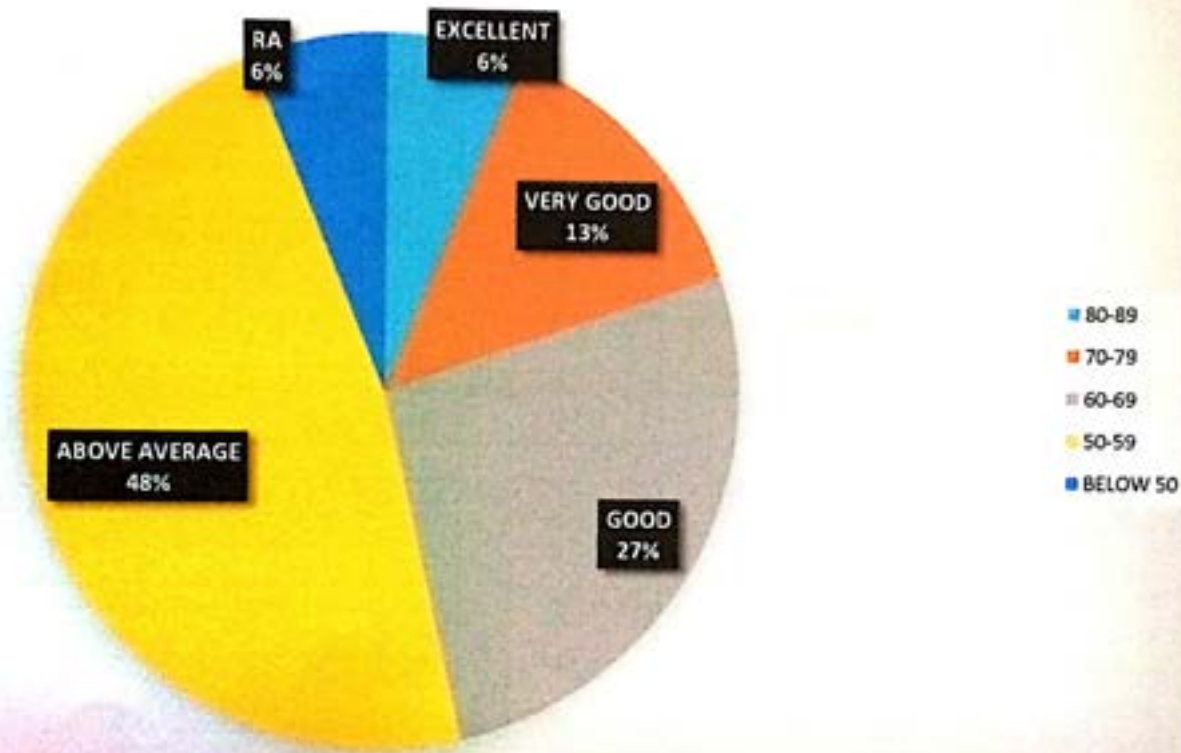
SUBJECT NAME: ADVANCED NUMERICAL ANALYSIS
SUBJECT CODE: P16MA43
NO. OF STUDENTS: 15

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO. OF STUDENTS	STATUS
90 AND ABOVE	0	OUTSTANDING
80-89	1	EXCELLENT
70-79	2	VERY GOOD
60-69	4	GOOD
50-59	7	ABOVE AVERAGE
BELOW 50	1	RE APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
80-89	6	EXCELLENT
70-79	13	VERY GOOD
60-69	26	GOOD
50-59	46	ABOVE AVERAGE
BELOW 50	6	RE APPEAR



COURSE OUTCOME ASSESSMENT



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ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

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PO2	Know various specialized areas of advanced mathematics and its applications.
PO3	Work as Professional mathematicians either in academia or elsewhere.
PO4	Inculcate knowledge of formulation and apply mathematical concepts which are suitable for real life applications.
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NAME OF THE PROGRAMME: M.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
P16MAE2A - STOCHASTIC PROCESSES	CO1	Understand the stochastic models for many real life probabilistic situations
	CO2	Understanding the concepts of Markov chains.
	CO3	Identifying the concepts of Poisson process and related distributions.
	CO4	Acquire the knowledge of Renewal process
	CO5	Evaluate the real life queuing problems by comparing the conventional queuing models.



PO → CO ↓	PO1	PO2	PO3	PO4	PO5
CO1	3	2	3	3	3
CO2	3	3	2	3	3
CO3	2	3	2	2	3
CO4	3	3	3	3	3
CO5	3	3	3	3	2
AVERAGE	2.8	2.8	2.6	2.8	2.8

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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

SNO	REG.NO.	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	P18191156	GOWTHAMI.M	5	5	5	5	5	25	100
2	P18191159	KOKILA.N	5	5	5	5	5	25	100
3	P18191160	MANIKANDAN.D	4	4	5	5	5	23	92
4	P18191161	MANISHABHAVANI.Y	5	5	5	5	4	24	96
5	P18191162	MUTHUKUMAR.M	5	5	5	4	4	23	92
6	P18191163	NISHA.K	5	5	5	5	5	25	100
7	P18191164	SANKARALINGAM.K	5	5	5	5	4	24	96
8	P18191165	VENKATRAMAN.K.S	5	5	4	4	5	23	92
9	P18191166	VIMALA.M	5	5	5	5	4	24	96
10	P18191167	VINOTHKUMAR.R	5	5	5	5	4	24	96
11	P18191168	VINOTHINI.S	5	5	5	5	4	24	96
12	P18191169	VIVEK.K	5	4	5	5	4	23	92
AVERAGE			4.92	4.83	4.92	4.83	4.42		



EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.92	75	79.92	94.02
CO2	4.83	75	79.83	93.92
CO3	4.92	75	79.92	94.02
CO4	4.83	75	79.83	93.92
CO5	4.42	75	79.42	93.43

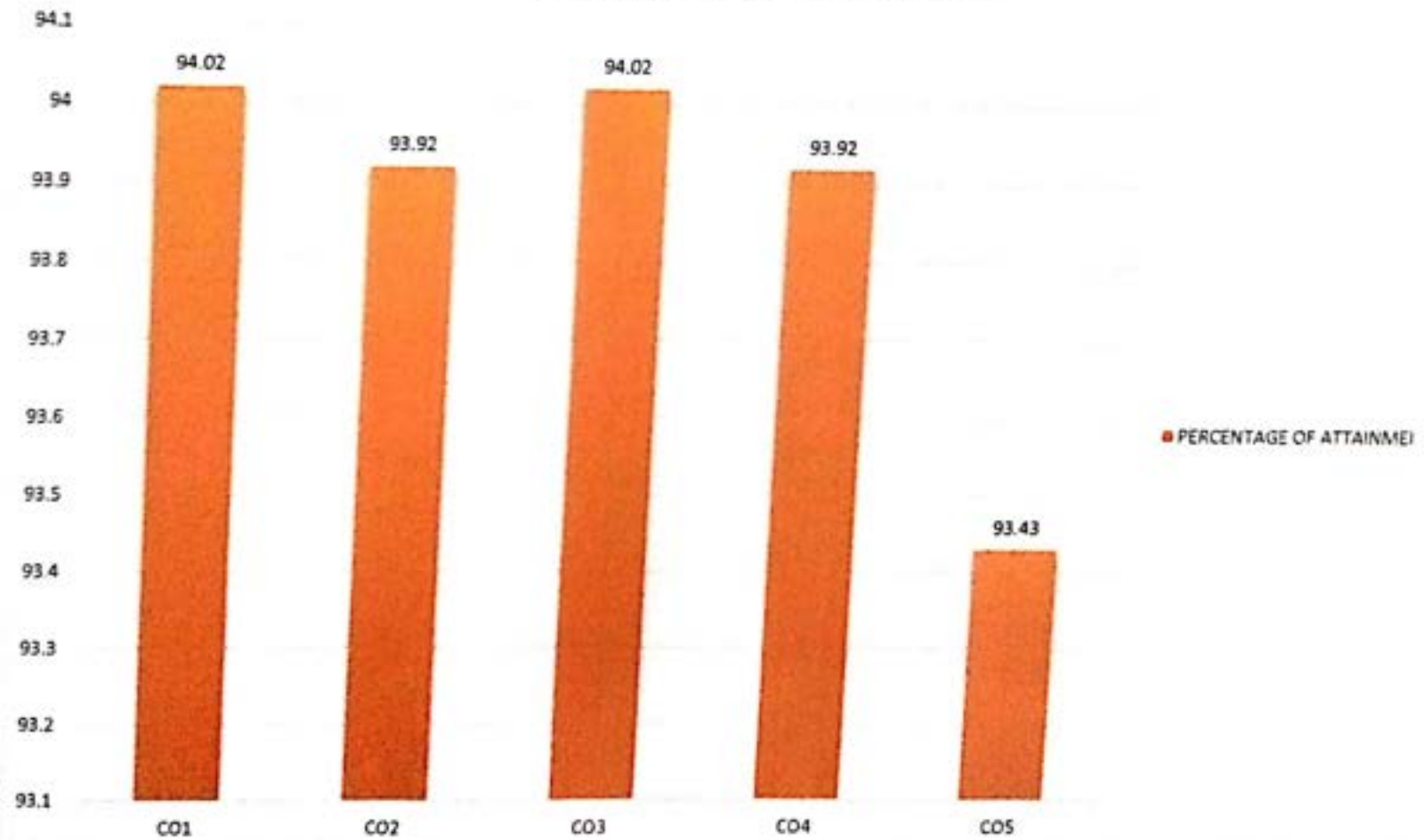
COURSE ATTAINMENT FOR M.Sc., MATHEMATICS

SUBJECT NAME: STOCHASTIC PROCESSES
 SUBJECT CODE: P16MAE2A
 NO. OF STUDENTS: 12

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	94.02
CO2	93.92
CO3	94.02
CO4	93.92
CO5	93.43



PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR M.Sc., MATHEMATICS

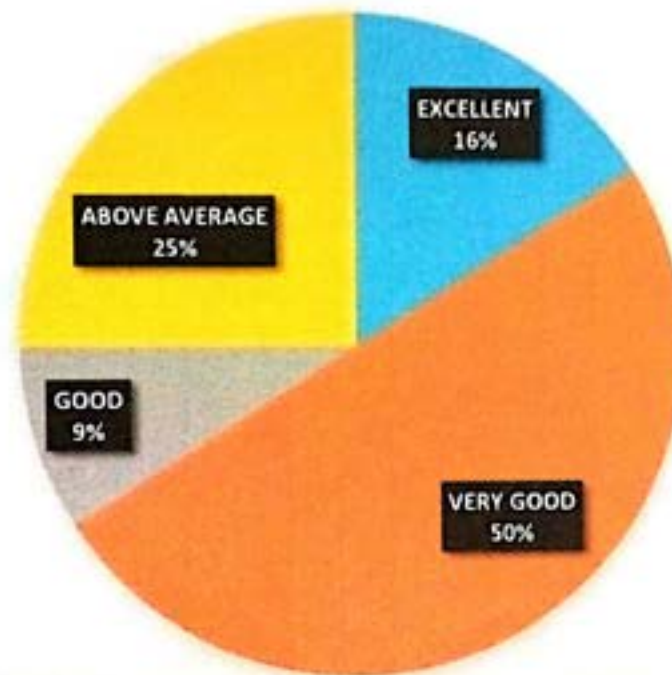
SUBJECT NAME: STOCHASTIC PROCESSES
 SUBJECT CODE: P16MAE2A
 NO. OF STUDENTS: 12

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO. OF	STATUS
90 AND ABOVE	0	OUTSTANDING
80-89	2	EXCELLENT
70-79	6	VERY GOOD
60-69	1	GOOD
50-59	3	ABOVE AVERAGE
BELOW 50	0	RE APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
80-89	16	EXCELLENT
70-79	50	VERY GOOD
60-69	9	GOOD
50-59	25	ABOVE AVERAGE



COURSE OUTCOME ASSESSMENT



- 80-89
- 70-79
- 60-69
- 50-59




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THANJAVUR-5
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PROGRAM OUTCOME

PO1	Remember the fundamental concepts of Mathematics
PO2	Imbibe the skills necessary to effectively translate mathematical aspects to the general public
PO3	Develop Critical thinking ability so as to improve Employability and Decision making.
PO4	Apply Mathematical Models to solve critical problems.
PO5	Apply the concepts studied, in real life situations.

NAME OF THE PROGRAMME: B.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
16SCMM2 INTEGRAL CALCULUS	CO1	Students will be able to acquire the basic knowledge of all integral models and methods.
	CO2	Applications of Definite integrals, Integration by parts and Understand the concepts of Reduction formulae.
	CO3	Verify Geometric Application of integration to length ,area and volume.
	CO4	Evaluate areas ,length of a curve and surface of revolution occurring in real life problems using multiple integrals and change of integrals.
	CO5	Techniques of Beta, Gamma integrals. Various integration formulae.



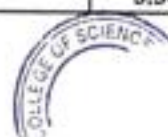
PO	PO1	PO2	PO3	PO4	PO5
CO1	3	3	2	3	3
CO2	3	3	3	2	2
CO3	3	2	3	3	3
CO4	3	3	3	3	3
CO5	2	3	3	3	3
AVERAGE	2.8	2.8	2.8	2.8	2.8

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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



SNO	REG. NO.	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	CB18S 372601	AAKASH.S	3	3	3	3	3	15	60
2	CB18S 372602	AKATHIYAN.A	3	3	3	3	3	15	60
3	CB18S 372603	AMIRTHA.S	3	3	3	3	3	15	60
4	CB18S 372604	DHEENA.B. R	3	3	3	3	3	15	60
5	CB18S 372605	KAVIBRINDHA.S	4	3	3	3	3	16	64
6	CB18S 372606	KAVIYARASI.V	5	5	5	5	5	25	100
7	CB18S 372607	KEERTHANA.B	4	4	3	3	3	17	68
8	CB18S 372608	KEERTHIGA.M	3	3	3	3	3	15	60
9	CB18S 372609	MAHESHKUMAR.M	3	4	3	3	3	16	64
10	CB18S 372610	MOHANKUMAR.V.G	3	3	4	4	4	18	72
11	CB18S 372611	MOHANAKRISHNAN.S	3	3	3	3	3	15	60
12	CB18S 372612	NAZIR AHAMED.T	3	3	3	3	3	15	60
13	CB18S 372613	PREMKUMAR.M	3	3	3	3	3	15	60
14	CB18S 372614	RAJESH.M	4	4	3	3	3	17	68
15	CB18S 372615	RANJITHKUMAR.A	3	3	3	3	3	15	60
16	CB18S 372616	REGIS PAUL RAJ.F	3	3	3	3	3	15	60
17	CB18S 372617	ROBERTNITTOLIAN.B	3	4	4	4	3	18	72
18	CB18S 372618	RUBIKA V	5	4	5	4	4	22	88
19	CB18S 372619	SATHISHKUMAR.M	3	3	3	3	3	15	60
20	CB18S 372620	SHANMUHA GURU.K	3	3	3	3	3	15	60
21	CB18S 372621	SURENTHIRABABU.K	3	4	3	4	3	17	68
22	CB18S 372622	SURUTHI.S	3	3	4	3	3	16	64
23	CB18S 372623	SURYA.P	3	3	3	4	3	16	64
24	CB18S 372624	THAMARA.I.E	4	4	4	3	3	18	72
25	CB18S 372625	VANATHI.M	3	3	3	3	3	15	60
26	CB18S 372626	VIDHYA.S	4	4	4	4	3	19	76
27	CB18S 372627	VIGNESH.S	3	4	4	3	4	18	72
28	CB18S 372628	VINOTH.S	3	3	3	3	4	16	64
29	CB18S 372629	YOGAYALINI.P	4	5	4	3	3	19	76
AVERAGE			3.34	3.45	3.38	3.28	3.21		



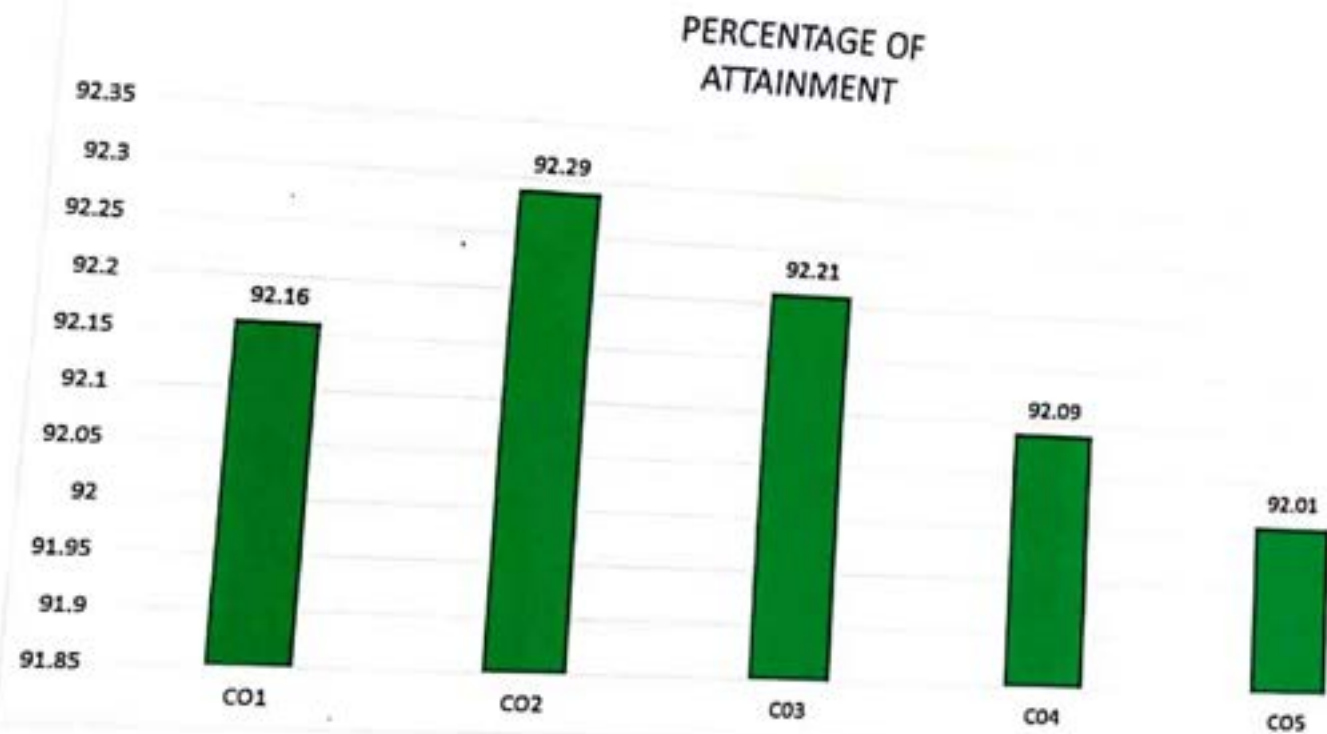
EXPECTED ATTAINMENT IN EACH CO - 85%				
CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	3.34	75	78.34	92.16
CO2	3.45	75	78.45	92.29
CO3	3.38	75	78.38	92.21
CO4	3.28	75	78.28	92.09
CO5	3.21	75	78.21	92.01

COURSE ATTAINMENT FOR B.Sc., MATHEMATICS

SUBJECT NAME : INTEGRAL CALCULUS
 SUBJECT CODE : 16SCCMM2
 NO OF STUDENTS : 29

COURSE OUTCOME	PERCENTAGE OF
CO1	92.16
CO2	92.29
CO3	92.21
CO4	92.09
CO5	92.01





COURSE ATTAINMENT FOR B.Sc., MATHEMATICS
 SUBJECT NAME : INTEGRAL CALCULUS
 SUBJECT CODE : 16SCMM2
 NO OF STUDENTS : 29

COURSE OUTCOME ASSESSMENT

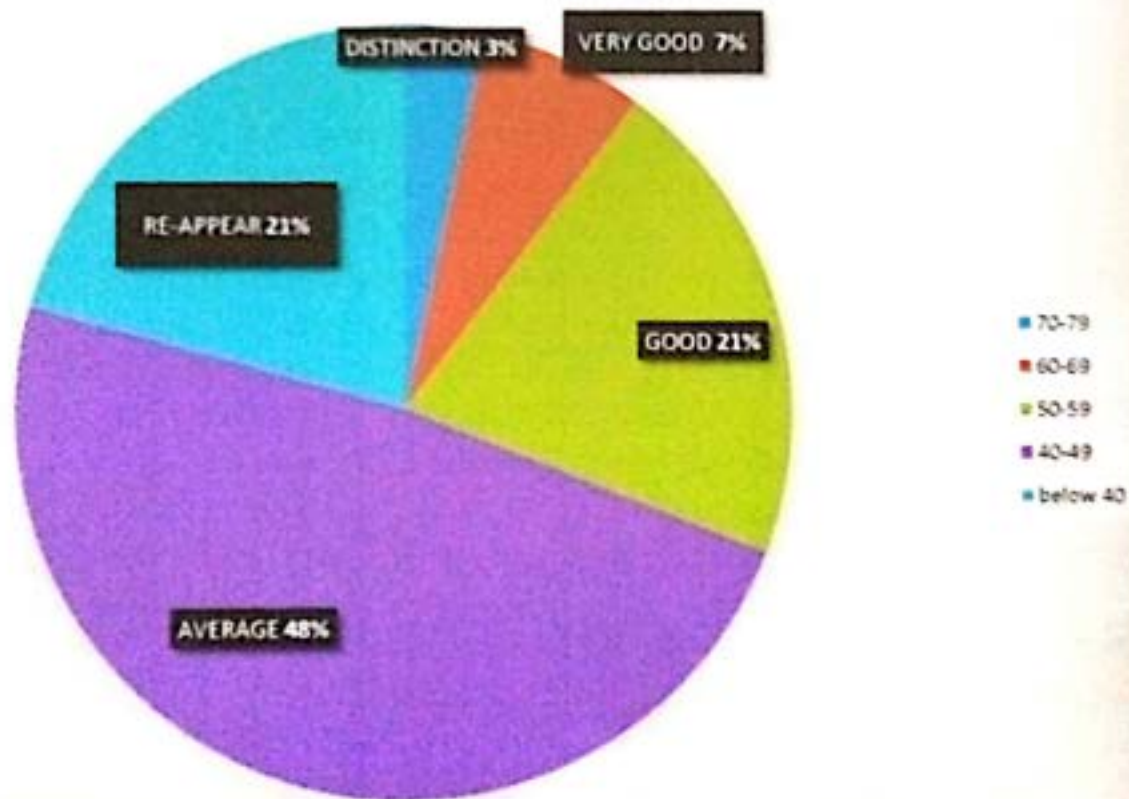
CATEGORY MARKS	NO OF STUDENTS	STATUS
90 and above (100)	0	OUTSTANDING
80-89	0	EXCELLENT
70-79	1	DISTINCTION
60-69	2	VERY GOOD
50-59	6	GOOD
40-49	14	AVERAGE
below 40	6	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE

CATEGORY MARKS	PERCENTAGE	STATUS
70-79	3%	DISTINCTION
60-69	7%	VERY GOOD
50-59	21%	GOOD
40-49	48%	AVERAGE
below 40	21%	RE-APPEAR



COURSE OUTCOME ASSESSMENT IN PERCENTAGE



[Signature]

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PROGRAM OUTCOME

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NAME OF THE PROGRAMME: B.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
16SCCMM3 - DIFFERENTIAL EQUATIONS AND LAPLACE TRANSFORMS	CO1	Define first order, higher order differential equations solvable for dy/dx , x and y .
	CO2	Discuss and demonstrate the Linear equations with variable coefficients and Variation of parameters.
	CO3	Describe the origin of Partial differential equation
	CO4	Explain PDE of second order homogeneous equations with constant coefficients
	CO5	Understand the concepts of differential equations and laplace transforms



PO → CO\	PO1	PO2	PO3	PO4	PO5
CO1	3	2	2	2	3
CO2	3	3	3	2	2
CO3	3	3	3	3	2
CO4	2	2	2	3	3
CO5	3	2	3	3	3
AVERAGE	2.8	2.4	2.6	2.6	2.6

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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



SNO	REG. NO.	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	CB18S 372601	AAKASH.S	3	3	3	3	3	15	60
2	CB18S 372602	AKATHIYAN.A	3	3	3	3	3	15	60
3	CB18S 372603	AMRITHA.S	4	4	4	4	3	19	76
4	CB18S 372604	DEENA.B.R	4	3	3	3	4	17	68
5	CB18S 372605	KAVIBRINDHA.S	4	4	4	4	4	20	80
6	CB18S 372606	KAVIYARASLV	5	5	5	5	5	25	100
7	CB18S 372607	KEERTHANA.B	4	4	4	3	3	18	72
8	CB18S 372608	KEERTHIKA.M	5	4	4	4	4	21	84
9	CB18S 372609	MAHESHKUMAR.M	3	4	4	4	4	19	76
10	CB18S 372610	MOHANKUMAR.V.G	4	4	4	4	3	19	76
11	CB18S 372611	MOHANAKRISHNAN.S	4	4	4	4	4	20	80
12	CB18S 372613	PREMKUMAR.M	3	3	4	4	3	17	68
13	CB18S 372614	RAJESH.M	4	4	4	4	4	20	80
14	CB18S 372615	RANJITHKUMAR.A	3	3	3	3	3	15	60
15	CB18S 372616	REGIS PAUL RAJ.F	3	3	3	3	3	15	60
16	CB18S 372617	ROBERT NITTOLIAN.B	5	5	5	5	5	25	100
17	CB18S 372618	RUBIKA.V	5	4	4	4	4	21	84
18	CB18S 372619	SATHISH KUMAR.M	3	3	3	3	3	15	60
19	CB18S 372620	SHANMUGAGURU.K	3	3	3	3	3	15	60
20	CB18S 372621	SURENTHIRA BABU.K	4	3	4	3	3	17	68
21	CB18S 372622	SURUTHI.S	4	4	4	5	5	22	88
22	CB18S 372623	SURYA.P	4	4	4	4	4	20	80
23	CB18S 372624	THAMARAILE	3	4	4	4	4	19	76
24	CB18S 372625	VANATHI.M	4	4	4	4	4	20	80
25	CB18S 372626	VIDHYA.S	4	4	4	4	4	20	80
26	CB18S 372627	VIGNESH.S	5	5	4	5	5	24	96
27	CB18S 372628	VINOTH.S	3	4	4	4	4	19	76
28	CB18S 372629	YOGAYALINI.P	5	5	4	4	4	22	88
AVERAGE			3.86	3.82	3.82	3.82	3.75		



EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	3.86	75	78.86	92.78
CO2	3.82	75	78.82	92.73
CO3	3.82	75	78.82	92.73
CO4	3.82	75	78.82	92.73
CO5	3.75	75	78.75	92.65

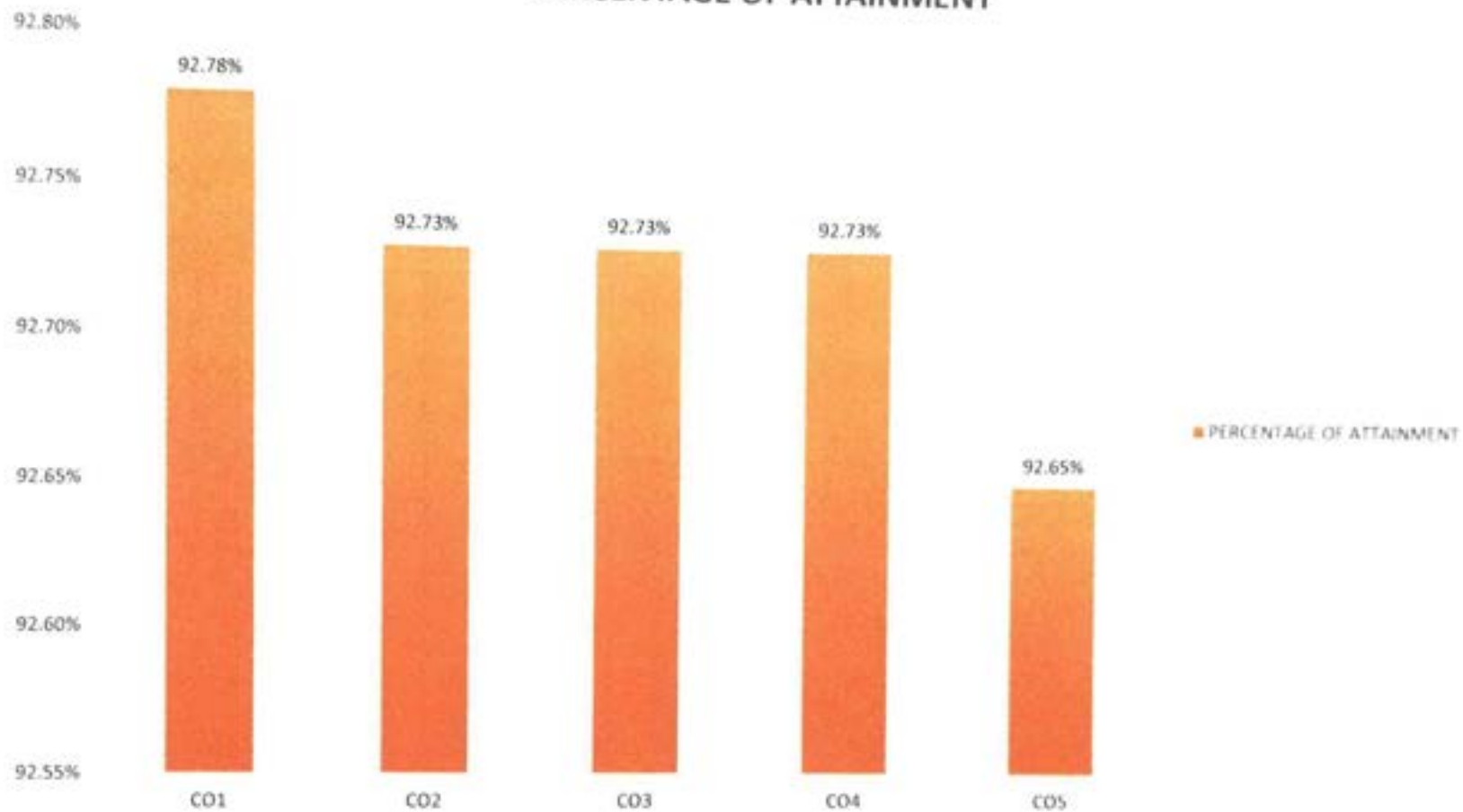
COURSE ATTAINMENT FOR B.Sc., MATHEMATICS

SUBJECT NAME: DIFFERENTIAL EQUATIONS AND LAPLACE TRANSFORMS
 SUBJECT CODE: 16SCCMM3
 NO. OF STUDENTS: 28

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	92.78%
CO2	92.73%
CO3	92.73%
CO4	92.73%
CO5	92.65%



PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR B.Sc., MATHEMATICS

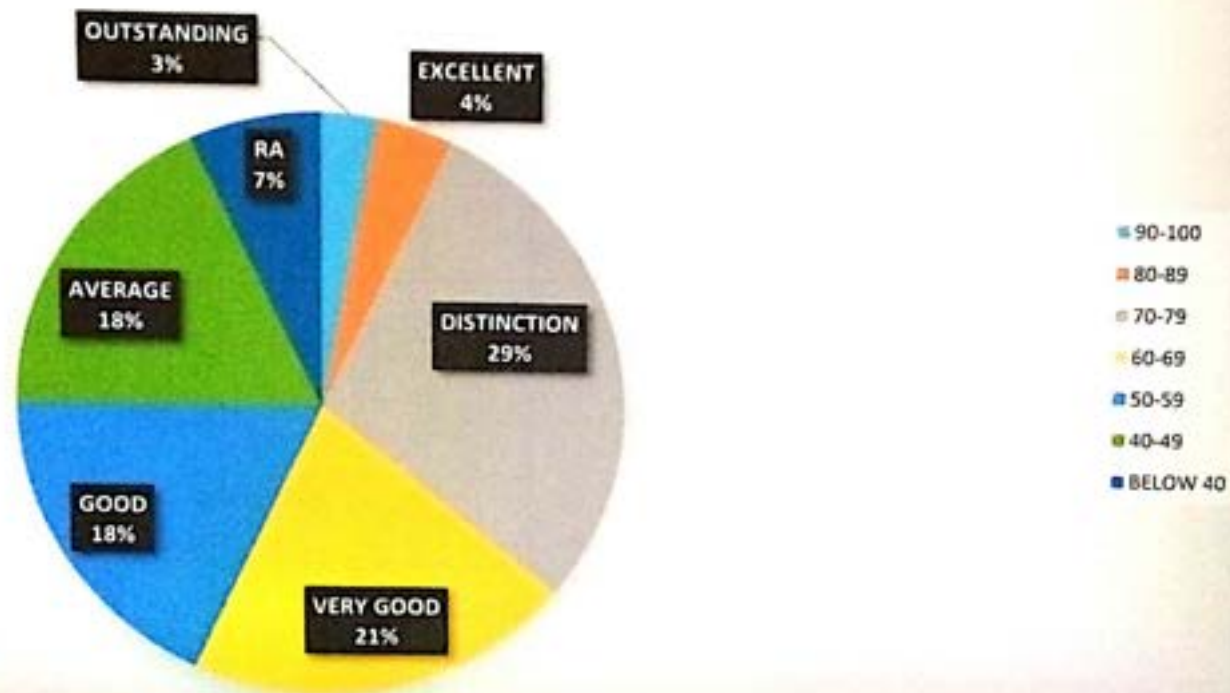
SUBJECT NAME: DIFFERENTIAL EQUATIONS AND LAPLACE TRANSFORMS
SUBJECT CODE: 16SCCMM3
NO. OF STUDENTS: 28

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO. OF STUDENTS	STATUS
90 AND ABOVE	1	OUTSTANDING
80-89	1	EXCELLENT
70-79	8	DISTINCTION
60-69	6	VERY GOOD
50-59	5	GOOD
40-49	5	AVERAGE
BELOW 40	2	RE APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
90-100	3%	OUTSTANDING
80-89	4%	EXCELLENT
70-79	29%	DISTINCTION
60-69	21%	VERY GOOD
50-59	18%	GOOD
40-49	18%	AVERAGE
BELOW 40	7%	RE APPEAR



COURSE OUTCOME ASSESSMENT



[Signature]
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Bharath Avenue (Near New Bus Stand)
THANJAVUR - 613 005.



BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
(UGC Recognized 2(f) & 12(B) Institution)
THANJAVUR-5
DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Remember the fundamental concepts of Mathematics
PO2	Imbibe the skills necessary to effectively translate mathematical aspects to the general public
PO3	Develop Critical thinking ability so as to improve Employability and Decision making.
PO4	Apply Mathematical Models to solve critical problems.
PO5	Apply the concepts studied, in real life situations.

NAME OF THE PROGRAMME: B.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
16SCCMM4 ANALYTICAL GEOMETRY 3D	CO1	Explain the coordinates in space, equation of a plane.
	CO2	Describe the concepts of straight lines and coplanar lines.
	CO3	classify the equation of a sphere and tangent planes.
	CO4	Finding the equation of surface, intersection of straight lines and quadric cone.
	CO5	To recognize the central quadrics, tangent and tangent plane.



PO → CO↓	PO1	PO2	PO3	PO4	PO5
CO1	3	2	3	3	3
CO2	3	3	3	2	2
CO3	2	3	2	3	3
CO4	3	2	3	3	3
CO5	3	3	3	3	2
AVERAGE	2.8	2.6	2.8	2.8	2.6

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	CB18S 372601	AAKASH S	3	3	3	3	3	15	60
2	CB18S 372602	AKATHIYAN A	4	3	3	3	3	16	64
3	CB18S 372603	AMRITHA S	4	4	4	4	4	20	80
4	CB18S 372604	DHEENA B R	3	3	3	3	3	15	60
5	CB18S 372605	KAVIBRINDHA S	4	4	4	4	3	19	76
6	CB18S 372606	KAVIYARASI V	5	5	4	5	5	24	96
7	CB18S 372607	KEERTHANA B	3	3	4	4	4	18	72
8	CB18S 372608	KEERTHIKA M	3	3	4	4	4	18	72
9	CB18S 372609	MAHESHKUMAR M	3	3	4	3	3	16	64
10	CB18S 372610	MOHAN KUMAR V G	3	3	3	4	3	16	64
11	CB18S 372611	MOHANAKRISHNAN S	3	3	3	3	3	15	60
12	CB18S 372613	PREMKUMAR M	3	3	4	4	4	18	72
13	CB18S 372614	RAJESH M	4	4	3	4	3	18	72
14	CB18S 372615	RANJITHKUMAR A	3	3	3	3	3	15	60
15	CB18S 372616	REGIS PAUL RAJ F	3	3	3	3	4	16	64
16	CB18S 372617	ROBERTNITTOLIAN B	4	4	4	4	4	20	80
17	CB18S 372618	RUBIKA V	4	4	4	4	4	20	80
18	CB18S 372619	SATHISHKUMAR M	3	3	3	3	3	15	60
19	CB18S 372620	SHANMUHA GURU K	3	3	3	3	3	15	60
20	CB18S 372621	SURENTHIRABABU K	4	4	4	4	3	19	76
21	CB18S 372622	SURUTHI S	4	4	4	4	4	20	80
22	CB18S 372623	SURYA S	4	4	4	4	4	20	80
23	CB18S 372624	THAMARAI E	4	4	3	4	4	19	76
24	CB18S 372625	VANATHI M	4	4	4	3	3	18	72
25	CB18S 372626	VIDHYA S	5	5	4	4	5	23	92
26	CB18S 372627	VIGNESH S	5	5	4	4	4	22	88
27	CB18S 372628	VINOTH S	4	3	4	3	3	17	68
28	CB18S 372629	YOGAYALINI P	5	5	4	5	4	23	92
AVERAGE			3.71	3.64	3.61	3.68	3.57		



TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
3.71	75	78.71	92.60
3.64	75	78.64	92.52
3.61	75	78.61	92.48
3.68	75	78.68	92.56
3.57	75	78.57	92.44

COURSE ATTAINMENT FOR B. SC., MATHEMATICS

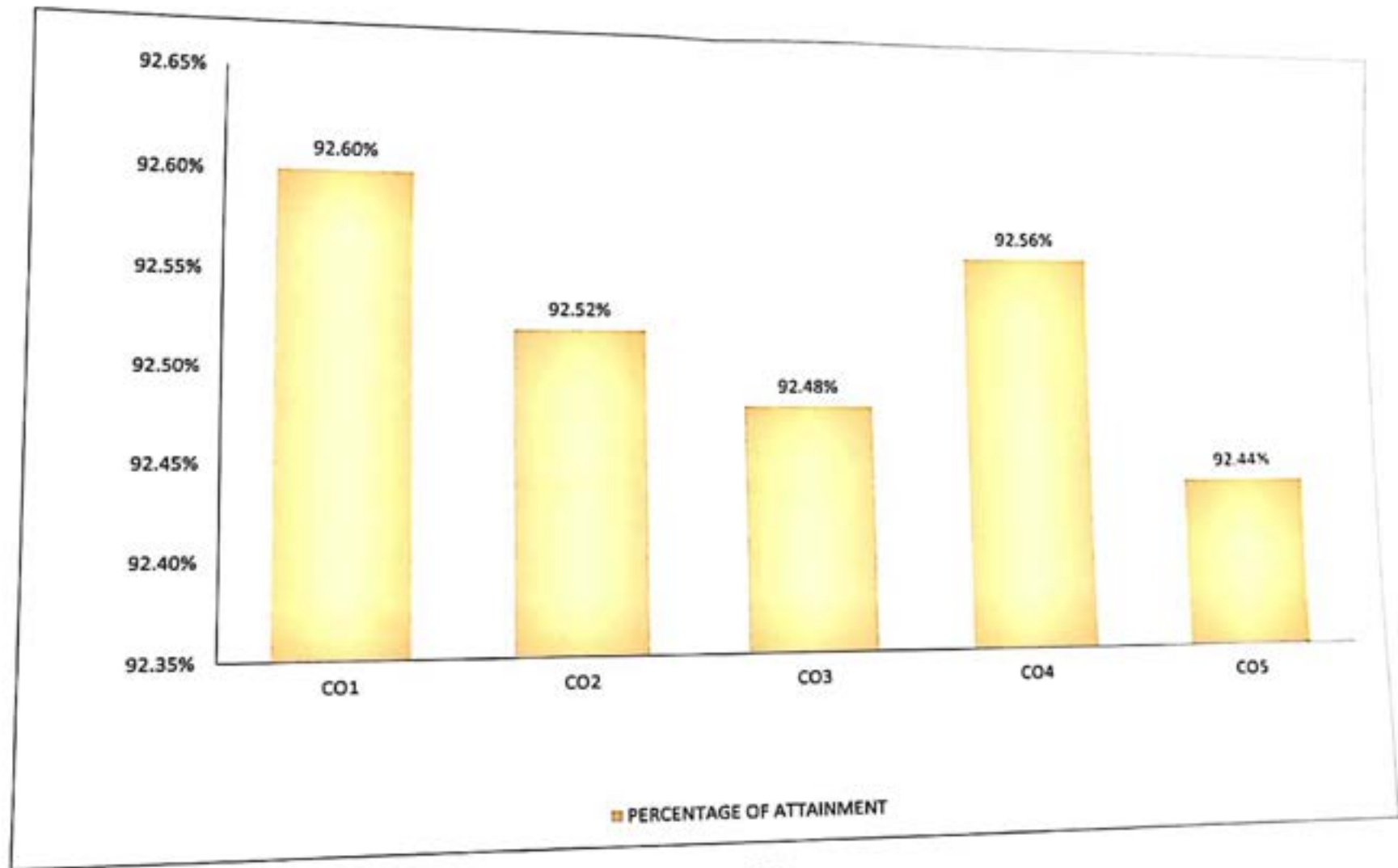
SUBJECT NAME: ANALYTICAL GEOMETRY 3D

SUBJECT CODE: 16SCCMM4

NO. OF STUDENTS: 28

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	92.60%
CO2	92.52%
CO3	92.48%
CO4	92.56%
CO5	92.44%





SUBJECT NAME: COURSE ATTAINMENT FOR B. SC., MATHEMATICS
 SUBJECT CODE: ANALYTICAL GEOMETRY 3D
 NO. OF STUDENTS: 16SCCMM4
 28

COURSE OUTCOME ASSESSMENT

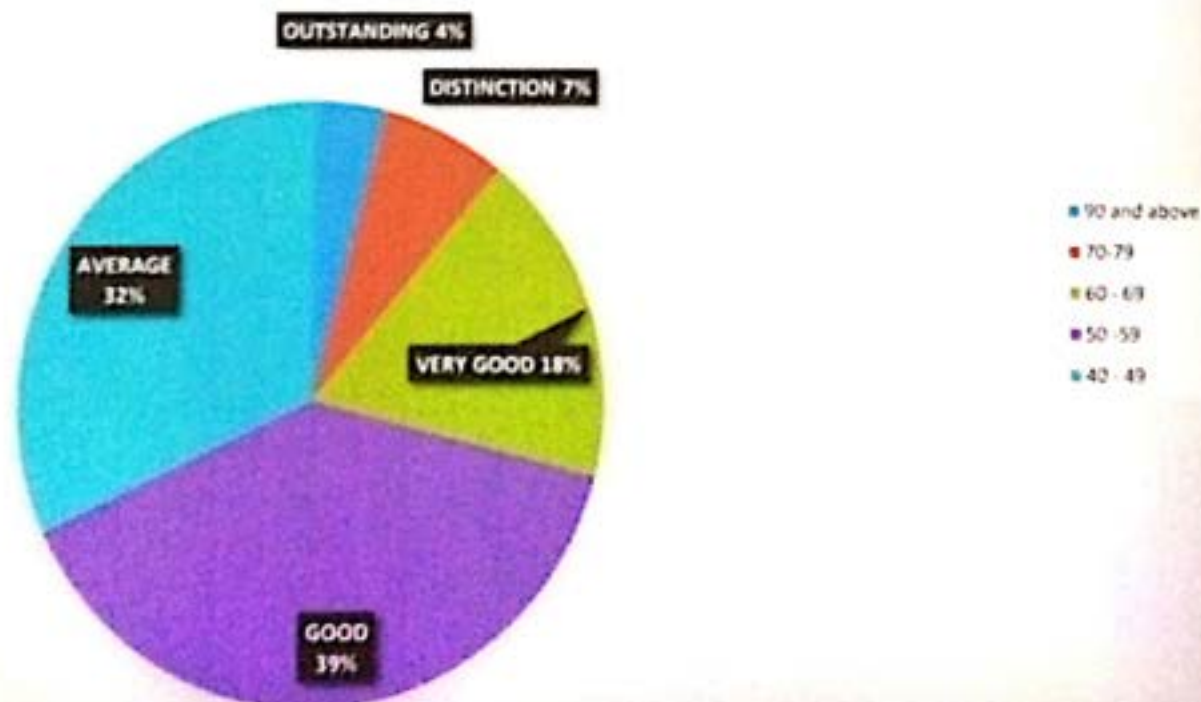
CATEGORY(MARKS)	NO. OF STUDENTS	STATUS
90 AND ABOVE	1	OUTSTANDING
80-89	0	EXCELLENT
70-79	2	DISTINCTION
60-69	5	VERY GOOD
50-59	11	GOOD
40-49	9	AVERAGE
BELOW 40	0	RE -APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE

CATEGORY (MARKS)	PERCENTAGE	STATUS
90 and above	4%	OUTSTANDING
70-79	7%	DISTINCTION
60 - 69	18%	VERY GOOD
50 -59	39%	GOOD
40 - 49	32%	AVERAGE



COURSE OUTCOME ASSESSMENT




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Bharath Avenue (Near New Bus Stand)
THANJAVUR - 613 005.



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THANJAVUR-5
DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Remember the fundamental concepts of Mathematics
PO2	Imbibe the skills necessary to effectively translate mathematical aspects to the general public
PO3	Develop Critical thinking ability so as to improve Employability and Decision making.
PO4	Apply Mathematical Models to solve critical problems.
PO5	Apply the concepts studied, in real life situations.

Name of the Programme : B.Sc Mathematics

Course Code & Course Title	Course Outcome	
16SCCMM5-SEQUENCES AND SERIES	CO1	Relate the concepts of convergent , divergent and oscilating sequences.
	CO2	Study the behaviour of monotonic functions.
	CO3	Evaluate the limit of the sequence.
	CO4	Apply the comparison test for the convergence series.
	CO5	Apply the D Alembert's ratio test , cauchy's root test for the convergence series.



PO →	PO1	PO2	PO3	PO4	PO5
CO1	3	2	3	3	3
CO2	2	2	3	2	1
CO3	3	2	3	2	3
CO4	3	2	2	3	2
CO5	3	3	2	2	2
AVERAGE	2.8	2.2	2.6	2.4	2.2

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	UNIT TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	CB17S 366511	ABINAYA M	4	4	5	4	5	22	88
2	CB17S 366512	ABINAYA R	4	5	4	5	4	22	88
3	CB17S 366513	ABINESH P	4	4	3	3	4	18	72
4	CB17S 366514	AFFREN A	4	4	4	4	4	20	80
5	CB17S 366515	AKASH P	2	2	2	2	2	10	40
6	CB17S 366516	AMARNATH J	4	3	4	4	4	19	76
7	CB17S 366517	ANBARASAN M	4	5	4	5	4	22	88
8	CB17S 366518	ARUNKUMAR K	4	4	4	4	4	20	80
9	CB17S 366519	BALAJI S	3	4	4	3	4	18	72
10	CB17S 366521	GOPINATH S	2	2	2	2	2	10	40
11	CB17S 366522	JAYAPRAKASH K	4	4	3	4	4	19	76
12	CB17S 366523	JEFRE GUDWINE J	4	5	5	5	4	23	92
13	CB17S 366524	KANIMOZHI B	4	4	4	5	5	22	88
14	CB17S 366525	KEERTHANA R	4	4	4	4	4	20	80
15	CB17S 366526	KEERTHIGA V	5	5	5	5	5	25	100
16	CB17S 366527	MARIMUTHU T	2	2	2	2	2	10	40
17	CB17S 366528	NESAMANI K	4	3	4	3	4	18	72
18	CB17S 366529	NISHANTHI F	4	4	4	5	4	21	84
19	CB17S 366530	PRAGATHI E	4	5	5	5	4	23	92
20	CB17S 366531	PRASANTH K	2	2	2	2	2	10	40
21	CB17S 366532	PUNITHA R	4	5	4	5	4	22	88
22	CB17S 366533	RAMKUMAR N	4	4	4	3	4	19	76
23	CB17S 366534	RAMYANJALI V	5	4	4	5	4	22	88
24	CB17S 366535	RAYMOND C	4	4	4	3	4	19	76
25	CB17S 366536	SENTHIL G	2	2	2	2	2	10	40
26	CB17S 366537	SNEHA A	4	4	5	4	4	21	84
27	CB17S 366538	SOWMIYA R	5	5	5	5	5	25	100
28	CB17S 366539	SUGANTHI B	4	4	4	5	4	21	84
29	CB17S 366540	SURUTHI M	5	4	4	5	5	23	92
30	CB17S 366541	SURYA C	3	4	4	4	4	19	76
31	CB17S 366542	VARTHANI V	4	5	4	5	5	23	92
32	CB17S 366543	VIGNESH R	3	3	3	3	3	15	60
33	CB17S 366544	YUVASHREE M	4	4	4	4	4	19	76
Average			3.73	3.82	3.79	3.91	3.85		



EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	3.73	75	78.73	92.62
CO2	3.82	75	78.82	92.73
CO3	3.79	75	78.79	92.69
CO4	3.91	75	78.91	92.84
CO5	3.85	75	78.85	92.76

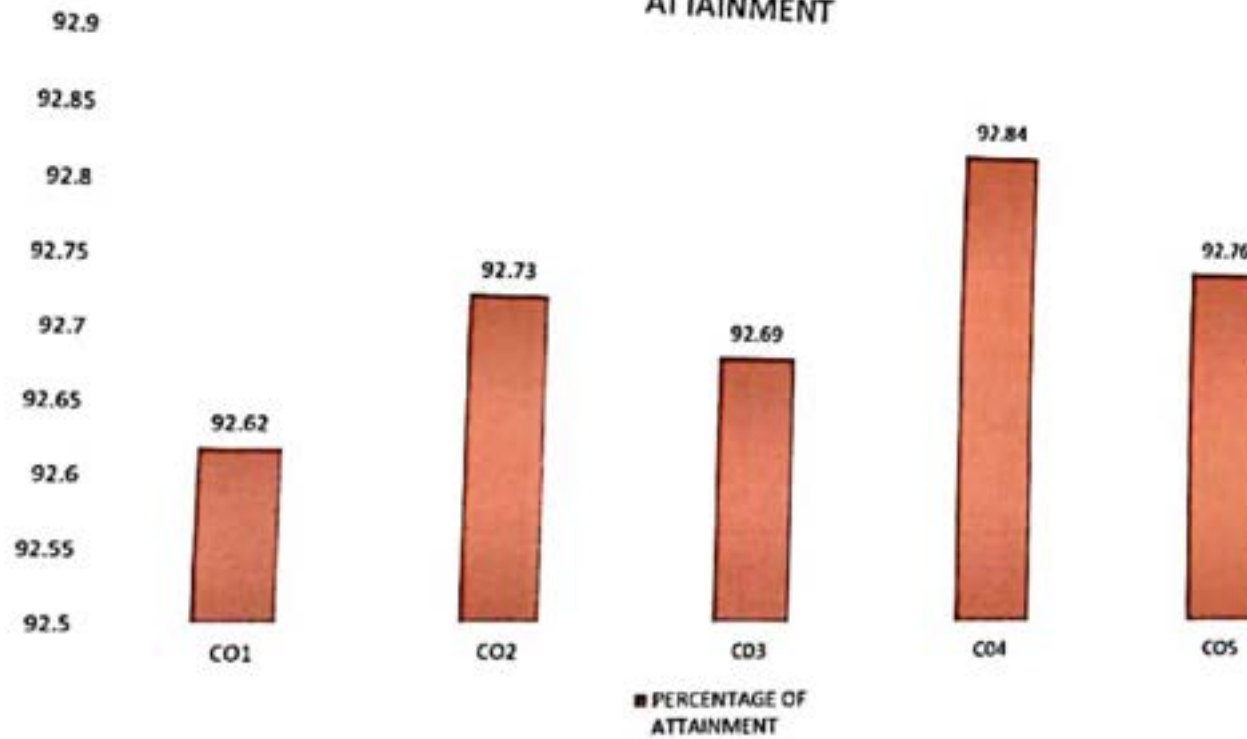
COURSE ATTAINMENT FOR B.Sc., MATHEMATICS

SUBJECT NAME : SEQUENCES AND SERIES
 SUBJECT CODE : 16SCCMM5
 NO OF STUDENTS : 33

COURSE OUTCOME	PERCENTAGE OF
CO1	92.62
CO2	92.73
CO3	92.69
CO4	92.84
CO5	92.76



PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR B.Sc., MATHEMATICS
SUBJECT NAME SEQUENCES AND SERIES
SUBJECT CODE : 16SCCMM5
NO OF STUDENTS : 33

COURSE OUTCOME ASSESSMENT

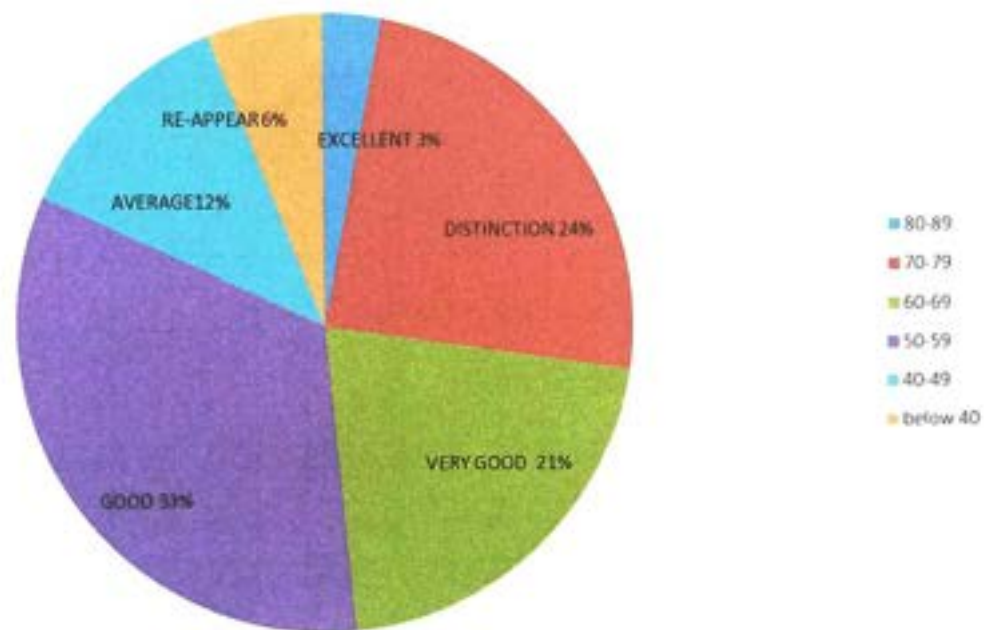
CATEGORY MARKS	NO OF STUDENTS	STATUS
90 and Above	0	OUTSTANDING
80-89	1	EXCELLENT
70-79	8	DISTINCTION
60-69	7	VERY GOOD
50-59	11	GOOD
40-49	4	AVERAGE
below 40	2	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE

CATEGORY MARKS	PERCENTAGE	STATUS
80-89	3%	EXCELLENT
70-79	24%	DISTINCTION
60-69	21%	VERY GOOD
50-59	33%	GOOD
40-49	12%	AVERAGE
below 40	6%	RE-APPEAR



COURSE OUTCOME ASSESSMENT IN PERCENTAGE PERCENTAGE




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BHARATH COLLEGE OF SCIENCE AND MANAGEMENT

(UGC Recognized 2(f) & 12(B) Institution)

THANJAVUR-5

DEPARTMENT OF MATHEMATICS

ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Remember the fundamental concepts of Mathematics
PO2	Imbibe the skills necessary to effectively translate mathematical aspects to the general public
PO3	Develop Critical thinking ability so as to improve Employability and Decision making.
PO4	Apply Mathematical Models to solve critical problems.
PO5	Apply the concepts studied, in real life situations.

Name of the Programme: B.Sc Mathematics

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
16SCMM6 CLASSICAL ALGEBRA AND THEORY OF NUMBERS	CO1	Find Relation between roots & coefficients of Polynomial Equations, Symmetric functions of the Roots.
	CO2	Describe transformations of Equations, Reciprocal equations.
	CO3	Use Descart's rule of sign and transformation in general
	CO4	Understanding the concept of inequalities Applications.
	CO5	Understanding the concept of Euler function.



PO → CO↓	PO1	PO2	PO3	PO4	PO5
CO1	3	2	1	2	1
CO2	3	2	2	2	2
CO3	2	2	1	3	2
CO4	3	3	2	3	2
CO5	2	3	3	3	3
AVERAGE	2.6	2.4	1.8	2.6	2.25

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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	REG. NO		CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	CB17S366511	ABINAYA.M	3	4	3	4	4	18	72
2	CB17S366512	ABINAYA.R	4	4	4	4	3	19	76
3	CB17S366513	ABINESH.P	3	3	3	3	4	16	64
4	CB17S366514	AFFRIN.A	4	4	4	4	4	20	80
5	CB17S366515	AKASH.P	2	2	2	2	2	10	40
6	CB17S366516	AMARNATH.J	3	4	3	3	3	16	64
7	CB17S366517	ANBARASAN.M	3	4	4	4	4	19	76
8	CB17S366518	ARUNKUMAR.K	4	3	4	4	3	18	72
9	CB17S366519	BALAJI.S	4	4	4	4	4	20	80
10	CB17S366521	GOPINATH.S	2	2	2	2	2	10	40
11	CB17S366522	JAYAPRAKASH.K	4	3	4	3	3	17	68
12	CB17S366523	JEFREE GUDWIN.J	3	4	3	3	4	17	68
13	CB17S366524	KANIMOZHI.B	4	4	4	4	4	20	80
14	CB17S366525	KEERTHANA.R	5	4	4	4	4	21	84
15	CB17S366526	KEERTHIGA.V	5	5	4	5	5	24	96
16	CB17S366527	MARIMUTHU.T	2	2	2	2	2	10	40
17	CB17S366528	NESAMANI.K	5	5	4	4	4	22	88
18	CB17S366529	NISHANTHI.F	4	4	4	4	4	20	80
19	CB17S366530	PRAGATHI.E	4	4	4	5	5	22	88
20	CB17S366531	PRASANTH.K	2	2	2	2	2	10	40
21	CB17S366532	PUNITHA.R	5	4	4	5	5	23	92
22	CB17S366533	RAMKUMAR.N	4	4	4	4	4	20	80
23	CB17S366534	RAMYANJALI.V	4	5	4	5	4	22	88
24	CB17S366535	RAYMOND.C	5	4	4	5	4	22	88
25	CB17S366536	SENTHIL.G	2	2	2	2	2	10	40
26	CB17S366537	SNEHA.A	4	5	4	4	4	21	84
27	CB17S366538	SOWMIYA.R	4	5	4	4	5	22	88
28	CB17S366539	SUGANTHI.B	3	4	3	3	3	16	64
29	CB17S366540	SURUTHI.M	4	5	5	5	5	24	96
30	CB17S366541	SURYA.C	3	3	3	3	3	15	60
31	CB17S366542	VARTHANI.V	3	4	4	3	3	17	68
32	CB17S366543	VIGNESH.R	4	5	4	4	4	21	84
33	CB17S366544	YUVASHREE.M	3	4	3	4	4	18	72
AVERAGE			3.58	3.79	3.52	3.67	3.64		



EXPECTED ATTAINMENT IN EACH CO - 85%				
CO	TEST + SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	3.58	75		
CO2	3.79	75	78.58	92.45
CO3	3.52	75	78.79	92.69
CO4	3.67	75	78.52	92.38
CO5	3.64	75	78.67	92.55
			78.64	92.52

COURSE ATTAINMENT FOR B.Sc MATHEMATICS

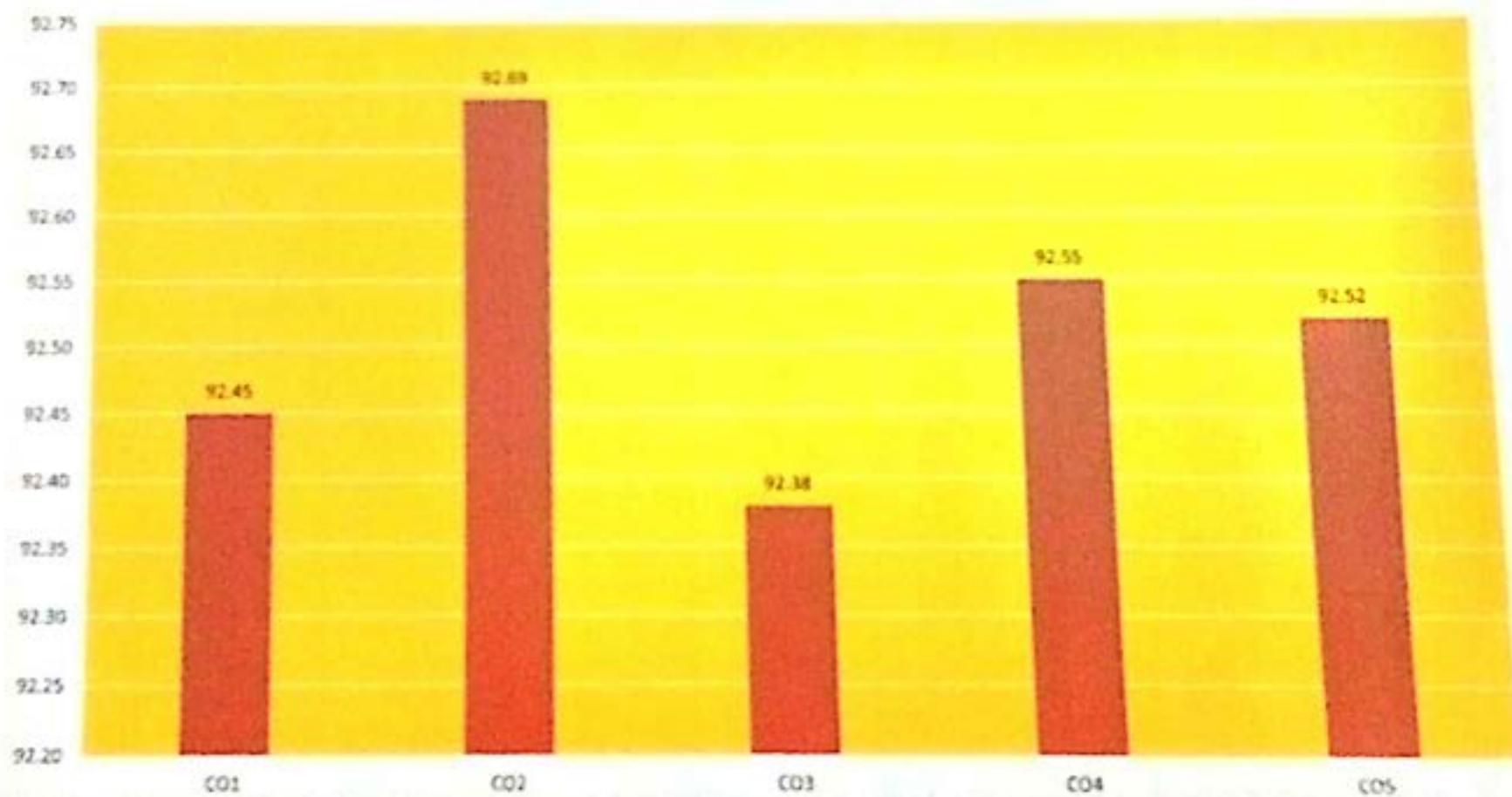
SUBJECT NAME
SUBJECT CODE
NO.OF STUDENTS

: CLASSICAL ALGEBRA AND THEORY OF NUMBERS
: 16SCCMM6
: 33

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	92.45
CO2	92.69
CO3	92.38
CO4	92.55
CO5	92.52



PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR B.Sc MATHEMATICS

SUBJECT NAME
SUBJECT CODE
NO.OF STUDENTS

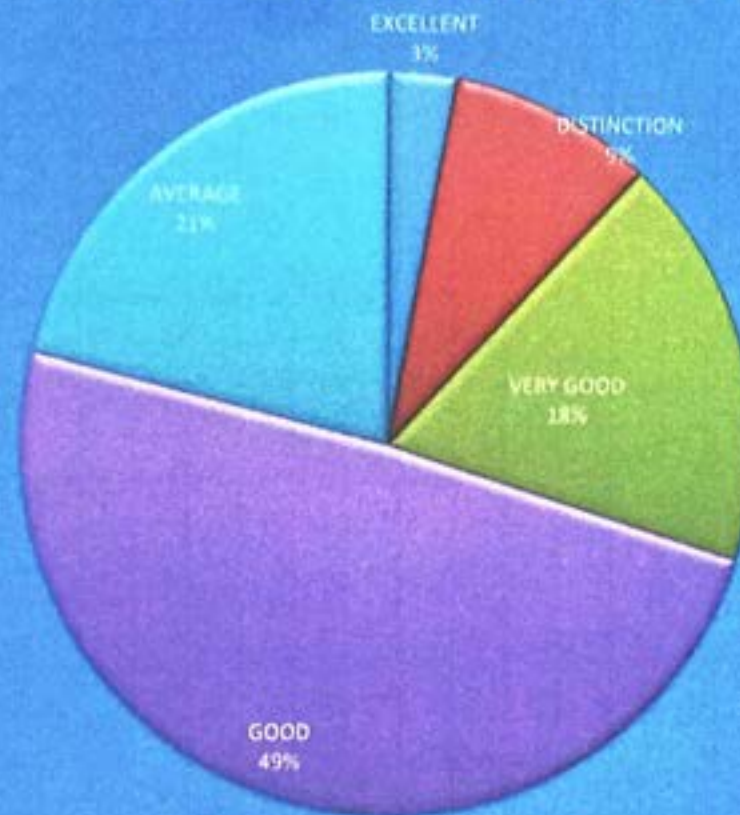
: CLASSICAL ALGEBRA AND THEORY OF NUMBERS
: 16SCCMM6
: 33

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO.OF. STUDENTS	STATUS
90 and above(100)	0	OUTSTANDING
80-89	1	EXCELLENT
70-79	3	DISTINCTION
60-69	6	VERY GOOD
50-59	16	GOOD
40-49	7	AVERAGE
Below 40	0	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
80-89	3%	EXCELLENT
70-79	9%	DISTINCTION
60-69	18%	VERY GOOD
50-59	49%	GOOD
40-49	21%	AVERAGE



COURSE OUTCOME ASSESSMENT IN PERCENTAGE



80-89 70-79 60-69 50-59 40-49



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THANJAVUR - 613 005



BHARATH COLLEGE OF SCIENCE AND MANAGEMENT

(UGC Recognized 2(f) & 12(B) Institution)

THANJAVUR-5

DEPARTMENT OF MATHEMATICS

ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Remember the fundamental concepts of Mathematics
PO2	Imbibe the skills necessary to effectively translate mathematical aspects to the general public
PO3	Develop Critical thinking ability so as to improve Employability and Decision making.
PO4	Apply Mathematical Models to solve critical problems.
PO5	Apply the concepts studied, in real life situations.



Name of the Programme : B.Sc Mathematics		
Course Code & Course Title	Course Outcome	
16SCMM8 ALGEBRA LINEAR	CO1	Understand the basic concepts of Vector spaces and Linear transformation
	CO2	To determine the solutions to problems and investigate the theoretical aspects of Basis and Dimension.
	CO3	Identify and construct Linear transformations of a matrix.
	CO4	To evaluate algebra of matrices and rank of a matrix.
	CO5	To find Eigen values and Eigen vectors by using characteristic equation.



PO → CO ₁	PO1	PO2	PO3	PO4	PO5
CO1	3	2	2	2	3
CO2	3	3	2	2	1
CO3	3	2	3	3	1
CO4	3	3	3	2	2
CO5	3	3	3	3	3
AVERAGE	3	2.6	2.6	2.4	2

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	UNIT TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	CB17S 366511	ABINAYA M	4	4	3	4	3	18	72
2	CB17S 366512	ABINAYA R	4	4	4	3	4	19	76
3	CB17S 366513	ABINESH P	3	3	3	3	3	15	60
4	CB17S 366514	AFFRIN A	3	3	4	3	4	17	68
5	CB17S 366515	AKASH P	3	3	2	3	2	13	52
6	CB17S 366516	AMARNATH J	4	3	4	3	4	18	72
7	CB17S 366517	ANBARASAN M	4	4	4	5	4	21	84
8	CB17S 366518	ARUNKUMAR K	4	4	5	4	5	22	88
9	CB17S 366519	BALAJI S	3	3	3	3	3	15	60
10	CB17S 366521	GOPINATH S	3	2	2	2	2	11	44
11	CB17S 366522	JAYAPRAKASH K	4	3	3	4	3	17	68
12	CB17S 366523	JEFRE GUDWINE J	4	4	2	3	4	17	68
13	CB17S 366524	KANIMOZHI B	4	4	4	4	4	20	80
14	CB17S 366525	KEERTHANA R	3	4	4	4	4	19	76
15	CB17S 366526	KEERTHIGA V	5	4	5	5	5	24	96
16	CB17S 366527	MARIMUTHU T	2	2	2	2	2	10	40
17	CB17S 366528	NESAMANI K	2	3	3	3	2	13	52
18	CB17S 366529	NISHANTHI F	3	3	3	3	4	16	64
19	CB17S 366530	PRAGATHI E	4	4	4	4	4	20	80
20	CB17S 366531	PRASANTH K	3	3	3	3	4	16	64
21	CB17S 366532	PUNITHA R	5	5	5	5	5	25	100
22	CB17S 366533	RAMKUMAR N	4	4	4	3	4	19	76
23	CB17S 366534	RAMYANJALI V	5	4	4	4	4	21	84
24	CB17S 366535	RAYMOND C	4	4	4	4	4	20	80
25	CB17S 366536	SENTHIL G	4	3	3	3	3	16	64
26	CB17S 366537	SNEHA A	4	4	3	3	3	17	68
27	CB17S 366538	SOWMIYA R	5	4	4	4	4	21	84
28	CB17S 366539	SUGANTHI B	3	4	3	3	4	17	68
29	CB17S 366540	SURUTHI M	5	4	5	5	5	24	96
30	CB17S 366541	SURYA C	3	4	3	3	3	16	64
31	CB17S 366542	VARTHANI V	4	5	4	4	4	21	84
32	CB17S 366543	VIGNESH R	4	4	4	3	4	18	72
33	CB17S 366544	YUVASHREE M	3	4	4	4	4	17	68
34	CB16S 359277	SRUTHIKA G	3	4	4	3	3	16	64
Average			3.68	3.62	3.50	3.47	3.65		



EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	3.68	75	78.68	92.56
CO2	3.62	75	78.62	92.49
CO3	3.50	75	78.50	92.35
CO4	3.47	75	78.47	92.32
CO5	3.65	75	78.65	92.53

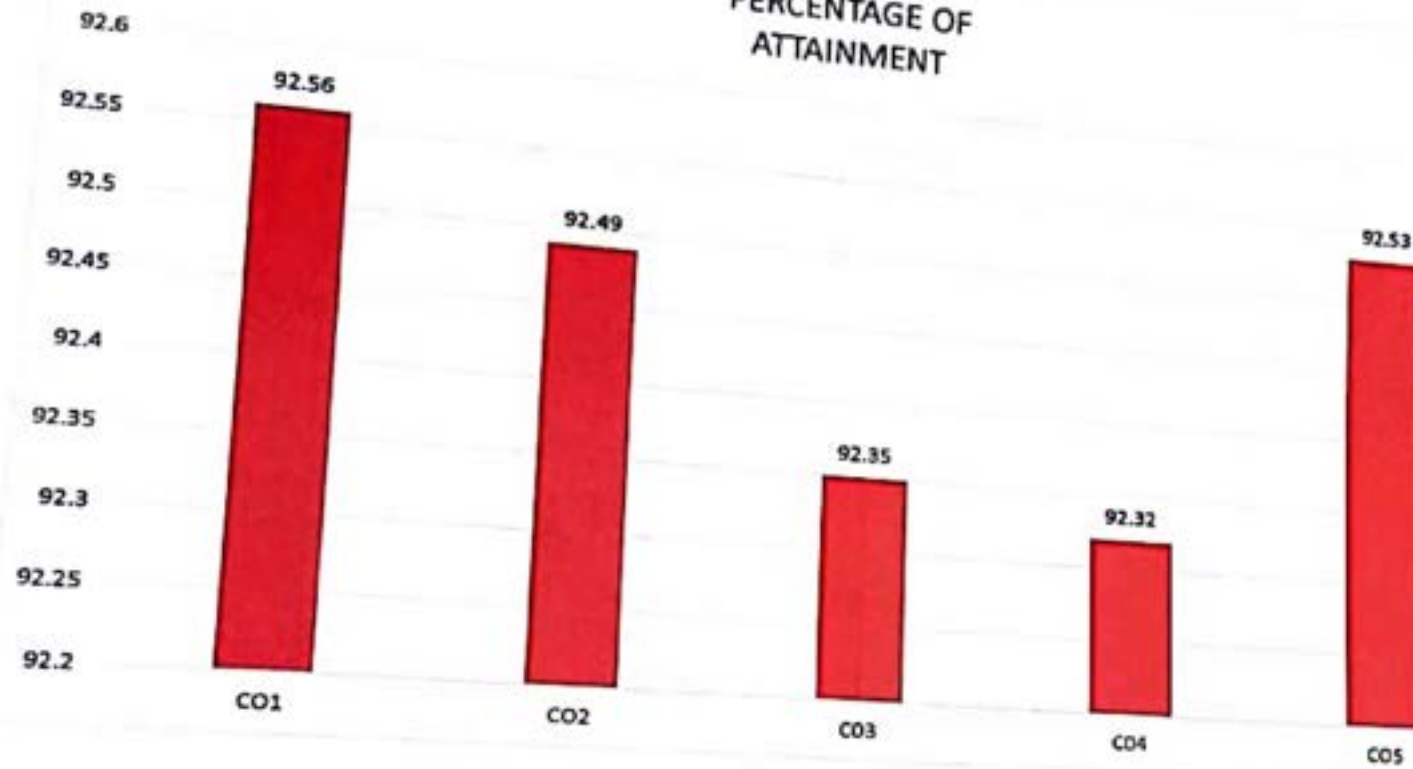
COURSE ATTAINMENT FOR B.Sc., MATHEMATICS

SUBJECT NAME : LINEAR ALGEBRA
 SUBJECT CODE : 16SCCMM8
 NO OF STUDENTS : 34

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	92.56
CO2	92.49
CO3	92.35
CO4	92.32
CO5	92.53



PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR B.Sc., MATHEMATICS
SUBJECT NAME : LINEAR ALGEBRA
SUBJECT CODE : 16SCCMM8
NO OF STUDENTS : 34

COURSE OUTCOME ASSESSMENT

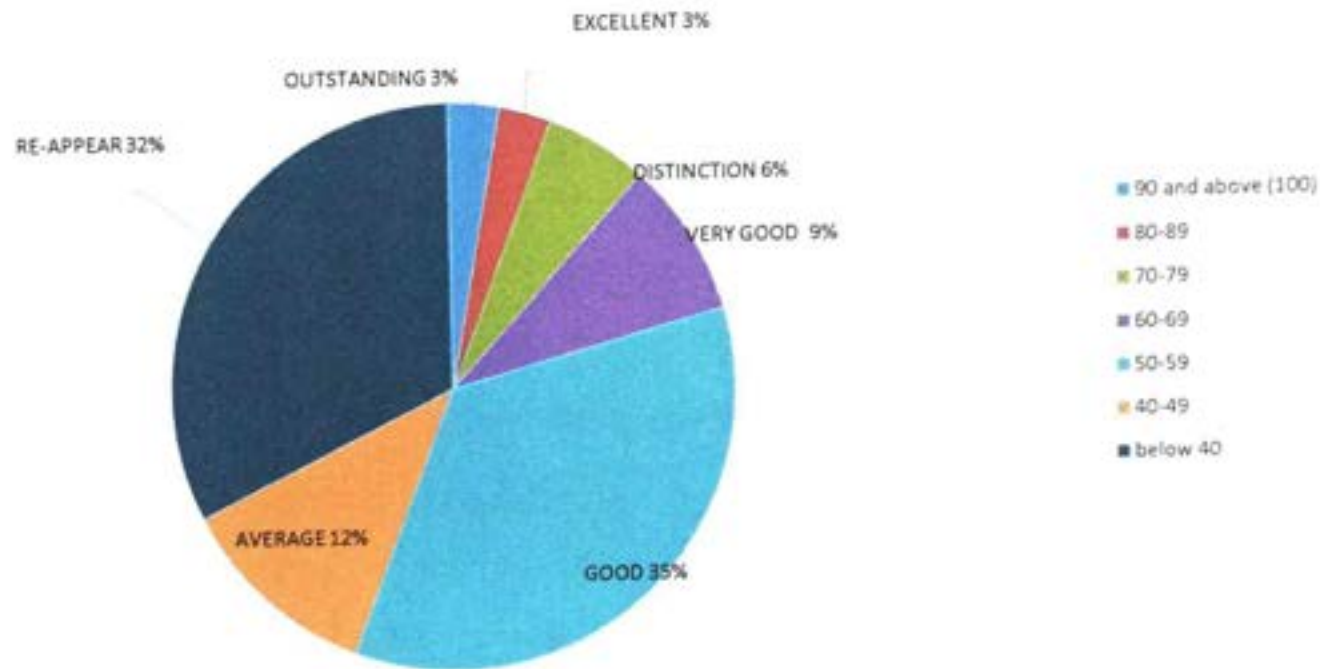
CATEGORY MARKS	NO OF STUDENTS	STATUS
90 and Above	1	OUTSTANDING
80-89	1	EXCELLENT
70-79	2	DISTINCTION
60-69	3	VERY GOOD
50-59	12	GOOD
40-49	4	AVERAGE
below 40	11	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE

CATEGORY MARKS	PERCENTAGE	STATUS
90 and above (100)	3%	OUTSTANDING
80-89	3%	EXCELLENT
70-79	6%	DISTINCTION
60-69	9%	VERY GOOD
50-59	35%	GOOD
40-49	12%	AVERAGE
below 40	32%	RE-APPEAR



COURSE OUTCOME ASSESSMENT IN PERCENTAGE




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THANJAVUR-5
DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Remember the fundamental concepts of Mathematics
PO2	Imbibe the skills necessary to effectively translate mathematical aspects to the general public
PO3	Develop Critical thinking ability so as to improve Employability and Decision making.
PO4	Apply Mathematical Models to solve critical problems.
PO5	Apply the concepts studied, in real life situations.

NAME OF THE PROGRAMME: B.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
16SCMM10 - REAL ANALYSIS	CO1	Acquire Knowledge about basic properties of real number system.
	CO2	Enhance Knowledge about the continuous and discontinuous functions.
	CO3	Develop the Knowledge of derivability.
	CO4	Assimilate the concept of Mean value theorems.
	CO5	Discuss Riemann integral and properties of Riemann integral.



PO – CO1	PO1	PO2	PO3	PO4	PO5
CO1	3	2	3	3	2
CO2	3	3	3	2	2
CO3	3	3	2	3	3
CO4	3	2	2	3	3
CO5	3	2	3	3	3
AVERAGE	3	2.4	2.6	2.8	2.6

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	CB16S 360286	AMTHAMBISELVI T	4	4	3	4	3	18	72
2	CB16S 360287	ARTH J	3	4	4	4	4	21	84
3	CB16S 360288	ARTH M	4	5	4	4	4	21	84
4	CB16S 360289	AKASH P	4	4	4	3	3	18	72
5	CB16S 360290	ALAGENDRAN G	3	3	3	3	4	21	96
6	CB16S 360291	ANANTHS	4	4	4	3	4	19	76
7	CB16S 360292	ANITHA D	4	3	4	4	4	21	84
8	CB16S 360293	ARTH P	3	4	4	4	4	21	84
9	CB16S 360294	DEEPAN CTAKARAVARTHY K	3	4	3	4	4	18	72
10	CB16S 360296	DHIVA C	4	4	4	4	4	20	80
11	CB16S 360297	DIVYA S	4	3	4	3	3	23	92
12	CB16S 360298	HEMALATHA K	3	3	3	3	3	25	100
13	CB16S 360299	JANNATHI L FIRTHOS P	4	4	4	3	3	22	88
14	CB16S 360300	KANALAVATHANAM G	4	4	4	4	4	20	80
15	CB16S 360301	LATCHAYA G	4	4	4	4	4	20	80
16	CB16S 360302	MOLLIYA B	3	3	4	3	3	24	96
17	CB16S 360303	NIRMALA M	3	4	4	3	4	22	88
18	CB16S 360304	NIHVA J	3	3	4	3	4	23	92
19	CB16S 360305	NIVETHA A	4	4	4	4	4	20	80
20	CB16S 360306	PUSHPKARANYA M	3	3	3	3	3	23	100
21	CB16S 360307	SIBUTHE M	3	3	3	3	3	23	100
22	CB16S 360308	SUGANYA A	3	3	3	3	3	23	100
23	CB16S 360309	THANARASELVI G	4	3	3	3	3	24	96
24	CB16S 360310	VIGNESH R	3	3	3	3	3	15	60
25	CB16S 358076	VIGNESHWARI R	3	4	3	3	3	24	96
26	CB16S 360913	HAMSAVARTHINI C	3	4	4	4	4	21	84
AVERAGE			4.38	4.38	4.15	4.35	4.231		

EXPECTED ATTAINMENT IN EACH CO - 85%

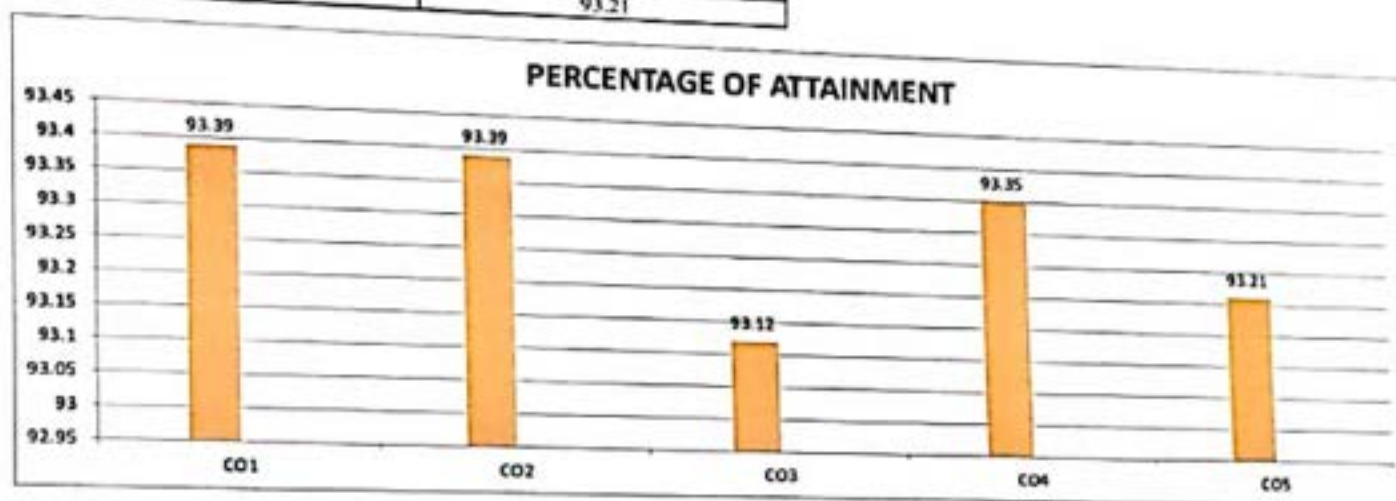
CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.38	75	79.38	93.388
CO2	4.38	75	79.38	93.388
CO3	4.15	75	79.15	93.118
CO4	4.35	75	79.35	93.353
CO5	4.23	75	79.23	93.212



SUBJECT NAME: REAL ANALYSIS
SUBJECT CODE: 16SCCM110
NO. OF STUDENTS: 26

COURSE ATTAINMENT FOR B. SC., MATHEMATICS

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.39
CO2	93.39
CO3	93.12
CO4	93.35
CO5	93.21



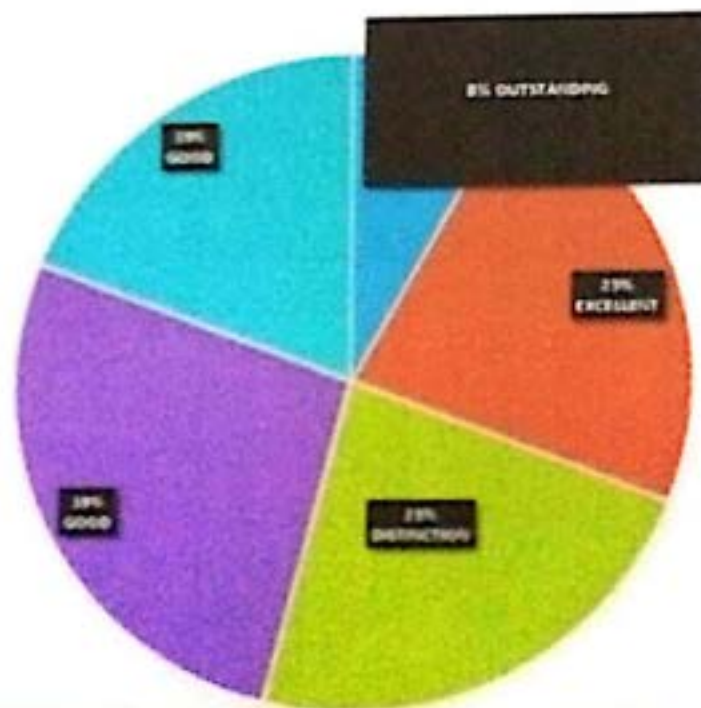
COURSE ATTAINMENT FOR B.Sc., MATHEMATICS
 SUBJECT NAME: REAL ANALYSIS
 SUBJECT CODE: 16SCCM110
 NO. OF STUDENTS: 26

COURSE OUTCOME ASSESSMENT		
CATEGORY(MARKS)	NO. OF STUDENTS	STATUS
90 AND ABOVE	2	OUTSTANDING
80-89	6	EXCELLENT
70-79	6	DISTINCTION
60-69	7	VERY GOOD
50-59	5	GOOD
40-49	0	AVERAGE
BELOW 40	0	RA

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY(MARKS)	PERCENTAGE	STATUS
90 AND ABOVE	8	OUTSTANDING
80-89	23	EXCELLENT
70-79	23	DISTINCTION
60-69	27	VERY GOOD
50-59	19	GOOD



COURSE OUTCOME ASSESSMENT



80 AND ABOVE
70-80
60-70
50-60
40-50




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THANJAVUR-5
DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Remember the fundamental concepts of Mathematics
PO2	Imbibe the skills necessary to effectively translate mathematical aspects to the general public
PO3	Develop Critical thinking ability so as to improve Employability and Decision making.
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NAME OF THE PROGRAMME: B.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
I6SCCMM12 - ABSTRACT ALGEBRA	CO1	Recognize technical terms groups, permutation groups.
	CO2	Acquire the knowledge of subgroups and cyclic groups.
	CO3	Acquire the knowledge of normal subgroups and Quotient Groups.
	CO4	Understand the elementary properties of rings.
	CO5	Formulate and develop unique factorization domain.



PO → CO ↓	PO1	PO2	PO3	PO4	PO5
CO1	2	2	3	3	3
CO2	2	2	2	2	2
CO3	2	3	2	2	2
CO4	3	2	3	3	2
CO5	3	3	2	2	2
AVERAGE	2.4	2.4	2.4	2.4	2.2

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	CB16S 360286	AINTHAMILSELVI.T	4	4	4	4	4	20	80
2	CB16S 360287	AJITH.J	4	3	3	3	3	16	64
3	CB16S 360288	AJITH.M	5	4	5	4	4	22	88
4	CB16S 360289	AKASH.P	3	3	3	3	3	15	60
5	CB16S 360290	ALAGENDRAN.G	5	5	5	5	5	25	100
6	CB16S 360291	ANANTH.S	3	3	3	3	3	15	60
7	CB16S 360292	ANITHA.D	5	4	4	4	4	21	84
8	CB16S 360293	ARTHI.P	4	4	3	3	3	17	68
9	CB16S 360294	DEEPAN CHAKRAVARTHI.K	3	3	3	3	3	15	60
10	CB16S 360296	DHIVYA.C	5	5	4	4	4	22	88
11	CB16S 360297	DIVYA.S	5	5	5	4	4	23	92
12	CB16S 360298	HEMALATHA.K	5	5	5	5	5	25	100
13	CB16S 360299	JANATTHUL FIRTHOS.P	5	5	5	5	4	24	96
14	CB16S 360300	KAMALAVATHANAM.G	5	5	5	5	4	24	96
15	CB16S 360301	LATCHAYA.G	5	4	5	5	5	24	96
16	CB16S 360302	MOURIYA.B	5	5	5	5	5	25	100
17	CB16S 360303	NIRMALA.M	5	5	4	4	4	22	88
18	CB16S 360304	NITHYA.J	5	5	4	5	5	24	96
19	CB16S 360305	NIVETHA.A	5	5	4	4	4	22	88
20	CB16S 360306	PUSHKARANYA.M	5	5	5	4	4	23	92
21	CB16S 360307	SHRUTHI.M	5	4	4	4	4	21	84
22	CB16S 360308	SUGANYA.A	5	5	5	5	4	24	96
23	CB16S 360309	THAMARAISELVI.G	5	4	4	4	4	21	84
24	CB16S 360310	VIGNESH.R	3	3	3	3	3	15	60
25	CB16S 358076	VIGNESHWARI.R	5	5	5	4	4	23	92
26	CB16S 360913	HAMSAVARTHINI.C	5	5	5	4	4	23	92
AVERAGE			4.35	4.35	4.23	4.08	3.96		



EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST + SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.35	75	79.35	93.35
CO2	4.35	75	79.35	93.35
CO3	4.23	75	79.23	93.21
CO4	4.08	75	79.08	93.03
CO5	3.96	75	78.96	92.89

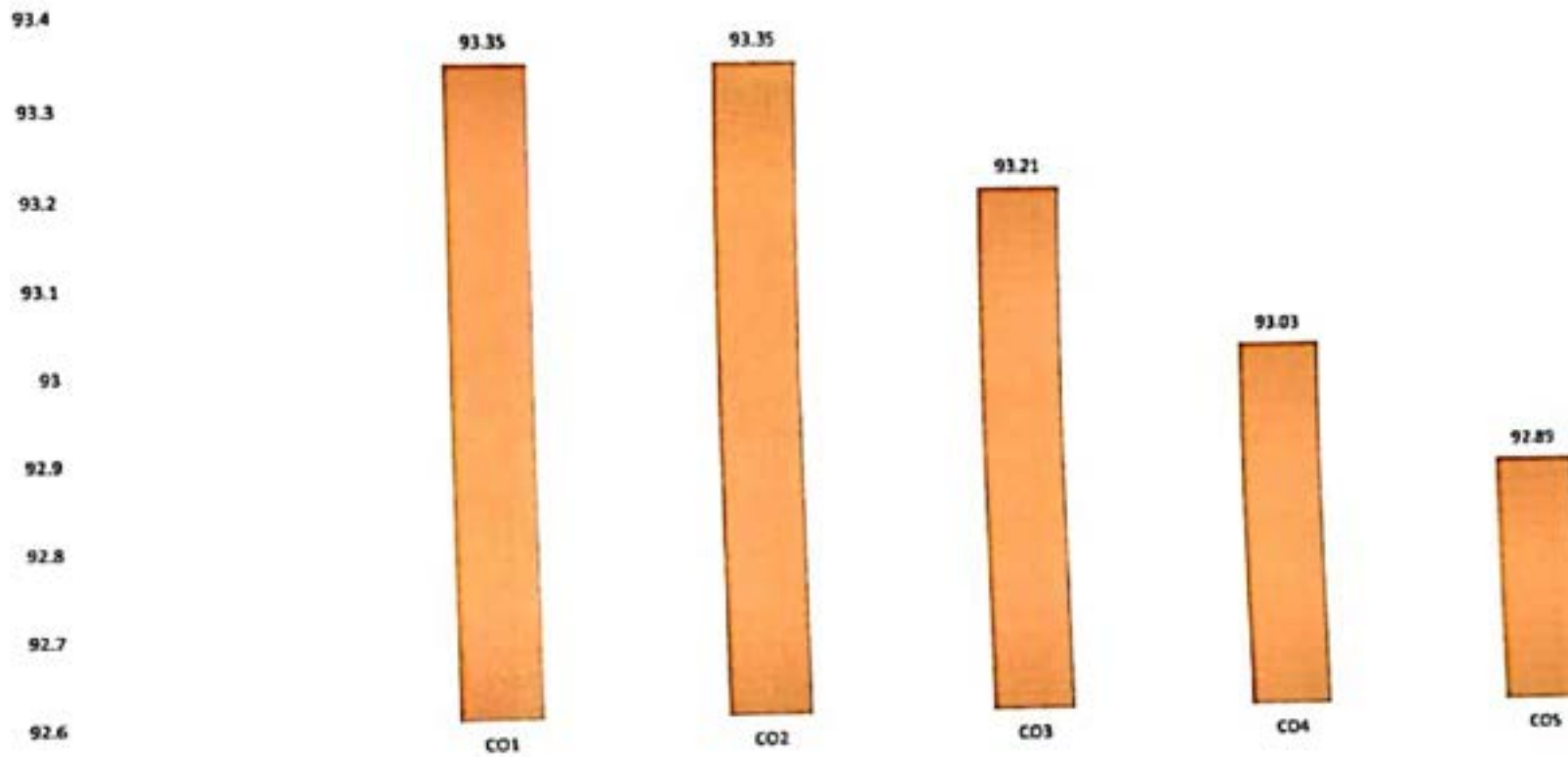
COURSE ATTAINMENT FOR B.SC MATHEMATICS

SUBJECT CODE : 16SCCMM12
 SUBJECT NAME : ABSTRACT ALGEBRA
 NO.OF STUDENTS : 26

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.35
CO2	93.35
CO3	93.21
CO4	93.03
CO5	92.89



PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR B.SC MATHEMATICS

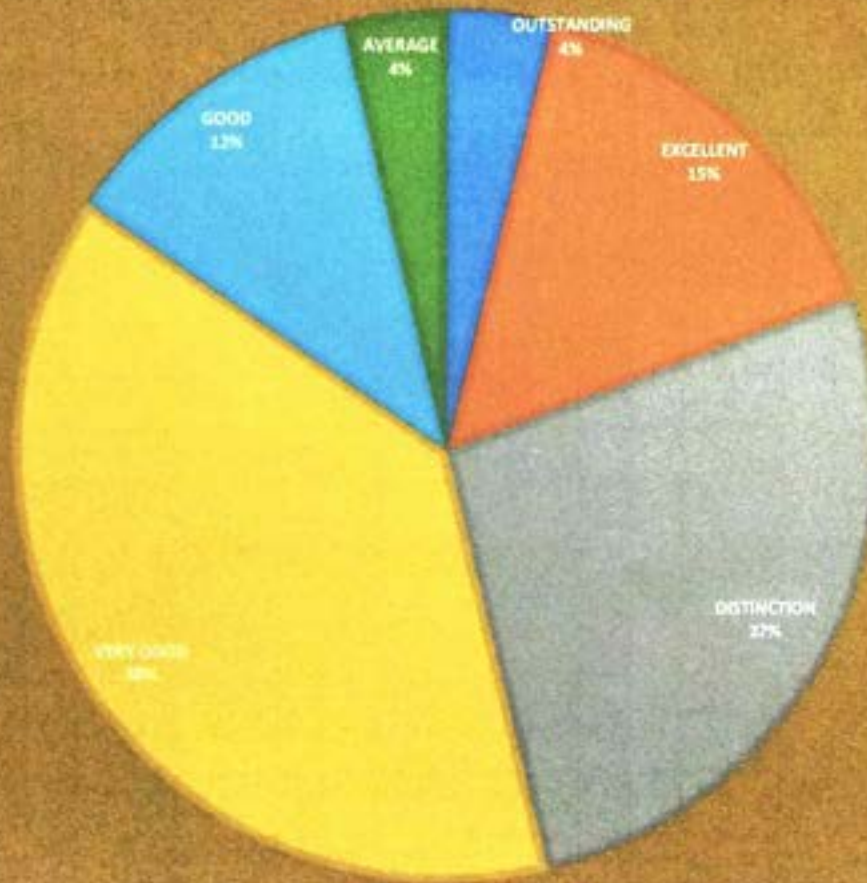
SUBJECT CODE : 16SCCMM12
SUBJECT NAME : ABSTRACT ALGEBRA
NO.OF STUDENT:: 26

COURSE OUTCOME ASSESSMENT		
CATEGORY(MARKS)	NO.OF STUDENTS	STATUS
90 and above	1	Out standing
80-89	4	Excellent
70-79	7	Distinction
60-69	10	Very good
50-59	3	Good
40-49	1	Average
below 40	0	Reappear

COURSE OUTCOME ASSESSMENT		
CATEGORY(MARKS)	PERCENTAGE	STATUS
90 and above	4	Out standing
80-89	15	Excellent
70-79	27	Distinction
60-69	38	Very good
50-59	12	Good
40-49	4	Average



COURSE OUTCOME ASSESSMENT



90 and above
80-89
70-79
60-69
50-59
40-49




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PG DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Remember the fundamental concepts of Mathematics
PO2	Imbibe the skills necessary to effectively translate mathematical aspects to the general public
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NAME OF THE PROGRAMME: B.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
16SCMM14 - DYNAMICS	CO1	Acquire the knowledge of velocity and Acceleration.
	CO2	Understand the path of Projectiles and characteristics of a motion of Projectiles.
	CO3	Study the Fundamental laws of impact.
	CO4	Derive the formulae for simple harmonic motion.
	CO5	Find out the pedal equation of central orbit.



PO → CO↓	PO1	PO2	PO3	PO4	PO5
CO1	3	2	3	2	3
CO2	3	2	2	2	3
CO3	3	2	3	2	3
CO4	3	2	2	2	3
CO5	3	2	2	3	3
AVERAGE	3	2	2.4	2.2	3

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	UNIT TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	CB16S 360286	AINTHAMILSELVIT	5	5	5	5	4	24	96
2	CB16S 360287	AJITH.J	5	5	5	4	4	23	92
3	CB16S 360288	AJITH.M	5	5	4	4	5	23	92
4	CB16S 360289	AKASH.P	5	5	5	4	4	23	92
5	CB16S 360290	ALAGENDRAN.G	5	5	5	5	5	25	100
6	CB16S 360291	ANANTH.S	5	5	5	4	4	23	92
7	CB16S 360292	ANITHA.D	5	5	5	5	5	25	100
8	CB16S 360293	ARTHI.P	5	5	5	5	5	25	100
9	CB16S 360294	DEEPAN CHAKRAVARTHI.K	5	5	5	4	4	23	92
10	CB16S 360296	DHIVYA.C	5	5	5	5	5	25	100
11	CB16S 360297	DIVYA.S	5	5	5	5	5	25	100
12	CB16S 360298	HEMALATHA.K	5	5	5	5	5	25	100
13	CB16S 360299	JANNATTHUL FIRTHOS.P	5	5	5	5	5	25	100
14	CB16S 360300	KAMALAVATHANAM.G	5	5	5	5	5	25	100
15	CB16S 360301	LATCHAYA.G	5	5	5	5	5	25	100
16	CB16S 360302	MOURIYA.B	5	5	5	5	5	25	100
17	CB16S 360303	NIRMALA.M	5	5	5	5	5	25	100
18	CB16S 360304	NITHYA.J	5	5	5	5	5	25	100
19	CB16S 360305	NIVETHA.A	5	5	5	5	5	25	100
20	CB16S 360306	PUSHKARANYA.M	5	5	5	5	5	25	100
21	CB16S 360307	SHRUTHI.M	5	5	5	5	5	25	100
22	CB16S 360308	SUGANYA.A	5	5	5	5	5	25	100
23	CB16S 360309	THAMARAISELVI.G	5	5	5	5	5	25	100
24	CB16S 360310	VIGNESH.R	5	5	5	4	4	23	92
25	CB16S 358076	VIGNESHWAR.L.R	5	5	5	5	5	25	100
26	CB16S 360913	HAMSAVARTHINI.C	5	5	5	5	5	25	100
AVERAGE			5.00	5.00	4.96	4.77	4.77		



EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	5.00	75	80.00	94.12
CO2	5.00	75	80.00	94.12
CO3	4.96	75	79.96	94.07
CO4	4.77	75	79.77	93.85
CO5	4.77	75	79.77	93.85

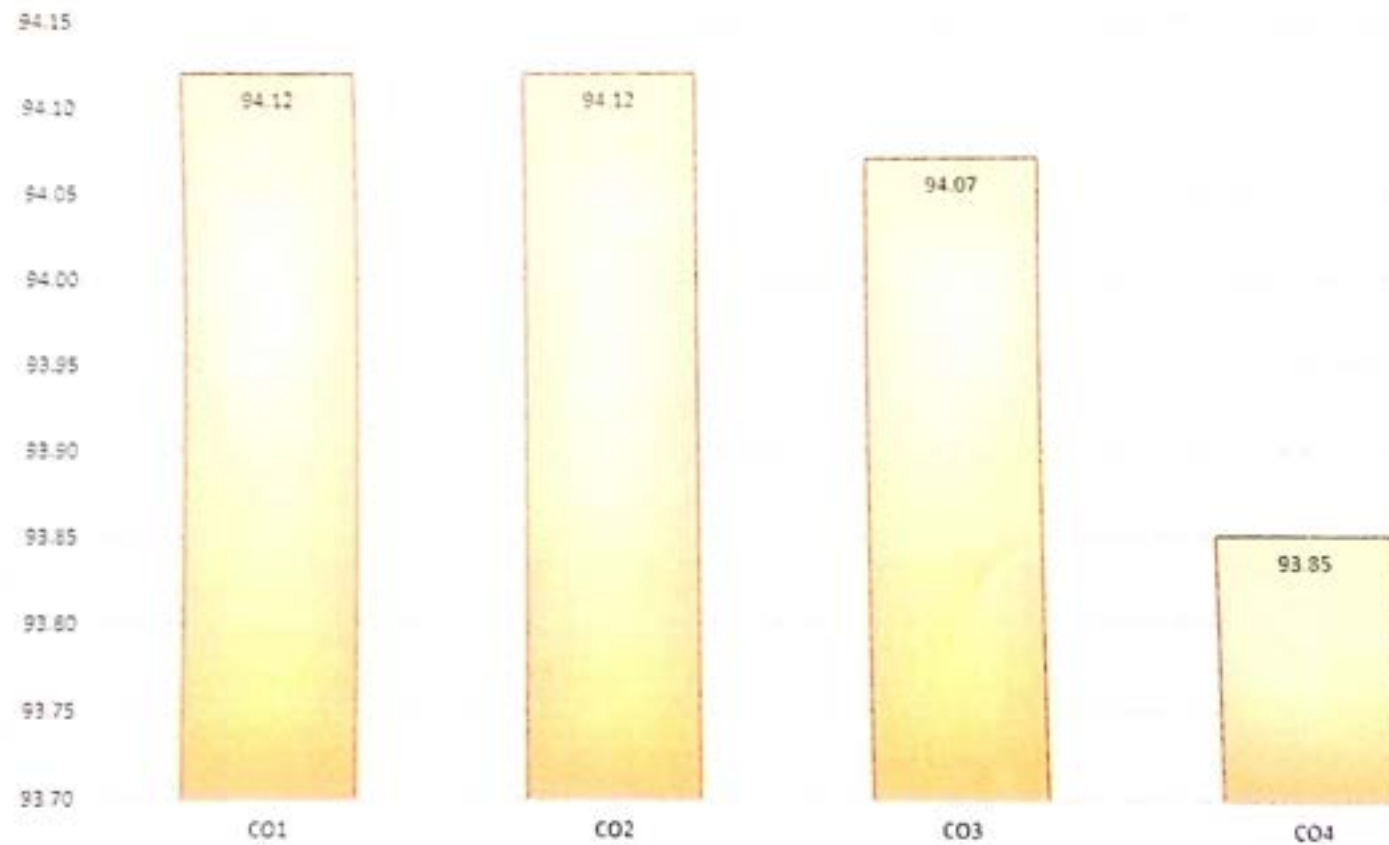
COURSE ATTAINMENT FOR B.SC MATHEMATICS

SUBJECT NAME : DYNAMICS
 SUBJECT CODE : 16SCCMM14
 NO OF STUDENTS : 26

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	94.12
CO2	94.12
CO3	94.07
CO4	93.85
CO5	93.85



PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR B.SC MATHEMATICS

SUBJECT NAME : DYNAMICS
SUBJECT CODE : 16SCCMM14
NO OF STUDENTS : 26

COURSE OUTCOME ASSESSMENT

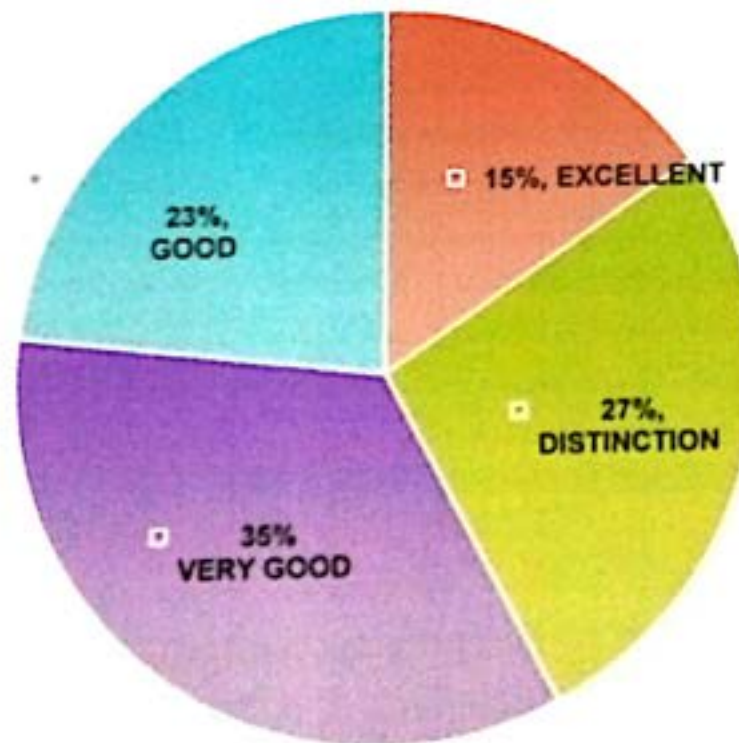
CATEGORY MARKS	NO OF STUDENTS	STATUS
90 and above (100)	0	OUTSTANDING
80-89	4	EXCELLENT
70-79	7	DISTINCTION
60-69	9	VERY GOOD
50-59	6	GOOD
40-49	0	AVERAGE
below 40	0	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE

CATEGORY MARKS	PERCENTAGE	STATUS
80-89	15	EXCELLENT
70-79	27	DISTINCTION
60-69	35	VERY GOOD
50-59	23	GOOD



COURSE OUTCOME ASSESSMENT IN PERCENTAGE



- 80-89
- 70-79
- 60-69
- 50-59



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THANJAVUR-5
PG DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Remember the fundamental concepts of Mathematics
PO2	Imbibe the skills necessary to effectively translate mathematical aspects to the general public
PO3	Develop Critical thinking ability so as to improve Employability and Decision making.
PO4	Apply Mathematical Models to solve critical problems.
PO5	Apply the concepts studied, in real life situations.

NAME OF THE PROGRAMME: B.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
16SMBEMM1:1 - OPERATIONS RESEARCH	CO1	Understand the advantages and limitations of operation research
	CO2	Understand the LPP and to know methods of solving problems
	CO3	Understand the concepts of transportation and assignment problems
	CO4	Learn about the sequencing problems
	CO5	Assimilate the concept of Network scheduling by CPM & PERT



PO → CO↓		PO1	PO2	PO3	PO4	PO5
CO1		3	2	3	3	3
CO2		3	3	3	2	2
CO3		2	3	2	3	1
CO4		3	2	3	3	1
CO5		3	3	3	3	2
AVERAGE		2.8	2.6	2.8	2.8	2.6

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO		INTERNAL (25)		
		UNIT TEST (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

SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	CB16S 360286	AINTHAMILSELVI.T	5	5	4	4	4	22	88
2	CB16S 360287	AJITH. J	4	4	4	4	4	20	80
3	CB16S 360288	AJITH.M	4	4	4	5	5	22	88
4	CB16S 360289	AKASH.P	4	4	4	3	3	18	72
5	CB16S 360290	ALAGENDRAN.G	5	5	5	5	5	25	100
6	CB16S 360291	ANANTH.S	4	4	3	3	3	17	68



7	CB16S 360292	ANITHA.D	5	5	4	4	4	22	88
8	CB16S 360293	ARTHI.P	4	4	4	4	4	20	80
9	CB16S 360294	DEEPAN CHAKRAVARTHI.K	5	4	4	4	4	21	84
10	CB16S 360296	DHIVYA.C	4	4	5	5	5	23	92
11	CB16S 360297	DIVYA.S	5	5	5	4	4	23	92
12	CB16S 360298	HEMALATHA.K	5	5	5	5	5	25	100
13	CB16S 360299	JANNATTHUL FIRTHOS.P	5	4	4	5	5	23	92
14	CB16S 360300	KAMALAVATHANAM.G	5	5	4	4	4	22	88
15	CB16S 360301	LATCHAYA.G	4	4	5	5	5	23	92
16	CB16S 360302	MOURIYA.B	5	5	5	5	5	25	100
17	CB16S 360303	NIRMALA.M	5	5	4	4	4	22	88
18	CB16S 360304	NITHYA.J	4	4	5	5	5	23	92
19	CB16S 360305	NIVETHA.A	5	4	4	4	4	21	84
20	CB16S 360306	PUSHKARANYA.M	5	5	5	5	5	25	100
21	CB16S 360307	SHRUTHI.M	5	5	5	5	5	25	100
22	CB16S 360308	SUGANYA.A	4	4	5	5	5	23	92
23	CB16S 360309	THAMARAISELVI.G	5	5	4	4	5	23	92
24	CB16S 360310	VIGNESH.R	3	3	4	4	4	18	72
25	CB16S 358076	VIGNESHWARI.R	5	5	5	5	5	25	100
26	CB16S 360913	HAMSAVARTHINI.C	5	4	4	4	5	22	88
AVERAGE			4.58	4.42	4.38	4.38	4.46		



EXPECTED ATTAINMENT IN EACH CO - 85%

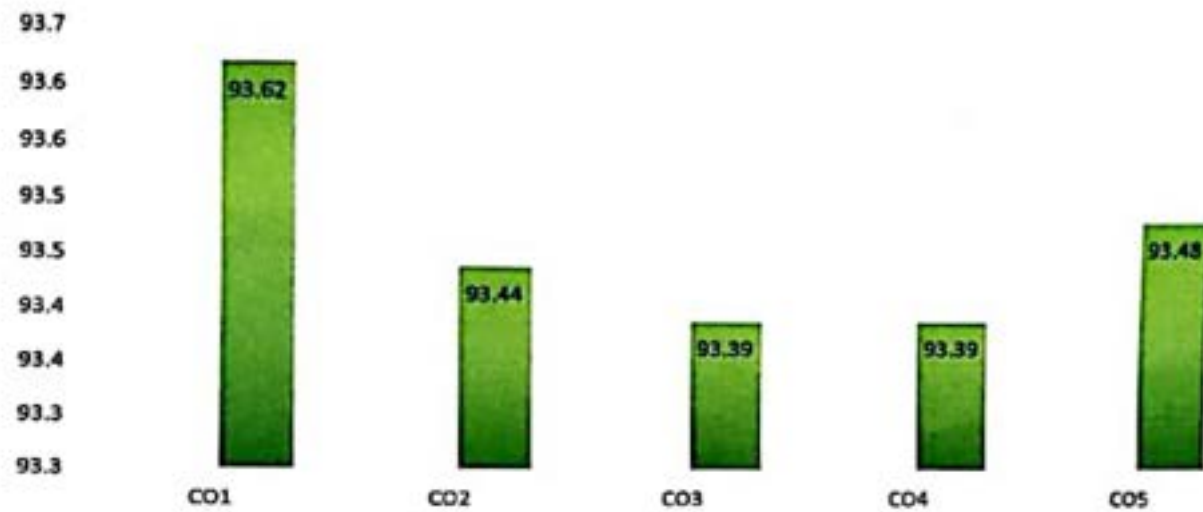
CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.58	75	79.58	93.62
CO2	4.42	75	79.42	93.44
CO3	4.38	75	79.38	93.39
CO4	4.38	75	79.38	93.39
CO5	4.46	75	79.46	93.48

COURSE ATTAINMENT FOR B.Sc MATHEMATICS

SUBJECT NAME : :OPERATION RESEARCH
 SUBJECT CODE : :165MBEMM1:1
 NO OF STUDENTS : 26

COURSE OUTCOME		PERCENTAGE OF ATTAINMENT
CO1		93.62
CO2		93.44
CO3		93.39
CO4		93.39
CO5		93.48





COURSE ATTAINMENT FOR B.Sc MATHEMATICS

SUBJECT NAME : :OPERATION RESEARCH

SUBJECT CODE : :165MBEMM1:1

NO OF STUDENTS : 26

COURSE OUTCOME ASSESSMENT

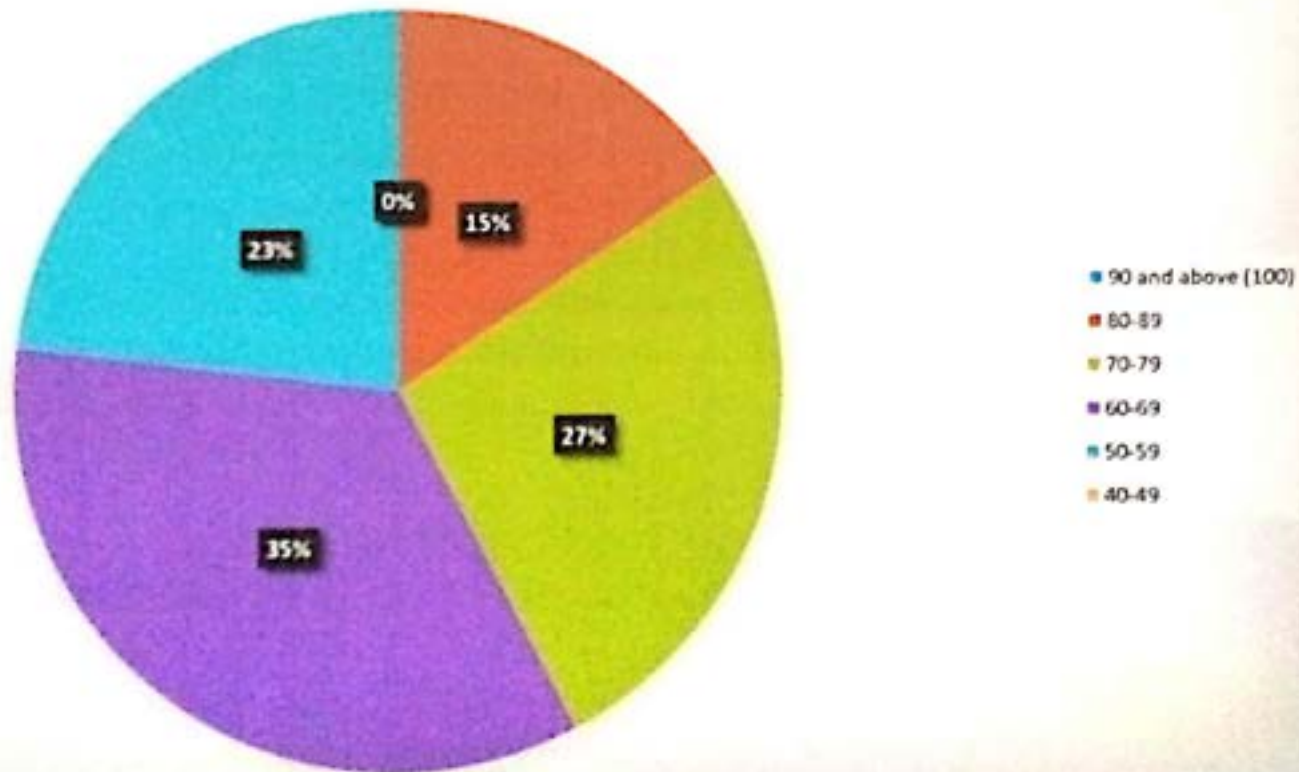
CATEGORY MARKS	NO OF STUDENTS	NO OF STUDENTS	STATUS
90 and above (100)	0	6	OUTSTANDING
80-89	4	10	EXCELLENT
70-79	7	5	DISTINCTION
60-69	9	3	VERY GOOD
50-59	6	1	GOOD
40-49	0	1	AVERAGE
below 40	0	0	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE

CATEGORY MARKS	NO OF STUDENTS	PERCENTAGE	STATUS
90 and above (100)	0	23	OUTSTANDING
80-89	4	38	EXCELLENT
70-79	7	19	DISTINCTION
60-69	9	12	VERY GOOD
50-59	6	4	GOOD
40-49	0	4	AVERAGE



COURSE OUTCOME ASSESSMENT IN PERCENTAGE



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THANJAVUR-5
DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Remember the fundamental concepts of Mathematics
PO2	Imbibe the skills necessary to effectively translate mathematical aspects to the general public
PO3	Develop Critical thinking ability so as to improve Employability and Decision making.
PO4	Apply Mathematical Models to solve critical problems.
PO5	Apply the concepts studied, in real life situations.

NAME OF THE PROGRAMME: B.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
16SMBEMM3:2 - NUMBER THEORY	CO1	Study the basic concepts of divisibility involving Euclid's Division lemma and Linear Diophantine equation.
	CO2	Study the basic principles of Permutations and Combinations .
	CO3	Acquire the knowledge of basic properties of Congruences residue system.
	CO4	Explain the chinese remainder theorem
	CO5	Recall the concepts of arithmetic function using Mobius inversion formula.



PO → CO ₁	PO1	PO2	PO3	PO4	PO5
CO1	3	2	2	3	3
CO2	3	3	3	2	3
CO3	3	2	2	3	3
CO4	3	2	3	3	3
CO5	3	2	2	2	2
AVERAGE	3	2.2	2.4	2.6	2.8

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE (H1 TC DME)

CO	INTERNAL (15)		
	TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	CB16S 360286	AINTHAMILSELVI. T	4	4	4	4	4	20	80
2	CB16S 360287	AJITH. J	4	4	4	4	4	20	80
3	CB16S 360288	AJITH. M	4	4	5	5	4	22	88
4	CB16S 360289	AKASH. P	4	4	4	4	4	20	80
5	CB16S 360290	ALAGENDRAN. G	5	5	5	5	5	25	100
6	CB16S 360291	ANANTH. S	5	5	4	4	5	23	92
7	CB16S 360292	ANITHA. D	5	5	4	4	4	22	88
8	CB16S 360293	ARTHI. P	5	4	5	4	5	23	92
9	CB16S 360294	DEEPAN CHAKRAVARTHY. K	5	4	4	5	4	22	88
10	CB16S 360296	DHIVYA. C	4	5	5	5	5	24	96
11	CB16S 360297	DIVYA. S	5	4	5	5	5	24	96
12	CB16S 360298	HEMALATHA. K	5	5	5	5	5	25	100
13	CB16S 360299	JANNATTHUL FIRTHOS. P	5	5	4	5	5	24	96
14	CB16S 360300	KAMALAVATHANAM. G	5	4	4	5	5	23	92
15	CB16S 360301	LATCHAYA. G	5	5	5	4	5	24	96
16	CB16S 360302	MOURIYA. B	5	5	5	5	5	25	100
17	CB16S 360303	NIRMALA. M	5	4	4	5	4	22	88
18	CB16S 360304	NITHYA. J	5	4	4	4	4	21	84
19	CB16S 360305	NIVETHA. A	4	4	4	4	4	20	80
20	CB16S 360306	PUSHKARANYA. M	5	5	5	5	5	25	100
21	CB16S 360307	SHRUTHI. M	5	5	5	5	5	25	100
22	CB16S 360308	SUGANYA. A	5	5	5	5	5	25	100
23	CB16S 360309	THAMARASELVI. G	4	5	5	4	5	23	92
24	CB16S 360310	VIGNESH. R	4	4	4	4	4	20	80
25	CB16S 358076	VIGNESHWARI. R	5	5	5	5	5	25	100
26	CB16S 360913	HAMSAVARTHINI. C	5	5	4	5	4	23	92
AVERAGE			4.69	4.54	4.50	4.58	4.58		



EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.69	75	79.69	93.75
CO2	4.54	75	79.54	93.58
CO3	4.50	75	79.50	93.53
CO4	4.58	75	79.58	93.62
CO5	4.58	75	79.58	93.62

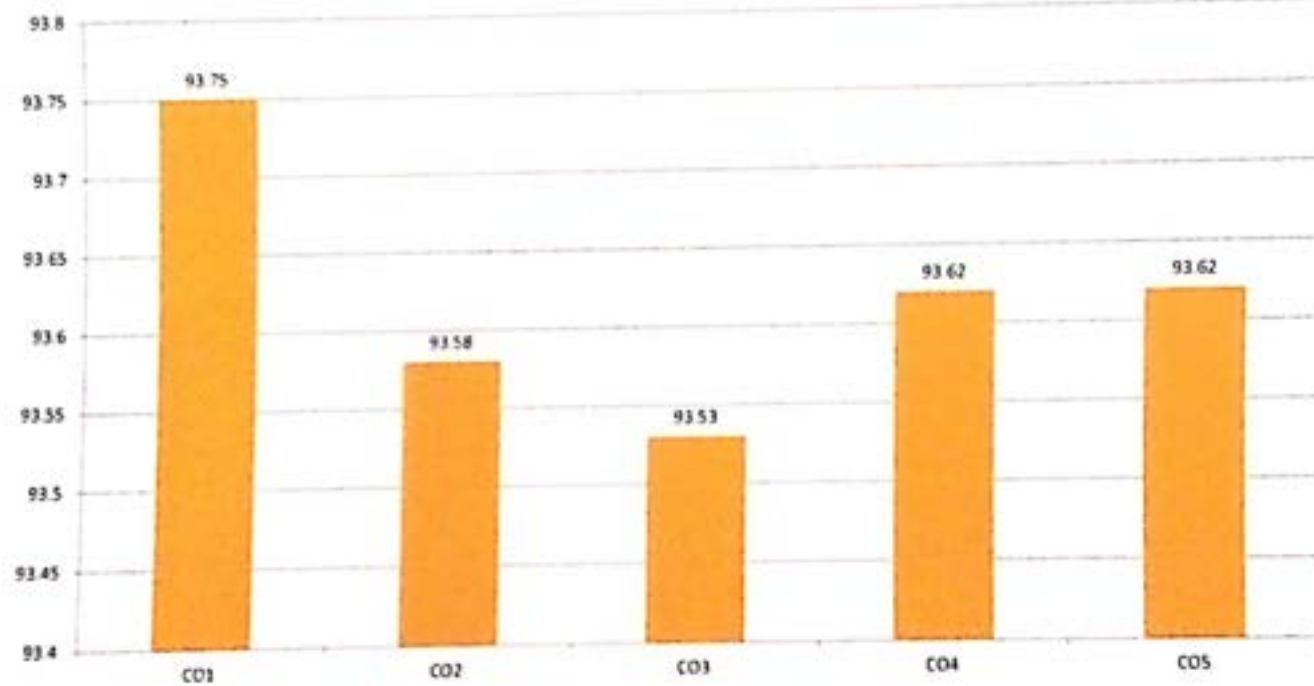
COURSE ATTAINMENT FOR B. SC., MATHEMATICS

SUBJECT NAME: NUMBER THEORY
 SUBJECT CODE: 16SMBEMMD: 2
 NO. OF STUDENTS: 26

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.75
CO2	93.58
CO3	93.53
CO4	93.62
CO5	93.62



PERCENTAGE OF ATTAINMENT



SUBJECT NAME: NUMBER THEORY
 SUBJECT CODE: 16SMBEMM3; 2
 NO. OF STUDENTS: 26

COURSE ATTAINMENT FOR B. SC., MATHEMATICS

COURSE OUTCOME ASSESSMENT

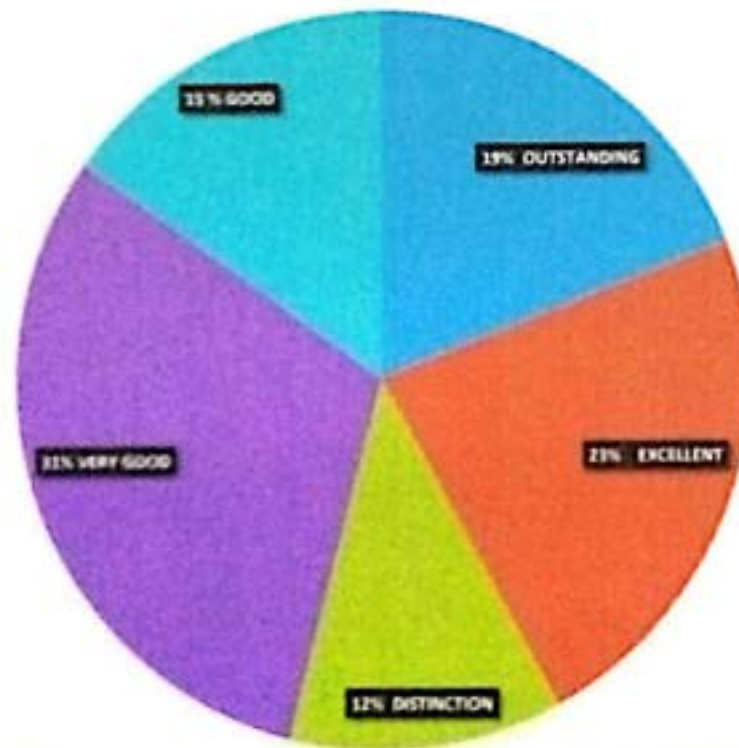
CATEGORY(MARKS)	NO. OF STUDENTS	STATUS
90 AND ABOVE	5	OUTSTANDING
80-89	6	EXCELLENT
70-79	3	DISTINCTION
60-69	8	VERY GOOD
50-59	4	GOOD
40-49	0	AVERAGE
BELOW 40	0	RE -APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE

CATEGORY (MARKS)	PERCENTAGE	STATUS
90 and above	19%	OUTSTANDING
80 -89	23%	EXCELLENT
70 - 79	12%	DISTINCTION
60 -69	31%	VERY GOOD
50 -59	15%	GOOD



COURSE OUTCOME ASSESSMENT



80 and above
70-79
60-69
50-49




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(Affiliated to Bharathidasan University, Tiruchirappalli – 24)**



DEPARTMENT OF MATHEMATICS

PO – CO ATTAINMENT

2019-2020



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DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES
PROGRAM OUTCOME

PO1	Identify and enhance mathematical and computational strategies in order to solve mathematical problems.
PO2	Know various specialized areas of advanced mathematics and its applications.
PO3	Work as Professional mathematicians either in academia or elsewhere.
PO4	Inculcate knowledge of formulation and apply mathematical concepts which are suitable for real life applications.
PO5	Crack lectureship and fellowship exams affirmed by UGC like CSIR - NET and SET.

Name of the Programme: M.Sc Mathematics

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
PI6MA11 ALGEBRA	CO1	Summarize the concept of Cayley's theorem, Sylow's theorem.
	CO2	Give a detailed knowledge about Euclidean Rings.
	CO3	Differentiate polynomial rings over the rational field and polynomial rings over the commutative rings.
	CO4	Understand Extension fields, Roots of Polynomials.
	CO5	Explain the concepts of Galois Theory.



PO → CO _i	PO1	PO2	PO3	PO4	PO5
CO1	3	3	2	3	3
CO2	3	2	3	2	3
CO3	3	3	2	2	3
CO4	3	3	2	3	3
CO5	3	2	2	3	3
AVERAGE	3	2.6	2.2	2.6	3

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	P 19192501	ABINAYA.C	5	4	5	4	4	22	88
2	P 19192502	AINTHAMILSELVIT	5	5	4	5	4	23	92
3	P 19192503	AJITH.J	4	4	4	4	4	20	80
4	P 19192504	ANUPRIYADHARSHINI.R	4	4	4	4	4	20	80
5	P 19192505	BHUNANESHWARI.R	4	4	4	4	5	21	84
6	P 19192506	BHUNANESWARIC	5	5	4	5	5	24	96
7	P 19192507	HEMALATHA.K	5	5	5	5	5	25	100
8	P 19192508	JAYASURYA.T	5	4	5	4	5	23	92
9	P 19192509	LATCHAYA.G	4	5	5	5	5	24	96
10	P 19192510	PRAKASH.M	4	5	5	4	5	23	92
11	P 19192511	PRIYANKA.J	5	5	5	5	5	25	100
12	P 19192512	PUSHKARANYA.M	5	5	5	5	5	25	100
13	P 19192513	RABIYA.D	4	4	4	4	4	20	80
14	P 19192514	RAJESH.K	5	5	4	5	5	24	96
15	P 19192515	RANJITH KUMAR.R	5	5	4	4	5	23	92
16	P 19192516	SAKTHIVEL.K	4	5	4	4	4	21	84
17	P 19192517	SANGEETHA.S	4	4	4	5	5	22	88
18	P 19192518	SUGANYA.A	5	5	5	5	5	25	100
19	P 19192519	TAMILALAGAN.A	4	4	4	5	4	21	84
20	P 19192520	VENKATESAN.R	4	4	4	4	4	20	80
21	P 19192521	VINOTHINI.M	5	4	4	5	5	23	92
AVERAGE			4.52	4.52	4.38	4.52	4.62		



EXPECTED ATTAINMENT IN EACH CO - 85%

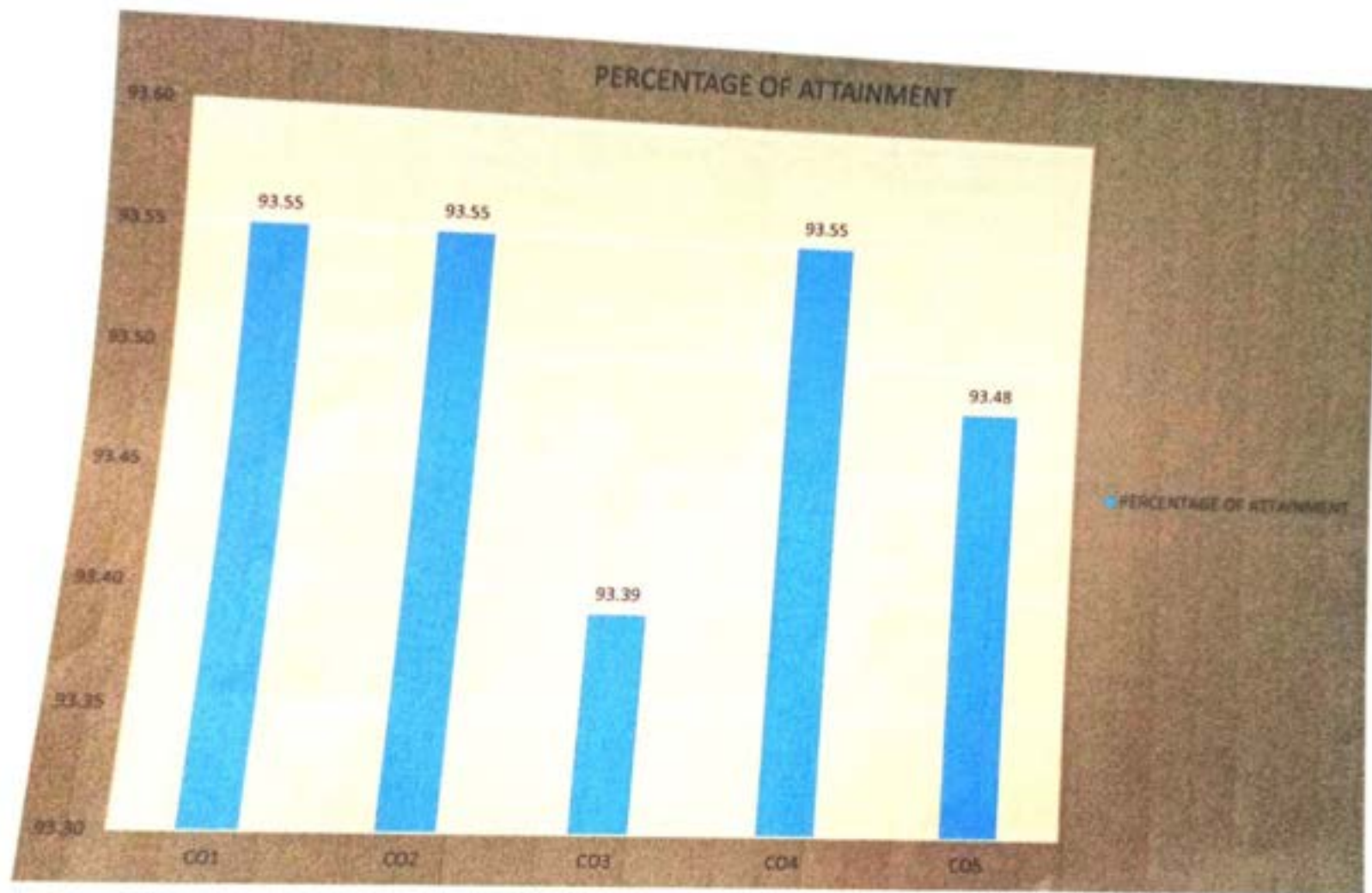
CO	TEST + SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.52	75	79.52	93.55
CO2	4.52	75	79.52	93.55
CO3	4.38	75	79.38	93.39
CO4	4.52	75	79.52	93.55
CO5	4.62	75	79.46	93.48

COURSE ATTAINMENT FOR M.Sc MATHEMATICS

SUBJECT NAME : ALGEBRA
 SUBJECT CODE : P16MA11
 NO.OF STUDENTS : 21

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.55
CO2	93.55
CO3	93.39
CO4	93.55
CO5	93.48





COURSE ATTAINMENT FOR M.Sc MATHEMATICS

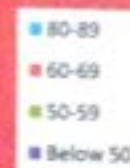
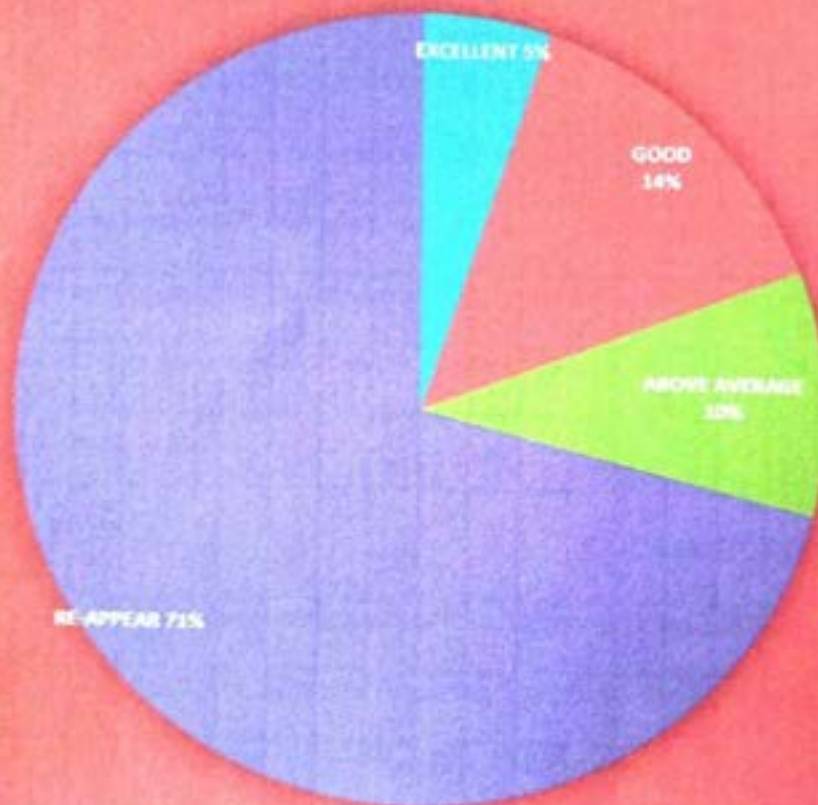
SUBJECT NAME : ALGEBRA
SUBJECT CODE : P16MA11
NO.OF STUDENTS : 21

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO.OF. STUDENTS	STATUS
90 and above(100)	0	OUTSTANDING
80-89	1	EXCELLENT
70-79	0	VERY GOOD
60-69	3	GOOD
50-59	2	ABOVE AVERAGE
Below 50	15	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
80-89	5%	EXCELLENT
60-69	14%	GOOD
50-59	10%	ABOVE AVERAGE
Below 50	71%	RE-APPEAR



COURSE OUTCOME ASSESSMENT IN PERCENTAGE



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THANJAVUR-5
DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME	
PO1	Identify and enhance mathematical and computational strategies in order to solve mathematical problems
PO2	Know various specialized areas of advanced mathematics and its applications.
PO3	Work as Professional mathematicians either in academia or elsewhere..
PO4	Inculcate knowledge of formulation and apply mathematical concepts which are suitable for real life applications
PO5	Crack lectureship and fellowship exams affirmed by UGC like CSIR – NET and SET..

NAME OF THE PROGRAMME: M.Sc., MATHEMATICS		
COURSE CODE & COURSE TITLE	COURSE OUTCOME	
P16MA12 - REAL ANALYSIS	CO1	Explain Sequences, Limits, Tests of convergence and Rearrangements.
	CO2	Describe the Limits of functions, Continuity and Differentiation of vector valued functions.
	CO3	Derive the existence of the Riemann, Stieltjes integral.
	CO4	Explain Uniform convergence of continuity, integration and differentiation for sequences and series of functions.
	CO5	Describe about the functions of several variables and the contract principle.



PO → CO ↓	PO1	PO2	PO3	PO4	PO5
CO1	3	3	3	3	3
CO2	3	3	3	2	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
AVERAGE	3	3	3	2.8	3

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	P19192501	ABINAYA.C	5	5	4	4	4	22	88
2	P19192502	AINTHAMIL SELVI.T	5	5	5	4	4	23	92
3	P19192503	AJITH.J	5	4	4	4	4	21	84
4	P19192504	ANUPRIYADHARSHINI.R	4	4	4	4	4	20	80
5	P19192505	BHUVANESHWARI.R	5	5	4	4	4	22	88
6	P19192506	BHUVANESHWARI.C	5	5	5	5	4	24	96
7	P19192507	HEMALATHA.K	5	5	5	5	5	25	100
8	P19192508	JAYASURYA.T	5	5	5	5	4	24	96
9	P19192509	LATCHAYA.G	5	5	5	5	4	24	96
10	P19192510	PRAKASH.M	5	5	4	4	4	22	88
11	P19192511	PRIYANKA.J	5	5	5	5	5	25	100
12	P19192512	PUSHKARANYA.M	5	5	5	5	5	25	100
13	P19192513	RABIYA.D	4	4	4	4	4	20	80
14	P19192514	RAJESH.K	5	5	5	5	4	24	96
15	P19192515	RANJITH KUMAR.R	5	5	5	5	4	24	96
16	P19192516	SAKTHIVEL.K	5	4	4	4	4	21	84
17	P19192517	SANGEETHA.S	5	5	5	4	4	23	88
18	P19192518	SUGANYA.A	5	5	5	5	5	25	100
19	P19192519	TAMILALAGANA.A	4	4	4	4	4	20	80
20	P19192520	VENKATESAN.R	4	4	4	4	4	20	80
21	P19192521	VINOTHINLM	5	5	4	4	4	22	88
AVERAGE			4.81	4.71	4.52	4.43	4.19		



EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.81	75	79.81	93.89
CO2	4.71	75	79.71	93.78
CO3	4.52	75	79.52	93.56
CO4	4.43	75	79.43	93.44
CO5	4.19	75	79.19	93.16

COURSE ATTAINMENT FOR M.SC MATHEMATICS

SUBJECT CODE : P16MA12

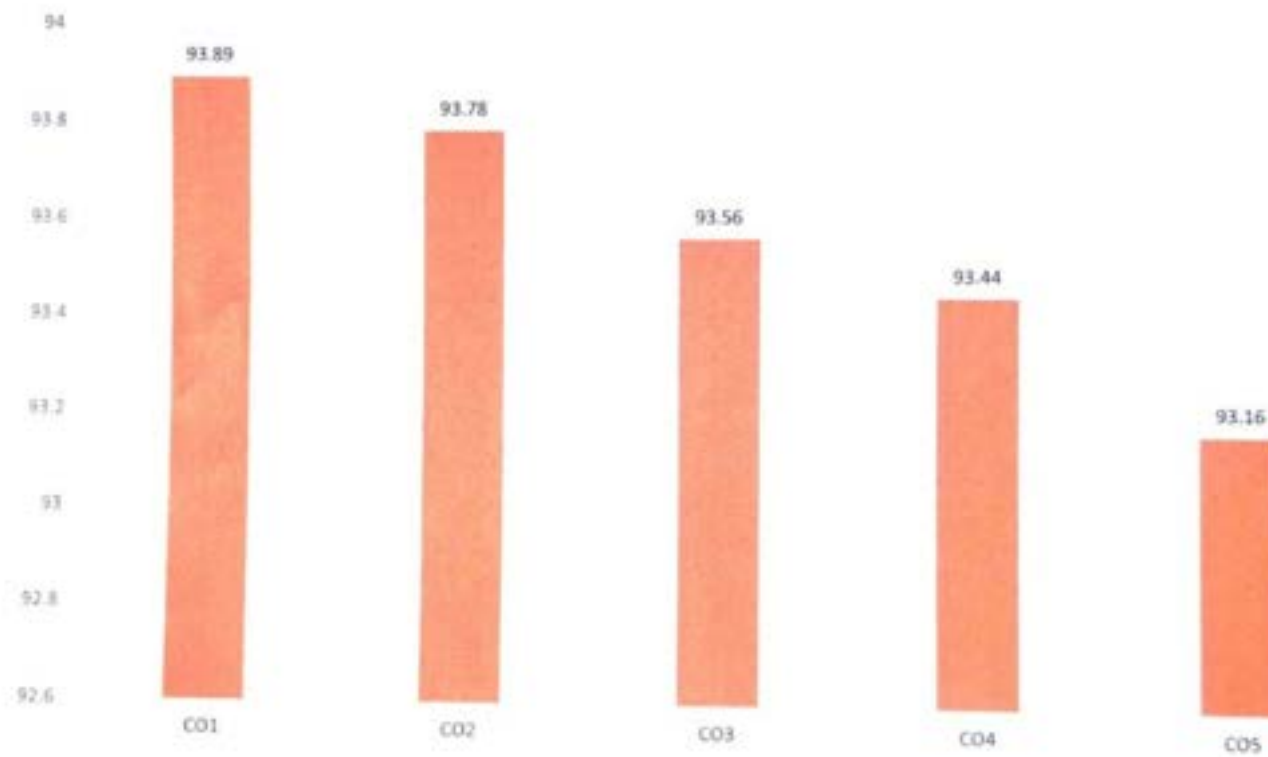
SUBJECT NAME : REAL ANALYSIS

NO.OF STUDENTS: 21

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.89
CO2	93.78
CO3	93.56
CO4	93.44
CO5	93.16



PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR M.SC MATHEMATICS

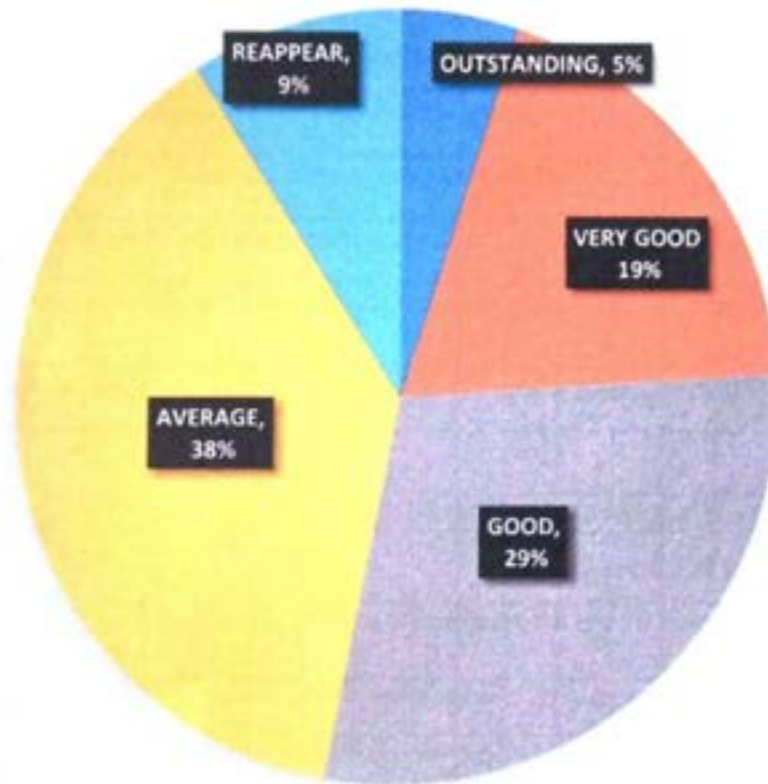
SUBJECT CODE : P16MA12
SUBJECT NAME : REAL ANALYSIS
NO.OF STUDENTS: 21

COURSE OUTCOME ASSESSMENT		
CATEGORY(MARKS)	NO.OF STUDENTS	STATUS
90 and above	1	Out standing
80-89	0	Excellent
70-79	4	Very good
60-69	6	Good
50-59	8	Average
below 49	2	Reappear

COURSE OUTCOME ASSESSMEN IN PERCENTAGE		
CATEGORY(MARKS)	PERCENTAGE	STATUS
90 and above	5	Out standing
70-79	19	Very good
60-69	29	Good
50-59	38	Average
Below 49	9	Reappear



PERCENTAGE



- 90 and above
- 70-79
- 60-69
- 50-59
- Below 49



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BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
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THANJAVUR-5
DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Identify and enhance mathematical and computational strategies in order to solve mathematical problems.
PO2	Know various specialized areas of advanced mathematics and its applications.
PO3	Work as Professional mathematicians either in academia or elsewhere.
PO4	Inculcate knowledge of formulation and apply mathematical concepts which are suitable for real life applications.
PO5	Crack lectureship and fellowship exams affirmed by UGC like CSIR – NET and SET.

NAME OF THE PROGRAMME: M.Sc., MATHEMATICS		
COURSE CODE & COURSE TITLE	COURSE OUTCOME	
P16MA15 - INTEGRAL EQUATIONS, CALCULUS OF VARIATIONS AND TRANSFORMS	CO1	Apply the concepts of calculus of variations to find the maxima and minima of quantities defined as integrals containing unknown functions.
	CO2	Classify various kinds of Fourier sine and cosine transforms with their properties and simple problems.
	CO3	Examine some of Hankel transform and its inverse transform.
	CO4	Determine the solution of Integral equations.
	CO5	Evaluate the integral equations by the method of successive approximations.



PO → CO ₁	PO1	PO2	PO3	PO4	PO5
CO1	3	3	3	3	3
CO2	3	2	3	2	3
CO3	3	3	2	3	2
CO4	3	2	2	3	3
CO5	2	3	3	3	2
AVERAGE	2.8	2.6	2.6	2.8	2.6

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	P19192501	ABINAYA.C	5	4	4	5	5	23	92
2	P19192502	AINTHAMIL SELVI.T	5	4	4	5	5	23	92
3	P19192503	AJITH.J	4	4	4	4	4	20	80
4	P19192504	ANUPRIYADHARSHINI.R	4	4	4	4	4	20	80
5	P19192505	BHUVANESHWARI.R	5	4	4	4	4	21	84
6	P19192506	BHUVANESWARI.C	5	5	5	4	5	24	96
7	P19192507	HEMALATHA.K	5	5	5	5	5	25	100
8	P19192508	JAYASURYA.T	4	5	5	5	5	24	96
9	P19192509	LATCHAYA.G	5	5	4	5	5	24	96
10	P19192510	PRAKASH.M	5	5	4	4	4	22	88
11	P19192511	PRIYANKA.J	5	5	4	5	5	24	96
12	P19192512	PUSHKARANYA.M	5	5	5	4	5	25	100
13	P19192513	RABIYA.D	4	4	4	4	4	20	80
14	P19192514	RAJESH.K	5	4	5	5	5	24	96
15	P19192515	RANJITH KUMAR.R	5	5	5	4	5	24	96
16	P19192516	SAKTHIVEL.K	4	4	4	4	5	21	84
17	P19192517	SANGEETHA.S	4	4	4	5	5	22	88
18	P19192518	SUGANYA.A	5	4	5	5	5	24	96
19	P19192519	TAMILALAGAN.A	4	4	4	4	4	20	80
20	P19192520	VENKATESAN.R	4	4	4	4	4	20	80
21	P19192521	VINOTHINI.M	5	5	4	4	5	23	92
AVERAGE			4.62	4.43	4.33	4.43	4.67		

EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.62	75	79.62	93.67
CO2	4.43	75	79.43	93.45
CO3	4.33	75	79.33	93.33
CO4	4.43	75	79.43	93.45
CO5	4.67	75	79.67	93.73

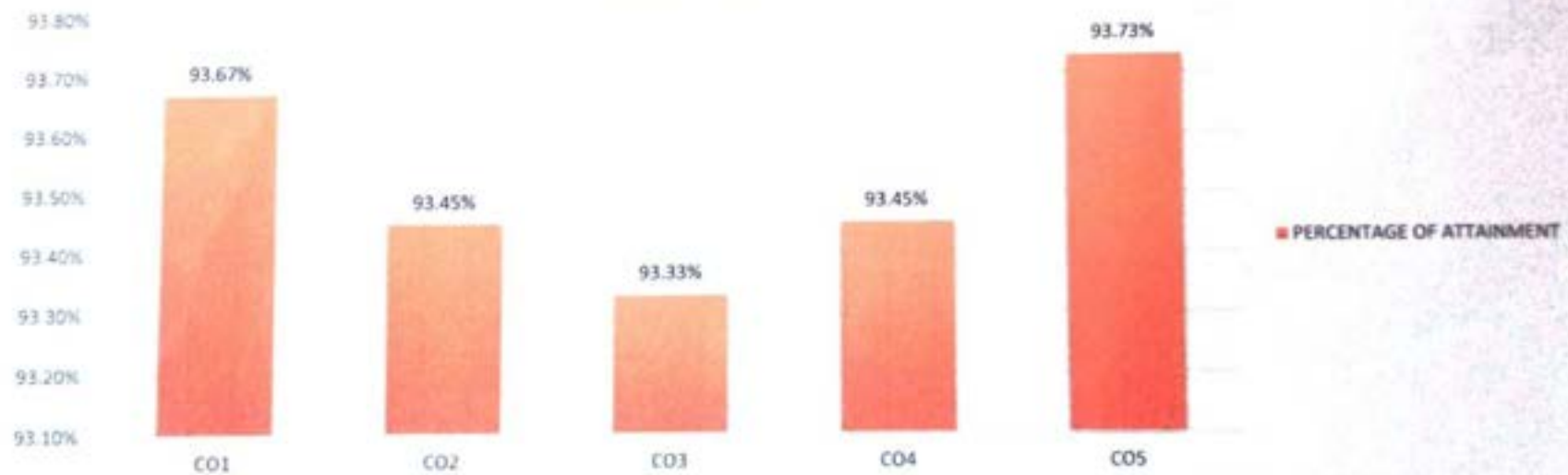


COURSE ATTAINMENT FOR M.Sc., MATHEMATICS

SUBJECT NAME: INTEGRAL EQUATIONS, CALCULUS OF VARIATIONS AND TRANSFORMS
SUBJECT CODE: P16MA15
NO. OF STUDENTS: 21

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.67%
CO2	93.45%
CO3	93.33%
CO4	93.45%
CO5	93.73%

PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR M.Sc., MATHEMATICS

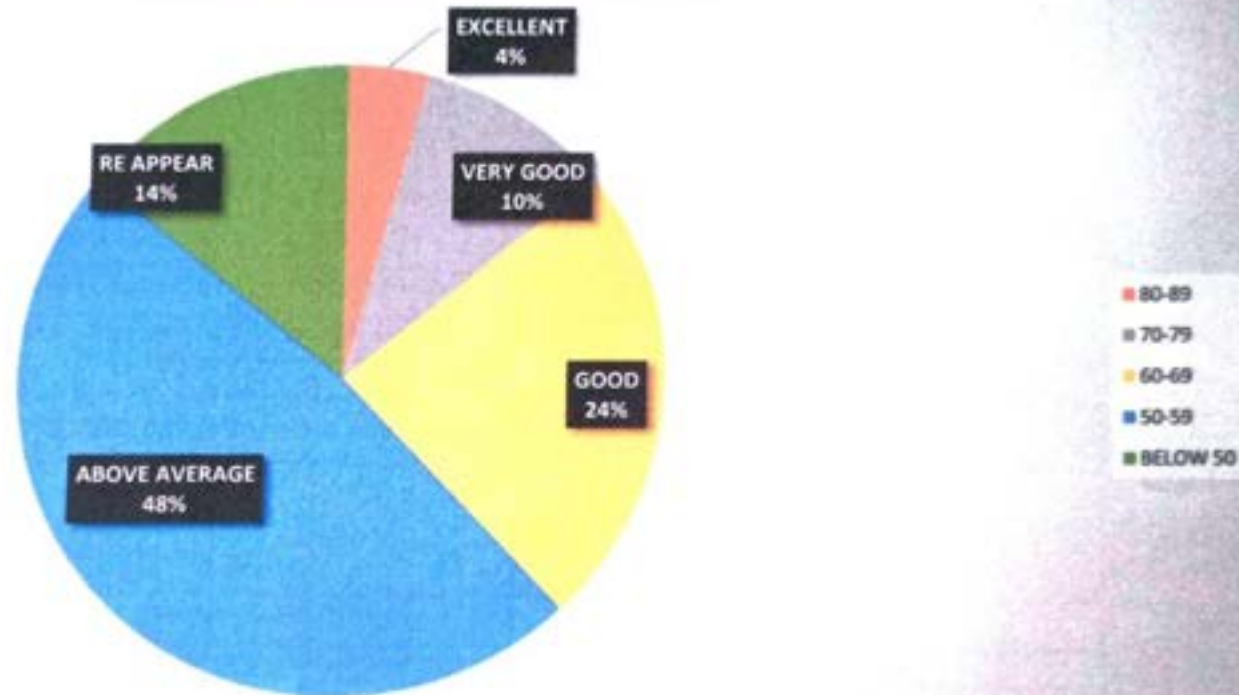
SUBJECT NAME: INTEGRAL EQUATIONS, CALCULUS OF VARIATIONS AND TRANSFORMS
SUBJECT CODE: P16MA15
NO. OF STUDENTS: 21

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO. OF STUDENTS	STATUS
90 AND ABOVE	0	OUTSTANDING
80-89	1	EXCELLENT
70-79	2	VERY GOOD
60-69	5	GOOD
50-59	10	ABOVE AVERAGE
BELOW 50	3	RE APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
80-89	4	EXCELLENT
70-79	10	VERY GOOD
60-69	24	GOOD
50-59	48	ABOVE AVERAGE
BELOW 50	14	RE APPEAR



COURSE OUTCOME ASSESSMENT



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PG DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Identify and enhance mathematical and computational strategies in order to solve mathematical problems.
PO2	Know various specialized areas of advanced mathematics and its applications.
PO3	Work as Professional mathematicians either in academia or elsewhere.
PO4	Inculcate knowledge of formulation and apply mathematical concepts which are suitable for real life applications.
PO5	Crack lectureship and fellowship exams affirmed by UGC like CSIR – NET and SET.

NAME OF THE PROGRAMME: M.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
P16MAE1C - FUZZY SETS AND THEIR APPLICATIONS	CO1	Interpret fuzzy set theory and uncertainty concepts.
	CO2	Identify the similarities and differences between probability theory and fuzzy
	CO3	Apply fuzzy set theory in modeling and analyzing uncertainty in a decision problem.
	CO4	Apply Decision Making Method.
	CO5	Apply fuzzy control by examining simple control problem examples.



PO → CO ₁	PO1	PO2	PO3	PO4	PO5
CO1	2	3	3	1	3
CO2	3	2	2	2	2
CO3	2	2	2	3	2
CO4	3	2	2	1	3
CO5	2	3	3	3	2
AVERAGE	2.4	2.4	2.4	2	2.4

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	UNIT TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	% TO TOTAL INTERNAL MARK
1	P 19192501	ABINAYA.C	5	5	5	4	4	23	92
2	P 19192502	AINTHAMIL SELVLT	5	5	5	4	4	23	92
3	P 19192503	AJITH.J	5	5	4	4	4	22	88
4	P 19192504	ANUPRIYADHARSHINI.R	4	4	4	4	4	20	80
5	P 19192505	BHUVANESHWARI.R	5	5	5	5	4	24	96
6	P 19192506	BHUVANESWARI.C	5	5	5	5	4	24	96
7	P 19192507	HEMALATHA.K	5	5	5	5	5	25	100
8	P 19192508	JAYASURYA.T	5	5	5	5	5	25	100
9	P 19192509	LATCHAYA.G	5	5	5	5	5	25	100
10	P 19192510	PRAKASH.M	5	5	5	5	5	25	100
11	P 19192511	PRIYANKA.J	5	5	5	5	5	25	100
12	P 19192512	PUSHKARANYA.M	5	5	5	5	5	25	100
13	P 19192513	RABIYA.D	4	4	4	4	4	20	80
14	P 19192514	RAJESH.K	5	5	5	5	5	25	100
15	P 19192515	RANJITH KUMAR.R	5	5	5	4	4	23	92
16	P 19192516	SAKTHIVEL.K	5	5	4	4	4	22	88
17	P 19192517	SANGEETHA.S	5	5	5	4	4	23	92
18	P 19192518	SUGANYA.A	5	5	5	5	4	24	96
19	P 19192519	TAMILALAGANA.A	4	4	4	4	4	20	80
20	P 19192521	VINOTHINI.M	5	5	5	5	4	24	96
AVERAGE			4.85	4.85	4.75	4.55	4.35		



EXPECTED ATTAINMENT IN EACH CO - 85%

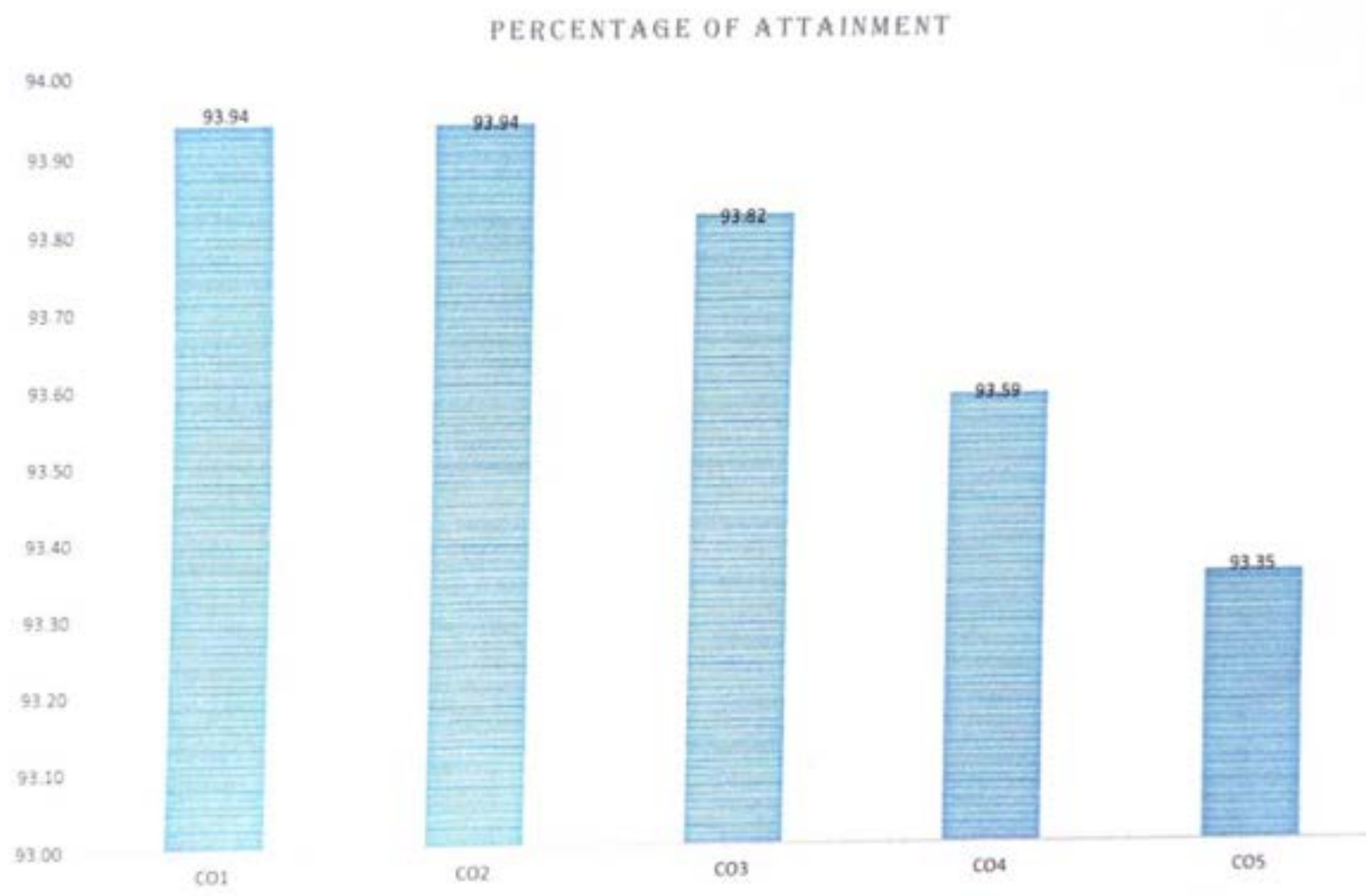
CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.85	75	79.85	93.94
CO2	4.85	75	79.85	93.94
CO3	4.75	75	79.75	93.82
CO4	4.55	75	79.55	93.59
CO5	4.35	75	79.35	93.35

COURSE ATTAINMENT FOR M.SC MATHEMATICS

SUBJECT NAME : FUZZY SETS AND THEIR APPLICATIONS
 SUBJECT CODE : P16MAE1C
 NO OF STUDENTS : 20

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.94
CO2	93.94
CO3	93.82
CO4	93.59
CO5	93.35





COURSE ATTAINMENT FOR M.Sc MATHEMATICS

SUBJECT NAME : FUZZY SETS AND THEIR APPLICATIONS
SUBJECT CODE : P16MAE1C
NO OF STUDENTS : 20

COURSE OUTCOME ASSESSMENT

CATEGORY MARKS	NO OF STUDENTS	STATUS
90 and above 100	15	OUTSTANDING
80-89	5	EXCELLENT
70-79	0	VERY GOOD
60-69	0	GOOD
50-59	0	ABOVE AVERAGE
below 49	0	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERSENTAGE (%)

CATEGORY MARKS	PERCENTAGE	STATUS
90 and above 100	75	OUTSTANDING
80-89	25	EXCELLENT



COURSE OUTCOME ASSESSMENT IN PERCENTAGE



■ 90 and above 100
■ 80-89



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THANJAVUR-5
DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Identify and enhance mathematical and computational strategies in order to solve mathematical problems.
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PO3	Work as Professional mathematicians either in academia or elsewhere.
PO4	Inculcate knowledge of formulation and apply mathematical concepts which are suitable for real life applications.
PO5	Crack lectureship and fellowship exams affirmed by UGC like CSIR – NET and SET.

Name of the Programme : M.Sc Mathematics

Course Code & Course Title	Course Outcome	
P16MA33 TOPOLOGY	CO1	Define topological spaces and explain the properties of topology, product topology, subspace topology, continuous.
	CO2	Describe the properties of metric topology.
	CO3	Gain the knowledge of connected spaces.
	CO4	Apply domain knowledge for compact spaces with examples.
	CO5	State and Prove Urysohn lemma, Urysohn Metrization theorem and the Tietz Extension Theorem.



PO → CO _i	PO1	PO2	PO3	PO4	PO5
CO1	3	3	3	3	3
CO2	3	3	3	2	2
CO3	3	2	3	3	3
CO4	2	3	3	3	3
CO5	3	3	2	3	3
AVERAGE	2.8	2.8	2.8	2.8	2.8

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	UNIT TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	P 18191156	GOWTHAMI M	5	5	5	5	5	25	100
2	P 18191159	KOKILA N	5	5	4	5	5	24	96
3	P 18191160	MANIKANDAN D	4	4	4	4	5	21	84
4	P 18191161	MANISHA BHAVANI Y	4	4	5	4	4	21	84
5	P 18191162	MUTHUKUMAR M	4	5	4	5	4	22	88
6	P 18191163	NISHA K	5	5	4	4	5	23	92
7	P 18191164	SANKARALINGAM K	4	4	5	4	5	22	88
8	P 18191165	VENKATARAMAN K S	5	4	4	4	4	21	84
9	P 18191166	VIMALA N	4	4	4	5	4	21	84
10	P 18191167	VINOTH KUMAR R	4	4	4	4	5	21	84
11	P 18191168	VINOTHINI S	5	4	5	4	4	22	88
12	P 18191169	VIVEK S	4	4	4	4	5	21	84
13	P 18192191	VASHANTHADEVI R	5	4	5	5	5	24	96
		Average	4.46	4.308	4.38	4.385	4.62		

EXPECTED ATTAINMENT IN EACH CO - 85%

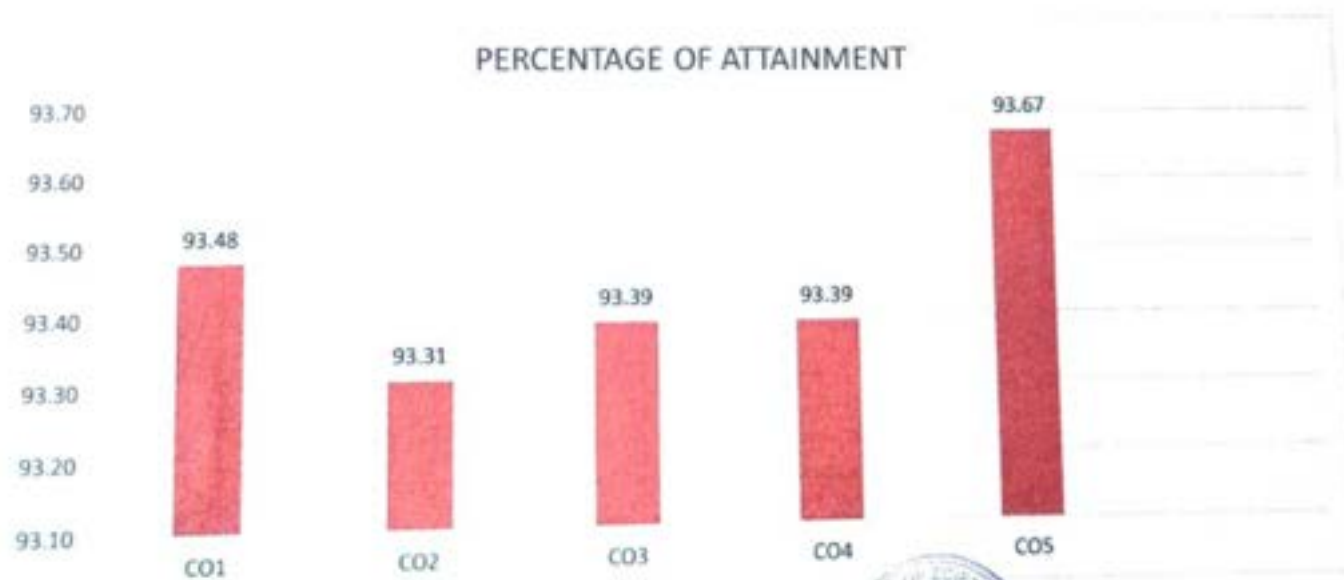
CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.46	75	79.46	93.482
CO2	4.31	75	79.31	93.306
CO3	4.38	75	79.38	93.388
CO4	4.38	75	79.38	93.388
CO5	4.62	75	79.62	93.671



COURSE ATTAINMENT FOR M.Sc MATHEMATICS

SUBJECT NAME : TOPOLOGY
SUBJECT CODE : PI6MA33
NO.OF STUDENTS : 13

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.48
CO2	93.31
CO3	93.39
CO4	93.39
CO5	93.67



COURSE ATTAINMENT FOR M.Sc MATHEMATICS

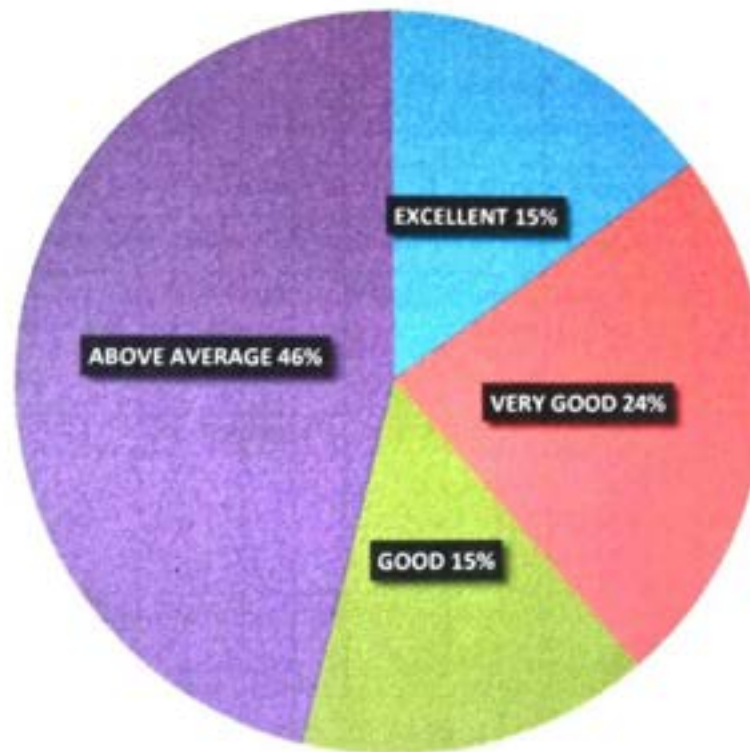
SUBJECT NAME : TOPOLOGY
 SUBJECT CODE : P16MA33
 NO.OF STUDENTS : 13

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO.OF. STUDENTS	STATUS
90 and above(100)	0	OUTSTANDING
80-89	2	EXCELLENT
70-79	3	VERY GOOD
60-69	2	GOOD
50-59	6	ABOVE AVERAGE
Below 50	0	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
80-89	15%	EXCELLENT
70-79	24%	VERY GOOD
60-69	15%	GOOD
50-59	46%	ABOVE AVERAGE



COURSE OUTCOME ASSESSMENT



- 80-89
- 70-79
- 60-69
- 50-59



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DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Identify and enhance mathematical and computational strategies in order to solve mathematical problems
PO2	Know various specialized areas of advanced mathematics and its applications.
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PO4	Inculcate knowledge of formulation and apply mathematical concepts which are suitable for real life applications
PO5	Crack lectureship and fellowship exams affirmed by UGC like CSIR – NET and SET..

NAME OF THE PROGRAMME: M.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
P16MA41 - FUNCTIONAL ANALYSIS	CO1	Recognize the fundamental properties of normed spaces and the transformations between them.
	CO2	Understand the central concepts from functional analysis, including the Hahn Banach Theorem, the Open Mapping Theorem and the Closed Graph Theorem.
	CO3	Understand the main properties of bounded operators of Hilbert spaces.
	CO4	Understand the notion of Hilbert Spaces and apply the spectral theorem to the resolution of integral equations
	CO5	Understand the basic properties of Banach Algebra



PO → CO ↓	PO1	PO2	PO3	PO4	PO5
CO1	3	3	3	3	3
CO2	3	2	3	2	2
CO3	3	3	2	3	2
CO4	3	2	2	2	3
CO5	3	3	3	3	2
AVERAGE	3	2.6	2.6	2.6	2.4

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	P 18191156	GOWTHAMLM	5	5	5	5	5	25	100
2	P 18191159	KOKILA	5	5	5	5	5	25	100
3	P 18191160	MANIKANDAN.D	5	4	5	4	4	22	88
4	P 18191161	MANISHA BHAVANI.Y.Y	5	5	5	5	4	24	96
5	P 18191162	MUTHUKUMAR.M	5	5	5	5	4	24	96
6	P 18191163	NISHA.K	5	5	5	4	4	23	92
7	P 18191164	SANKARALINGAM.K	5	5	4	4	4	22	88
8	P 18191165	VENKATARAMAN.K.S	5	5	5	4	4	23	92
9	P 18191166	VIMALA.N	5	5	5	4	4	23	92
10	P 18191167	VINOTHKUMAR.R	5	5	4	4	4	22	88
11	P 18191168	VINOTHINLS	5	5	5	4	4	23	92
12	P 18191169	VIVEK.S	5	5	4	5	4	23	92
13	P 18192191	VASANTHADEVLR	5	5	5	5	5	25	100
AVERAGE			5.00	4.92	4.77	4.46	4.23		

EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	5.00	75	80.00	94.12
CO2	4.92	75	79.92	94.02
CO3	4.77	75	79.77	93.85
CO4	4.46	75	79.46	93.48
CO5	4.23	75	79.23	93.21



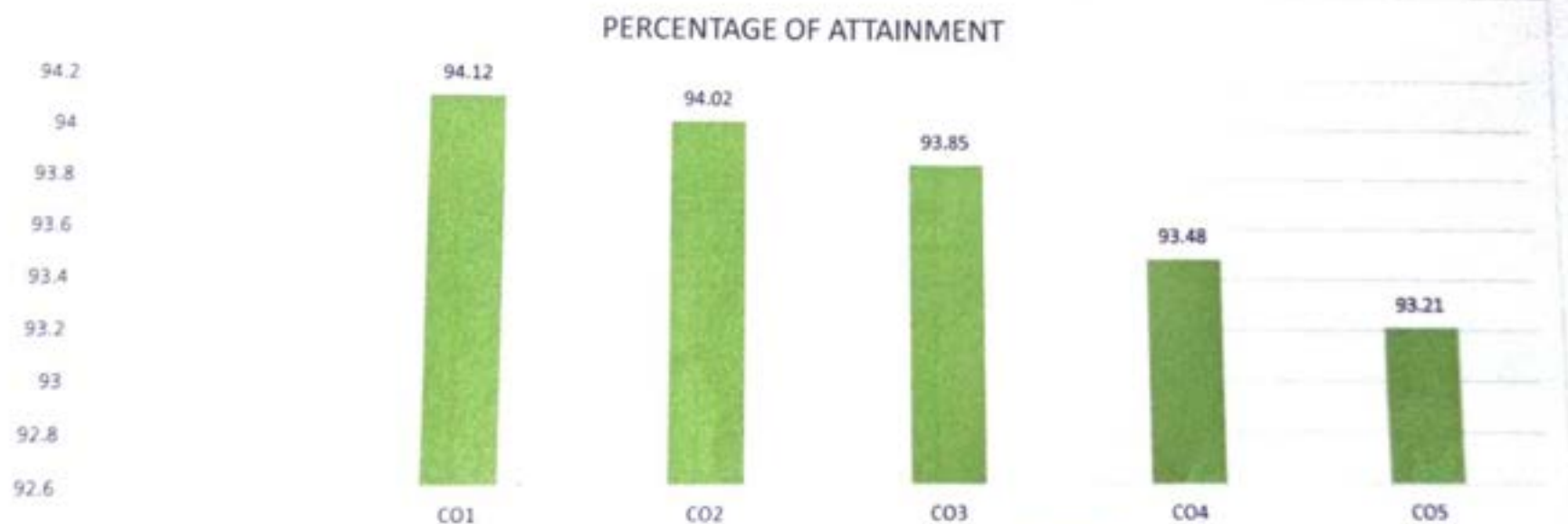
COURSE ATTAINMENT FOR M.SC MATHEMATICS

SUBJECT CODE : P16MA41

SUBJECT NAME : FUNCTIONAL ANALYSIS

NO.OF STUDENTS : 13

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	94.12
CO2	94.02
CO3	93.85
CO4	93.48
CO5	93.21



COURSE ATTAINMENT FOR M.SC MATHEMATICS

SUBJECT CODE : P16MA41

SUBJECT NAME : FUNCTIONAL ANALYSIS

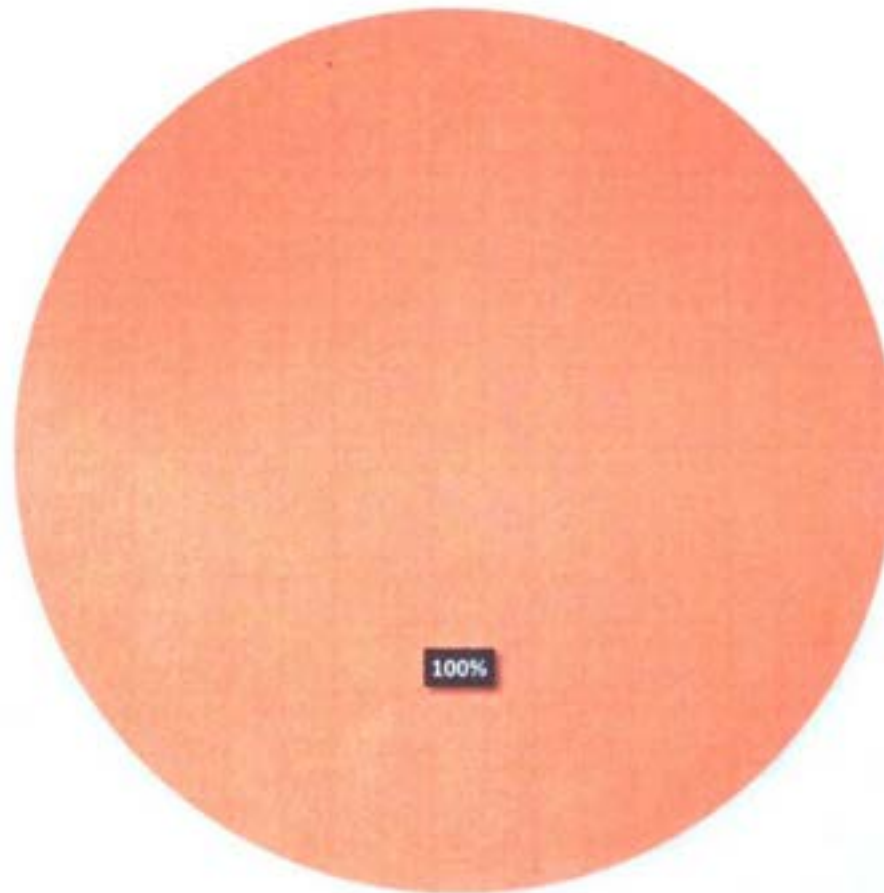
NO.OF STUDENTS : 13

COURSE OUTCOME ASSESSMENT		
CATEGORY(MARKS)	NO.OF STUDENTS	STATUS
90-100	13	Out standing
80-89	0	Excellent
70-74	0	Very good
60-69	0	Good
50-59	0	Average
0-49	0	Reappear

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY(MARKS)	PERCENTAGE	STATUS
90-100	13	Out standing



COURSE OUTCOME ASSESSMENT



100%




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DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Identify and enhance mathematical and computational strategies in order to solve mathematical problems.
PO2	Know various specialized areas of advanced mathematics and its applications.
PO3	Work as Professional mathematicians either in academia or elsewhere.
PO4	Inculcate knowledge of formulation and apply mathematical concepts which are suitable for real life applications
PO5	Crack lectureship and fellowship exams affirmed by UGC like CSIR – NET and SET.

COURSE OUTCOME

COURSE CODE & COURSE TITLE		
P16MA42 DIFFERENTIAL GEOMETRY	CO1	Concept of space curve, Arc length, tangent, normal and binormal, curvature and torsion, contact between curves and surfaces, tangent surface.
	CO2	Learn the curves on a surface, Surface of revolution, Helicoid, Metric, Direction coefficients, families of curves, Isometric correspondence, Intrinsic properties.
	CO3	Compute the Geodesics, Canonical geodesic equations, Normal property of geodesics, Geodesic parallels, Geodesics curvature, Gauss- Bonnet Theorem.
	CO4	Ability to understand the second fundamental form, Principal curvature, Lines of curvature, Developable, Developable associated with space curves and with curves on surface.
	CO5	Learn Compact surfaces whose points are umbilics, Compact surface of constant curvature, Complete surface and their characterization, Hilbert's Theorem.



PO → CO↓	PO1	PO2	PO3	PO4	PO5
CO1	3	2	2	2	3
CO2	3	2	3	2	2
CO3	2	3	2	3	2
CO4	3	1	3	1	3
CO5	2	3	3	3	1
AVERAGE	2.6	2.2	2.6	2.2	2.2

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	P 18191156	GOWTHAMI .M	5	5	5	5	5	25	100
2	P 18191159	KOKILA. N	5	5	5	5	5	25	100
3	P 18191160	MANIKANDAN. D	4	5	4	5	5	23	92
4	P 18191161	MANISHA BHAVANI. Y	5	5	5	5	4	24	96
5	P 18191162	MUTHUKUMAR. M	5	5	5	5	5	25	100
6	P 18191163	NISHA. K	4	5	5	5	5	24	96
7	P 18191164	SANKARALINGAM. K	5	4	5	4	5	23	92
8	P 18191165	VENKATARAMAN. K. S	5	5	5	5	4	24	96
9	P 18191166	VIMALA. N	5	5	5	4	5	24	96
10	P 18191167	VINOTHKUMAR. R	4	5	4	5	5	23	92
11	P 18191168	VINODHINI. S	5	5	5	5	5	25	100
12	P 18191169	VIVEK. S	5	5	4	5	4	23	92
13	P 18192191	VASANTHADEVI. R	5	5	5	5	5	25	100
AVERAGE			4.77	4.92	4.77	4.85	4.77		

EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST + SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.77	75	79.77	93.85
CO2	4.92	75	79.92	94.02
CO3	4.77	75	79.77	93.85
CO4	4.85	75	79.85	93.94
CO5	4.77	75	79.77	93.85

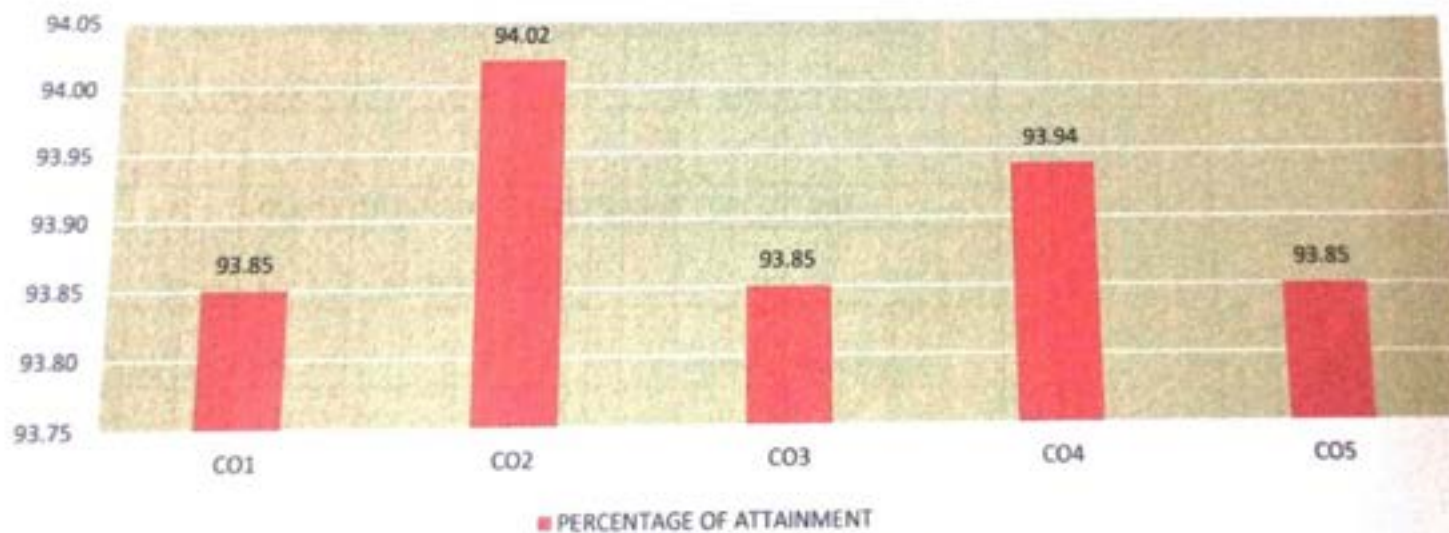


COURSE ATTAINMENT FOR M.Sc MATHEMATICS

SUBJECT NAME : **DIFFERENTIAL GEOMETRY**
SUBJECT CODE : **P16MA42**
NO.OF STUDENTS : **13**

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.85
CO2	94.02
CO3	93.85
CO4	93.94
CO5	93.85

PERCENTAGE OF ATTAINMENT



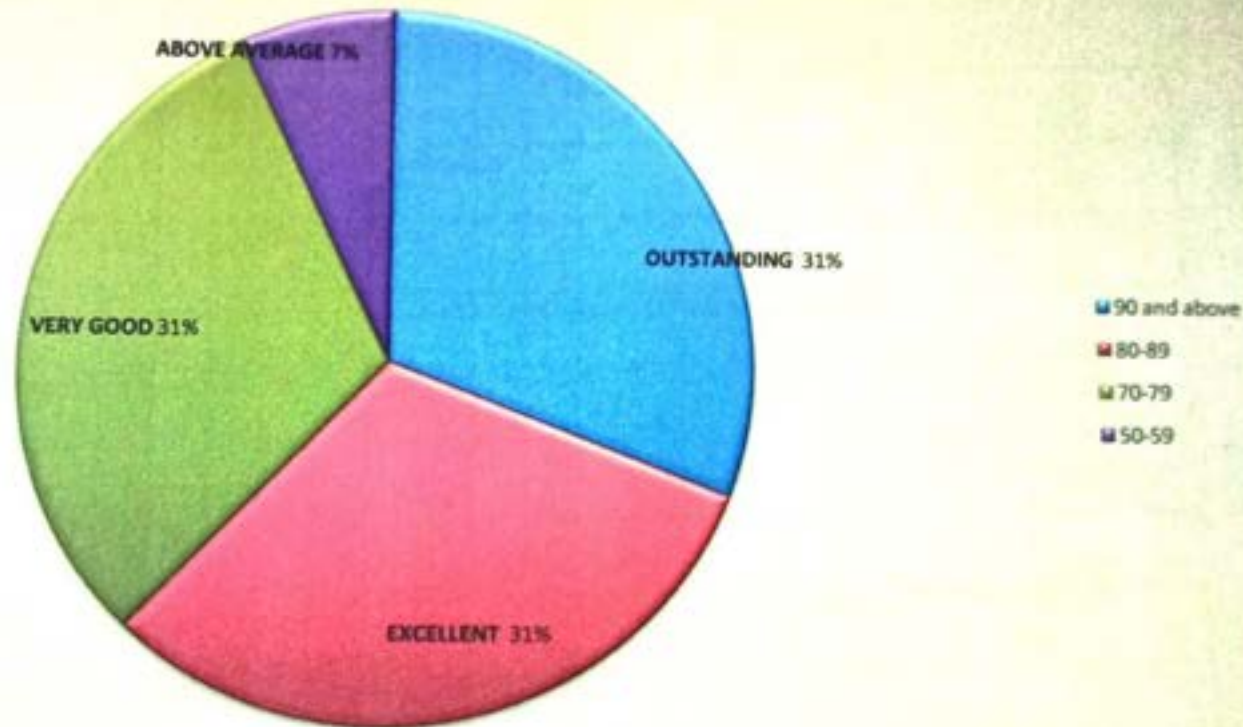
SUBJECT NAME	DIFFERENTIAL GEOMETRY
SUBJECT CODE	: P16MA42
NO.OF STUDENTS	: 13

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO.OF. STUDENTS	STATUS
90 and above	4	OUTSTANDING
80-89	4	EXCELLENT
70-79	4	VERY GOOD
60-69	0	GOOD
50-59	1	ABOVE AVERAGE
Below 50	0	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
90 and above	31%	OUTSTANDING
80-89	31%	EXCELLENT
70-79	31%	VERY GOOD
50-59	7%	ABOVE AVERAGE



COURSE OUTCOME ASSESSMENT IN PERCENTAGE



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THANJAVUR-5
DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Identify and enhance mathematical and computational strategies in order to solve mathematical problems.
PO2	Know various specialized areas of advanced mathematics and its applications.
PO3	Work as Professional mathematicians either in academia or elsewhere.
PO4	Inculcate knowledge of formulation and apply mathematical concepts which are suitable for real life applications.
PO5	Crack lectureship and fellowship exams affirmed by UGC like CSIR – NET and SET.

Name of the Programme : M.Sc Mathematics

Course Code & Course Title	Course Outcome	
P16MAE2A STOCHASTIC PROCESSES	CO1	Understand the stochastic models for many real life probabilistic situations.
	CO2	Understanding the concepts of Markov chains.
	CO3	Identifying the concepts of poisson processes and related distributions.
	CO4	Acquire the knowledge of Renewal process.
	CO5	Evaluate the real life queueing problems by comparing the conventional queueing models.



PO → CO ₁	PO1	PO2	PO3	PO4	PO5
CO1	3	2	3	3	3
CO2	3	3	2	3	3
CO3	2	3	2	2	3
CO4	3	3	3	3	3
CO5	3	3	3	3	2
AVERAGE	2.8	2.8	2.6	2.8	2.8

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	UNIT TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	P 19192501	ABINAYA C	5	5	5	5	4	24	96
2	P 19192502	AINTHAMILSELVI T	5	5	5	5	4	24	96
3	P 19192503	AJITH J	4	5	5	5	5	24	96
4	P 19192504	ANUPRIYADHARSHINI R	4	4	5	4	4	21	84
5	P 19192505	BHUVANESHWARI R	5	5	5	5	4	24	96
6	P 19192506	BHUVANESHWARI C	5	5	5	5	5	25	100
7	P 19192507	HEMALATHA K	5	5	5	5	5	25	100
8	P 19192508	JAYASURYA T	5	5	5	5	5	25	100
9	P 19192509	LATCHAYA G	5	5	4	5	5	24	96
10	P 19192510	PRAKASH M	5	5	5	5	5	25	100
11	P 19192511	PRIYANKA J	5	5	5	5	5	25	100
12	P 19192512	PUSHKARNYA M	5	5	5	5	5	25	100
13	P 19192513	RABIYA D	4	4	5	4	5	22	88
14	P 19192514	RAJESH K	5	5	5	5	5	25	100
15	P 19192515	RANJITH KUMAR K	5	5	4	5	4	23	92
16	P 19192516	SAKTHIVEL K	4	5	4	5	5	23	92
17	P 19192517	SANGEETHA S	4	4	5	5	4	23	92
18	P 19192518	SUGANYA A	5	5	5	5	5	25	100
19	P 19192519	TAMILALAGAN A	5	5	4	4	5	23	92
20	P 19192521	VINOTHINI M	5	5	5	5	5	25	100
		AVERAGE	4.75	4.85	4.80	4.85	4.70		

EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST + SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.75	75	79.75	93.82
CO2	4.85	75	79.85	93.94
CO3	4.80	75	79.80	93.88
CO4	4.85	75	79.85	93.94
CO5	4.70	75	79.70	93.76

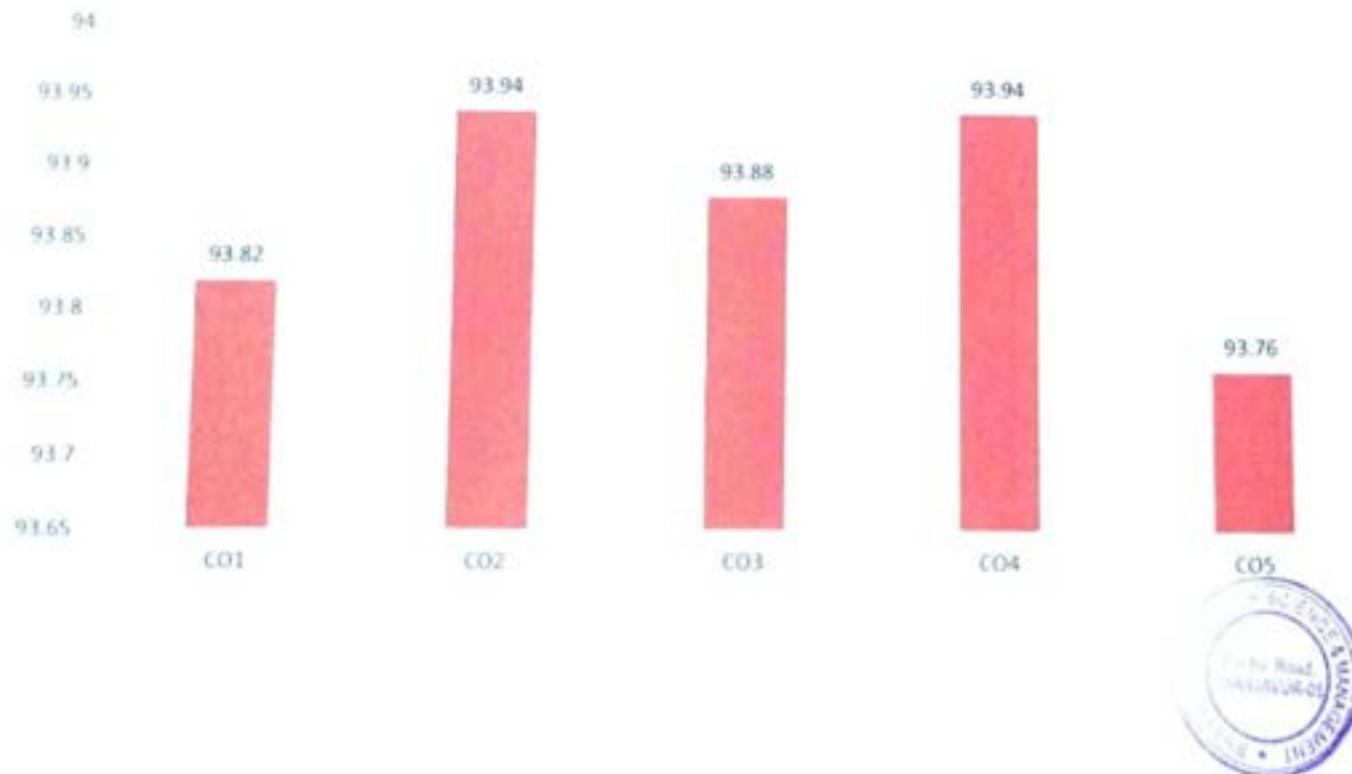


COURSE ATTAINMENT FOR M.Sc MATHEMATICS

SUBJECT NAME : STOCHASTIC PROCESSES
 SUBJECT CODE : PI6MAE2A
 NO.OF STUDENTS : 20

OUTCOME	ATTAINMENT
CO1	93.82
CO2	93.94
CO3	93.88
CO4	93.94
CO5	93.76

PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR M.Sc MATHEMATICS

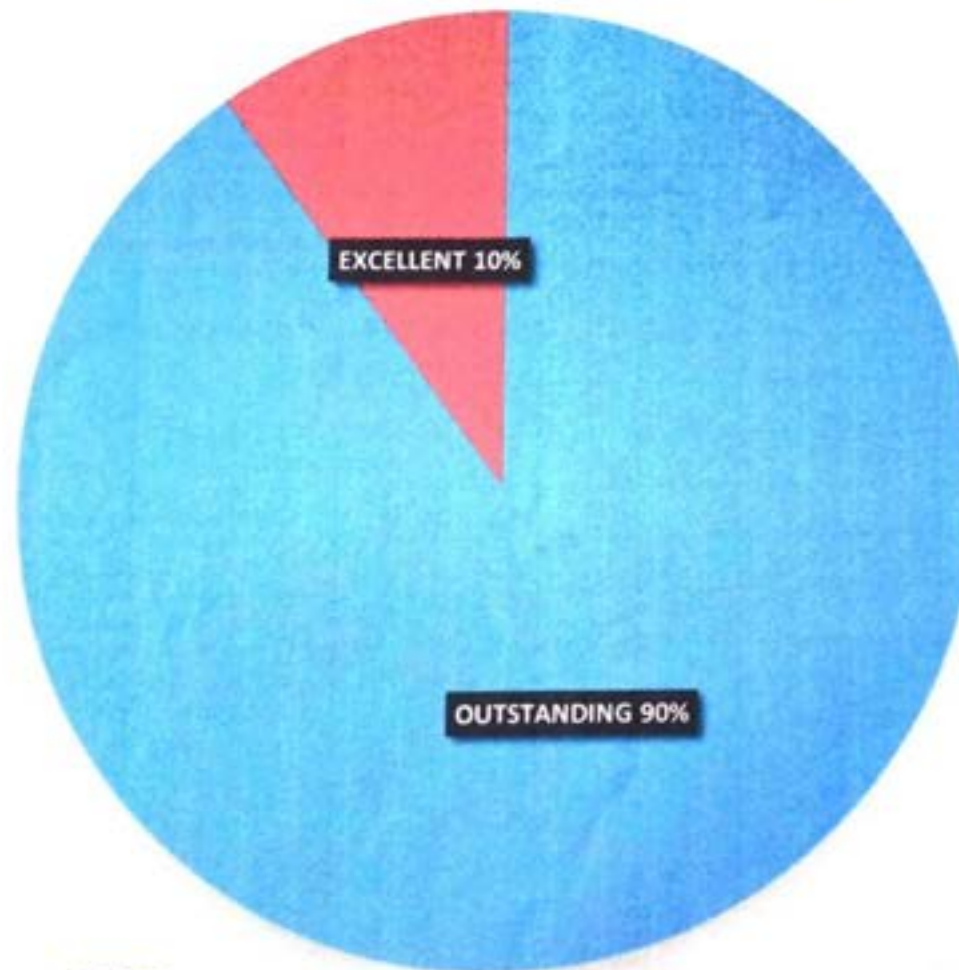
SUBJECT NAME : STOCHASTIC PROCESSES
 SUBJECT CODE : P16MAE2A
 NO.OF STUDENTS : 20

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO.OF. STUDENTS	STATUS
90 and above(100)	18	OUTSTANDING
80-89	2	EXCELLENT
70-79	0	VERY GOOD
60-69	0	GOOD
50-59	0	ABOVE AVERAGE
Below 50	0	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
90-100	90%	OUTSTANDING
80-89	10%	EXCELLENT



COURSE OUTCOME ASSESSMENT



■ 90-100
■ 80-89



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ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Identify and enhance mathematical and computational strategies in order to solve mathematical problems.
PO2	Know various specialized areas of advanced mathematics and its applications.
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PO4	Inculcate knowledge of formulation and apply mathematical concepts which are suitable for real life applications.
PO5	Crack lectureship and fellowship exams affirmed by UGC like CSIR – NET and SET.

NAME OF THE PROGRAMME: M.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
F16MAE3B - DISCRETE MATHEMATICS	CO1	Recall the concept of relations and functions.
	CO2	Construct mathematical arguments using logical connectives and qualifiers.
	CO3	Acquire the knowledge of lattices as partially ordered sets.
	CO4	Obtain the knowledge of boolean algebras.
	CO5	Learn about Grammar and Languages.



PO → CO↓	PO1	PO2	PO3	PO4	PO5
CO1	3	2	3	3	3
CO2	3	2	2	2	2
CO3	3	2	2	2	2
CO4	3	2	3	3	2
CO5	3	2	2	2	2
AVERAGE	3	2	2.4	2.4	2.2

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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



SNO	REG. NO.	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	% TO TOTAL INTERNAL MARK
1	P 18191156	GOWTHAMI M	5	5	5	5	5	25	100
2	P 18191159	KOKILA, N	5	4	5	5	5	24	96
3	P 18191160	MANIKANDAN D	5	5	4	5	4	23	92
4	P 18191161	MANISHABHAVANI, Y	4	4	4	4	4	20	80
5	P 18191162	MUTHUKUMAR, M	5	5	4	4	5	23	92
6	P 18191163	NISHA, K	4	5	5	5	5	24	96
7	P 18191164	SANKARALINGAM, K	4	4	4	4	4	20	80
8	P 18191165	VENKATARAMAN, K. S	5	4	4	5	5	23	92
9	P 18191166	VIMALA, N	4	4	4	4	4	20	80
10	P 18191167	VENOTH KUMAR, R	5	5	4	4	4	22	88
11	P 18191168	VINODHINI, S	5	5	5	5	5	25	100
12	P 18191169	VIVEK, S	5	4	4	4	5	22	88
13	P 18192191	VASANTHADEVI, R	5	5	5	5	5	25	100
AVERAGE			4.69	4.54	4.38	4.54	4.62		

EXPECTED ATTAINMENT IN EACH CO - 85%

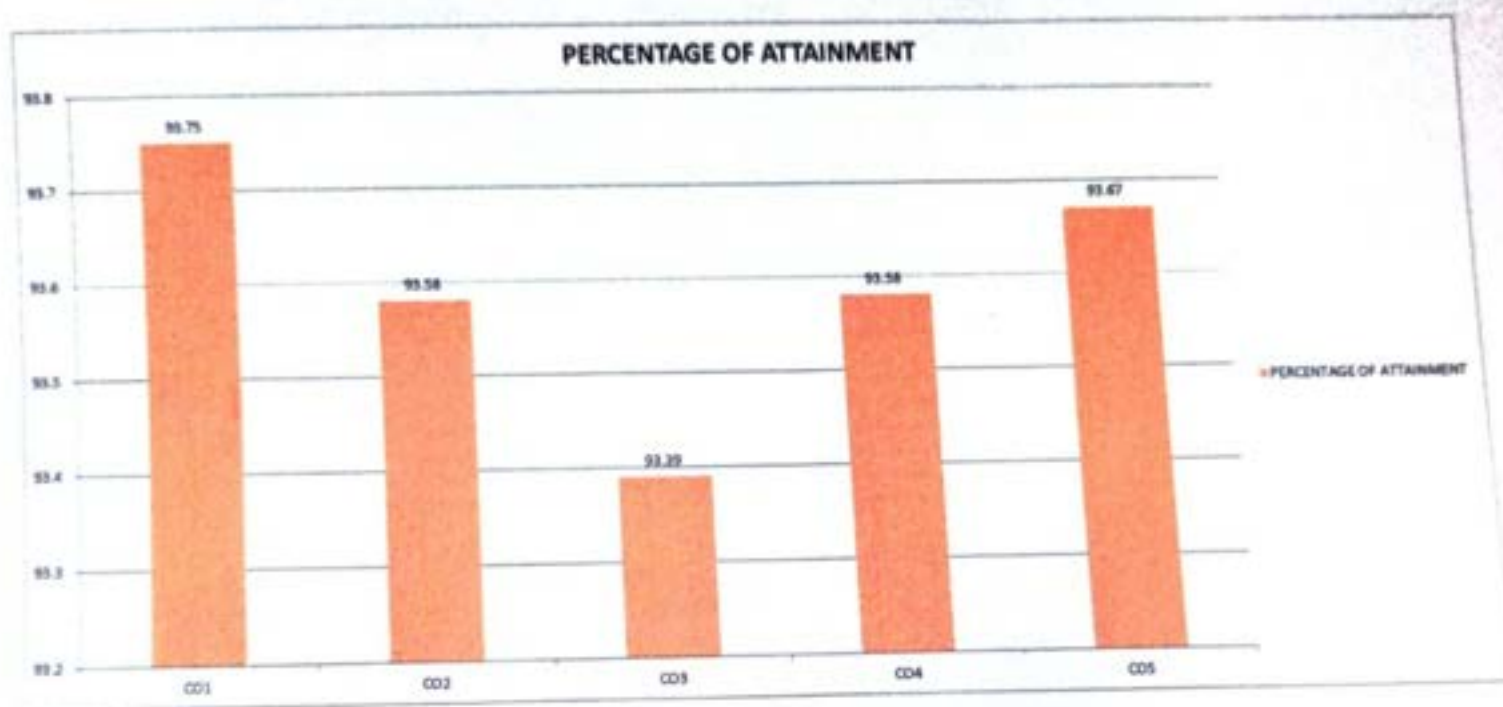
CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.69	75	79.69	93.75
CO2	4.54	75	79.54	93.58
CO3	4.38	75	79.38	93.39
CO4	4.54	75	79.54	93.58
CO5	4.62	75	79.62	93.67

COURSE ATTAINMENT FOR M. SC., MATHEMATICS

SUBJECT NAME: DISCRETE MATHEMATICS
 SUBJECT CODE: P16MAE3B
 NO. OF STUDENTS: 13

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.75
CO2	93.58
CO3	93.39
CO4	93.58
CO5	93.67





COURSE ATTAINMENT FOR M. SC., MATHEMATICS

SUBJECT NAME: DISCRETE MATHEMATICS

SUBJECT CODE: P16MAE3B

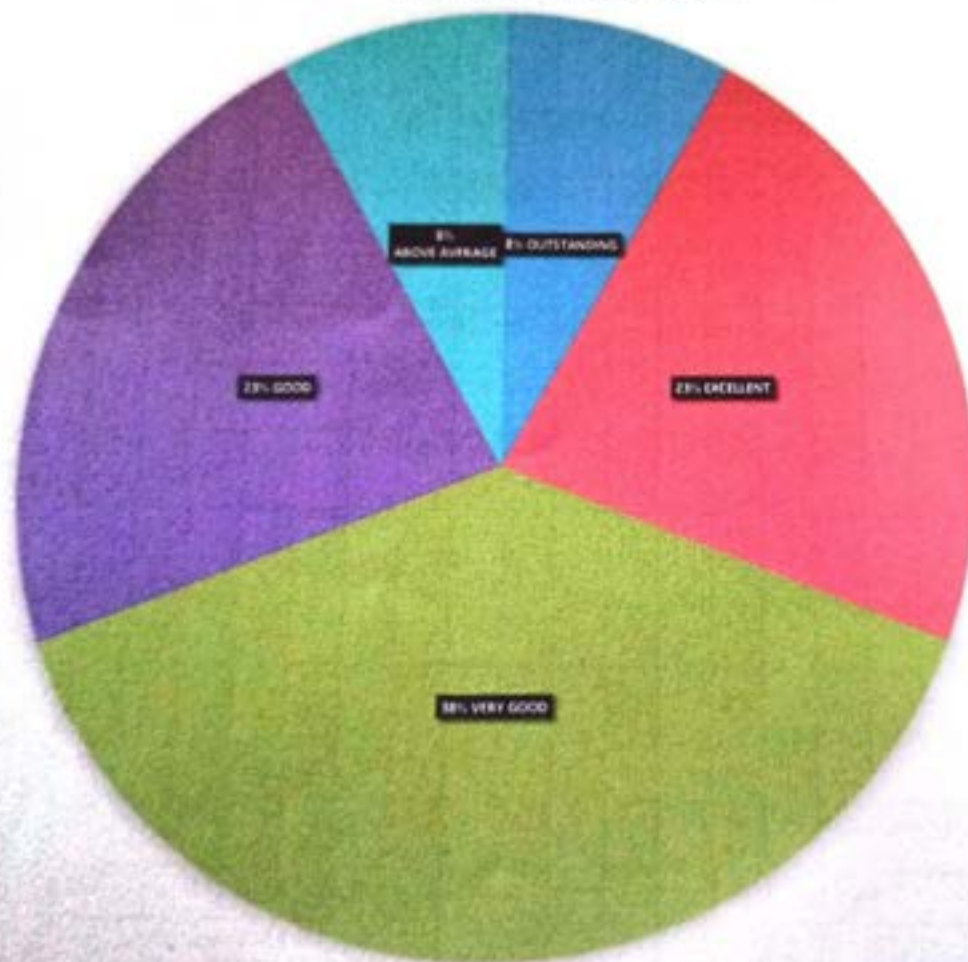
NO. OF STUDENTS: 13

COURSE OUTCOME ASSESSMENT		
CATEGORY(MARKS)	NO. OF STUDENTS	STATUS
90 AND ABOVE	1	OUTSTANDING
80-89	3	EXCELLENT
70-79	5	VERY GOOD
60-69	3	GOOD
50-59	1	ABOVE AVERAGE
BELOW 50	0	RE -APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
90 AND ABOVE	8%	OUTSTANDING
80 -89	23%	EXCELLENT
70 - 79	38%	VERY GOOD
60 - 69	23%	GOOD
50 - 59	8%	ABOVE AVERAGE



COURSE OUTCOME ASSESSMENT



0-100 MARKS
 0-20 20-40
 40-60 60-80
 80-100 100-120



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DEPARTMENT OF MATHEMATICS
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PROGRAM OUTCOME

PO1	Identify and enhance mathematical and computational strategies in order to solve mathematical problems.
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PO3	Work as Professional mathematicians either in academia or elsewhere.
PO4	Inculcate knowledge of formulation and apply mathematical concepts which are suitable for real life applications.
PO5	Crack lectureship and fellowship exams affirmed by UGC like CSIR – NET and SET.

Name of the Programme: M.Sc Mathematics

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
P16MAE4B ADVANCED OPERATIONS RESEARCH	CO1	Concept of Integer Programming Problems and Cutting plane method, Mixed IPP, Branch and Bound method
	CO2	Learn the Dynamic (multistage) algorithm, applications of Dynamic Programming.
	CO3	Compute the Decision theory and Value of the game, Dominance property and Graphical method by Game theory.
	CO4	Ability to understand Deterministic inventory and Probability inventory, EOQ and Material Requirement planning
	CO5	Learn Non-Linear Programming Algorithm, Direct method, constrained Algorithms, Separable, Quadratic, Geometric, Stochastic Programming, Linear Combination method and SUMT algorithm.



PO → CO ↓	PO1	PO2	PO3	PO4	PO5
CO1	3	2	2	2	2
CO2	1	2	3	2	3
CO3	3	1	1	3	2
CO4	3	3	2	3	2
CO5	2	3	3	3	1
AVERAGE	2.4	2.2	2.2	2.6	2

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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

SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	P 18191156	GOWTHAMI .M	5	4	5	5	5	24	80
2	P 18191159	KOKILA. N	5	5	5	5	5	25	100
3	P 18191160	MANIKANDAN. D	4	4	5	4	4	21	84
4	P 18191161	MANISHA BHAVANI. Y	4	4	4	4	5	21	84
5	P 18191162	MUTHUKUMAR. M	4	5	4	4	5	22	88
6	P 18191163	NISHA. K	4	5	4	5	5	23	92
7	P 18191164	SANKARALINGAM. K	5	4	4	4	4	21	84
8	P 18191165	VENKATARAMAN. K. S	4	4	5	4	4	21	84
9	P 18191166	VIMALA. N	4	4	4	5	4	21	84
10	P 18191167	VINOTHKUMAR.R	4	4	4	4	4	20	80
11	P 18191168	VINODHINI. S	4	5	5	5	5	24	96
12	P 18191169	VIVEK. S	4	4	4	4	4	20	80
13	P 18192191	VASANTHADEVIL R	5	5	5	5	4	24	96
AVERAGE			4.31	4.38	4.46	4.46	4.46		



EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST + SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.31	75	79.31	93.31
CO2	4.38	75	79.38	93.39
CO3	4.46	75	79.46	93.48
CO4	4.46	75	79.46	93.48
CO5	4.46	75	79.46	93.48

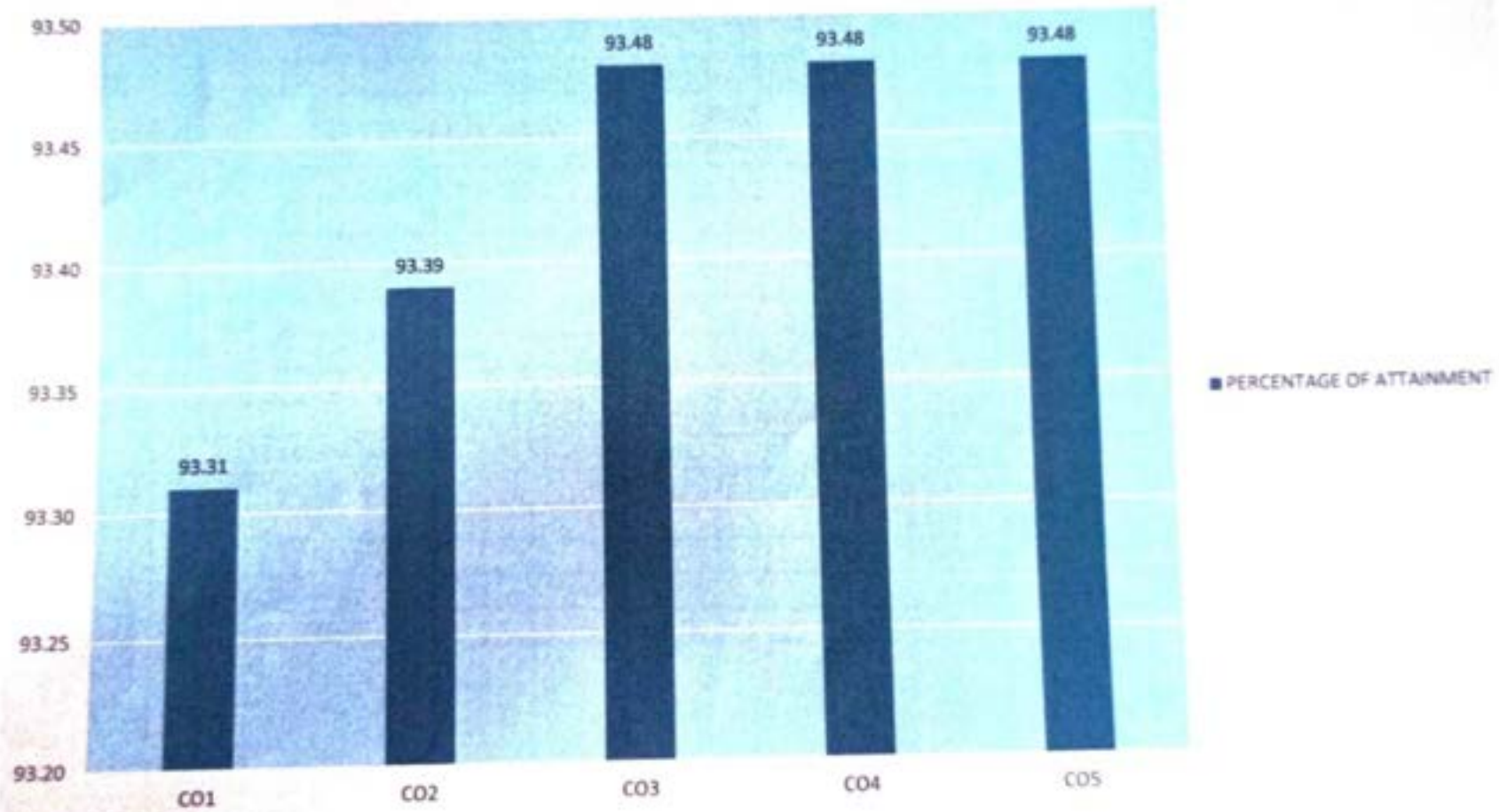
COURSE ATTAINMENT FOR M.Sc MATHEMATICS

SUBJECT NAME : ADVANCED OPERATIONS RESEARCH
SUBJECT CODE : P16MAE4B
NO.OF STUDENTS : 13

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.31
CO2	93.39
CO3	93.48
CO4	93.48
CO5	93.48



PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR M.Sc MATHEMATICS

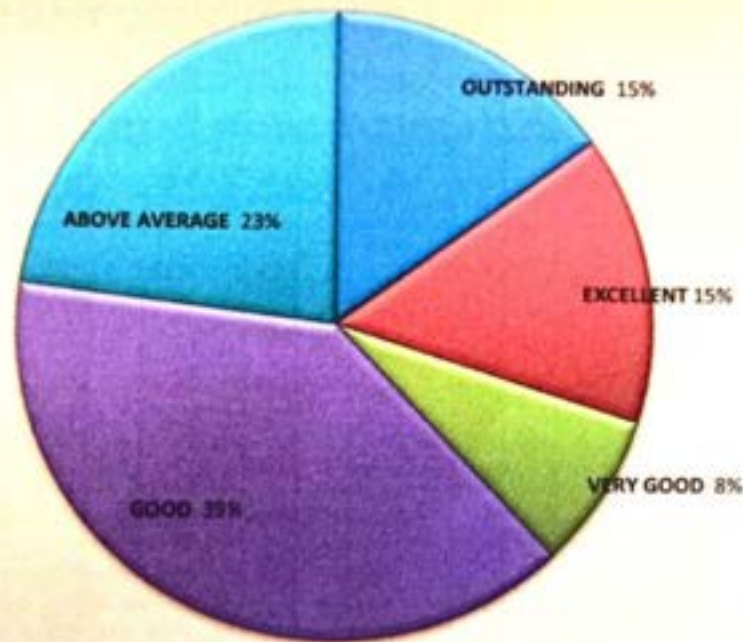
SUBJECT NAME : ADVANCED OPERATIONS RESEARCH
SUBJECT CODE : P16MAE4B
NO.OF STUDENTS : 13

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO.OF. STUDENTS	STATUS
90 and above(100)	2	OUTSTANDING
80-89	2	EXCELLENT
70-79	1	VERY GOOD
60-69	5	GOOD
50-59	3	ABOVE AVERAGE
Below 50	0	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
90 and above(100)	15%	OUTSTANDING
80-89	15%	EXCELLENT
70-79	8%	VERY GOOD
60-69	39%	GOOD
50-59	23%	ABOVE AVERAGE



COURSE OUTCOME ASSESSMENT



- 90 and above(100)
- 80-89
- 70-79
- 60-69
- 50-59



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DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Identify and enhance mathematical and computational strategies in order to solve mathematical problems.
PO2	Know various specialized areas of advanced mathematics and its applications.
PO3	Work as Professional mathematicians either in academia or elsewhere.
PO4	Inculcate knowledge of formulation and apply mathematical concepts which are suitable for real life applications.
PO5	Crack lectureship and fellowship exams affirmed by UGC like CSIR – NET and SET.

NAME OF THE PROGRAMME: M.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
P16MAESC - ALGEBRAIC NUMBER THEORY	CO1	Explain the concepts of divisibility, Congruences.
	CO2	Understand the techniques of numerical calculations of prime power moduli, using congruences.
	CO3	Understand the ideas of quadratic residues and quadratic reciprocity.
	CO4	Study about the concepts of binary quadratic forms.
	CO5	Acquire the knowledge of Diophantine Equations.



PO → CO ₁	PO1	PO2	PO3	PO4	PO5
CO1	3	2	3	2	2
CO2	3	2	2	3	2
CO3	3	2	2	2	2
CO4	3	2	3	2	3
CO5	3	2	2	3	2
AVERAGE	3	2	2.4	2.4	2.2

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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

SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	P 18191156	GOWTHAMI M	5	5	5	5	5	25	100
2	P 18191159	KOKILA N	5	5	5	5	5	25	100
3	P 18191160	MANIKANDAN D	5	4	4	4	5	22	88
4	P 18191161	MANISHADHAVANI Y	5	5	5	5	5	25	100
5	P 18191162	MUTHUKUMAR M	4	5	5	5	5	24	96
6	P 18191163	NISHA K	5	5	5	5	5	25	100
7	P 18191164	SANKARALINGAM K	5	5	4	4	4	22	88
8	P 18191165	VENKATARAMAN K S	5	5	5	4	5	24	96
9	P 18191166	VIMALA N	5	5	5	5	5	25	100
10	P 18191167	VINOTH KUMAR R	4	5	4	5	5	23	92
11	P 18191168	VINODHINI S	5	5	5	4	5	24	96
12	P 18191169	VIVEK S	5	4	4	5	4	22	88
13	P 18192191	VASANTHADEVI R	5	5	5	5	5	25	100
AVERAGE			4.85	4.85	4.69	4.69	4.85		



EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.85	75	79.85	93.94
CO2	4.85	75	79.85	93.94
CO3	4.69	75	79.69	93.75
CO4	4.69	75	79.69	93.75
CO5	4.85	75	79.85	93.94

COURSE ATTAINMENT FOR M. SC., MATHEMATICS

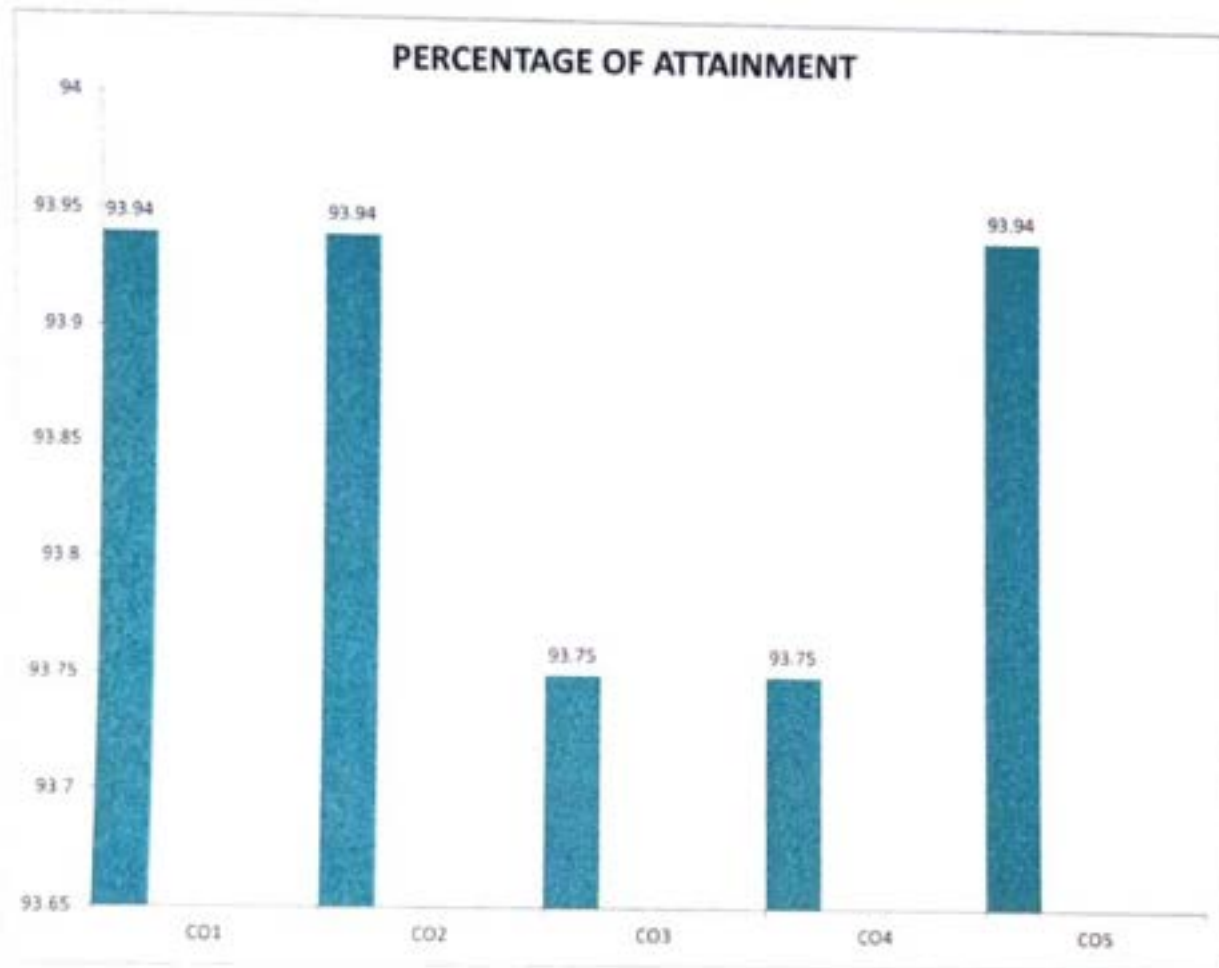
SUBJECT NAME: ALGEBRAIC NUMBER THEORY

SUBJECT CODE: P16MAE5C

NO. OF STUDENT 13

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.94
CO2	93.94
CO3	93.75
CO4	93.75
CO5	93.94





COURSE ATTAINMENT FOR MSc., MATHEMATICS

SUBJECT NAME: ALGEBRAIC NUMBER THEORY

SUBJECT CODE: P16MAE5C

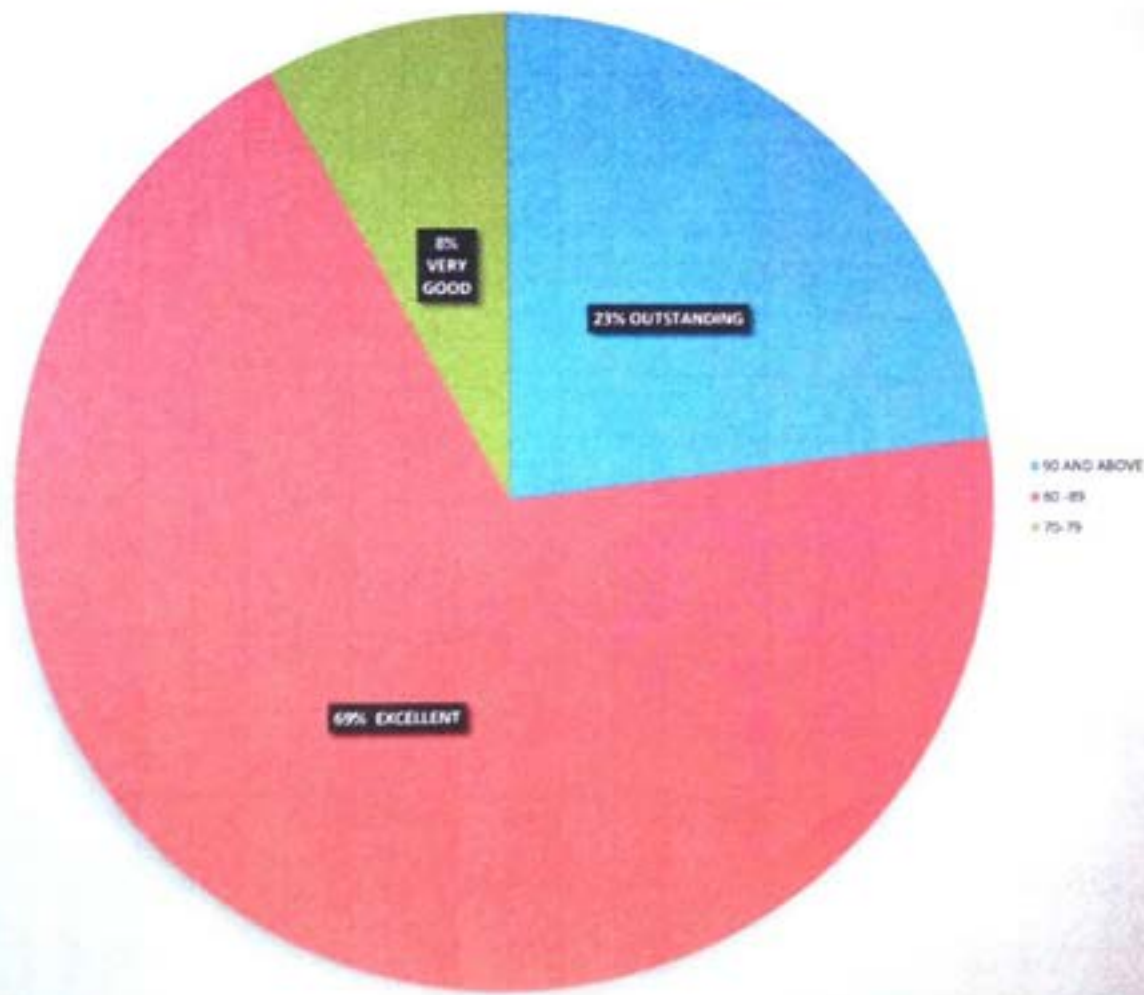
NO. OF STUDENT 13

COURSE OUTCOME ASSESSMENT		
CATEGORY(MARKS)	NO. OF STUDENTS	STATUS
90 AND ABOVE	3	OUTSTANDING
80-89	9	EXCELLENT
70-79	1	VERY GOOD
60-69	0	GOOD
50-59	0	ABOVE AVERAGE
BELOW 50	0	RE -APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY(MARKS)	PERCENTAGE	STATUS
90 AND ABOVE	23%	OUTSTANDING
80-89	69%	EXCELLENT
70-79	8%	VERY GOOD



COURSE OUTCOME ASSESSMENT




PRINCIPAL
Bharath College of Science and Management
Bharath Avenue (Near New Bus Stand)
THANJAVUR - 613 005.



BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
(UGC Recognized 2(f) & 12(B) Institution)
THANJAVUR-5
PG DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Remember the fundamental concepts of Mathematics
PO2	Imbibe the skills necessary to effectively translate mathematical aspects to the general public
PO3	Develop Critical thinking ability so as to improve Employability and Decision making.
PO4	Apply Mathematical Models to solve critical problems.
PO5	Apply the concepts studied, in real life situations.

NAME OF THE PROGRAMME: B.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
16SCMM2 - INTEGRAL CALCULUS	CO1	Students will be able to acquire the basic knowledge of all Integral models and methods.
	CO2	Applications of definite Definite integrals, Integration by parts and Understand the concepts of Reduction formulae.
	CO3	Verify Geometric Application of integration to length, area and volume.
	CO4	Evaluate areas, length of a curve and surface of revolution occurring in real life problems using multiple integrals and change of integral.
	CO5	Techniques of Beta, Gamma integrals. Various integration formulae.



PO → CO ↓	PO1	PO2	PO3	PO4	PO5
CO1	3	3	2	3	3
CO2	3	3	3	2	2
CO3	3	2	3	3	3
CO4	3	3	3	3	3
CO5	2	3	3	3	3
AVERAGE	2.8	2.8	2.8	2.8	2.8

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	UNIT TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	CB19S 377896	AKASH.S	4	4	3	3	4	18	72
2	CB19S 377897	ARURA.K	4	4	4	4	4	20	80
3	CB19S 377898	DIVAHAR.P	3	3	3	3	3	15	60
4	CB19S 377899	JAYASHEELA.J	5	5	5	5	5	25	100
5	CB19S 377900	KARTHICK.N	5	5	5	5	5	25	100
6	CB19S 377901	KAYALVIZHI.K	4	4	4	3	4	19	76
7	CB19S 377902	MANIKANDAN.N	5	5	5	4	4	23	92
8	CB19S 377903	NAVEENA.K	5	5	5	5	4	24	96
9	CB19S 377904	RAMANAN.G	5	5	5	5	5	25	100
10	CB19S 377905	SHARMILA.S	5	5	4	4	4	22	88
11	CB19S 377906	SURIYA.S	4	4	4	4	4	20	80
12	CB19S 377908	VISHNURAJ.K	4	4	4	3	4	19	76
AVERAGE			4.42	4.42	4.25	4.00	4.17		

EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST + SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.42	75	79.42	93.44
CO2	4.42	75	79.42	93.44
CO3	4.25	75	79.25	93.24
CO4	4.00	75	79	92.94
CO5	4.17	75	79.17	93.14

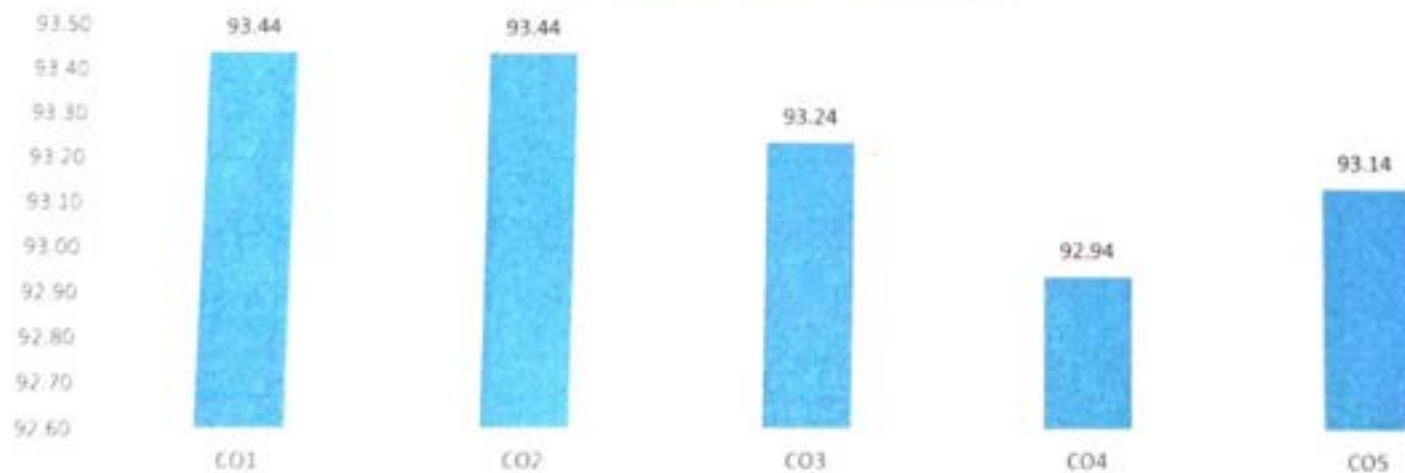


COURSE ATTAINMENT FOR B.Sc MATHEMATICS

SUBJECT NAME : INTEGRAL CALCULUS
SUBJECT CODE : 16SCCMM2
NO OF STUDENTS : 12

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.44
CO2	93.44
CO3	93.24
CO4	92.94
CO5	93.14

PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR B.Sc MATHEMATICS

SUBJECT NAME : INTEGRAL CALCULUS
SUBJECT CODE : 16SCCMM2
NO OF STUDENTS : 12

COURSE OUTCOME ASSESSMENT

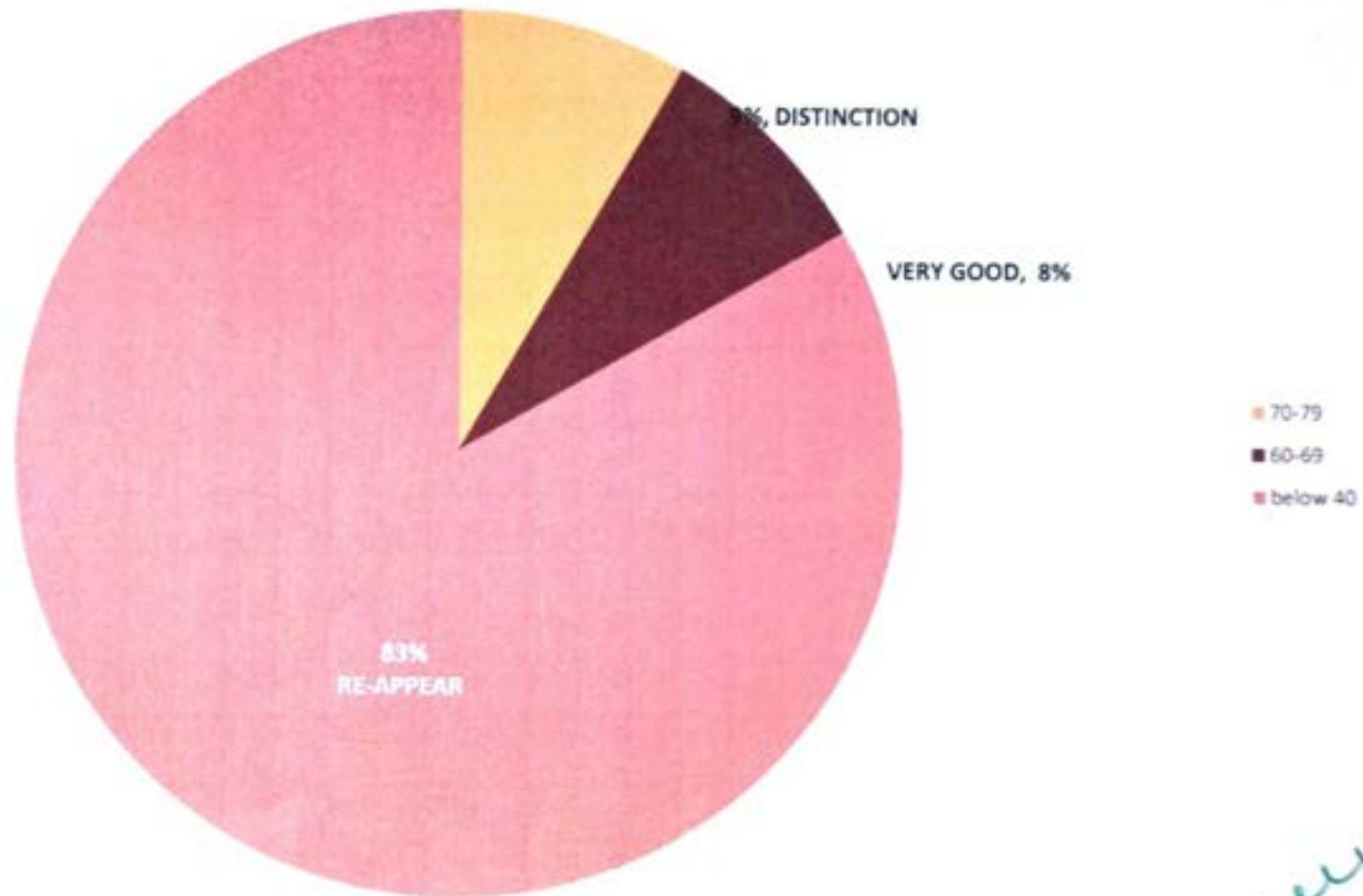
CATEGORY MARKS	NO OF STUDENTS	STATUS
90 & above(100)	0	OUTSTANDING
80-89	0	EXCELLENT
70-79	1	DISTINCTION
60-69	1	VERY GOOD
50-59	0	GOOD
40-49	0	AVERAGE
below 40	10	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE

CATEGORY MARKS	PERCENTAGE	STATUS
70-79	9	DISTINCTION
60-69	8	VERY GOOD
below 40	83	RE-APPEAR



COURSE OUTCOME ASSESSMENT IN PERCENTAGE



PRINCIPAL

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THANJAVUR-5
PG DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Remember the fundamental concepts of Mathematics
PO2	Imbibe the skills necessary to effectively translate mathematical aspects to the general public
PO3	Develop Critical thinking ability so as to improve Employability and Decision making.
PO4	Apply Mathematical Models to solve critical problems.
PO5	Apply the concepts studied, in real life situations.

NAME OF THE PROGRAMME: B.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
16SCMM3 - DIFFERENTIAL EQUATION AND LAPLACE TRANSFORMS	CO1	Define first order, higher order differential equations solvable for dy/dx , x and y
	CO2	Discuss and demonstrate the Linear equations with variable coefficients and variation of parameters.
	CO3	Describe the origin of partial differential equation.
	CO4	Explain PDE of second order homogeneous equation with constant coefficients.
	CO5	Understand the concepts of differential equations and laplace transforms.



PO → CO ↓	PO1	PO2	PO3	PO4	PO5
CO1	3	3	2	3	3
CO2	3	3	3	2	2
CO3	3	2	3	3	3
CO4	3	3	3	3	3
CO5	2	3	3	3	3
AVERAGE	2.8	2.8	2.8	2.8	2.8

CO	INTERNAL (25)		
	UNIT TEST (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

SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	% TO TOTAL INTERNAL MARK
1	CB19S 377896	AKASH S	4	4	4	4	4	20	80
2	CB19S 377897	ARURA K	5	5	5	4	5	24	96
3	CB19S 377898	DIVAHAR P	4	4	4	4	4	20	80
4	CB19S 377899	JAYASHEELA J	5	5	5	5	5	25	100
5	CB19S 377900	KARTHICK N	5	5	5	5	5	25	100
6	CB19S 377901	KAYALVIZHI K	5	4	4	4	5	23	92
7	CB19S 377902	MANIKANDAN N	5	4	4	5	4	24	96
8	CB19S 377903	NAVEENA K	5	5	5	5	5	25	100
9	CB19S 377904	RAMANAN G	5	5	5	5	5	25	100
10	CB19S 377905	SHARMILA S	5	5	5	5	4	24	96
11	CB19S 377906	SURIYA S	4	5	5	5	4	23	92
12	CB19S 377908	VISHNURAJ K	5	5	4	4	5	23	92
AVERAGE			4.75	4.67	4.58	4.58	4.58		

EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.75	75	79.75	93.82
CO2	4.67	75	79.67	93.73
CO3	4.58	75	79.58	93.62
CO4	4.58	75	79.58	93.62
CO5	4.58	75	79.58	93.62

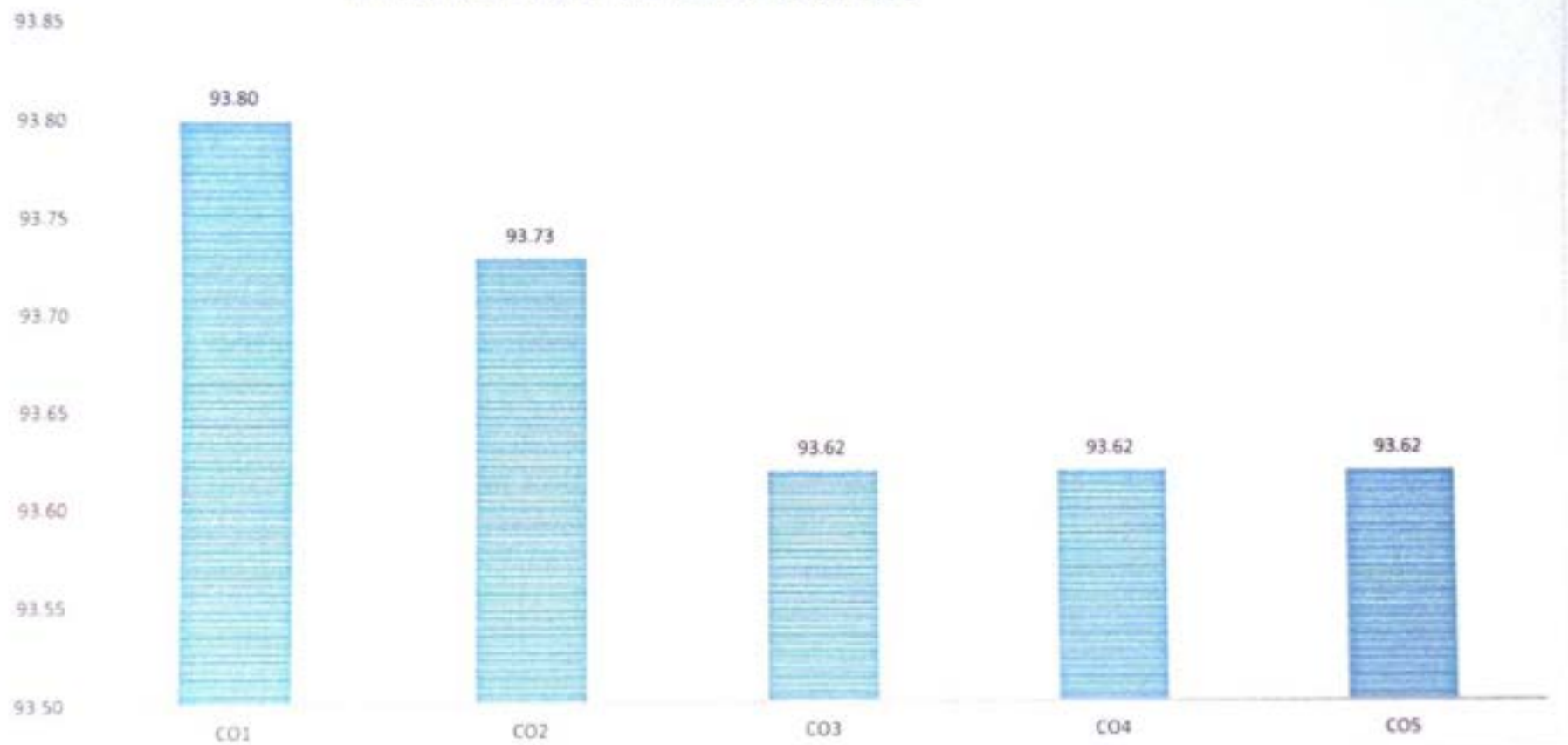
COURSE ATTAINMENT FOR B.Sc MATHEMATICS

SUBJECT NAME : DIFFERENTIAL EQUATION AND LAPLACE TRANSFORMS
SUBJECT CODE : 16SCCMM3
NO OF STUDENTS : 12

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.80
CO2	93.73
CO3	93.62
CO4	93.62
CO5	93.62



PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR B.Sc MATHEMATICS

SUBJECT NAME : DIFFERENTIAL EQUATION AND LAPLACE TRANSFORMS
 SUBJECT CODE : 16SCCMM3
 NO OF STUDENTS : 12

COURSE OUTCOME ASSESSMENT

CATEGORY MARKS	NO OF STUDENTS	STATUS
90 and above(100)	4	OUTSTANDING
80-89	6	EXCELLENT
70-79	1	DISTINCTION
60-69	1	VERY GOOD
50-59	0	GOOD
40-49	0	AVERAGE
below 40	0	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE

CATEGORY MARKS	PERCENTAGE	STATUS
90 and above(100)	34	OUTSTANDING
80-89	50	EXCELLENT
70-79	8	DISTINCTION
60-69	8	VERY GOOD



COURSE OUTCOME ASSESSMENT IN PERCENTAGE



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THANJAVUR-5
DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Remember the fundamental concepts of Mathematics.
PO2	Imbibe the skills necessary to effectively translate mathematical aspects to the general public.
PO3	Develop Critical thinking ability so as to improve Employability and Decision making.
PO4	Apply Mathematical Models to solve critical problems.
PO5	Apply the concepts studied, in real life situations.

NAME OF THE PROGRAMME : B.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
16SCMM9 NUMERICAL METHODS WITH MATLAB PROGRAMMING	CO1	Determine better and more accurate solution.
	CO2	Understand the basic properties of MATLAB, its environment and programming.
	CO3	Learn the concepts of Plotting and types of plots.
	CO4	Solve the algebraic and transcendental equations.
	CO5	Learn the Interpolation formulae and rules.



PO → CO	PO1	PO2	PO4	PO5
CO1	3	3	3	3
CO2	3	3	2	3
CO3	3	3	3	2
CO4	3	2	3	3
CO5	3	3	3	2
AVERAGE	3	2.8	2.8	2.6

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	CB17S 366511	ABINAYA. M	4	4	4	4	4	20	80
2	CB17S 366512	ABINAYA.R	5	4	4	4	5	22	88
3	CB17S 366513	ABINESH.P	3	4	4	3	3	17	68
4	CB17S 366514	AFFRIN.A	3	4	4	4	4	19	76
5	CB17S 366515	AKASH.P	3	3	3	3	3	15	60
6	CB17S 366516	AMARNATH.J	3	3	3	3	4	16	64
7	CB17S 366517	ANBARASAN.M	3	4	4	4	4	19	76
8	CB17S 366518	ARUN KUMAR.K	4	4	4	4	5	21	84
9	CB17S 366519	BALAJI.S	4	4	4	4	4	20	80
10	CB17S 366521	GOPINATH.S	3	4	3	3	4	17	68
11	CB17S 366522	JAYAPRAKASH.K	4	4	4	3	4	19	76
12	CB17S 366523	JEFRE GUDWIN.J	4	4	4	4	4	20	80
13	CB17S 366524	KANIMOZHIL.B	4	5	4	5	4	22	88
14	CB17S 366525	KEERTHANA.R	4	4	5	5	5	23	92
15	CB17S 366526	KERTHIGA.V	5	5	5	5	5	25	100
16	CB17S 366527	MARIMUTHU.T	3	3	3	3	3	15	60
17	CB17S 366528	NESAMANIK	4	4	4	4	4	20	80
18	CB17S 366529	NISHANTHI.F	4	4	4	4	4	20	80
19	CB17S 366530	PRAGATHI.E	5	5	4	4	4	22	88
20	CB17S 366531	PRASANTH.K	3	4	4	3	4	18	72
21	CB17S 366532	PUNITHA.R	5	4	5	4	5	23	92
22	CB17S 366533	RAMKUMAR.N	3	4	3	4	4	18	72
23	CB17S 366534	RAMYANJALI.V	5	4	4	5	5	23	92
24	CB17S 366535	RAYMOND.C	4	4	5	5	5	23	92
25	CB17S 366536	SENTHIL.G	3	4	4	4	4	16	64
26	CB17S 366537	SNEHA.A	4	5	4	4	4	21	84
27	CB17S 366538	SOWMIYA.R	5	5	5	5	5	25	100
28	CB17S 366539	SUGANTHI.B	4	4	4	4	4	20	80
29	CB17S 366540	SURUTHI.M	5	5	5	5	5	25	100
30	CB17S 366541	SURYA.C	3	4	4	4	4	19	76
31	CB17S 366542	VARTHANLV	5	4	5	4	4	22	88
32	CB17S 366543	VIGNESH.R	4	4	4	3	4	19	76
33	CB17S 366544	YUVASHREE.M	5	4	4	5	5	23	92
34	CB16S 359277	SRUTHIKA.G	4	4	4	4	4	20	80
Average			3.94	4.09	4.06	4.00	4.21		

EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	3.94	75	78.94	92.87
CO2	4.09	75	79.09	93.05
CO3	4.06	75	79.06	93.01
CO4	4.00	75	79.00	92.94
CO5	4.21	75	79.21	93.19

COURSE ATTAINMENT FOR B.Sc., MATHEMATICS

SUBJECT NAME : NUMERICAL METHODS WITH MATLAB PROGRAMMING

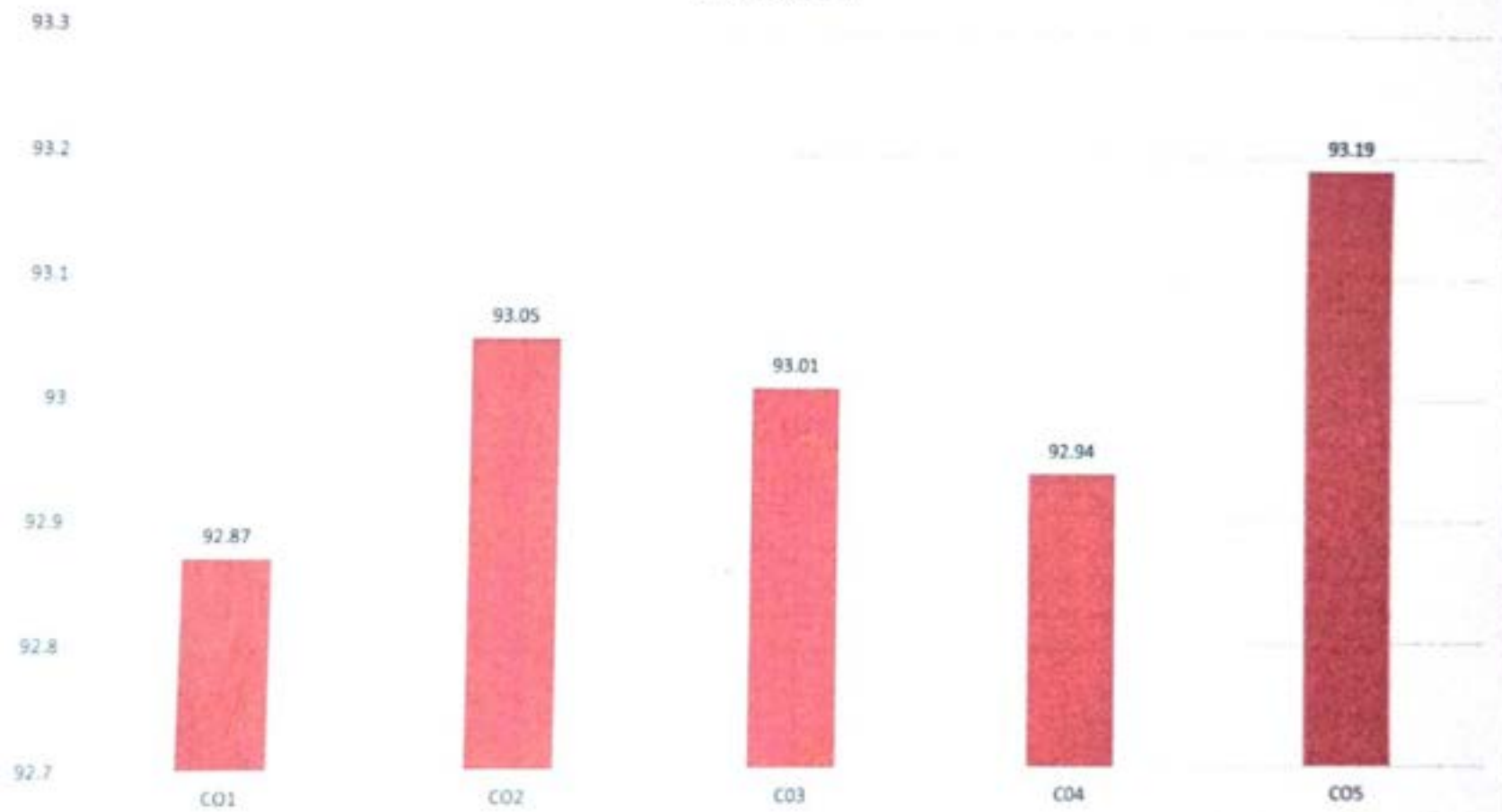
SUBJECT CODE : 16SCCMM9

NO OF STUDENTS : 34

COURSE OUTCOME	PERCENTAGE OF
CO1	92.87
CO2	93.05
CO3	93.01
CO4	92.94
CO5	93.19



PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR B.Sc., MATHEMATICS

SUBJECT NAME : NUMERICAL METHODS WITH MATLAB PROGRAMMING
SUBJECT CODE : 16SCCMM9
NO OF STUDENTS : 34

COURSE OUTCOME ASSESSMENT

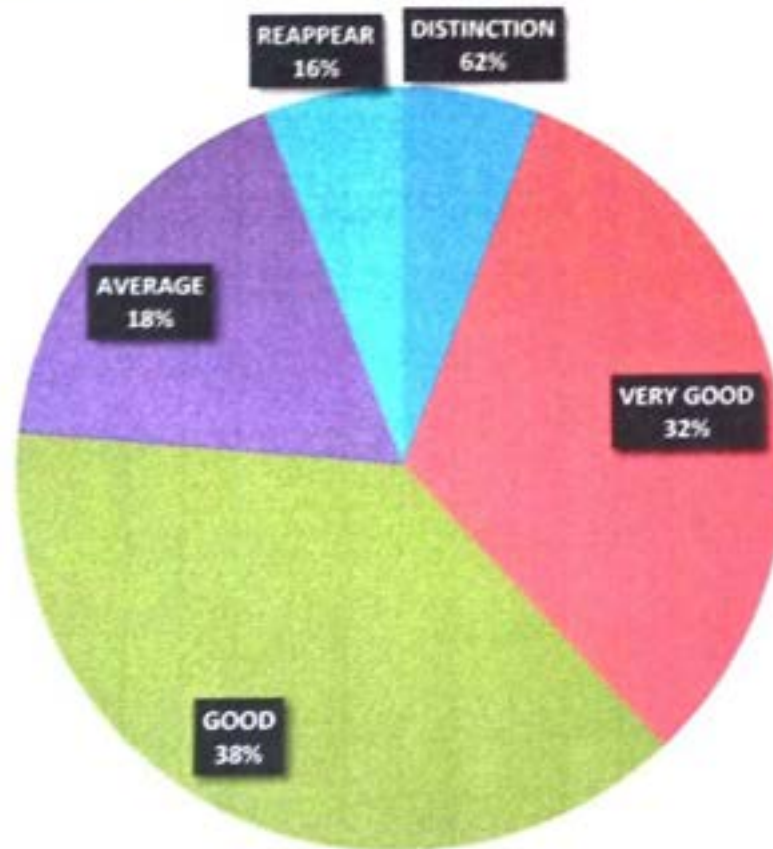
CATEGORY MARKS	NO OF STUDENTS	STATUS
90 and above (100)	0	OUTSTANDING
80-89	0	EXCELLENT
70-79	2	DISTINCTION
60-69	11	VERY GOOD
50-59	13	GOOD
40-49	6	AVERAGE
below 40	2	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE

CATEGORY MARKS	PERCENTAGE	STATUS
70-79	6%	DISTINCTION
60-69	32%	VERY GOOD
50-59	38%	GOOD
40-49	18%	AVERAGE
below 40	6%	RE-APPEAR



COURSE OUTCOME ASSESSMENT IN PERCENTAGE



- 70-79
- 60-69
- 50-59
- 40-49
- below 40




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PO1	Remember the fundamental concepts of Mathematics
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NAME OF THE PROGRAMME: B.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
16SCMM13 - COMPLEX ANALYSIS	CO1	Understanding and significance of Limits, Continuous functions and Differentiability for complex function and be familiar with the CR-equation.
	CO2	Define Conformal Mapping, Bilinear transformations, Cross ratio and Fixed points.
	CO3	Use Cauchy's integral Theorem and formula to compute line integral.
	CO4	Represent functions as Taylor's series and Laurent's series.
	CO5	Find Residues and evaluate complex integral using Cauchy's Residue Theorem.



PO → CO ₁	PO1	PO2	PO3	PO4	PO5
CO1	3	2	3	3	3
CO2	3	3	3	2	2
CO3	3	3	3	3	3
CO4	2	3	3	3	3
CO5	3	2	2	3	3
AVERAGE	2.8	2.6	2.8	2.8	2.8

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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

SNO	REG. NO.	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	CB17S366511	ABINAYA.M	5	5	5	5	4	24	96
2	CB17S366512	ABINAYA.R	5	5	5	4	5	24	96
3	CB17S366513	ABINESH.P	4	4	4	4	5	21	84
4	CB17S366514	AFFRIN.A	4	4	5	4	4	21	84
5	CB17S366515	AKASH.P	4	4	4	4	4	20	80
6	CB17S366516	AMARNATH.J	4	4	4	4	4	20	80
7	CB17S366517	ANBARASAN.M	4	5	4	4	4	21	84
8	CB17S366518	ARUNKUMAR.K	4	4	4	4	5	21	84
9	CB17S366519	BALAJI.S	4	4	4	4	4	20	80
10	CB17S366521	GOPINATH.S	4	4	4	4	4	20	80
11	CB17S366522	JAYAPRAKASH.K	4	4	4	4	4	20	80
12	CB17S366523	JEFREE GUDWIN.J	4	4	4	4	4	20	80
13	CB17S366524	KANIMOZHIL.B	5	5	5	4	4	23	92
14	CB17S366525	KEERTHANA.R	5	5	5	5	4	24	96
15	CB17S366526	KEERTHIGA.V	5	5	5	5	5	25	100
16	CB17S366527	MARIMUTHU.T	4	4	4	4	4	20	80
17	CB17S366528	NESAMANIK	4	4	4	4	4	20	80
18	CB17S366529	NISHANTHIL.F	5	4	4	4	5	22	88
19	CB17S366530	PRAGATHI.E	5	5	4	5	4	23	92
20	CB17S366531	PRASANTH.K	4	4	4	4	4	20	80
21	CB17S366532	PUNITHA.R	5	5	5	5	4	24	96
22	CB17S366533	RAM KUMAR.N	4	4	4	4	4	20	80
23	CB17S366534	RAMYANJALI.V	5	5	5	4	5	24	96
24	CB17S366535	RAYMOND.C	5	5	4	4	4	22	88
25	CB17S366536	SENTHIL.G	4	4	4	4	4	20	80
26	CB17S366537	SNEHA.A	4	4	4	5	5	22	88
27	CB17S366538	SOWMIYA.R	5	5	5	5	5	25	100
28	CB17S366539	SUGANTHI.B	5	5	4	5	4	23	92
29	CB17S366540	SURUTHIL.M	5	5	5	5	5	25	100
30	CB17S366541	SURYA.C	4	4	4	4	5	21	84
31	CB17S366542	VARTHANIL.V	5	5	5	5	4	24	96
32	CB17S366543	VIGNESH.R	5	4	4	5	5	23	92
33	CB17S366544	YUVASHREE.M	5	5	5	5	4	24	96
AVERAGE			4.48	4.45	4.36	4.36	4.33		



EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.48	75	79.48	93.51
CO2	4.45	75	79.45	93.47
CO3	4.36	75	79.36	93.37
CO4	4.36	75	79.36	93.36
CO5	4.33	75	79.33	93.33

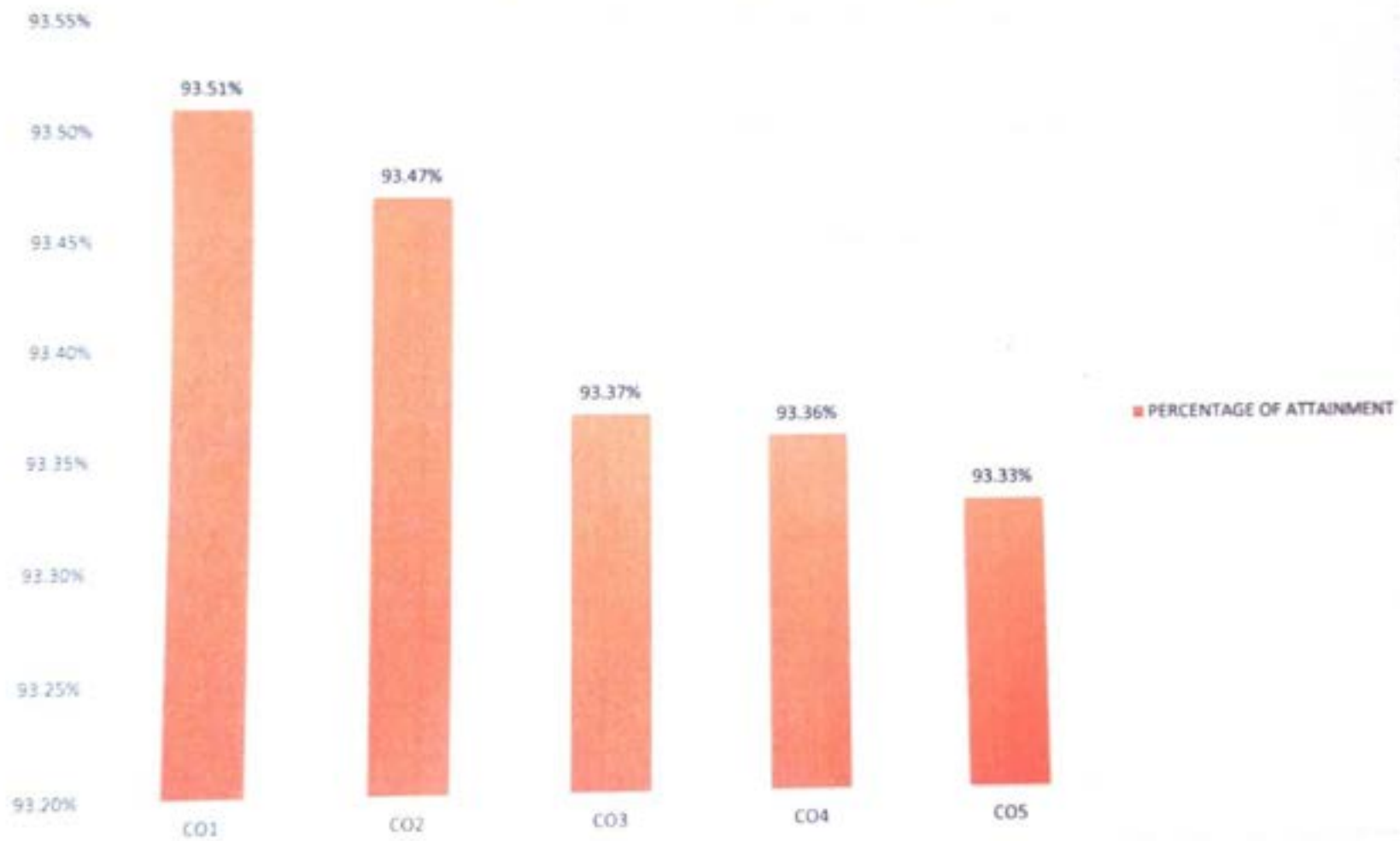
COURSE ATTAINMENT FOR B.Sc., MATHEMATICS

SUBJECT NAME: COMPLEX ANALYSIS
 SUBJECT CODE: 16SCCMM13
 NO. OF STUDENTS: 33

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.51%
CO2	93.47%
CO3	93.37%
CO4	93.36%
CO5	93.33%



PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR B.Sc., MATHEMATICS

SUBJECT NAME: COMPLEX ANALYSIS

SUBJECT CODE: 16SCCMM13

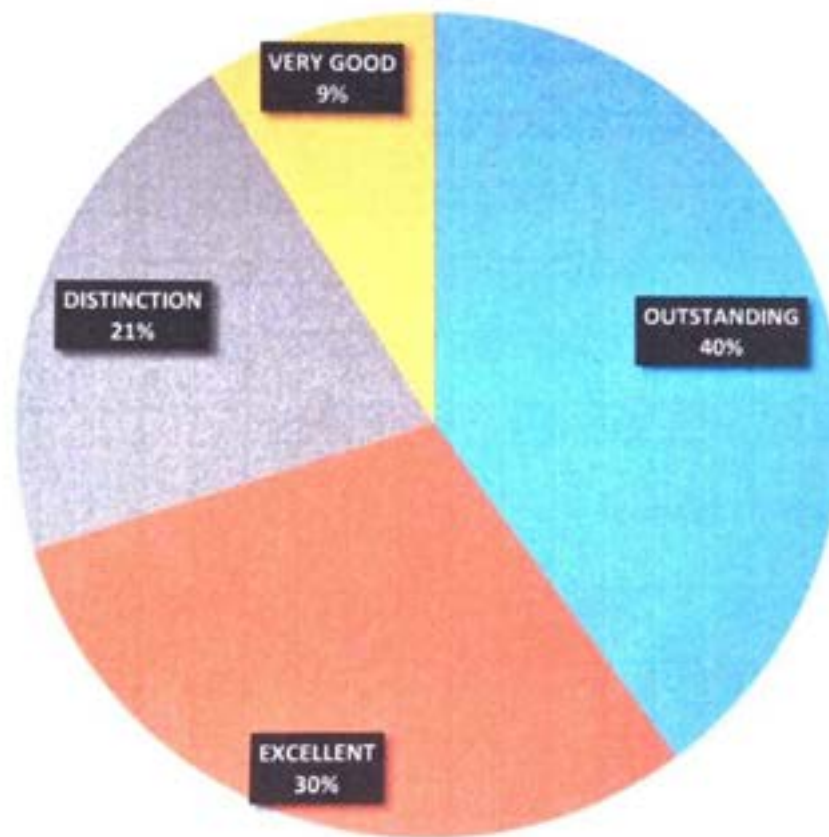
NO. OF STUDENTS: 33

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO. OF STUDENTS	STATUS
90 AND ABOVE	13	OUTSTANDING
80-89	10	EXCELLENT
70-79	7	DISTINCTION
60-69	3	VERY GOOD
50-59	0	GOOD
40-49	0	AVERAGE
BELOW 40	0	RE APPEAR

CATEGORY (MARKS)	PERCENTAGE	STATUS
90-100	40	OUTSTANDING
80-89	30	EXCELLENT
70-79	21	DISTINCTION
60-69	9	VERY GOOD



COURSE OUTCOME ASSESSMENT



■ 90-100
■ 80-89
■ 70-79
■ 60-69



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THANJAVUR - 613 005.



BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
 (UGC Recognized 2(f) & 12(B) Institution)
 THANJAVUR-5
 DEPARTMENT OF MATHEMATICS
 ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Remember the fundamental concepts of Mathematics
PO2	Imbibe the skills necessary to effectively translate mathematical aspects to the general public
PO3	Develop Critical thinking ability so as to improve Employability and Decision making.
PO4	Apply Mathematical Models to solve critical problems.
PO5	Apply the concepts studied, in real life situations.

NAME OF THE PROGRAMME: B.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
16SCMM14 - DYNAMICS	CO1	Acquire the knowledge of velocity and Acceleration.
	CO2	Understand the path of Projectiles and characteristics of a motion of Projectiles.
	CO3	Study the Fundamental laws of impact.
	CO4	Derive the formulae for simple harmonic motion.
	CO5	Find out the pedal equation of central orbit.

PO → CO ↓	PO1	PO2	PO3	PO4	PO5
CO1	3	2	3	2	3
CO2	3	2	2	2	3
CO3	3	2	3	2	3
CO4	3	2	2	2	3
CO5	3	2	2	3	3
AVERAGE	3	2	2.4	2.2	3

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	CB17S 366511	ABINAYA M	5	5	5	5	5	25	100
2	CB17S 366512	ABINAYA R	5	5	5	5	5	25	100
3	CB17S 366513	ABINESH P	5	4	4	4	5	22	88
4	CB17S 366514	AFFRIN A	5	5	4	4	5	23	92
5	CB17S 366515	AKASH P	4	4	4	4	4	20	80
6	CB17S 366516	AMARNATH J	4	4	4	4	4	20	80
7	CB17S 366517	ANBARASAN M	5	5	4	4	4	22	88
8	CB17S 366518	ARUN KUMAR K	5	5	5	4	4	23	92
9	CB17S 366519	BALAJI S	4	5	4	4	4	21	84
10	CB17S 366521	GOPINATH S	4	4	4	4	4	20	80
11	CB17S 366522	JAYAPRAKASH K	5	4	4	4	5	22	88
12	CB17S 366523	JEFRE GUDWIN J	5	4	5	5	5	24	96
13	CB17S 366524	KANIMOZHI B	5	5	4	5	5	24	96
14	CB17S 366525	KEERTHANA R	5	5	5	5	5	25	100
15	CB17S 366526	KEERTHIGA V	5	5	5	5	5	25	100
16	CB17S 366527	MARIMUTHU T	4	4	4	4	4	20	80
17	CB17S 366528	NESAMANI K	4	4	4	4	4	20	80
18	CB17S 366529	NISHANTHI F	5	4	5	5	5	24	96
19	CB17S 366530	PRAGATHI E	5	5	4	5	5	24	96
20	CB17S 366531	PRASANTH K	4	4	5	5	5	23	92
21	CB17S 366532	PUNITHA R	5	5	5	5	5	25	100
22	CB17S 366533	RAMKUMAR N	4	4	5	5	5	23	92
23	CB17S 366534	RAMYANJALI V	5	5	5	5	5	25	100
24	CB17S 366535	RAYMOND C	5	5	5	5	5	25	100
25	CB17S 366536	SENTHIL G	4	4	4	4	4	20	80
26	CB17S 366537	SNEHA A	5	4	4	5	5	23	92
27	CB17S 366538	SOWMIYA R	5	5	5	5	5	25	100
28	CB17S 366539	SUGANTHI B	5	5	5	5	5	25	100
29	CB17S 366540	SURUTHI M	5	5	5	5	5	25	100
30	CB17S 366541	SURYA C	4	4	4	5	5	22	88
31	CB17S 366542	VARTHANI V	5	5	5	5	5	25	100

32	CB17S 366543	VIGNESH R	5	5	4	4	5	23	92
33	CB17S 366544	YUVASHREE M	5	5	5	5	5	25	100
AVERAGE			4.70	4.58	4.52	4.61	4.73		

EXPECTED ATTAIMENT IN EACH CO - 85%

CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.70	75	79.70	93.76
CO2	4.58	75	79.58	93.62
CO3	4.52	75	79.52	93.55
CO4	4.61	75	79.61	93.66
CO5	4.73	75	79.73	93.80

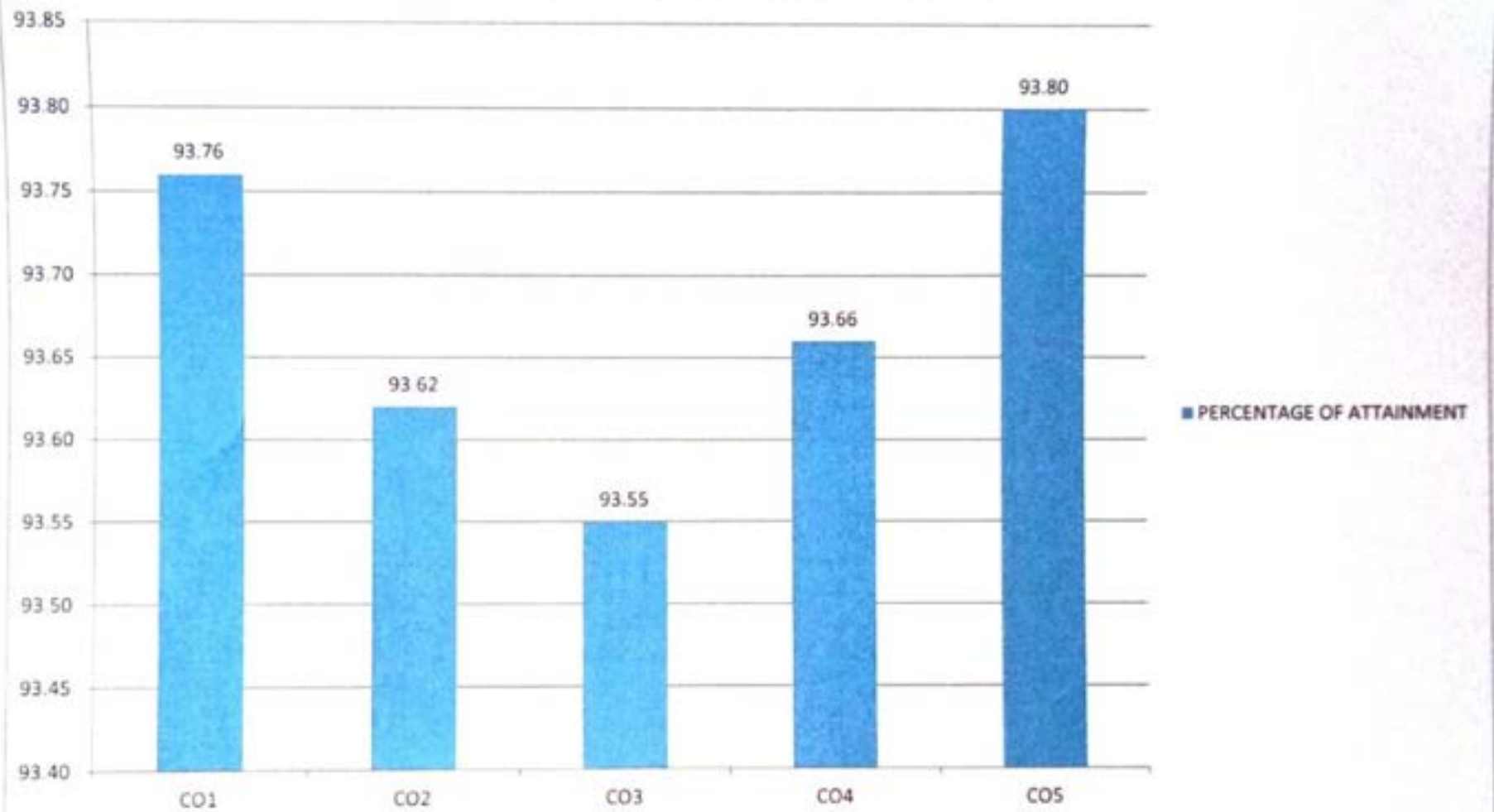
COURSE ATTAINMENT FOR B. SC., MATHEMATICS

SUBJECT NAME: DYNAMICS
SUBJECT CODE: 16SCCMM14
NO. OF STUDENTS: 33

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.76
CO2	93.62
CO3	93.55
CO4	93.66
CO5	93.80



PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR B. SC., MATHEMATICS

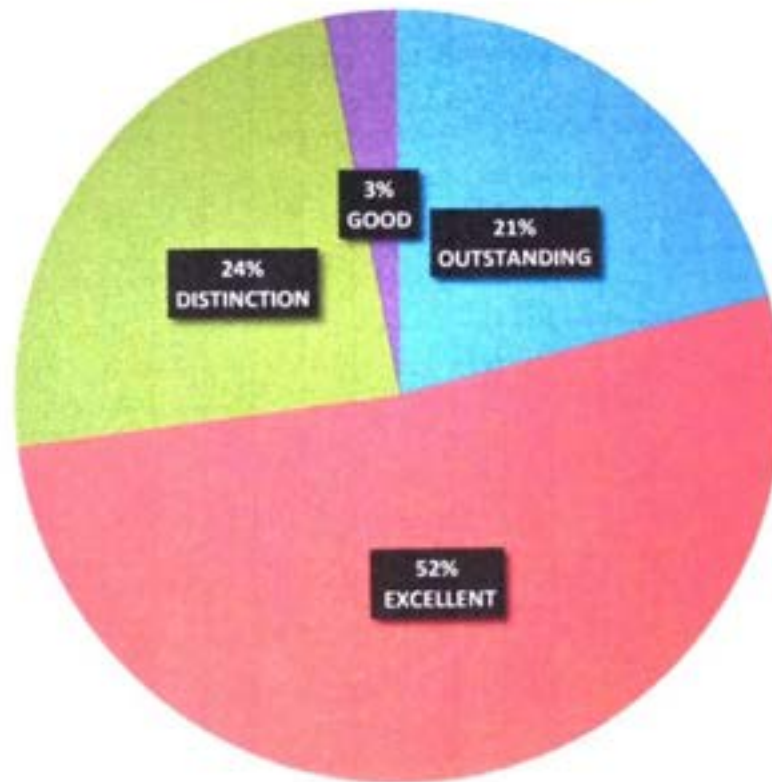
SUBJECT NAME: DYNAMICS
SUBJECT CODE: 16SCMM14
NO. OF STUDENTS: 33

COURSE OUTCOME ASSESSMENT		
CATEGORY(MARKS)	NO. OF STUDENTS	STATUS
90 AND ABOVE	7	OUTSTANDING
80-89	17	EXCELLENT
70-79	8	DISTINCTION
60-69	0	VERY GOOD
50-59	1	GOOD
40 -49	0	AVERAGE
BELOW 40	0	RE -APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
90 AND ABOVE	21%	OUTSTANDING
80 -89	52%	EXCELLENT
70 - 79	24%	DISTINCTION
50-59	3%	GOOD



COURSE OUTCOME ASSESSMENT



- 90 AND ABOVE
- 80 - 89
- 70 - 79
- 50-59

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THANJAVUR-5
DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Remember the fundamental concepts of Mathematics
PO2	Imbibe the skills necessary to effectively translate mathematical aspects to the general public
PO3	Develop Critical thinking ability so as to improve Employability and Decision making.
PO4	Apply Mathematical Models to solve critical problems.
PO5	Apply the concepts studied, in real life situations.

NAME OF THE PROGRAMME: B.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
16SMBEMM1:1 - OPERATION RESEARCH	CO1	Understand the advantages and limitations of operation research
	CO2	Understand the LPP and to know methods of solving problems
	CO3	Understand the concepts of transportation and assignment problems
	CO4	Learn about Queuing theory
	CO5	Assimilate the concept of Network scheduling by CPM & PERT

PO → CO↓	PO1	PO2	PO3	PO4	PO5
CO1	3	2	3	3	3
CO2	3	3	2	3	3
CO3	2	3	2	2	3
CO4	3	3	3	3	3
CO5	3	3	3	3	2
AVERAGE	2.8	2.8	2.6	2.8	2.8

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	% TO TOTAL INTERNAL MARK
1	CB17S366511	ABINAYA.M	5	5	5	5	4	24	96
2	CB17S366512	ABINAYA.R	5	5	5	5	5	25	100
3	CB17S366513	ABINESH.P	4	3	3	3	3	16	64
4	CB17S366514	AFFRIN.A	4	4	4	4	5	21	84
5	CB17S366515	AKASH.P	4	3	3	3	3	16	64
6	CB17S366516	AMARNATH.J	4	4	4	3	3	18	72
7	CB17S366517	ANBARASAN.M	4	4	4	4	4	20	80
8	CB17S366518	ARUNKUMAR.K	5	5	4	4	4	22	88
9	CB17S366519	BALAJI.S	4	4	4	4	3	19	76
10	CB17S366521	GOPINATH.S	4	3	3	3	3	16	64
11	CB17S366522	JAYAPRAKASH.K	4	4	3	3	3	17	68
12	CB17S366523	JEFREE GUDWIN.J	4	5	4	4	4	21	84
13	CB17S366524	KANIMOZHIL.B	5	5	5	4	4	23	92
14	CB17S366525	KEERTHANA.R	5	5	5	5	4	24	96
15	CB17S366526	KEERTHIGA.V	5	5	5	5	5	25	100
16	CB17S366527	MARIMUTHU.T	4	3	3	3	3	16	64
17	CB17S366528	NESAMANIK	4	4	3	4	3	18	72
18	CB17S366529	NISHANTH.L	4	4	4	4	3	19	76
19	CB17S366530	PRAGATHI.E	4	4	4	4	4	20	80
20	CB17S366531	PRASANTH.K	4	3	3	3	3	16	64
21	CB17S366532	PUNITHA.R	5	5	5	5	4	24	96
22	CB17S366533	RAM KUMAR.N	3	4	3	3	3	16	64
23	CB17S366534	RAMYANJALI.V	5	5	5	5	4	24	96
24	CB17S366535	RAYMOND.C	5	5	5	3	4	22	88



25	CB17S366536	SENTHIL.G	3	3	3	4	3	16	64
26	CB17S366537	SNEHA.A	4	4	4	4	4	20	80
27	CB17S366538	SOWMIYA.R	5	5	5	5	5	25	100
28	CB17S366539	SUGANTHI.B	5	5	4	4	4	22	88
29	CB17S366540	SURUTHI.M	5	5	5	5	5	25	100
30	CB17S366541	SURYA.C	4	4	3	3	3	17	68
31	CB17S366542	VARTHAN.L.V	4	4	4	4	4	20	80
32	CB17S366543	VIGNESH.R	4	4	4	3	3	18	72
33	CB17S366544	YUVASHREE.M	5	5	4	4	4	22	88
34	CB16S359277	SRUTHIKA.G	5	4	4	4	4	21	60
AVERAGE			4.35	4.24	4.00	3.91	3.74		

EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.35	75	79.35	93.35
CO2	4.24	75	79.24	93.22
CO3	4.00	75	79.00	92.94
CO4	3.91	75	78.91	92.84
CO5	3.74	75	78.74	92.63

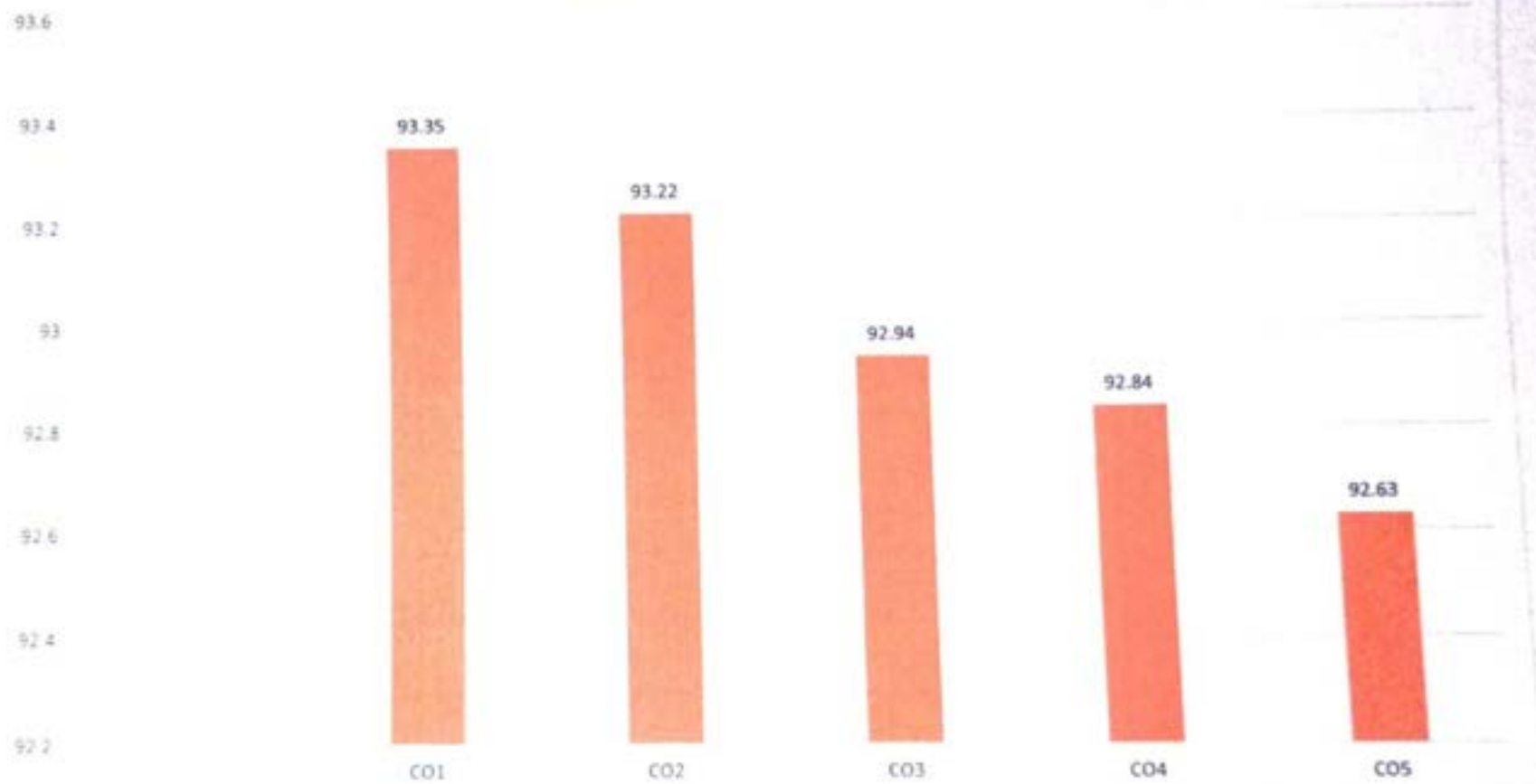
COURSE ATTAINMENT FOR B.SC MATHEMATICS

SUBJECT CODE : 16SMBEMM1:1
SUBJECT NAME : OPERATION RESEARCH
NO.OF STUDENTS : 34

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.35
CO2	93.22
CO3	92.94
CO4	92.84
CO5	92.63



PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR B.SC MATHEMATICS

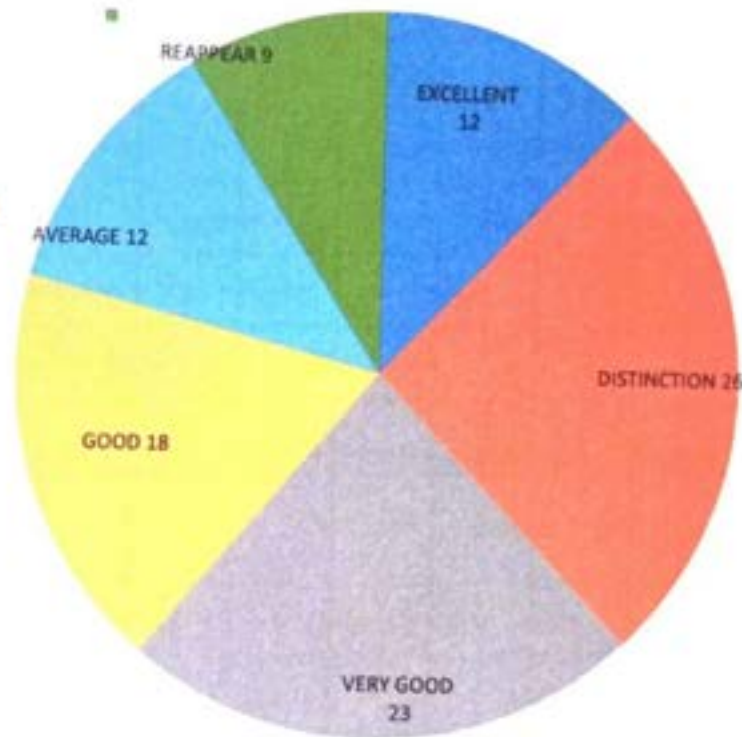
SUBJECT CODE : 16SMBEMM1:1
SUBJECT NAME : OPERATION RESEARCH
NO.OF STUDENTS : 34

COURSE OUTCOME ASSESSMENT		
CATEGORY(MARKS)	NO.OF STUDENTS	STATUS
90 AND ABOVE	0	Out standing
80-89	4	Excellent
70-79	9	Distinction
60-69	8	Very good
50-59	6	Good
40-49	4	Average
BELOW 40	3	Reappear

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY(MARKS)	PERCENTAGE	STATUS
80-89	12	Excellent
70-79	26	Distinction
60-69	23	Very good
50-59	18	Good
40-49	12	Average
BELOW 40	9	Reappear



COURSE OUTCOME ASSESSMENT



- 80-89
- 70-79
- 60-69
- 50-59
- 40-49
- BELOW 40



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DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Remember the fundamental concepts of Mathematics
PO2	Imbibe the skills necessary to effectively translate mathematical aspects to the general public
PO3	Develop Critical thinking ability so as to improve Employability and Decision making.
PO4	Apply Mathematical Models to solve critical problems.
PO5	Apply the concepts studied, in real life situations.

NAME OF THE PROGRAMME: B.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
16SMBEMM2:1 - GRAPH THEORY	CO1	Understand the basic definitions of graphs and their applications
	CO2	Recognize the Characteristics of graph
	CO3	List and relate special graphs
	CO4	Learn about Planar Graphs
	CO5	Understand the concepts of graph theory as an application of mathematics in information technology and its related fields.

PO → CO↓	PO1	PO2	PO3	PO4	PO5
CO1	3	2	3	3	3
CO2	3	3	3	2	2
CO3	3	3	3	3	3
CO4	2	3	3	3	3
CO5	3	2	2	3	3
AVERAGE	2.8	2.6	2.8	2.8	2.8

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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



SNO	REG. NO.	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	CB17S366511	ABINAYA.M	5	5	5	5	5	25	100
2	CB17S366512	ABINAYA.R	5	5	5	5	5	25	100
3	CB17S366513	ABINESH.P	4	4	4	5	5	22	88
4	CB17S366514	AFFRIN.A	4	4	5	5	4	22	88
5	CB17S366515	AKASH.P	4	4	4	4	4	20	80
6	CB17S366516	AMARNATH.J	4	4	4	4	4	20	80
7	CB17S366517	ANBARASAN.M	5	5	5	4	4	23	92
8	CB17S366518	ARUNKUMAR.K	5	5	5	4	5	24	96
9	CB17S366519	BALAJI.S	5	5	4	4	4	22	88
10	CB17S366521	GOPINATH.S	4	4	4	4	4	20	80
11	CB17S366522	JAYAPRAKASH.K	5	4	4	4	4	21	84
12	CB17S366523	JEFREE GUDWIN.J	5	4	5	5	5	24	96
13	CB17S366524	KANIMOZHIL.B	5	5	5	5	5	25	100
14	CB17S366525	KEERTHANA.R	5	5	5	5	5	25	100
15	CB17S366526	KEERTHIGA.V	5	5	5	5	5	25	100
16	CB17S366527	MARIMUTHU.T	4	4	4	4	4	20	80
17	CB17S366528	NESAMANIK	4	4	4	4	4	20	80
18	CB17S366529	NISHANTHIL.F	5	4	4	4	5	22	88
19	CB17S366530	PRAGATHI.E	5	4	4	5	4	22	88
20	CB17S366531	PRASANTH.K	4	4	4	4	4	20	80
21	CB17S366532	PUNITHA.R	5	5	5	5	5	25	100
22	CB17S366533	RAM KUMAR.N	4	4	4	4	5	21	84
23	CB17S366534	RAMYANJALI.V	5	5	5	5	5	25	100
24	CB17S366535	RAYMOND.C	5	5	5	5	5	25	100
25	CB17S366536	SENTHIL.G	4	4	4	4	4	20	80
26	CB17S366537	SNEHA.A	4	4	4	5	5	22	88
27	CB17S366538	SOWMIYA.R	5	5	5	5	5	25	100
28	CB17S366539	SUGANTHIL.B	5	5	4	4	4	22	88
29	CB17S366540	SURUTHI.M	5	5	5	5	5	25	100
30	CB17S366541	SURYA.C	4	4	4	4	5	21	84
31	CB17S366542	VARTHANIL.V	5	5	5	4	4	23	92
32	CB17S366543	VIGNESH.R	5	5	5	5	5	25	100
33	CB17S366544	YUVASHREE.M	5	5	5	5	5	25	100
AVERAGE			4.64	4.52	4.52	4.52	4.58		



EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.64	75	79.64	93.69
CO2	4.52	75	79.52	93.55
CO3	4.52	75	79.52	93.55
CO4	4.52	75	79.52	93.55
CO5	4.58	75	79.58	93.62

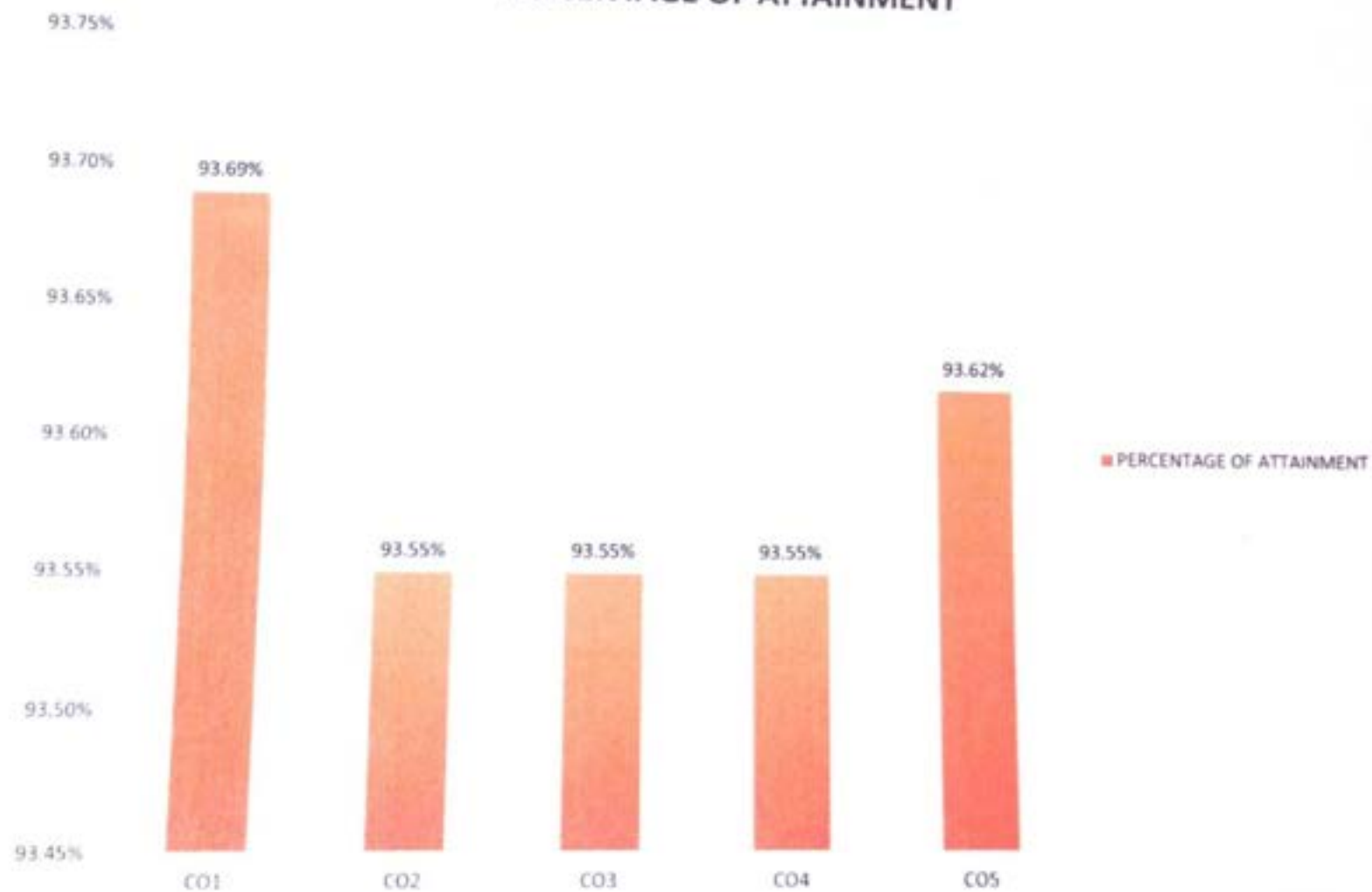
COURSE ATTAINMENT FOR B.Sc., MATHEMATICS

SUBJECT NAME: GRAPH THEORY
 SUBJECT CODE: 16SMBEMM2:1
 NO. OF STUDENTS: 33

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.69%
CO2	93.55%
CO3	93.55%
CO4	93.55%
CO5	93.62%



PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR B.Sc., MATHEMATICS

SUBJECT NAME: GRAPH THEORY

SUBJECT CODE: 16SMBEMM2:1

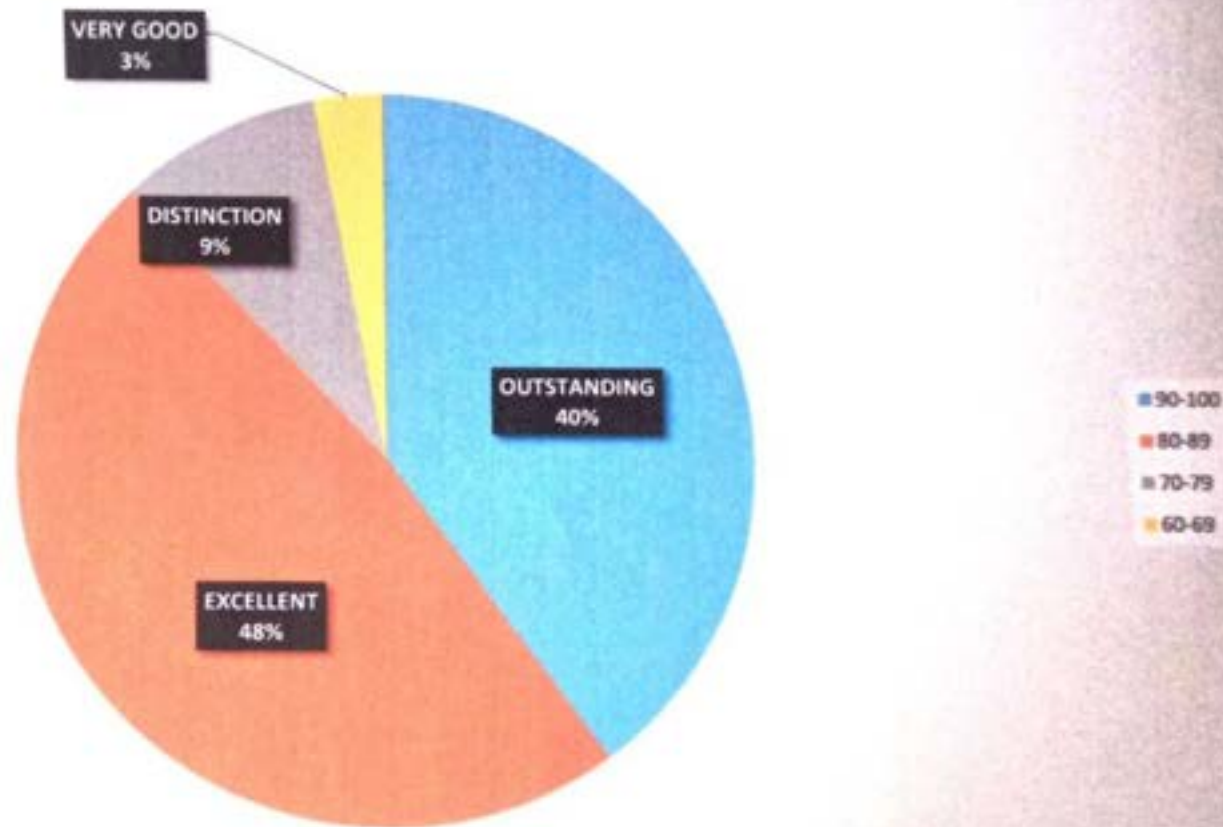
NO. OF STUDENTS: 33

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO. OF STUDENTS	STATUS
90 AND ABOVE	13	OUTSTANDING
80-89	16	EXCELLENT
70-79	3	DISTINCTION
60-69	1	VERY GOOD
50-59	0	GOOD
40-49	0	AVERAGE
BELOW 40	0	RE APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
90-100	40	OUTSTANDING
80-89	48	EXCELLENT
70-79	9	DISTINCTION
60-69	3	VERY GOOD



COURSE OUTCOME ASSESSMENT



[Handwritten Signature]

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**BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
THANJAVUR-5**

**(UGC Recognized 2(f) & 12(B) Institution)
(Affiliated to Bharathidasan University, Tiruchirappalli – 24)**



DEPARTMENT OF MATHEMATICS

PO – CO ATTAINMENT

2020-2021



BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
(UGC Recognized 2(f) & 12(B) Institution)
THANJAVUR-5
DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Identify and enhance mathematical and computational strategies in order to solve mathematical problems.
PO2	Know various specialized areas of advanced mathematics and its applications.
PO3	Work as Professional mathematicians either in academia or elsewhere.
PO4	Inculcate knowledge of formulation and apply mathematical concepts which are suitable for real life applications.
PO5	Crack lectureship and fellowship exams affirmed by UGC like CSIR – NET and SET.

NAME OF THE PROGRAMME: M.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
P16MA12 - REAL ANALYSIS	CO1	Explain Sequences, Limits, Tests of convergence and Rearrangements.
	CO2	Describe the Limits of functions, Continuity and Differentiation of vector valued functions.
	CO3	Derive the existence of the Riemann - Stieltjes integral.
	CO4	Explain Uniform convergence of continuity, integration and differentiation for sequences and series of functions.
	CO5	Describe about the functions of several variables and the contract principle.



PO → CO _i	PO1	PO2	PO3	PO4	PO5
CO1	3	3	3	3	3
CO2	3	3	3	2	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
AVERAGE	3	3	3	2.8	3

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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

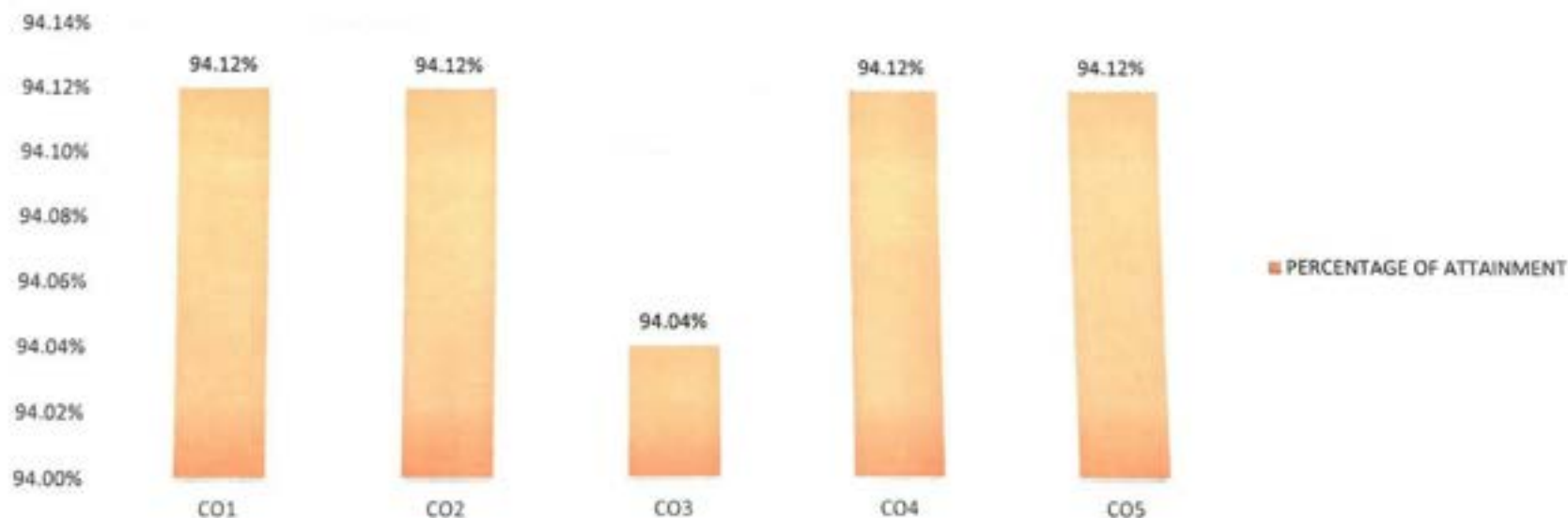


COURSE ATTAINMENT FOR M.Sc., MATHEMATICS

SUBJECT NAME: REAL ANALYSIS
SUBJECT CODE: P16MA12
NO. OF STUDENTS: 15

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	94.12%
CO2	94.12%
CO3	94.04%
CO4	94.12%
CO5	94.12%

PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR M.Sc., MATHEMATICS

SUBJECT NAME: REAL ANALYSIS

SUBJECT CODE: P16MA12

NO. OF STUDENTS: 15

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO. OF STUDENTS	STATUS
90 AND ABOVE	15	OUTSTANDING
80-89	0	EXCELLENT
70-79	0	VERY GOOD
60-69	0	GOOD
50-59	0	ABOVE AVERAGE
BELOW 50	0	RE APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
90-100	100	OUTSTANDING



COURSE OUTCOME ATTAINMENT



90-100



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PRINCIPAL

Bharath College of Science and Management
Bharath Avenue (Near New Bus Stand)
THANJAVUR - 613 005.



BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
(UGC Recognized 2(f) & 12(B) Institution)
THANJAVUR-5
DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Identify and enhance mathematical and computational strategies in order to solve mathematical problems.
PO2	Know various specialized areas of advanced mathematics and its applications.
PO3	Work as Professional mathematicians either in academia or elsewhere.
PO4	Inculcate knowledge of formulation and apply mathematical concepts which are suitable for real life applications.
PO5	Crack lectureship and fellowship exams affirmed by UGC like CSIR – NET and SET.



Name of the Programme : M.Sc Mathematics		
Course Code & Course Title	Course Outcome	
P16MA15 INTEGRAL EQUATIONS, CALCULUS OF VARIATIONS AND TRANSFORMS	CO1	Apply the concepts of calculus of variations to find the maxima and minima of quantities defined as integrals containing unknown functions.
	CO2	Classify various kinds of Fourier sine and cosine transforms with their properties and simple problems.
	CO3	Examine some of Hankel transform and its inverse transform.
	CO4	Determine the solution of Integral equations.
	CO5	Evaluate the integral equations by the method of successive approximations.



PO → CO ₁	PO1	PO2	PO3	PO4	PO5
CO1	3	3	3	3	3
CO2	3	2	3	2	3
CO3	3	3	2	3	2
CO4	3	2	2	3	3
CO5	2	3	3	3	2
AVERAGE	2.8	2.6	2.6	2.8	2.6

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	UNIT TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	P 20193401	ABARNA N	5	5	5	5	5	25	100
2	P 20193402	ABINAYA R	5	5	5	5	5	25	100
3	P 20193403	ANUSUYA R	4	5	5	5	5	25	100
4	P 20193404	ARUN KUMAR K	5	4	5	4	5	25	100
5	P 20193405	KEERTHIGA V	5	5	5	5	4	25	100
6	P 20193406	LAKSHMIPRIYA S	5	5	5	4	5	25	100
7	P 20193407	NANDHINI G	5	4	5	5	5	25	100
8	P 20193408	NIVETHA R	5	5	5	5	5	25	100
9	P 20193409	RAMKUMAR N	4	4	4	5	4	25	100
10	P 20193410	RAMYANJALI V	5	5	4	5	5	25	100
11	P 20193411	RISHNA YASMINE G	5	5	5	4	5	25	100
12	P 20193412	SOWMIYA R	5	4	5	5	5	25	100
13	P 20193413	VARTHANI V	5	4	5	4	5	25	100
14	P 20193414	VERONICA SWEETY PRABHA F	5	5	5	5	5	25	100
15	P 20193415	VIGNESH R	5	5	5	5	4	25	100
		Average	4.87	4.67	4.87	4.73	4.80		



EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.87	75	79.87	93.96
CO2	4.67	75	79.67	93.73
CO3	4.87	75	79.87	93.96
CO4	4.73	75	79.73	93.80
CO5	4.80	75	79.8	93.88

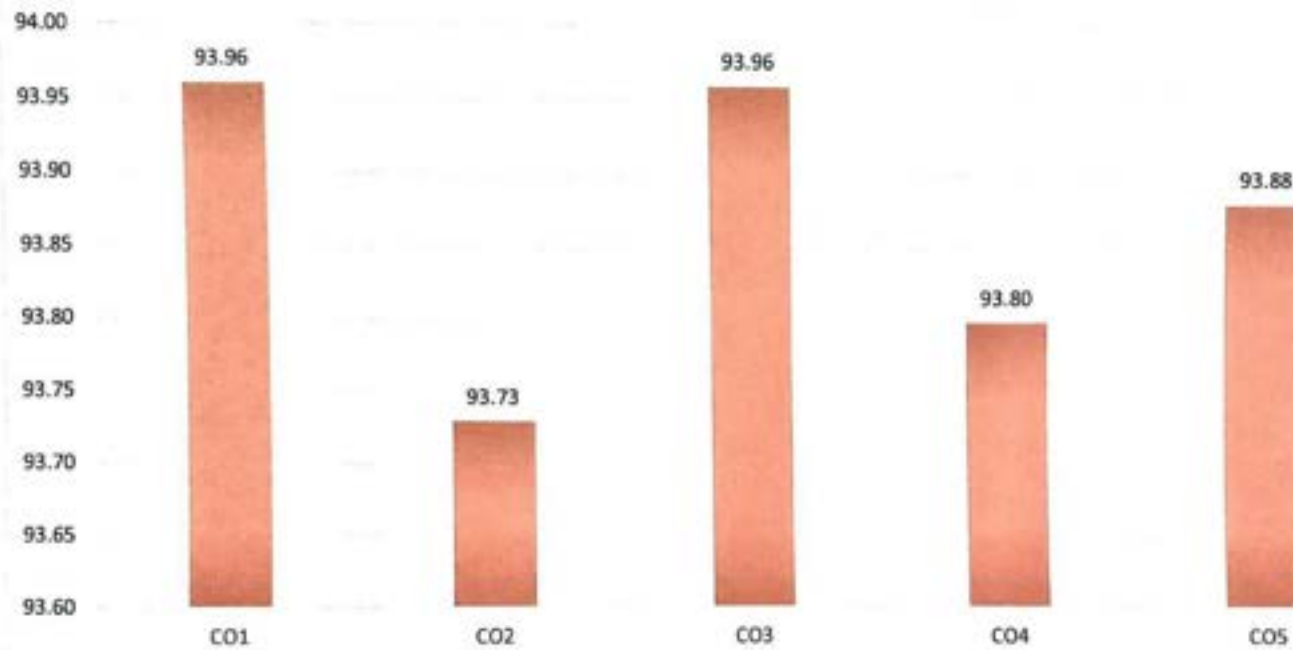
COURSE ATTAINMENT FOR M.Sc MATHEMATICS

SUBJECT NAME : INTEGRAL EQUATIONS, CALCULUS OF VARIATIONS AND TRANSFORMS
SUBJECT CODE : P16MA15
NO.OF STUDENTS : 15

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.96
CO2	93.73
CO3	93.96
CO4	93.80
CO5	93.88



PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR M.Sc MATHEMATICS

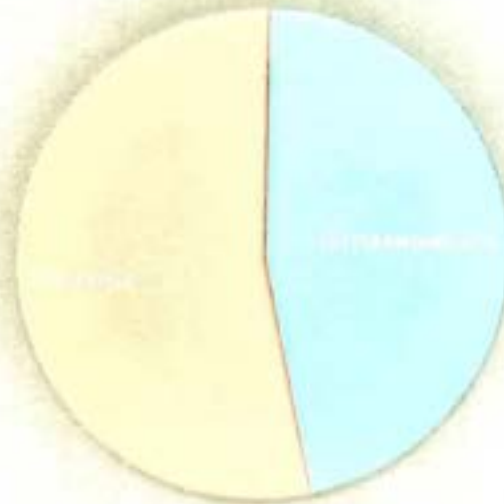
SUBJECT NAME : INTEGRAL EQUATIONS, CALCULUS OF VARIATIONS AND TRANSFORMS
SUBJECT CODE : P16MA15
NO.OF STUDENTS : 15

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO.OF, STUDENTS	STATUS
90 and above(100)	7	OUTSTANDING
80-89	8	EXCELLENT
70-79	0	VERY GOOD
60-69	0	GOOD
50-59	0	ABOVE AVERAGE
Below 50	0	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
90-100	47%	OUTSTANDING
80-89	53%	EXCELLENT



PERCENTAGE



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DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Identify and enhance mathematical and computational strategies in order to solve mathematical problems.
PO2	Know various specialized areas of advanced mathematics and its applications.
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PO4	Inculcate knowledge of formulation and apply mathematical concepts which area suitable for real life applications.
PO5	Crack lectureship and fellowship exams affirmed by UGC like CSIR – NET and SET.

NAME OF THE PROGRAMME: M.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
P16MAE1C - FUZZY SETS AND THEIR APPLICATIONS	CO1	Interpret fuzzy set theory and uncertainty concepts.
	CO2	Identify the similarities and differences between probability theory and fuzzy set theory and their application conditions.
	CO3	Apply fuzzy set theory in modeling and analyzing uncertainty in a decision problem.
	CO4	Apply Decision Making Method.
	CO5	Describe and discuss Multi-person Decision Making-Ranking methods, Fuzzy Linear Programming.



PO → CO ↓	PO1	PO2	PO3	PO4	PO5
CO1	2	3	3	1	3
CO2	3	2	2	2	2
CO3	2	2	2	3	2
CO4	3	2	2	1	3
CO5	2	3	3	3	2
AVERAGE	2.4	2.4	2.4	2	2.4

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	% TO TOTAL INTERNAL MARK
1	P 20193401	ABARNAN	5	5	5	5	5	25	100
2	P 20193402	ABINAYAR	5	5	5	5	4	24	96
3	P 20193403	ANUSUYAR	5	5	5	5	4	24	96
4	P 20193404	ARUN KUMAR.K	5	5	5	4	4	23	92
5	P 20193405	KETRIBHAGAV	5	5	5	5	5	25	100
6	P 20193406	LAKSHIMPRIYAS	5	5	5	5	5	25	100
7	P 20193407	NANDHINIG	4	4	4	5	4	20	80
8	P 20193408	NIVETHAR	5	5	5	5	5	25	100
9	P 20193409	RAMKUMAR.N	4	4	4	4	4	20	80
10	P 20193410	RAMYANJALIV	5	5	5	5	5	25	100
11	P 20193411	RISHINA YASHMINE.G	5	5	5	5	5	25	100
12	P 20193412	SCOWMIYAR	5	5	5	5	5	25	100
13	P 20193413	VARTHANIV	5	5	5	4	4	23	92
14	P 20193414	VIRONICA SWEETY PRABHA.F	5	5	5	4	4	23	92
15	P 20193415	VIGNESHR	5	4	4	4	4	21	84
AVERAGE			4.87	4.80	4.80	4.67	4.47		

EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST + SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.87	75	79.87	93.96
CO2	4.80	75	79.80	93.88
CO3	4.80	75	79.80	93.88
CO4	4.67	75	79.67	93.72
CO5	4.47	75	79.47	93.49



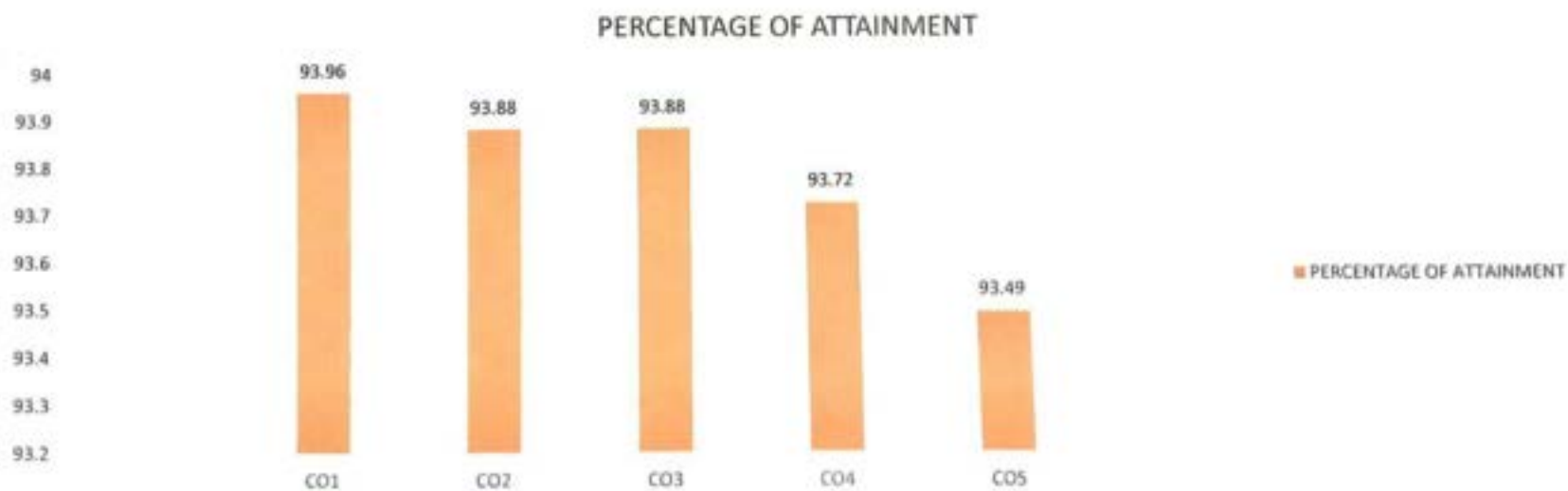
COURSE ATTAINMENT FOR M.SC MATHEMATICS

SUBJECT CODE : P16MAE1C

SUBJECT NAME : FUZZY SETS AND THEIR APPLICATIONS

NO.OF STUDENT: 15

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.96
CO2	93.88
CO3	93.88
CO4	93.72
CO5	93.49



COURSE ATTAINMENT FOR M.SC MATHEMATICS

SUBJECT CODE : P16MAE1C

SUBJECT NAME : FUZZY SETS AND THEIR APPLICATIONS

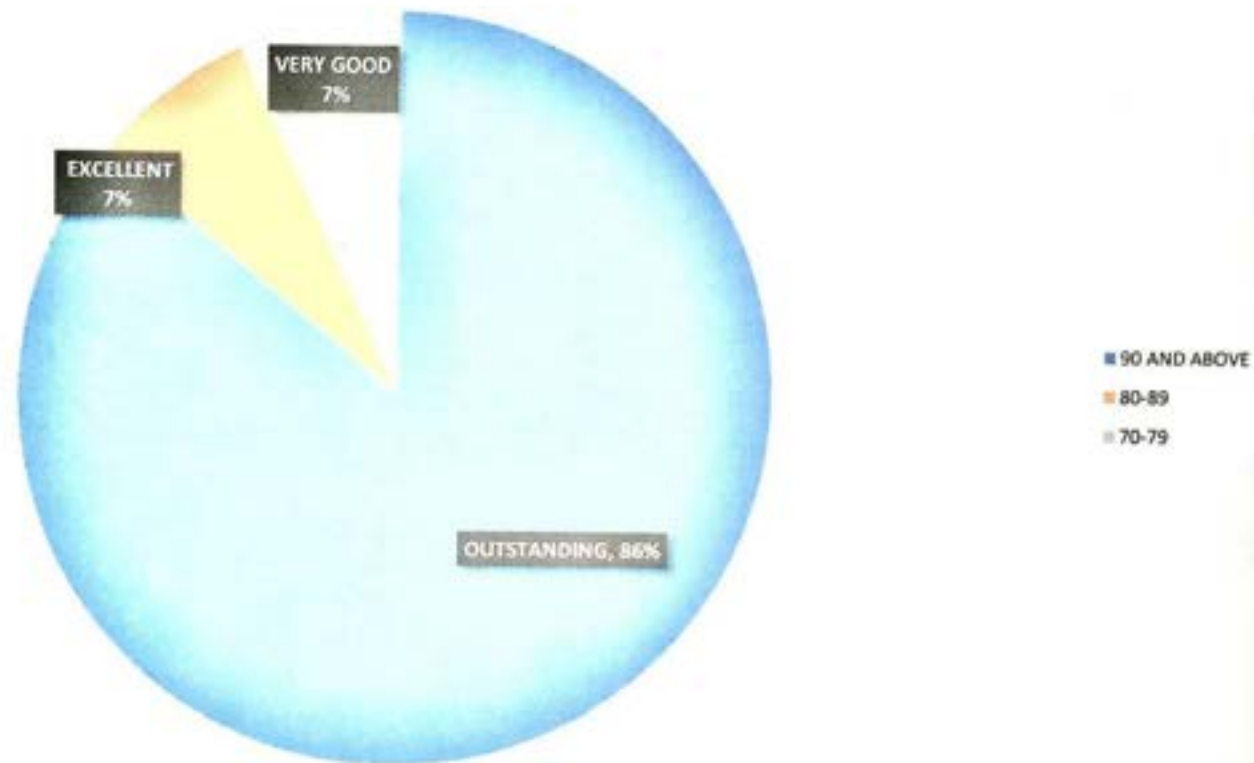
NO.OF STUDENT:: 15

COURSE OUTCOME ASSESSMENT		
CATEGORY(MARKS)	NO.OF STUDENTS	STATUS
90 AND ABOVE	13	Out standing
80-89	1	Excellent
70-79	1	Very good
60-69	0	Good
50-59	0	Average
BELOW 49	0	Reappear

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY(MARKS)	PERCENTAGE	STATUS
90 AND ABOVE	86%	Out standing
80-89	7%	Excellent
70-79	7%	Very good



COURSE OUTCOME ASSESSMENT



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ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

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PO4	Inculcate knowledge of formulation and apply mathematical concepts which are suitable for real life applications.
PO5	Crack lectureship and fellowship exams affirmed by UGC like CSIR – NET and SET.

NAME OF THE PROGRAMME: M.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
P16MA21 - COMPLEX ANALYSIS	CO1	Complex analysis, in particular the theory of conformal mappings, has many physical applications and is also used throughout analytic number theory.
	CO2	Prove that Cauchy's theorem for a rectangle and disk, Use Cauchy's integral theorem and formula to compute line integrals.
	CO3	Classify Removable singularities, Zeros and poles and Describe the local mapping.
	CO4	Demonstrate Homology and prove general form of Cauchy theorem.
	CO5	Describe the harmonic functions and calculus of residue.



PO → CO _i	PO1	PO2	PO3	PO4	PO5
CO1	3	3	3	3	3
CO2	3	3	2	2	3
CO3	3	2	3	3	3
CO4	3	3	2	3	3
CO5	2	3	3	3	2
AVERAGE	2.8	2.8	2.6	2.8	2.8

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	P20193401	ABARNA N	5	5	5	5	5	25	100
2	P20193402	ABINAYA R	5	5	4	5	5	24	96
3	P20193403	ANUSUYA R	5	5	5	4	5	24	96
4	P20193404	ARUN KUMAR K	5	4	4	4	5	23	92
5	P20193405	KEERTHIGA V	5	5	5	5	5	25	100
6	P20193406	LAKSHMIPRIYA S	5	5	5	5	5	25	100
7	P20193407	NANDHINI G	4	4	4	4	4	20	80
8	P20193408	NIVETHA R	5	5	5	5	5	25	100
9	P20193409	RAMKUMAR N	4	4	4	4	4	20	80
10	P20193410	RAMYANJALI V	5	5	5	5	5	25	100
11	P20193411	RISHNA YASMINE G	5	5	5	4	5	24	96
12	P20193412	SOWMIYA R	5	5	5	5	5	25	100
13	P20193413	VARTHANI V	5	5	5	5	5	25	100
14	P20193414	VERONICA SWEETY PRABHA F	4	4	4	4	4	20	80
15	P20193415	VIGNESH R	5	4	4	4	5	22	88
AVERAGE			4.80	4.67	4.60	4.53	4.80		

EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.80	75	79.80	93.88
CO2	4.67	75	79.67	93.73
CO3	4.60	75	79.60	93.65
CO4	4.53	75	79.53	93.57
CO5	4.80	75	79.80	93.88



COURSE ATTAINMENT FOR M.Sc., MATHEMATICS

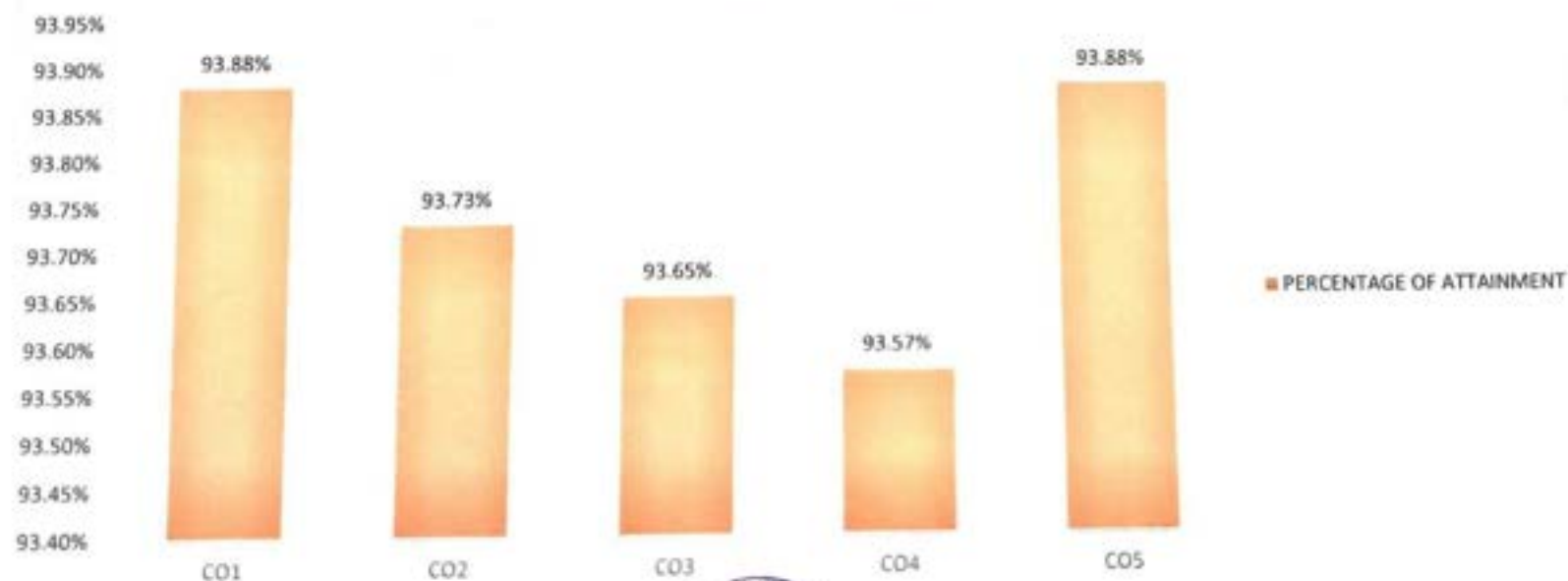
SUBJECT NAME: COMPLEX ANALYSIS

SUBJECT CODE: P16MA21

NO. OF STUDENTS: 15

COURSE OUTCOME	ATTAINMENT
CO1	93.88%
CO2	93.73%
CO3	93.65%
CO4	93.57%
CO5	93.88%

PERCENTAGE OF ATTAINMENT



SUBJECT CODE: P16MA21

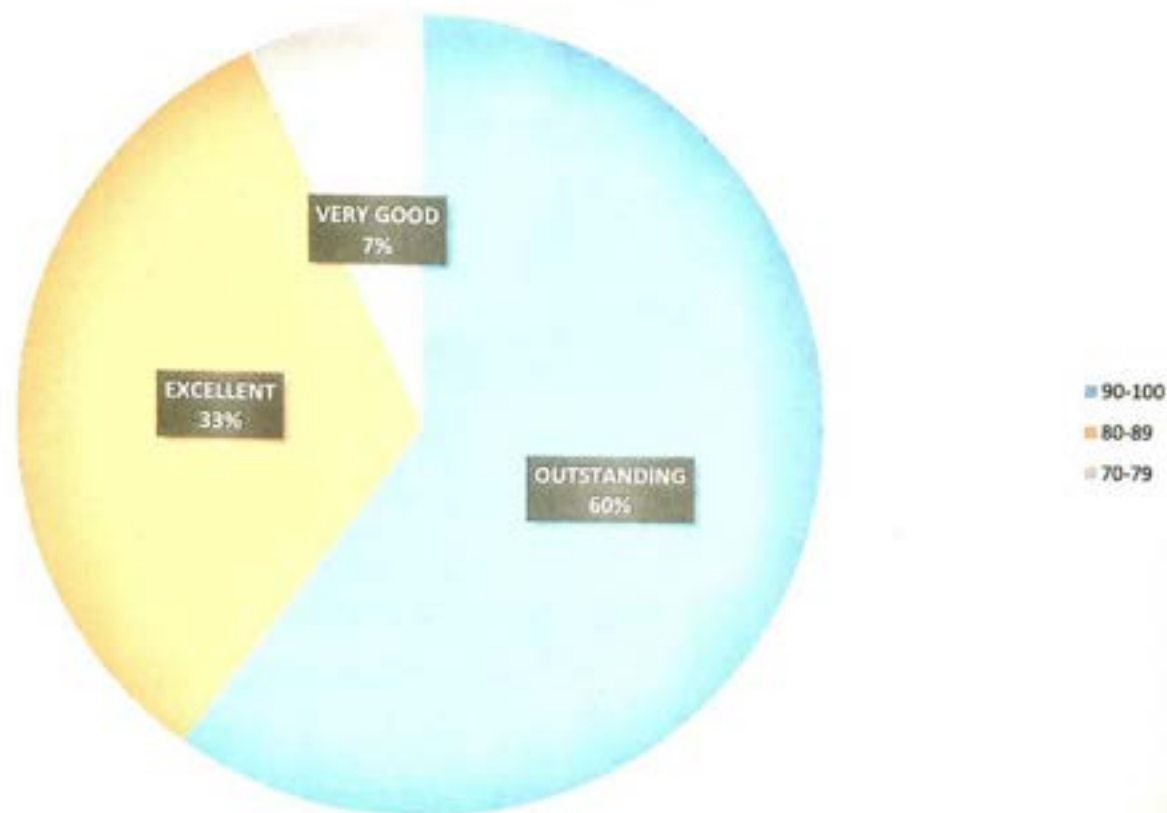
NO. OF STUDENTS: 15

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO. OF STUDENTS	STATUS
90 AND ABOVE	9	OUTSTANDING
80-89	5	EXCELLENT
70-79	1	VERY GOOD
60-69	0	GOOD
50-59	0	ABOVE AVERAGE
BELOW 50	0	RE APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
90-100	60	OUTSTANDING
80-89	33	EXCELLENT
70-79	7	VERY GOOD



COURSE OUTCOME ASSESSMENT



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THANJAVUR-5
DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Identify and enhance mathematical and computational strategies in order to solve mathematical problems.
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PO5	Crack lectureship and fellowship exams affirmed by UGC like CSIR – NET and SET.

NAME OF THE PROGRAMME: M.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
P16MA22 - LINEAR ALGEBRA	CO1	Learn about bases and dimension.
	CO2	Acquire knowledge about linear transformation.
	CO3	Understand the polynomial ideals and the prime factorization of polynomials.
	CO4	Understand the permutations and the uniqueness of determinants.
	CO5	Learn about triangularization and diagonalization.



PO → CO ₁	PO1	PO2	PO3	PO4	PO5
CO1	3	3	2	2	3
CO2	3	3	3	2	2
CO3	3	2	2	2	3
CO4	3	2	2	3	3
CO5	3	2	3	3	2
AVERAGE	3	2.4	2.4	2.4	2.6

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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

SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	P 20193401	ABARNA N	5	5	5	5	5	25	100
2	P 20193402	ABINAYA. R	5	4	5	5	5	24	96
3	P 20193403	ANUSUYA R	5	5	5	4	5	24	96
4	P 20193404	ARUN KUMAR K	4	4	4	5	5	22	88
5	P 20193405	KEERTHIGA V	5	5	5	5	5	25	100
6	P 20193406	LAKSHMPRIYA S	5	5	5	4	5	24	96
7	P 20193407	NANDHINI G	4	4	4	4	4	20	80
8	P 20193408	NIVETHA R	5	4	5	5	5	24	96
9	P 20193409	RAMKUMAR N	4	4	4	4	4	20	80
10	P 20193410	RAMYANJALI V	5	5	5	4	5	24	96
11	P 20193411	RISHNA YASMINE G	5	5	5	5	5	25	100
12	P 20193412	SOWMIYA. R	5	5	5	5	5	25	100
13	P 20193413	VARTHANI V	5	5	5	4	5	24	96
14	P 20193414	VERONICA SWEETY PRABHA F	5	5	5	5	5	25	100
15	P 20193415	VIGNESH R	5	4	4	4	4	21	84
AVERAGE			4.80	4.60	4.73	4.53	4.80		



EXPECTED ATTAINMENT IN EACH CO - 85%

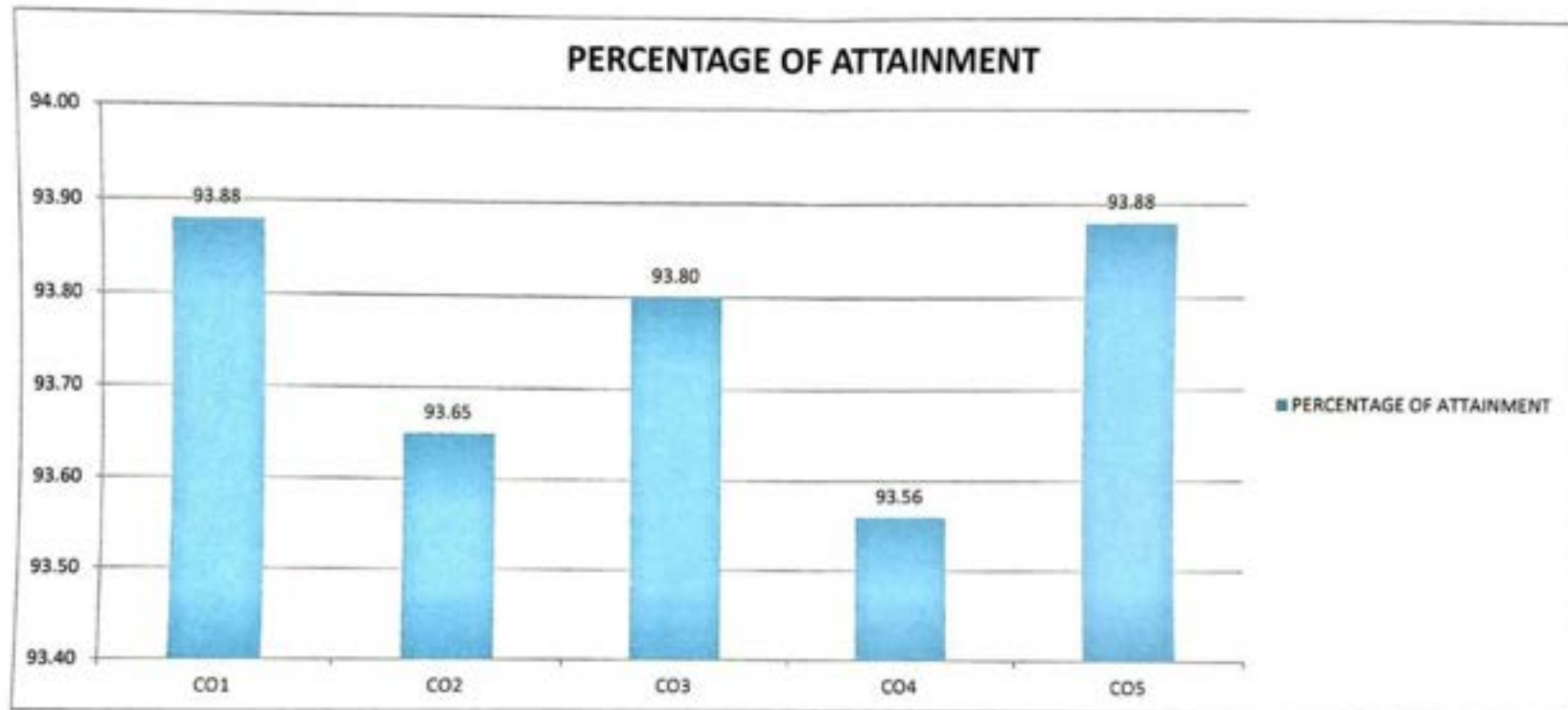
CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.80	75	79.80	93.88
CO2	4.60	75	79.60	93.65
CO3	4.73	75	79.73	93.80
CO4	4.53	75	79.53	93.56
CO5	4.80	75	79.80	93.88

SUBJECT NAME:
SUBJECT CODE:
NO. OF STUDENTS:

COURSE ATTAINMENT FOR M. SC., MATHEMATICS
LINEAR ALGEBRA
P16MA22
15

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.88
CO2	93.65
CO3	93.80
CO4	93.56
CO5	93.88





SUBJECT NAME:
SUBJECT CODE:
NO. OF STUDENTS:

COURSE ATTAINMENT FOR M. SC., MATHEMATICS

LINEAR ALGEBRA

P16MA22

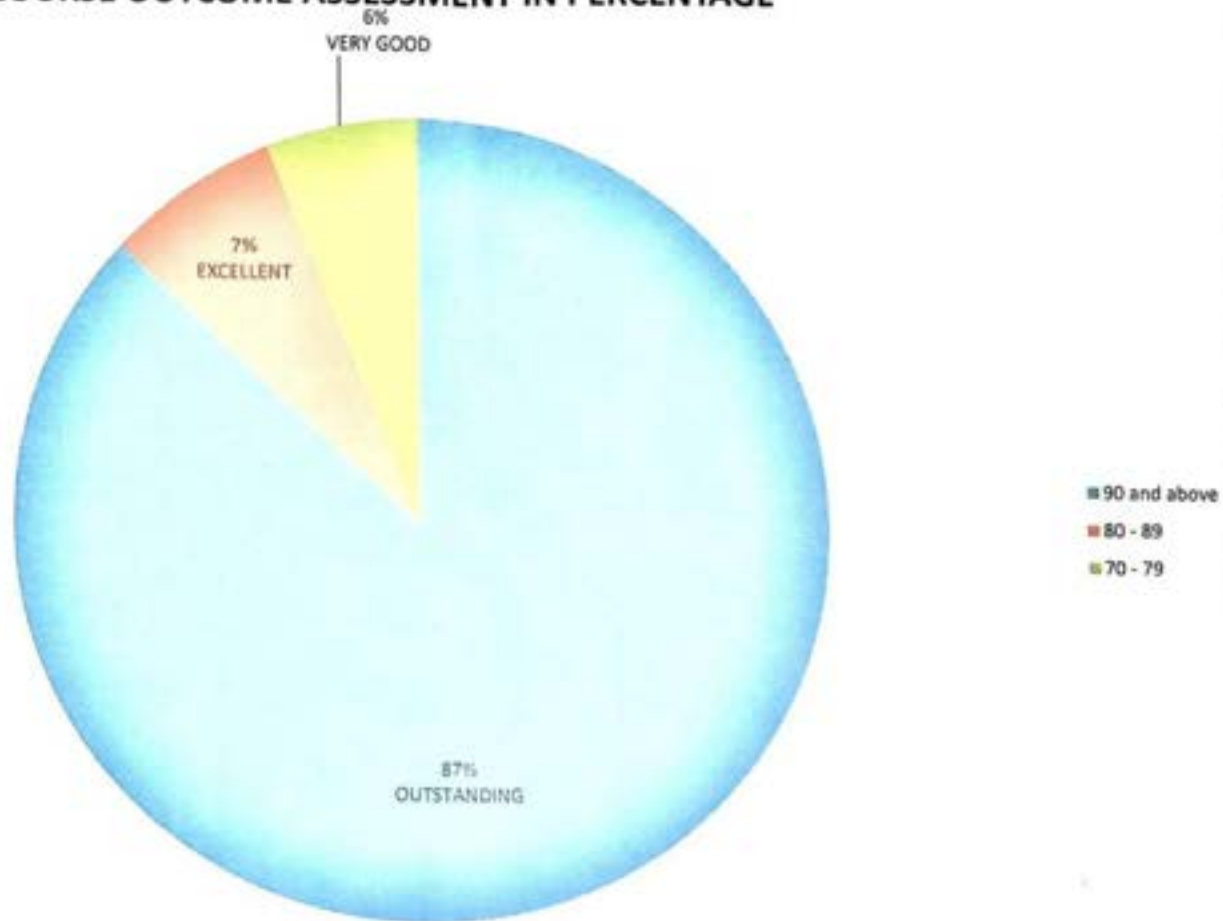
15

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO. OF STUDENTS	STATUS
90 and above	13	OUTSTANDING
80 - 89	1	EXCELLENT
70 - 79	1	VERY GOOD
60 - 69	0	GOOD
50 - 59	0	ABOVE AVERAGE
Below 50	0	RE - APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
90 and above	87	OUTSTANDING
80 - 89	7	EXCELLENT
70 - 79	6	VERY GOOD



COURSE OUTCOME ASSESSMENT IN PERCENTAGE



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ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

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NAME OF THE PROGRAMME: M.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
P16MA31 - CLASSICAL DYNAMICS	CO1	Define mechanical system, Generalized Co-ordinates, Constraints and Virtual work.
	CO2	Derivation of Lagrange's equation and integrals of motion
	CO3	Construct the applications of Lagrange's equations and Gyroscopic systems
	CO4	Write Hamilton's principle function and variational principles.
	CO5	The use of Hamilton-Jacobi equation and Separability.



PO → CO ↓	PO1	PO2	PO3	PO4	PO5
CO1	3	3	3	3	3
CO2	3	2	3	2	3
CO3	3	3	2	3	2
CO4	3	2	2	3	3
CO5	2	3	3	3	2
AVERAGE	2.8	2.6	2.6	2.8	2.6

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	P19192501	ABINAYA.C	5	5	5	5	5	25	100
2	P19192502	AINTHAMIL SELVI.T	5	5	5	5	5	25	100
3	P19192503	AJITH.J	5	5	5	5	5	25	100
4	P19192504	ANUPRIYADHARSHINLR	4	4	4	4	4	20	80
5	P19192505	BHUVANESHWARLR	5	5	5	5	4	24	96
6	P19192506	BHUVANESWARLC	5	5	5	5	5	25	100
7	P19192507	HEMALATHA.K	5	5	5	5	5	25	100
8	P19192508	JAYASURYA.T	5	5	5	5	5	25	100
9	P19192509	LATCHAYA.G	5	5	5	5	5	25	100
10	P19192510	PRAKASH.M	5	5	5	5	5	25	100
11	P19192511	PRIYANKA.J	5	5	5	5	5	25	100
12	P19192512	PUSHKARANYA.M	5	5	5	5	5	25	100
13	P19192513	RABIYA.D	5	5	5	5	4	24	96
14	P19192514	RAJESH.K	5	5	5	5	5	25	100
15	P19192515	RANJITH KUMAR.R	4	4	4	4	4	20	80
16	P19192516	SAKTHIVEL.K	5	4	4	4	5	22	84
17	P19192517	SANGEETHA.S	5	5	5	5	5	25	88
18	P19192518	SUGANYA.A	5	5	5	5	5	25	100
19	P19192519	TAMILALAGANA.A	4	4	4	4	4	20	80
20	P19192521	VINOTHINI.M	5	5	5	5	5	25	100
AVERAGE			4.85	4.80	4.80	4.80	4.75		

EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.85	75	79.85	93.94
CO2	4.80	75	79.80	93.88
CO3	4.80	75	79.80	93.88
CO4	4.80	75	79.80	93.88
CO5	4.75	75	79.75	93.82



COURSE ATTAINMENT FOR M.Sc., MATHEMATICS

SUBJECT NAME: CLASSICAL DYNAMICS
SUBJECT CODE: P16MA31
NO. OF STUDENTS: 20

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.94%
CO2	93.88%
CO3	93.88%
CO4	93.88%
CO5	93.82%

PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR M.Sc., MATHEMATICS

SUBJECT NAME: CLASSICAL DYNAMICS

SUBJECT CODE: P16MA31

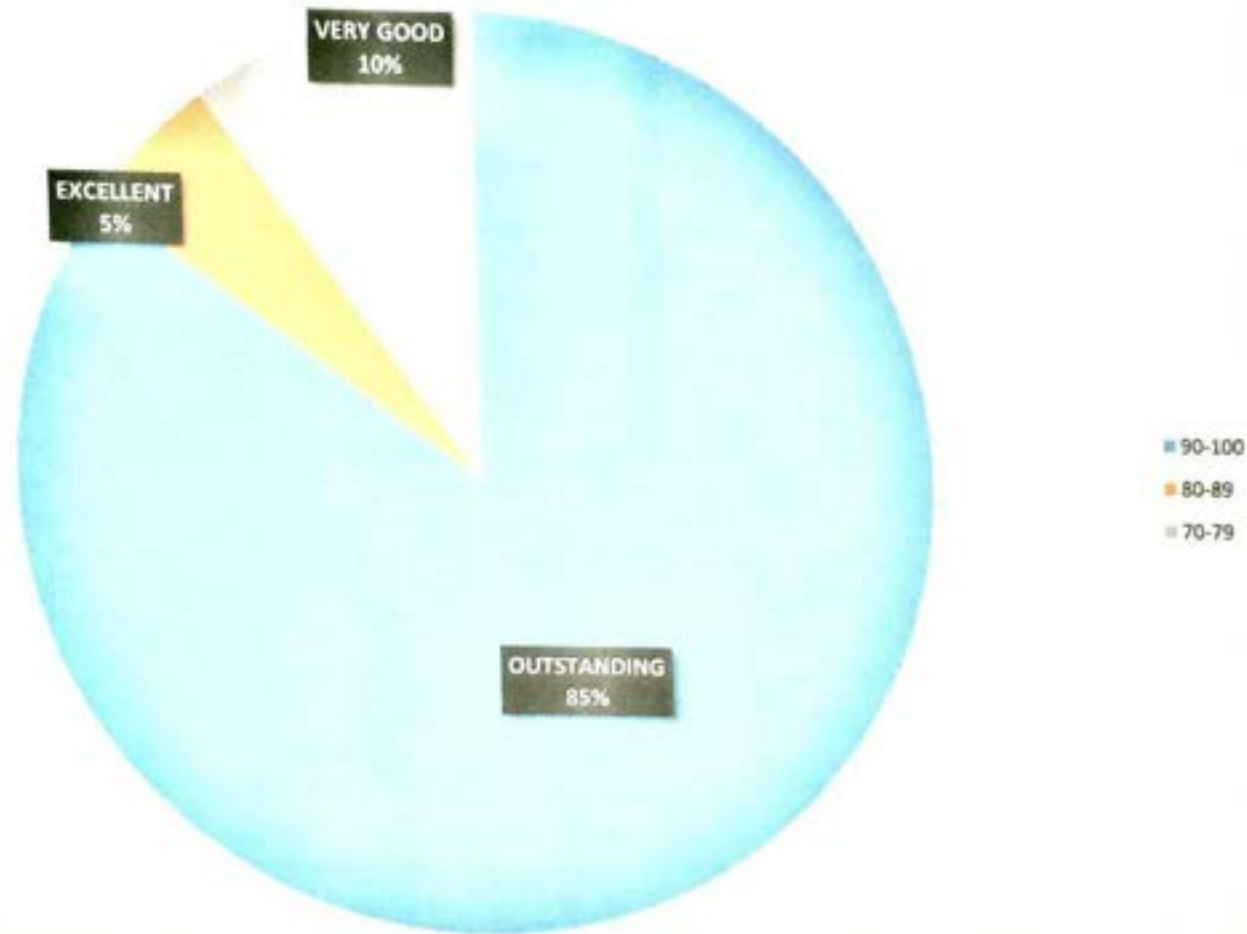
NO. OF STUDENTS: 20

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO. OF STUDENTS	STATUS
90 AND ABOVE	17	OUTSTANDING
80-89	1	EXCELLENT
70-79	2	VERY GOOD
60-69	0	GOOD
50-59	0	ABOVE AVERAGE
BELOW 50	0	RE APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
90-100	85	OUTSTANDING
80-89	5	EXCELLENT
70-79	10	VERY GOOD



COURSE OUTCOME ATTAINMENT



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Bharath Avenue (Near New Bus Stand)
THANJAVUR - 613 005.



BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
(UGC Recognized 2(f) & 12(B) Institution)
THANJAVUR-5
PG DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Identify and enhance mathematical and computational strategies in order to solve mathematical problems.
PO2	Know various specialized areas of advanced mathematics and its applications.
PO3	Work as Professional mathematicians either in academia or elsewhere.
PO4	Inculcate knowledge of formulation and apply mathematical concepts which are suitable for real life applications.
PO5	Crack lectureship and fellowship exams affirmed by UGC like CSIR – NET and SET.

NAME OF THE PROGRAMME: M.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
P16MA33 - TOPOLOGY	CO1	Define topological spaces and explain the properties of order topology, product topology, subspace topology, continuous functions.
	CO2	Describe the properties on metric topology
	CO3	Gain the knowledge of connected spaces.
	CO4	Apply domain knowledge for compact space with examples.
	CO5	State and prove Urysohn lemma, Urysohn Metrization theorem and The Tietz Extension Theorem.

PO → CO _i	PO1	PO2	PO3	PO4	PO5
CO1	3	2	2	2	0
CO2	2	3	3	2	1
CO3	3	3	3	3	0
CO4	3	2	3	3	0
CO5	3	3	3	2	0
AVERAGE	2.8	2.6	2.8	2.4	0.2

CO	INTERNAL (25)		
	UNIT TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	P 19192501	ABINAYA.C	5	5	5	5	4	24	96
2	P 19192502	AINTHAMIL SELVI.T	5	5	5	5	5	25	100
3	P 19192503	AJITH.J	5	5	5	5	5	25	100
4	P 19192504	ANUPRIYADHARSHINI.R	5	5	4	4	4	22	88
5	P 19192505	BHUVANESHWARI.R	5	5	5	5	5	25	100
6	P 19192506	BHUVANESWARIC	5	5	5	5	5	25	100
7	P 19192507	HEMALATHA.K	5	5	5	5	5	25	100
8	P 19192508	JAYASURYA.T	5	5	5	5	5	25	100
9	P 19192509	LATCHAYA.G	5	5	5	5	5	25	100
10	P 19192510	PRAKASH.M	5	5	5	5	5	25	100
11	P 19192511	PRIYANKA.J	5	5	5	5	5	25	100
12	P 19192512	PUSHKARANYA.M	5	5	5	5	5	25	100
13	P 19192513	RABIYA.D	5	5	5	5	5	25	100
14	P 19192514	RAJESH.K	5	5	5	5	5	25	100
15	P 19192515	RANJITH KUMAR.R	5	4	4	4	4	21	84
16	P 19192516	SAKTHIVEL.K	5	5	5	5	5	25	100
17	P 19192517	SANGEETHA.S	5	5	5	5	5	25	100
18	P 19192518	SUGANYA.A	5	5	5	5	5	25	100
19	P 19192519	TAMILALAGAN.A	5	5	5	4	4	23	92
20	P 19192521	VINOTHINLM	5	5	5	5	5	25	100
AVERAGE			5.00	4.95	4.90	4.85	4.80		

EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST + SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	5.00	75	80.00	94.12
CO2	4.95	75	79.95	94.06
CO3	4.90	75	79.90	94.00
CO4	4.85	75	79.85	93.94
CO5	4.80	75	79.80	93.88



COURSE ATTAINMENT FOR M.Sc MATHEMATICS

SUBJECT NAME : TOPOLOGY
SUBJECT CODE : P16MA33
NO OF STUDENTS : 20

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	94.12
CO2	94.06
CO3	94.00
CO4	93.94
CO5	93.88

PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR M.Sc MATHEMATICS

SUBJECT NAME : TOPOLOGY
SUBJECT CODE : P16MA33
NO OF STUDENTS : 20

COURSE OUTCOME ASSESSMENT

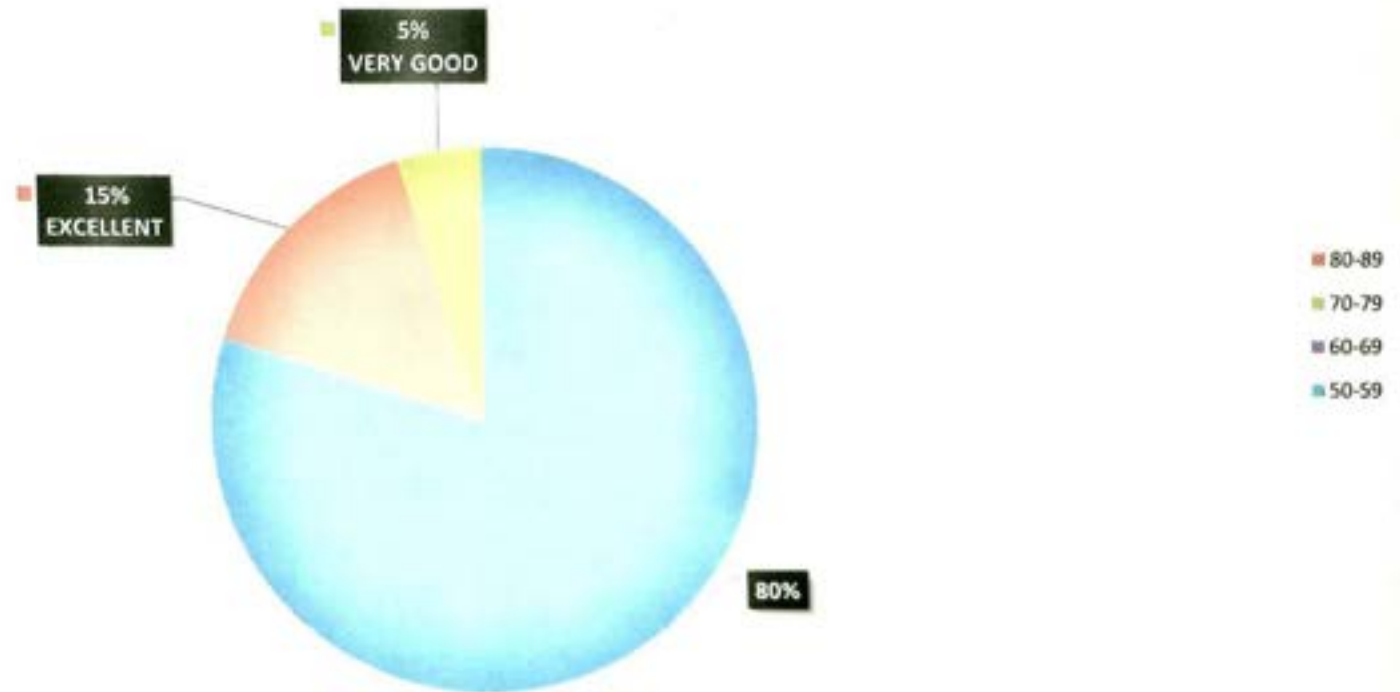
CATEGORY MARKS	NO OF STUDENTS	STATUS
90 and above (100)	16	OUTSTANDING
80-89	3	EXCELLENT
70-79	1	VERY GOOD
60-69	0	GOOD
50-59	0	ABOVE AVERAGE
below 49	0	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE (%)

CATEGORY MARKS	PERCENTAGE	STATUS
90 and Above	80	EXCELLENT
80-89	15	VERY GOOD
70-79	5	GOOD



COURSE OUTCOME ASSESSMENT IN PERCENTAGE




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Bharath Avenue (Near New Bus Stand)
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BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
(UGC Recognized 2(f) & 12(B) Institution)
THANJAVUR-5
DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Identify and enhance mathematical and computational strategies in order to solve mathematical problems.
PO2	Know various specialized areas of advanced mathematics and its applications.
PO3	Work as Professional mathematicians either in academia or elsewhere.
PO4	Inculcate knowledge of formulation and apply mathematical concepts which are suitable for real life applications
PO5	Crack lectureship and fellowship exams affirmed by UGC like CSIR – NET and SET.

COURSE CODE & COURSE TITLE	Name of the Programme: M.Sc Mathematics	
	COURSE OUTCOME	
P16MA42 DIFFERENTIAL GEOMETRY	CO1	Concept of space curve, Arc length, tangent, normal and binormal, curvature and torsion, contact between curves and surfaces, tangent surface.
	CO2	Learn the curves on a surface, Surface of revolution, Helicoid, Metric, Direction coefficients, families of curves, Isometric correspondence, Intrinsic properties.
	CO3	Compute the Geodesics, Canonical geodesic equations, Normal property of geodesics, Geodesic parallels, Geodesics curvature, Gauss- Bonnet Theorem.
	CO4	Ability to understand the second fundamental form, Principal curvature, Lines of curvature, Developable, Developable associated with space curves and with curves on surface.
	CO5	Learn Compact surfaces whose points are umbilics, Compact surface of constant curvature, Complete surface and their characterization, Hilbert's Theorem.



PO → CO↓	PO1	PO2	PO3	PO4	PO5
CO1	3	2	2	2	3
CO2	3	2	3	2	2
CO3	2	3	2	3	2
CO4	3	1	3	1	3
CO5	2	3	3	3	1
AVERAGE	2.6	2.2	2.6	2.2	2.2

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	P 19192501	ABINAYA.C	4	5	5	5	5	24	96
2	P 19192502	AINTHAMILSELVIT	5	5	4	5	5	24	96
3	P 19192503	AJITHJ	5	5	5	5	5	25	100
4	P 19192504	ANUPRIYADHARSHINLR	4	4	5	4	4	21	84
5	P 19192505	BHUNANESHWARLR	5	4	4	5	4	22	88
6	P 19192506	BHUNANESWARLC	5	5	5	5	5	25	100
7	P 19192507	HEMALATHIA.K	5	5	5	5	5	25	100
8	P 19192508	JAYASURYA.T	5	5	5	5	5	25	100
9	P 19192509	LATCHIAYA.G	5	5	5	5	5	25	100
10	P 19192510	PRAKASHLM	5	5	5	5	5	25	100
11	P 19192511	PRIYANKAJ	5	5	5	5	5	25	100
12	P 19192512	PUSHIKARANYA.M	5	5	5	5	5	25	100
13	P 19192513	RAHIYA.D	5	5	4	5	5	24	96
14	P 19192514	RAJESILK	5	5	5	5	5	25	100
15	P 19192515	RANJITH KUMAR.R	4	4	4	4	5	21	84
16	P 19192516	SAKTHIVEL.K	4	5	5	5	5	24	96
17	P 19192517	SANGEETHA.S	5	5	4	5	4	23	92
18	P 19192518	SUGANYA.A	5	5	5	5	5	25	100
19	P 19192519	TAMILALAGANA	5	5	4	5	4	23	92
20	P 19192521	VINOTHINLM	5	4	5	5	5	24	96
AVERAGE			4.80	4.80	4.70	4.90	4.80		



EXPECTED ATTAINMENT IN EACH CO - 85%

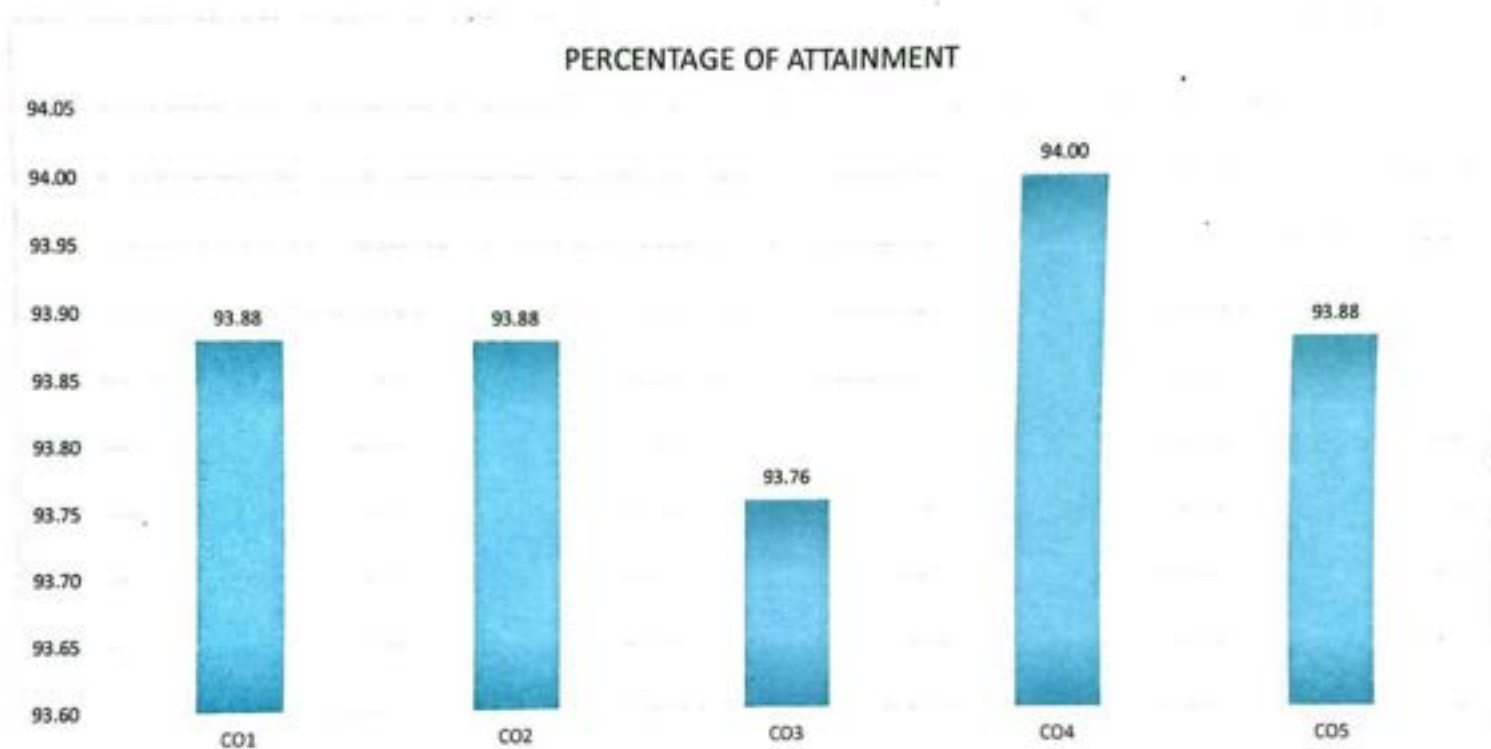
CO	TEST + SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.80	75	79.8	93.88
CO2	4.80	75	79.8	93.88
CO3	4.70	75	79.7	93.76
CO4	4.90	75	79.9	94.00
CO5	4.80	75	79.8	93.88

COURSE ATTAINMENT FOR M.Sc MATHEMATICS

SUBJECT NAME : DIFFERENTIAL GEOMETRY
 SUBJECT CODE : P16MA42
 NO.OF STUDENTS : 20

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.88
CO2	93.88
CO3	93.76
CO4	94.00
CO5	93.88





COURSE ATTAINMENT FOR M.Sc MATHEMATICS

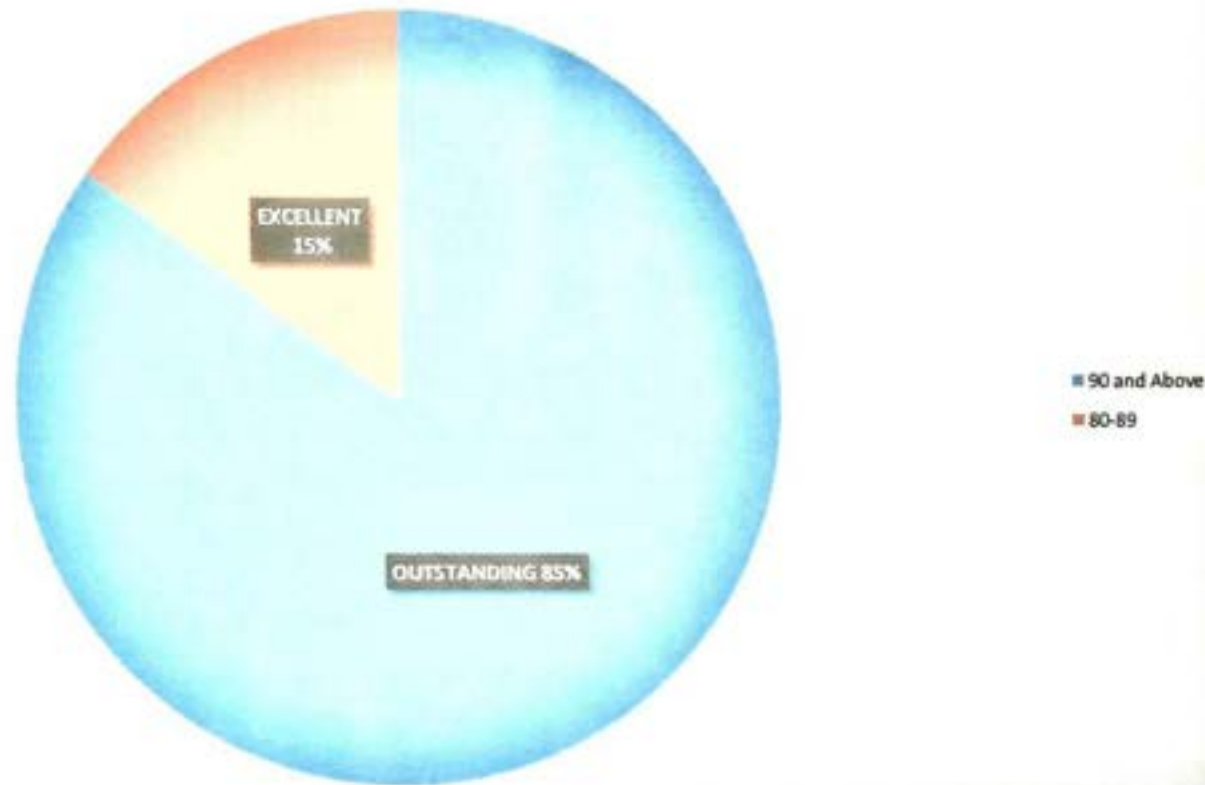
SUBJECT NAME : DIFFERENTIAL GEOMETRY
 SUBJECT CODE : P16MA42
 NO.OF STUDENTS : 20

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO.OF. STUDENTS	STATUS
90 and above(100)	17	OUTSTANDING
80-89	3	EXCELLENT
70-79	0	DISTINCTION
60-69	0	VERY GOOD
50-59	0	GOOD
40-49	0	AVERAGE
Below 40	0	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
90 and Above	85%	OUTSTANDING
80-89	15%	EXCELLENT



COURSE OUTCOME ASSESSMENT



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THANJAVUR-5

DEPARTMENT OF MATHEMATICS

ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Identify and enhance mathematical and computational strategies in order to solve mathematical problems.
PO2	Know various specialized areas of advanced mathematics and its applications.
PO3	Work as Professional mathematicians either in academia or elsewhere.
PO4	Inculcate knowledge of formulation and apply mathematical concepts which are suitable for real life applications.
PO5	Crack lectureship and fellowship exams affirmed by UGC like CSIR – NET and SET.

Name of the Programme: M.Sc Mathematics

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
P16MA43 ADVANCED NUMERICAL ANALYSIS	CO1	Apply various methods to solve transcendental and polynomial equations
	CO2	Solve system of linear algebraic equations and Eigen value problems
	CO3	Classify the various techniques of interpolation and approximation.
	CO4	Compute the integration and differentiation problems.
	CO5	Determine the various methods to solve ordinary differential equations



PO → CO ↓	PO1	PO2	PO3	PO4	PO5
CO1	3	3	3	3	3
CO2	3	3	3	2	3
CO3	3	2	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
AVERAGE	3	2.8	3	2.8	3

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	P 19192501	ABINAYA.C	5	4	5	4	5	23	92
2	P 19192502	AINTHAMILSELVLT	5	4	5	5	4	23	92
3	P 19192503	AJITH.J	5	5	4	5	5	24	96
4	P 19192504	ANUPRIYADHARSHINLR	5	4	4	4	4	21	84
5	P 19192505	BHUNANESHWARLR	5	4	5	5	5	24	96
6	P 19192506	BHUNANESWARIC	5	5	5	5	5	25	100
7	P 19192507	HEMALATHA.K	5	5	5	5	5	25	100
8	P 19192508	JAYASURYA.T	5	5	5	5	5	25	100
9	P 19192509	LATCHAYA.G	5	5	5	5	5	25	100
10	P 19192510	PRAKASH.M	5	5	4	5	5	24	96
11	P 19192511	PRIYANKA.J	5	5	5	5	5	25	100
12	P 19192512	PUSHKARANYA.M	4	5	5	5	5	24	96
13	P 19192513	RABIYA.D	4	5	5	5	4	23	92
14	P 19192514	RAJESH.K	5	5	5	5	5	25	100
15	P 19192515	RANJITH KUMAR.R	4	4	5	5	4	22	88
16	P 19192516	SAKTHIVEL.K	5	4	4	5	5	23	92
17	P 19192517	SANGEETHA.S	4	4	4	5	5	22	88
18	P 19192518	SUGANYA.A	5	5	5	5	5	25	100
19	P 19192519	TAMILALAGANA.A	5	4	5	5	4	23	92
20	P 19192521	VINOTHINLM	5	5	4	4	5	23	92
AVERAGE			4.80	4.60	4.70	4.85	4.75		

EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST + SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.80	75	79.80	93.88
CO2	4.60	75	79.60	93.65
CO3	4.70	75	79.70	93.76
CO4	4.85	75	79.85	93.94
CO5	4.75	75	79.75	93.82

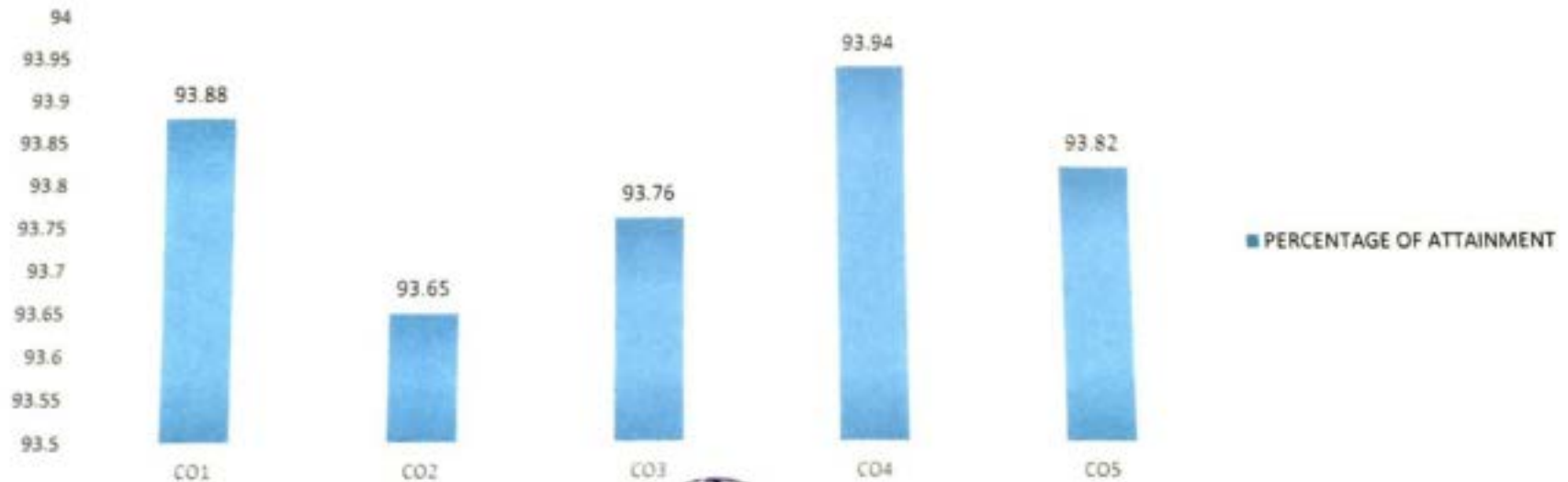


COURSE ATTAINMENT FOR M.Sc MATHEMATICS

SUBJECT NAME : ADVANCED NUMERICAL ANALYSIS
SUBJECT CODE : P16MA43
NO.OF STUDENTS : 20

COURSE	PERCENTAGE OF
CO1	93.88
CO2	93.65
CO3	93.76
CO4	93.94
CO5	93.82

PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR M.ScMATHEMATICS

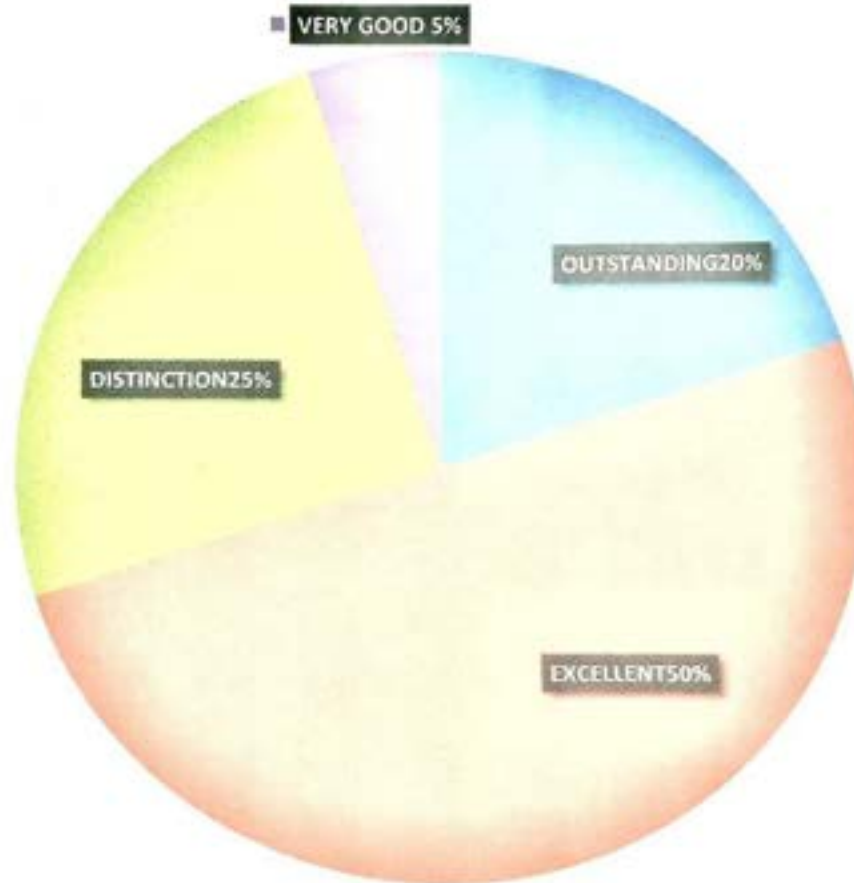
SUBJECT NAME : ADVANCED NUMERICAL ANALYSIS
SUBJECT CODE : P16MA43
NO.OF STUDENTS : 20

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO.OF.STUDENTS	STATUS
90 and Above	4	OUTSTANDING
80-89	10	EXCELLENT
70-79	5	DISTINCTION
60-69	1	VERY GOOD
50-59	0	GOOD
40-49	0	AVERAGE
Below 40	0	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
90 and Above	20%	OUTSTANDING
80-89	50%	EXCELLENT
70-79	25%	DISTINCTION
60-69	5%	VERY GOOD



COURSE OUTCOME ASSESSMENT



- 90 and above(100)
- 80-89
- 70-79
- 60-69




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(UGC Recognized 2(f) & 12(B) Institution)
THANJAVUR-5
DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES
PROGRAM OUTCOME

PO1	Identify and enhance mathematical and computational strategies in order to solve mathematical problems.
PO2	Know various specialized areas of advanced mathematics and its applications.
PO3	Work as Professional mathematicians either in academia or elsewhere.
PO4	Inculcate knowledge of formulation and apply mathematical concepts which are suitable for real life applications.
PO5	Crack lectureship and fellowship exams affirmed by UGC like CSIR – NET and SET.

Name of the Programme: M.Sc Mathematics

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
P16MAE4B ADVANCED OPERATIONS RESEARCH	CO1	Concept of Integer Programming Problems and Cutting plane method, Mixed IPP, Branch and Bound method
	CO2	Learn the Dynamic (multistage) algorithm, applications of Dynamic Programming.
	CO3	Compute the Decision theory and Value of the game, Dominance property and Graphical method by Game theory.
	CO4	Ability to understand Deterministic inventory and Probability inventory, EOQ and Material Requirement planning.
	CO5	Learn Non-Linear Programming Algorithm, Direct method, constrained Algorithms, Separable, Quadratic, Geometric, Stochastic Programming, Linear Combination method and SUMT algorithm.



PO →	PO1	PO2	PO3	PO4	PO5
CO1	3	2	2	2	2
CO2	1	2	3	2	3
CO3	3	1	1	3	2
CO4	3	3	2	3	2
CO5	2	3	3	3	1
AVERAGE	2.4	2.2	2.2	2.6	2

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	P 19192501	ABINAYA.C	5	5	5	5	5	25	100
2	P 19192502	AINTHAMILSELVI.T	5	5	5	5	5	25	100
3	P 19192503	AJITH.J	4	5	5	5	5	24	96
4	P 19192504	ANUPRIYADHARSHINI.R	5	5	5	5	5	25	100
5	P 19192505	BHUNANESHWARI.R	5	5	5	5	5	25	100
6	P 19192506	BHUNANESWARLI.C	5	5	5	5	5	25	100
7	P 19192507	HEMALATHA.K	5	5	5	5	5	25	100
8	P 19192508	JAYASURYA.T	5	5	5	5	5	25	100
9	P 19192509	LATCHAYA.G	5	5	5	5	5	25	100
10	P 19192510	PRAKASH.M	5	5	5	5	5	25	100
11	P 19192511	PRIYANKA.J	5	5	5	5	5	25	100
12	P 19192512	PUSHKARANYA.M	5	5	5	5	5	25	100
13	P 19192513	RABIYA.D	5	5	5	5	5	25	100
14	P 19192514	RAJESH.K	5	5	5	5	5	25	100
15	P 19192515	RANJITH KUMAR.R	4	4	5	5	4	22	88
16	P 19192516	SAKTHIVEL.K	5	5	5	5	5	25	100
17	P 19192517	SANGEETHA.S	5	5	5	5	5	25	100
18	P 19192518	SUGANYA.A	5	5	5	5	5	25	100
19	P 19192519	TAMILALAGAN.A	5	5	4	4	5	23	92
20	P 19192521	VINOTHINI.M	4	5	5	4	5	23	92
AVERAGE			4.85	4.95	4.95	4.90	4.95		



EXPECTED ATTAINMENT IN EACH CO - 85%

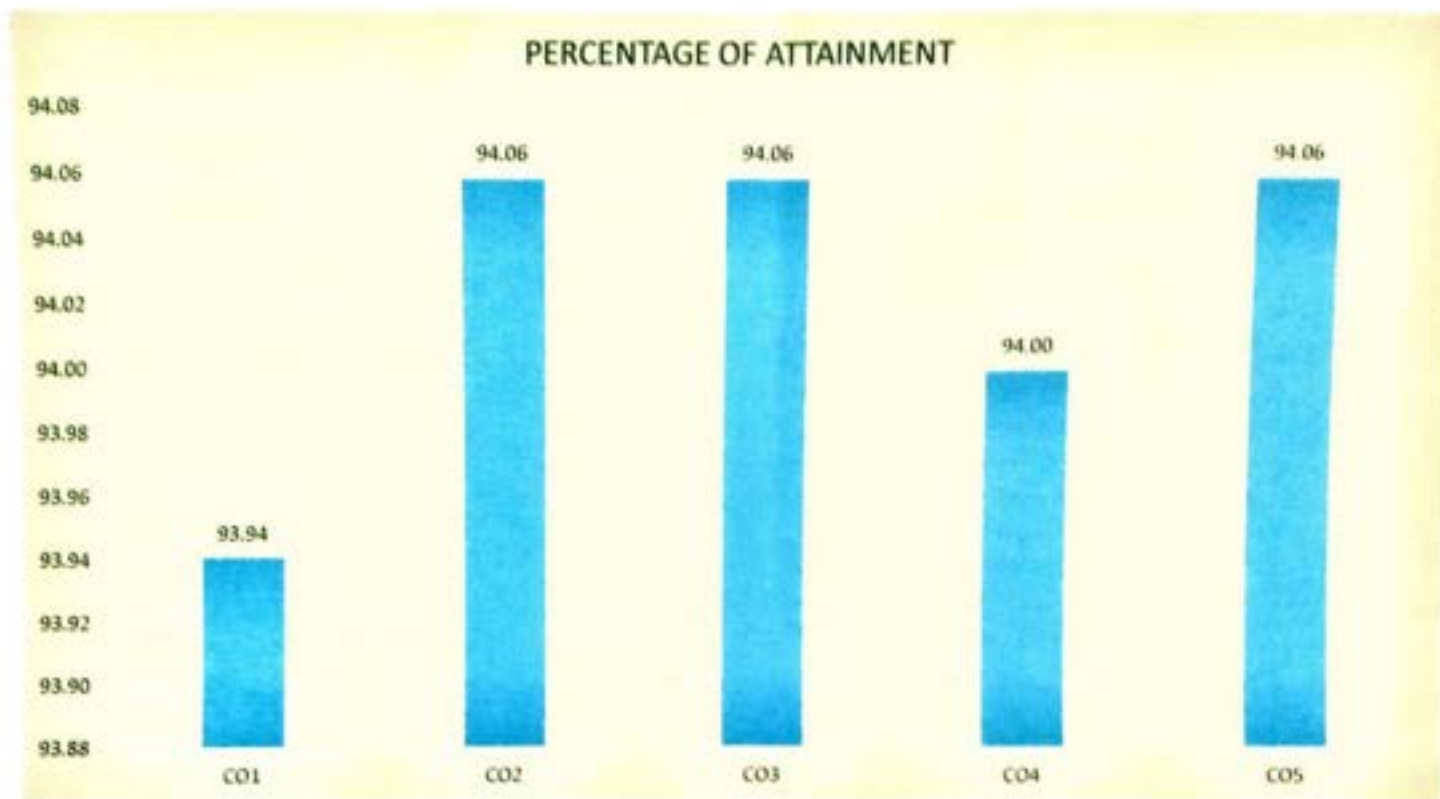
CO	TEST + SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.85	75	79.85	93.94
CO2	4.95	75	79.95	94.06
CO3	4.95	75	79.95	94.06
CO4	4.90	75	79.9	94.00
CO5	4.95	75	79.95	94.06

COURSE ATTAINMENT FOR M.Sc MATHEMATICS

SUBJECT NAME : ADVANCED OPERATIONS RESEARCH
 SUBJECT CODE : P16MAE4B
 NO.OF STUDENTS : 20

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.94
CO2	94.06
CO3	94.06
CO4	94.00
CO5	94.06





COURSE ATTAINMENT FOR M.Sc MATHEMATICS

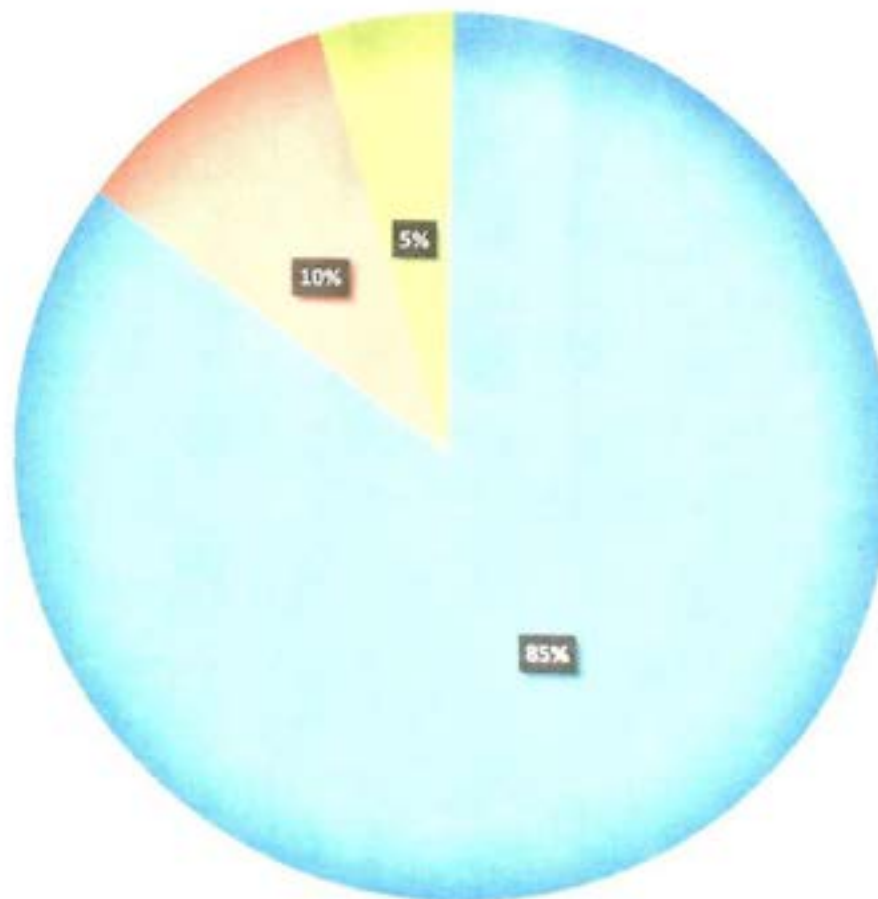
SUBJECT NAME : ADVANCED OPERATIONS RESEARCH
 SUBJECT CODE : P16MAE4B
 NO.OF STUDENTS : 20

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO.OF. STUDENTS	STATUS
90 and Above	17	OUTSTANDING
80-89	2	EXCELLENT
70-79	1	DISTINCTION
60-69	0	VERY GOOD
50-59	0	GOOD
40-49	0	AVERAGE
Below 40	0	RE-APPEAR

CATEGORY (MARKS)	PERCENTAGE	STATUS
90 and Above	85%	OUTSTANDING
80-89	10%	EXCELLENT
70-79	5%	DISTINCTION



COURSE OUTCOME ASSESSMENT



■ 90 and Above
■ 80-89
■ 70-79



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THANJAVUR-5
DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Remember the fundamental concepts of Mathematics
PO2	Imbibe the skills necessary to effectively translate mathematical aspects to the general public
PO3	Develop Critical thinking ability so as to improve Employability and Decision making.
PO4	Apply Mathematical Models to solve critical problems.
PO5	Apply the concepts studied, in real life situations.

NAME OF THE PROGRAMME: B.Sc., MATHEMATICS		
COURSE CODE & COURSE TITLE	COURSE OUTCOME	
16SCCMMI - DIFFERENTIAL CALCULUS AND TRIGONOMETRY	CO1	Learn the basics of differentiation and their applications.
	CO2	understand and apply the concepts of envelopes using the cartesian formula for radius of curvature.
	CO3	Evaluate the expansions of trigonometric functions.
	CO4	Evaluate the expansions of hyperbolic functions and inverse hyperbolic functions.
	CO5	Learn about the logarithm of a complex number, summation and angles.



PO → CO↓	PO1	PO2	PO3	PO4	PO5
CO1	3	2	3	3	3
CO2	3	3	3	2	2
CO3	3	3	3	3	3
CO4	3	2	3	3	3
CO5	3	2	3	3	3
AVERAGE	3	2.4	3	2.8	2.8

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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

SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	CH20S 378296	ANUSHIYA K	5	5	5	5	5	25	100
2	CH20S 378297	ARUN KUMAR R	5	4	5	5	5	24	96
3	CH20S 378298	DEVI M	3	5	5	5	5	23	92
4	CH20S 378299	KANUTHANA R	5	5	5	5	5	25	100
5	CH20S 378300	KLIRITHIANA M	5	5	4	4	5	23	92
6	CH20S 378301	MARIYAM SAHIBA H	5	5	5	5	5	25	100
7	CH20S 378302	RINISHIKUMAR K	5	4	4	5	5	23	92
8	CH20S 378303	SANTHOSH A	5	4	5	5	4	23	92
9	CH20S 378304	SARUBALA T	5	5	5	5	5	25	100
10	CH20S 378305	SRIKANTH G	5	5	5	5	4	24	96
AVERAGE			4.70	4.70	4.80	4.90	4.80		



EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.70	75	79.70	93.765
CO2	4.70	75	79.70	93.765
CO3	4.80	75	79.80	93.882
CO4	4.90	75	79.90	94.00
CO5	4.80	75	79.80	93.882

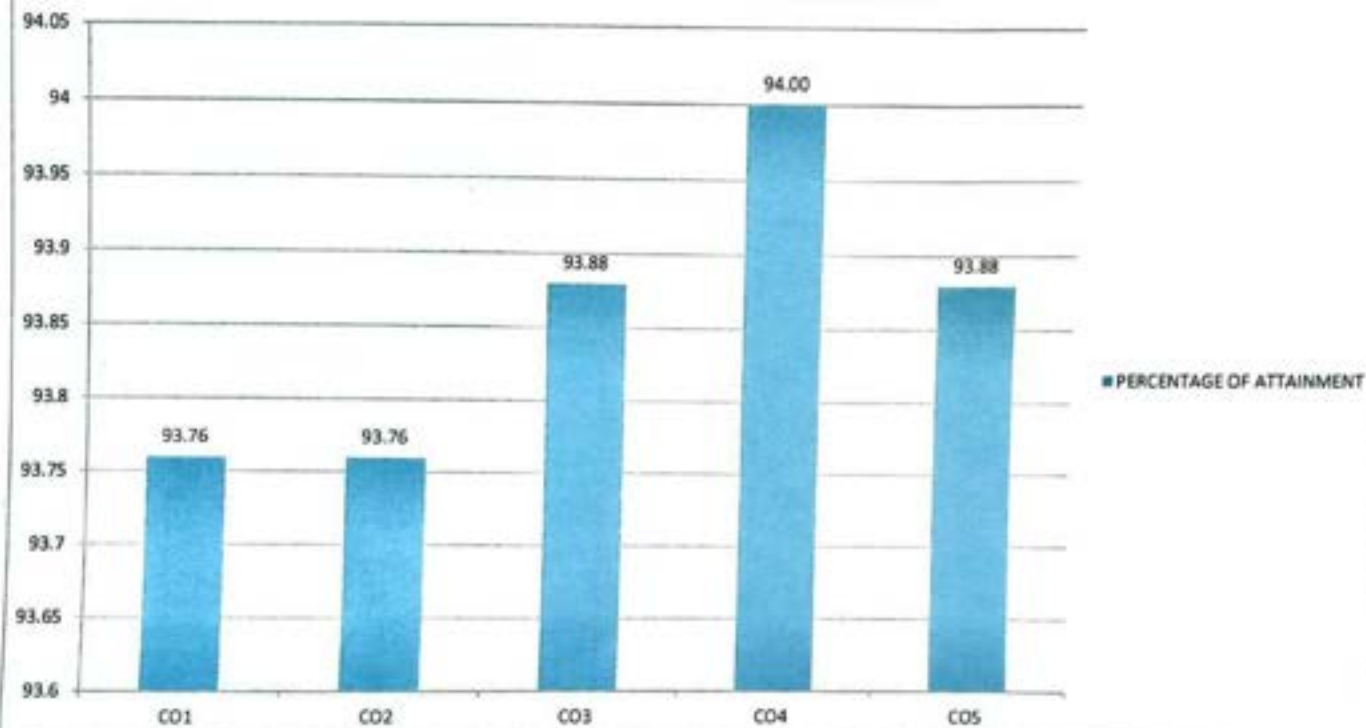
SUBJECT NAME:
SUBJECT CODE:
NO. OF STUDENTS:

COURSE ATTAINMENT FOR B. SC., MATHEMATICS
DIFFERENTIAL CALCULUS AND TRIGONOMETRY
16SCCMM1
10

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.76
CO2	93.76
CO3	93.88
CO4	94.00
CO5	93.88



PERCENTAGE OF ATTAINMENT



SUBJECT NAME:
SUBJECT CODE:
NO. OF STUDENTS:

COURSE ATTAINMENT FOR B.Sc., MATHEMATICS
DIFFERENTIAL CALCULUS AND TRIGONOMETRY
16SCCMM1
10

COURSE OUTCOME ASSESSMENT		
CATEGORY(MARKS)	NO. OF STUDENTS	STATUS
90 AND ABOVE	10	OUTSTANDING
80-89	0	EXCELLENT
70-79	0	DISTINCTION
60-69	0	VERY GOOD
50-59	0	GOOD
40-49	0	AVERAGE
BELOW 40	0	RE -APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
90 and above	100	OUTSTANDING



COURSE OUTCOME ASSESSMENT



■ 90 and above



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DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Remember the fundamental concepts of Mathematics
PO2	Imbibe the skills necessary to effectively translate mathematical aspects to the general public
PO3	Develop Critical thinking ability so as to improve Employability and Decision making.
PO4	Apply Mathematical Models to solve critical problems.
PO5	Apply the concepts studied, in real life situations.

Name of the Programme : B.Sc Mathematics

Course Code & Course Title	Course Outcome	
16SCCMM3 DIFFERENTIAL EQUATION AND LAPLACE TRANSFORMS	CO1	Define first order, higher order differential equations solvable for dy/dx , x and y .
	CO2	Discuss and demonstrate the Linear equations with variable coefficients and variation of parameters.
	CO3	Describe the origin of partial differential equation.
	CO4	Explain PDE of second order homogeneous equation with constant coefficients.
	CO5	Understand the concepts of differential equations and laplace transforms.



PO → CO↓	PO1	PO2	PO3	PO4	PO5
CO1	3	2	2	2	3
CO2	3	3	3	2	2
CO3	3	3	3	3	2
CO4	2	2	2	3	3
CO5	3	2	3	3	3
AVERAGE	2.8	2.4	2.6	2.6	2.6

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	UNIT TEST (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

SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	CB20S 378296	ANUSHIYA K	5	5	5	5	5	25	100
2	CB20S 378297	ARUN KUMAR R	5	5	5	5	5	25	100
3	CB20S 378298	DEVI M	5	5	5	5	5	25	100
4	CB20S 378299	KANCHANA R	5	5	5	5	5	25	100
5	CB20S 378300	KEERTHANA M	3	5	4	5	4	21	84
6	CB20S 378301	MARIYAM SAHIBA H	5	5	5	5	5	25	100
7	CB20S 378302	RENESHKUMAR K	5	5	5	5	5	25	100
8	CB20S 378303	SANTHOSH A	5	4	5	4	5	23	92
9	CB20S 378304	SARUBALA T	5	5	5	5	5	25	100
10	CB20S 378305	SRIKANTH G	5	5	4	5	5	24	96
		Average	4.8	4.8	4.8	4.9	4.9		



EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.80	75	79.8	93.88
CO2	4.90	75	79.9	94.00
CO3	4.80	75	79.8	93.88
CO4	4.90	75	79.9	94.00
CO5	4.90	75	79.9	94.00

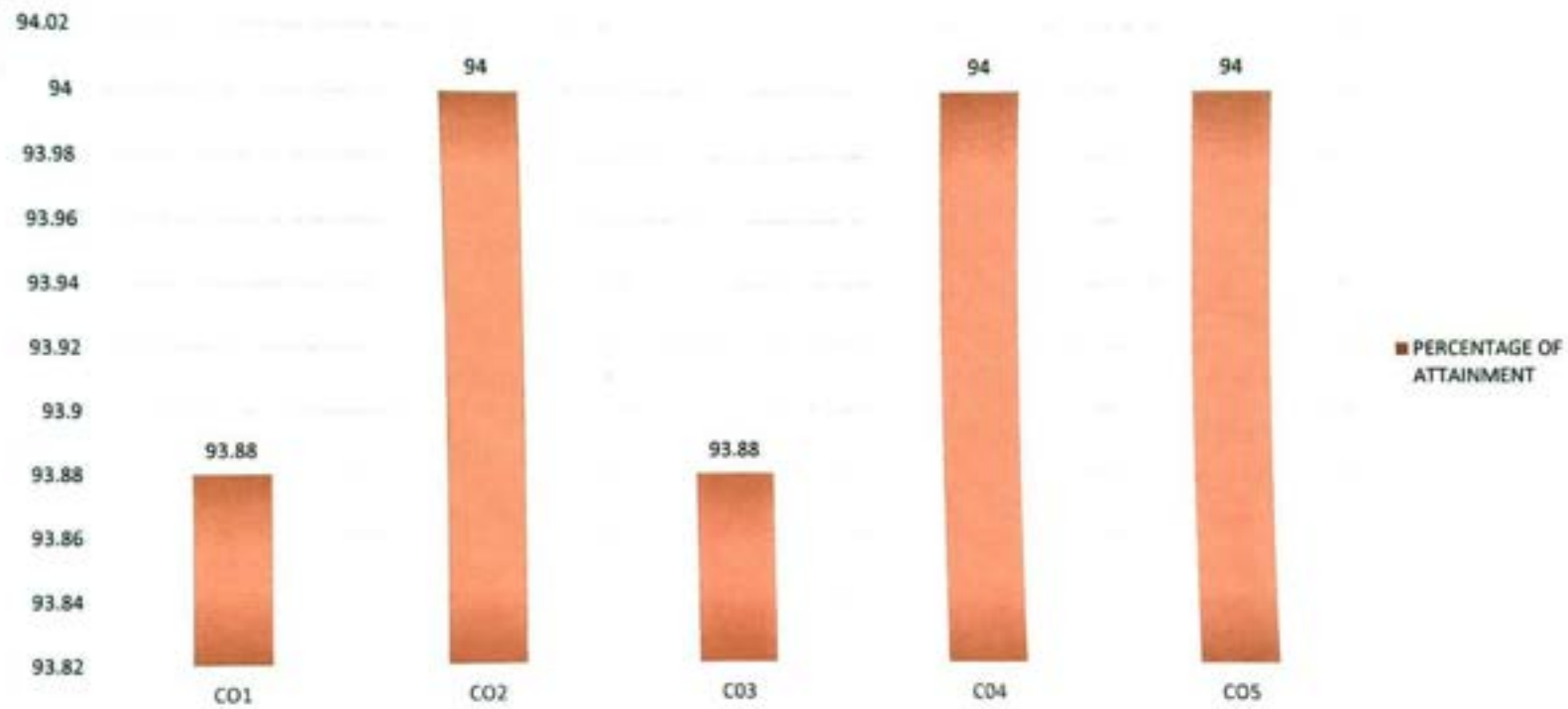
COURSE ATTAINMENT FOR B.Sc., MATHEMATICS

SUBJECT NAME : DIFFERENTIAL EQUATION AND LAPLACE TRANSFORMS
 SUBJECT CODE : 16SCCMM3
 NO OF STUDENTS : 10

COURSE OUTCOME	PERCENTAGE OF
CO1	93.88
CO2	94.00
CO3	93.88
CO4	94.00
CO5	94.00



PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR B.Sc., MATHEMATICS

SUBJECT NAME : DIFFERENTIAL EQUATION AND LAPLACE TRANSFORMS

SUBJECT CODE : 16SCCMM3

NO OF STUDENTS : 10

COURSE OUTCOME ASSESSMENT

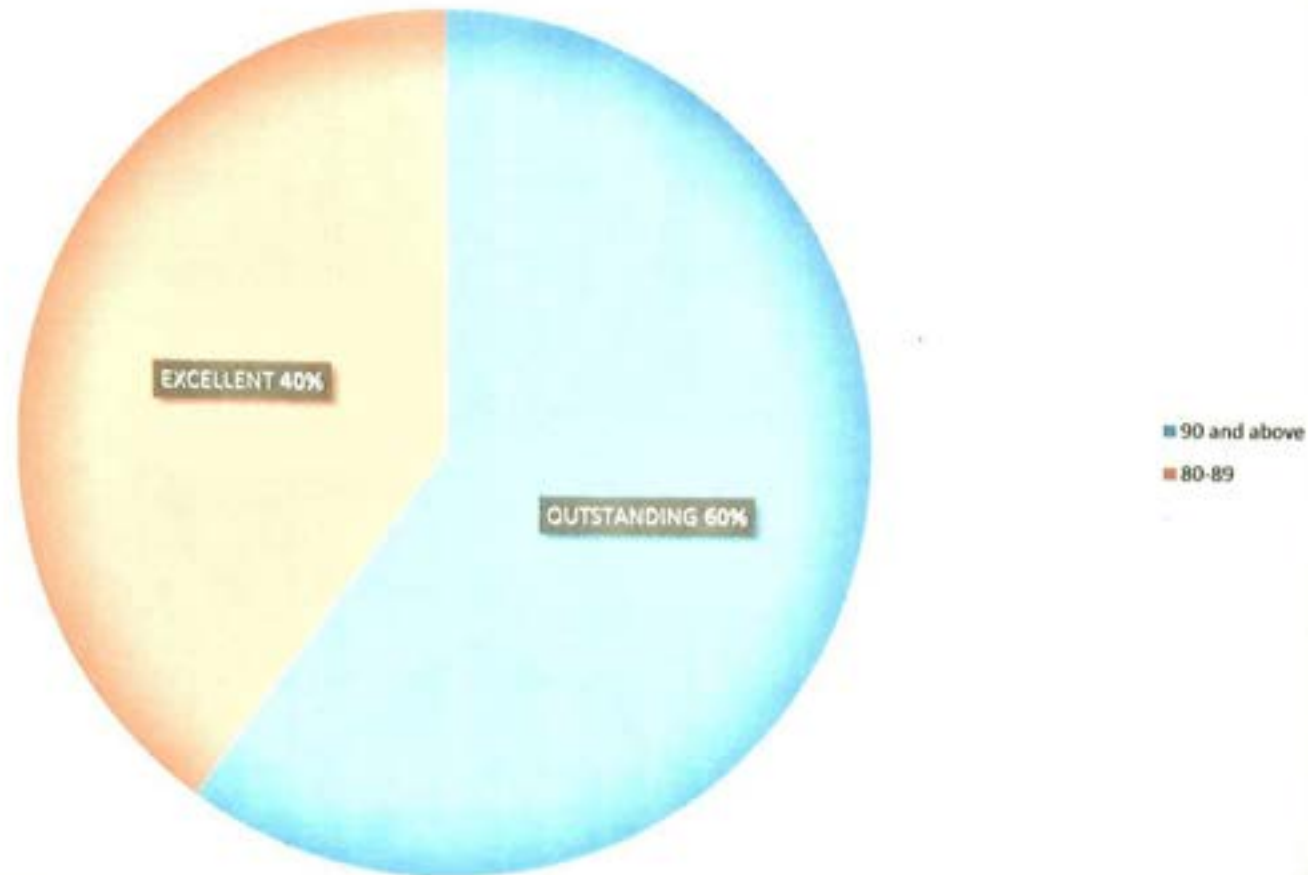
CATEGORY MARKS	NO OF STUDENTS	STATUS
90 and above	6	OUTSTANDING
80-89	4	EXCELLENT
70-79	0	DISTINCTION
60-69	0	VERY GOOD
50-59	0	GOOD
40-49	0	AVERAGE
below 40	0	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE

CATEGORY MARKS	PERCENTAGE	STATUS
90 and above	60%	OUTSTANDING
80-89	40%	EXCELLENT



COURSE OUTCOME ASSESSMENT



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PG DEPARTMENT OF MATHEMATICS
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PROGRAM OUTCOME

PO1	Remember the fundamental concepts of Mathematics
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NAME OF THE PROGRAMME: B.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
16SCMM4 - ANALYTICAL GEOMETRY 3D	CO1	Explain the coordinates in space, equation of a plane.
	CO2	Describe the concepts of straight lines and coplanar lines.
	CO3	classify the equation of a sphere and tangent planes.
	CO4	Finding the equation of surface, intersection of straight lines and quadric cone.
	CO5	To recognize the central quadrics, tangent and tangent plane.



PO → CO _i	PO1	PO2	PO3	PO4	PO5
CO1	3	2	3	3	3
CO2	3	3	3	2	2
CO3	2	3	2	3	3
CO4	3	2	3	3	3
CO5	3	3	3	3	2
AVERAGE	2.8	2.6	2.8	2.8	2.6

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	UNIT TEST (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

SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	% TO TOTAL INTERNAL MARK
1	CB20S 378296	ANUSHIYA.K	5	5	5	5	5	25	100
2	CB20S 378297	ARUNKUMAR.R	5	5	4	5	5	24	96
3	CB20S 378298	DEVLM	5	5	5	5	5	25	100
4	CB20S 378299	KANCHANAR	5	5	5	4	5	24	96
5	CB20S 378300	KEERTHANAM	4	4	4	4	4	20	80
6	CB20S 378301	MARIYAM SHAHIBA.H	5	5	5	5	5	25	100
7	CB20S 378302	RENESHKUMAR K	5	5	5	5	5	25	100
8	CB20S 378303	SANTHOSH A	5	4	5	5	5	24	96
9	CB20S 378304	SARUBALA T	5	5	5	5	5	25	100
10	CB20S 378305	SRIKANTH G	5	5	5	5	5	25	100
AVERAGE			4.90	4.80	4.80	4.80	4.90		



EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST + SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.90	75	79.9	94.00
CO2	4.80	75	79.8	93.88
CO3	4.80	75	79.8	93.88
CO4	4.80	75	79.8	93.88
CO5	4.90	75	79.9	94.00

COURSE ATTAINMENT FOR B.Sc - MATHEMATICS

SUBJECT NAME : ANALYTICAL GEOMETRY 3D

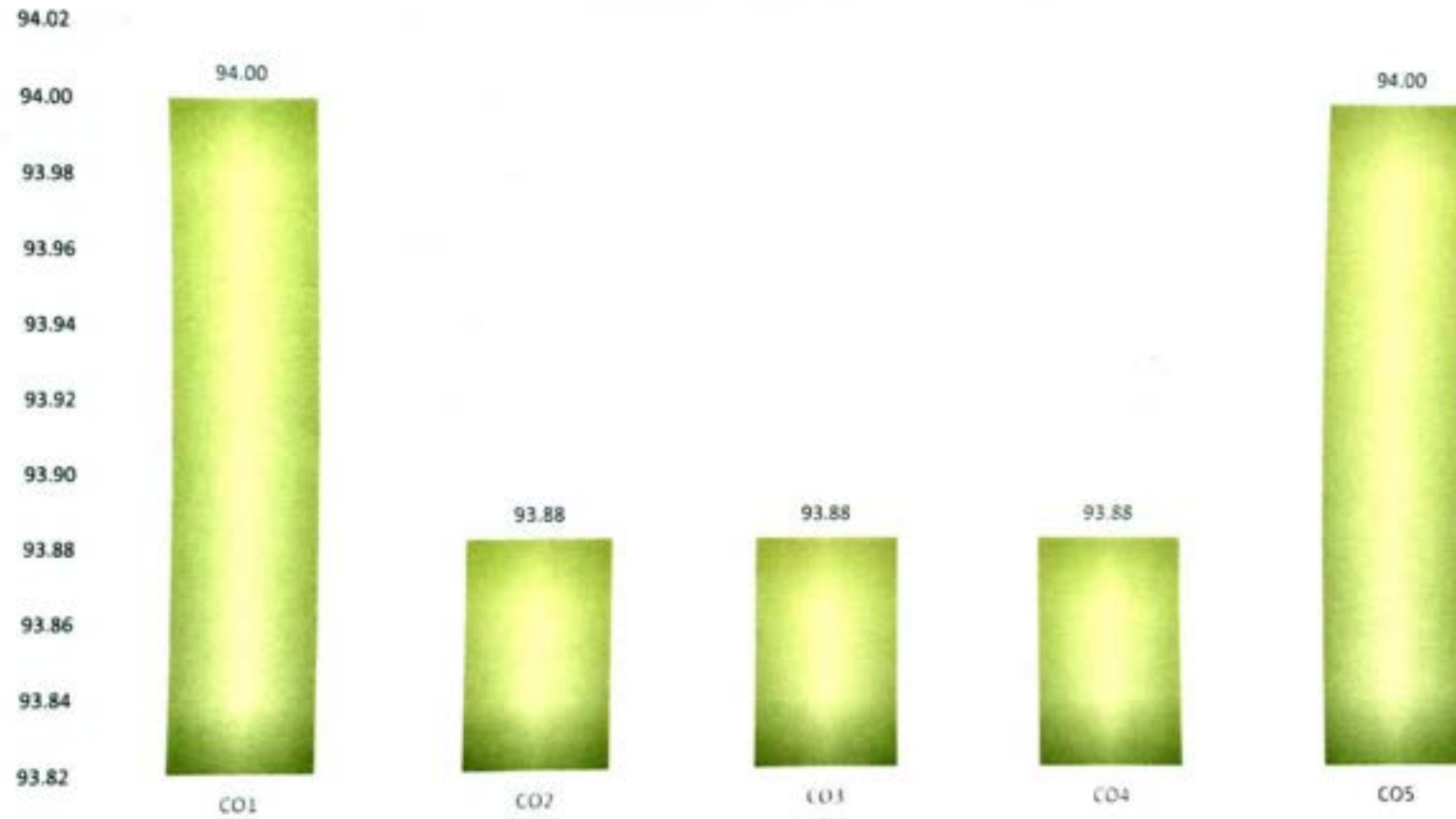
SUBJECT CODE : 16SCCMM4

NO OF STUDENTS : 10

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	94.00
CO2	93.88
CO3	93.88
CO4	93.88
CO5	94.00



PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR B.Sc MATHEMATICS

SUBJECT NAME : ANALYTICAL GEOMETRY 3D

SUBJECT CODE : 16SCCMM4

NO OF STUDENTS : 10

COURSE OUTCOME ASSESSMENT

CATEGORY MARKS	NO OF STUDENTS	STATUS
90 and above (100)	6	OUTSTANDING
80-89	4	EXCELLENT
70-79	0	DISTINCTION
60-69	0	VERY GOOD
50-59	0	GOOD
40-49	0	AVERAGE
below 40	0	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE (%)

CATEGORY MARKS	PERCENTAGE	STATUS
90 and above (100)	60	OUTSTANDING
80-89	40	EXCELLENT



COURSE OUTCOME ASSESSMENT



90 and above (100)
80-89



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PROGRAM OUTCOME

PO1	Remember the fundamental concepts of Mathematics
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NAME OF THE PROGRAMME: B.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
16SCCMM6- CLASSICAL ALGEBRA AND THEORY OF NUMBERS	CO1	Concept of Relation between roots & coefficients of Polynomial Equations, Symmetric functions, Sum of the r th Powers of the Roots
	CO2	Learn the Transformations of Equations, Diminshing, Increasing & Multiplying the roots by a constant, Reciprocal equations.
	CO3	Compute the Form of the quotient and remainder, Removal of terms, To form of an equation whose roots are any power, Transformation in general, Descart's rule of sign.
	CO4	Ability to Inequalities, elementary principles, Geometric & Arithmetic means, Weirstrass inequalities, Cauchy inequality, Applications to Maxima & Minima
	CO5	Learn Laplace equation, Families of equipotential Surfaces, Boundary value problems, Separation of variables, Problems with Axial Symmetry.



PO → CO ↓	PO1	PO2	PO3	PO4	PO5
CO1	3	2	1	2	1
CO2	3	2	2	2	2
CO3	2	2	1	3	2
CO4	3	3	2	3	2
CO5	2	3	3	3	3
AVERAGE	2.6	2.4	1.8	2.6	2

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	% TO TOTAL INTERNAL MARK
1	CB19S 377896	AKASH.S	5	4	4	4	4	21	84
2	CB19S 377897	ARURA.K	5	5	5	5	5	25	100
3	CB19S 377898	DIVAHAR.P	3	3	3	3	3	15	60
4	CB19S 377899	JAYASHEELA.J	5	5	5	5	4	24	96
5	CB19S 377900	KARTHICK.N	5	5	5	5	5	25	100
6	CB19S 377901	KAYALVIZHI.K	5	5	5	4	4	23	92
7	CB19S 377902	MANIKANDAN.N	4	4	4	4	4	20	80
8	CB19S 377903	NAVEENA.K	5	5	5	5	5	25	100
9	CB19S 377904	RAMANAN.G	5	5	5	5	5	25	100
10	CB19S 377905	SHARMILA.S	5	5	5	5	5	25	100
11	CB19S 377906	SURIYA.S	5	5	4	4	5	23	92
12	CB16S 361183	DEVASUNDARLP	5	5	5	5	4	24	96
13	CB19S 377907	VISHNURAJ.K	5	5	5	4	4	23	92
AVERAGE			4.77	4.69	4.62	4.46	4.38		

EXPECTED ATTAINMENT IN EACH CO - 85%

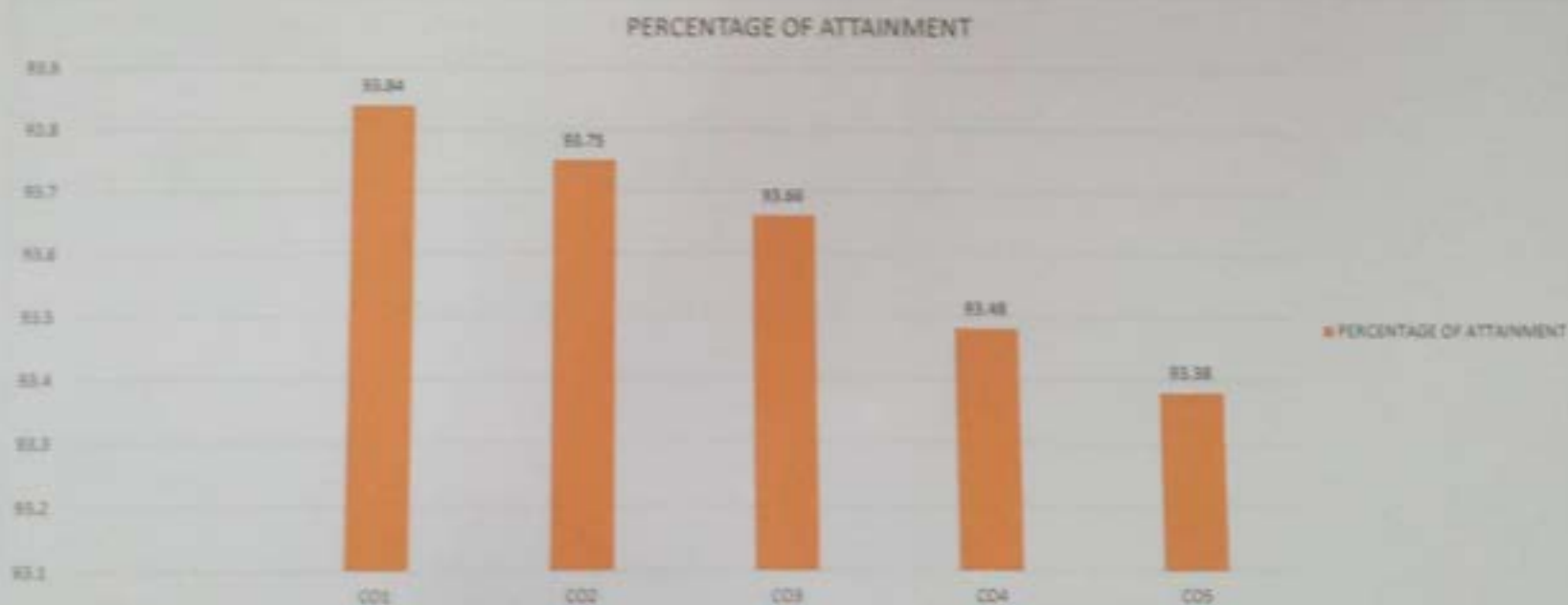
CO	TEST + SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.77	75	79.77	93.85
CO2	4.69	75	79.69	93.75
CO3	4.62	75	79.62	93.66
CO4	4.46	75	79.46	93.48
CO5	4.38	75	79.38	93.39



COURSE ATTAINMENT FOR B.SC MATHEMATICS

SUBJECT CODE : 16SCCMM16
SUBJECT NAME : CLASSICAL ALGEBRA AND THEORY OF NUMBERS
NO.OF STUDENTS : 13

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.84
CO2	93.75
CO3	93.66
CO4	93.48
CO5	93.38



COURSE ATTAINMENT FOR B.SC MATHEMATICS

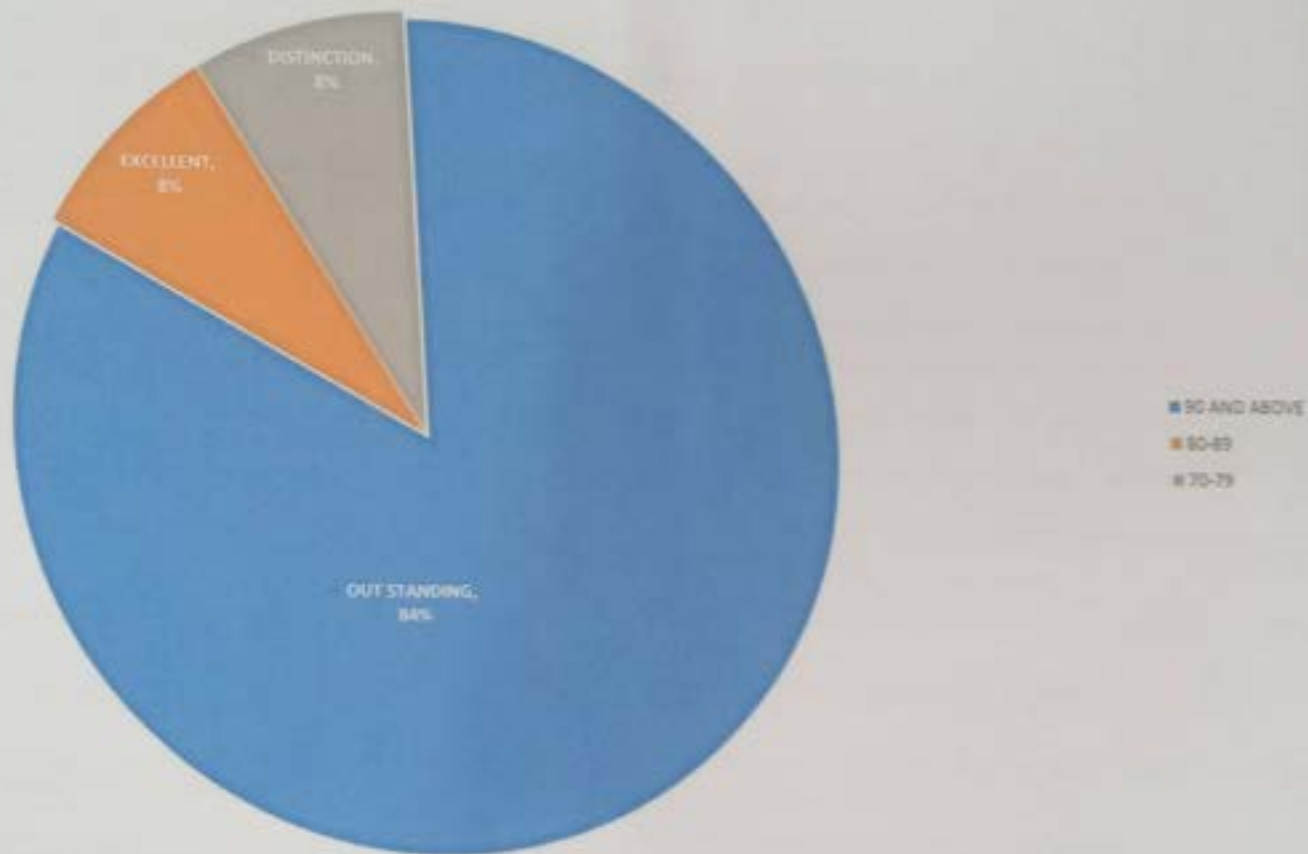
SUBJECT CODE : 16SCCMM6
SUBJECT NAME : CLASSICAL ALGEBRA AND THEORY OF NUMBERS
NO.OF STUDENTS : 13

COURSE OUTCOME ASSESSMENT		
CATEGORY(MARKS)	NO.OF STUDENTS	STATUS
90 AND ABOVE	10	Out standing
80-89	1	Excellent
70-79	1	Distinction
60-69	1	Very good
50-59	0	Good
40-49	0	Average
BELOW 40	0	Reappear

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY(MARKS)	PERCENTAGE	STATUS
90 AND ABOVE	76.92	Out standing
80-89	7.69	Excellent
70-79	7.69	Distinction
60-69	7.69	Very good



COURSE OUTCOME ASSESSMENT



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ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Remember the fundamental concepts of Mathematics
PO2	Imbibe the skills necessary to effectively translate mathematical aspects to the general public
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PO5	Apply the concepts studied, in real life situations.

COURSE CODE & COURSE TITLE	Name of the Programme: B.Sc Mathematics	
	COURSE OUTCOME	
I6SCMM7 VECTOR CALCULUS AND FOURIER SERIES	CO1	Learn Vector differentiation.
	CO2	Learn Vector integration.
	CO3	Learn verifications of the theorems for Simple problems .
	CO4	Acquire the knowledge about Fourier series for periodic signals.
	CO5	Learn the development of Fourier Series in cosine and sine series.



PO → CO _n	PO1	PO2	PO3	PO4	PO5
CO1	3	2	2	3	2
CO2	2	2	3	3	3
CO3	3	3	2	2	2
CO4	3	3	2	2	3
CO5	3	2	3	3	3
AVERAGE	2.8	2.4	2.4	2.6	2.6

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	UNIT TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	CB19S 377896	AKASH.S	4	4	4	4	4	20	80
2	CB19S 377897	ARURA.K	5	5	5	5	4	24	96
3	CB19S 377898	DIVAHAR.P	4	4	4	4	4	20	80
4	CB19S 377899	JAYASHEELA.J	5	5	5	4	4	23	92
5	CB19S 377900	KARTHICK.N	5	5	4	4	4	22	88
6	CB19S 377901	KAYALVIZHLK	4	4	4	4	4	20	80
7	CB19S 377902	MANIKANDAN.N	5	5	5	5	4	24	96
8	CB19S 377903	NAVEENA.K	5	5	5	5	4	24	96
9	CB19S 377904	RAMANAN.G	5	5	5	5	5	25	100
10	CB19S 377905	SHARMILA.S	5	5	5	5	4	24	96
11	CB19S 377906	SURIYA.S	5	5	4	5	5	24	96
12	CB19S 377907	VISHNURAJ.K	5	5	5	5	4	24	96
13	CB16S 361183	DEVASUNDARI.P	4	4	4	4	4	20	80
AVERAGE			4.69	4.69	4.54	4.54	4.15		

EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST + SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.69	75	79.69	93.75
CO2	4.69	75	79.69	93.75
CO3	4.54	75	79.54	93.58
CO4	4.54	75	79.54	93.58
CO5	4.15	75	79.15	93.12

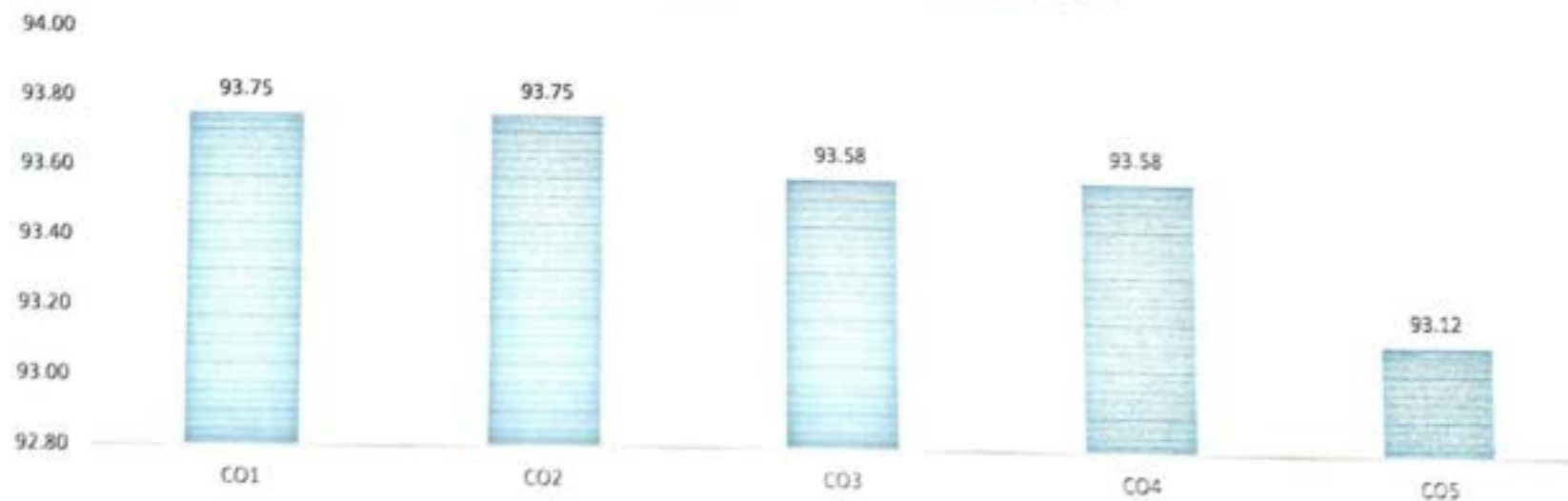


COURSE ATTAINMENT FOR B.SC MATHEMATICS

SUBJECT NAME : VECTOR CALCULUS AND FOURIER SERIES
SUBJECT CODE : 16SCCMM7
NO OF STUDENTS : 13

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.75
CO2	93.75
CO3	93.58
CO4	93.58
CO5	93.12

PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR B.Sc MATHEMATICS

SUBJECT NAME : VECTOR CALCULUS AND FOURIER SERIES
SUBJECT CODE : 16SCCMM7
NO OF STUDENTS : 13

COURSE OUTCOME ASSESSMENT

CATEGORY MARKS	NO OF STUDENTS	STATUS
90 and above	8	OUTSTANDING
80-89	3	EXCELLENT
70-79	1	DISTINCTION
60-69	1	VERY GOOD
50-59	0	GOOD
40-49	0	AVERAGE
below 40	0	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE (%)

CATEGORY MARKS	PERCENTAGE	STATUS
90 and above	62	OUTSTANDING
80-89	23	EXCELLENT
70-79	8	DISTINCTION
60-69	8	VERY GOOD



COURSE OUTCOME ASSESSMENT IN PERCENTAGE



PRINCIPAL

Bharath College of Science and Management
Bharath Avenue (Near New Bus Stand)
THANJAVUR - 613 005.



BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
(UGC Recognized 2(f) & 12(B) Institution)
THANJAVUR-5
DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME	
PO1	Remember the fundamental concepts of Mathematics
PO2	Imbibe the skills necessary to effectively translate mathematical aspects to the general public
PO3	Develop Critical thinking ability so as to improve Employability and Decision making.
PO4	Apply Mathematical Models to solve critical problems.
PO5	Apply the concepts studied, in real life situations.

NAME OF THE PROGRAMME: B.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
16SMBEMM1:1 - OPERATIONS RESEARCH	CO1	Understand the advantages and limitations of Operations Research
	CO2	Understand the LPP and to know methods of solving problems.
	CO3	Understand the concepts of transportation and assignment problems.
	CO4	Learn about queuing theory
	CO5	Assimilate the concept of Network scheduling by CPM and PERT.



PO → CO↓	PO1	PO2	PO3	PO4	PO5
CO1	3	2	3	3	3
CO2	3	3	2	3	3
CO3	2	3	2	2	3
CO4	3	3	3	3	3
CO5	3	3	3	3	2
AVERAGE	2.8	2.8	2.6	2.8	2.8

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	CB18S 372601	AAKASH S	5	5	5	5	5	25	100
2	CB18S 372602	AKATHIYAN A	5	5	5	4	4	23	92
3	CB18S 372603	AMRITHA S	5	5	5	5	5	25	100
4	CB18S 372604	DHEENA B R	5	5	5	5	5	25	100
5	CB18S 372605	KAVIBRINDHA S	5	5	5	5	5	25	100
6	CB18S 372606	KAVIYARASI V	5	5	5	5	5	25	100
7	CB18S 372607	KEERTHANA B	5	5	5	5	5	25	100
8	CB18S 372608	KEERTHIKA M	5	5	5	5	5	25	100
9	CB18S 372609	MAHESHKUMAR M	5	5	5	5	5	25	100
10	CB18S 372610	MOHAN KUMAR V G	5	5	5	4	5	24	96
11	CB18S 372611	MOHANAKRISHNAN S	5	5	5	5	5	25	100
12	CB18S 372613	PREMKUMAR M	5	5	5	4	4	23	92
13	CB18S 372614	RAJESH M	4	4	4	4	5	21	84
14	CB18S 372615	RANJITHKUMAR A	5	5	4	4	4	22	88
15	CB18S 372616	REGIS PAUL RAJ F	5	5	5	4	4	23	92
16	CB18S 372617	ROBERTNITTOLIAN B	5	5	5	5	5	25	100
17	CB18S 372619	SATHISHKUMAR M	5	5	4	4	4	22	88
18	CB18S 372620	SHANMUHA GURU K	4	4	4	4	4	20	80
19	CB18S 372621	SURENTHIRABABU K	4	4	4	4	4	20	80
20	CB18S 372622	SURUTHI S	5	5	5	5	5	25	100
21	CB18S 372623	SURYA S	5	5	5	5	5	25	100
22	CB18S 372624	THAMARAI E	5	5	5	5	5	25	100
23	CB18S 372625	VANATHI M	5	5	5	5	5	25	100
24	CB18S 372626	VIDHYA S	5	5	5	5	5	25	100
25	CB18S 372627	VIGNESH S	5	5	5	5	4	24	96
26	CB18S 372628	VINOTHI S	4	5	5	4	5	23	92
27	CB18S 372629	YOGAYALINI P	5	5	5	5	5	25	100
AVERAGE			4.85	4.89	4.81	4.63	4.70		

EXPECTED ATTAINMENT IN EACH CO - 85%

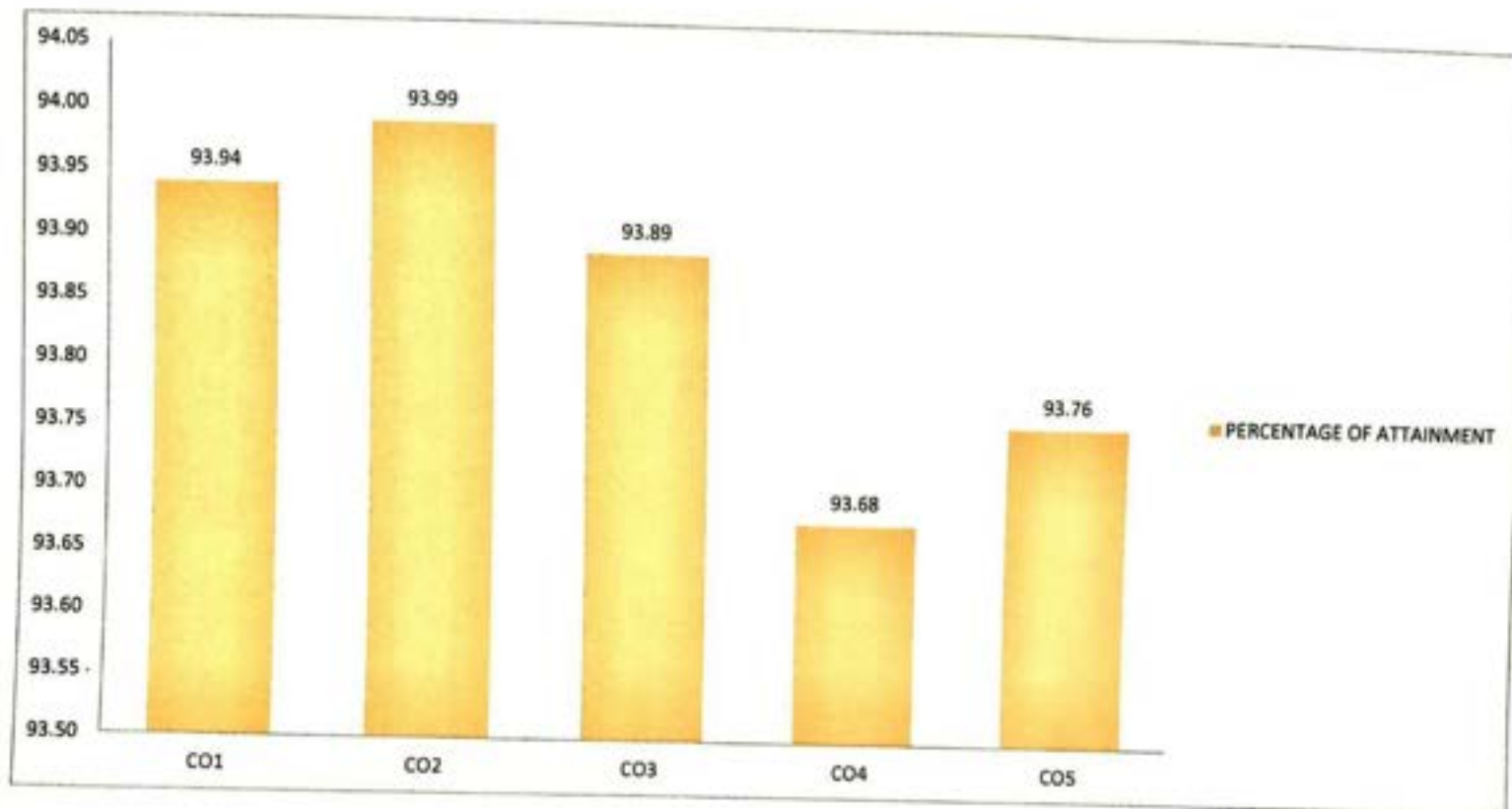
CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.85	75	79.85	93.94
CO2	4.89	75	79.89	93.99
CO3	4.81	75	79.81	93.89
CO4	4.63	75	79.63	93.68
CO5	4.70	75	79.70	93.76

SUBJECT NAME:
SUBJECT CODE:
NO. OF STUDENTS:

COURSE ATTAINMENT FOR B. SC., MATHEMATICS
OPERATIONS RESEARCH
16SMBEMM1: 1
27

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.94
CO2	93.99
CO3	93.89
CO4	93.68
CO5	93.76





SUBJECT NAME:
SUBJECT CODE:
NO. OF STUDENTS:

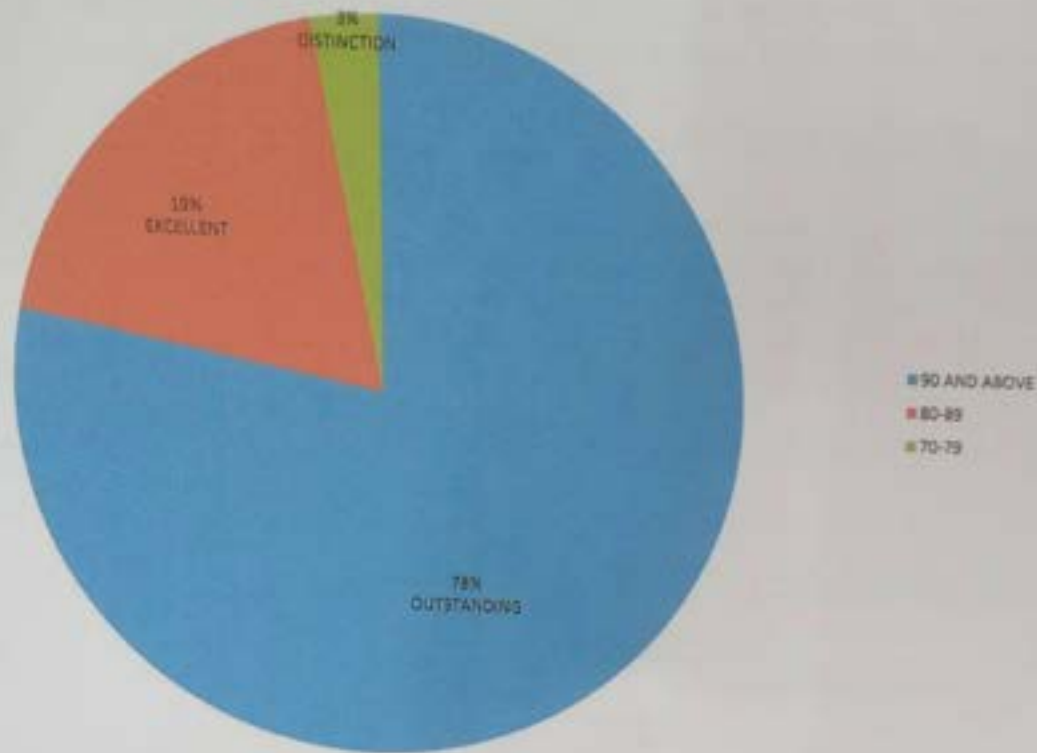
COURSE ATTAINMENT FOR B.Sc., MATHEMATICS
OPERATIONS RESEARCH
16SMBEMM1:1
27

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO. OF STUDENTS	STATUS
90 AND ABOVE	21	OUTSTANDING
80-89	5	EXCELLENT
70-79	1	DISTINCTION
60-69	0	VERY OOD
50-59	0	GOOD
40-49	0	AVERAGE
BELOW 40	0	RA

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
90 AND ABOVE	78%	OUTSTANDING
80-89	19%	EXCELLENT
70-79	3%	DISTINCTION



COURSE OUTCOME ASSESSMENT IN PERCENTAGE



PRINCIPAL

Bharath College of Science and Management
Bharath Avenue (Near New Bus Stand)
THANJAVUR - 613 005.



BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
(UGC Recognized 2(f) & 12(B) Institution)
THANJAVUR-5
DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME	
PO1	Remember the fundamental concepts of Mathematics
PO2	Imbibe the skills necessary to effectively translate mathematical aspects to the general public
PO3	Develop Critical thinking ability so as to improve Employability and Decision making.
PO4	Apply Mathematical Models to solve critical problems.
PO5	Apply the concepts studied, in real life situations.

NAME OF THE PROGRAMME: B.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
16SMBEMM2:1 GRAPH THEORY	CO1	Understand the basic definitions of graphs and their applications
	CO2	Recognize the Characteristics of graph
	CO3	List and relate special graphs
	CO4	Learn about Planar Graphs
	CO5	Understand the concepts of graph theory as an application of mathematics in information technology and its related fields.



PO → CO _i	PO1	PO2	PO3	PO4	PO5
CO1	3	2	3	3	3
CO2	3	3	3	2	2
CO3	3	3	3	3	3
CO4	2	3	3	3	3
CO5	3	2	2	3	3
AVERAGE	2.8	2.6	2.8	2.8	2.8

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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



SNO	REG. NO.	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	CB18S 372601	AAKASH.S	4	4	4	4	4	20	80
2	CB18S 372602	AKATHIYAN.A	4	4	4	4	4	20	80
3	CB18S 372603	AMRITHA.S	5	5	5	5	5	25	100
4	CB18S 372604	DHEENA.B. R	4	5	4	5	4	23	92
5	CB18S 372605	KAVIBRINDHA.S	5	5	5	5	5	25	100
6	CB18S 372606	KAVIYARASI.V	5	5	5	5	5	25	100
7	CB18S 372607	KEERTHANA.B	5	5	5	5	5	25	100
8	CB18S 372608	KEERTHIGA.M	5	4	5	4	5	23	92
9	CB18S 372609	MAHESHKUMAR.M	5	5	5	5	5	25	100
10	CB18S 372610	MOHANKUMAR.V.G	4	4	5	4	5	22	88
11	CB18S 372611	MOHANAKRISHNAN.S	4	5	5	4	5	23	92
12	CB18S 372613	PREMKUMAR.M	5	4	5	5	4	23	92
13	CB18S 372614	RAJESH.M	5	4	5	4	4	22	88
14	CB18S 372615	RANJITHKUMAR.A	4	4	4	4	4	20	80
15	CB18S 372616	REGIS PAUL RAJ.F	5	4	5	4	5	23	92
16	CB18S 372617	ROBERTNITTOLIAN.B	5	4	4	5	4	23	92
17	CB18S 372619	SATHISHKUMAR.M	4	5	4	4	4	21	84
18	CB18S 372620	SHANMUGA GURU.K	4	4	4	4	4	20	80
19	CB18S 372621	SURENTHIRABABU.K	5	4	4	4	4	21	84
20	CB18S 372622	SURUTHI.S	5	5	5	5	5	25	100
21	CB18S 372623	SURYA.P	5	4	5	4	5	23	92
22	CB18S 372624	THAMARALE	5	5	5	5	5	25	100
23	CB18S 372625	VANATHI.M	5	5	5	5	5	25	100
24	CB18S 372626	VIDHYA.S	5	5	5	5	5	25	100
25	CB18S 372627	VIGNESH.S	5	5	5	5	4	24	96
26	CB18S 372628	VINOTH.S	5	4	5	4	4	22	88
27	CB18S 372629	YOGAYALINI.P	5	5	5	5	5	25	100
AVERAGE			4.70	4.52	4.70	4.52	4.56		



EXPECTED ATTAINMENT IN EACH CO - 85%

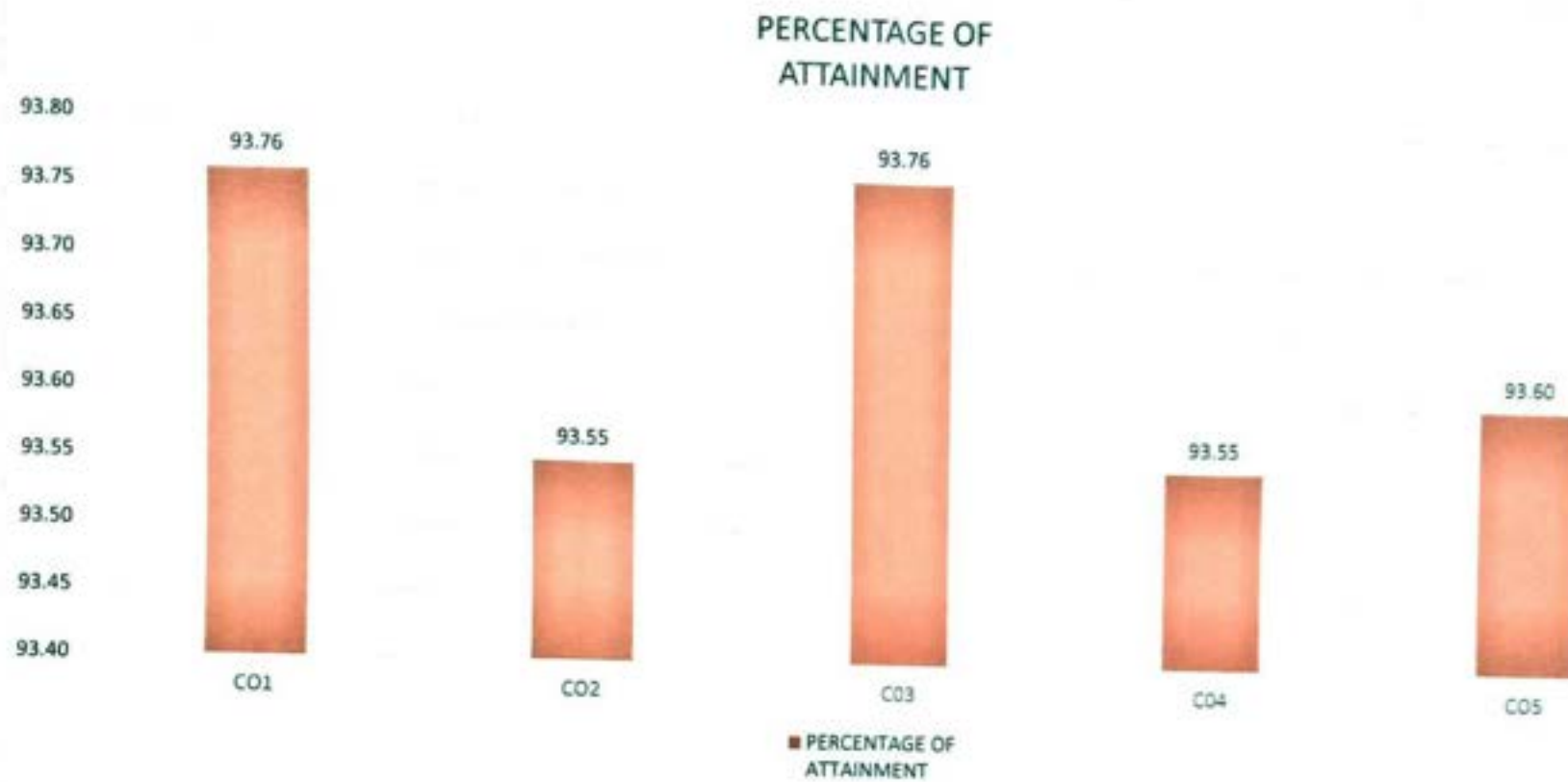
CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.70	75	79.70	93.76
CO2	4.52	75	79.52	93.55
CO3	4.70	75	79.70	93.76
CO4	4.52	75	79.52	93.55
CO5	4.56	75	79.56	93.60

COURSE ATTAINMENT FOR B.Sc., MATHEMATICS

SUBJECT NAME : GRAPH THEORY
 SUBJECT CODE : 16SMBEMM2:1
 NO OF STUDENTS : 27

COURSE OUTCOME	PERCENTAGE OF
CO1	93.76
CO2	93.55
CO3	93.76
CO4	93.55
CO5	93.60





COURSE ATTAINMENT FOR B.Sc., MATHEMATICS

SUBJECT NAME : GRAPH THEORY
 SUBJECT CODE : 16SMBEMM2:1
 NO OF STUDENTS : 27

COURSE OUTCOME ASSESSMENT

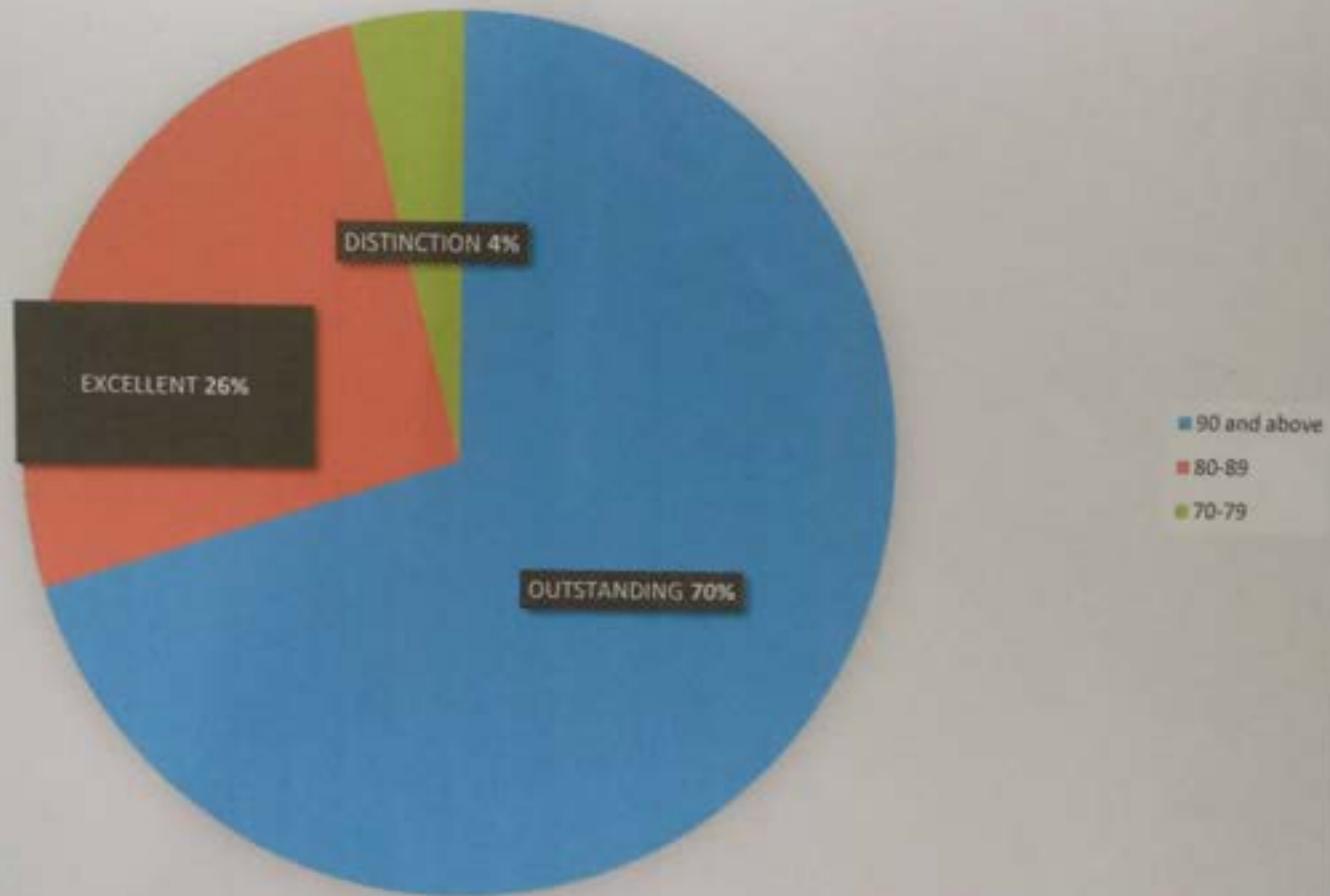
CATEGORY MARKS	NO OF STUDENTS	STATUS
90 and above	19	OUTSTANDING
80-89	7	EXCELLENT
70-79	1	DISTINCTION
60-69	0	VERY GOOD
50-59	0	GOOD
40-49	0	AVERAGE
below 40	0	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE

CATEGORY MARKS	PERCENTAGE	STATUS
90 and above	68	OUTSTANDING
80-89	25	EXCELLENT
70-79	4	DISTINCTION



COURSE OUTCOME ASSESSMENT



PRINCIPAL

Bharath College of Science and Management
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THANJAVUR - 613 005.

**BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
THANJAVUR-5**

**(UGC Recognized 2(f) & 12(B) Institution)
(Affiliated to Bharathidasan University, Tiruchirappalli – 24)**



DEPARTMENT OF MATHEMATICS

PO – CO ATTAINMENT

2021-2022



BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
(UGC Recognized 2(f) & 12(B) Institution)
THANJAVUR-5
DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Identify and enhance mathematical and computational strategies in order to solve mathematical problems.
PO2	Know various specialized areas of advanced mathematics and its applications.
PO3	Work as Professional mathematicians either in academia or elsewhere.
PO4	Inculcate knowledge of formulation and apply mathematical concepts which are suitable for real life applications.
PO5	Crack lectureship and fellowship exams affirmed by UGC like CSIR – NET and SET.

Name of the Programme : M.Sc Mathematics

Course Code & Course Title		Course Outcome
P16MA13 ORDINARY DIFFERENTIAL EQUATIONS	CO1	Learn various techniques of getting exact solutions of solvable first order equations and second order linear equations.
	CO2	Perform operations with Bessel functions and Legendre polynomial along with the corresponding recurrence formulas of different functions.
	CO3	Learn Picard's method of obtaining successive approximations of solutions of first order differential equations.
	CO4	Recognize and solve an Eigen value by use of a characteristic equation.
	CO5	Learn Autonomous system of two non-linear first order ordinary differential equations.



PO → CO _i	PO1	PO2	PO3	PO4	PO5
CO1	3	3	2	3	3
CO2	3	2	2	2	1
CO3	3	2	2	2	2
CO4	3	3	2	3	3
CO5	3	2	3	2	1
AVERAGE	3	2.4	2.2	2.4	2

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	UNIT TEST (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



SNO	REG.NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	P21192625	DHEENA B R	5	5	5	5	5	25	100
2	P21192626	KAVI BRINDHA R	5	5	5	5	5	25	100
3	P21192627	KAVIYA SRI R	4	5	4	5	5	23	92
4	P21192628	KEERTHANA B	5	5	5	5	5	25	100
5	P21192629	NIVEDIHA R	5	5	5	5	5	25	100
6	P21192630	NIVYA A	5	5	4	5	4	23	92
7	P21192631	PRIYADHARSHINI G	5	4	4	5	5	23	92
8	P21192632	PUNITHA D	5	5	5	5	5	25	100
9	P21192633	REGIS PAUL RAJ F	5	5	5	5	5	25	100
10	P21192634	RENGANATHAN V	5	4	5	4	5	23	92
11	P21192635	SHALINI R	5	5	4	5	4	23	92
12	P21192636	SHARMILA A	5	4	5	4	5	23	92
13	P21192637	SOWMIYA V	5	4	5	4	5	23	92
14	P21192638	SUGUNA R	5	5	5	5	5	25	100
15	P21192639	SUREGA S	5	5	5	5	5	25	100
16	P21192640	VARSHA S	4	4	5	5	5	23	92
17	P21192641	VINODHINI V	5	4	5	5	4	23	92
18	P21192642	WAJAHATH PARWIN S	5	5	5	5	5	25	100
19	P21192643	YOGAYALINI P	5	5	5	5	5	25	100
AVERAGE			4.89	4.68	4.79	4.84	4.84		



EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.89	75	79.89	93.99
CO2	4.68	75	79.68	93.74
CO3	4.79	75	79.79	93.87
CO4	4.84	75	79.84	93.93
CO5	4.84	75	79.84	93.93

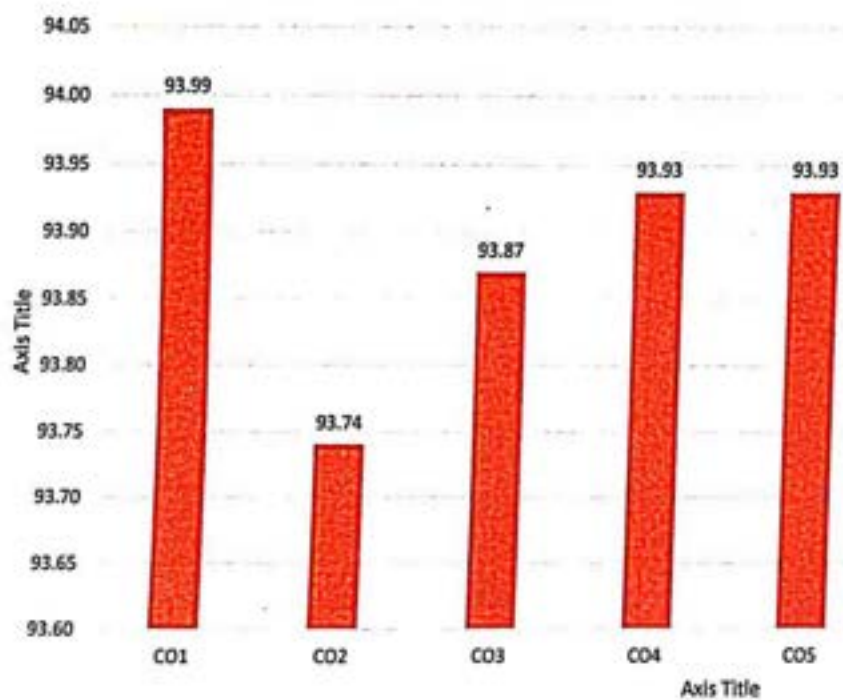
COURSE ATTAINMENT FOR M.Sc MATHEMATICS

SUBJECT NAME : ORDINARY DIFFERENTIAL EQUATIONS
 SUBJECT CODE : P16MA13
 NO.OF STUDENTS : 19

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.99
CO2	93.74
CO3	93.87
CO4	93.93
CO5	93.93



PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR M.Sc MATHEMATICS

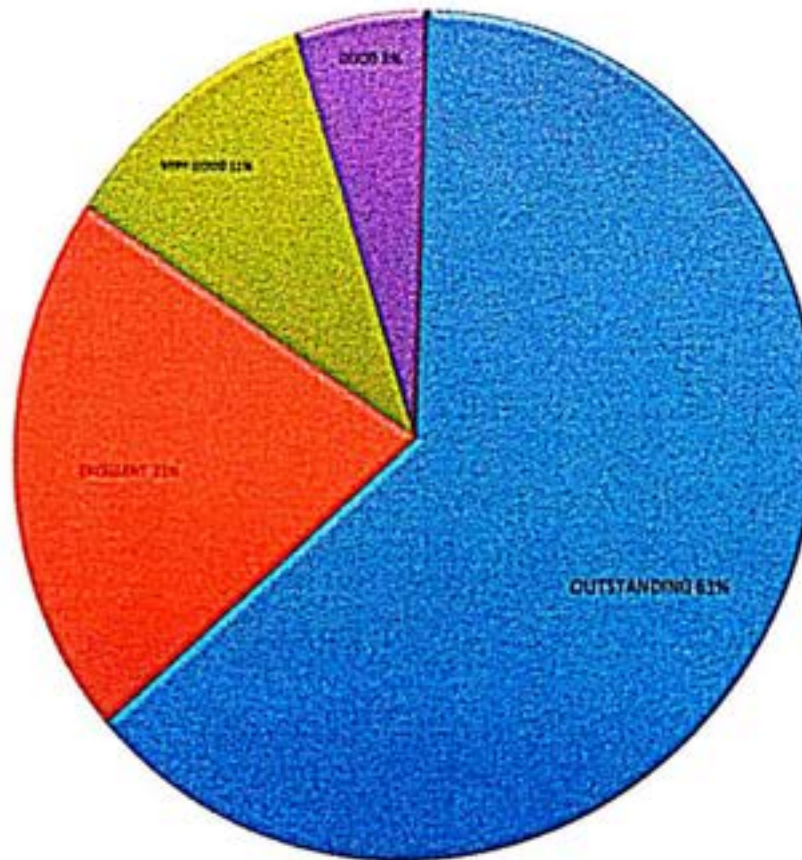
SUBJECT NAME :ORDINARY DIFFERENTIAL EQUATIONS
SUBJECT CODE : P16MA13
NO.OF STUDENTS : 19

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO.OF. STUDENTS	STATUS
90 and above(100)	12	OUTSTANDING
80-89	4	EXCELLENT
70-79	2	VERY GOOD
60-69	1	GOOD
50-59	0	ABOVE AVERAGE
Below 50	0	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
90 and above(100)	63%	OUTSTANDING
80-89	21%	EXCELLENT
70-79	11%	VERY GOOD
60-69	5%	GOOD



COURSE OUTCOME ASSESSMENT IN PERCENTAGE



■ 90 and above(100) ■ 80-89 ■ 70-79 ■ 60-69



PRINCIPAL

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BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
(UGC Recognized 2(f) & 12(B) Institution)
THANJAVUR-5
DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Identify and enhance mathematical and computational strategies in order to solve mathematical problems
PO2	Know various specialized areas of advanced mathematics and its applications.
PO3	Work as Professional mathematicians either in academia or elsewhere..
PO4	Inculcate knowledge of formulation and apply mathematical concepts which area suitable for real life applications
PO5	Crack lectureship and fellowship exams affirmed by UGC like CSIR – NET and SET..

NAME OF THE PROGRAMME: M.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
P16MA15 - INTEGRAL EQUATIONS, CALCULUS OF VARIATIONS AND TRANSFORMS	CO1	Apply the concepts of calculus of variations to find the maxima and minima of quantities defined as integrals containing unknown functions.
	CO2	Classify various kinds of Fourier sine and cosine transforms with their properties and simple problems.
	CO3	Examine some of Hankel transform and its inverse transform.
	CO4	Determine the solution of Integral equations.
	CO5	Evaluate the integral equations by the method of successive approximations.



PO → CO↓	PO1	PO2	PO3	PO4	PO5
CO1	3	3	3	3	3
CO2	3	2	3	2	3
CO3	3	3	2	3	2
CO4	3	2	2	3	3
CO5	2	3	3	3	2
AVERAGE	2.8	2.6	2.6	2.8	2.6

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	% TO TOTAL INTERNAL MARK
1	P 21192625	DHEENA.B. R	5	5	5	5	5	25	100
2	P 21192626	KAVIBRINDHA.S	5	5	5	5	5	25	100
3	P 21192627	KAVIYASRI.R	5	5	5	4	4	23	92
4	P 21192628	KEERTHANA.B	5	5	5	5	5	25	100
5	P 21192629	NIVEDHA.R	5	5	5	5	5	25	100
6	P 21192630	NIVYA.A	5	5	5	4	4	23	92
7	P 21192631	PRIYADHARSHINI.G	5	4	5	5	4	23	92
8	P 21192632	PUNITHA.D	5	5	5	5	5	25	100
9	P 21192633	REGIS PAUL RAJ. F	5	5	5	5	5	25	100
10	P 21192634	RENGANATHAN. V	5	5	4	5	4	23	92
11	P 21192635	SHALINI.R	5	5	5	4	4	23	92
12	P 21192636	SHARMILA.A	5	4	5	5	4	23	92
13	P 21192637	SOWMIYA.V	5	5	4	5	4	23	92
14	P 21192638	SUGUNA.R	5	5	5	5	5	25	100
15	P 21192639	SUREGA.S	5	5	5	5	5	25	100
16	P 21192640	VARSHA.S	5	5	5	4	4	23	92
17	P 21192641	VINODHINI.V	5	5	5	4	4	23	92
18	P 21192642	WAJAHATH PARWIN.S	5	5	5	5	5	25	100
19	P 21192643	YOGAYALINI.P	5	5	5	5	5	25	100
AVERAGE			5.00	4.89	4.89	4.74	4.53		



EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST + SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	5.00	75	80.00	94.12
CO2	4.89	75	79.89	93.99
CO3	4.89	75	79.89	93.99
CO4	4.74	75	79.74	93.81
CO5	4.53	75	79.53	93.56

COURSE ATTAINMENT FOR M.SC MATHEMATICS

SUBJECT CODE : P16MA15

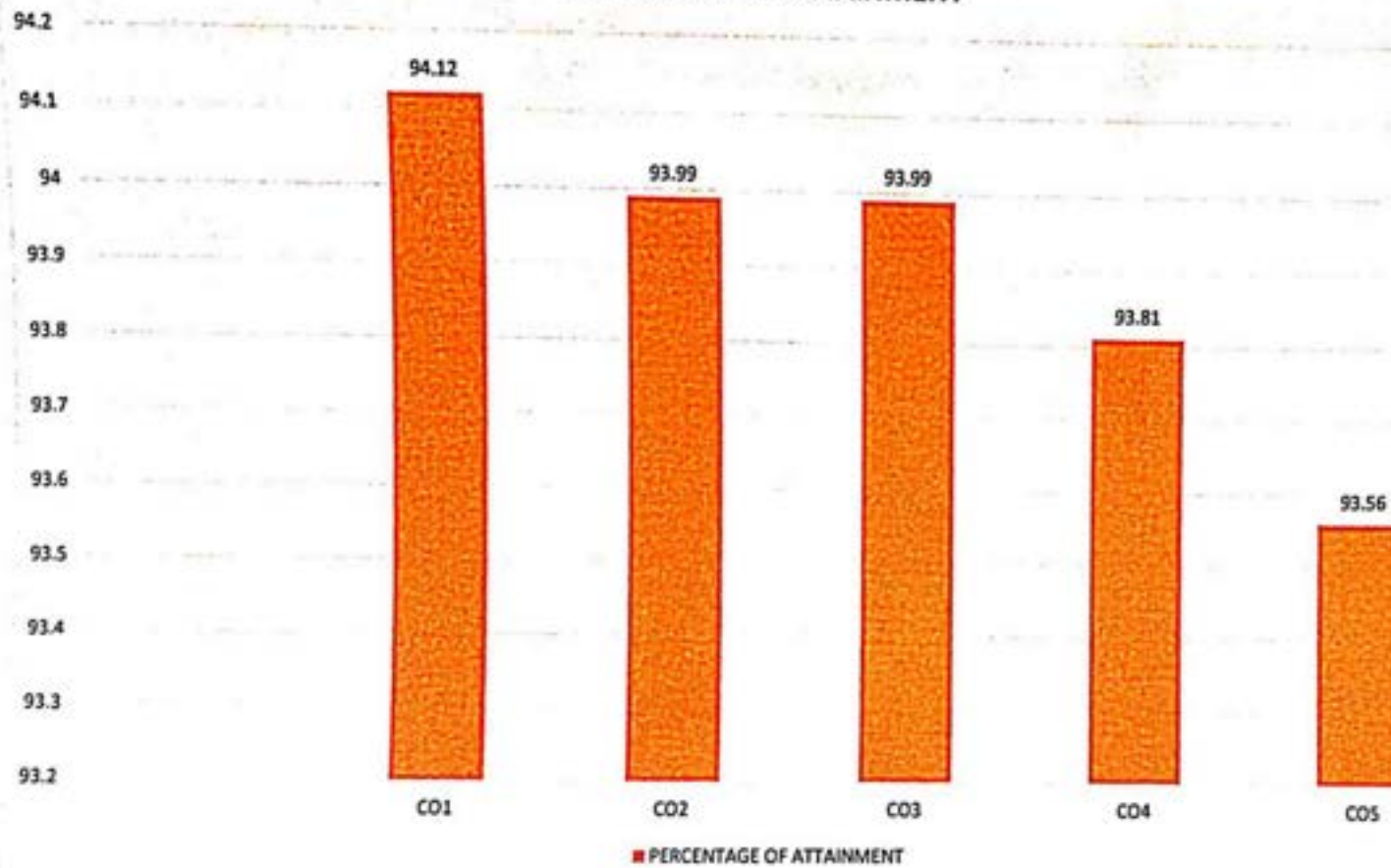
SUBJECT NAME : INTEGRAL EQUATIONS AND LAPLACE TRANSFORMS

NO.OF STUDENTS : 19

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	94.12
CO2	93.99
CO3	93.99
CO4	93.81
CO5	93.56



PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR M.SC MATHEMATICS

SUBJECT CODE : P16MA15

SUBJECT NAME : INTEGRAL EQUATIONS AND LAPLACE TRANSFORMS

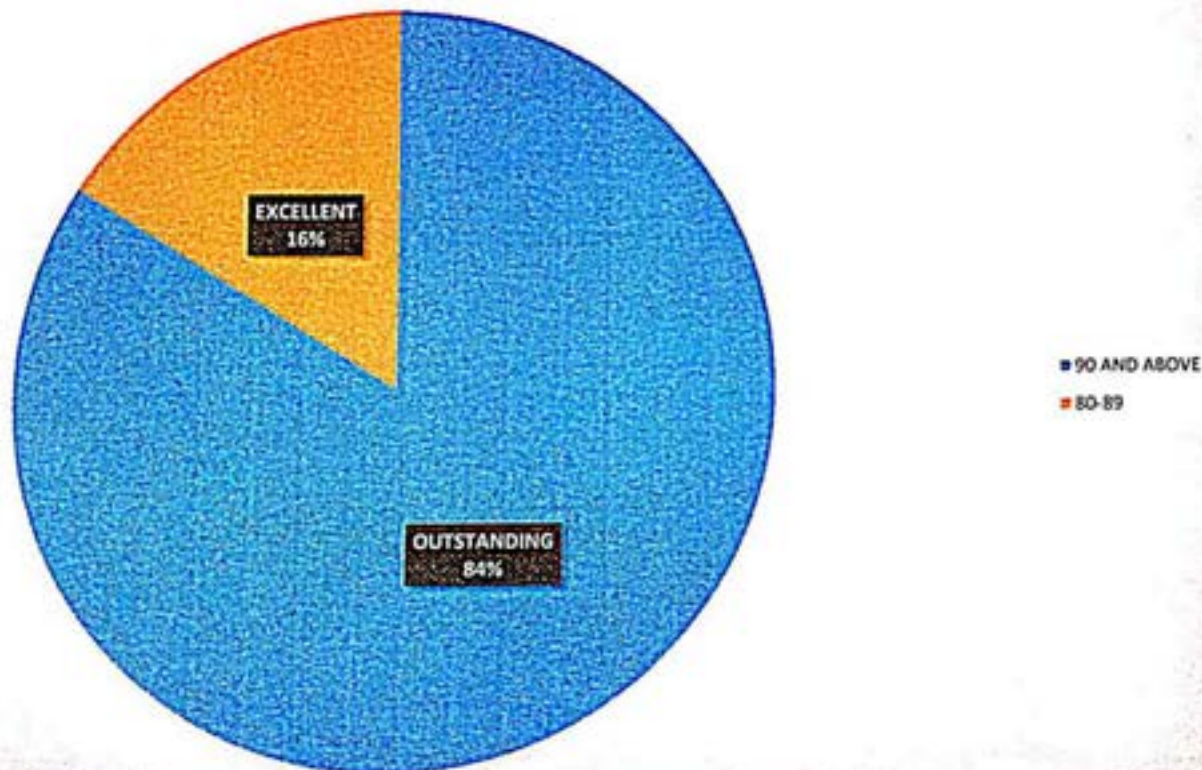
NO.OF STUDENTS : 19

COURSE OUTCOME ASSESSMENT		
CATEGORY(MARKS)	NO.OF STUDENTS	STATUS
90 AND ABOVE	16	Out standing
80-89	3	Excellent
70-79	0	Very good
60-69	0	Good
50-59	0	Average
BELOW 49	0	Reappear

COURSE OUTCOME ASSESSMENT		
CATEGORY(MARKS)	PERCENTAGE	STATUS
90 AND ABOVE	84%	Out standing
80-89	16%	Excellent



COURSE OUTCOME ASSESSMENT



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Bharath College of Science and Management
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- THANJAVUR - 613 005.



BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
(UGC Recognized 2(f) & 12(B) Institution)
THANJAVUR-5
PG DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME	
PO1	Identify and enhance mathematical and computational strategies in order to solve mathematical problems.
PO2	Know various specialized areas of advanced mathematics and its applications.
PO3	Work as Professional mathematicians either in academia or elsewhere.
PO4	Inculcate knowledge of formulation and apply mathematical concepts which are suitable for real life applications.
PO5	Crack lectureship and fellowship exams affirmed by UGC like CSIR – NET and SET.

NAME OF THE PROGRAMME: M.Sc., MATHEMATICS

COURSE CODE & COURSE	COURSE OUTCOME	
P16MA22 - LINEAR ALGEBRA	CO1	learn about basis under dimension
	CO2	acquire knowledge about linear transformation
	CO3	understand the polynomial ideals and the prime factorization of polynomial
	CO4	understand the permutation and the uniqueness of determinants
	CO5	learn about triangularisation and diagonalisation



PO → CO↓	PO1	PO2	PO3	PO4	PO5
CO1	3	2	2	2	0
CO2	3	3	3	2	1
CO3	3	3	3	3	0
CO4	3	2	3	3	0
CO5	3	3	3	3	0
AVERAGE	3	2.6	2.8	2.6	0.2

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	UNIT TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	P 21192625	DHEENA.B. R	5	4	4	4	4	21	84
2	P 21192626	KAVIBRINDHA.S	5	5	5	4	4	23	92
3	P 21192627	KAVIYASRI.R	4	4	4	4	4	20	80
4	P 21192628	KEERTHANA.B	5	5	5	5	4	24	96
5	P 21192629	NIVEDHA.R	5	5	5	5	5	25	100
6	P 21192630	NIVYA.A	4	4	4	4	4	20	80
7	P 21192631	PRIYADHARSHINI.G	4	4	4	4	4	20	80
8	P 21192632	PUNITHA.D	5	5	5	5	5	25	100
9	P 21192633	REGIS PAUL RAJ. F	5	4	4	4	4	21	84
10	P 21192634	RENGANATHAN. V	5	4	4	4	4	21	84
11	P 21192635	SHALINI.R	4	4	4	4	4	20	80
12	P 21192636	SHARMILA.A	4	4	4	4	4	20	80
13	P 21192637	SOWMIYA.V	4	4	4	4	4	20	80
14	P 21192638	SUGUNA.R	5	5	5	4	4	23	92
15	P 21192639	SUREGA.S	5	5	5	5	4	24	96
16	P 21192640	VARSHA.S	5	4	4	4	4	21	84
17	P 21192641	VINODHINI.V	4	4	4	4	4	20	80
18	P 21192642	WAJAHATH PARWIN.S	5	5	4	4	4	22	88
19	P 21192643	YOGAYALINI.P	5	5	5	5	4	24	96
AVERAGE			4.63	4.42	4.37	4.26	4.11		



EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST + SEMINAR- ASSIGNMENT	END SEM	TOTAL
CO1	4.63	75	79.63
CO2	4.42	75	79.42
CO3	4.37	75	79.37
CO4	4.26	75	79.26
CO5	4.11	75	79.11

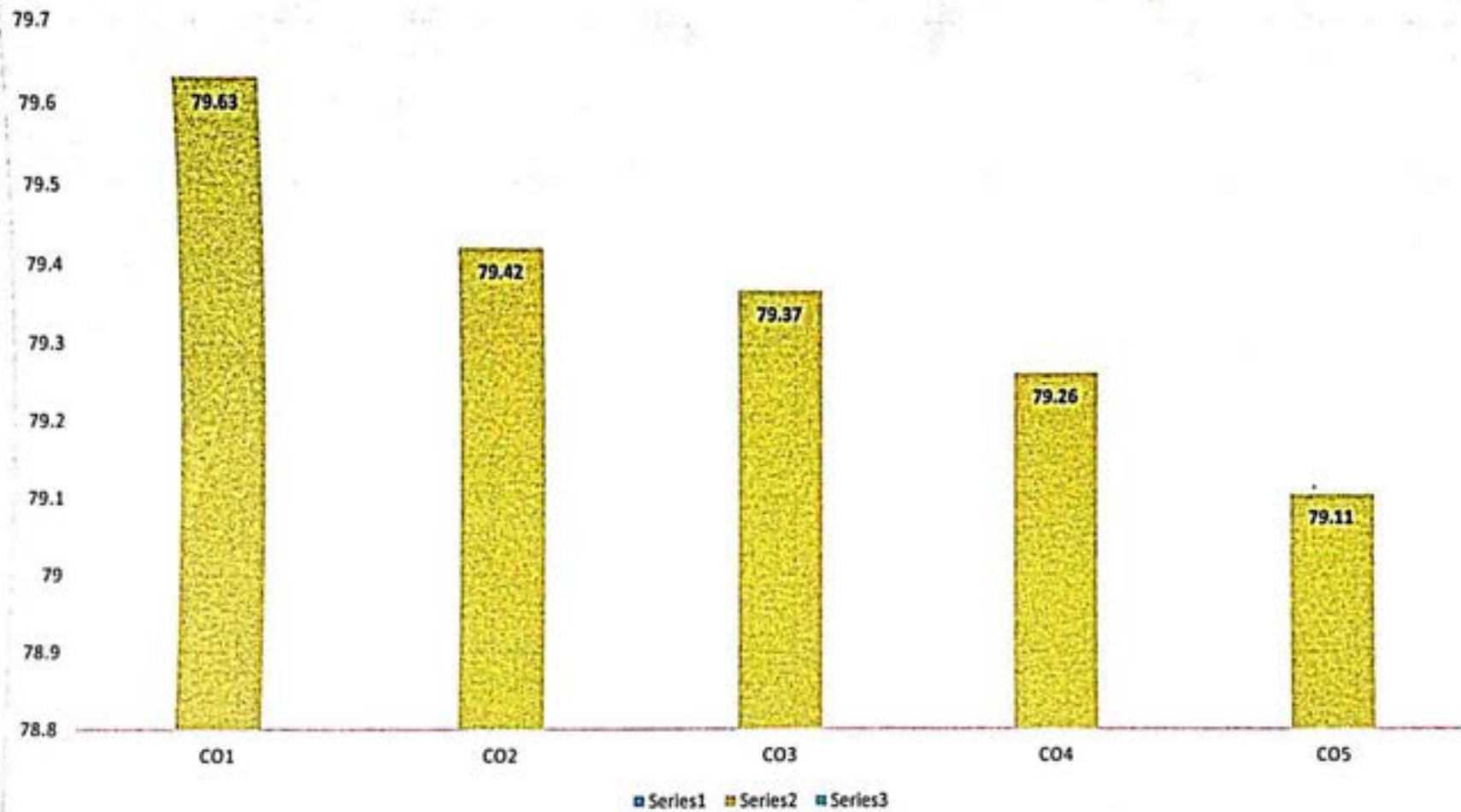
COURSE ATTAINMENT FOR M.SC MATHEMATICS

SUBJECT NAME : LINEAR ALGEBRA
 SUBJECT CODE : P16MA22
 NO OF STUDENTS : 19

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	79.63
CO2	79.42
CO3	79.37
CO4	79.26
CO5	79.11



PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR M.SC MATHEMATICS

SUBJECT NAME : LINEAR ALGEBRA
SUBJECT CODE : P16MA22
NO OF STUDENTS : 19

COURSE OUTCOME ASSESSMENT

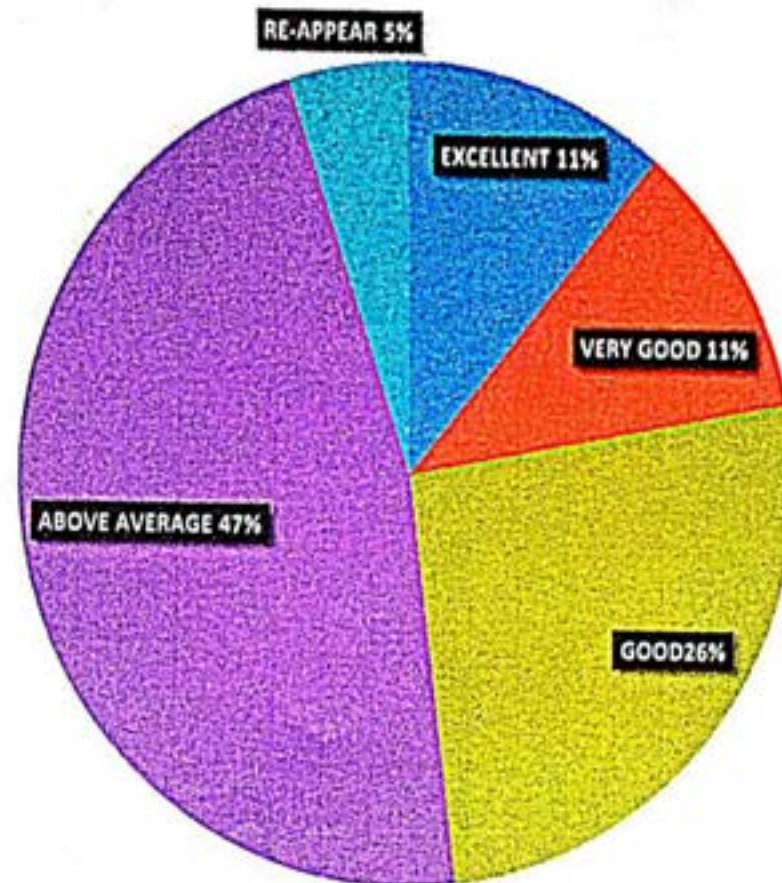
CATEGORY MARKS	NO OF STUDENTS	STATUS
90 and above	0	OUTSTANDING
80-89	2	EXCELLENT
70-79	2	VERY GOOD
60-69	5	GOOD
50-59	9	ABOVE AVERAGE
below 49	1	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE (%)

CATEGORY MARKS	PERCENTAGE	STATUS
80-89	11	EXCELLENT
70-79	11	VERY GOOD
60-69	26	GOOD
50-59	47	ABOVE AVERAGE
below 49	5	RE-APPEAR



COURSE OUTCOME ASSESSMENT



■ 80-89
■ 70-79
■ 60-69
■ 50-59
■ below 49



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PG DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

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PO4	Inculcate knowledge of formulation and apply mathematical concepts which are suitable for real life applications.
PO5	Crack lectureship and fellowship exams affirmed by UGC like CSIR – NET and SET.

NAME OF THE PROGRAMME: M.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
P16MA31 - CLASSICAL DYNAMICS	CO1	Define mechanical system, Generalized Co-ordinates, Constraints and Virtual work.
	CO2	Derivation of Lagrange's equation and integrals of motion
	CO3	Construct the applications of Lagrange's equations and Gyroscopic systems
	CO4	Write Hamilton's principle function and variational principles.
	CO5	The use of Hamilton-Jacobi equation and Separability.



PO → CO _i	PO1	PO2	PO3	PO4	PO5
CO1	3	3	3	3	3
CO2	3	2	3	2	3
CO3	3	3	2	3	2
CO4	3	2	2	3	3
CO5	2	3	3	3	2
AVERAGE	2.8	2.6	2.6	2.8	2.6

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	UNIT TEST (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



SNO	REG.NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	% TO TOTAL INTERN AL MARK
1	P 20193401	ABARNAN	5	5	5	5	5	25	100
2	P 20193402	ABINAYA.R	5	5	5	5	5	25	100
3	P 20193403	ANUSUYA.R	5	5	5	5	5	25	100
4	P 20193404	ARUN KUMAR.K	5	5	5	4	4	23	92
5	P 20193405	KEERTHIGA.V	5	5	5	5	5	25	100
6	P 20193406	LAKSHMIPRIYA.S	5	5	5	5	5	25	100
7	P 20193407	NANDHINI.G	5	4	4	5	5	23	92
8	P 20193408	NIVETHA.R	5	5	5	5	5	25	100
9	P 20193409	RAMKUMAR.N	5	5	5	4	4	23	92
10	P 20193410	RAMYANJALI.V	5	5	5	5	5	25	100
11	P 20193411	RISHNA YASMINE.G	5	5	5	5	5	25	100
12	P 20193412	SOWMIYA.R	5	5	5	5	5	25	100
13	P 20193413	VARTHANI.V	5	5	5	4	4	23	92
14	P 20193414	VERONICA SWEETY PRABHA F	5	5	5	4	4	23	92
15	P 20193415	VIGNESH.R	5	5	5	4	4	23	92
AVERAGE			5.00	4.93	4.93	4.67	4.667		



EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST + SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	5.00	75	80	94.12
CO2	4.93	75	79.93	94.04
CO3	4.93	75	79.93	94.04
CO4	4.67	75	79.67	93.73
CO5	4.67	75	79.67	93.73

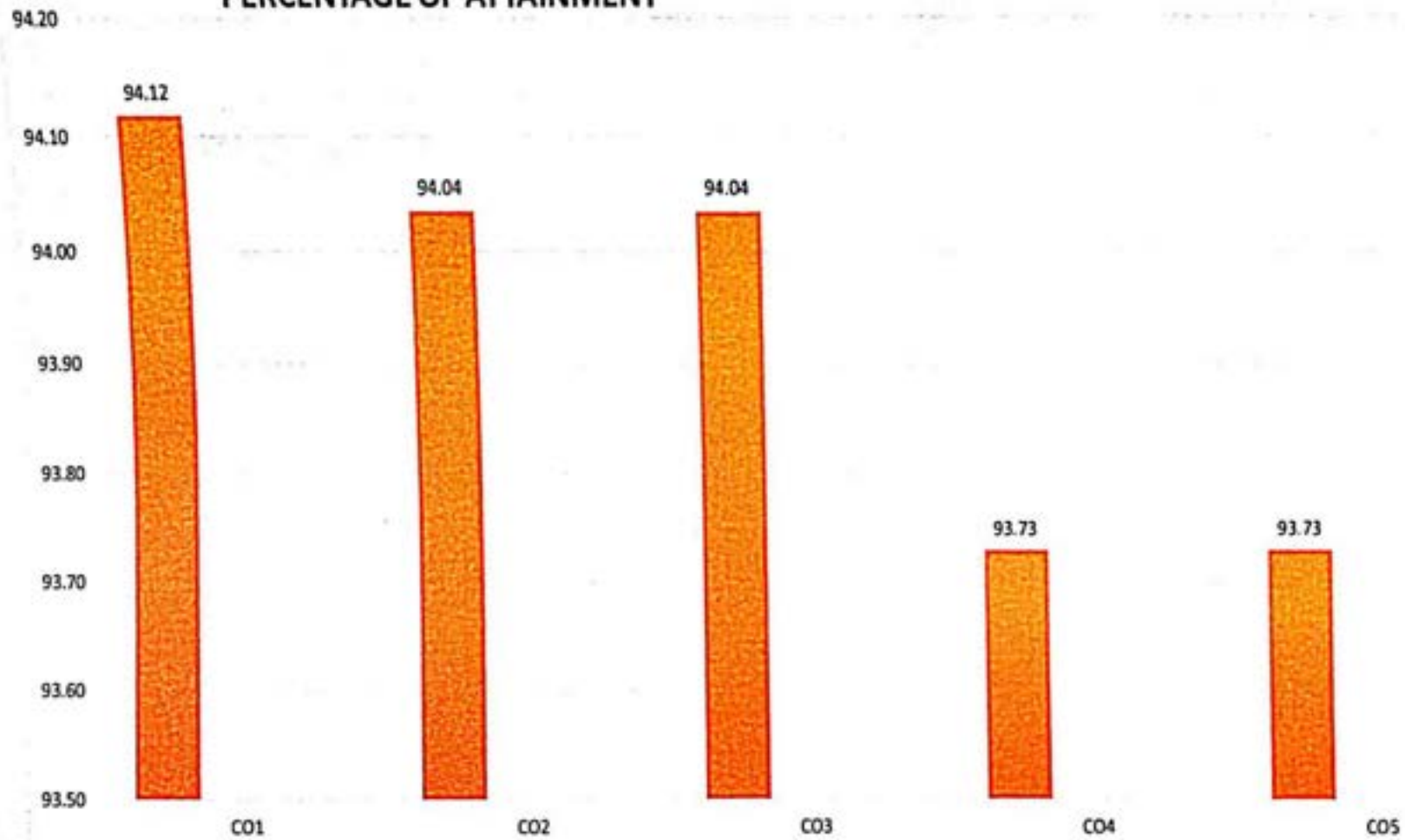
COURSE ATTAINMENT FOR M.SC MATHEMATICS

SUBJECT NAME : CLASSICAL DYNAMICS
 SUBJECT CODE : P16MA31
 NO OF STUDENTS : 15

COURSE OUTCOME	E OF ATTAINMEN T
CO1	94.12
CO2	94.04
CO3	94.04
CO4	93.73
CO5	93.73



PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR M.SC MATHEMATICS

SUBJECT NAME : CLASSICAL DYNAMICS
SUBJECT CODE : P16MA31
NO OF STUDENTS : 15

COURSE OUTCOME ASSESSMENT

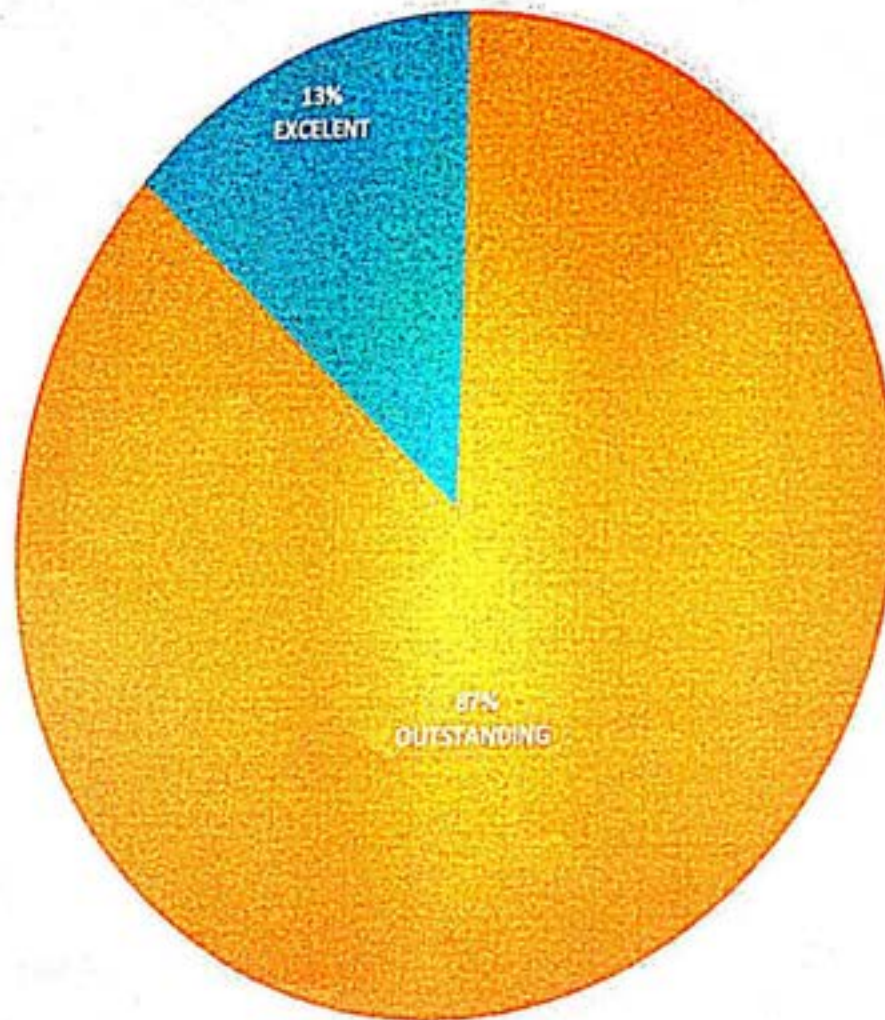
CATEGORY MARKS	NO OF STUDENTS	STATUS
90 and above	13	OUTSTANDING
80-89	2	EXCELLENT
70-79	0	DISTINCTION
60-69	0	VERY GOOD
50-59	0	GOOD
below 49	0	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE (%)

CATEGORY MARKS	PERCENTAGE	STATUS
90 and above (100)	87	OUTSTANDING
80-89	13	EXCELLENT



COURSE OUTCOME ASSESSMENT



■ 90 and above
■ 80-89



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THANJAVUR-5
DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Identify and enhance mathematical and computational strategies in order to solve mathematical problems
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NAME OF THE PROGRAMME: M.Sc., MATHEMATICS

**COURSE CODE &
COURSE TITLE**

COURSE OUTCOME

P16MA41- FUNCTIONAL ANALYSIS	CO1	Recognize the fundamental properties of normed spaces and the transformations between them.
	CO2	Understand the central concepts from functional analysis, including the Hahn Banach Theorem, the Open Mapping Theorem and the Closed Graph Theorem.
	CO3	Understand the main properties of bounded operators of Hilbert spaces.
	CO4	Understand the notion of Hilbert Spaces and apply the spectral theorem to the resolution of integral equations
	CO5	Understand the basic properties of Banach Algebra



PO → CO↓	PO1	PO2	PO3	PO4	PO5
CO1	3	3	3	3	3
CO2	3	2	3	2	2
CO3	3	3	2	3	2
CO4	3	2	2	2	3
CO5	3	3	3	3	2
AVERAGE	3	2.6	2.6	2.6	2.4

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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

SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	P 20193401	ABARNA.N	5	5	5	5	5	25	100
2	P 20193402	ABINAYA.R	5	5	5	5	4	24	96
3	P 20193403	ANUSUYA.R	5	5	5	5	4	24	96
4	P 20193404	ARUN KUMAR.K	5	5	4	4	4	23	92
5	P 20193405	KEERTHIGA.V	5	5	5	5	5	25	100
6	P 20193406	LAKSHMIPRIYA.S	5	5	5	5	5	25	100
7	P 20193407	NANDHINI.G	5	5	4	5	4	23	92
8	P 20193408	NIVETHA.R	5	5	5	5	5	25	100
9	P 20193409	RAMKUMAR.N	5	5	5	5	4	24	96
10	P 20193410	RAMYANJALI.V	5	5	5	5	5	25	100
11	P 20193411	RISHNA YASMINE.G	5	5	5	5	5	25	100
12	P 20193412	SOWMIYA.R	5	5	5	5	5	25	100
13	P 20193413	VARTHANI.V	5	5	5	5	4	24	96
14	P 20193414	VERONICA SWEETY PRABHA.F	5	5	5	4	4	23	92
15	P 20193415	VIGNESH.R	5	5	5	5	4	24	96
AVERAGE			5	5	4.87	4.87	4.47		



EXPECTED ATTAINMENT IN EACH CO - 85%

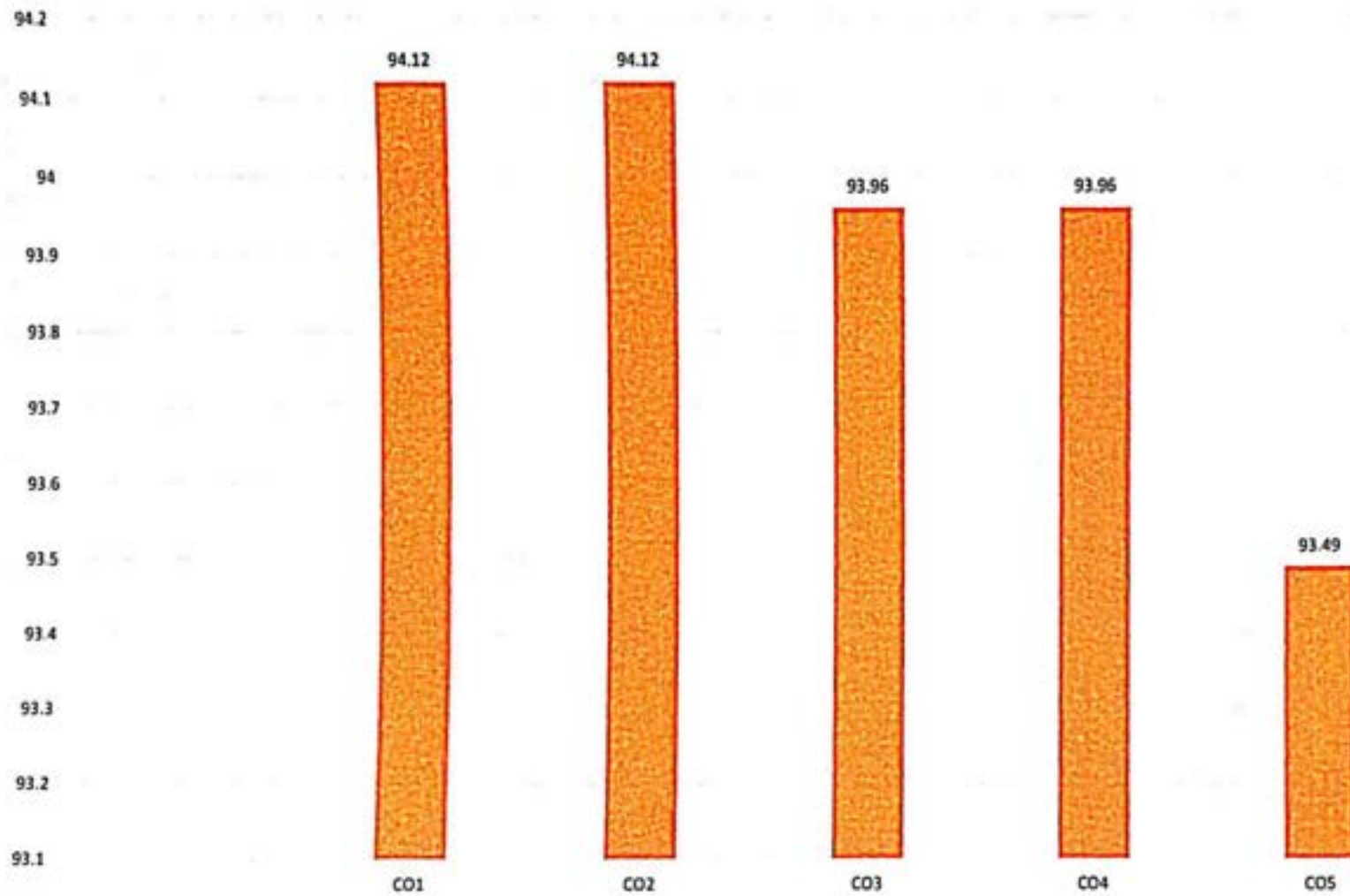
CO	TEST + SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	5	75	80.00	94.12
CO2	5	75	80.00	94.12
CO3	4.87	75	79.87	93.96
CO4	4.87	75	79.87	93.96
CO5	4.47	75	79.47	93.49

COURSE ATTAINMENT FOR M.SC MATHEMATICS

SUBJECT CODE : : P16MA41
 SUBJECT NAME : : FUNCTIONAL ANALYSIS
 NO.OF STUDENTS : : 15

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	94.12
CO2	94.12
CO3	93.96
CO4	93.96
CO5	93.49





COURSE ATTAINMENT FOR M.SC MATHEMATICS

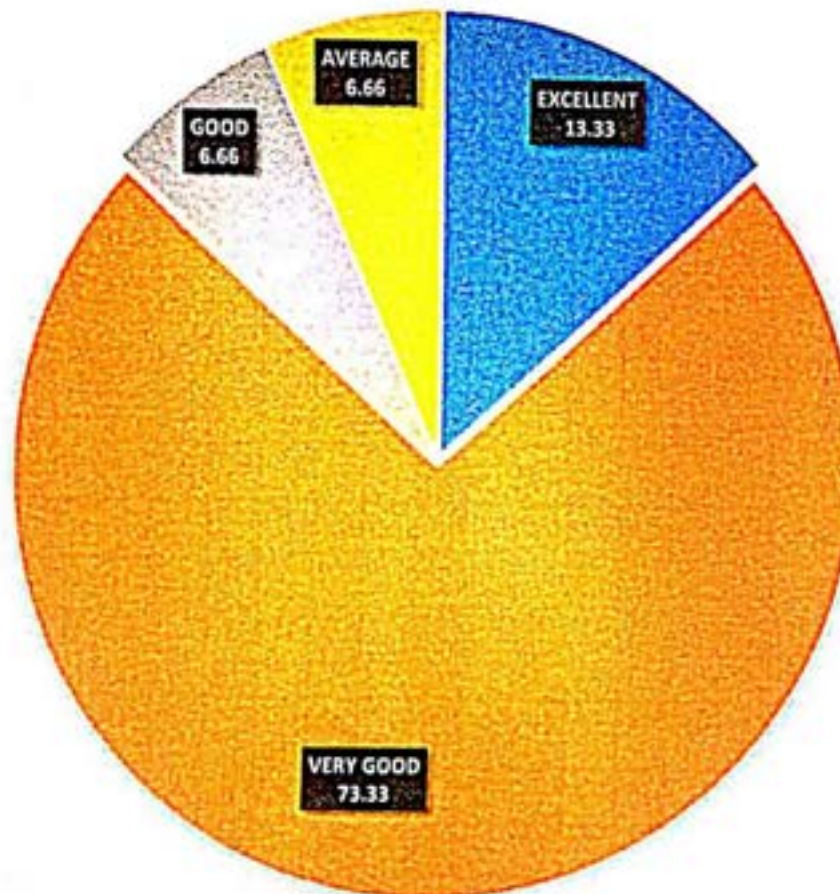
SUBJECT CODE : P16MA41
SUBJECT NAME : FUNCTIONAL ANALYSIS
NO.OF STUDENTS : 15

COURSE OUTCOME ASSESSMENT		
CATEGORY(MARKS)	NO.OF STUDENTS	STATUS
90 AND ABOVE	0	Out standing
80-89	2	Excellent
70-79	11	Very good
60-69	1	Good
50-59	1	Average
BELOW 49	0	Reappear

COURSE OUTCOME ASSESSMEN IN PERCENTAGE		
CATEGORY(MARKS)	PERCENTAGE	STATUS
80-89	13.33	Excellent
70-79	73.33	Very good
60-69	6.66	Good
50-59	6.66	Average



COURSE OUTCOME ASSESSMENT



■ 80-89
■ 70-79
■ 60-69
■ 50-59




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THANJAVUR-5

DEPARTMENT OF MATHEMATICS

ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Identify and enhance mathematical and computational strategies in order to solve mathematical problems.
PO2	Know various specialized areas of advanced mathematics and its applications.
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PO4	Inculcate knowledge of formulation and apply mathematical concepts which are suitable for real life applications.
PO5	Crack lectureship and fellowship exams affirmed by UGC like CSIR – NET and SET.

Name of the Programme: M.Sc Mathematics

COURSE CODE & COURSE TITLE	COURSE OUTCOME
P16MAE4B ADVANCED OPERATIONS RESEARCH	CO1 Concept of Integer Programming Problems and Cutting plane method, Mixed IPP, Branch and Bound method
	CO2 Learn the Dynamic (multistage) algorithm, applications of Dynamic Programming.
	CO3 Compute the Decision theory and Value of the game, Dominance property and Graphical method by Game theory.
	CO4 Ability to understand Deterministic inventory and Probability inventory, EOQ and Material Requirement planning.
	CO5 Learn Non-Linear Programming Algorithm, Direct method, constrained Algorithms, Separable, Quadratic, Geometric, Stochastic Programming, Linear Combination method and SUMT algorithm.



PO → CO↓	PO1	PO2	PO3	PO4	PO5
CO1	3	2	2	2	2
CO2	1	2	3	2	3
CO3	3	1	1	3	2
CO4	3	3	2	3	2
CO5	2	3	3	3	1
AVERAGE	2.4	2.2	2.2	2.6	2

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	P20193401	ABARNA N	5	5	5	5	5	25	100
2	P20193402	ABINAYA R	5	5	5	5	5	25	100
3	P20193403	ANUSUYA R	4	5	5	5	5	25	100
4	P20193404	ARUN KUMAR K	5	4	5	4	5	23	92
5	P20193405	KEERTHIGA V	5	5	5	5	5	25	100
6	P20193406	LAKSHMI PRIYA S	5	5	5	5	5	25	100
7	P20193407	NANDHINI G	5	4	5	5	4	23	92
8	P20193408	NIVETHA R	5	5	5	5	5	25	100
9	P20193409	RAM KUMAR N	4	4	5	5	5	23	92
10	P20193410	RAMYANJALI V	5	5	5	5	5	25	100
11	P20193411	RISHNA YASMINE G	5	5	5	5	5	25	100
12	P20193412	SOWMIYA R	5	5	5	5	5	25	100
13	P20193413	VARTHANI V	4	5	4	5	5	23	92
14	P20193414	VERONICA SWEETY PRABHA F	5	4	5	4	5	23	92
15	P20193415	VIGNESH R	4	4	5	5	5	23	92
AVERAGE			4.73	4.67	4.93	4.87	4.93		



EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST + SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.73	75	79.73	93.80
CO2	4.67	75	79.67	93.73
CO3	4.93	75	79.93	94.04
CO4	4.87	75	79.87	93.96
CO5	4.93	75	79.93	94.04

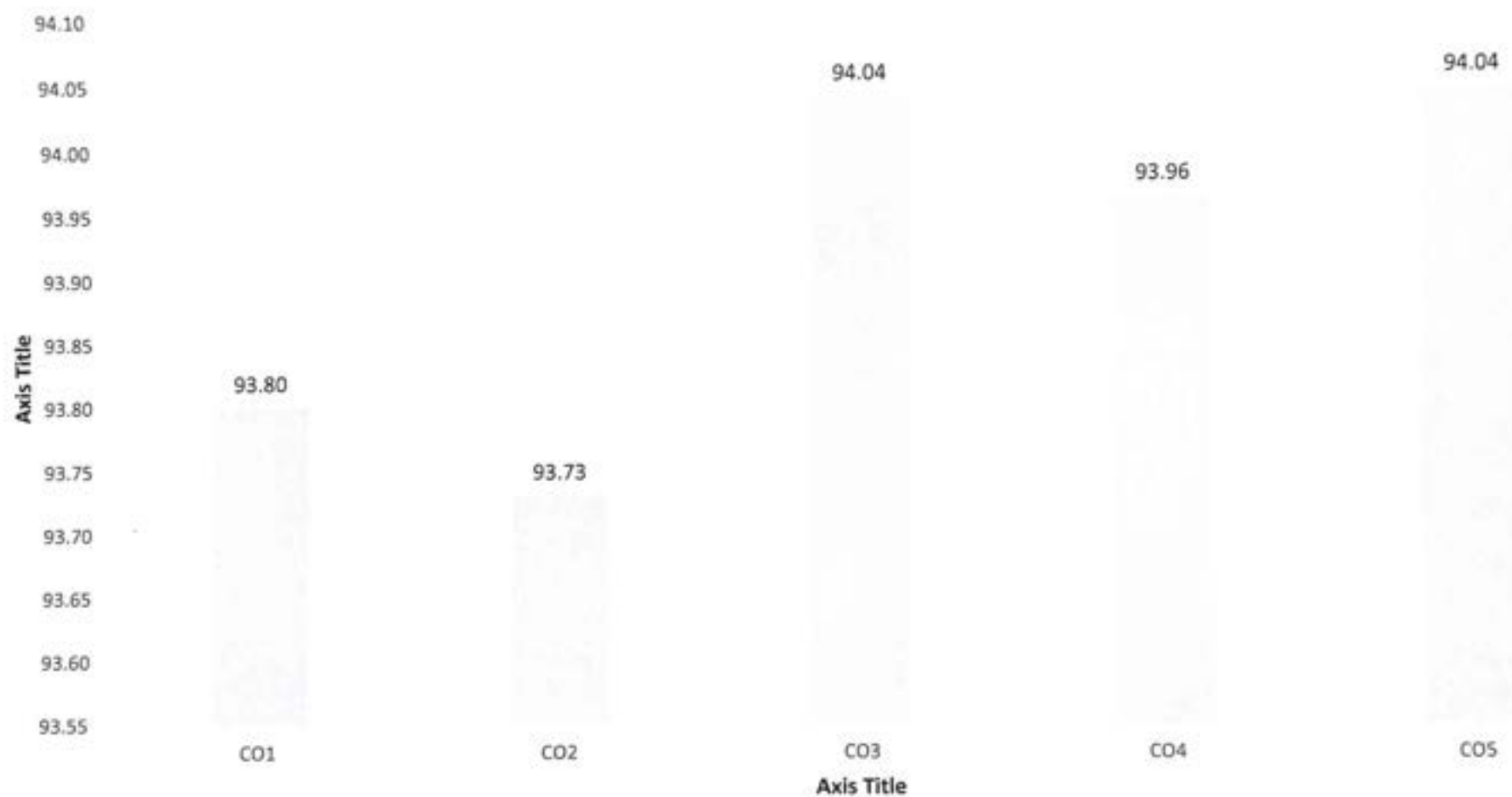
COURSE ATTAINMENT FOR M.ScMATHEMATICS

SUBJECT NAME : ADVANCED OPERATIONS RESEARCH
SUBJECT CODE : P16MAE4B
NO.OF STUDENTS : 15

COURSE	PERCENTAGE OF
CO1	93.80
CO2	93.73
CO3	94.04
CO4	93.96
CO5	94.04



PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR M.Sc MATHEMATICS

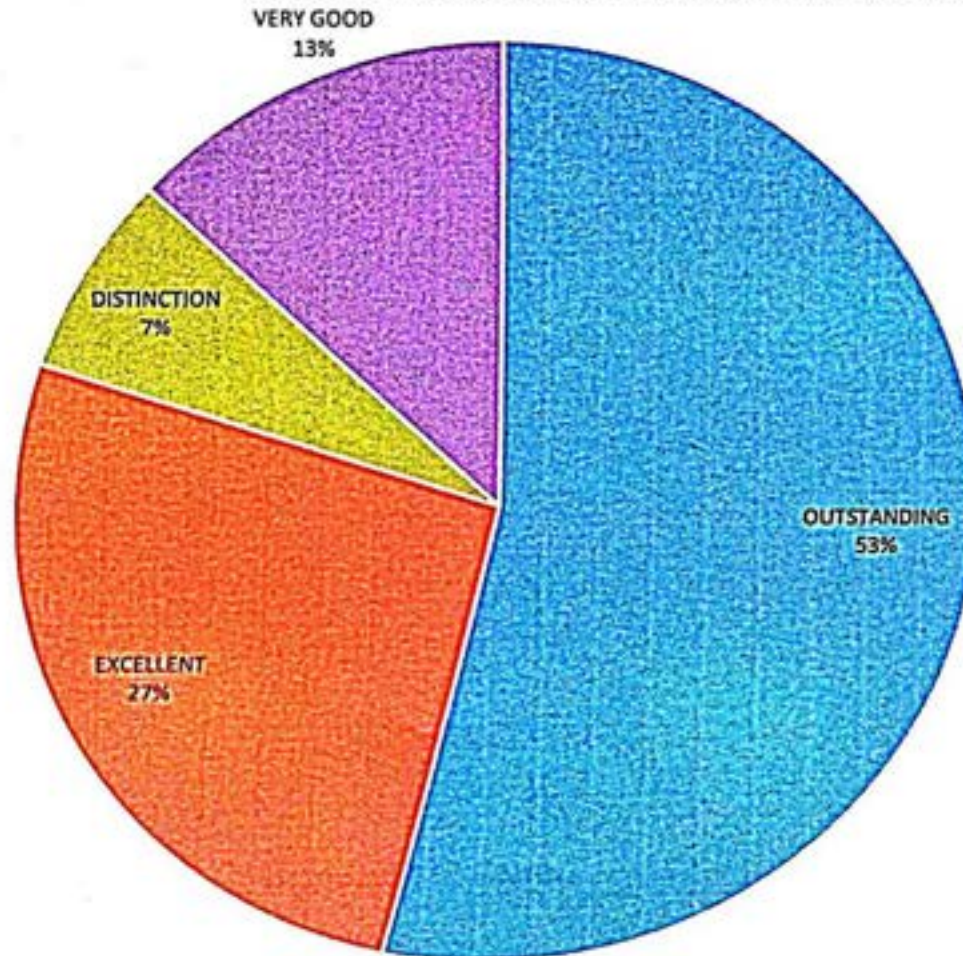
SUBJECT NAME : ADVANCED OPERATIONS RESEARCH
SUBJECT CODE : P16MAE4B
NO.OF STUDENTS : 15

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO.OF.STUDENTS	STATUS
90 and above(100)	8	OUTSTANDING
80-89	4	EXCELLENT
70-79	1	DISTINCTION
60-69	2	VERY GOOD
50-59	0	GOOD
40-49	0	AVERAGE
Below 40	0	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
90 and above(100)	53%	OUTSTANDING
80-89	27%	EXCELLENT
70-79	7%	DISTINCTION
60-69	13%	VERY GOOD



COURSE OUTCOME ASSESSMENT IN PERCENTAGE



- 90 and above(100)
- 80-89
- 70-79
- 60-69



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PO5	Crack lectureship and fellowship exams affirmed by UGC like CSIR – NET and SET.

Name of the Programme : M.Sc Mathematics		
Course Code & Course Title	Course Outcome	
P16MAE5C ALGEBRAIC NUMBER THEORY	CO1	Explain the concepts of divisibility ,congruences.
	CO2	Understand the techniques of numerical calculations of prime power moduli, using congruences.
	CO3	Understand the ideas of quadratic residues and quadratic reciprocity.
	CO4	Study about the concept of binary quadratic forms.
	CO5	Acquire the knowledge of Diophantine Equations .



PO → CO↓	PO1	PO2	PO3	PO4	PO5
CO1	3	2	3	2	2
CO2	3	2	2	3	2
CO3	3	2	2	2	2
CO4	3	2	3	2	3
CO5	3	2	2	3	2
AVERAGE	3	2	2.4	2.4	2.2

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	UNIT TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	P 20193401	ABARNA N	5	5	5	5	5	25	100
2	P 20193402	ABINAYA R	5	5	5	5	4	24	96
3	P 20193403	ANUSUYA R	4	5	4	5	5	23	92
4	P 20193404	ARUN KUMAR K	5	4	5	4	5	23	92
5	P 20193405	KEERTHIGA V	5	5	5	5	5	25	100
6	P 20193406	LAKSHMIPRIYA S	5	5	5	5	5	25	100
7	P 20193407	NANDHINI G	5	4	4	5	5	23	92
8	P 20193408	NIVETHA R	5	5	5	5	5	25	100
9	P 20193409	RAMKUMAR N	5	5	4	5	5	24	96
10	P 20193410	RAMYANJALI V	5	5	5	5	5	25	100
11	P 20193411	RISHNA YASMINE G	5	5	5	5	5	25	100
12	P 20193412	SOWMIYA R	5	5	5	5	5	25	100
13	P 20193413	VARTHANI V	5	5	5	4	5	24	96
14	P 20193414	VERONICA SWEETY PRABHA F	5	5	4	5	5	24	96
15	P 20193415	VIGNESH R	5	5	5	5	4	24	96
		Average	4.93	4.87	4.73	4.87	4.87		



EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.93	75	79.93	94.0
CO2	4.87	75	79.87	94.0
CO3	4.73	75	79.73	93.8
CO4	4.87	75	79.87	94.0
CO5	4.87	75	79.87	94.0

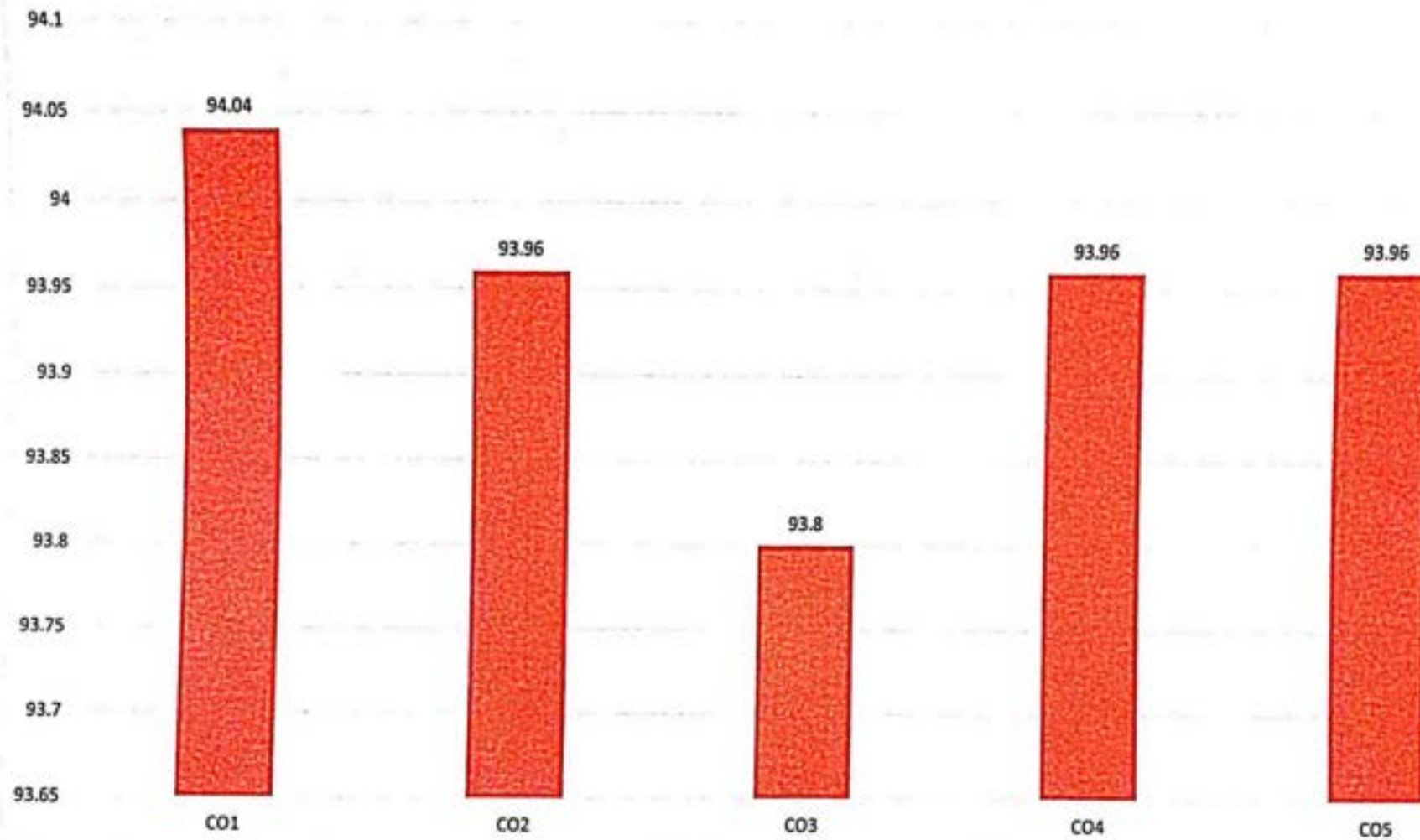
COURSE ATTAINMENT FOR M.Sc MATHEMATICS

SUBJECT NAME : ALGEBRAIC NUMBER THEORY
 SUBJECT CODE : P16MAE5C
 NO.OF STUDENTS : 15

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	94.04
CO2	93.96
CO3	93.80
CO4	93.96
CO5	93.96



PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR M.Sc MATHEMATICS

SUBJECT NAME : ALGEBRAIC NUMBER THEORY
SUBJECT CODE : P16MAE5C
NO.OF STUDENTS : 15

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO.OF. STUDENTS	STATUS
90 and above(100)	0	OUTSTANDING
80-89	0	EXCELLENT
70-79	4	VERY GOOD
60-69	10	GOOD
50-59	0	ABOVE AVERAGE
Below 50	1	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
70-79	27%	VERY GOOD
60-69	67%	GOOD
Below 50	7%	RE-APPEAR



PERCENTAGE

RE-APPEAR 0.66666667



70-79

60-69

Below 50



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THANJAVUR-5
DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME	
PO1	Remember the fundamental concepts of Mathematics
PO2	Imbibe the skills necessary to effectively translate mathematical aspects to the general public
PO3	Develop Critical thinking ability so as to improve Employability and Decision making.
PO4	Apply Mathematical Models to solve critical problems.
PO5	Apply the concepts studied, in real life situations.

NAME OF THE PROGRAMME: B.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
16SCCMM2 - INTEGRAL CALCULUS	CO1	Students will be able to acquire the basic knowledge of all Integral models and methods.
	CO2	Applications of definite Definite integrals, Integration by parts and Understand the concepts of Reduction formulae.
	CO3	Verify Geometric Application of integration to length, area and volume.
	CO4	.Evaluate areas, length of a curve and surface of revolution occurring in real life problems using multiple integrals and change of integral.
	CO5	Techniques of Beta, Gamma integrals. Various integration formulae.



PO → CO↓	PO1	PO2	PO3	PO4	PO5
CO1	3	3	2	3	3
CO2	3	3	3	2	2
CO3	3	2	3	3	3
CO4	3	3	3	3	3
CO5	2	3	3	3	3
AVERAGE	2.8	2.8	2.8	2.8	2.8

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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

SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	CB21S 381695	N. ANUSHYA	5	5	5	5	4	24	96
2	CB21S 381696	R. ARULPRASATH	5	4	4	4	5	22	88
3	CB21S 381697	R. NITHYA	5	5	4	5	5	24	96
AVERAGE			5.00	4.67	4.33	4.67	4.67		



EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	5.00	75	80.00	94.12
CO2	4.67	75	79.67	93.73
CO3	4.33	75	79.33	93.33
CO4	4.67	75	79.67	93.73
CO5	4.67	75	79.67	93.73

COURSE ATTAINMENT FOR B.Sc., MATHEMATICS

SUBJECT NAME: INTEGRAL CALCULUS

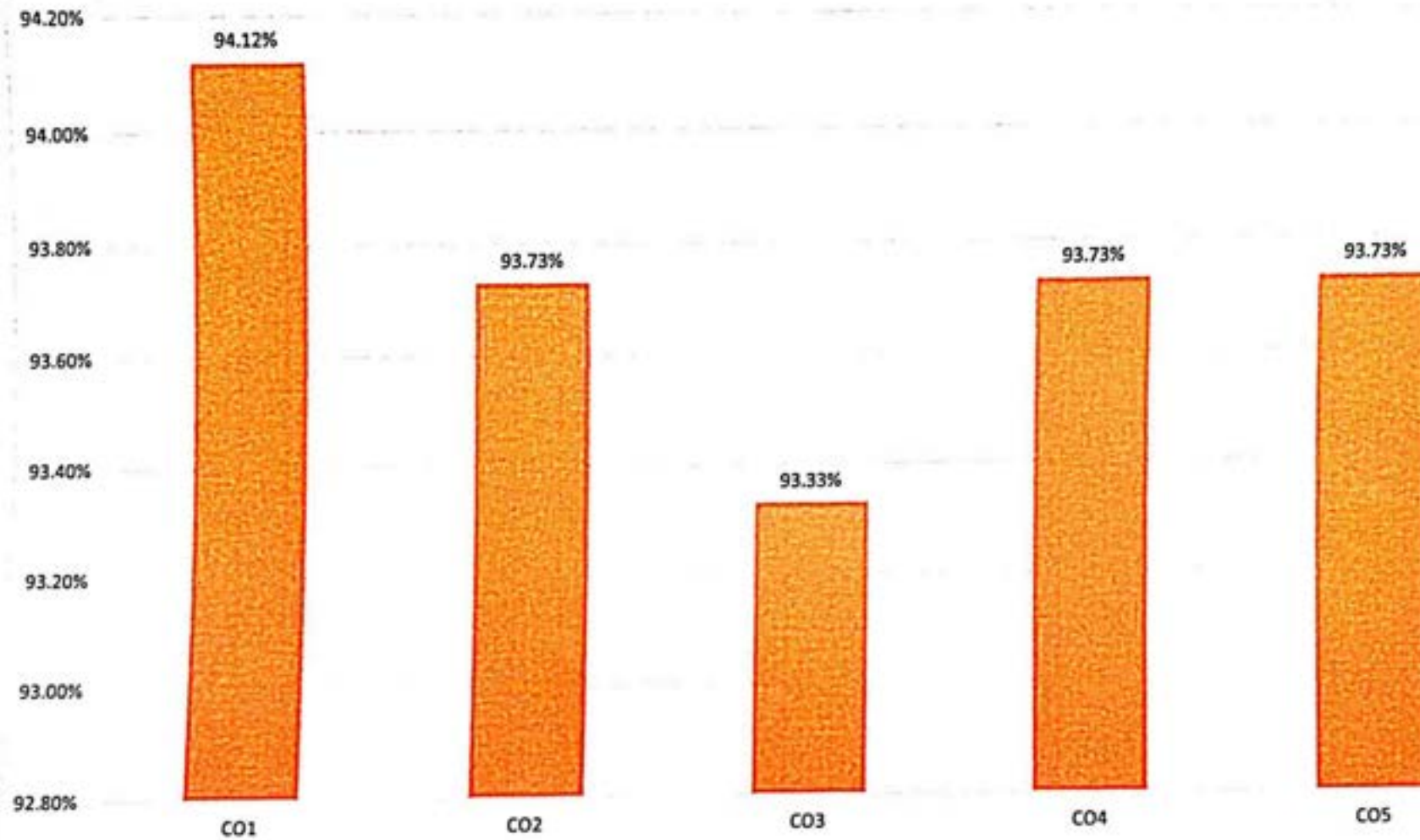
SUBJECT CODE: 16SCCMM2

NO. OF STUDENTS: 03

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	94.12%
CO2	93.73%
CO3	93.33%
CO4	93.73%
CO5	93.73%



PERCENTAGE OF ATTAINMENT



■ PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR B.Sc., MATHEMATICS

SUBJECT NAME: INTEGRAL CALCULUS

SUBJECT CODE: 16SCCMM2

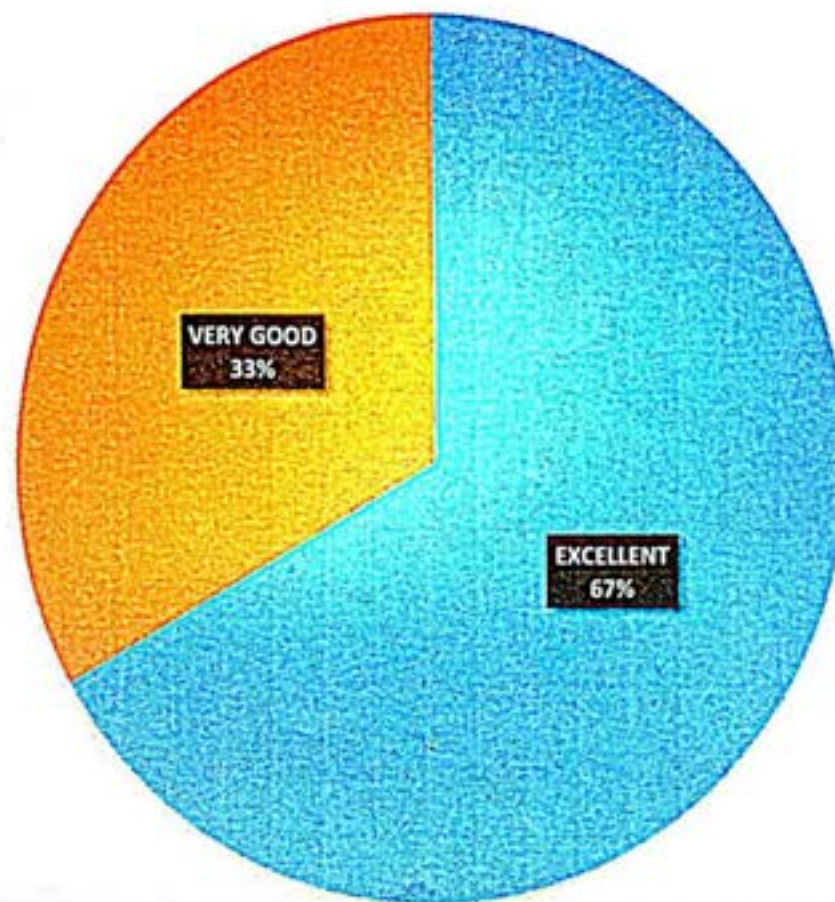
NO. OF STUDENTS: 03

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO. OF STUDENTS	STATUS
90 AND ABOVE	0	OUTSTANDING
80-89	2	EXCELLENT
70-79	1	DISTINCTION
60-69	0	VERY GOOD
50-59	0	GOOD
40-49	0	AVERAGE
BELOW 40	0	RE APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
80-89	2	EXCELLENT
70-79	1	DISTINCTION



COURSE OUTCOME ASSESSMENT



■ 80-89

■ 70-79



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DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Remember the fundamental concepts of Mathematics
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NAME OF THE PROGRAMME: B.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
16SCCMM3- DIFFERENTIAL EQUATIONS AND LAPLACE TRANSFORMS	CO1	Define first order, higher order differential equations solvable for dy/dx , x and y .
	CO2	Discuss and demonstrate the Linear equations with variable coefficients and Variation of parameters.
	CO3	Describe the origin of Partial differential equation
	CO4	Explain PDE of second order homogeneous equations with constant coefficients
	CO5	Understand the concepts of differential equations and laplace transforms



PO → CO1	PO1	PO2	PO3	PO4	PO5
CO1	3	2	2	2	3
CO2	3	3	3	2	2
CO3	3	3	3	3	2
CO4	2	2	2	3	3
CO5	3	2	3	3	3
AVERAGE	2.8	2.4	2.6	2.6	2.6

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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

SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	% TO TOTAL INTERNAL MARK
1	CB21S 381695	ANUSHYA.N	5	5	5	5	5	25	100
2	CB21S 381696	ARULPRASATH.R	5	5	5	4	5	24	96
3	CB21S 381697	NITHYA.R	5	5	5	5	5	25	100
AVERAGE			5.00	5.00	5.00	4.67	5.00		



EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST + SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	5.00	75	80.00	94.12
CO2	5.00	75	80.00	94.12
CO3	5.00	75	80.00	94.12
CO4	4.67	75	79.67	93.73
CO5	5.00	75	80.00	94.12

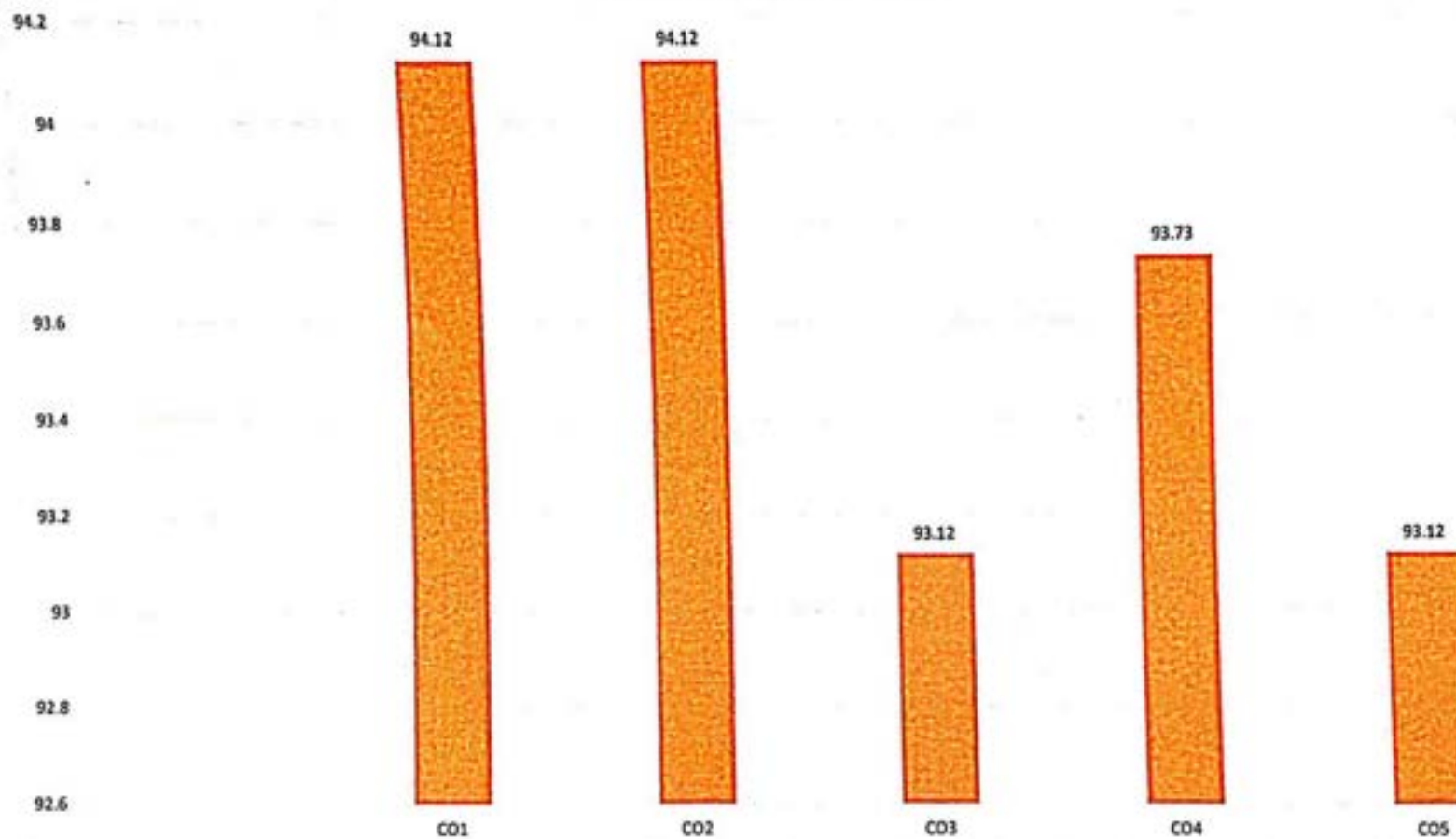
COURSE ATTAINMENT FOR B.SC MATHEMATICS

SUBJECT CODE : 16SCCMM3
 SUBJECT NAME : DIFFERENTIAL EQUATION AND LAPLACE TRANSFORMS
 NO.OF STUDENTS : 03

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	94.12
CO2	94.12
CO3	93.12
CO4	93.73
CO5	93.12



PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR B.SC MATHEMATICS

SUBJECT CODE : 16SCMM3

SUBJECT NAME : DIFFERENTIAL EQUATION AND LAPLACE TRANSFORMS

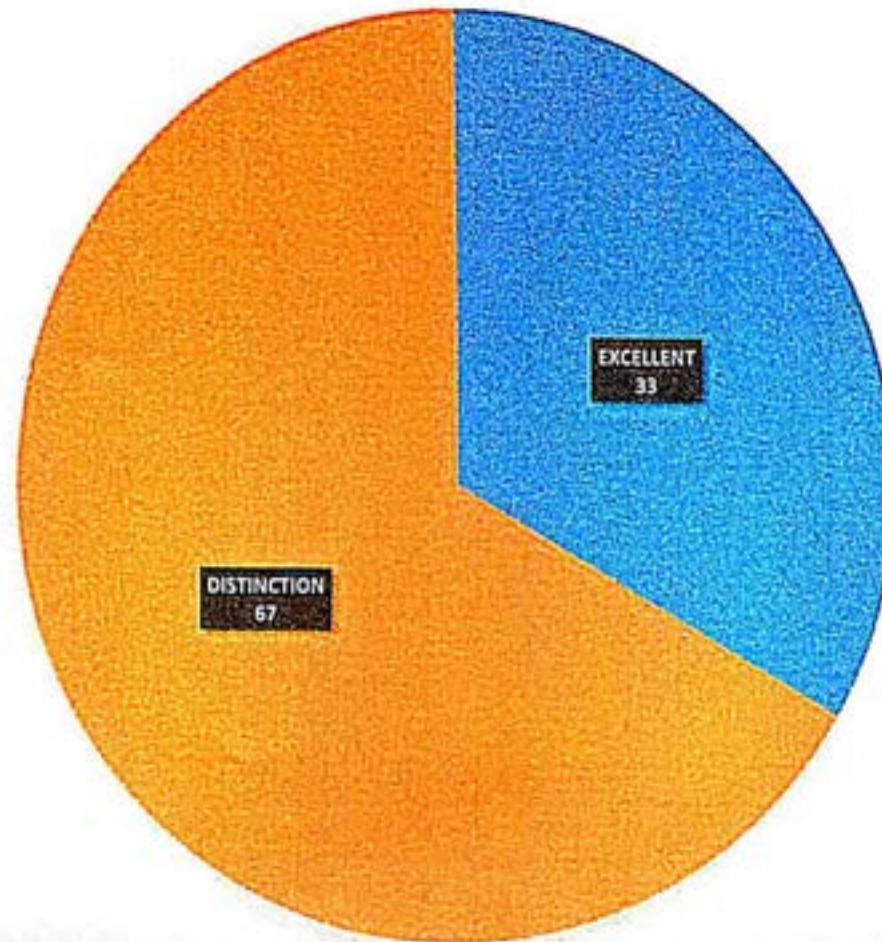
NO.OF STUDENTS : 03

COURSE OUTCOME ASSESSMENT		
CATEGORY(MARKS)	NO.OF STUDENTS	STATUS
90 AND ABOVE	0	Out standing
80-89	1	Excellent
70-79	2	Distinction
60-69	0	Very good
50-59	0	Good
40-49	0	Average
BELOW 40	0	Reappear

COURSE OUTCOME ASSESSMENT		IN PERCENTAGE
CATEGORY(MARKS)	PERCENTAGE	STATUS
80-89	33	Excellent
70-79	67	Distinction



COURSE OUTCOME ASSESSMENT




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DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

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NAME OF THE PROGRAMME: B.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
16SCCMM4 - ANALYTICAL GEOMETRY 3D	COURSE OUTCOME	
	CO1	Explain the coordinates in space, equation of a plane.
	CO2	Describe the concepts of straight lines and coplanar lines.
	CO3	classify the equation of a sphere and tangent planes.
	CO4	Finding the equation of surface, intersection of straight lines and quadric cone.
	CO5	To recognize the central quadrics, tangent and tangent plane.



PO → CO ₁	PO1	PO2	PO3	PO4	PO5
CO1	3	2	3	3	3
CO2	3	3	3	2	2
CO3	2	3	2	3	3
CO4	3	2	3	3	3
CO5	3	3	3	3	2
AVERAGE	2.8	2.6	2.8	2.8	2.6

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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

SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	CB21S 381695	N. ANUSHYA	5	5	5	5	5	25	100
2	CB21S 381696	R. ARULPRASATH	5	5	5	4	5	24	96
3	CB21S 381697	R. NITHYA	5	5	5	5	5	25	100
AVERAGE			5.00	5.00	5.00	4.67	5.00		



EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	5.00	75	80.00	94.12
CO2	5.00	75	80.00	94.12
CO3	5.00	75	80.00	94.12
CO4	4.67	75	79.67	93.73
CO5	5.00	75	80.00	94.12

COURSE ATTAINMENT FOR B.Sc., MATHEMATICS

SUBJECT NAME: ANALYTICAL GEOMETRY 3D

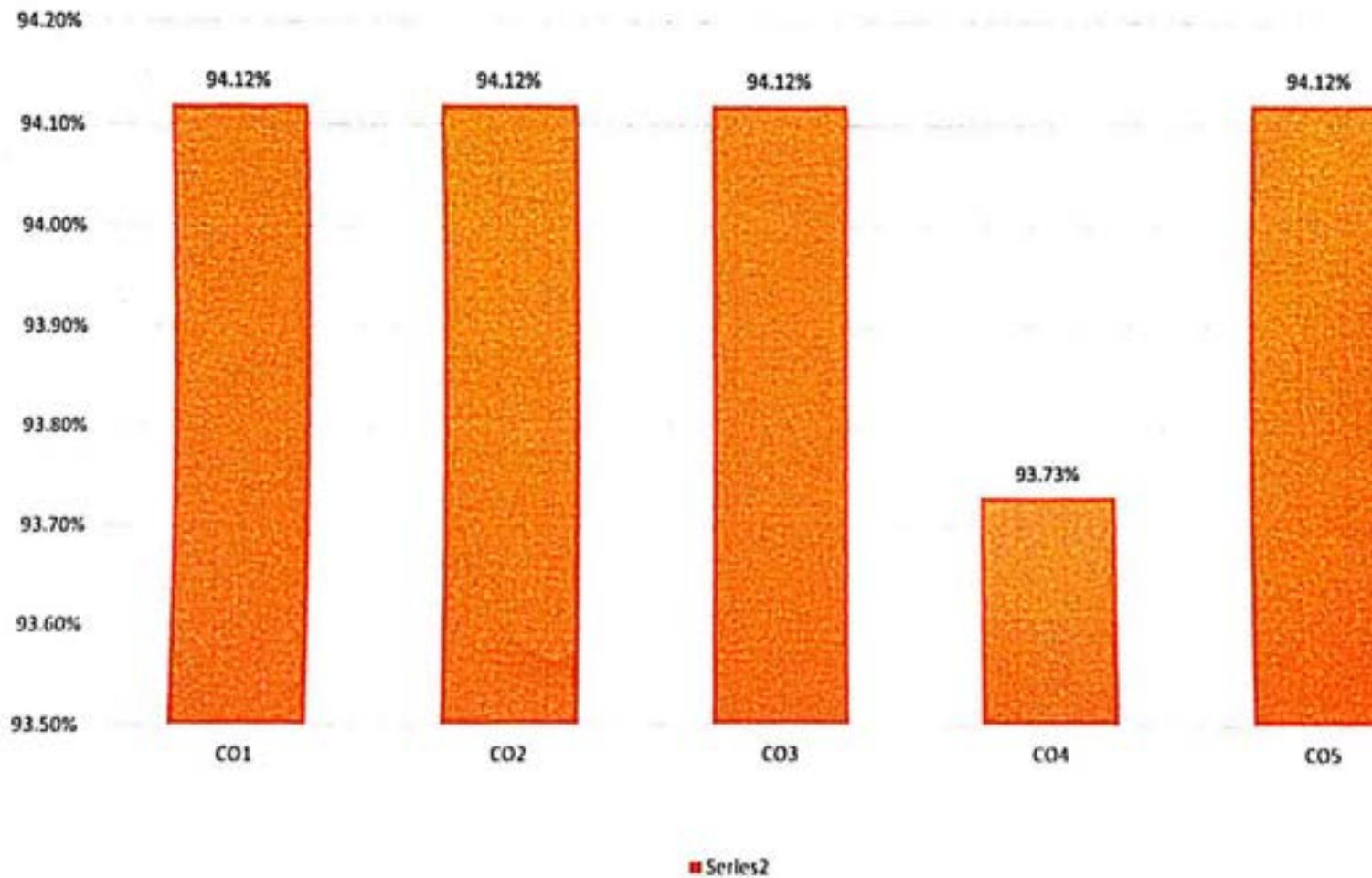
SUBJECT CODE: 16SCCMM4

NO. OF STUDENTS: 03

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	94.12%
CO2	94.12%
CO3	94.12%
CO4	93.73%
CO5	94.12%



PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR B.Sc., MATHEMATICS

SUBJECT NAME: ANALYTICAL GEOMETRY 3D
SUBJECT CODE: 16SCMM4
NO. OF STUDENTS: 03

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO. OF STUDENTS	STATUS
90 AND ABOVE	0	OUTSTANDING
80-89	1	EXCELLENT
70-79	0	DISTINCTION
60-69	2	VERY GOOD
50-59	0	GOOD
40-49	0	AVERAGE
BELOW 40	0	RE APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
80-89	33	EXCELLENT
70-79	67	VERY GOOD



COURSE OUTCOME ASSESSMENT



■ 80-89
■ 70-79



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ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Remember the fundamental concepts of Mathematics
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NAME OF THE PROGRAMME: B.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
16SCCMM6 - CLASSICAL ALGEBRA AND THEORY OF NUMBERS	CO1	Find relation between the roots and coefficients of equations and symmetric functions of the roots.
	CO2	Describe transformation of equation and Reciprocal equation.
	CO3	Use Descarte's rule of sign and transformation in general.
	CO4	Understanding the concept of inequalities.
	CO5	Understanding the concept of Euler function.



PO → CO ₁	PO1	PO2	PO3	PO4	PO5
CO1	3	2	2	2	3
CO2	3	2	2	2	2
CO3	3	2	2	2	2
CO4	3	2	2	2	3
CO5	3	2	2	2	2
AVERAGE	3	2	2	2	2.4

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	CB20S 378296	ANUSHIYA. K	5	5	5	5	5	25	100
2	CB20S 378297	ARUN KUMAR. R	4	5	5	5	5	24	96
3	CB20S 378298	DEVI. M	5	5	5	5	5	25	100
4	CB20S 378299	KANCHANA. R	5	5	4	5	5	24	96
5	CB20S 378300	KEERTHANA. M	5	5	5	5	4	24	96
6	CB20S 378301	MARIYAM SAHIBA. H	5	5	5	5	5	25	100
7	CB20S 378302	RENEESHKUMAR. K	5	5	5	5	4	24	96
8	CB20S 378303	SANTHOSH. A	4	5	5	5	5	24	96
9	CB20S 378304	SARUBALA. T	5	5	5	5	5	25	100
10	CB20S 378305	SRIKANTH. G	4	4	5	5	5	23	92
AVERAGE			4.70	4.90	4.90	5.00	4.80		



EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.70	75	79.70	93.76
CO2	4.90	75	79.90	94.00
CO3	4.90	75	79.90	94.00
CO4	5.00	75	80.00	94.12
CO5	4.80	75	79.80	93.88

COURSE ATTAINMENT FOR B.Sc., MATHEMATICS

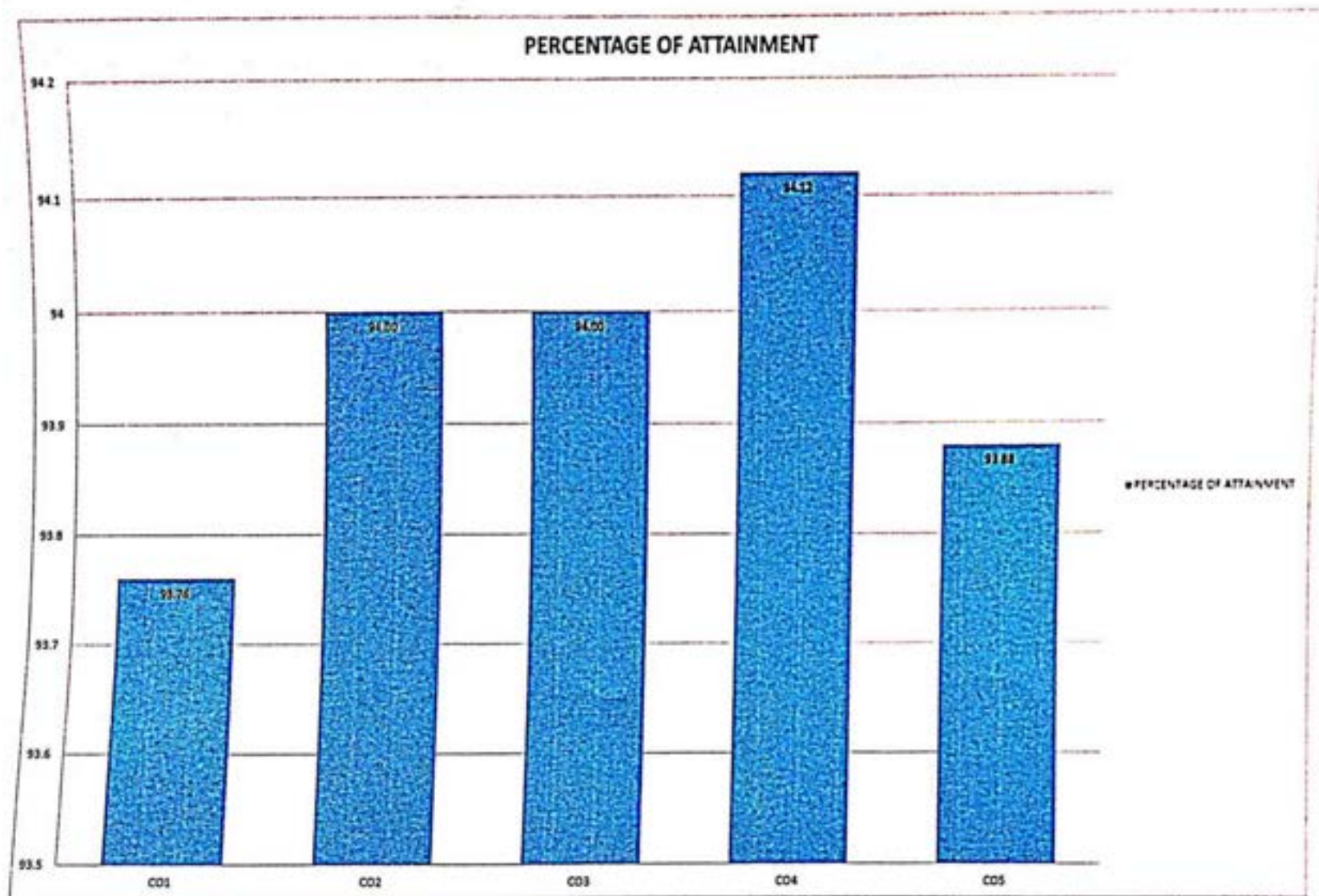
SUBJECT NAME: CLASSICAL ALGEBRA AND THEORY OF NUMBERS

SUBJECT CODE: 16SCCM16

NO. OF STUDENTS: 10

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.76
CO2	94.00
CO3	94.00
CO4	94.12
CO5	93.88





COURSE ATTAINMENT FOR B.Sc., MATHEMATICS

SUBJECT NAME: CLASSICAL ALGEBRA AND THEORY OF NUMBERS

SUBJECT CODE: 16SCMM6

NO. OF STUDENTS: 10

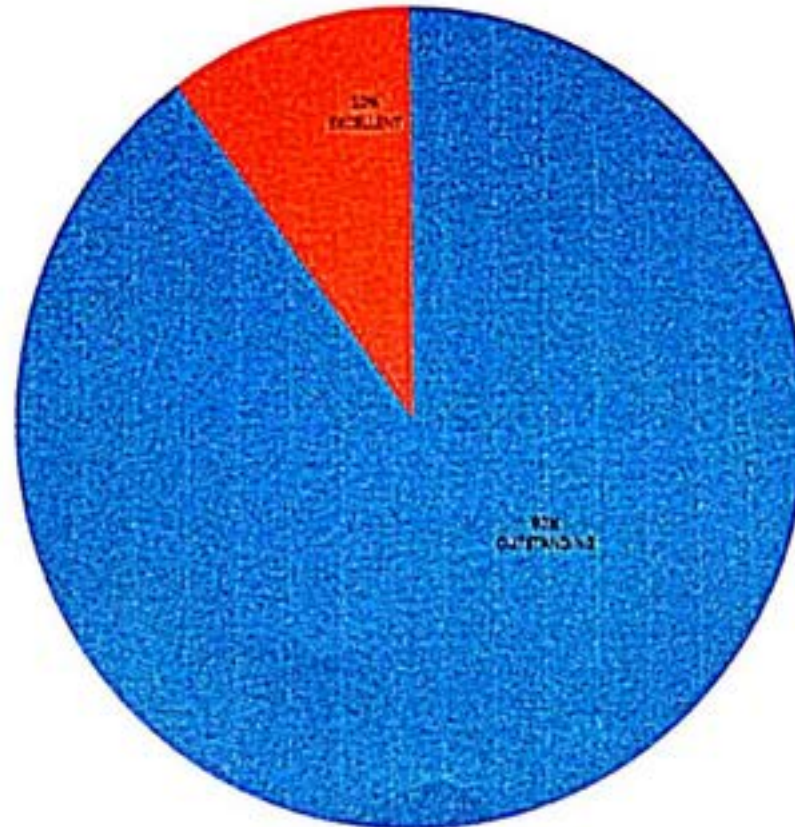
COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO. OF STUDENTS	STATUS
90 AND ABOVE	9	OUTSTANDING
80-89	1	EXCELLENT
70-79	0	DISTINCTION
60-69	0	VERY GOOD
50-59	0	GOOD
40-49	0	AVERAGE
BELOW 40	0	RE -APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
90 AND ABOVE	90.00%	OUTSTANDING
80-89	10.00%	EXCELLENT



COURSE OUTCOME ASSESSMENT IN PERCENTAGE

■ 90 AND ABOVE ■ 80-89



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DEPARTMENT OF MATHEMATICS
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PROGRAM OUTCOME

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NAME OF THE PROGRAMME : B.Sc MATHEMATICS

**COURSE CODE
&
COURSE TITLE**

COURSE OUTCOME

16SCCMM7 VECTOR CALCULUS AND FOURIER SERIES	CO1	Learn Vector differentiation.
	CO2	Learn Vector integration.
	CO3	Learn verifications of the theorems for Simple problems .
	CO4	Acquire the knowledge about Fourier series for periodic signals.
	CO5	Learn the development of Fourier Series in cosine and sine series.



PO → CO ↓	PO1	PO2	PO3	PO4	PO5
CO1	3	2	2	3	2
CO2	2	2	3	3	3
CO3	3	3	2	2	2
CO4	3	3	2	2	3
CO5	3	2	3	3	3
AVERAGE	2.8	2.4	2.4	2.6	2.6

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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



SNO	REG. NO	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	CB20S 378296	ANUSHIYA.K	5	5	5	5	5	25	100
2	CB20S 378297	ARUN KUMAR.R	4	4	4	4	4	20	80
3	CB20S 378298	DEVLM	5	5	5	5	5	25	100
4	CB20S 378299	KANCHANA.R	5	5	5	5	5	25	100
5	CB20S 378300	KEERTHANA.M	4	5	5	5	5	24	96
6	CB20S 378301	MARIYAM SAHIBA.H	5	5	5	5	5	25	100
7	CB20S 378302	RENESH KUMAR.K	4	4	4	4	4	20	80
8	CB20S 378303	SANTHOSHA	5	5	5	4	5	24	96
9	CB20S 378304	SARUBALA.T	5	5	5	5	5	25	100
10	CB20S 378305	SRIKANTH.G	5	4	5	5	5	24	96
AVERAGE			4.67	4.67	4.78	4.67	4.78		

EXPECTED ATTAINMENT IN EACH CO - 85%

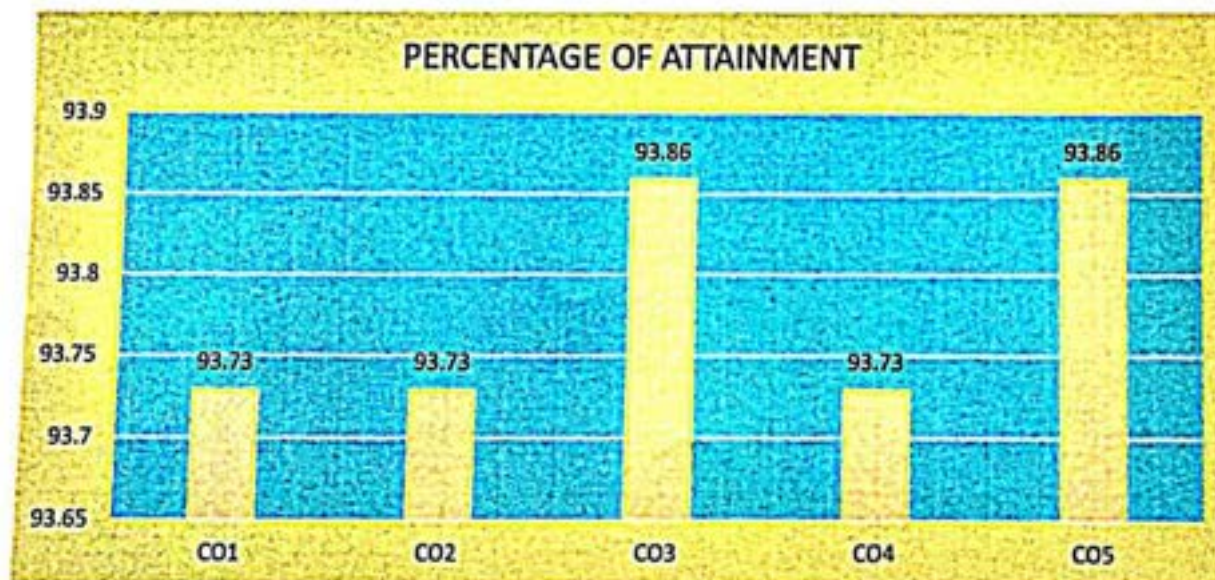
CO	TEST + SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.67	75	79.67	93.73
CO2	4.67	75	79.67	93.73
CO3	4.78	75	79.78	93.86
CO4	4.67	75	79.67	93.73
CO5	4.78	75	79.78	93.86



COURSE ATTAINMENT FOR B.Sc MATHEMATICS

SUBJECT NAME : VECTOR CALCULUS AND FOURIER SERIES
SUBJECT CODE : 16SCCMM7
NO.OF STUDENTS : 10

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.73
CO2	93.73
CO3	93.86
CO4	93.73
CO5	93.86



COURSE ATTAINMENT FOR B.Sc MATHEMATICS

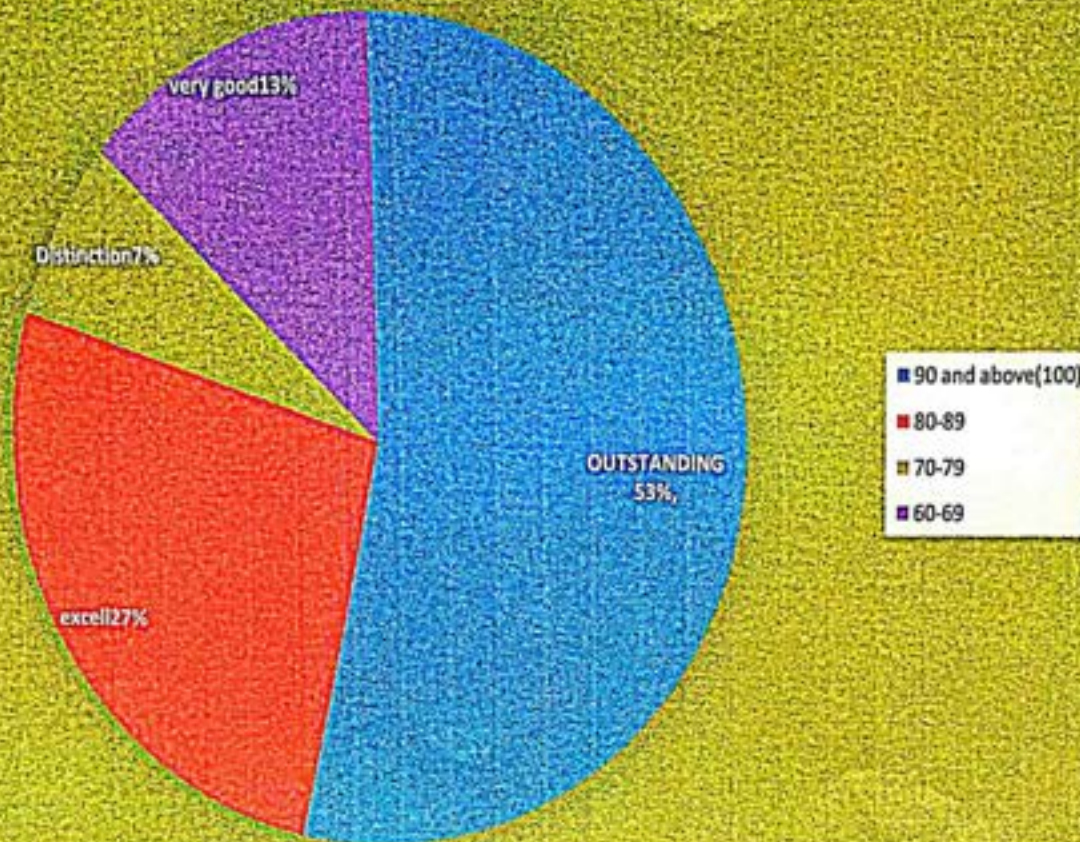
SUBJECT NAME : VECTOR CALCULUS AND FOURIER SERIES
SUBJECT CODE : 16SCCMM7
NO.OF STUDENTS : 10

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO.OF. STUDENTS	STATUS
90 and above(100)	8	OUTSTANDING
80-89	4	EXCELLENT
70-79	1	DISTINCTION
60-69	2	VERY GOOD
50-59	0	GOOD
40-49	0	AVERAGE
Below 40	0	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
90 and above(100)	53%	OUTSTANDING
80-89	27%	EXCELLENT
70-79	7%	DISTINCTION
60-69	13%	VERY GOOD



COURSE OUTCOME ASSESSMENT IN PERCENTAGE



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ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Remember the fundamental concepts of Mathematics
PO2	Imbibe the skills necessary to effectively translate mathematical aspects to the general public
PO3	Develop Critical thinking ability so as to improve Employability and Decision making.
PO4	Apply Mathematical Models to solve critical problems.
PO5	Apply the concepts studied, in real life situations.

NAME OF THE PROGRAMME: B.Sc., MATHEMATICS		
COURSE CODE & COURSE TITLE	COURSE OUTCOME	
16SCCMM10 REAL ANALYSIS	CO1	Acquire Knowledge about basic properties of real number system.
	CO2	Enhance Knowledge about the the continuous and discontinuous functions.
	CO3	Develop the Knowledge of derivability.
	CO4	Assimilate the concept of Mean value theorems.
	CO5	Discuss Riemann integral and properties of Riemann integral.



PO → CO↓	PO1	PO2	PO3	PO4	PO5
CO1	3	2	3	3	2
CO2	3	3	3	2	2
CO3	3	3	2	3	3
CO4	3	2	2	3	3
CO5	3	2	3	3	3
AVERAGE	3	2.4	2.6	2.8	2.6

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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



SNO	REG. NO		CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	CB19S 377896	AKASH S	5	4	4	5	4	22	88
2	CB19S 377897	ARURA K	4	5	5	5	5	24	96
3	CB19S 377898	DIVAHAR P	4	4	4	4	4	20	80
4	CB19S 377899	JAYASHEELA J	5	5	5	5	5	25	100
5	CB19S 377900	KARTHICK N	4	4	4	4	4	20	80
6	CB19S 377901	KAYALVIZHI K	5	4	5	5	5	24	96
7	CB19S 377902	MANIKANDAN N	5	5	4	5	5	24	96
8	CB19S 377903	NAVEENA K	4	4	4	4	4	20	80
9	CB19S 377904	RAMANAN G	5	5	5	5	5	25	100
10	CB19S 377905	SHARMILA S	5	5	5	5	5	25	100
11	CB19S 377906	SURIYA S	4	4	4	4	4	20	80
12	CB19S 377907	VISHNURAJ K	4	4	4	5	4	21	84
13	CB16S 361183	DEVASUNDARI P	4	4	4	4	4	20	80
AVERAGE			4.46	4.38	4.38	4.62	4.46		



EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.46	75	79.46	93.482
CO2	4.38	75	79.38	93.388
CO3	4.38	75	79.38	93.388
CO4	4.62	75	79.62	93.671
CO5	4.46	75	79.46	93.482

COURSE ATTAINMENT FOR B.Sc., MATHEMATICS

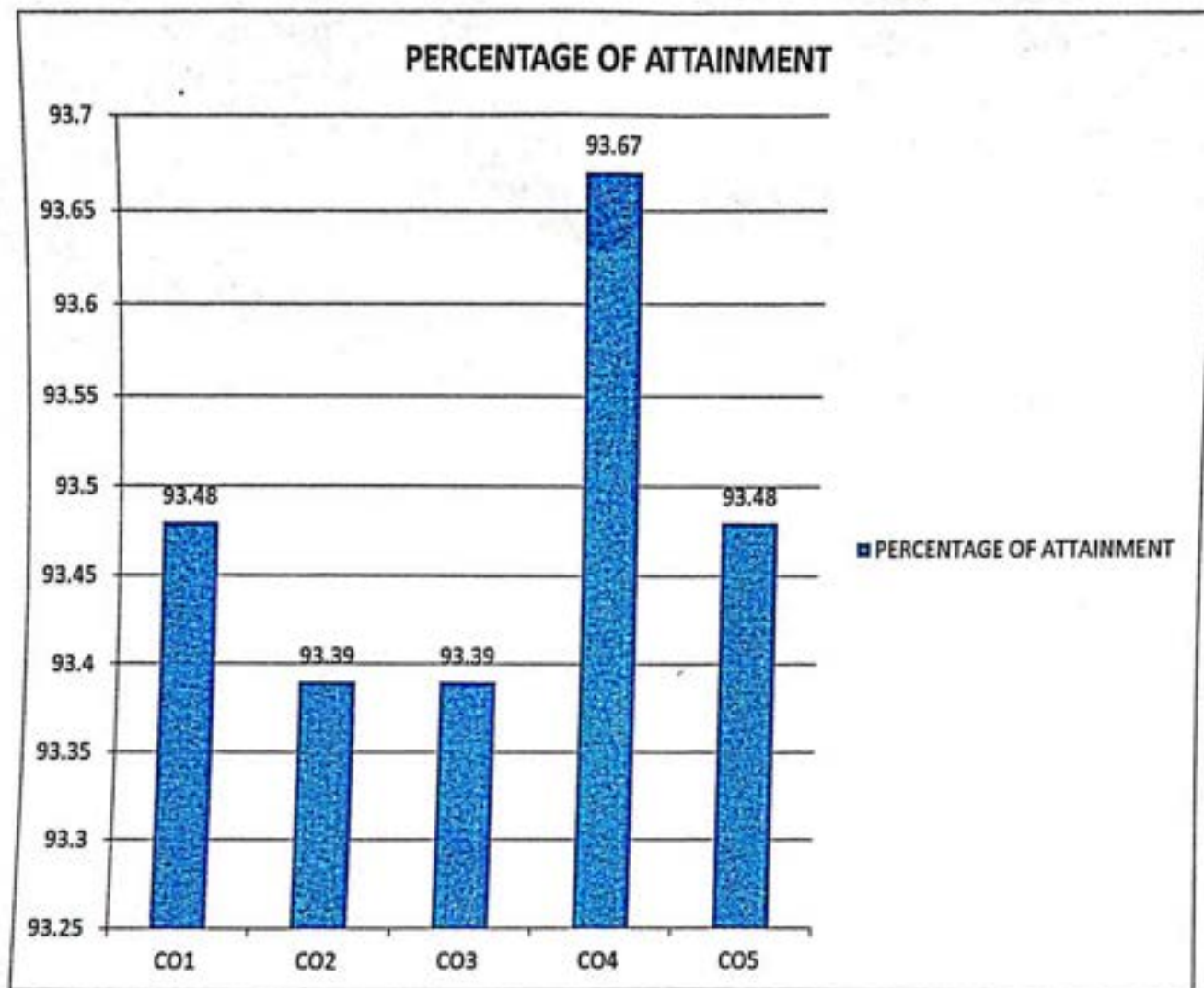
SUBJECT NAME: REAL ANALYSIS

SUBJECT CODE: 16SCCMM10

NO. OF STUDENTS: 13

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.48
CO2	93.39
CO3	93.39
CO4	93.67
CO5	93.48





COURSE ATTAINMENT FOR B.Sc., MATHEMATICS

SUBJECT NAME: REAL ANALYSIS

SUBJECT CODE: 16SCCMM10

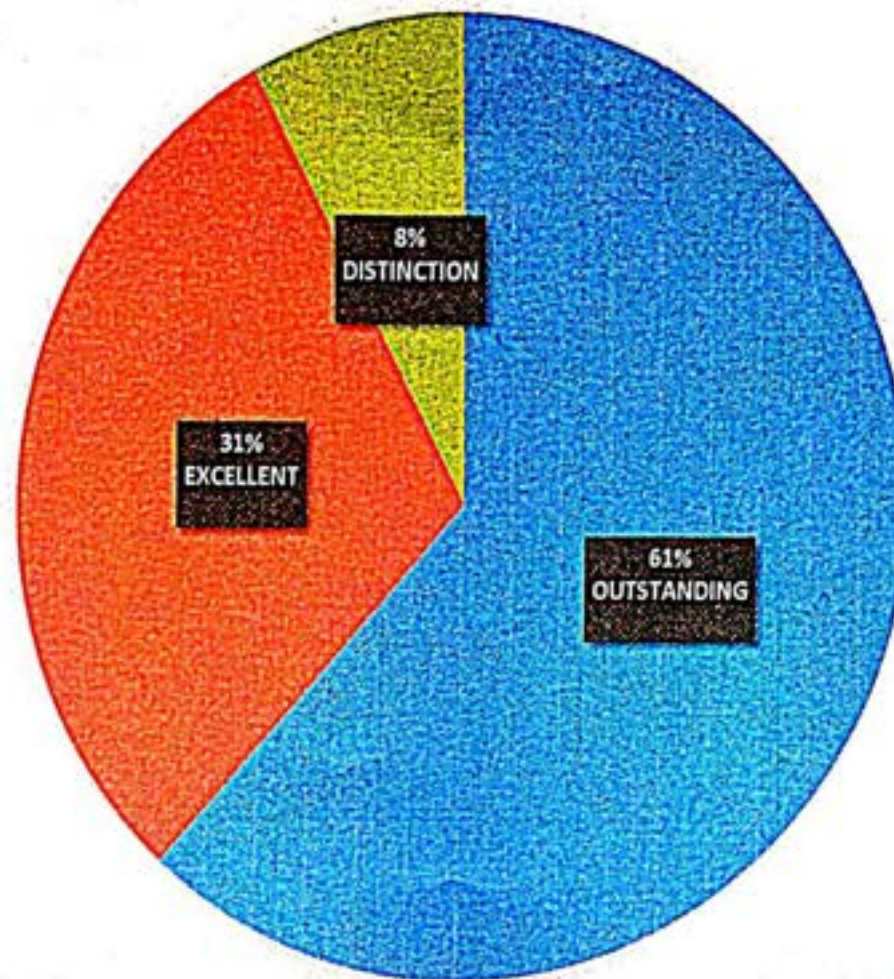
NO. OF STUDENTS: 13

COURSE OUTCOME ASSESSMENT		
CATEGORY(MARKS)	NO. OF STUDENTS	STATUS
90 AND ABOVE	8	OUTSTANDING
80-89	4	EXCELLENT
70-79	1	DISTINCTION
60-69	0	VERY GOOD
50-59	0	GOOD
40-49	0	AVERAGE
BELOW 40	0	RE -APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY(MARKS)	PERCENTAGE	STATUS
90 AND ABOVE	61%	OUTSTANDING
80-89	31%	EXCELLENT
70-79	8%	DISTINCTION



COURSE OUTCOME ASSESSMENT




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Bharath Avenue (Near New Bus Stand)
THANJAVUR - 613 005.



BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
(UGC Recognized 2(f) & 12(B) Institution)
THANJAVUR-5
DEPARTMENT OF MATHEMATICS
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME	
PO1	Remember the fundamental concepts of Mathematics
PO2	Imbibe the skills necessary to effectively translate mathematical aspects to the general public
PO3	Develop Critical thinking ability so as to improve Employability and Decision making.
PO4	Apply Mathematical Models to solve critical problems.
PO5	Apply the concepts studied, in real life situations.

NAME OF THE PROGRAMME: B.Sc., MATHEMATICS		
COURSE CODE & COURSE TITLE	COURSE OUTCOME	
16SMBEMM1:1 OPERATIONS RESEARCH	CO1	Understand the advantages and limitations of operation research
	CO2	Understand the LPP and to know methods of solving problems
	CO3	Understand the concepts of transportation and assignment problems
	CO4	Learn about Queuing theory
	CO5	Assimilate the concept of Network scheduling by CPM & PERT



PO → CO↓	PO1	PO2	PO3	PO4	PO5
CO1	3	2	3	3	3
CO2	3	3	2	3	3
CO3	2	3	2	2	3
CO4	3	3	3	3	3
CO5	3	3	3	3	2
AVERAGE	2.8	2.8	2.6	2.8	2.8

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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



SNO	NAME	REG. NO	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	AKASH S	CB19S 377896	5	4	4	5	5	23	92
2	ARURA K	CB19S 377897	5	5	5	5	5	25	100
3	DIVAHAR P	CB19S 377898	4	4	4	4	4	20	80
4	JAYASHEELA J	CB19S 377899	5	5	5	4	5	25	100
5	KARTHICK N	CB19S 377900	4	4	4	4	4	20	80
6	KAYALVIZHI K	CB19S 377901	5	4	4	5	5	23	92
7	MANIKANDAN N	CB19S 377902	5	5	5	5	5	25	100
8	NAVEENA K	CB19S 377903	4	4	4	4	4	20	80
9	RAMANAN G	CB19S 377904	5	5	5	5	5	25	100
10	SHARMILA S	CB19S 377905	4	4	5	5	5	23	92
11	SURIYA S	CB19S 377906	4	4	4	4	4	20	80
12	VISHNURAJ K	CB19S 377907	4	4	4	4	4	20	80
13	DEVASUNDARI P	CB16S 361183	4	4	4	4	4	20	80
AVERAGE			4.46	4.31	4.38	4.46	4.54		



EXPECTED ATTAINMENT IN EACH CO - 85%

CO	TEST+ SEMINAR+ ASSIGNMENT	END SEM	TOTAL	%
CO1	4.46	75	79.46	93.48
CO2	4.31	75	79.31	93.30
CO3	4.38	75	79.38	93.39
CO4	4.46	75	79.46	93.48
CO5	4.54	75	79.54	93.57

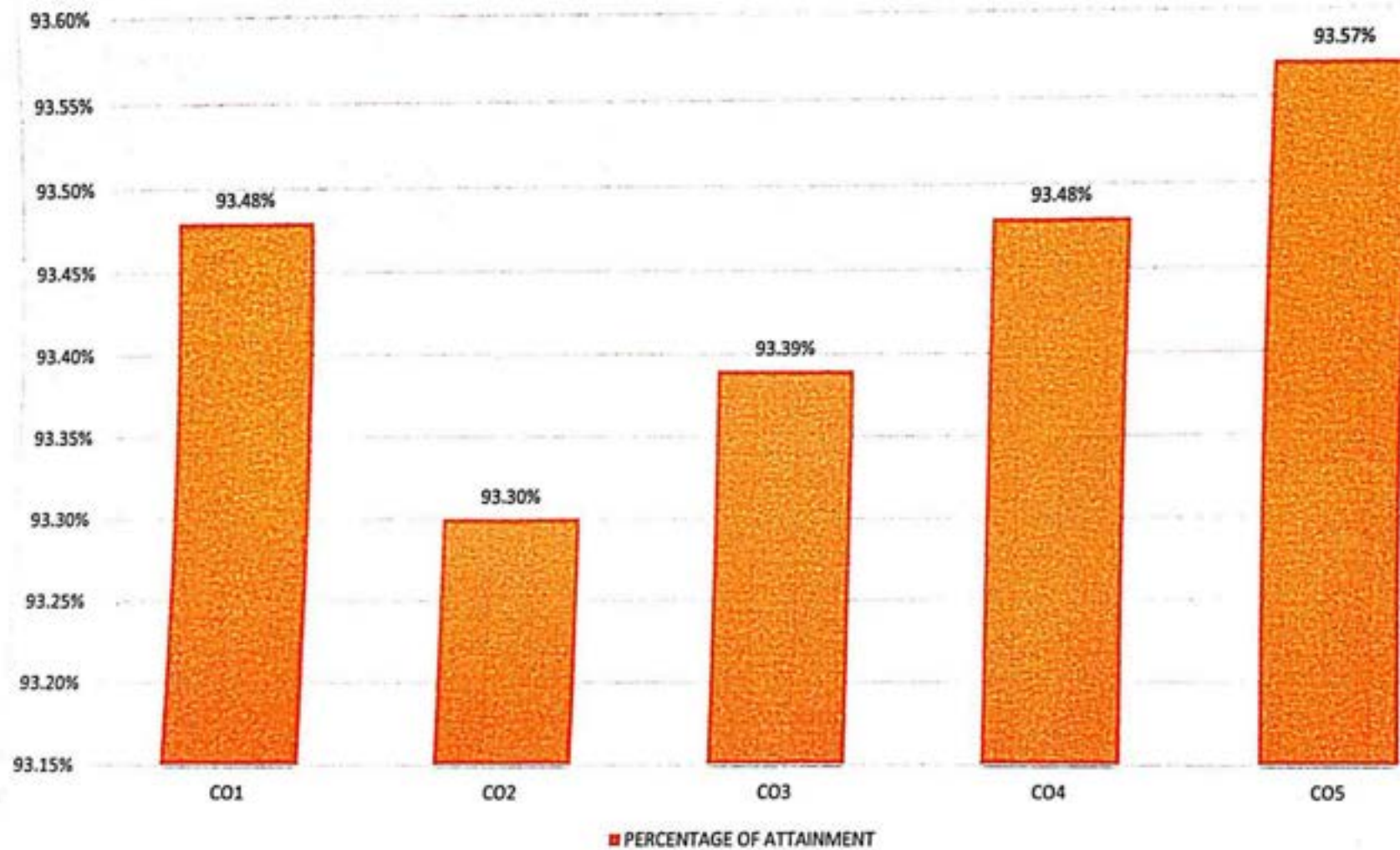
COURSE ATTAINMENT FOR B.Sc., MATHEMATICS

SUBJECT NAME: OPERATIONS RESEARCHII
SUBJECT CODE: 16SMBEMM1:1
NO. OF STUDENTS: 13

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.48%
CO2	93.30%
CO3	93.39%
CO4	93.48%
CO5	93.57%



PERCENTAGE OF ATTAINMENT



COURSE ATTAINMENT FOR B.Sc., MATHEMATICS

SUBJECT NAME: OPERATIONS RESEARCH

SUBJECT CODE: 16SMBEMM1:1

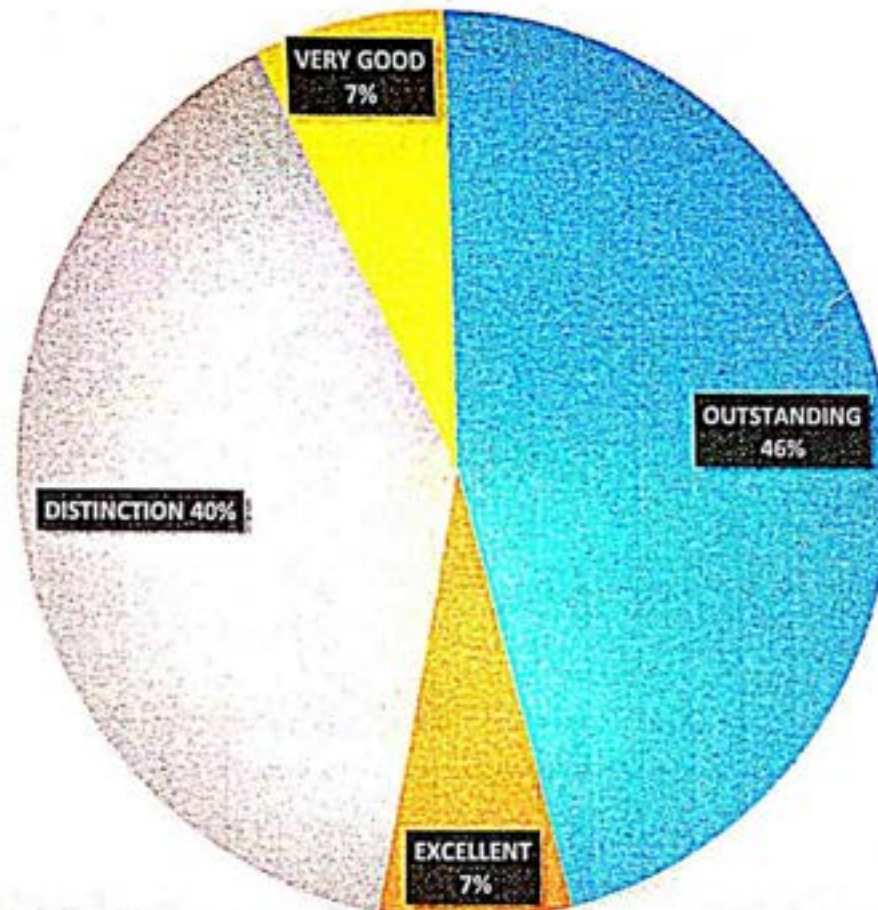
NO. OF STUDENTS: 13

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO. OF STUDENTS	STATUS
90 AND ABOVE	6	OUTSTANDING
80-89	1	EXCELLENT
70-79	5	DISTINCTION
60-69	1	VERY GOOD
50-59	0	GOOD
40-49	0	AVERAGE
BELOW 40	0	RE APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
90 AND ABOVE	46	OUTSTANDING
80-89	7	EXCELLENT
70-79	40	DISTINCTION
60-69	7	VERY GOOD



COURSE OUTCOME ASSESSMENT



■ 90-100
■ 80-89
■ 70-79
■ 60-69



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ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME

PO1	Remember the fundamental concepts of Mathematics
PO2	Imbibe the skills necessary to effectively translate mathematical aspects to the general public
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NAME OF THE PROGRAMME: B.Sc., MATHEMATICS

COURSE CODE & COURSE TITLE	COURSE OUTCOME	
16SMBEMM2:1 GRAPH THEORY	CO1	Understand the basic definitions of graphs and their applications
	CO2	Recognize the Characteristics of graph
	CO3	List and relate special graphs
	CO4	Learn about Planar Graphs
	CO5	Understand the concepts of graph theory as an application of mathematics in information technology and its related fields.



PO → CO↓	PO1	PO2	PO3	PO4	PO5
CO1	3	2	3	3	3
CO2	3	3	3	2	2
CO3	3	3	3	3	3
CO4	2	3	3	3	3
CO5	3	2	2	3	3
AVERAGE	2.8	2.6	2.8	2.8	2.8

INTERNAL EXAMINATION MARK DISTRIBUTION FOR EACH COURSE OUTCOME

CO	INTERNAL (25)		
	TEST (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



SNO	REG. NO.	NAME	CO1	CO2	CO3	CO4	CO5	TOTAL	%
1	CB19S 377896	AKASH.S	5	4	5	4	5	23	92
2	CB19S 377897	ARURA.K	5	5	5	5	5	25	100
3	CB19S 377898	DIVAHAR.P	4	4	4	4	5	21	84
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12	CB19S 377907	VISHNURAJ.K	5	4	5	5	4	23	92
13	CB16S 361183	DEVASUNDARI.P	4	4	4	4	4	20	80
AVERAGE			4.69	4.69	4.77	4.46	4.46		

EXPECTED ATTAINMENT IN EACH CO - 85%

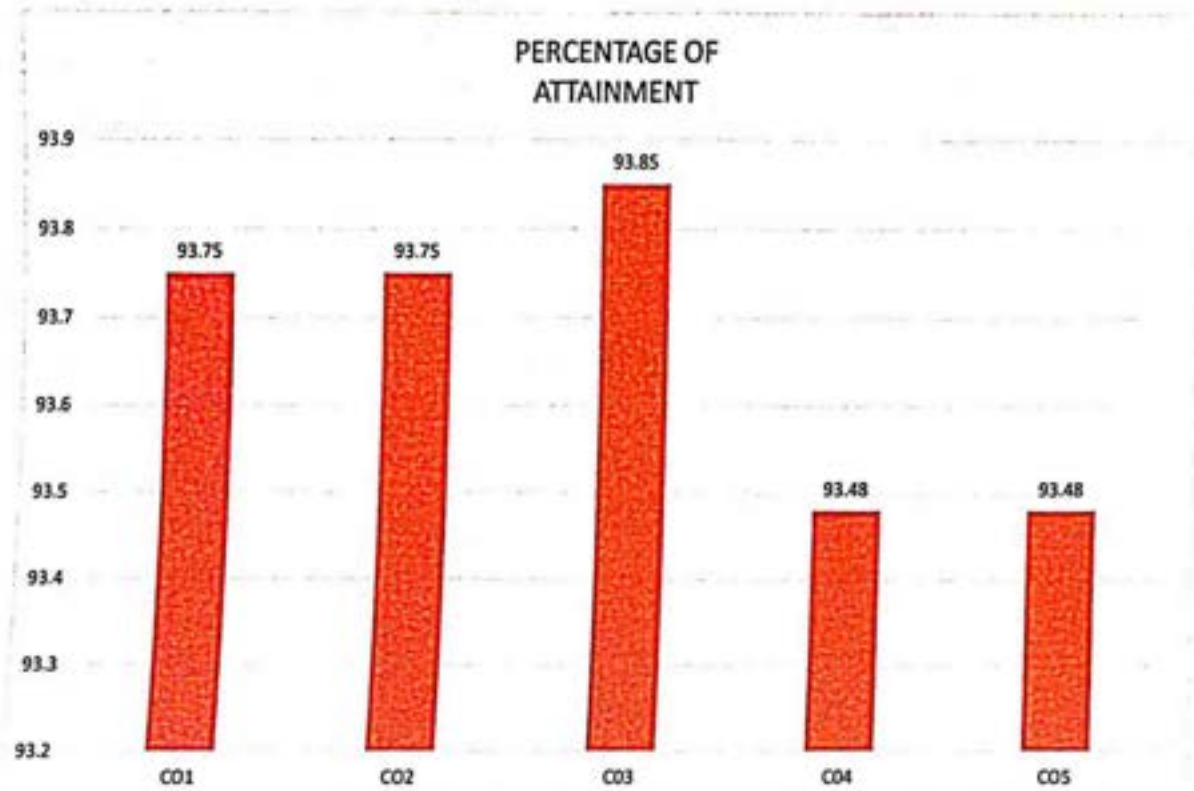
CO	TEST+ SEMINAR+	END SEM	TOTAL	%
CO1	4.69	75	79.69	93.75
CO2	4.69	75	79.69	93.75
CO3	4.77	75	79.77	93.85
CO4	4.46	75	79.46	93.48
CO5	4.46	75	79.46	93.48

COURSE ATTAINMENT FOR B.Sc., MATHEMATICS

SUBJECT NAME : GRAPH THEORY
SUBJECT CODE : 16SMBEMM 2:1
NO OF STUDENTS : 13

COURSE OUTCOME	PERCENTAGE OF
CO1	93.75
CO2	93.75
CO3	93.85
CO4	93.48
CO5	93.48





COURSE ATTAINMENT FOR B.Sc., MATHEMATICS

SUBJECT NAME : GRAPH THEORY
SUBJECT CODE : 16SMBEMM 2:1
NO OF STUDENTS : 13

COURSE OUTCOME ASSESSMENT

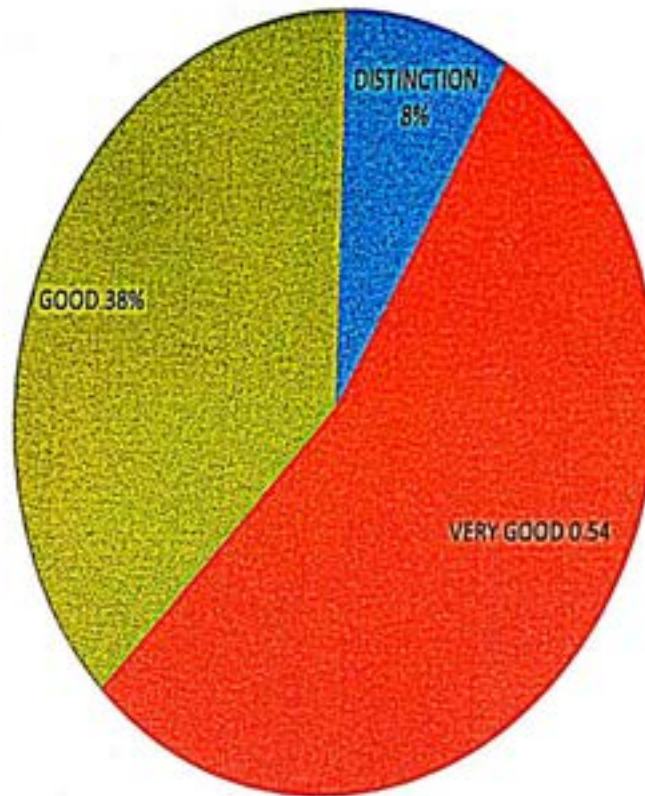
CATEGORY MARKS	NO OF STUDENTS	STATUS
90 and above (100)	0	OUTSTANDING
80-89	0	EXCELLENT
70-79	1	DISTINCTION
60-69	7	VERY GOOD
50-59	5	GOOD
40-49	0	AVERAGE
below 40	0	RE-APPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE

CATEGORY MARKS	PERCENTAGE	STATUS
70-79	8%	DISTINCTION
60-69	54%	VERY GOOD
50-59	38%	GOOD



COURSE OUTCOME ASSESSMENT IN PERCENTAGE



■ 70-79 ■ 60-69 ■ 50-59




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