CAUVERY COLLEGE FOR WOMEN(AUTONOMOUS)

STAFF PROFILE

PERSONAL INFORMATION

1. Name : JANAKI.G

2. Date of Birth : 30.05.1970

3. Address :

Residential	Office
RK Manor, B2, II Floor, SBO Colony, Lawson's Road, Cantonment, Trichy-620 001 E-Mail: janakikarun@rediffmail.com Mobile:9443625112	Cauvery College for Women(Autonomous), Annamalai Nagar, Tiruchirappalli-620018 E-Mail: janaki.maths@cauverycollege.ac.in

ACADEMIC INFORMATION

4. Designation & Department: Associate Professor,
PG and Research Department of Mathematics.

5. Educational Qualification :

Degree	Year	College/University
Ph.D.,	2011	National College, Trichy.
M.Phil.,	1995	St.Joseph College, Trichy.
M.Sc.,	1993	Seethalakshmi Ramaswami College, Trichy.
B.Sc.,	1991	Seethalakshmi Ramaswami College, Trichy.

6. Researcher ID :
GOOGLE SCHOLAR: 2bchmd8AAAAJ

ORCID: https://orcid.org/0000-0002-9159-4275

SCOPUS ID: 57211329254

MENDELEY: Registered

WEB OF SCIENCE: AAH-6149-2021

PUBLONS: https://publons.com/researcher/4295314/janaki-mathematics/

7. Experience :

Date of Joining	Institution	Year of Experience
09.07.1997	Cauvery College for Women	27 years

8. **Areas of Specialization :** Number Theory
9. **Languages known :** Tamil, English

10. Subjects Taught :

UG	Abstract Algebra, Complex Analysis, Statics, Dynamics, Probability and Statistics, Sequences and Series, Differential Equations and Laplace Transforms, Integral Calculus and Analytical Geometry of 3D, Practical Statistics, Numerical Methods, Operations Research, Number Theory, Astronomy, Algebra and Calculus, Biostatistics, Algebra, Analytical Geometry of 3D and Trigonometry
PG	Topology, Functional Analysis, Optimization Techniques, Discrete Mathematics, Integral equations, Calculus of Variations and Fourier Transforms, Classical Dynamics, Ordinary Differential Equations, Partial Differential Equations, Algebraic Number Theory, Research Methods and Statistical Techniques

11. Research Supervision:

	University from where guideship obtained	**Thesis**		
		Completed (in numbers)	**Year of Completion**	**Pursuing (in numbers)**
M.Phil	Bharathidasan University	-	-	-
Ph.D	Bharathidasan University	04	2021	04

12. Details of Publications:

Journal Name & Volume	Year of Publication	ISSN Number	Name of the Paper	Impact Factor
Acta Ciencia Indica, XXXIIIM(4)	2007	0970-0455	A Remarkable Pythagorean Problem	-
Acta Ciencia Indica, XXXIVM(2)	2008	0970-0455	Observation on $Y^2 = 3X^2 + 1$	-

Impact Journal of Science and Technology	2008	0973-8290	Integral solutions of Ternary Quadratic equation $x^2 - y^2 + xy = z^2$	-
Bulletin of Pure and Applied Sciences, 27(E)(2)	2008	0970-6577	Pythagorean triangle with Area/Perimeter as a special polygonal number	-
Antarctica J. Math., 5(2)	2008	0972-8643	Pythagorean Triangle with perimeter as Pentogonal number	-
Journal of Applied Mathematical Analysis and Applications (Serial Publications), (4)1-2	2008	0973-3884	Pythagorean Triangle with Nasty number as a leg	-
Impact Journal of Science and Technology, 2(1)	2008	0973-8290	Pythagorean Triangle and Nasty number	-
Impact Journal of Science and Technology, 2(2)	2008	0973-8290	Integral solutions of Ternary Quadratic equation $x^2 + y^2 = z^2 - 4$	-
Impact Journal of Science and Technology,2(3)	2008	0973-8290	Observations on $x^2 - y^2 + x + y + xy = 2$	-
Impact Journal of Science and Technology, 2(4)	2008	0973-8290	Pythagorean Triangle with Pentagonal number as Perimeter	-
Cauvery Research Journal, 2(1)	July 2008		Observations on $2(x^2 - y^2) + 4xy = (k^2 + 4k - 4)z^3$	-
Impact J.Sci.Tech,, 3(3)	2009	0973-8290	On Pairs of Rectangles	-
Proceedings of the International Conference on Mathematical Methods and Computation, Jamal Mohammed College (Autonomous), Tiruchirappalli, India	2009	ISBN: 978-81-8424-466-3	Integral Solutions of $x^2 + y^2 = z^2 + 4$	-
Acta Ciencia Indica, Vol. XXXV M(2)	2009	0970-0455	Observation on $2(x^2 - y^2) + 4xy = z^4$	-
Impact J.Sci.Tech.,, 4	2010	0973-8290	Integral Solutions of $(x^2 - y^2)(3x^2 + 3y^2 - 2xy) = 2(z^2 - w^2)p^3$	-
Antarctica J. Math., 7(1)	2010	0972-8643	Integral Solution of $x^2 - y^2 + xy = (m^2 - 5n^2)z^3$	-
Antarctica J. Math., 7(2)	2010	0972-8643	Observations on $3(x^2 - y^2) + 9xy = z^4$	-

Antarctica J. Math., 7(1)	2010	0972-8643	Integral Solutions of $xy + x + y + 1 = z^2 - w^2$	-
Impact J.Sci.Tech., 4	2010	0972-8643	Integral solutions of $(x^2 - y^2)(3x^2 + 3y^2 - 2xy) = 2(z^2 - w^2)p^3$	-
Archimedes J.Math., 1(2)	2011	-	Observations on $xy + x + y + 1 = kz^2$	-

Reflections des ERA, 6(4)	2011	0973-4597	Pythagorean triangles with Perimeter as a Nasty Number	-
Jamal Academic	2011	0973-0303	On the Ternary Quadratic	-
Research Journal: An Interdisciplinary, Special Issue			Diophantine equation $6(x^2 + y^2) - 11xy + 2(x + y) + 4 = 27z^2$	
International Journal of Engineering Research-Online, A Peer Reviewed International Journal, 4(1)	Jan-Feb, 2016	2321-7758	Rectangle with Area as a special polygonal number	3.601
International Journal of Science and Research(IJSR), 5(1)	2016	2319-7064	Integral Solutions of $4w^2 - x^2 - y^2 + z^2 = t^2$	5.611
International Journal for Research in Applied Science and Engineering Technology (IJRASET), 4(II)	Feb-2016	2321-9653	Special pairs of rectangles and sphenic number	5.011
International Journal of Innovative Research in Science, Engineering and Technology, 5(2)	March2016.	2319-8753	Special Pythagorean trianglesand 6-digitHarshad numbers	5.442
Jamal Academic Research Journal: An Interdisciplinary Special Issue	February2016	0973-0303	Pythagorean triangle with Heptagonal number as Perimeter	-
Jamal Academic Research Journal: An Interdisciplinary Special Issue	February2016	0973-0303	Observations On Ternary Quadratic Equation $5x^2 + 7y^2 = 972z^2$	-
American International Journal of Research in Science, Technology, Engineering and Mathematics, 13(2)	December, 2015-Febuary,2016	2328-3491	Special pairs of Pythagorean Triangles and Jarasandha Numbers	5.01
International Journal of Interdisciplinary Research(IJIR), 2(3)	2016	2454-1362	On the Ternary Quadratic Diophantine Equation $5(x^2 + y^2) - 6xy = 4z^2$	3.75

International Journal of Innovative Research in Science, Engineering and Technology,5(2)	February2016	2347-6710	Observations on Ternary Quadratic Diophantine Equation $6(x^2+y^2)-11xy+3x+3y+9=72z^2$	5.442
International Journal for Research in Applied Science and Engineering Technology, 4(2)	February-2016	2321-9653	Special pairs of Rectangle and Sphenic Number	5.011
International Journal of Multidisciplinary Research and Development, 3(3)	March 2016	2349-4182	Connection between special Pythagorean triangles and Jarasandha Numbers	5.72
International Journal of Science and Research(IJSR), 5(3)	March 2016	2319-7064	On the Ternary Cubic Diophantine Equation $5(x^2+y^2)-6xy+4(x+y)+4=40z^3$	5.611
Bulletin of Mathematics and Statistics Research(A Peer Reviewed International Research Journal), 4(2)	April-June, 2016	2348-0580	Special Rectangles and Jarasandha Numbers	4.495
International Journal of Multidisciplinary Research and Development, 3(4)	April 2016	2349-4182	Special pairs of Pythagorean triangles and Narcissistic number	5.72
International Journal of Science, Engineering and Technology, 2(2)	April 2016	2394-4099	On the integer solutions of the pell equation $x^2-79y^2=9^k$	3.7
International Journal of Multidisciplinary Research and Development, 3(5)	May 2016	2349-4182	On the integer solutions of the pell equation $x^2=20y^2-4^t$	5.72
Asian Journal of Science and Technology, 7(5)	May 2016	0976-3376	Special pairs of Rectangles and Jarasandha numbers	5.544
International Journal of Engineering, Science and Computing, 6(5)	May-2016	2321-3361	Integral solutions of the non-homogeneous heptic equation with five unknowns $5(x^3-y^3)-7(x^2+y^2)+4(z^3-w^3+3wz-xy+1)=972p^7$	5.611
International Journal of Engineering, Science and Computing, 6(6)	June-2016	2321-3361	On the integer solutions of the homogeneous bi-quadratic Diophantine equation $x^4-y^4=82(z^2-w^2)p^2$	5.611

American International Journal of Research in Science, Technology, Engineering and Mathematics, 15(1)	June-August-2016	2328-3580	Special pairs Pythagorean triangles and 2-digits sphenic numbers	5.01
International Research Journal of Engineering and Technology, 3(7)	July-2016	2395-0056	Pythagorean Triangle with Area/Perimeter as a Jarasandha Number of order 2 &4	4.45
American International Journal of Research in Science, Technology, Engineering and Mathematics, Volume 2, Issue14,	March-May, 2016	2328-3580	Special Pythagorean Triangles in Connection with the Narcissistic Numbers of Order 3 and 4	5.01
International Journal of Engineering Science and computing, Volume 6, Issue 5	May 2016	2321-3361	Observations on "$x^2 - 4xy + y^2 + 22x = 0$"	5.611
International Journal For Research in Applied Science and Engineering Technology, Volume 4, Issue VI	June 2016	2321-9653	Special Rectangles and Narcissistic Numbers of Order 3 and 4	5.011
Universal Journal of Mathematics, Volume 3, Issue 3	June 2016	2456-1312	Observations on Truncated Octahedral Number	-
International Research Journal of Engineering and Technology, Volume 3, Issue 8	August 2016	2395-0056	Special pairs of rectangles and Narcissistic numbers of order 3 and 4	4.45
Asian Journal of Science and Technology , Volume 7, Issue 8	August 2016	0976-3376	Special pairs of Pythagorean triangles and Harshad numbers	6.351
International Journal of Applied Research, Volume 2, Issue 11	Nov 2016	2394-5869	On the negative Pell equation y2 = 21x2 – 3	5.2
International Journal of Academic Research and Development, Volume 1, Issue 11	Nov 2016	2455-4197	Special pairs of Pythagorean triangles and 3-digit consecutive sphenic numbers	5.22
International Journal of Advanced Research and Development(ijard), Volume 2, Issue 6	Jan 2017	2455-4030	Construction of Special Dio 3-Tuples from CCn □ I Gnon	5.24

International Journal of Engineering Science and Computing, Volume 7, Issue 2	February 2017	2321-3361	On the Quinitic Non-Homogeneous Diophantine Equation x4 □ y4 □ 40(z2 □ w2) p3	5.611
International Research Journal of Engineering and Technology, Volume 4, Issue 3	March 2017	2395-0056	Integral solutions of the Ternary Cubic equation 3(x 2 □ y 2) □ 4xy □ 2(x □ y □ 1) □ 972 z3	5.181
International Research Journal of Engineering and Technology, Volume 4, Issue 3	March 2017	2395-0056	Observations on x2 □ y 2 □ 2z 2 □ 62w2	5.181
International Research Journal of Engineering and Technology, Volume 4, Issue 3	March 2017	2395-0056	Observations on Ternary Quadratic equation z 2 □ 82x2 □ y 2	5.181
International Journal of Engineering and Technology, Volume 4, Issue 3	March 2017	2395-0056	Observations on x2 □ y 2 □ 2z 2 □ 62w2	6.171
International Journal of Research in Engineering and Applied Sciences, Volume 7, Issue XI	March 2017	2249-3905	Connection between Frustum of the Cone with Jarasandha Numbers and Some Special Numbers	7.196
International Research Journal of Engineering and Technology, Volume 4, Issue 3	March 2017	2395-0056	Observations on Ternary Quadratic Equation z2 = 82x2 + y2	5.181
International Journal of Statistics and Applied Mathematics, Volume 2, Issue 3	May-June 2017	2456-1452	Observation on y2 = 6x2 + 1	5.34
International Journal for Research in Applied Science & Engineering Technology, Volume 5, Issue VIII	Aug 2017	2321-9653	Integral Solutions of the Homogeneous Biquadratic Diophantine Equation 3(x 4 □ y 4) □ 2xy(x 2 □ y 2) □ 972 (z □ w) p3	6.887
International Journal for Scientific Research & Development, Volume 5, Issue 7	Aug 2017	2321-0613	Integral Solutions of the Homogeneous Quintic Diophantine Equation x5 □ y 5 □ x 2 y 2 (x □ y) □ 972 (x □ y)(z □ w)2 p 2	4.396

International Journal for Research in Applied Science and Engineering Technology, Volume 5, Issue IX	September 2017	2321-9653	Pythagorean Triangle with Area/Perimeter as a 4-digit Consecutive Sphenic Number	6.887
International Journal for Research in Applied Science & Engineering Technology, Volume 5, Issue XI	Nov 2017	2321-9653	Evaluating Pyramidal Numbers and Pentatope Number Using Initial Value Theorem in Z-Transform	6.887
International Research Journal of Engineering and Technology (IRJET), Volume 04, Issue 11	Nov -2017	2395-0056	On the Exponential Diophantine Equation 36x + 3y = z2	6.171
International Journal for Research in Applied Science & Engineering Technology (IJRASET), Volume 5, Issue 11	Nov -2017	2321-9653	Construction of Special Dio 3-Tuples from CCn □ II Gnon	**6.887**
International Journal for Research in Applied Science and Engineering Technology, Volume 5, Issue X	November 2017	2321-9653	Special Dio 3-tuples for Pronic Number-I	**6.887**
International Journal of Advanced Science and Research, Volume 2, Issue 6	November 2017	2455-4227	Special Dio 3-tuples for Pronic Number-II	5.12
International Journal of Statistics and Applied Mathematics, Volume 2, Issue 6	November-December 2017	2456-1452	A Novel Approach of determining Stella Octangula number and Pronic number using initial Value theorem in Z – Transform	5.34
Journal of Mathematics and Informatics, Volume 10, Special Issue	December 2017	2349-0640	Construction of the Diophantine triple involving Stella Octangula number	1.627
International Journal of Statistics and Applied Mathematics(ijsam), Volume 2, Issue 6	Dec -2017	2456-1452	Construction of Gaussian Diophantine triples with the property D (25)	5.34
Journal of Mathematics and Informatics(jmi), Volume 10	Special Issue, Dec -2017	2349-0632	Connections between Cylinder, Frustum of a Cone with Truncated Octahedral Number and Other Special	1.627

			Numbers	
Journal of Mathematics and Informatics, Vol 11, Special Issue	Dec 2017	2349-0632	Special Dio 3-tuples for Pentatope Number	1.627
International Journal of Research in applied Science and Engineering, Technology, Volume 5, Issue 12	Dec 2017	2321-9653	Pythagorean Triangle with Area/Perimeter as a Harshad number of digits 4, 5 & .6	6.887
International Journal of Research in applied Science and Engineering, Technology, Volume 6, Issue 1	January 2018	2321-9653	On Ternary quadratic Diophantine equation 15x2 □15 y 2 □ 24xy □ 438z 2	6.887
International Journal for Research in Applied Science and Engineering Technology, Volume 6, Issue I	January 2018	2321-9653	Construction of the Diophantine triple involving Pronic number	6.887
International Journal for Research in Applied Science & Engineering Technology, Volume 6, Issue III	March 2018	2321-9653	Construction of The Diophantine Triple involving Pentatope Number	6.887
International Journal for Science and Advance Research in Technology(ijsart), Volume 4, Issue 4	April 2018	2395-1052	Half companion sequences CCn of Dio 3-tuples from Gnon	5.388
International Journal for Research in Applied Science & Engineering Technology, volume 6, Issue V	May 2018	2321-9653	Explication of dio 3-tuples from truncated octahedral number-1	6.887
International Journal for Science and Advance Research in Technology(ijsart), Volume 4, Issue 5	May 2018	2395-1052	Explication of dio 3-tuples from truncated octahedral number-11	5.388
International Journal of Research and Analytic Reviews, Volume 5, Issue 3	July 2018	2348-1269	Special dio 3-tuples-II for star numbers	5.75

International Journal of Computer Sciences and Engineering Vol 6, Issue 7	July 2018	2347-2693	An Integral Solutions of Negative Pell's equation involving two digit Sphenic numbers	3.022
Aryabhata Journal of Mathematics & Informatics, Vol 10, No 2	July-Dec 2018	0975-7139	Tracing of Polygonal Number from Pyramidal Number and Pentatope Number Division Algorithm	5.856
International Journal of Management, IT & Engineering, Volume 8 Issue 08(1)	Aug 2018	2249-0558	Dio 3-tuples for star numbers	7.119
International journal of scientific research and reviews(ijsrr), Volume 7, Issue 4	Oct-Dec 2018	2279-0543	Allegory of lateral surface area of a cube with a special number	6.946
International Journal of Research and Analytical Reviews, Volume 5, Issue 4	Nov 2018	2349-5138	Sums of Squares of Pyramidal Numbers	5.75
International Journal of Research and Analytical Reviews, Volume 6, Issue 1	Jan 2019	2349-5138	Integer Triples comprising of Jarasandha Numbers in Arithmetic Progression & Geometric Progression	5.75
International Journal of Scientific Research in Mathematical and Statistical Sciences, Volume 6, Issue 1	Feb 2019	2348-4519	Solutions of Pell's Equation involving Jarasandha Numbers	1.021
International Journal of Research and Analytical Reviews, Volume 6, Issue 1	March 2019	2348-1269	On the integer solutions of the homogeneous Biquadratic Diophantine equation $x^4 - y^4 = 145(z^2 - w^2)p^2$	5.75
International Journal of Research and Analytical Reviews, Volume 6, Issue 1	March 2019	2348-1269	Observations on Ternary quadratic Diophantine equation $9(x^2 + y^2) - 17xy + 5x + 5y + 25 = 51z^2$	5.75
International Journal of Research and Analytical Reviews, Volume 6, Issue 1	March 2019	2348-1269	On the integral solutions of pell equation $x^2 = 10y^2 - 9^T$	5.75
International Journal of Research and Analytical Reviews, Volume 6, Issue 1	March 2019	2348-1269	Integral solutions of the Ternary cubic equation $4(x^2 + y^2) - 7xy + x + y + 1 = 40z^3$	5.75
International Journal of Research and Analytical	June 2019	2348-1269	Construction of Gaussian Diophantine Quadruple	5.75

Reviews Vol 6, Issue 2			with Property D (16)	

Aryabhata Journal of Mathematics & Informatics, Vol 11, No. 2	July-Dec 2019	0975-7139	Correlation between Pyramidal Numbers	5.856
ADALYA Journal (UGC CARE LIST 'II' & WEB OF SCIENCE), Volume 10, Issue 8	August 2019	1301 - 2746	Elevation of Stella Octangula number as a Special Dio 3-tuples and the non-extendability of Special Dio quadruple	5.3
Compliance Engineering journal (UGC CARE LIST 'II'), Volume 10, Issue 8	Aug 2019	0898-3577	Relation Between Lateral Surface Area of a Cube & Pyramidal Numbers	6.1
ADALYA Journal (UGC CARE LIST 'II' & WEB OF SCIENCE), Volume 10, Issue 8	Aug 2019	1301-2746	Special Dio-Quadruples comprising of Centered Square numbers with property D(2)	5.3
International Journal for Science and Advance Research in Technology, Volume 5, Issue 8	Aug 2019	2395-1052	Gaussian Diophantine Quadruples involving Gnomonic numbers with property D(4)	5.888
Compliance Engineering Journal (UGC CARE LIST 'II'), Vol- 10, Issue-08.	Aug 2019	0898-3577	Ascertainment On The Exponential Equation $p^{3c} - a(p^{2c} - p^b) = p^{b+c}$	6.1
ADALYA Journal (UGC CARE LIST 'II' & WEB OF SCIENCE), Volume 10, Issue 8	SEP 2019	1301-2746	Explication Of The Transcendental Equation $p + p^3 + q^3 - pq + \sqrt[3]{r^2 + s^2} = (m^2 + 1)t^3$	5.3
International Journal of Recent Technology and Engineering (UGC CARE LIST 'II' & SCOPUS INDEXED),Volume 8, Issue 3	Sep 2019	2277-3878	Half Companion sequences of special Dio 3-tuples involving Centered square numbers	5.92
Adalya Journal, Volume 8, Issue 10	October 2019	1301-2746	Special Dio 3-tuples for Hex number	5.3

International Journal of Analytical and Experimental Modal Analysis, Volume 11, Issue 10	October 2019	0886-9367	Special Dio 3-tuples II for Hex number	6.3

Advances and Applications in Mathematical Sciences, (UGC CARE LIST 'I' & Web of Science), Volume 18, Issue 12	Oct 2019	0974-6803	Solution of Exponential Diophantine Equation involving Jarasandha Numbers	-
INFOKARA Journal (UGC CARE LIST 'II'), Volume 8, Issue 12	Dec 2019	1021-9056	Formation Of Special Dio-Quadruple Involving Pronic Number With Property D(5)	5.3
Compliance Engineering journal (UGC CARE LIST 'II'), Volume 10, Issue 12	Dec 2019	0898-3577	Observation On Remarkable Diophantine Equation	6.1
International Journal of Scientific Research in Mathematical and Statistical sciences, Volume 6, Issue 6	Dec 2019	2348-4519	Appraisal of the Sum of the Polygonal Numbers of Even Order from Stella Octangula Number and Pronic Number Using the Division Algorithm	1.021
International Journal for Science and Advance Research in Technology , Volume 5 Issue 12	Dec 2019	2395-1052	Observation on $y^2 = 11x^2 + 1$	5.888
International Journal of Scientific Research in Mathematical and Statistical sciences, Volume 6, Issue 6	Dec 2019	2348-4519	Some Non-Extendable Diophantine Triples involving Centered square numbers	1.021
Journal of Scientific Computing, Volume 8, Issue 12	December 2019	1524-2560	Integral solutions of $(x^2 - y^2)(7x^2 + 7y^2 - 13xy) = 2(z^2 - w^2)t^2$,	6.1
Infokara Journal(UGC CARE LIST 'II'), Vol-9 , Issue-1	Jan 2020	1021-9056	Gaussian quadruples involving Fermat number, Stella octangular number and pronic number	5.3
Parishodh Journal, Volume IX, Issue II	Feb 2020	2347 - 6648	Connection between special Pythagorean triangles and 2-digit sphenic numbers	6.3
INFOKARA Journal (UGC CARE LIST 'II'), Volume 9, Issue 2	Feb 2020	1021-9056	Some Non-Extendable Special Dio- Triples involving Pentatope Numbers	5.3

PARISHODH Journal (UGC CARE LIST 'I'), Volume XI, Issue II	Feb 2020	2347-6648	On Generalized Fermat Equations involving Jarasandha Numbers	6.3
Parishodh Journal Volume 9, Issue 2	Feb2020	2347-6648	Dio 3-tuples for centered square pyramidal number	6.3
International Journal of Scientific Research in Multidisciplinary Studies, Volume 6, Issue 6	Mar 2020	2454-9312	Integral solutions of the non-homogeneous Sextic equation with Three unknowns $3(x 2 \square y 2) \square 2xy \square 972z 6$	**1.021**
Parishodh Journal, Vol ix, No.3,pp.7911-7919	Mar 2020	2347-6648	Ascertainment on the integral solutions of the Biquadratic Diophantine Equation $m 4- n 4 = 4(u 2 + 1)(r - s)t3$	**6.3**
Journal of Xidian University, Volume 14, Issue 4	Apr-2020	1001-2400	Continued Fractions of Proportions of Consecutive Pyramidal Numbers	**5.4**
International Journal of Scientific Research in Mathematical and Statistical sciences, Volume 7, Issue 2	Apr-2020	2348-4519	Observations on the Binary Quadratic Diophantine Equation x2-2xy-y2+2x+14y=72	**1.021**
Aryabhata Journal of Mathematics & Informatics, Volume 12, No.1	Jan-June 2020	0975-7139	Ramanujan-Type Diophantine Equation Involving Jarasandha Numbers	**5.856**
Aryabhata Journal of Mathematics and Informatics, Vol 12, No.1,pp.81-84	Jan – June 2020	0975-7139	On some Non-Extendable Gaussian Triples involving Mersenne and Gnomonic number.	**5.856**
Infokara Journal Volume 9, Issue 6	June 2020	1021-9056	Gaussian triples with the property D(36)	**5.3**
Sambodhi	Oct – Dec 2020	2249 - 6661	Construction of Gaussian Diophantine quadruples with property D(16k2)	-
Sambodhi Journal, Vol 43, No.4,pp. 91-94	Oct- Dec 2020	2246-6661	Generation of Special Diophantine Quadruples with the property D (2)	**5.80**
Kala: The Journal of Indian Art History Congress	Dec 2020	0975 -	Heptagonal Number and Pythagorean Triangles	-

		7945		
Kala –The journal of Indian Art History Congress, Vol 26, No.2(XXVII),pp. 191-194	Jan 2021	0975-7945	Diophantine Equations on Chemical Reactions	**6.125**

JIJNASA, Volume 38, No.1	April 2021	0337-743X	Encryption Technique Using RSA Public Key Cryptography Involving Jarasandha Numbers Of Orders 2 And 4	-
Utkal Historical Research Journal, Volume 34(V)	April 2021	0976-2132	Application of Number Theory in Balancing Chemical Equations And Ladder Problem in Statics	-
Turkish journal of computer and mathematics Education Vol 12, No. 9	April 2021	3172-3173	On Interesting integer Triple	-
Turkish journal of computer and mathematics Education Vol 12, No. 7	April 2021	3175-3178	Applications of Diophantine equations in chemical reactions and cryptography	-
International Journal for Research in Applied Science & Engineering Technology, Volume 10, Issue VIII	Aug ust 2022	2321-9653	Properties of the Ternary Cubic Equation $5x^2-3y^2=z^3$	-
Aryabhata Journal of Mathematics and Informatics, Volume 14, Issue 2	Dece mber 2022	0975-7139(P) 2394-9309(O)	Cryptographic Algorithm Using Binary Quadratic Equation $x^2-7y^2=1$ with Exponent Assignment of Alphabets	5.856
Asian Journal of Science and Technology, Volume 14, Issue 02	February, 2023	0976-3376	Integer Right triangle with Area/Perimeter as a Canada Numbers	-

METSZET Journal	March, 2023	2061-2710	Generating Dio-3 Triples using the Second-Order Polynomials with Incisive Properties	5.7
International Journal for Research in Applied Science & Engineering Technology (IJRASET)	March , 2023	2321-9653	An analysis on the Ternary Cubic Diophantine Equation $2(l^2+m^2)-3lm=56t^3$	-
International Journal for Research in Applied Science & Engineering Technology (IJRASET)	March , 2023	2321-9653	On Integer Solutions Of the Ternary Quadratic Equation $3a^2+3r^2-2ar=332n^2$	-
International Journal for Research in Applied Science & Engineering Technology (IJRASET)	March , 2023	2321-9653	On Integer Solutions Of the Homogeneous Biquadratic Diophantine Equation $x^4-y^4=26(z^2-w^2)p^2$	-
International Journal for Research in Applied Science & Engineering Technology (IJRASET)	March, 2023	2321-9653	Integral Solutions Of the Ternary Cubic Equation $3(x^2+y^2)-4xy+2(x+y+1)=552z^2$	-
Ratio Mathematica (UGC Care list 1) Volume 46	March, 2023	1592-7415, 2282-8214	Algebraic coding theory using Pell equation $x^2-8y^2=1$	-
International Journal for Research in Applied Science & Engineering Technology (IJRASET), Volume 11	March 2023	1320-1322	An analysis on the Ternary Cubic Diophantine Equation $2(l^2+m^2)-3lm=56t^3$	-
International Journal of Scientific Research in Engineering and Management (IJSREM), volume 07	April 2023	1320-1322	Relationship between Pythagorean triangle & Woodall Primes	7.185
International Research Journal of Engineering and Technology, Volume 10, Issue 04	April, 2023	2395-0072	Generation of Pythagorean Triangle with Area/Perimeter as a Wag staff prime numbers	-

Acta Ciencia Indica Mathematics, Volume XLVIII-M, No. 1 to 4(2022)	May, 2023	0970-0455	Integral Solutions of the Homogeneous Trinity Quadratic Equation $3x^2+y^2=16z^2$	-
Asian Journal of Science and Technology & Vol. 14.	May 2023	0976-3376	Integral Solution of The Ternary Cubic Equation $6(x^2+y^2)-11xy+x+y+1=552z^3$	5.99
International Journal for Research in Applied Science & Engineering Technology (IJRASET) &Vol 11 Is	May 2023	2321-9653	Pythagorean Triangle with Area/Perimeter as a Disarium Number of Order 2 to 4	-
International Journal of Scientific Research in Engineering and Management (IJSREM) & Vol 07	June 2023	2582-3930	Connection Between Special Pythagorean Triangles and Disarium Number	7.185
Journal For Basic Sciences, Volume 23, No. 7, Page No. 391-396	July 2023	1006-8341	Connection between Distinguished Integer Right Triangle and Canada Numbers	6.1
International Journal of Scientific Development and Research (IJSDR), Volume 8, No. 9, Page No. 1788-1179	September 2023	2455-2631	Exponential Diophantine Equation $2^a+n^{2b}=c^2$, n=1, 2, 3…	8.15
International Journal of Latest Engineering Research and Applications (IJLERA)	December, 2023	2455-7137	Renovated RSA Algorithm for Sending Secret Numbers using Primes and 3-Length Words Employing Gaussian Primes	2.105
Global Journal of Science Frontier Research: F Mathematics and Decision Sciences	December, 2023	2249-4626	Distinguished Couple of Integer Right Triangles and Canada Numbers	-

Indian Journal of Science and Technology (IJST)", (WEB OF SCIENCE) (UGC CARE List Group II)	January, 2024	0974-5645	Exponential Diophantine Equation $(n^2-1)^u+n^{2v}=w^2$, $n=2,3,4,5$	-

13. Details of Papers Presented:

Date	Organizer	Name of the Seminar	Paper Name
16.02.2007	Theivanai Ammal College for Women	Applications in Analysis	Observations on $X^2 = 8\alpha^2 + Y^2$
23.02.2007 & 24.02.2007	Shrimathi Indira Gandhi College For Women	Emerging Trends of Mathematical Techniques and their applications in Computer Science	A Remarkable Pythagorean Problem
22.03.2007 & 23.03.2007	Periyar E.V.R.College	Application of Mathematics	Pythagorean Triangle with perimeter as a Nasty number
27.09.2007 To 29.09.2007	Thiagarajar College of Engineering	Discrete Mathematics And Its Applications	Pythagorean Triangle and Nasty number
28.03.2008 & 29.03.2008	Government Arts College for Women	Recent Developments in Mathematics and its Applications	Pythagorean Triangle with Nasty number as a leg
20.12.2008 To 22.12.2008	SASTRA University	Number Theory and Modular Forms	Pythagorean Triangle with Area/Perimeter as a special polygonal number
24th, 25thJuly-2009	Jamal Mohammed College(Autonomous),Accredited at 'A' Grade by NAAC,Tichy-620 020.	UGC Sponsored International Conference on Mathematical Methods and Computation	Integral Solutions of $x^2 + y^2 = z^2 + 4$
31st Aug and 1st Sep-2009	Kunthavai Naachiyar Govt., Arts College for Women(Autonomous), Nationally Reaccredited with grade B+, Thanjavur-613 007.	UGC Sponsored National Conference on Advances in Mathematics: Scientific Development and Engineering Applications,	Integral Solutions of $xy + x + y + 1 = z^2 - w^2$

14. Details of Seminars / Conferences / Workshops Attended:

Year & Date	Organizer	Title	National / International	Topic
16.02.2007	Theivanai Ammal College for Women	Applications in Analysis	National	Observations on $X^2 = 8\alpha^2 + Y^2$
23.02.2007 & 24.02.2007	Shrimathi Indira Gandhi College	Emerging Trends of Mathematical Techniques and their applications in Computer Science	National	A Remarkable Pythagorean Problem
22.03.2007 & 23.03.2007	Periyar E.V.R.College	Application of Mathematics	National	Pythagorean Triangle with perimeter as a Nasty number
27.09.2007 To 29.09.2007	Thiagarajar College of Engineering	Discrete Mathematics And Its Applications	State Level	Pythagorean Triangle and Nasty number
28.03.2008 & 29.03.2008	Government Arts College for Women	Recent Developments in Mathematics and its Applications	International	Pythagorean Triangle with Nasty number as a leg
20.12.2008 To 22.12.2008	SASTRA University	Number Theory and Modular Forms	National	Pythagorean Triangle with Area/Perimeter as a special polygonal number
24th, 25th July-2009	Jamal Mohammed College(Autonomous),Accredited at 'A' Grade by NAAC	UGC Sponsored International Conference on Mathematical Methods and Computation	National	Integral Solutions of x2 □ y2 □ z 2 □ 4
31st Aug and 1st Sep 2009	Kunthavai Naachiyar Govt., Arts College for Women (Autonomous), Nationally Reaccredited with grade B+	UGC Sponsored National Conference on Advances in Mathematics: Scientific Development and Engineering Applications	National	Integral Solutions of xy □ x □ y □ 1 □ z2 □ w2

3rd and 4th April-2009	Cauvery College for Women, Nationally Accredited with A Grade by NAAC	Two Day State Level Workshop on SPSS Package	State Level	-
4th & 5th December 2009	National College, Nationally Accredited at A level by NAAC	UGC Sponsored National Seminar on Applications of Algebra and Number Theory	International	Observations 3 3 3 on x □ y □ z □ (x □ y □ z)w4
9th Mar-2010	Jamal Mohammed College (Autonomous) Accredited at A Grade by NAAC	UGC Sponsored One day National Level Seminar on Graph Theory, Algorithms and Modeling	National	Observations on xy □ x □ y □ 1 □ kz2
20.12.2010 To 22.12.2010	The PG and Research Department of Mathematics, Shrimati Indira Gandhi College	Seminar on Mathematics and its Applications	National	-
28th and 29th January 2011	Government Arts College for Women (Autonomous), Accredited by B++ by NAAC	National Conference on Recent Advances in Pure and Applied Mathematics	National	Integral solutions of Quintic equation with five unknowns x4 □ y4 □ z3(p2 □ q2)
4.4.2011	Department of Mathematics, Cauvery College For Women(Nationally Re-accredited with 'A' Grade by NAAC,	State level Workshop on MATLAB Organized	State Level	-
13-14 February, 2014	Jamal Mohammed College(Autonomous), Accredited at 'A' Grade by NAAC	International Conference on Mathematical Methods and Computation	International	On the Ternary Quadratic Diophantine Equation $6(x^2+y^2)-11xy+2(x+y)+4=27z^2$

15. Details of Seminars / Conferences / Workshops Organized: Nil

16. Details of Orientation / Refresher Course Attended: Nil

17. Details of Study Materials / Books written and published:

S.No	Book Name & Publisher	Year of Publication	Print ISBN	eBook ISBN
1.	**Explorations in Diophantine Equations, B P International.**	Nov 2023	**978-81-967488-3-8**	**978-81-967488-6-9**

18. Chapter Publications:

S.No	Chapter Name	Book Name & Volume	Year of Publication	Print ISBN	eBook ISBN
1.	Integral Solutions of the Binary Quadratic Diophantine Equation x^2 -2xy -y^2 + 2x +14y= 72	Recent Advances in Mathematical Research and Computer Science Vol. 2, Chapter 8	Oct 2021	978-93-5547-178-9	978-93-5547-179-6
2.	Non-Extendability of Diophantine Triples Comprising Centered Square Numbers	Recent Advances in Mathematical Research and Computer Science Vol. 2, Chapter 9	Oct 2021	978-93-5547-178-9	978-93-5547-179-6
3.	Some Interesting Applications Of Number Theory	Emerging Trends in Science, Social Science, Engineering and Management-A Multidisciplinary Approach, Chapter 20		-	978-93-5546-016-5
4.	Evaluation of the sum of the Polygonal numbers of even sides from stella octangular number and pronic number using the division algorithm	Recent Advances in Mathematical Research and Computer Science Vol. 2, Chapter 9	Oct 2021	978-93-5547-178-9	978-93-5547-179-6
5	A Cryptographic Algorithm Based on Large Gaussian Primes and Primes	Research Highlights in Mathematics and Computer Science B P International Volume	Oct 2022	978-93-5547-911-2	978-93-5547-912-9,

a. Details of Chairing as Resource Person:

Date	Title of the Seminar/Conference	Session Chaired
2016	National Conference on Modern Trends	National Conference
2017	National College Research Journal	Member of the Editorial Board

b. Details of Incharge / Participation in Extracurricular Activities :

(NSS, NCC, Sports, Games, Voluntary Association and Cultural Activities):

Nature of Activity	Period of Incharge
BOMAC club In charge	2009-2011
Sports In charge	2006 – 2008
Department Research Committee Co-Ordinator	From 2015 to Till date
Timetable In-charge	2022-2023
Member of College Research Advisory Committee	From 2022 to Till date
Member of College Research Ethics Committee	From 2022 to Till date

c. Details of Participation in Consultancy, Training, Development etc..: -

i. Consultancy- Microsoft - Certified Microsoft Innovative Educator

ii. Consultancy- Microsoft - Getting started with one Note

d. Details of Membership in Academic Bodies/ Board of Studies and Reviewer Details:

Reviewer in

- American Journal of Applied Mathematics.
- Korean Journal of Mathematics.
- Indian Journal of Science and Technology.
- Journal of Advances in Mathematics and Computer Science.
- Jnanabha, Vijnana Parishad of India.

e. Details of Membership of Professional Bodies:

- **Life time membership**

  Bharat Ganita Parishad, University of Lucknow, Lucknow.

  Vijnana Parishad of India.

f. Country visited: **Nil**

g. Any other information if any:

Number of National, International and State Webinars Attended : 14

Number of Faculty Development Programme Attended: 33

Number of Short Term Training Course Attended: 01

Number of Workshop Faculty Development Program Attended : 02

Research & M.Phil Project Guidance

S.No	Name & Reg.No.	M.Phil / Ph.D	Year of Submission	University
1	R.Radha 31191/Ph.D-K3/Mathematics/Part time/Oct 2015	Ph.D	2021 Awarded	Bharathidasan University
2	S.Vidhya 31192/Ph.D-K3/Mathematics/Part time/Oct2015	Ph.D	2021 Awarded	Bharathidasan University
3	C.Saranya 043344/Ph.D-K3/Mathematics/Part time/Jan2016	Ph.D	2021 Awarded	Bharathidasan University
4	P.Saranya 043345/Ph.D-K3/Mathematics/Part time/Jan2016	Ph.D	2021 Awarded	Bharathidasan University
5	A. Gowri Shankari BDU2220182 779933/April 2022	Ph.D	Pursuing	Bharathidasan University
6	P. Sangeetha BDU2220182780114/ August 2022	Ph.D	Pursuing	Bharathidasan University
7	S. Shanmuga Priya BDU2220182780200/ Dec 2022(Part time) Feb. 2023 (Full time)	Ph.D	Pursuing	Bharathidasan University
8	R. Sarulatha BDU2310182780530/ NOV 2023 (Full Time)	Ph.D	Pursuing	Bharathidasan University

Ph.D Doctoral Committee Member

S.No	Name of The Instituition	Student Name and Research Guide	Subject	Year
1	Srimati Indira Gandhi College (Part Time)	Ms.K.Lakshmi and Dr.S.Vidhyalakshmi	Number Theory	2012
2	Srimati Indira Gandhi College (Part Time)	Ms.S.Mallika and Dr.M.A.Gopalan	Number Theory	2012
3	Srimati Indira Gandhi College (Part Time)	Ms.V.Geetha and Dr.M.A.Gopalan	Number Theory	2013
4	National College (Part Time)	Ms.V.Sangeetha and Dr.Manju Somanath	Number Theory	2013

5	Srimati Indira Gandhi College (Full Time)	Ms.N.Thiruniraiselvi and Dr.M.A.Gopalan	Number Theory	2014
6	Srimad Andavan Arts & Science College (Part Time)	Ms.M.S.Ponmudi and Dr.A.Rameshkumar	Algebra	2015
7	Urumu Dhanalakshmi College (Part Time)	Ms.P.Sivakamasundari and Dr.V.Pandichelvi	Number Theory	2015
8	Urumu Dhanalakshmi College (Full Time)	Mr.R.Livingston and Dr.R.Krishnakumar	Functional Analysis	2016
9	Urumu Dhanalakshmi College (Part Time)	Mr.Nagaral Pandit Sanatammappa and Dr.R.Krishnakumar	Functional Analysis	2016
10	National College (Full Time)	Mr.J.Kannan and Dr.Manju Somanath	Number Theory	2016
11	Govt. Arts College, Tiruchy (Part Time)	Mr.T.Ragunathan and Dr.G.Srividhya	Number Theory	2017
12	Cauvery College for Women (Part Time)	Ms.L.Mahalakshmi and Dr.K.Kalaiarasi	Fuzzy Theory	2017
13	Cauvery College for Women (Part Time)	Ms.P.Geethanjali and Dr.K.Kalaiarasi	Fuzzy Theory	2017
14	Cauvery College for Women (Part Time)	Ms.R.Divya and Dr.K.Kalaiarasi	Fuzzy Theory	2018
15	Urumu Dhanalakshmi College (Part Time)	Ms.P.Santhiya and Dr.V.Pandichelvi	Number Theory	2019
16	National College (Part Time)	Ms.Bindhu and Dr.Manju Somanath	Number Theory	2020
17	Urumu Dhanalakshmi College (Part Time)	Ms.R.Vanaja Dr.V.Pandichelvi	Number Theory	2020
18	Urumu Dhanalakshmi College (Part Time)	Ms. Uma Maheswari Dr.V.Pandichelvi	Number Theory	2021
19	National College(Part Time)	Ms.Vinmol K Jesudas Dr.Manju Somanath	Number Theory	2022