

 $\textbf{Name} \ (\text{Fr./Dr./Mr./Mrs./Ms.}) \quad : \text{Dr.A. LEEMA MARIA PRAKASAM}$ 

**Department** : Mathematics

Educational Qualification : M.Sc., M.Phil., Ph.D., SET., PGDCA

S. No.	Degree / Diploma	Subject / Main	Name of the College / University
1.	U.G.	MATHEMATICS	HOLY CROSS COLLEGE (AUTONOMOUS), BHARATHIDASAN UNIVERSITY.
2.	P.G.	MATHEMATICS	ST.JOSEPH'S COLLEGE(AUTONOMOUS), BHARATHIDASAN UNIVERSITY.
3.	M.Phil.	MATHEMATICS	LOYOLA COLLEGE(AUTONOMOUS), UNIVERSITY OF MADRAS.
4.	Ph.D.	MATHEMATICS	ST.JOSEPH'S COLLEGE(AUTONOMOUS), BHARATHIDASAN UNIVERSITY.
5.	NET/CSIR/SLET	SET	MOTHER THERESA UNIVERSITY, KODAIKANAL.
6.	PGDCA	COMPUTER APPLICATION	ISS COMPUTER EDUCATION, TRICHY.

Aided	Management	Shift I	Shift II
Teaching Expen	rience at Holy Cross College	:14 Years	
Teaching Exper	rience outside Holy Cross Co	ollege: 3 Years	

:17 Years

**Total Teaching Experience** 

# ${\bf Position\; held\; in\; other\; Colleges\; /\; Institutions\; /\; Industries\; worked:}$

Designation	Donautment	Colleges/ Institutions	Date		
Designation	Department	/ Industries worked	From	To	
Lecturer	Mathematics	New Prince Shri Bhavani Arts & Science College, Chennai	27.06.2007	30.04.2008	
Lecturer	Mathematics	St.Peter's Institute of Higher Education and Research,Chennai.	18.06.2008	31.07.2010	

# **E-lessons developed:**

Academic Year	Teaching Aids prepared & used	e-content prepared
2015-2016	Smart Board	Partial Differential Equations
2018-2019	Power Point	Partial Differential Equations
2019-2020	Google Platform	Introduction to Complex Analysis
2023-2024	Power Point	Types of Matrices

### **Resource Person:**

Academic Year	Name of the Programme	Date	Details
2020	INDEP-2020	09.01.2020	Judge for the event Poster Making, St.Joseph's College, Trichy

### Other Honors / Awards / Achievements / Responsibilities:

### Recognition/Awards received

Academic Year	Government / Private	Name of the award
2022	Private-PATENT-Apeejay School of Management,	Best Indian Research Award 2022
	New Delhi.	

#### Fields of Specification under the Subject / Discipline:

- 1. Functional Analysis
- 2. Real Analysis

**Subjects specialized in Teaching : (UG,PG)** 

UG:

- Analytical Geometry of Three Dimensions and Vector Calculus
- Algebra and Trigonometry
- Real Analysis, Complex Analysis, Linear Algebra
- Differential Equations, Laplace Transforms and Fourier Series
- Laplace Transforms, Partial Differential Equations and Fourier Series

PG:

- Optimization Techniques
- Ordinary Differential Equations
- Mathematical Analysis
- Partial Differential Equations and Integral Transforms
- Topology
- Functional Analysis

#### Journal / Articles Published: (Attach the list using the format given below) (18):

- 1: Dr.U.Karuppiah and A.Leema Maria Prakasam .,(2013). Fixed Point Theorems in G-MetricSpaces. JP Journal of Fixed Point Theory and Applications(8):165-191
- 2: Dr.U.Karuppiah and A.Leema Maria Prakasam .,(2014).Common Fixed Point Theorem of Generalized contractions on Partial Metric Spaces,International Journal of Pure and EngineeringMathematics(2 III):59-70.
- 3: Dr.U.Karuppiah and A.Leema Maria Prakasam .,(2015). Some Common Fixed Point Theorems for Multi-valued Maps in Complete Metric space, International Journal of Mathematical Sciences and Engineering Applications(9):157-178.
- 4: Dr.U.Karuppiah and A.Leema Maria Prakasam .,(2015). New common Fixed Point Theorems for Multi-valued and Single-valued Maps in Complete Metric Space, International Journal of Pure and Engineering Mathematics (3 I):263-281.
- 5: Dr.U.Karuppiah and A.Leema Maria Prakasam .,(2015). Some common Fixed Point Theorems for Non-self Mappings( $\psi$ ,  $\varphi$ )-weak Contractive Conditions of Integral Type In Symmetric Spaces, Far East Journal of Mathematical Science 98(1):15-35.
- 6: Dr.U.Karuppiah and A.Leema Maria Prakasam .,(2016). Fixed Point Theorems for (α ,ψ , ξ ) Multi-valued Mappings, International Journal of Mathematical Sciences and Engineering Applications 10(II):19-30.
- 7: Dr. A. Leema Maria Prakasam, Dr. A. Mary Priya Dharsini and Dr.A. Jennie Sebasty Pritha (2020). Some Fixed Point Theorems for  $(\alpha_z, \psi_x, \xi_y)$  Rational type Contractive mappings, MalayaJournal of Matematik :5(4), 619-624.
- 8: Dr. A. Leema Maria Prakasam, and Dr. M. Gunaseelan (2020). Common Fixed Point theorem using CLR and E. A properties in Complex Partial b -metric spaces, Advances in Mathematics: Scientific Journal :9(2020), (5), 2773-2790.
- 9: Dr. A. Leema Maria Prakasam, Dr. A. Mary Priya Dharsini and Dr.A. Jennie Sebasty Pritha (2020)., Fixed Point Theorem for Integral Type F-Contractions in Complex Valued Gb- metric spaces, European Journal of Molecular & Clinical Medicine:7(9), 3190-3196.
- 10: Dr. A Mary Priya Dharsini, Dr. A. Leema Maria Prakasam and Dr.A. Jennie Sebasty

- Pritha (2020)., Fixed Point Theorem in Multiplicative Rectangular b-metric spaces, Malaya Journal of Matematik:5(1), 348-350.
- 11: Dr. A. Jennie Sebasty Pritha, Dr. A. Mary Priya Dharsini and Dr. A. Leema Maria Prakasam,(2020)., A Fixed Point Theorem for JSC-Contraction Type Mappings on Group Theory European Journal of Molecular & Clinical Medicine:7(11), 3190-3196.
- 12: Dr. A Mary Priya Dharsini, Dr. A. Jennie Sebasty Pritha and Dr. A. Leema Maria Prakasam (2021)., A note on (Ø, A, B) Contractive Results using Comparable functions on b-Metric spaces, Advances and Applications in Mathematical Science :20(6), 1041-1051.
- 13: Dr. A. Leema Maria Prakasam, and Dr. M. Gunaseelan (2021)., Common fixed Point Theorems in Complex Partial b-metric spaces, Advances and Applications in Mathematical Science :20(5), 793-805.
- 14: Dr. A Mary Priya Dharsini, Dr. A. Jennie Sebasty Pritha and Dr. A. Leema Maria Prakasam (2021).,Fixed Point Theorem with Integral-Type Inequality on Multiplicative Metric Spaces, NVEO- Natural Volatiles & Essential Oils: 9849-9860.
- 15: Dr. A. Leema Maria Prakasam, Dr. A. Mary Priya Dharsini and Dr.A. Jennie Sebasty Pritha (2021)., Common Fixed Point Theorems in R-Partial B- Metric Spaces, NVEO-Natural Volatiles & Essential Oils: 8(4),9838-9848.
- 16: Dr. A. Jennie Sebasty Pritha, Dr. A. Mary Priya Dharsini and Dr. A. Leema Maria Prakasam,(2021)., Some Fixed Point Theorem for F-Contraction in a complete partial b-Metric Space, NVEO- Natural Volatiles & Essential Oils: 9870-9877.
- 17: Dr. M. Gunaseelan, Dr. A. Leema Maria Prakasam, Lakshmi Narayan Mishra and Vishnu Narayan Mishra(2021), Application and Fixed point theorems for Orthogonal Generalized F-Contraction mappings on O-complete Metric space, Nonlinear Functional Analysis and Applications, 26(5), 903-915.
- 18: Ms.J.Rani. Dr. A. A. Leema Maria Prakasam(2024)., Fixed Points of oerators with mulitiplicative closed graphs on bi-polar b-multiplicative metric spaces, Advanced Fixed point theory: 14, Article ID(57).

# Conference/Seminar/Workshop/ Training Programme attended - Academic & General:

S.No.	Theme	Place	International / National / State level	Year	Resource Person / Paper Presentation/ Participation
1.	EMERGING TRENDS IN WOMEN LEADERSHIP IN INDIA	HOLY CROSS COLLEGE (AUTONOMOUS), TIRUCHIRAPPA LLI – 620002.	NATIONAL	2011	PARTICIPATION
2.	MATHEMATICAL SCIENCES AND APPLICATIONS	ST. JOSEPH'S COLLEGE (AUTONOMOUS), TRICHY.	NATIONAL	2014	PARTICIPATION
3.	GRAPH THEORY AND OPERATIONS RESESARCH	HOLY CROSS COLLEGE (AUTONOMOUS), TIRUCHIRAPPALLI – 620002.	NATIONAL	2014	PARTICIPATION
4.	NATIONAL CONFERENCE ON DISCRETE MATHEMATICS	ST. JOSEPH'S COLLEGE (AUTONOMOUS), TRICHY.	NATIONAL	2015	PARTICIPATION
5.	NATIONAL CONFERENCE ON ADAVANCES IN APPLIED MATHEMATICAL SCIENCES	CAUVERY COLLEGE FOR WOMENTRICHY	NATIONAL	2016	PARTICIPATION
6.	PRESENT TRENDS IN APPLICATIONS OF MATHEMATICS	HOLY CROSS COLLEGE (AUTONOMOUS), TIRUCHIRAPPALLI – 620002.	INTERNATIO NAL SEMINAR	2018	PARTICIPATION

PRESENT TRENDS IN	HOLY CROSS	INTERNATIO	2019	PARTICIPATION
			2017	
OF MATHEMATICS	TIRUCHIRAPPALLI –			
	620002.			
MATHEMATICAL	JAMAL MOHAMED	INTERNATIO	2020	PRESENTATION
METHODS AND	COLLEGE,	NAL		
COMPUTATION	TRICHY.			
FDP ON NEW	HOLY CROSS	NATIONAL	2021	PARTICIPATION
EPOCH IN	COLLEGE			
SOFTWARE	(AUTONOMOUS),			
LEARNING	TIRUCHIRAPPALLI –			
		NATIONAL		
			10.7.2020	PARTICIPATION
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		NATIONAL		
			18.7.2020	PARTICIPATION
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			11.10.2022	
PEDAGOGIES FOR	CHRISTIANTIOTIER			
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	APPLICATIONS OF MATHEMATICS  MATHEMATICAL METHODS AND COMPUTATION  FDP ON NEW EPOCH IN SOFTWARE LEARNING  ARTIFICIAL INTELLIGENCE AND IOT – HEURISTIC TRANSDISCIPLINA RY PERSPECTIVES CAPACITY BUILDING OF YOUNG TALENT IN TRANSDISCIPLINA RY RESEARCH FORA SUSTAINABLE DEVELOPMENT OF SOCIETY FACULTY ORIENTATION WEBINAR SERIES ON RISK MANAGEMENT IN TIMES OF CRISIS FDP ON VIRTUAL TEACHING – A PARADIGM SHIFT FROM OFFLINE TO ONLINE TEACHING A VIRTUAL FDP ON "DIGITAL	OF MATHEMATICS  (AUTONOMOUS), TIRUCHIRAPPALLI – 620002.  MATHEMATICAL METHODS AND COMPUTATION  FDP ON NEW EPOCH IN SOFTWARE LEARNING  ARTIFICIAL INTELLIGENCE AND IOT – HEURISTIC TRANSDISCIPLINA RY PERSPECTIVES  COLLEGE (AUTONOMOUS), TIRUCHIRAPPALLI – 620002.  ARTIFICIAL INTELLIGENCE AND IOT – HEURISTIC TRANSDISCIPLINA RY PERSPECTIVES  COLLEGE (AUTONOMOUS), TIRUCHIRAPPAL LI – 620002.  CAPACITY BUILDING OF YOUNG TALENT IN TRANSDISCIPLINA RY RESEARCH FORA SUSTAINABLE DEVELOPMENT OF SOCIETY  FACULTY ORIENTATION WEBINAR SERIES ON RISK MANAGEMENT IN TIMES OF CRISIS  FDP ON VIRTUAL TEACHING – A PARADIGM SHIFT FROM OFFLINE TO ONLINE TEACHING ASSOCIATION FOR	APPLICATIONS OF MATHEMATICS  COLLEGE (AUTONOMOUS), TIRUCHIRAPPALLI – 620002.  MATHEMATICAL METHODS AND COLLEGE, TRICHY.  FDP ON NEW EPOCH IN SOFTWARE (AUTONOMOUS), TIRUCHIRAPPALLI – 620002.  ARTIFICIAL INTELLIGENCE AND IOT – HEURISTIC TRANSDISCIPLINA RY PERSPECTIVES COLLEGE (AUTONOMOUS), TIRUCHIRAPPAL LI – 620002.  CAPACITY BUILDING OF YOUNG TALENT IN TRANSDISCIPLINA RY RESEARCH FORA SUSTAINABLE DEVELOPMENT OF SOCIETY FACULTY ORIENTATION COLLEGE (AUTONOMOUS), TIRUCHIRAPPAL LI – 620002.  NATIONAL  AUTONOMOUS), TIRUCHIRAPPAL LI – 620002.  NATIONAL  NATIONAL	APPLICATIONS OF MATHEMATICS  OF MATHEMATICS  OF MATHEMATICS  COLLEGE (AUTONOMOUS), TIRUCHRAPPALLI – 620002.  MATHEMATICAL METHODS AND COLLEGE, TRICHY.  FDP ON NEW EPOCH IN SOFTWARE (AUTONOMOUS), TIRUCHIRAPPALLI – 620002.  ARTIFICIAL INTELLIGENCE AND IOT – HEURISTIC TRANSDISCIPLINA RY PERSPECTIVES  CAPACITY COLLEGE YOUNG TALENT IN TRANSDISCIPLINA RY RESEARCH FORA SUSTAINABLE DEVELOPMENT OF SOCIETY  FACULTY ORIENTATION  TIRUCHIRAPPAL LI – 620002.  AUTONOMOUS), TIRUCHIRAPPAL LI – 620002.  NATIONAL  4.7.2020 – 10.7.2020  10.7.2020  11.7.2020  12.06.2020  NATIONAL  13.7.2020  14.7.2020  15.7.2020  15.7.2020  NATIONAL  15.7.2020  NATIONAL  15.06.2020  17.06.2020  TRUCHIRAPPAL LI – 620002  A VIRTUAL FDP ON  ALL INDIA  NATIONAL  15.06.2020  NATIONAL  15.06.2020

15.	AN INTRODUCTION	PAAVAI	NATIONAL	2021	PARTICIPATION
	TO LINEAR	ENGINEERING			
	ALGEBRA FOR	COLLEGE,			
	CSIR/SET EXAM	NAMAKKAL			
16.	PRESENT TRENDS	HOLY CROSS	NATIONAL	2023	PARTICIPATION
	INAPPLICATIONS	COLLEGE			
	OF MATHEMATICS	(AUTONOMOUS),			
		TIRUCHIRAPPALLI			
		- 620002			
17.	ONE DAY-	HOLY CROSS		2024	PARTICIPATION
	INSERVICE	COLLEGE			
	FACULTY	(AUTONOMOUS),			
	WORKSHOP ON	TIRUCHIRAPPALLI –			
	MANIPULATION	620002.			
	AND ANALYSIS OF				
	DATA IN SPSS				
18.	RECENT TRENDS IN	HOLY CROSS	INTERNATIONAL	2024	PARTICIPATION
	APPLICATIONS OF	COLLEGE			
	MATHEMATICS	(AUTONOMOUS),			
		TIRUCHIRAPPALLI –			
- 10		620002.			
19.	THE EVOLVING	HOLY CROSS	NATIONAL	2024	PARTICIPATION
	LANDSCAPE:	COLLEGE			
	EXPLORING	(AUTONOMOUS),			
	POSSIBLITIES AND	TIRUCHIRAPPALLI –			
	CHALLENGES FOR	620002.			
	THE GIRL CHILD IN A DYANMIC				
	WORLD				
20.	INTERCOLLEGIATE	BON SECOURS	NATIONAL	2024	PARTICIPATION
20.	COMPETITION		INATIONAL	2024	TARTICITATION
	"MATHSTAR 24"	COLLEGE FOR			
	WATIBIAN 24	WOMEN,			
		THANJAVUR			

### **Research Scholars Details:**

S.No	Academic	Name of the	Ref. No
	Year	Scholar	
1.	2022	Mrs. J. Mercy Arokia Rani	16241/Ph.D. K1/ Mathematics/Part Time/Oct.2017/ Ist Ext./Date/ 19.10.2022
2.	2024	Mrs. N.Ganeswari	BDU2410182780794/Ph.D/Mathematics/Full Time/ Dated 07.03.2024
3.	2024	Mrs. Maria Merlin	BDU2410182780872/Ph.D/Mathematics/Full Time/ Dated 23.05.2024

# ${\bf Research\ activities-Papers\ Presented:}$

Academic Year	Name of the Conference	National / International	Details
2012	National Conference on Frontiers	National	Bharathidasan University,
	in Analysis and Differential Equations		Tiruchirappalli.
2020	International Conference on	International	Jamal Mohammed College,
	Mathematical Methods and Computation		Tiruchirappalli.
2020	Analysis and Computation in	International	Bon Secours College For
	Pure and Applied Mathematics		Women, Than javur.

# **Outside colleges:**

Academic Year	Details
2021	Question Paper setter, Department of Mathematics, SriSankara Arta and
	Science College, Kanchipuram.

2020	Question Paper setter, Department of Mathematics, Seetha Lakshmi Ramasamy College, Trichy.
2022	Question Paper setter, Department of Mathematics, Nirmala College for Women, Coimbatore.
2022	External Examiners for PG Viva-voce –Jamal Mohammed College, Department of Mathematics, Trichy.
2023	Doctoral Committee Member, Ph. D Programme, Department of Mathematics Bharathidasan University, Tiruchirappalli.
2023	External Examiner, St.Joseph's College, Department of Mathematics, Trichy.
2023	Question Paper setter, Department of Mathematics, Selvam Arts and science College, Nammakkal.
2023	Question Paper setter, Thassim Beevi Abdul Kader College for Women, Department of Mathematics, Kilakarai, Ramanathapuram.
2024	Question Paper setter, Department of Mathematics, St.Joseph's College, Trichy.

# Any other contribution to the student community:

Academic Year	Details		
2019-2020	Guest Lecture – Department of Audiology Speech Language		
	Pathology, HCC for the Subject "Statistics".		
2020-2021	Guest Lecture – Department of Audiology Speech Language		
	Pathology, HCC for the Subject "Statistics".		
2022-2023	Delivered speech on Motivational Session to the students.		

### PATENT PUBLISHED:

Academic Year	Details
2021	TITLE: Developing An Intelligent System
	Architecture For Extending Security Perspective By
	Using Innovative Technique In IOT Resource

	Systems PATENT APP.NO: 202141019203
	PUBLICATION DATE: 07.05.2021
2022	TITLE: A Neonatal Fitness Patch
	PATENT APP.NO: 202211026759
	PUBLICATION DATE:
	09.05.2022

# Academic Responsibilities within college:

Academic Year	Details		
2017-2018	Co-Ordinator (Shift-II), Department of Mathematics		
2018-2019	Core Member of Noon-Meal Incharge		
2019-2020	Core Member of Noon-Meal Incharge		
2020-2021	Core Member of Noon-Meal Incharge		
2018-2019	Member of CICRSD		
2019-2020	Member of CICRSD		
2020-2021	Member of CICRSD		
2021-2022	Member of CICRSD		
2022-2023	Member of CICRSD		
2022-2023	Member of IIC		
2022(Nov)-2023	Core Member of Exam Committee		
2023-2024	Core Member of Exam Committee		
2024-till date	Core Member of Exam Committee		
2023-2024	Core Member of DOVE Department		
2024-till date	Core Member of DOVE Department		

**Religion**: CHRISTIAN

Residential Address: Mr.A. AROCKIA SELVA RAJ,

NO:49, JAYAM ILLAM,

NARAYANA GARDEN,13<sup>th</sup> CROSS STREET,

THALLAKUDI(PT), LALGUDI(TK), TRICHY(DT).

Pincode : 621216

**Mobile** : 8838777491/95246 85902

**Email – ID** : leemamaria15@gmail.com/ leemamariaprakasam@hcctrichy.ac.in