## CAUVERY COLLEGE FOR WOMEN(AUTONOMOUS) STAFF PROFILE

## PERSONAL INFORMATION

1. Name : JANAKI.G
2. Date of Birth $\quad \mathbf{3 0 . 0 5 . 1 9 7 0}$
3. Address :

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

## 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 <br> College, Trichy. |
| B.Sc., | 1991 | Seethalakshmi Ramaswami <br> College, Trichy. |

## 6. Researcher ID <br> :

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 |
| :---: | :---: | :---: |
| 28.11 .2003 | Cauvery College for Women | 20 years and 3 months |

8. Areas of Specialization : Number Theory
9. Languages known : Tamil, English
10. Subjects Taught :

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

11. Research Supervision:

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

## 12. Details of Publications:

| Journal Name \& Volume | Year of <br> Publication | ISSN <br> Number | Name of the Paper | Impact <br> Factor |
| :---: | :---: | :---: | :---: | :---: |
| Acta Ciencia Indica, | 2007 | $0970-0455$ | A Remarkable Pythagorean <br> Problem | - |
| XXXIIIM(4) |  |  | $0970-0455$ | Observation on <br> $Y^{2}=3 X^{2}+1$ |
| XXXIVM(2) Ciencia Indica, | 2008 | 09 |  |  |


| Impact Journal of Science and Technology | 2008 | 0973-8290 | Integral solutions of Ternary Quadratic equation $x^{2}-y^{2}+x y=z^{2}$ | - |
| :---: | :---: | :---: | :---: | :---: |
| 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 | 2008 | 0973-3884 | Pythagorean Triangle with | - |
| Mathematical Analysis and Applications (Serial Publications), (4)1-2 |  |  | 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 $\begin{aligned} & x^{2}-y^{2}+x+y+ \\ & x y=2 \end{aligned}$ | - |
| 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 $\begin{aligned} & 2\left(x^{2}-y^{2}\right)+4 x y \\ & =\left(k^{2}+4 k-4\right) z^{3} \end{aligned}$ | - |
| Impact J.Sci.Tech,, 3(3) | 2009 | 0973-8290 | On Pairs of Rectangles | - |
| Proceedings of the International Conference on Mathematical Methods and <br> Computation, Jamal Mohammed College (Autonomous), Tiruchirappalli, India | 2009 | $\begin{gathered} \hline \text { ISBN: } \\ 978-81- \\ 8424-466- \\ 3 \end{gathered}$ | Integral Solutions of $x^{2}+y^{2}=z^{2}+4$ | - |
| Acta Ciencia Indica, Vol. XXXV M(2) | 2009 | 0970-0455 | Observation on $2\left(x^{2}-y^{2}\right)+4 x y=z^{4}$ | - |
| Impact J.Sci.Tech.,, 4 | 2010 | 0973-8290 | Integral Solutions of $\begin{aligned} & \left(x^{2}-y^{2}\right)\left(3 x^{2}+3 y^{2}-2 x y\right) \\ & =2\left(z^{2}-w^{2}\right) p^{3} \end{aligned}$ | - |
| Antarctica J. <br> Math., 7(1) | 2010 | 0972-8643 | Integral Solution of $x^{2}-y^{2}+x y=\left(m^{2}-5 n^{2}\right) z^{3}$ | - |
| Antarctica J. <br> Math., 7(2) | 2010 | 0972-8643 | Observations on $3\left(x^{2}-y^{2}\right)+9 x y=z^{4}$ | - |


| Antarctica J. <br> Math., 7(1) | 2010 | $0972-8643$ | Integral Solutions of <br> $x y+x+y+1=z^{2}-w^{2}$ | - |
| :---: | :---: | :---: | :---: | :---: |
| Impact J.Sci.Tech., 4 | 2010 | $0972-8643$ | Integral solutions of <br> $\left(x^{2}-y^{2}\right)\left(3 x^{2}+3 y^{2}-2 x y\right)=$ <br> $2\left(z^{2}-w^{2}\right) p^{3}$ | - |
| Archimedes <br> J.Math., 1(2) | 2011 | - | Observations on <br> $x y+x+y+1=k z^{2}$ | - |


| 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 $\begin{gathered} 6\left(x^{2}+y^{2}\right)-11 x y+2(x+y)+4 \\ =27 z^{2} \end{gathered}$ |  |
| International Journal of Engineering ResearchOnline, 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 $4 w^{2}-x^{2}$ $-y^{2}+z^{2}=t^{2}$ | 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 | $\begin{aligned} & \text { Observations On Ternary } \\ & \text { Quadratic Equation } \\ & 5 x^{2}+7 y^{2}=972 z^{2} \end{aligned}$ |  |
| American International Journal of Research in Science, Technology, Engineering and Mathematics, 13(2) | $\begin{gathered} \text { December, } \\ 2015- \\ \text { Febuary,2016 } \end{gathered}$ | 2328-3491 | Special pairs of Pythagorean Triangles and Jarasandha <br> Numbers | 5.01 |
| International Journal of Interdisciplinary Research(IJIR), 2(3) | 2016 | 2454-1362 | On the Ternary Quadratic Diophantine Equation $5\left(x^{2}+y^{2}\right)-6 x y=4 z^{2}$ | 3.75 |


| International Journal of Innovative Research in Science, Engineering and Technology,5(2) | February2016 | 2347-6710 | Observations on Ternary Quadratic Diophantine Equation $6\left(x^{2}+y^{2}\right)-11 x y+3 x+3 y+9=72 z^{2}$ | 5.442 |
| :---: | :---: | :---: | :---: | :---: |
| International Journal for Research in Applied Science and Engineering Technology, 4(2) | February2016 | 2321-9653 | Special pairs of Rectangle and Sphenic <br> Number | 5.011 |
| International Journal of Multidisciplinary Research and Development, 3(3) | March 2016 | 2349-4182 | Connection between special Pythagorean triangles and Jarasandha Number <br> S | 5.72 |
| International Journal of <br> Science and <br> Research(IJSR), 5(3) | March 2016 | 2319-7064 | On the Ternary Cubic Diophantine Equation $5\left(x^{2}+y^{2}\right)-6 x y+4(x+y)+4=40 z^{3}$ | 5.611 |
| Bulletin of Mathematics and Statistics Research(A Peer Reviewed International Research Journal), 4(2) | $\begin{gathered} \text { April-June, } \\ 2016 \end{gathered}$ | 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 <br> 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 $x^{2}-79 y^{2}=9^{k}$ | 3.7 |
| International Journal of <br> Multidisciplinary Research and <br> Development, 3(5) | May 2016 | 2349-4182 | On the integer solutions of the pell equation $x^{2}=20 y^{2}-4^{t}$ | 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 $\begin{aligned} & 5\left(x^{3}-y^{3}\right)-7\left(x^{2}+y^{2}\right)+ \\ & 4\left(z^{3}-w^{3}+3 w z-x y+1\right) \\ & =972 p^{7} \end{aligned}$ | 5.611 |
| International Journal of Engineering, Science and Computing, 6(6) | June-2016 | 2321-3361 | On the integer solutions of the homogeneous biquadratic Diophantine equation $x^{4}-y^{4}=82\left(z^{2}-w^{2}\right) p^{2}$ | 5.611 |


| American International Journal of Research in Science, Technology, <br> Engineering and Mathematics, 15(1) | June-August2016 | 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- <br> May, 2016 | 2328-3580 | Special Pythagorean <br> Triangles in Connection with the Narcissistic <br> 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 $" x^{2}-4 x y+y^{2}+22 x=0 "$ | 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 <br> 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 $\mathrm{y} 2=21 \mathrm{x} 2-3$ | 5.2 |
| International Journal of Academic Research and Development, Volume 1, Issue 11 | Nov 2016 | 2455-4197 | Special pairs of Pythagorean triangles and <br> 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 $\quad$ I Gnon | 5.24 |


| International Journal of Engineering Science and Computing, Volume 7, Issue 2 | February 2017 | 2321-3361 | On the Quinitic NonHomogeneous Diophantine Equation $\mathrm{x} 4 \square \mathrm{y} 4 \square 40(\mathrm{z} 2 \square \mathrm{w} 2) \mathrm{p} 3$ | 5.611 |
| :---: | :---: | :---: | :---: | :---: |
| International Research Journal of Engineering and Technology, Volume 4, Issue 3 | March 2017 | 2395-0056 | Integral solutions of the Ternary Cubic equation $\begin{aligned} & 3(\mathrm{x} 2 \square \mathrm{y} 2) \square 4 \mathrm{xy} \square \\ & 2(\mathrm{x} \square \mathrm{y} \square 1) \square 972 \mathrm{z3} \\ & \hline \end{aligned}$ | 5.181 |
| International Research Journal of Engineering and Technology, Volume 4, Issue 3 | March 2017 | 2395-0056 | Observations on $\mathrm{x} 2 \square \mathrm{y} 2 \square 2 \mathrm{z} 2 \square 62 \mathrm{w} 2$ | 5.181 |
| International Research Journal of Engineering and Technology, Volume 4, Issue 3 | March 2017 | 2395-0056 | Observations on Ternary Quadratic equation $\mathrm{z} 2 \square 82 \mathrm{x} 2 \square \mathrm{y} 2$ | 5.181 |
| International Journal of <br> Engineering and <br> Technology, Volume 4, Issue 3 | March 2017 | 2395-0056 | Observations on $\mathrm{x} 2 \square \mathrm{y} 2 \square 2 \mathrm{z} 2 \square 62 \mathrm{w} 2$ | 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 <br> Jarasandha Numbers and Some Special Numbers | 7.196 |
| International Research Journal of Engineering and <br> Technology, Volume 4, Issue 3 | March 2017 | 2395-0056 | Observations on Ternary Quadratic Equation $\mathrm{z} 2=82 \mathrm{x} 2+\mathrm{y} 2$ | 5.181 |
| International Journal of Statistics and Applied Mathematics, Volume 2, Issue 3 | May-June 2017 | 2456-1452 | Observation on $\mathrm{y} 2=6 \mathrm{x} 2+$ 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 $\begin{gathered} 3(\mathrm{x} 4 \square \mathrm{y} 4) \square 2 \mathrm{xy}(\mathrm{x} 2 \\ \square \mathrm{y} 2) \\ \square 972(\mathrm{z} \square \mathrm{w}) \mathrm{p} 3 \\ \hline \end{gathered}$ | 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 $\begin{gathered} \square \mathrm{y} 5 \square \mathrm{x} 2 \mathrm{y} 2(\mathrm{x} \square \mathrm{y}) \\ \square 972(\mathrm{x} \square \mathrm{y})(\mathrm{z} \square \mathrm{w}) 2 \mathrm{p} \\ 2 \end{gathered}$ | 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 ZTransform | 6.887 |
| International Research Journal of Engineering and Technology (IRJET), Volume 04, Issue 11 | Nov -2017 | 2395-0056 | On the Exponential <br> Diophantine Equation 36x $+3 y=z 2$ | 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 <br> from CCn <br> $\square$ I <br> 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 | $\begin{aligned} & \text { November } \\ & 2017 \end{aligned}$ | 2455-4227 | Special Dio 3-tuples for Pronic Number-II | 5.12 |
| International Journal of Statistics and Applied Mathematics, Volume 2, Issue 6 | November- <br> December <br> 2017 | 2456-1452 | A Novel Approach of determining Stella <br> Octangula number and Pronic number using initial <br> Value theorem in Z Transform | 5.34 |
| Journal of Mathematics and Informatics, Volume 10, Special Issue | $\begin{aligned} & \text { December } \\ & 2017 \end{aligned}$ | 2349-0640 | Construction of the <br> 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, <br> 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, <br> 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, <br> Technology, Volume 6, Issue 1 | January 2018 | 2321-9653 | On Ternary quadratic Diophantine equation $\begin{gathered} 15 \mathrm{x} 2 \square 15 \mathrm{y} 2 \square 24 \mathrm{xy} \\ 438 \mathrm{z} 2 \end{gathered}$ | 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 $\mathrm{CCn}$ <br> 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 <br> Computer Sciences and <br> Engineering <br> Vol 6, Issue 7 | July 2018 | $2347-2693$ | An Integral Solutions of <br> Negative Pell's equation <br> involving two digit Sphenic <br> numbers | 3.022 |
| :---: | :---: | :---: | :---: | :---: |
| Aryabhata Journal of <br>  <br> Informatics, Vol 10, No <br> 2 | July-Dec <br> 2018 | $0975-7139$ | Tracing of Polygonal <br> Number from Pyramidal <br> Number and Pentatope <br> Number Division <br> Algorithm | 5.856 |
| International Journal of <br>  <br> Engineering, Volume 8 <br> Issue 08(1) | Aug 2018 | $2249-0558$ | Dio 3-tuples for star <br> numbers | 7.119 |
| International journal of <br> scientific research and <br> reviews(ijsrr), | Oct-Dec | 2018 | $2279-0543$ | Allegory of lateral surface <br> area of a cube with a <br> special number |
| Volume 7, Issue 4 | 6.946 |  |  |  |
| International Journal of <br> Research and Analytical <br> Reviews, Volume 5, <br> Issue 4 | Nov 2018 | $2349-5138$ | Sums of Squares of <br> Pyramidal Numbers | 5.75 |
| International Journal of <br> Research and Analytical <br> Reviews, Volume 6, <br> Issue 1 | Jan 2019 | $2349-5138$ | Integer Triples comprising <br> of Jarasandha Numbers in <br>  <br> Geometric Progression | 5.75 |
| International Journal of <br> Research and Analytical | June 2019 | $2348-1269$ | Construction of Gaussian <br> Diophantine Quadruple | 5.75 |
| International Journal of <br> Scientific Research in <br> Mathematical and <br> Statistical Sciences, <br> Volume 6, Issue 1 | Feb 2019 | $2348-4519$ | Solutions of Pell's <br> Equation involving <br> Jesearch and Analytical <br> Issue 1 | March 2019 |


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


| Aryabhata Journal of Mathematics \& Informatics, Vol 11, No. 2 | $\begin{gathered} \text { July-Dec } \\ 2019 \end{gathered}$ | 0975-7139 | Correlation between Pyramidal Numbers | 5.856 |
| :---: | :---: | :---: | :---: | :---: |
| ADALYA Journal (UGC CARE LIST ‘II' \& WEB OF SCIENCE), Volume 10, Issue 8 | $\begin{gathered} \text { August } \\ 2019 \end{gathered}$ | $\begin{gathered} 1301- \\ 2746 \end{gathered}$ | 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 $\mathrm{D}(2)$ | 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 $\mathrm{D}(4)$ | 5.888 |
| Compliance Engineering Journal (UGC CARE LIST 'II'), Vol-10, Issue-08. | Aug 2019 | 0898-3577 | Ascertainment On The Exponential Equation $p^{3 c}-a\left(p^{2 c}-p^{b}\right)=p^{b+c}$ | 6.1 |
| ADALYA Journal (UGC CARE LIST ‘II' \& WEB OF SCIENCE), Volume 10, Issue 8 | SEP 2019 | 1301-2746 | Explication Of The Transcendental Equation $\begin{aligned} & p+p^{3}+q^{3}-p q+{ }^{3} r^{2}+s^{2} \\ & \left.=\left(m^{2}+1\right)\right)^{3} \end{aligned}$ | 5.3 |
| International Journal of Recent Technology and Engineering (UGC CARE LIST ‘II’ \& SCOPUS <br> 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 | October | $0886-9367$ | Special Dio 3-tuples II for <br> Analysis, Volume 11, <br> Hex number | 6.3 |
| Issue 10 |  |  |  |  |


| 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 DioQuadruple 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 $\mathrm{y}^{2}=11 \mathrm{x}^{2}+$ 1 | 5.888 |
| International Journal of Scientific Research in Mathematical and Statistical sciences, Volume 6, Issue 6 | Dec 2019 | 2348-4519 | Some Non-Extendable <br> Diophantine Triples involving Centered square numbers | 1.021 |
| Journal of Scientific Computing, Volume 8, Issue 12 | $\begin{gathered} \text { December } \\ 2019 \end{gathered}$ | 1524-2560 | Integral solutions of $\left(x^{2}-y^{2}\right)\left(7 x^{2}+7 y^{2}-13 x y\right)=2\left(z^{2}-w^{2}\right) t^{2},$ | 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 | $\begin{gathered} 2347- \\ 6648 \end{gathered}$ | 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'), <br> Volume XI, Issue II | Feb 2020 | 2347-6648 | On Generalized Fermat Equations involving Jarasandha Numbers | 6.3 |
| :---: | :---: | :---: | :---: | :---: |
| Parishodh Journal Volume 9, Issue 2 | Feb2020 | $\begin{gathered} 2347- \\ 6648 \end{gathered}$ | Dio 3-tuples for centered square pyramidal number | 6.3 |
| International Journal of Scientific Research in Multidisciplinary Studies, Volume 6, Issue 6 | Mar 2020 | $\begin{aligned} & 2454- \\ & 9312 \end{aligned}$ | Integral solutions of the nonhomogeneous Sextic equation with Three unknowns $\begin{aligned} & 3(\mathrm{x} 2 \square \mathrm{y} 2) \square 2 \mathrm{xy} \\ & 972 \mathrm{z} 6 \end{aligned}$ | 1.021 |
| Parishodh Journal, <br> Vol ix, No.3,pp.7911- <br> 7919 | Mar 2020 | $\begin{aligned} & 2347- \\ & 6648 \end{aligned}$ | Ascertainment on the integral solutions of the Biquadratic Diophantine Equation m 4-n $4=$ $4(\mathrm{u} 2+1)(\mathrm{r}-\mathrm{s}) \mathrm{t} 3$ | 6.3 |
| Journal of Xidian University, Volume 14, Issue 4 | Apr-2020 | $\begin{aligned} & 1001- \\ & 2400 \end{aligned}$ | Continued Fractions of Proportions of Consecutive Pyramidal Numbers | 5.4 |
| International Journal of Scientific Research in Mathematical and Statistical sciences, <br> Volume 7, Issue 2 | Apr-2020 | $\begin{aligned} & 2348- \\ & 4519 \end{aligned}$ | Observations on the Binary Quadratic Diophantine Equation $x 2-2 x y-$ $y 2+2 x+14 y=72$ | 1.021 |
| Aryabhata Journal of Mathematics \& Informatics, Volume 12 , <br> No. 1 | $\begin{array}{\|l\|} \hline \text { Jan-June } \\ 2020 \end{array}$ | $\begin{aligned} & 0975- \\ & 7139 \end{aligned}$ | Ramanujan-Type Diophantine Equation Involving $\quad$ Jarasandha Numbers | 5.856 |
| Aryabhata Journal of Mathematics and Informatics, Vol 12, No.1,pp.81-84 | $\begin{aligned} & \text { Jan - June } \\ & 2020 \end{aligned}$ | $\begin{aligned} & 0975- \\ & 7139 \end{aligned}$ | On some Non-Extendable Gaussian Triples involving Mersenne and Gnomonic number. | 5.856 |
| Infokara Journal <br> Volume 9, Issue 6 | June 2020 | $\begin{aligned} & 1021- \\ & 9056 \end{aligned}$ | Gaussian triples with the property $\mathrm{D}(36)$ | 5.3 |
| Sambodhi | $\begin{aligned} & \text { Oct - Dec } \\ & 2020 \end{aligned}$ | $\begin{aligned} & 2249 \\ & 6661 \end{aligned}$ | Construction of Gaussian Diophantine quadruples with property D (16k2) |  |
| Sambodhi Journal, Vol <br> 43, No.4,pp. 91-94 | $\begin{aligned} & \text { Oct- Dec } \\ & 2020 \end{aligned}$ | $\begin{aligned} & 2246- \\ & 6661 \end{aligned}$ | 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 <br> Indian Art History <br> Congress, Vol 26, <br> No.2(XXVII),pp. 191- <br> 194 | Jan 2021 | 0975- | Diophantine Equations on <br> Chemical Reactions | $\mathbf{6 . 1 2 5}$ |


| JIJNASA, Volume 38, No. 1 | April 2021 | $\begin{aligned} & \text { 0337- } \\ & 743 \mathrm{X} \end{aligned}$ | Encryption Technique Using RSA Public Key Cryptography Involving Jarasandha Numbers Of Orders 2 And 4 | - |
| :---: | :---: | :---: | :---: | :---: |
| Utkal Historical Research Journal, Volume 34(V) | April 2021 | $\begin{aligned} & 0976- \\ & 2132 \end{aligned}$ | Application of Number Theory in Balancing Chemical Equations And Ladder Problem in Statics | - |
| Turkish journal of computer and mathematics Education Vol 12, No. 9 | $\begin{aligned} & \text { April } \\ & 2021 \end{aligned}$ | $\begin{aligned} & 3172- \\ & 3173 \end{aligned}$ | On Interesting integer Triple | - |
| Turkish journal of computer and mathematics Education Vol 12, No. 7 | $\begin{aligned} & \text { April } \\ & 2021 \end{aligned}$ | $\begin{gathered} 3175- \\ 3178 \end{gathered}$ | 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 | $\begin{aligned} & 2321- \\ & 9653 \end{aligned}$ | Properties ofthe <br> Ternary <br> Equation <br>  <br> $5 x^{2}-3 y^{2}=z^{3}$ | - |
| Aryabhata Journal of Mathematics and Informatics, Volume 14, Issue 2 | Dece mber <br> 2022 | $\begin{aligned} & 0975- \\ & 7139(\mathrm{P}) \\ & 2394- \\ & 9309(\mathrm{O}) \end{aligned}$ | Cryptographic <br> Algorithm Using <br> Binary Quadratic <br> Equation $x^{2}-7 y^{2}=1 \text { with }$ <br> Exponent Assignment of Alphabets | - |
| Asian Journal of Science and Technology, Volume 14, Issue 02 | $\begin{aligned} & \text { February } \\ & , 2023 \end{aligned}$ | $\begin{aligned} & \hline 0976- \\ & 3376 \end{aligned}$ | Integer Right triangle with Area/Perimeter as a Canada Numbers | - |


| METSZET Journal | March, 2023 | $\begin{gathered} 2061- \\ 2710 \end{gathered}$ | Generating Dio-3 Triples using the Second-Order Polynomials with Incisive Properties | - |
| :---: | :---: | :---: | :---: | :---: |
| International Journal for Research in Applied Science \& Engineering Technology (IJRASET) | March, 2023 | $\begin{aligned} & 2321- \\ & 9653 \end{aligned}$ | An analysis on the Ternary Cubic Diophantine Equation $2\left(1^{2}+m^{2}\right)-31 m=56 t^{3}$ | - |
| International Journal for Research in Applied Science \& Engineering Technology (IJRASET) | March, 2023 | $\begin{aligned} & 2321- \\ & 9653 \end{aligned}$ | On Integer Solutions Of the Ternary Quadratic Equation $3 a^{2}+3 r^{2}-2 a r=332 n^{2}$ | - |
| International Journal for Research in Applied Science \& Engineering Technology (IJRASET) | March, 2023 | $\begin{aligned} & 2321- \\ & 9653 \end{aligned}$ | On Integer Solutions Of the Homogeneous Biquadratic Diophantine Equation $x^{4}-y^{4}=26\left(z^{2}-w^{2}\right) p^{2}$ | - |
| International Journal for Research in Applied Science \& Engineering Technology (IJRASET) | March, 2023 | $\begin{aligned} & 2321- \\ & 9653 \end{aligned}$ | Integral Solutions Of the Ternary Cubic <br> Equation $3\left(x^{2}+y^{2}\right)-4 x y+2(x+y+1)$ | $=552 z^{2}$ |
| Ratio Mathematica (UGC <br> Care list 1) <br> Volume 46 | March, 2023 | $\begin{aligned} & 1592- \\ & 7415, \\ & 2282- \\ & 8214 \end{aligned}$ | Algebraic coding theory using Pell equation $x^{2}-8 y^{2}=1$ | - |
| International Journal for Research in Applied Science \& Engineering Technology (IJRASET), <br> Volume 11 | March 2023 | 1320-1322 | An analysis on the Ternary Cubic Diophantine Equation $2\left(1^{2}+\mathrm{m}^{2}\right)-31 \mathrm{~m}=56 \mathrm{t}^{3}$ | - |
| International Journal of Scientific Research in Engineering and Management (IJSREM), volume 07 | April 2023 | 1320-1322 | Relationship between <br> Pythagorean triangle \& Woodall Primes |  |
| 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 $3 x^{2}+y^{2}=16 z^{2}$ | - |
| :---: | :---: | :---: | :---: | :---: |
| Asian Journal of Science and Technology \& Vol. 14. | May 2023 | 0976-3376 | Integral Solution of The Ternary Cubic Equation 6( $\mathrm{x}^{2}+\mathrm{y}^{2}$ )- $11 x y+x+y+1=552 z^{3}$ | 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 | 7.538 |
| International Journal of Scientific Research in Engineering and Management (IJSREM) \& Vol 07 | June 2023 | 2582-3930 | Connection Between Special Pythagorean Triangles and Disarium Number | 8.176 |
| Journal For Basic Sciences, <br> Volume 23, No. 7, <br> Page No. 391-396 | July 2023 | 1006-8341 | Connection between Distinguished <br> Integer Right Triangle and Canada Numbers | - |
| International Journal of Scientific <br> Development and Research (IJSDR), Volume 8, No. 9, Page No. 1788-1179 | $\begin{aligned} & \text { September } \\ & 2023 \end{aligned}$ | 2455-2631 | Exponential Diophantine Equation $2^{a}+n^{2 b}=c^{2}, n=1$, 2, 3... | - |
| International Journal of Latest Engineering Research and Applications (IJLERA) | December, 2023 | 2455-7137 | Renovated RSA <br> Algorithm for Sending Secret Numbers using Primes and 3-Length Words Employing Gaussian Primes | - |
| Global Journal of Science Frontier Research: F Mathematics and Decision Sciences | $\begin{aligned} & \hline \text { December, } \\ & 2023 \end{aligned}$ | 2249-4626 | Distinguished Couple of Integer Right Triangles and Canada Numbers | - |


| Indian Journal of <br> Science and <br> Technology <br> (IJST)", (WEB OF | January, <br> SCIENCE) |  | $0974-5645$ | Exponential <br> Diophantine Equation <br> $\left(n^{2}-1\right)^{u}+n^{2 v}=w^{2}, n=$ <br> $2,3,4,5$ |
| :---: | :--- | :--- | :--- | :--- |

## 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 $X^{2}=8 \alpha^{2}+Y^{2}$ |
| $\begin{gathered} 23.02 .2007 \\ \& \\ 24.02 .2007 \end{gathered}$ | Shrimathi Indira Gandhi College For Women | Emerging Trends of Mathematical Techniques and their applications in Computer Science | A Remarkable Pythagorean Problem |
| $\begin{gathered} 22.03 .2007 \\ \& \\ 23.03 .2007 \end{gathered}$ | Periyar E.V.R.College | Application of Mathematics | Pythagorean Triangle with perimeter as a Nasty number |
| $\begin{gathered} 27.09 .2007 \\ \text { To } \\ 29.09 .2007 \end{gathered}$ | Thiagarajar College of Engineering | Discrete Mathematics And Its Applications | Pythagorean Triangle and Nasty number |
| $\begin{gathered} 28.03 .2008 \\ \& \\ 29.03 .2008 \end{gathered}$ | Government Arts College for Women | Recent <br> Developments in Mathematics and its Applications | Pythagorean Triangle with Nasty number as a leg |
| $\begin{gathered} \text { 20.12.2008 } \\ \text { To } \\ 22.12 .2008 \end{gathered}$ | SASTRA University | Number Theory and Modular Forms | Pythagorean Triangle with Area/Perimeter as a special polygonal number |
| $\begin{gathered} 24^{\mathrm{th}}, \\ 25^{\mathrm{th}_{\mathrm{h}} \mathrm{July}-} \\ 2009 \end{gathered}$ | Jamal Mohammed <br> College(Autonomous),Accr edited at 'A' Grade by NAAC,Tichy-620 020. | UGC Sponsored International Conference on Mathematical Methods and Computation | Integral Solutions of $x^{2}+y^{2}=z^{2}+4$ |
| $\begin{aligned} & 31^{\text {st }} \text { Aug and } \\ & 1^{\text {st }} \text { Sep-2009 } \end{aligned}$ | Kunthavai Naachiyar Govt., <br> Arts College for <br> Women(Autonomous), <br> Nationally Reaccredited with grade B+, Thanjavur-613 007. | UGC Sponsored National Conference on Advances in Mathematics: Scientific Development and Engineering Applications, | Integral Solutions of $x y+x+y+1=z^{2}-w^{2}$ |

## 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 $X^{2}=8 \alpha^{2}+Y^{2}$ |
| $\begin{gathered} 23.02 .2007 \\ \& \\ 24.02 .2007 \end{gathered}$ | Shrimathi Indira Gandhi College | Emerging Trends of Mathematical <br> Techniques and their applications in Computer Science | National | A Remarkable Pythagorean Problem |
| $\begin{gathered} 22.03 .2007 \\ \& \\ 23.03 .2007 \end{gathered}$ | Periyar E.V.R.College | Application of Mathematics | National | Pythagorean Triangle with perimeter as a Nasty number |
| $\begin{gathered} \text { 27.09.2007 } \\ \text { To } \\ \text { 29.09.2007 } \end{gathered}$ | Thiagarajar College of Engineering | Discrete Mathematics And Its Applications | State Level | Pythagorean Triangle and Nasty number |
| $\begin{gathered} 28.03 .2008 \\ \& \\ 29.03 .2008 \end{gathered}$ | Government Arts College for Women | Recent Developments in Mathematics and its Applications | International | Pythagorean Triangle with Nasty number as a leg |
| $\begin{gathered} \text { 20.12.2008 } \\ \text { To } \\ \text { 22.12.2008 } \end{gathered}$ | SASTRA <br> University | Number Theory and Modular Forms | National | Pythagorean Triangle with Area/Perimeter as a special polygonal number |
| $\begin{aligned} & \text { 24th, 25th } \\ & \text { July-2009 } \end{aligned}$ | Jamal Mohammed College(Autonomou s), Accredited at 'A' Grade by NAAC | UGC <br> Sponsored International Conference on Mathematical Methods and Computation | National | Integral Solutions of $\mathrm{x} 2 \square \mathrm{y} 2 \square \mathrm{z} 2$ $\square 4$ |
| $\begin{gathered} \text { 31st Aug } \\ \text { and 1st Sep } \\ 2009 \end{gathered}$ | Kunthavai <br> Naachiyar Govt., <br> Arts College for <br> Women <br> (Autonomous), <br> Nationally <br> Reaccredited with grade B+ | UGC <br> Sponsored National Conference on Advances in Mathematics: Scientific Development and Engineering Applications | National | Integral <br> Solutions of $\mathrm{xy} \square \mathrm{x} \square \mathrm{y} \square 1$ 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 | - |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { 4th \& 5th } \\ & \text { December } \\ & 2009 \end{aligned}$ | National College, Nationally Accredited at A level by NAAC | UGC <br> Sponsored <br> National <br> Seminar on <br> Applications <br> of <br> Algebra and Number Theory | International | $\begin{aligned} & \text { Observations } \\ & 3 \begin{array}{c} 3 \\ \text { on } \quad \mathrm{x} \square \mathrm{y} \square \\ \\ \\ \mathrm{z} \square \\ \mathrm{x} \square \mathrm{y} \square \mathrm{z}) \mathrm{w} 4 \end{array} \end{aligned}$ |
| $\begin{aligned} & \text { 9th Mar- } \\ & 2010 \end{aligned}$ | Jamal Mohammed College (Autonomous) Accredited at A Grade by NAAC | UGC <br> Sponsored <br> One day <br> National <br> Level <br> Seminar on Graph <br> Theory, <br> Algorithms and Modeling | National | $\begin{gathered} \text { Observations } \\ \text { on } \\ \mathrm{xy} \square \mathrm{x} \square \mathrm{y} \square 1 \\ \square \mathrm{kz} 2 \end{gathered}$ |
| $\begin{gathered} \text { 20.12.2010 } \\ \text { To } \\ 22.12 .2010 \end{gathered}$ | The PG and Research Department of Mathematics, Shrimati Indira Gandhi College | Seminar on Mathematics and its Applications | National | - |
| $\begin{aligned} & \text { 28th and } \\ & \text { 29th } \\ & \text { January } \\ & 2011 \end{aligned}$ | Government Arts College for Women (Autonomous), Accredited by B++ by NAAC | National Conference on Recent Advances in Pure and Applied Mathematics | National | Integral <br> solutions of <br> Quintic <br> equation with <br> five unknowns <br> $\mathrm{x} 4 \square \mathrm{y} 4 \square \mathrm{z3}($ <br> $\mathrm{p} 2 \square \mathrm{q} 2)$ |
| 4.4.2011 | Department of Mathematics, Cauvery College For <br> Women(Nationally Re-accredited with 'A' Grade by NAAC, | State level Workshop on MATLAB Organized | State Level | - |
| $\begin{gathered} \text { 13-14 } \\ \text { February, } \\ 2014 \end{gathered}$ | Jamal Mohammed College(Autonomou s), Accredited at 'A' Grade by NAAC | International Conference on Mathematical Methods and Computation | International | On the Ternary Quadratic Diophantine Equation $\left.6\left(x^{2}+\right)^{2}\right)-11 x+2(x+y)+4=2 r^{2}$ |

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 |  <br> Publisher | Year of <br> Publication | Print ISBN | eBook ISBN |
| :--- | :--- | :---: | :--- | :---: |
| 1. | Explorations in Diophantine <br> Equations, <br> 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 Publicati on | Print ISBN | eBook ISBN |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | Integral Solutions of the Binary Quadratic Diophantine $\begin{aligned} & \text { Equation } x^{2}-2 x y-y^{2} \\ & +2 x+14 y=72 \end{aligned}$ | Recent Advances in Mathematical Research and Computer Science Vol. 2, Chapter 8 | Oct 2021 | $\begin{aligned} & 978-93- \\ & 5547-178-9 \end{aligned}$ | $\begin{aligned} & 978-93-5547-179- \\ & 6 \end{aligned}$ |
| 2. | Non-Extendability of Diophantine Triples Comprising Centered Square Numbers | Recent Advances in Mathematical Research and Computer Science Vol. 2, Chapter 9 | Oct 2021 | $\begin{aligned} & 978-93- \\ & 5547-178-9 \end{aligned}$ | $\begin{aligned} & 978-93-5547-179- \\ & 6 \end{aligned}$ |
| 3. | Some Interesting Applications Of Number Theory | Emerging Trends in Science, Social Science, Engineering and Management-A Multidisciplinary Approach, Chapter 20 |  | - | $\begin{aligned} & \text { 978-93-5546-016- } \\ & 5 \end{aligned}$ |
| 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 | $\begin{aligned} & \text { 978-93- } \\ & 5547-178-9 \end{aligned}$ | $\begin{aligned} & 978-93-5547-179- \\ & 6 \end{aligned}$ |
| 5 | A Cryptographic Algorithm Based on Large Gaussian Primes and Primes | Research Highlights in Mathematics and Computer Science B P International Volume | Oct 2022 | $\begin{aligned} & \text { 978-93-5547- } \\ & 911-2 \end{aligned}$ | 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 <br> Trends | National Conference |
| 2017 | National College Research Journal | Member of the Editorial <br> 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 <br> Co-Ordinator | From 2015 to Till date |
| Timetable In-charge | 2022-2023 |
| Member of College Research Advisory <br> Committee | From 2022 to Till date |
| Member of College Research Ethics Committee | Fro22 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
e. Details of Membership of Professional Bodies:
> Life time membership- Bharat Ganita Parishad, University of Lucknow, Lucknow.
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 <br> / Ph.D | Year of Submission | University |
| :---: | :---: | :---: | :---: | :---: |
| 1 | $\begin{gathered} \text { R.Radha } \\ \text { 31191/Ph.D- } \end{gathered}$ <br> K3/Mathematics/Part time/Oct 2015 | Ph.D | 2021 <br> Awarded | Bharathidasan University |
| 2 | S.Vidhya 31192/Ph.D- K3/Mathematics/Part time/Oct2015 | Ph.D | $\begin{aligned} & \hline 2021 \\ & \text { Awarded } \end{aligned}$ | Bharathidasan University |
| 3 | C.Saranya 043344/Ph.D- K3/Mathematics/Part time/Jan2016 | Ph.D | 2021 <br> Awarded | Bharathidasan University |
| 4 | P.Saranya 043345/Ph.D- K3/Mathematics/Part time/Jan2016 | Ph.D | 2021 <br> 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) <br> 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 <br> Research Guide | Subject | Year |
| :---: | :--- | :---: | :---: | :---: |
| 1 | Srimati Indira Gandhi College <br> (Part Time) | Ms.K.Lakshmi and <br> Dr.S.Vidhyalakshmi | Number Theory | 2012 |
| 2 | Srimati Indira Gandhi College <br> (Part Time) | Ms.S.Mallika and <br> Dr.M.A.Gopalan | Number Theory | 2012 |
| 3 | Srimati Indira Gandhi College <br> (Part Time) | Ms.V.Geetha and <br> Dr.M.A.Gopalan | Number Theory | 2013 |
| 4 | National College <br> (Part Time) | Ms.V.Sangeetha and <br> Dr.Manju Somanath | Number Theory | 2013 |


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

