

**J. SHANTHI**

Assistant Professor Of Mathematics
Shrimati Indira Gandhi College
Triuchirappalli-620 002
Mobile:9787647705

Email Id: shanthivishvaa@gmail.com

EDUCATIONAL QUALIFICATION

- Ph.D in Mathematics from Bharathidasan University [2018]
- M.Phil in Mathematics, first class with Distinction from Shrimati Indira Gandhi College, Bharathidasan University with specialisation in Graph Theory [2007]
- M.Sc Mathematics with First Class with Distinction from Shrimati Indira Gandhi College , Bharathidasan University [2006]
- B.Sc Mathematics with First Class from Shrimati Indira Gandhi College Ramasamy, Bharathidasan University [2004]

PROFESSIONAL QUALIFICATION

- B.ED, Amman Institute of Education, Tamilnadu Teacher Education Board, [2010]

TEACHING EXPERIENCE:

- From 2007-till date, Assistant Professor, Shrimati Indira Gandhi College,Trichy-2.

NATIONAL AND INTERNATIONAL CONFERENCES ATTENDED:**PAPERS PUBLISHED:**

1. Gopalan, M.A., Vidhyalakshmi, S., Shanthi, J. and Kanaka, D., *On the negative Pell Equation $y^2 = 15x^2 - 6$* , Scholars Journal of Physics, Mathematics and Statistics, Vol. 2, Issue 2A, 123-128, March 2015.
2. Gopalan, M.A., Vidhyalakshmi, S. and Shanthi, J., *“On the Hyperbola $(a+1)x^2 - ay^2 = 3a+3, a > 0$ ”*, Global Journal of Engineering Science and Researches, Vol. 1, Issue 10, December 2014.
3. Gopalan, M.A., Vidhyalakshmi, S. and Shanthi, J., *“Integral Points on the Hyperbola $x^2 - 4xy + y^2 + 11x = 0$ ”*, Bulletin of Mathematics and Statistics Research, Volume 2, Issue 3, 2014, 327-330.
4. Gopalan, M.A., Vidhyalakshmi, S., Shanthi, J. and Suguna, S., *“On the Binary quadratic equation $x^2 - 4xy + y^2 + 32x = 0$ ”*, Bulletin of Mathematics and Statistics Research, Volume 3, Issue 3, July 2015, 45-51.
5. Gopalan, M.A., Vidhyalakshmi, S. and Shanthi, J., *“The ternary quadratic Diophantine equation $67x^2 + y^2 = z^2$ ”*, Paper presented in International Conference on Mathematical Methods and Computation (ICOMAC 2015)” on 22nd & 23rd January 2015.
6. Gopalan, M.A., Shanthi, J. and Nandhini, S., *“On the ternary quadratic Diophantine equation $6z^2 = 6x^2 - 5y^2$ ”*, International Journal of Engineering Technology and Management Research, Volume 1, Issue 1, April 2015, 27-35.
7. Vidhyalakshmi, S., Gopalan, M.A. and Shanthi, J., *“On Ternary Quadratic Diophantine Equation $3(x^2 + y^2) - 5xy + x + y + 1 = 15z^2$ ”*, International Journal of Innovative Science, Engineering & Technology, Volume 1, Issue 6, August 2014, 212-215.
8. Shanthi, J., Gopalan, M.A. and Vidhyalakshmi, S., *“Lattice Points on the Homogeneous Cone $8(x^2 + y^2) - 15xy = 56z^2$ ”*, Scholars Journal of Physics, Mathematics and Statistics, Vol. 1, Issue 1, 2014, 29-32.
9. Gopalan, M.A., Vidhyalakshmi, S. and Shanthi, J., *“Pythagorean triangle with 3(hypoteneous) + 4 is a Nasty number”*, International Research Journal of Engineering and Technology, Vol. 2, Issue 4, July 2015.

10. Gopalan, M.A., Vidhyalakshmi, S., Shanthi, J., Maheswari, J., “*On ternary cubic Diophantine equation $3(x^2 + y^2) - 5xy + x + y + 1 = 12z^3$* ”, International Journal of Applied Research, Vol. 1, Issue 8, 209-212.
11. Gopalan, M.A., Vidhyalakshmi, S., Shanthi J. and Bhuvaneswari, E., “*On the ternary cubic equation $3(x^2 + y^2) - 2xy + 2(x + y) + 1 = 123z^3$* ”, International Journal of Advanced and Latest Research in Engineering Science and Technology, Vol. 1, Issue 1, 2016.
12. Gopalan, M.A., Vidhyalakshmi, S. and Shanthi, J., “*On the cubic equation with four unknowns $x^3 + 4z^3 = y^3 + 4w^3 + 6(x - y)^3$* ”, International Journal of Mathematics Trends and Technology, Vol. 20, No. 1, April 2015, 75-84.
13. Gopalan, M.A., Vidhyalakshmi, S. and Shanthi, J., “*On Cubic Equation With Four Unknowns $x^3 + y^3 + 2(x + y)(x + y + 2) = 19zw^2$* ”, International Journal for Mathematics, Vol. 2, Issue 3, March 2016, 1-8.
14. Gopalan, M.A., Vidhyalakshmi, S. and Shanthi, J. “*On the non-homogeneous cubic equation with five unknowns $9(x^3 - y^3) = z^3 - w^3 + 12p^2 + 16$* ”, International Journal of Information Research and Review, Vol. 3, Issue 6, June 2016, 2525-2528.
15. Gopalan, M.A. and Shanthi, J., “*On the non-homogeneous cubic equation with five unknowns $(a + 1)^2(x^3 - y^3) = (2a + 1)(z^3 - w^3) + 6a^2p^2 + 2a^2$* ”, International Journal of Modern Science and Engineering Technology, Vol. 3, Issue 5, 2016, 32-
16. Gopalan, M.A., Vidhyalakshmi, S., Shanthi, J. and Bhuvaneswari, M., “*On biquadratic equation with three unknowns $10(x^2 + y^2) - 16xy = 65z^4$* ”, International Journal of Research and Current Development, Vol. 1, Issue 2, June 2015.
17. Gopalan, M.A., Vidhyalakshmi, S. and Shanthi, J., “*Observation on the biquadratic equation with three unknowns $x^2 - 4xy + 11y^2 = 11z^4$* ”, Universe of Emerging Technologies and Science, Vol. II, Issue VIII, 01-05, August 2015.
18. Gopalan, M.A., Vidhyalakshmi, S. and Shanthi, J., “*On biquadratic equation with five unknowns $2(x^3 + y^3)(x - y) + x^4 - y^4 = 2(z^2 - w^2)p^2$* ”, Universe of Emerging Technologies and Science, Vol. II, Issue I, January 2015, 1-5.
19. Gopalan, M.A., Vidhyalakshmi, S. and Shanthi, J., “*Observation on the biquadratic equation with five unknowns $4x^3 + 4y^3 - 2x^2y - 2xy^2 = 23p^2(z^2 - w^2)$* ”, Universal Publishing and Research Organization, Vol. 1, No. 2, 52-57.

20. Meena, K., Gopalan, M.A., Vidhyalakshmi, S. and Shanthi, J., “*Observations on the quartic equation with six unknowns $(x^3 - y^3)z = (w^2 - p^2)R^2$* ”, Global Journal of Pure and Applied Mathematics, Vol. 1, No. 3, 2015, 1435-1444.
21. Gopalan, M.A., Vidhyalakshmi, S. and Shanthi, J., “*The non-homogeneous Quintic equation with five unknowns $x^4 - y^4 + 2k(x^2 + y^2)(x - y + k) = (a^2 + b^2)(z^2 - w^2)p^3$* ”, Open Journal of Applied and theoretical Mathematics, Vol. 2, No. 3, September 2016, 08-13.
22. Gopalan, M.A., Vidhyalakshmi, S. and Shanthi, J., “*Observations on the non-homogeneous sextic equation with five unknowns $2(x^2 - y^2)(x^2 + y^2 - xy) = 7(z^2 - w^2)p^4$* ”, American International Journal of Research in Science, Technology, Engineering and Mathematics, Vol. 15, Issue 2, June-August 2016, 169-172.
23. Gopalan, M.A., Vidhyalakshmi, S. and Shanthi, J., “*On the non-homogeneous Octic equation with four unknowns $x^2 = y^3 + z^5w^3$* ”, International Journal of Advanced and Innovative Research, Vol. 5, Issue 1, 2015, 13-15.
24. Gopalan, M.A., Vidhyalakshmi, S. and Shanthi, J., “*On the Diophantine equation of degree ten with six unknowns $3(x^2 - y^2)^3 + 4T^6P^2(x^2 - y^2) = (z^4 - w^4)p^2$* ”, International Journal of Innovative Science, Engineering and Technology, Vol. 3, Issue 5, May 2016, 397-399.
25. Gopalan, M.A., Vidhyalakshmi, S. and Shanthi, J., “*Gaussian integer solutions for the elliptic paraboloid $x^2 + y^2 = 10z$* ”, International Journal of Scientific Engineering and Applied Science, Vol. 1, Issue 3, June 2015, 303-307.
26. Gopalan, M.A., Vidhyalakshmi, S. and Shanthi, J., “*Gaussian integer solutions for the elliptic paraboloid $x^2 + 2y^2 = 4z$* ”, International Journal of Engineering Sciences & Research Technology, Vol. 4, Issue 7, July 2015, 674-679.
27. Gopalan, M.A., Vidhyalakshmi, S. and Shanthi, J., “*Gaussian Integer Solutions of $2(x^2 + y^2) = z^2$* ”, International Journal of Advanced and Latest Research In Engineering Science and Technology, Vol. 1, Issue 1, 2016.
28. Gopalan, M.A., Vidhyalakshmi, S. and Shanthi, J., “*On the Surd Equation $A\sqrt[n]{x} + B\sqrt[n]{y} = C\sqrt[n]{z}, (a, b, c \in \mathbb{Q})$* ”, International Journal of Development Research, Vol. 06, Issue 10, October 2016, 9665-9668.

29. Gopalan, M.A., Vidhyalakshmi, S. and Shanthi, J., "*On the Transcendental Equation with Six Unknowns $\sqrt[2]{x^2 + 3y^2} + \sqrt[4]{X^3 + Y^3} = z^2 + w^2$* ", International Journal of Innovative Research in Science, Engineering and Technology, Vol. 5, Issue 8, August 2016, 14385-14388.
30. Gopalan, M.A., Vidhyalakshmi, S. and Shanthi, J., "*A new Integer Sequence*", International Journal of Recent Trends in Engineering and Research, Vol. 2, Issue 6, June 2016, 307-314.
31. Gopalan, M.A., Vidhyalakshmi, S. and Shanthi, J., "*A Remarkable Integer Sequence*", International Journal of Engineering & Scientific Research, Vol. 4, Issue 8, August 2016, 37-45.
32. Gopalan, M.A., Shanthi, J. and Agalya, K., "*On interesting Triple Integer Sequences*", Scholars Bulletin, Vol. 1, Issue 7, Oct 2015, 169-171.
33. Gopalan, M.A., Vidhyalakshmi, S., Shanthi, J. and Agalya, K., "*On interesting Diophantine problem*", International Journal of Multidisciplinary Research and Modern Education", Vol. 1, Issue 1, 2015, 168-170.
34. Gopalan, M.A., Vidhyalakshmi, S. and Shanthi, J., "*On Interesting Integer Triple*", International Journal of Emerging Technologies in Engineering Research, Vol. 3, Issue 2, November 2015, 57-59.
35. Gopalan, M.A., Shanthi, J. and Agalya, K., "*An Interesting Integer Triples-I*", Transaction on Mathematics, Vol. 2, No. 3, July 2016, 33-36.
36. Gopalan, M.A., Vidhyalakshmi, S., Shanthi, J. and Sofica Christinal, S., "*An Interesting Integer Triple-II $a_0 + a_1 = p^2, a_0 + a_2 = q^2, a_1 + a_2 = r^2, a_0 + a_1 + a_2 = 7s^3$* ", Open Journal of Applied & Theoretical Mathematics, Vol. 1, No. 1, December 2015, 74-78.
37. Meena, K., Vidhyalakshmi, S., Shanthi, J. and Agalya, K., "*An interesting Diophantine problem*", International Journal of Research in Engineering and Applied Sciences, Vol. 5, Issue 12, Dec 2015, 93-98.
38. Gopalan, M.A., Vidhyalakshmi, S., Shanthi, J. and Karthika, R., "*Construction of Special Integer Triples*", International Journal of Applied Research, Vol. 2, Issue 2, 2016, 357-360.
39. Gopalan, M.A., Vidhyalakshmi, S. and Shanthi, J., "*A Connection Between Rectangle and Dhuruva Numbers of Digits 3 and 5*", International Journal of Recent Scientific Research, Vol. 7, Issue 2, March 2016, 9234-9236.

40. Gopalan, M.A., Vidhyalakshmi, S., Shanthi, J. and Rukmani, A. “*An Interesting Diophantine problem on Triple – IP*”, International Journal of Current Multidisciplinary Studies, Vol. 2, Issue 2, February 2016, 130-133.
41. Gopalan, M.A., Vidhyalakshmi, S., Shanthi, J. and Agalya, K., “*Connection between polygonal number and special rectangle*”, International Journal of Advanced and Latest Research In Engineering Science and Technology, Vol. 1, Issue 1, 2016.
42. Gopalan, M.A., Vidhyalakshmi, S. and Shanthi, J., “*Three interesting Diophantine pairs*”, Paper presented in the International Conference on Discrete and Computational Mathematics ICDCM2017 at Gandhigram Rural Institute-Deemed University, Dindigul, Feb. 16-18, 2017.
43. Gopalan, M.A., Vidhyalakshmi, S. and Shanthi, J., “*On Special $D(17)$ -quadruple*”, International Journal of Statistics and Applied Mathematics, Vol. 1, Issue 2, 2016, 04-05.
44. Gopalan, M.A., Vidhyalakshmi, S. and Shanthi, J., “*On Special Dio-quadruple with property $D(s^2 + 1)$* ”, World Journal of Engineering Research and Technology, Vol. 2, Issue 5, 2016, 134-136.
45. Gopalan, M.A., Vidhyalakshmi, S. and Shanthi, J., “*On Special $D(2)$ -quadruple*”, Asian Journal of Science and Technology, Vol. 7, Issue 11, November 2016, 3785-378.

Papers Presented:

1. “*The ternary quadratic Diophantine equation $67x^2 + y^2 = z^2$* ” **International Conference on Mathematical Methods and Computation (ICOMAC 2015)** organized by the P.G. & Research Department of Mathematics, Jamal Mohamed College (Autonomous), Trichy – 20, on 22nd and 23rd January 2015.
2. “*On Interesting Integer Triple*”, **International Conference on Mathematical Methods and Computation (ICOMAC 2016)** organized by the P.G. & Research Department of Mathematics, Jamal Mohamed College (Autonomous), Trichy – 20, on 18th and 19th of February 2016.
3. “*Three interesting Diophantine pairs*”, **In the International Conference on Discrete and Computational Mathematics ICDCM2017** at Gandhigram Rural Institute-Deemed University, Dindigul, Feb.16-18, 2017

Book Published:

1. **Dr.M.A.Gopalan,Dr.S.Vidhyalakshmi,J.Shanthi,**” Special quadratic equations with Gaussian integer solution”, LambertAcademic publishing,9783330336599.
2. **Dr.M.A.Gopalan,Dr.S.Vidhyalakshmi and J.Shanthi** “Elliptic paraboloids and Gaussian integers”, LambertAcademic publishing,9783330317734
3. **Dr.M.A.Gopalan, J.Shanthi,D.Maheswari and T.Geetha,** “ Biquadratic Diophantine Equation with integer solution”, ky- publishing,9789387769236.

DECLARATION

I hereby declared that all the information are true to the best of my knowledge and belief.