#### **BIO DATA**

- 1. NAME
- 2. QUALIFICATION
- 3. DESIGNATION & DEPARTMENT
- 4. AGE & DATE OF BIRTH
- 5. SEX

- :Dr. S. DEVIBALA
- :M.Sc, M.Phil., P.hD.
- : Assistant professor of Mathematics
- : 40 & 10.07.1979

: Female

- 6. PERMANENT ADDRESS
- : 132/1, North Agraharam, Thenkarai, Periyakulam, Theni (Dt)
- 7. ADDRESS FOR COMMUNICATION
- :323, Nellai Street, Thasildharnagar, Anna Nagar, Madurai
- 8. EDUCATIONAL OUALIFICATION

S.No	COURSES	SUBJECT	YEAR OF COMPLETION	INSTITUTION
1	B.Sc	Mathematics	April 1999	Shrimati Indira Gandhi
				College for
				Women, Thiruchirrappalli
2	M.Sc	Mathematics	May 2001	Government Arts
				College, Karur.
3	M.Phil	Mathematics	January 2003	National College,
			-	Tiruchirappalli.
4	Ph.D	Mathematics	April 2008	National College,
				Tiruchirappalli.

- Research Work / Experience
  Recognized Research guide
  Area of Specialization

- 12. Teaching Experience

S.No	Designation	Place	Duration	No. of Years
•				
1	Guest Lecturer	School of	10/07/2003 to	1 year 9 months
		Engineering and	30/04/2005	
		Technology,		
		Bharathidasan		
		University		
2	Lecturer	Shimati Indira	1/07/2005 to	3 years 9 months
		Gandhi College,	30/04/2009	
		Tiruchirappalli		
3	Assistant Professor of	Govt. Arts	09/07/2009 to	3 years
	Mathematics	College for	04/07/2012 AN	
		Women(A),		
		Pudukkottai.		
4	Assistant Professor of	Sri Meenakshi	05/07/2012 FN	7 years
	Mathematics	Govt. Arts	to Till Date	
		College for		

- :19 years
- : yes :Algebraic Number Theory

	Women(A), Madurai	
	erience 15 years 6	
		months

13. Orientation / Refresher Courses / Other Programmes&Training :

S.No	Name of the Course	Торіс	Place	Period
1	Orientation		UGC – Academic	09/07/2009 to
			Staff College,	05/08/2009
			University of Madras	
2	Refresher	Mathematics	UGC – Academic	10/11/2010 to
			Staff College,	30/11/2010
			Bharathidasan	
			University,	
			Tiruchirappalli.	
3	Refresher	Mathematics	UGC – Academic	13/07/2018 to
			Staff College,	02/08/2018
			Bharathidasan	
			University,	
			Tiruchirappalli.	
4	Orientation	NSS Program	National Service	24/07/2019 to
		Officers	Scheme - Empanelled	30/07/2019
			Training Institution	
			Avinashilingam	
			Institute for Home	
			Science and Higher	
			Education for Women,	
			Coimbatore.	

## 14. International Publications :

Sl.	Title of the Article	Name of the Journal	Volume, Number,
No.			pages and Year
1	On Ternary Quadratic Diophantine	JASC Journal of	Vol. VI, Issue III, Pp.
	Equation $7x^2 - 4y^2 = 12z^2$	Applied Science and	25 – 30, March 2019
		Computations	ISSN NO. 1076 -
			5131
2	On the Positive Pell Equation	International Journal of	Vol.6, Issue. 3, Pp.
	$y^2 = 42x^2 - 6$	Engineering & Scientific	66 – 72, March 2018
		Research	ISSN : 2347B- 6532
			Impact factor: 6.660
3	On the Negative Pell Equation	International Journal of	Vol.3,No.2, Pp. 37 –
	$y^2 = 3x^2 - 2$	Statistics and applied	40, 2018
		Mathematics	ISSN: 2456 – 1452

4	On ternary Quadratic Diophantine	International Journal of	Vol.3, Issue1,
	Equation $6(x^2 + y^2) - 11xy +$	Advanced Research and	January 2018, Pp. 78
	$x + y + 1 = 24z^2$	Development	- 86
		1	ISSN: 2455 – 4030
			Impact Factor: RJIF
			5.24
5	On the Positive Pell Equation	IOSR Journal of	Vol. 13, Issue. 5
	$y^2 = 5x^2 + 4$	Mathematics	Ver.1 Sep. – Oct.
			2017, Pp. 65 – 69,e –
			ISSN : 2278 – 5728,
			p – ISSN : 2319 –
			765x,
6	On the Negative Pell Equation	International Journal of	Vol. 3, Issue 7, Pp.
	$y^2 = 42x^2 - 6$	Applied Research	954 – 959, 2017
7	On the System of Double	International Journal of	Vol. 4, Issue 6, Pp.
	Equations	Engineering and	44 – 45, June 2017
	$N_1 - N_2 = 4k + 2(k > 0), N_1 N_2$	Applied Sciences	
	$= (2k+1)\alpha^2$		
8	Observations on the Cone $15x^2$ –	Bulletin of Mathematics	Vol. 4, issue 4,
	$32y^2 = 7z^2$	and Statistics Research	November 2016
9	On The Ternary Quadratic	Roots International	Vol. 3, Special issue
	Diophantine Equation $z^2 =$	journal of	1, Pp. 59 – 62,
	$13x^2 + y^2$	Multidisciplinary	October 2016, ISSN:
		Researches	2349 - 8684
1.0			Impact factor 0.811
10	On The Ternary Quadratic	International Journal of	Volume 4, Issue
	Diophantine Equation $z^2 = 7x^2 + 3x^2$	Emerging Technologies	9,Pp. 6 – $7$ ,
	$y^2$	in Engineering	September (2016)
		Kesearch	ISSN: 2454-6410
			Impact 2015 :
11			Factor 4.225
11	On the Ternary Quadratic $D^2 + \frac{1}{2}$	International Journal of	Vol.1, No. 5, pp. 234
	Diophantine Equation $3x^2 + y^2 - \frac{1}{2}$	Applied Research	-238,2015
	$5xy = 60z^2$		ISSN Print: 2394-
			/ 500 ISSNI Online: 2204
			155N Omme. 2394-
			Jour Impact Easter - DIIE
			5 2
12	On the Ternary Ouadratic	International Journal of	Vol. 2. No.4. Pp.
	Diophantine Equation $9z^2 =$	Multidisciplinary	215 – 219, 2015
	$11x^2 - 2y^2$	Research and	e-ISSN: 2349 -4182
		Development	P-ISSN:2349 – 5979
		L ·	Impact factor : RJIF
			5.72
13	On Ternary Quadratic Diophantine	International Journal of	Vol.1, No. 11, Pp.

	Equation $8x^2 + 5y^2 = 143z^2$	Innovative Research	169 – 172, 2014
14	Integral Points on the Hyperbola $2x^2 - 3y^2 = 5$	American Journal of Applied Mathematics and Mathematical Sciences	Vol. 1, No. 1, Pp. 1 – 4, 2012
15	Integral Solutions of Quadratic Equation With Five Unknowns $xy + 2z(z + w) = U^2$	Archimedes Journal of Mathematics	Vol. 1, No. 1, Pp. 1 – 6, 2011
16	Parametric Solutions of Multi- degreed Equalities $x_1, x_2, x_3 = y_1, y_2, y_3$	Reflections des ERA – JMS	Vol. 6, No. 3, Pp.267 – 272, 2011 ISSN – 0973 - 4597
17	Observations on the Quadratic Equation With Four Unknowns xy = 2(z + w)	International Journal of Mathematical Sciences	Vol. 9, No. 1 – 2, Pp. 159 – 164, 2010
18	Ternary Quartic Diophantine Equation $2^{4n+3}(x^3 - y^3) = z^4$	Impact Journal of Science and Technology	Vol. 4, No. 1, Pp. 57 - 60, 2010 ISSN - 0973-8290
19	Integral Solutions of Ternary Cubic Diophantine Equation $x^2 + xy + y^2 = z^3$	Impact Journal of Science and Technology	Vol. 3, No. 3, Pp. 29 - 37, 2009 ISSN - 0973-8290
20	On the binary Non – Homogeneous Quartic Equation $x^4 - (2y + c)x^2 - bx + y^2 - ay - d = 0$	Reflections des ERA- JMS	Vol.2, Issue 1, Pp. 9 – 14, 2008
21	Pythagorean Triangle with Triangular number as a leg	Impact Journal of Science and Technology	Vol.2, Issue 4, Pp. 195 – 199, 2008
22	Integral Solutions of $x^3 + x + y^3 + y = 4z(z-2)(z+2)$	Impact Journal of Science and Technology	Vol.2, Issue 2, Pp. 65 - 69, 2008
23	Integral Solutions of Homogeneous Quadratic with four unknowns $Z(X + Y) = W^2$	Impact Journal of Science and Technology	Vol.2, Issue 1, Pp. 31 - 35, 2008
24	An Interesting Diophantine Problem	International Journal of Mathematics, Computer Sciences and Information Technology	Vol.1, Issue 2, Pp. 205 – 209, 2008
25	Integral Solutions of (x-1)(x-2) + y(2x + y - 1) = 2z	International Journal of Mathematics, Computer Sciences and Information Technology	Vol. 1,No.2, ,Pp.185- 190 ,July- December2008
26	Integral Solutions of $\sum_{i=1}^{3} x_i^h =$	Pure and Applied Mathematika Sciences	Vol.LXVI,No.1- 2,September 2007

	$\sum_{i=1}^{3} X_{i}^{h}, h = 1,2$		
27	Integral Solutions of	Impact Journal of	Vol.1(2),Pp.35-
	$a(x^2 - kx + 1) - b(y^2 - ky + 1)$	Science and	40,2007
	= 0	Technology	
27	Integral Solutions of $7x^2 + 8y^2 =$	Pure and Applied	Vol. LXVI,No.1-
	$9z^2$	Mathematika Sciences	2,September 2007
28	Integral Solutions of $ka(x^2 +$	Bulletin of Pure and	25E, 2, Pp. 401 –
	$y^2) + bxy = 4ka^2z^3$	Applied Sciences	406, 2006
29	Complex Integer Solutions of	Advanced in theoretical	1, 1, Pp. 91 – 95,
	$x, y = n u, v \ (n = 1, 5)$	and Applied Sciences	2006
30	On the System of Binary Quadratic	Pure and Applied	LXIII,1-2,59-63,Mar
	Diophantine Equations	Mathematika Sciences	2006
	$a(x^2 - y^2) + N$		
	$= u^2, b(x^2 - y^2)$		
	$+N = v^2$		
31	On Ternary Quadratic	Bulletin of Pure and	24E, 1, 25-28, 2005
	Homogenous Equation $(x - y)(x - y)$	Applied Sciences	
	$z) + y^2 = 0$		
32	On the System of Double	Bulletin of Pure and	23E,2,279-280,2004
	Equations $x^{2} + y^{2} - N = u^{2}$ , $x^{2} - N = u^{2}$	Applied Sciences	
	$y^2 - N = v^2$		

15. National Publications :

SI.	Title of the Article	Name of the Journal	Volume, Number,
No.			pages and Year
1	On the Diophantine Equation	ActaCienciaIndica	Vol.2, Issue 2, Pp. 65
	$3x^2 + xy = 14$		- 69, 2007
2	On Lenekal Numbers	Antartica J. Math.,	Vol.4, Issue 1, Pp.35
			- 39, 2007
3	On the System $x + y = u^2$ , $x - y =$	ActaCienciaIndica	Vol. XXXIII
	$v^2, x^2 - y^2 = w^3$		M,No.1,043,2007
4	A Remarkable Transcendental	Antartica J. Math.,	Vol.3, Issue 2, Pp.
	Equation		209 – 215, 2006
5	On the System $x \pm y =$	ActaCienciaIndica,	Vol. XXXII
	sqares, xy = cube		M,No.3,1469,2006
6	Integral Solutions of the system	ActaCienciaIndica	XXXI M,2,325-
	$a(x^2 - y^2) + N_1^2 = u^2$ , $b(x^2 - y^2) = u^2$		326,2005
	$y^2$ ) + $N_2^2 = v^2$		
7	On a pair of Simultaneous	ActaCienciaIndica	XXXI M,4,1061-
	Diophantine Equations $X + Y =$		1062,2005
	$q^2, X^2 + Y^2 = P^4$		
8	On Ternary Quadratic Homogenous	Bulletin of Pure and	24E, 1, 25-28, 2005

	$Equation(x - y)(x - z) + y^2 = 0$	Applied Sciences	
9	Polynomial Solutions for the	ActaCienciaIndica	XXX M,4,811-
	Diophantine Equation $Y^2 =$		812,2004
	$(\lambda^2 b^2 + 2\lambda a - 1)X^2 +$		
	$(-1)^k (\lambda^2 b^2 + 2\lambda a - 2)^k (a^2 + b^2)$		
10	A Remarkable Observation	ActaCienciaIndica	XXX M,3,655-
			656,2004
11	A method of Obtaining Pythagorean	ActaCienciaIndica	XXX M,3,519-
	Triangles		520,2004
12	Two Interesting Problems on	ActaCienciaIndica	XXX M,1,79-
	Inequalities		80,2004
13	On the System $b - a = d^2$ , $b^3 - d^2$	ActaCienciaIndica	XXIX M,4,749-
	$a^3 = y^2$		750,2003
14	Note on the Diophantine Equation	ActaCienciaIndica	XXIX M,2,273-
	y(y+2) = 3(x+1)		274,2003
15	Note on the Double Equations	ActaCienciaIndica	XXIX M,1,149-
	$\sum_{i=1}^{3} x_{i}^{h} = \sum_{i=1}^{3} X_{i}^{h}, h = 1,2$		150,2003
16	Note on the Double	ActaCienciaIndica	XXIX M,1,41-
	Equations $\sum_{i=1}^{3} x_i^h = \sum_{i=1}^{3} X_i^h$ , $h =$		42,2003
	1,3		
17	A Remark on $X + Y = U^2, X - Y =$	ActaCienciaIndica	XXVIII M,4,699-
	$V^2, XY + 1 = W^2$		700,2002
18	Note on the Double Equations	ActaCienciaIndica	XXVIII M,4,697-
	$Y - X = U^2, Y^2 + X^2 = U^6$		698,2002
19	Note on the Double Equations	ActaCienciaIndica	XXVIII M,4,571-
	$X + Y + Z = N, X^2 + Y^2 + Z^2 = N^2$		572,2002

16. Technical Talks Delivered :

S.No.	<b>Resource Person</b>	Title	Place
1.	One day State level Seminar	Pythagorean	Govt. Arts
		Triangle : A	College for
		Treasure House	Women(A),
			Pudukkottai.

## 17. Seminar / Symposia / Workshop Attended :

	International	Topic	Tile of the	Date	Venue
SI.	/National		paper		
No.	Level		presented		
1	State level	Oppertunities	Attended	4/09/2019	IQAC, Sri Meenakshi
		and			Govt. Arts College for
		Chaengesbin			Women(A), Madurai
		the Emerging			
		spaces of			
		Hiher			

		Education			
2	International	International	Some Sums	27/08/2019 &	Raja Doraisingam Govt. Arts
	Conference	Conference	Formulae and	28/08/2019	College, Sivagangai.
		on Recent	product of terms		
		Advances in	of Jacobsthal		
		Pure and	and Jacobsthal –		
		Applied	lucas numbers		
		Mathematics			
3	State level	State level	Attended	23/02/2018	NadarMahajanaSangam S.
		Workshop on			VellaichamyNadar College
		Latex and			
		Mapple			
4	State Level	State level	Techniques in	07/09/2017 &	AyyaNadarJanakiAmmal
	Workshop	Workshop	Abstract	08/09/2017	College, Sivakasi
			Mathematics		
5	National		Integral Points	22/12/2016	Shrimati Indira Gandhi
	Conference		on $15x^2$ –		Coellge for Women, Trichy
			$32y^2 = 7z^2$		
			5		
6	National	Mathematical	On The Ternary		Mangaiyarkarasi College of
	Conference	Science and	Quadratic		Arts and Science, Madurai
		Applications	Diophantine	1/10/2016	
			Equation	1/10/2010	
			$z^2 = 13x^2 + y^2$		
7	International	International	Integral Points		Combatore Institution of
	Conference	Conference	on the		Technology,Colmbatore
		on (1)	Hyperbolic	11/7/2012,12/07/2012	
		Mathematical	Paraboloid5 $x^2$ –	&13/07/2012	
		Modeling and	$2y^2 = 2z$		
		Applied Soft			
0	International	International			Sostra University
o	Conference	Conference	Integral	20/12/2008 +0	Sasua Oniversity, SrinivasaRamanuian Centre
	Contenence	on Number	Solutions of	20/12/2000 10	Kumbakonam
		Theory and	$x^2 - xy - ky^2$	22, 12, 2000	
		Modular	$\begin{array}{c} x - xy - \kappa y \\ - z^2 \end{array}$		
		Forms	— Z		
9	National	Recent	Integral		Government Arts College for
-	Conference	Developments	Solutions of	28/03/2008 &	Women, Pudukkottai
		in	$x^{3} + x + v^{3} + v$	29/03/2008	
		Mathematics	= 4z(z-2)	. ,	
		and its	(z+2)		
		Applications	(- · -)		
10		Mathematics	Integral		Thiagarajar College of

	AICTE,CSIR	and its	Solutions of	27/09/2007 to	Engineering, Madurai
	,DST and	Applications	(x-1)(x-2)	29/09/2007	
	TCS		+y(2x + y - 1)		
	Sponsored		=2z		
	National				
	Conference				
11		Computer	Special Patterns		Shrimati Indira Gandhi
	State level	Oriented	of Pythagorean	10/08/2007 &	College, Trichy
	Seminar	Mathematical	Triangles	11/08/2007	
		Techniques	_		
		2007			
12		Intellectual	Pythagorean		Cauvery College for
	National	Perspectives	Triangle with	05/04/2007	Women, Trichy
	Seminar	of	Triangular		
		Mathematics	Number as a leg		
13	National	Applications	A Remarkable	22/03/2007 &	Periyar E.V.R. College,
	Conference	of	Transcendental	23/03/2007	Trichy
		Mathematics	Equation		
14	National	Emerging	The Integral		Shrimati Indira Gandhi
	Seminar	Trends of	Solutions of	23/02/2007 &	College, Trichy
		Mathematical	$49X^2 + 50Y^2$	24/02/2007	
		Techniques	$= 51Z^{2}$		
		and their			
		Applications			
		in Computer			
		Science			
15	National	Applications	On Coupled		TheivanaiAmmal College
	Seminar	in Analysis	Squares	16/02/2007	for Women, Villupuram
			$x(1+y)=v^2,$		
			$y(1+x) = u^2$		
16	National	Mathematical	Complex Integer		Indian Institute of
	Symposium	Methods and	Solutions of	22/12/2005	Technology Madras,
		Applications	x, y = u, v(1,5)		Chennai
17	UGC	Recent	On a	15/10/2005 &	Gobi Arts and Science
	Sponsored	Trends in	Pythagorean	16/10/2005	College,
	National	Applied	Problem		Gobichettipalayam
	Seminar	Mathematics			
18	UGC	Recent	On a		KandaswamiKandar's
	Sponsored	Advances in	Pythagorean	22/08/2005 &	College ,Velur
	National	Analysis and	Problem	23/08/2005	
	Seminar	Applications			
19					KunthavaiNaachiar
					Government Arts College
	UGC	Development	On Lenakel	08/04/2005 &	for Women , Thanjavur
	Sponsored	in	Numbers	09/04/2005	
	National	Mathematical			

	Seminar	Applications			
20		Mathematical	Integral		Indian Institute of
	National	Methods and	solutions of	22/12/2004	Technology Madras,
	Symposium	Applications	(x-y)(x-z)		Chennai
			$+y^{2} = 0$		
21		Algebra	Pythagorean		Little Flower College,
	NBHM	,Number	Triangle-A	16/09/2004 to	Guruvayoor
	Sponsored	theory and	Treasure House	18/09/2004	
	National	Applications			
	Seminar	to Coding and			
		Cryptanalysis			
22		Recent Trend	Equality of		A.VeeriyaVandaiyar
		of Research in	Triangular	01/02/2004 &	Memorial Sri Pushpam
	National	Mathematics	Numbers with	02/02/2004	College, Poondi
	Seminar	and its	Special M -		
		Applications	gonal Numbers		
23	UGC	Mathematics-	An Interesting	10/12/2003 &	SeethalakshmiRamaswami
	Sponsored	An Elixir For	Pythagorean	11/12/2003	College, Trichy
	State level	all Sciences	Problem		
	Seminar				
24		Recent	An Interesting		Kandaswami College
	UGC	Advances in	Pythagorean	23/08/2003	,Velur
	Sponsored	Pure and	Problem		
	National	Applied			
	Seminar	Mathematics			

#### 18.GUIDANCE FOR M.Phil:

S.No.	NAME OF THE STUDENT	M.Phil	UNIVERSITY	YEAR
1.	K. Vani	M.Phil	Madurai	2018
		Mathematics	Kamaraj	
			University	

#### 19.GUIDANCE FOR Ph.D UNDER MADURAI KAMARAJ UNIVERSITY, MADURAI

S.No.	NAME	TITLE	STATUS
1	B. Malini Devi	A study on Diophantine Equations and its Applications	Ongoing

### 20.0THER RESPONSIBILITIES HOLD IN SERVICE( CURRENT/ PREVIOUS):

S.No.	NAME OF THE	PLACE	PERIOD
	SERVICE/COMMITTEE		
1.	Placement Committee member	SMGAC, Madurai	2013 - 14
			2014 - 15
2.	National Service Scheme –	SMGAC, Madurai	2018 to tilldate
	Programme Officer		

### 21. OTHER RESPONSIBILITIES HOLD IN OTHER INSTITUTIONS:

S.No.	NAME OF THE SERVICE/COMMITTEE	PLACE	PERIOD
1	Sports Committee member	Govt. Arts College for Women(A), Pudukkottai	2009 - 2010

# 22. RESEARCH PROJECTS

Acade	CON	IFEREN	ICE	Attente	Journa	l	Refreshe	Projec	Resour
mic				d /	Publica	ations	r /	t	rce
Year				Presen			Orientat		Person
				ted			ion		
	Sta	Natio	Internatio		Natio	Internatio			
	te	nal	nal		nal	nal			
2019	1	-	1		-	1	Orientati		
							on		
2018	1	-	-		-	3	Refreshe		
							r		
2017	1	-	-		-	3			
2016	-	2	-		-	3			
2015	-	-	-		-	2		UGC	
								Minor	
								Resear	
								ch	
								Projec	
								t	
2014	-	-	-		-	1			
2013	-	-	-		-	-			
2012	-	-	1		-	1			
2011	-	1	-		-	2			1
2010	1	-	-		-	2	Refreshe		
							r		
2009	-	-	-		-	1	Orientati		
							on		
2008	-	1	1		-	6			
2007	1	5	-		3	3			
2006	-	-	-		2	3			
2005	-	4	-		3	1			
2004	-	3	-		4	1			
2003	-	2	2		4				
2002	-	-	-		3				