DEPARTMENT OF MATHEMATICS

SRI CHANDRASEKHARENDRA SARASWATHI VISWA MAHAVIDYALAYA (SCSVMV UNIVERSITY)

(University u/s 3 of UGC Act 1956)   (Accredited with "B" Grade by NAAC)
Enathur, Kanchipuram-631561.

GANITH VAARTHA

DEPARTMENT

The department of Mathematics established in 1994, took the role of supporting all B.E/B.Tech, M.C.A and M.B.A courses. Presently, the department offers B.Sc., M.Sc., and Research Degrees (M.Phil. / Ph.D) programmes in Mathematics.

The department is actively engaged in research in the frontier areas of Mathematics and its applications. Current areas of research of the department includes Algebra, Graph Theory, Queueing Theory, and Operations Research. Interdisciplinary research is also encouraged.

So far more than fifteen Ph.D degrees have been awarded and more than twenty scholars are pursuing research under the department. More than 150 research papers have been published in the last five years.

Greeting from Department chair

It is a great pleasure to extend my heartfelt greetings to the readers of the maiden issue of Ganitha Vaartha, departmental newsletter. I sincerely hope you will enjoy reading about the accomplishments of our faculty. The Newsletter will be published two times a year. This issue contains the activities about our department from July 2016 to December 2016. I am happy to share that three of our faculty members were awarded Ph.D and four of our faculty members submitted their thesis. One of the special features of our department is student friendly environment through mentoring and counselling.

Department is regularly organizing workshops, seminars, quality enrichment programs, research colloquiums etc., to be familiar in latest trends in mathematics. Career guidance programmes and skill development courses are introduced for our students to face the competitive world. Department is conducting various competitions such as quiz, paper presentation, oratorical, short film, mathematical modeling etc., to bring out the talents of the students and also our students are encouraged to actively participate in various competitions organized by other departments. The department is actively engaged in research in the frontier areas of Mathematics and its applications.

Although the newsletter format is limited but it can provide in-depth information about our department achievements. Any criticism, opinions, and encouragement will be highly appreciated by the editors of the Newsletter.

Dr. K. Srinivasa Rao

Faculty List

Sl.No.	Name	Designation	Area of Specialization
1.	Prof.Dr.T.Venugopal	Professor	Functional Analysis
2.	Prof.Dr.A.Jeyalakshmi	Professor	Algebra
3.	Dr.K.SrinivasaRao	Associate Professor & Head	Algebra
4.	Mrs.N.Saradha	Assistant Professor	Graph Theory
5.	Dr. R.Malathi	Assistant Professor	Artificial intelligence and Multivalued logic.
6.	Mr. P.Balaji	Assistant Professor	Petri Nets
7.	Mrs. D.Vijayalakshmi	Assistant Professor	Graph Theroy
8.	Dr. E.Geetha	Assistant Professor	Fluid Dynamics
9.	Mrs. R.Mageswari	Assistant Professor	Graph Theory
10.	Mr. P.Nagarajan	Assistant Professor	Queuing Theory
11.	Dr.J.SengamalaSelvi	Assistant Professor	Applied Mathematics using ICT
12.	Mrs. S.Vijayabarathi	Assistant Professor	Algebra
13.	Mrs.K.Pramila	Assistant Professor	Fuzzy Set Theory
14.	Mr.V.K.Radhakrishnan	Assistant Professor	Operations Research
15.	Mrs. A.Dhanalakshmi	Assistant Professor	Graph Theory
16.	Mrs.K.Bharathi	Assistant Professor	Operations Research
17.	Dr.T.N.Kavitha	Assistant Professor	Algebra
18.	Mrs. A.Gayathri	Assistant Professor	Applied Mathematics
19.	Mrs.S.Revathy	Assistant Professor	Operations Research
20.	Mrs. S. Sujatha	Assistant Professor	Statistics

EVENTS ORGANIZED BY THE DEPARTMENT

Career Guidance Programme in Defence Service

Department of Mathematics organized Career Guidance Programme in defence service for M.Phil., M.Sc., B.Sc., Mathematics students on 31-08-2016. Mr. *K.Kishore Kumar,* gave a lecture to create awareness.

International Seminar

Department organized International Seminar on *Power Sums and Univariate Distrubutions* on 02-09-2016. **Prof. IstvanMezo,** Research Professor, Nanjing University of Information Science and Technology, Jiangsu, P.R. China delivered the talk on Power Sums and **Prof. Arpad Baricz,** Research Professor, Institute of Applied Mathematics, Budapest, Hungary delivered a talk on Log-Concave and Geometrically Concave Univariate Distribution.

Quality Enrichment Programme

The department organized Quality Enrichment Programme-II on 20-09-2016. **Dr.R.Malathi, Mr.P.Balaji, Mrs.D.Vijayalakshmi** and **Mr. V.K.Radhakrishnan** acted as resource persons. Topics covered in the program are Complex number and the complex exponential, Operational research, Fundamental in Real Analysis, Networking Algorithms. Students and faculties of various department benefited from this program.

One-day Career Guidance Programme

The department of Mathematics conducted a One-Day Career Guidance Programme for Science students on 26.09.2016. *Nellai Kavinesan Prof. Dr. S. NarayanaRajan,* Head, Department of Business Administration, Aditanar College, Tiruchendur acted as resource person . Nearly 100 students participated in the program and utilitized the program.

Workshop On Random Process

Workshop on *Transforms & Random Processes* for the Engineering students conducted by department of Mathematics on 01-10-2016. *Mrs.A. Dhanalakshmi, Mrs. K. Bharathi and Mrs. S. Sujatha* acted as resource persons.

OUT REACH ACTIVITIES

Prof. Dr. T.Venugopal, Prof. of Mathematics, one of the representatives of our University in the "International Conference in Excellence Education" arranged by *The Hindu* at Taj Coromandel, Chennai which was held on 12.08.2016.

Dr. T. Venugopal, Professor of Mathematics, gave an invited talk on the topic *"Spirituality and pulses"* during the *National Seminar on Chemistry of pulses* on 21.10.2016 organized by department of Chemistry, SCSVMV University.

Dr. T. Venugopal, Professor of Mathematics gave a Guest lecture on *"Calculus and its applications"* at VIT, Vellore on 11.11.2016. More than hundred students participated in the event.

Dr. T. Venugopal, Professor of Mathematics, gave a spiritual talk on *"Practical tips to see God in Everybody"* at Sri Sathya Sai Samithi, Chengalpet on 25.12.2016.

Dr. Konda Srinivasa Rao chaired a Mathematical Session in the International Conference on Science, Technology, Women Studies, Business & Social Sciences 2016 at International Multidisciplinary Research Foundation (IMRF) Goa Chapter, Margoa, Goa, India, during November 03-05, 2016

University organized events for independence day as Azadi -70. As a part of it the department staff members **S. Vijayabarathi and T. N. Kavitha,** organized events.

Dr. J. Sengamalaselvi, Asst.Prof.of Mathematics acted as a resource person in the *"National workshop on Math with open source software Geogebra"* to Government P.G & B.T Mathematics teacher in Tiruvannamalai District on 19th November 2016. The teachers of Government schools of Tiruvannamalai District have participated in the workshop.

Dr. J.Sengamalaselvi, Asst.Prof.of Mathematics acted as a resource person in the workshop on *"Math with open source software"* in St.Mary's Matriculation school, Mahabalipuram on 25th November 2016. Handbook on Geogebra had been issued to the students to get clear idea about Geogebra.

The department staff members **Dr.A.Jayalakshmi, R.Mageswari, Dr.J.Sengamalaselvi** are the Students Co-ordinatiors of the women cell of our university. The Women Cell organized a workshop on "Threats and Safety issues for women" on 16.11.2016 for first year girl students. Mrs. NithyaSriram, Councellor, Managing Partner, Gyandeep handled the work shop.

Mr. V.K. Radhakrishnan, Asst .Prof.of Mathematics delivered an invited talk on *"Introduction to Network Modelling and its Optimisation Techniques"* at Kanchi Sri Krishna Arts and Science College on 7.10.2016

Staff Achievements

1. Appreciation by BOM (Board of Management) for **Dr.T.Venugopal,** Professor of Mathematics, for his achievement for running our University Press in an outstanding way.

2. **Dr.T.Venugopal,** awarded the best teacher for the year 2013-2014 by our university.

3. **Dr. Konda Srinivasa Rao**, received the best paper award in the year 2015-16 in International Conference on Data Analytics and Mathemtical Modelling organized by department of Mathematics , AVIT University during 5-6, May 2016.

4. **Dr.T.N.Kavitha**, awarded the best teacher for the year 2014-15 by our university.

5. **Dr.R.Malathi**, awarded the best teacher for the year 2016-17 by our university.

6. **Mr.V.K.Radhakrishnan,** received best paper award in the year 2015-2016 in ICMMDA at AVIT University and 2016 - 2017 in NXTGEN Conference at SCP Jain College, Chennai.

7. **Mrs. A.Gayathri**, completed an online non-credit course authorized by University of California, Santa Cruz and offered through Coursera during November 2016.

Department Achievements

1. Staff members of our department published research articles in the various reputed International and Scopus Indexed journals.

2. Published a book entitled **Basic Mathematics for Engineers - I** with ISBN No. 978 93 85983 06 1 by **N.Saradha, R.Malathi, D.Vijayalakshmi, P.Nagarajan, V.K.Radhakrishnan & K.Bharathi** during August 2016, Scitech Publications (India) Pvt. Ltd.,

3. Department has organized 24 Workshops on Matlab for Students and Researchers.

Details of the Publications

1. **Kanchana, K.SrinivasaRao**, (2016),"Solution of System of Boolean Equation to Give the Input of the Circuit", Journal of Chemical and Pharmaceutical Sciences, 9(4) pp. 2231-2234

2. **N.Saradha, V.Swaminathan, K.Angammal**, (2016),"Weak complementary acyclic domination of a graph", International Journal of Current trends in Engineering and Research, 2(7)pp. 165-170. (IF – 3.468).

3. **N.Saradha, V.Swaminathan, K.Angammal,**(2016), "Complementary acyclic weak domination preserving sets", International Journal of research in Engineering and Science, 4(7), pp.44-48.(IF – 3.541)

4. **N.Saradha,V.Swaminathan ,**(2016), "Excellence with respect to the parameter $e\beta$

5. of a graph", Indian Journal of Applied Research, 6(10), pp .377-388 (IF – 3.919) .

5. **N.Saradha, V.Swaminathan (2**016), "Equivalence Dominator Coloring of a Graph", Indian Journal of Applied Research, 6(10), pp.679-690 (IF – 3.919) .

6. **N.Saradha,V.Swaminathan** (2016),"Secure Complementary Equivalence Domination", International Journal of Research in Engineering and Science (IJRES) 4(10), pp. 81-88.

7. **N.Saradha, V.Swaminathan**, (2016), "Complementary Equivalence Dominating Sets in Graphs", International Journal of Mathematical Archieve, 7(12), pp.151-158.

8. **N.Saradha, V.Swaminathan**,(2016) "Very β_e - Excellence of a Graph" International Journal of Mathematical Archieve,7(12), pp. 135-140.

9.   *N.Saradha, V.Swaminathan*,(2016) "EquivalenceChromatic Partition of a Graph" International Journal of Mathematical Archieve,7(12), pp. 145-150.

10.   *N. Saradha, V. Swaminathan*, (2016) "Triple Connected Complementary Acyclic Domination of a Graph," International Journal of Mathematical Archieve, 7(9), pp. 189-194.

11.   *R. Malathi,K.Muniyappan*,(2016), "A Study on Queueing Model", International Journal of Engineering Science Invention Research &Development, III (VI) , pp. 329-331.(IF :1.896)

12.   *R.Malathi, S.Sridharan*, (2016), "A Study on Generalized Bi-Polar Fuzzy Graphs", International Journal of Advanced Research in Science, Engineering and Technology,3(12) pp. 3025- 3032.(IF : 4.346)

13.   *P.Balaji,* (2016), "Marked Graph of Automated Manufacturing Cell with three Machines three Robots and two Part Types and Its Conversion into Digraph", Transylvanian Review, (XXIV. 9), pp. 1374-1379.

14.   *D.Vijayalakshmi, K.SrinivasaRao,* (2016), "Similarity / Dissimilarity Study of Protein Using Secondary Structure Elements and Kernel Function", Advances in Natural and Applied Science, 10(14), pp. 65-71.

15.   *P.Nagarajan*, (2016), "Bulk arrival, fixed batch service queue with Unreliable Server and with Bernoulli Vacation, Two stages of service", Journal of chemical and pharmaceutical science, pp. 2271-2281.

16.   *P.Nagarajan,* (2016), "Bulk arrival, fixed batch service queue with Unreliable Server and with Bernoulli Vacation, Two stages of service", Journal of Chemical and pharmaceutical science, 9 (4), pp. 2271-2281.

17.   *P.Nagarajan*, (2016), " Bulk arrival, fixed batch service queue with Unreliable Server ,Bernoulli Vacation, Two stages of service and with delay time", International journal of mathematics trends and technology, 38(1).

18.   *P.Nagarajan*, (2016), "Bulk Arrival, Fixed Batch Service Queue with Unreliable Server and with Compulsory Vacation", Indian journal of Science and technology, 9(38), pp.1-8.

19.   *P.Nagarajan*, (2016), "A Bulk queue with unreliable server,with compulsory server vacation and with two stages of service", International Journal ofControl Theory and Applications, 9(28), pp. 527-538.

20.   *T.Latha, J.Sengamalaselvi, T.Venugopal,* (2016), "Implementation of Information and Communication Technology In Statistics by using the Open sourceSoftwareGeogebra", International Journal of Scientific Research, 5(7), pp. 382-385.

21.   *T.Latha, J.Sengamalaselvi,T.Venugopal* (2016)"Enact mentation of ICT in continousand Discrete Distributions by the open source software Geogebra"intheInternational Journal of Mathematical Archive"7(10),pp 2229 –5046.

22.   *S.Vijayabarathi, D.Baskaran* (2016),"Comparative Study on Boolean Algebra , C-Algebra and Pre A* Algebra", International Journal of Recent Scientific Research, 7(11),pp:14113-14115.

23.   *K.Pramila,G.Uthra*, (2016) "Application of Fuzzy Decision Making with Multi criteria in Ranking Natural Radioactivity Levels of Beach Sediments", Indian Journal of Science and Technology 9(40),pp. H-18.

24.   *K.Pramila,G.Uthra*, (2016) "Application Of Triangular Intuitionistic Fuzzy Number in Fuzzy MCDM", International Journal of Pure and Applied Mathematics, 10(6), pp.27-34.

25.   *K.Bharathi. C.Vijayalakshmi*, (2016) "Optimization of Multi-objective Transportation Problem Using Evolutionary Algorithms", Global Journal of Pure and Applied Mathematics, 12, pp. 1387-1396.

26.   *K.Bharathi. C.Vijayalakshmi*,(2016) "A Framework for the Design and Analysis of an Evolutionary Algorithm for Multi Travelling Salesman Problem". Indian Journal of Science and Technology, 9(48), pp.0974-6846.

27.   *Sakthivel. A and Kavitha.T.N*,(2016) 'A trial to solve the puzzles by modeling linear equations And using gauss- method' International Journal of Recent Scientific Research , 7(10), pp. 13777-13781.