

**Evaluative Report of the Department of Mathematics**

- 1. Name of the department : MATHEMATICS**
- 2. Year of Establishment : 1976**
- 3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)**

<b>Sl. No.</b>	<b>Name of Programme</b>	<b>Subject</b>	<b>Year of affiliation</b>	<b>Sanctioned strength</b>	<b>Total Student strength (2013-14)</b>	<b>Remarks</b>
<b>1.</b>	<b>B.Sc.</b>	<b>Maths(E/M)</b>	<b>1976-77</b>	<b>31+31+31</b>	<b>93</b>	<b>I, II &amp; III Year</b>
<b>4.</b>	<b>M.Sc.</b>	<b>Maths(E/M)</b>	<b>2005-06</b>	<b>32+32</b>	<b>64</b>	<b>I &amp; II year</b>

**4. Names of Interdisciplinary courses and the departments/units involved**

- **In UG level, in Part IV interdisciplinary Courses like Skill Based Elective are offered in IV & V semesters and Non-Major Elective are offered in III & IV semester as mandatory to all the students.**

<b>Interdisciplinary courses</b>	<b>Departments involved</b>
<b>Skill Based Elective</b>	<b>Tamil Idhazhial varalaru</b>
<b>Non – Major Elective</b>	<b>Freedom Movement in India, Women &amp; Legal Rights</b>

**5. Annual/ semester/choice based credit system (programme wise)**

- 2005 – 2008 : Choice Based Credit System (CBCS)  
2008 –2014 : Revised Choice Based Credit System (RCBCS)

**6. Participation of the department in the courses offered by other departments**

<b>Offering Department</b>	<b>Subject</b>	<b>Programmes</b>	<b>Receiving Department</b>
<b>Physics</b>	<b>Physics</b>	<b>U.G - I &amp; II Semester</b>	<b>Mathematics</b>
<b>Chemistry</b>	<b>Chemistry</b>	<b>U.G - III &amp; IV Semester</b>	

**7. Courses in collaboration with other universities, industries, foreign institutions, etc.**

**-Nil-**

**8. Details of courses/programmes discontinued (if any) with reasons**

**-Nil-**

**9. Number of teaching posts sanctioned and filled (Professors/Associate Professors/Asst. Professors)**

<b>Post</b>	<b>Sanctioned</b>	<b>Filled</b>	<b>Vacant</b>
<b>Professors</b>	<b>---</b>	<b>---</b>	<b>---</b>
<b>Associate Professors</b>	<b>---</b>	<b>---</b>	<b>---</b>
<b>Asst. Professors</b>	<b>08</b>	<b>04</b>	<b>04</b>
<b>Guest Faculties</b>	<b>04</b>	<b>04</b>	<b>---</b>

**10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. Etc.,)**

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Sl. No.	Name	Qualification	Designation	Specialization	Total No. of Years of Experience		No. of M. Phil guided since 2006		No. of Ph.D. guided since 2006		
					Govt.	Pvt.	A	P	A	S	P
					Yrs	Yrs	---	---	---	--	---
1	S.A.Shanmugavadivu	M.Sc., M.Phil.,	Assistant Professor	Graph Theory	6	3	---	---	---	--	---
2.	S. Loganathan	M.Sc., M.Phil.,	Assistant Professor	Function al Analysis	6	2	---	---	--	--	--
3.	U .Annadurai	M.Sc., M.Phil., M.Phil FS),,	Assistant Professor	Pure Maths	--	8	--	--	--	--	--
4.	Dr. M. Kannan	M.Sc, M.Phil, B.Ed,PGDCA , Ph.D.,	Assistant Professor	CFD	1.5	18	--	--	--	--	--
2	N.Akila	M.Sc., M.Phil.,	Guest Faculty	Number Theory	8	--	---	---	---	--	---
3	B.Hema	M.Sc., M.Phil.,		Algebra	7	--	---	---	---	--	---
4	S.Subasri	M.Sc., M.Phil., B.Ed., (Ph.D.)		Stochasti c Processes	4	--	---	---	---	--	---
5	S.Jothi	M.Sc., M.Phil., B.Ed.,		Fuzzy Maths	3	--	---	---	---	--	---

*A-Awarded*

*S –Submitted*

*P – Pursuing*

**11. List of senior visiting faculty**

**-Nil-**

**12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty**

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<b>Programme</b>	<b>Department</b>	<b>Hours handled / Week</b>	<b>Total Hours / Week</b>	<b>Percentage of classes</b>
<b>U.G. &amp; P.G.</b>	<b>Maths</b>	<b>18</b>	<b>18</b>	<b>100%</b>
<b>U.G.</b>	<b>Computer Science</b>	<b>7</b>	<b>7</b>	<b>100%</b>
<b>U.G.</b>	<b>Physics</b>	<b>7</b>	<b>7</b>	<b>100%</b>
<b>U.G.</b>	<b>Chemistry</b>	<b>7</b>	<b>7</b>	<b>100%</b>

**13. Student -Teacher Ratio (programme wise)**

<b>Programme</b>		<b>Student: Teacher ratio</b>
<b>B.Sc.</b>	<b>:</b>	<b>31:2</b>
<b>M.Sc.</b>	<b>:</b>	<b>32:2</b>

**14. Number of academic support staff (technical) and administrative staff; sanctioned and filled**

<b>Technical staff</b>	<b>sanctioned</b>	<b>Filled</b>
<b>---</b>	<b>---</b>	<b>---</b>

**15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil/PG.**

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Sl. No	Name	Qualification	Designation	Specialization	Total No. of Years of Experience		No. of M. Phil guided since 2006		No. of Ph.D. guided since 2006		
					Govt.	Pvt.	A	P	A	S	P
					Yrs	Yrs	---	---	---	--	---
1	S.A.Shanmugavadivu	M.Sc., M.Phil.,	Assistant Professor	Graph Theory	6	3	---	---	---	--	---
2.	S. Loganathan	M.Sc., M.Phil.,	Assistant Professor	Functional Analysis	6	2	---	---	--	--	--
3.	U .Annadurai	M.Sc., M.Phil., M.Phil (FS),	Assistant Professor	Pure Maths	--	8	--	--	--	--	--
4.	Dr. M. Kannan	M.Sc, M.Phil, B.Ed,PGDCA, Ph.D.,	Assistant Professor	CFD	1.5	18	--	--	--	--	--
2	N.Akila	M.Sc., M.Phil.,	Guest Faculty	Number Theory	8	--	---	---	---	--	---
3	B.Hema	M.Sc., M.Phil.,		Algebra	7	--	---	---	---	--	---
4	S.Subasri	M.Sc., M.Phil., B.Ed., (Ph.D.)		Stochastic Processes	4	--	---	---	---	--	---
5	S.Jothi	M.Sc., M.Phil., B.Ed.,		Fuzzy Maths	3	--	---	---	---	--	---

**16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received**

**-Nil-**

**17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received**

**-Nil-**

**18. Research Centre /facility recognized by the University**

**-Nil-**

**19. Publications: 09**

<b>Name of the Staff</b>	<b>Title of Paper</b>	<b>Journal Name with ISSN/ISSN No.</b>
S.A.Shanmugavadivu	1) On Ternary Diophantine Quadratic Equation	1 Int. J. of Appl. Research, 1(11): pp.179-181, 2015.
Mr. S.Loganathan	1) A net convergence on Schauder double bases 2)Block convergence of series in Topological vector spaces	1)Asian European Journal of Mathematics (to be appear) 2) Journal of Analysis and Number Theory (to be appear)
Mr.U. Annadurai	-	-
Dr. M. Kannan	1) MHD effects on moving semi-infinite vertical cylinder with Heat and Mass Transfer. 2) Thermal radiation effects on MHD flow over a moving semi-infinite vertical cylinder. 3) MHD effects on moving semi-infinite vertical cylinder in the presence of Chemical reaction. 4) Magnetohydrodynamic effects on moving semi-infinite vertical cylinder with Temperature oscillation.	1) Int. J. of Appl. Math. and Mech. <b>6</b> (21): pp.22-40, 2010. 2) Int. Journal of Math. Analysis, Vol. 5, 2011, no. 6, pp.257 - 274 3) European Journal of Scientific Research, Vol. 60, No.1, pp.119-131, 2011. 4) Journal of Applied Mathematics and Mechanics (English Edition), Vol. 32, No.11, pp. 1367-1376, 2011.

**20. Areas of consultancy and income generated**

**-Nil-**

**21. Faculty recharging strategies**

<b>Sl. No.</b>	<b>Name of the faculty</b>	<b>Number of Attended Orientation / Refresher Courses</b>
<b>1.</b>	<b>S.A. Shanmugavadivu</b>	<b>03</b>
<b>2.</b>	<b>S. Loganathan</b>	<b>--</b>
<b>3.</b>	<b>U .Annadurai</b>	<b>--</b>
<b>4.</b>	<b>Dr. M. Kannan</b>	<b>04</b>

**22. Faculty as members in**

**a) National committees b) International Committees c) Editorial Boards....**

<b>Sl. No.</b>	<b>Name of the faculty</b>	<b>National/ International committees</b>
<b>1.</b>	<b>S.A. Shanmugavadivu</b>	<b>02</b>
<b>2.</b>	<b>S. Loganathan</b>	<b>--</b>
<b>3.</b>	<b>U .Annadurai</b>	<b>--</b>
<b>4.</b>	<b>Dr. M. Kannan</b>	<b>03</b>

**23. Student projects**

**+ Percentage of students who have done in-house projects including inter-departmental**

All the Post-graduate students are permitted to undertake a project work to gain extra-credit in the existing CBCS. They mostly make use of department of Mathematics. However, the percentage seems to be in decreasing trend in single digits.

All the M.Sc., Students do their project as it is mandatory in curriculum. Apart from the parent department.

**b) Percentage of students placed for projects in organizations outside the institution  
i.e.in Research laboratories/Industry/other agencies**

**Nil**

**24. Awards/ Recognitions received by faculty and students**

Sl. No.	Name of the faculty	Awards/ Recognitions
1.	S.A. Shanmugavadivu	--
2.	S. Loganathan	--
3.	U .Annadurai	--
4.	Dr. M. Kannan	05

Sl. No.	Name of the Students	Awards/ Recognitions
1.	M. Viswanathan Iyr M.Sc.	01
2.	N. Sathish kumar Iyr M.Sc.	01
3.	R. RagupathRaja Iyr M.Sc.	01
4.	S. Vinotha IIIyr B.Sc.	01

**25. List of eminent academicians and scientists/ visitors to the department**

Name of College	Department	Seminars	Workshop	Funding Agencies
Thiru.Vi. Ka. Govt. Arts College, Tiruvarur - 610 003.	Mathematics	New Trends in Fuzzy Mathematics Delivered by Dr. R. Sophiya Porchelvi for P.G. Students, Even Sem.2007.	Advanced Graph Theory Delivered by Dr. Ramesh Kumar for P.G. Students, Even Sem.2007.	Dept. of Mathematics



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**26. Seminars/ Conferences/Workshops organized & the source of funding**

Name of the Staff	Seminars	Conference/Presentation	Workshop
S.A.Shanmuga vadivu	1) Emerging infectious disease and management Organized by Dept. of Zoology, TVK, held on 27 <sup>th</sup> -28 <sup>th</sup> Jan 2011. 2) Recent Advancements in Mathematics Organized by Dept. of Math. Rabiammal Ahamed Maideen College for Women Tiruvarur, held on 23 <sup>rd</sup> Feb. 2013. 3) Recent Trends in Mathematics Organized by Dept. of Math. Shrimati Indra Gandhi College, Trichy, held on 26 <sup>th</sup> Sep. 2015.	1) Paper presented on Ternary Diophantine Quadratic Equation at Shrimati Indra Gandhi College, Trichy, held on 26 <sup>th</sup> Sep. 2015.	1) Fuzzy logic and its applications at Valivalam Desikar Polytechnic College, Nagapattinam, held on 22 <sup>nd</sup> Feb 2014.
Mr.S. Loganathan	1) A seminar on Applications of Mathematics Organized by Department of Mathematics, Mepco Schlenk Engineering College, Sivakasi held on 30 <sup>th</sup> Jan 2010.	1) National Conference on Emerging Trends in Modern Topology Organized by Dept. of Math. Arul Anandar College, Karumathur, held on 22 <sup>nd</sup> Feb 2011. 2) National Conference on Nonlinear Functional Analysis Organized by Dept. of Math. M.S. University, Tirunelveli held on 3 <sup>rd</sup> -5 <sup>th</sup> Mar 2011 3) International Conference on Nonlinear Functional Analysis Organized by The Institute of Math. Sciences, Taramani, Chennai held on 18 <sup>th</sup> -20 <sup>th</sup> Jan 2012.	1) Mathematics Teacher Training Programme Organized by Department of Mathematics, Thiagarajar Engineering College, Madurai held on 3 <sup>rd</sup> -8 <sup>th</sup> Jan 2011. 2) UGC Training Programme on Competence Building for Young Teachers Organized by IQAC, V.H.N.S.N College, Virudhunagar held on 17 <sup>th</sup> -19 <sup>th</sup> Feb 2011. 3) Instructional School for Lecturer on Functional Analysis held at Indian Statistical Institute, Bangalore, on 4 <sup>th</sup> -16 <sup>th</sup> Mar 2013. 4) Workshop on Riemann Surfaces Organized by NPTEL, IIT Madras, on 23 <sup>rd</sup> -24 <sup>th</sup> Sep 2013. 5) National Workshop on Mathematical Analysis Organized by Department of Mathematics, Ayya Nadar Janaki Ammal College, Sivakasi on 11 <sup>th</sup> -15 <sup>th</sup> Mar 2014. 6) Workshop on Functional Analysis & Operator Algebras at NIT, Surathkal on 2 <sup>nd</sup> -7 <sup>th</sup> 2014
Mr. Annadurai	1) Mathematical Modeling and Computer Simulation for Real life Situation Organized by		

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	Dept. of Computer Science and Math. At St. Xavior's College Palayamkotai, held on 27 <sup>th</sup> -29 <sup>th</sup> August 1996.	-	-
Dr. M. Kannan	1) Selected Topics in Computational Fluid Dynamics Organized by Dept. of Math. At Sri Venkateswara College of Engg. Sriperumbadur, held on 9 <sup>th</sup> Oct. 2010.	1) SDP on Random process and its applications in emerging fields Organized by Dept. of Math.Sri Shakthi Ins. Engg. Tech. Coimbatore,Sponsored by AICTE New Delhi, held on 28.5.2007 - 8.6.2007 . 2) FDP on Decision making in a Fuzzy Environment Organized by Dept. of Math. and centre for continuing education at NIT, Calicut, Kerala, held on 1.6.2009 – 5.6.2009.	1) Mathematical Aspects of Scientific Computing Organized by Dept. of Math. Sathyabama University, Chennai, held on 24 <sup>th</sup> -26 <sup>th</sup> April 2008. 2) New Trend in Applied Mathematics and its Applications Organized by Dept. of Math. Anand Institute of Higher Technology, Chennai, held on 7 <sup>th</sup> March 2009.

**27. Student profile programme/course wise:**

**U.G. Programme :**

Year of study	Applications received	Selected		Total
		Male	Female	
2006-07	300	02	28	30
2007-08	350	07	21	28
2008-09	375	10	18	28
2009-10	386	07	23	30
2010-11	385	05	25	30
2011-12	398	05	23	28
2012-13	402	03	27	30
2013-14	425	01	29	30
2014-15	455	03	28	31
2015-16	465	03	28	31

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**P.G. Programme :**

Year of study	Applications received	Selected		Total
		Male	Female	
2006-07	35	03	16	18
2007-08	42	06	14	20
2008-09	38	01	19	20
2009-10	40	06	21	27
2010-11	62	04	24	28
2011-12	65	06	22	28
2012-13	72	03	21	24
2013-14	84	02	23	25
2014-15	90	08	24	32
2015-16	117	03	26	29

**U.G. Programme :**

Academic Year	No. of Students appeared	Pass %	No. of first class	No. of Distinction.	University Rank obtained	Students went for higher education (%)	Students went for Job (%)
April 2006	28	79.00	13	9	---	65	20
April 2007	26	58.00	08	7	---	50	20
April 2008	21	62.00	11	2	--	40	-
April 2009	23	82.00	14	5	--	60	20
April 2010	25	88.00	20	2	--	63	30
April 2011	22	86.00	13	6	--	60	-
April 2012	30	70.00	14	4	01	55	40

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<b>April 2013</b>	30	87.0 0	17	9	--	60	40
<b>April 2014</b>	28	82.0 0	18	5	---	70	30
<b>April 2015</b>	30	93.0 0	28	--	---	95	-

**P.G. Programme :**

<b>Academic Year</b>	<b>No. of Students appeared</b>	<b>Pass %</b>	<b>No of first class</b>	<b>No. of Distinction.</b>	<b>University Rank obtained</b>	<b>Students went for higher education (%)</b>	<b>Students went for Job (%)</b>
<b>April 2006</b>	-	-	-	-	-	-	-
<b>April 2007</b>	23	83	17	2	--	30	50
<b>April 2008</b>	15	47	5	2	--	35	60
<b>April 2009</b>	16	56	7	2	--	30	55
<b>April 2010</b>	19	79	14	1	--	40	60
<b>April 2011</b>	23	78	17	1	--	33	66
<b>April 2012</b>	27	70	15	4	01	40	60
<b>April 2013</b>	27	70	18	1	--	50	40
<b>April 2014</b>	20	80	13	3	--	52	38
<b>April 2015</b>	20	88	19	2	--	50	30

**28. Diversity of Students**

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<b>Name of the Course</b>	<b>% of students from the same state</b>	<b>% of students from other States</b>	<b>% of students from abroad</b>
<b>-Nil-</b>			

29. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc. : **-Nil-**

**30. Student progression**

<b>Student progression</b>	<b>Against % enrolled</b>
<b>UG to PG</b>	<b>50%</b>
<b>PG to M.Phil.</b>	<b>---</b>
<b>PG to Ph.D.</b>	<b>---</b>
<b>Ph.D. to Post-Doctoral</b>	<b>---</b>
<b>Employed</b>	<b>40%</b>
• Campus selection	<b>10%</b>
• Other than campus recruitment	<b>30%</b>
<b>Entrepreneurship/Self-employment</b>	<b>20%</b>

**31. Details of Infrastructural facilities**

- a) Library - 1500 Books are available
- b) Internet facilities for Staff & Students - Available
- c) Class rooms with ICT facility - Nil

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**Number of students receiving financial assistance from college, university, government or other agencies**

<b>Year</b>	<b>No. of students getting financial assistance for UG Programme</b>	<b>No. of students getting financial assistance for PG Programme</b>	<b>Total</b>
2006 – 07	30	18	48
2007 – 08	28	20	48
2008 – 09	28	20	48
2009 – 10	30	27	57
2010 – 11	30	28	58
2011 – 12	28	28	56
2012 - 13	30	24	54
2013 - 14	30	25	55
2014 - 15	31	32	63
2015 - 16	31	29	60

**32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts :**

Departmental seminars at U.G, P.G levels are a routine academic process in the department .

**33. List the distinguished alumni of the department (maximum- 05)**

*Thiru.Vi.Ka. Govt. Arts College, Tiruvarur - 610 003.*

<b>SL. No.</b>	<b>Name of the Alumni</b>	<b>Designation</b>	<b>Place</b>
1	Mrs. N. AHILA	Guest Lecturer	Thiru. Vi. Ka. Govt. Arts College, Tiruvarur.
2	Ms. S SUBASRI	Guest Lecturer	Thiru. Vi. Ka. Govt. Arts College, Tiruvarur.
3	Ms. M. TAMIL SELVI	Guest Lecturer	Thiru. Vi. Ka. Govt. Arts College, Tiruvarur.

**34. List the teaching methods adopted by the faculty for different Programmes.**

- Using chalk and talk
- Group discussion, Oral questions
- Assignments
- LCD Projectors, slides, Seminar Method using LCD and OHP
- ILFS enhanced education

**35. Participation in Institutional Social Responsibility (ISR) and Extension activities**

**-Nil-**

**36. SWOT analysis of the department and Future plans**

- **We have arranged to conduct the special coaching classes for weaker students.**
- **We plan to conduct the symposium, National seminars, International seminars and workshops.**
- **The govt. organizes the ICT and ILFS to develop the communication and soft skills for all the students.**