



SHRIMATI INDIRA GANDHI COLLEGE

(Affiliated to Bharathidasan University)

Nationally Accredited at 'A' Grade (4th Cycle) by NAAC | An ISO 9001 : 2015 Certified Institution
Tiruchirappalli - 620 002

Name : Ms.D.Maheswari
Designation : Assistant Professor
Department : PG & Research Department of Mathematics
Qualification : M.Sc., M.Phil., SET
Experience : Teaching: 18 Research: 10
Area of Specialization(s) : Number Theory
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Academic Qualifications

Degree	Branch	Institution / University Name	Year of Graduation
SET	Mathematics	Mother Theresa University	2016
M.Phil	Mathematics	National College/ Bharathidasan University	2003
M.Sc	Applied Mathematics	Bishop Heber College/ Bharathidasan University	2001
B.Sc	Mathematics	Shrimati Indira Gandhi College/ Bharathidasan University	1999

Research Guidance

Programme	No. of Scholars	
	Completed	Pursuing
M.Phil	6	-

Research Publications (Indexed)

1. M.A.Gopalan, S.Vidhyalakshmi, J.Umarani and D.Maheswari, "Integral points on the hyperbola $x^2+y^2-4xy+26=0$ ", IJPAMS, 6(5), (2013), 419-424.
2. M.A.Gopalan, S.Vidhyalakshmi and D.Maheswari, " Observations on the Hyerbola $y^2=30x^2+1$ ", IJOER, Vol-1, Issue 3, (2013), 312-314.
3. M.A.Gopalan, S.Vidhyalakshmi and D.Maheswari, " Observations on the Hyerbola $y^2=34x^2+1$ ", BOMSR, Vol-2, Issue 4, (2014), 414-417.
4. M.A.Gopalan, S.Vidhyalakshmi and D.Maheswari, "Integer points on the homogeneous cone $2x^2+3y^2=35z^2$ ", Indian Journal of Science, 7(17), (2014), 6-10.
5. M.A.Gopalan, S.Vidhyalakshmi and D.Maheswari, "On the Binary Quadratic Diophantine Equation $x^2-7xy+y^2+5x=0$ ", IJESRT, 3(8), Aug (2014), 193-196.
6. M.A.Gopalan, S.Vidhyalakshmi and D.Maheswari, "Observations on the quintic equation with five unknowns $x^4-y^4=37(z^2-w^2)p^3$ ", IJAR, 1(3), partB(2015), 78-81.
7. M.A.Gopalan, S.Vidhyalakshmi and D.Maheswari, "Observations on the biquadratic equation with five unknowns $x^3+y^3=39(w^2-z^2)p^2$ ", International Journal of Multidisciplinary Research and Development, 2(5), (2015), 83-86.
8. M.A.Gopalan, D.Maheswari and J.Maheswari, "On ternary quadratic Diophantine equation $2(x^2+y^2)-3xy=43z^2$ ", JP Journal of Mathematical Sciences 13(1&2), (2015), 9-23.
9. R.Suganya and D.Maheswari, "On the negative pellian equation $y^2=110x^2-29$ ", Journal of Mathematics and Informatics, vol-11, (2017), 63-71.
10. S.Dharuna and D.Maheswari, "On the non-homogeneous cubic equation with four unknowns $x^2-y^2=z^3+w^3$ ", Journal of Mathematics and Informatics, vol-10, (2017), 113-117.
11. A.Victoria Maharani and D.Maheswari, "On the non-homogeneous cubic equation with four unknowns $(x-y)^2=2z^3+w^2$ ", Journal of Mathematics and Informatics, vol-10, (2017), 119-124.
12. D. Maheshwari, S. Dharuna, "Observations on the Hyperbola", International Journal of Emerging Technologies in Engineering Research (IJETER), Volume 6, Issue 5, May (2018), 7-12.

13. D.Maheswari and R.Suganya, "Observations on the Pell equation $y^2=11x^2+5$ ", JNCET, 8(4), Apr(2018), 1-6.
14. S.Vidhyalakshmi, E.Premalatha and D.Maheswari, "On the non homogeneous binary quadratic equation $4x^2-3y^2=37$ ", Bulletin of Pure and Applied Sciences, vol 38E(1), Jan-Jun(2019), 324-328.
15. D.Maheswari and K.Kaviyarasi, "On the negative pell equation $y^2=102x^2-18$ ", Global Scientific Journals, 7(4), April (2019), 521-528.
16. D.Maheswari and J.Keerthana, "On the positive pell equation $y^2=34x^2+18$ ", Global Scientific Journals, 7(4), April (2019), 512-520.
17. D.Maheswari and A.Mercy Carolin, "On the negative pell equation $y^2=30x^2-45$ ", IJMTT, vol-65, Issue 5(1), May (2019), 32-40.
18. S.Mallika, D.Maheswari and T.Arthi, "Observations on the ternary quadratic Diophantine equation $5x^2+2y^2=5z$ ", Infokara research journal, vol-9 Issue-3, 2020, 804 – 813.(UGC)
19. S.Mallika, D.Maheswari and R.Anbarasi, "Observations on the homogeneous ternary quadratic Diophantine equation $16x^2+8xy+3y^2=11z^2$ ", Infokara research journal, vol-9 Issue-4, 2020, 26 – 31.(UGC)
20. D. Maheshwari, S. Devibala, M. A. Gopalan, "Observations on the Negative Pell Equation $y^2=10x^2-54$ ", Turkish Online Journal of Qualitative Inquiry (TOJQI) Volume 12, Issue 7, July 2021: 6311-6321. <https://www.tojqj.net/index.php/journal/article/view/4836/3394>
21. D. Maheswari, S. Devibala, M. A. Gopalan, "Integral Solutions Of Cubic Diophantine Equation With Five Unknowns $X^3+Y^3=13(Z+W)P^2$, Advances and Applications in Mathematical Sciences, Volume 21, Issue 8, June 2022, PP 4595-4604. https://www.mililink.com/upload/article/1723078247aams_vol_218_june_2022_a33_p4595-4604_d._maheswari_et_al..pdf (UGC)
22. D. Maheswari, S. Devibala, "Unrestricted Mersenne and Mersenne-Lucas Hybrid Sequences" Indian Journal of Science and Technology, Volume: 16, Issue: 41, Pages: 3591-3598, 2023. (WOS) <https://indjst.org/articles/unrestricted-mersenne-and-mersenne-lucas-hybrid-sequences>
23. D. Maheswari, S. Devibala, "Unrestricted Mersenne and Mersenne-Lucas Hybrid Quaternions", Jnanabha, Volume: 54, Issue: 2, Pages: 113-119, 2024. (UGC Care listed) <https://doi.org/10.58250/jnanabha.2024.54210>

Book Publications

1. Dr.M.A.Gopalan, J.Shanthi, D.Maheswari and T.Geetha, **Biquadratic Diophantine equation with integer solution**, ky- publishing,9789387769236.

Presentations in Conference/ FDP/ Workshop

- Attended **UGC Sponsored Orientation Course** from 09-11-2005 to 06-12-2005 at UGC – Academic Staff College, Bharathidasan University, Trichy-23.
- Participated and presented a paper in the **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.
- Participated in the **Mathematics Outreach Programme** organized jointly by the Ramanujan Mathematical Society and National College, Trichy, during the period May 20, 2015 to May 27, 2015 at National College Campus.
- Attended the **Scilab Workshop** on 4th May 2019, organized by National Institute Of Technology, Trichy.
- Participated and presented a paper in the **Heber International Conference on Applied Mathematics, Management, Computer Science and Statistics (HICAMMCS 2022)** organized by the P.G. & Research Department of Mathematics, Bishop Heber College (Autonomous), Trichy – 17, on 18th March 2022.
- Participated and presented a paper in the **International Conference on Analysis & Number Theory-2022** from 27-10-2022 to 29-10-2022 organized jointly by Ayya Nadar Janaki Ammal College, Sivakasi, Ramco Institute of Technology, Rajapalayam and The Standard Fireworks Rajaratnam College for Women, Sivakasi.
- participated in “ Applications of MATLAB” Organized by “ Department of Mathematics and Statistics , ST. Francis College”, Koramangala, Bengalur, India from 13.07.2023
- Participated and presented a paper in the **International Conference on Recent Innovations in Applications of Mathematics (ICRIAM 2023)** organized by the P.G. & Research Department of Mathematics, Rani Anna Government College for women, Thirunelveli, on 26th July 2023.
- Participated and presented a paper in the **International Conference on Mathematical Modelling, Analysis and Computing (MMAC-2023)** organized by the Department of Mathematics, Holy Cross Arts and Science College for women, Tirupattur, on 21st and 22nd October 2023.

- Completed the **NEP 2020 Orientation and Sensitization Programme** under Malaviya Mission Teacher Training Programme MMTTP of UGC, organized by UGC - Malaviya Mission Teacher Training Centre, Bharathidasan University, Tiruchirappalli, from 22nd to 31st January 2024.
- Participated and presented a paper in the **International Conference on Applied Analysis and Discrete Mathematics (ICAADM-2024)** organized by the Department of Mathematics, The Gandhigram Rural Institute (Deemed to be University), Gandhigram, on 22 - 24 January 2024.
- Participated in the two-days Indian Knowledge Systems Workshop titled Technology & Tools for Languages & Computations held at the National Institute of Technology, Tiruchirappalli on 30 – 31 Aug 2024.
- Participated and presented a paper in the **International Conference on Emerging Trends in Mathematics and Physical Sciences (ETMPS-2024)** at Shrimati Indira Gandhi College on 24 Sep 2024.
- Attended FDP on " Understanding outcome based education" organized by IQAC, SIGC from 10.06.2024 to 15.06.24 and 18.06.24
- Attended FDP on "A platform for Augmentation of Multilingual Digital Resources for Development"organized by Vikaspedia on 20.02.2025
- D.Maheswari, “On Mersenne Narayana and Mersenne Narayana Lucas Sequences”, ICRTAM 25, Holy Cross College,Trichy on 06.02.2025.