



DEPARTMENT OF MATHEMATICS

SRI CHANDRASEKHARENDRASARASWATHI VISWA MAHAVIDYALAYA (SCSVMV)

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

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GANITHI VAARTHA

Issue - III

July - December 2017

ABOUT DEPARTMENT

The Department of Mathematics, established in 1994, aims to impart state of the art knowledge, practical skill of the latest advancements in the respective domain to achieve excellence in both academic and research perspectives. The department fosters excellence in B.Sc., M.Sc., and research programs (M.Phil. and Ph.D) and acts as a supporting department to all Engineering courses, B.Sc.(CS), B.C.A, M.C.A and M.B.A. The department has qualified and goal-oriented 21 faculty members who are actively involved in research in diverse areas such as Algebra, Graph Theory, Queuing Theory and Operations Research. Interdisciplinary research is also encouraged. The department is strengthened by a faculty team of 21 members among which 10 are doctorates and 5 faculty members submitted their theses. So far 19 Ph.D degrees have been awarded and more than twenty scholars are pursuing research under the department. The focus in research promotes the publications and 175 research papers were published in the last five years.

GREETINGS FROM DEPARTMENT CHAIR

It is a great pleasure to extend my heartfelt greetings to the readers of the third edition of Ganitha Vaartha, department news letter. I sincerely hope you will enjoy reading about the accomplishments of our faculty. The Newsletter is published twice in a year. This issue contains the activities about our department from July-December, 2017. I am very happy to share that Mr. P.Nagarajan, Assistant Professor, defended his thesis at Annamalai University during this period.



The department is regularly organizing workshops, seminars, quality enrichment programs, research colloquiums etc., to be familiar in latest trends in Mathematics. Career guidance programs and skill development courses are introduced for our students to face the competitive world. The department has organized National Workshop on MATLAB in Applied Sciences, one Quality Enrichment Program and one guest lecture in this period. The 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.

Dr. K. Srinivasa Rao

FACULTY TEAM

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

EVENTS ORGANIZED BY THE DEPARTMENT

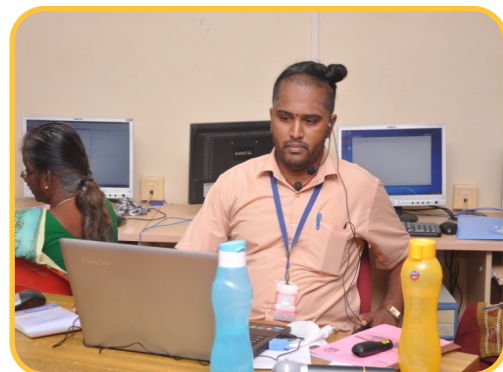
NATIONAL WORKSHOP ON MATLAB IN APPLIED SCIENCES



The Department of Mathematics organized National Workshop on MATLAB IN APPLIED SCIENCES (NWMAS) on 15-16, September, 2017. The inaugural function started with welcome address by Prof.Dr.K.Srinivasa Rao, Professor and Head, Department of Mathematics. The second issue of department newsletter 'Ganith Vaartha' was released by our honorable Registrar Prof.Dr.G.Srinivasu and he delivered a Presidential address. Prof.Dr.S.Balaji, Dean, Faculty of Science and Prof.Dr. T. Venugopal, felicitated the gathering.



The first session “Getting started with MATLAB” was handled by Prof. Dr.K.Srinivasa Rao.. The second session was followed by Dr. A. Gayathri, Asst. Prof. of Mathematics , about arrays and matrix algebra. The third session “2 Dimensional and 3 Dimensional plotting” was handed over to Dr. A.Dhanalakshmi, Asst. Prof. of Mathematics. In the next session Prof.Dr.K.Srinivasa Rao, explained the one dimensional and two dimensional interpolation.



On the second day first session “Worksheet and Handling of M files in MATLAB” was delivered by Prof.Dr.K.Srinivasa Rao. The next session was followed by Mr.P.Nagarajan, Asst. Prof. of Mathematics. He explained how to solve first, second and higher order ordinary differential equations using ODE solvers. Next, Prof.Dr.K.Srinivasa Rao, presented “Solving Non-Linear & System of non-linear Equations using MATLAB and data analysis using curve fitting tool box.

More than 80 participants from Maharashtra, Andhra Pradesh and Tamil Nadu were benefited by this

QUALITY ENRICHMENT PROGRAM-III



Quality Enrichment Programme III (QEP-III) was organized by the Department of Mathematics on 27th of October 2017. Lectures were delivered to enrich the young minds of students in the basics of Mathematics as detailed below.



- Session I : Introduction to Graph Theory by Mrs.N.Saradha, Asst.Prof of Mathematics, SCSVMV.
- Session II : Numerical Error Analysis by Mrs. Mageswari, Asst.Prof of Mathematics, SCSVMV.



Session III : Parikh Matrices of Words and their Algebraic Properties by Prof. Dr.G. Gnanaraj Thomas, .Professor of Mathematics(Retd), Madras Christian College, Chennai.

Session IV : Fundamental in First Order Differential Equations by Dr. E.Geetha, Asst. Prof of Mathematics, SCSVMV.

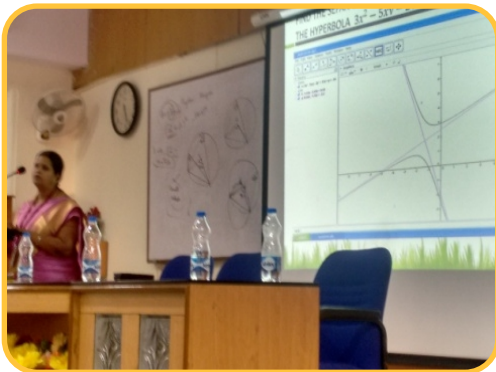
Nearly 90 students were benefitted by this program.

INVITED LECTURE



The Department of Mathematics successfully organized the invited lecture “Cryptography” on 31.07.2017. Dr.K.Srinivasa Rao, Head, Professor of Mathematics, honored the chief guest, Mrs. N.Saradha, Assistant professor of Mathematics introduced chief guest. Dr.S.Pasunkili Pandian, Head Associate Professor, Aditanar College, Tiruchendur delivered a lecture which includes cryptography, Mystical Number 7, Golden Ratio, Phi with interesting and suitable examples. A total of 64 students actively participated in the program.

OUTREACH PROGRAMMES



Dr. J. Sengamalaselvi acted as expert in the National level panel discussion on “ Curriculum Frame workshop-2017” organized by State Council of Educational Research and Training, Tamilnadu at Anna University, Chennai on 20.07.2017 to 22.07.2017.

Mrs.R.Mageswari acted as Chief Guest in inauguration of Mathematics Association at SSB Arts & Science College, Kommadikottai and delivered a lecture on the topic “Automaton” on 24/08/2017.



Dr.K.Srinivasa Rao delivered a invited talk on “Boolean Algebra of Pre A*-Algebra” in the International Conference on Advances in Mathematics and Computing Science at V.V.Vanniaperumal College for Women, Virudhunagar, Tamil Nadu during 14-16 of December, 2017.

STAFF ACHIEVEMENTS

AWARDS / RECOGNITION RECEIVED BY FACULTY MEMBERS

- Dr.K.Srinivasa Rao received best teacher award for the year 2016-17 on Teacher's Day Celebration 2017.
- Dr.R.Malathi got appreciation award on Teacher's Day Celebration 2017 for scoring above 300 in PBAS 2016-17.
- Dr.J.Sengamalaselvi, Mr.V.K.Radhakrishnan, Dr.T.N.Kavitha got appreciation awards on Teacher's Day Celebration 2017 for scoring above 300 in PBAS 2016-17.
- Dr.A.Dhanalakshmi has qualified in Tamilnadu State Eligibility Test for Assistant Professor held on 23rd of April 2017.
- Mr.P.Nagarajan defended his thesis entitled “Contributions to the Study on Some Bulk Queue with Unreliable Server with Vacations” at Annamalai University on 29th of December 2017.

DEPARTMENT ACTIVITIES

- Five doctoral committee meetings of external candidates were conducted during the month of July 2017.
- Dr.R.Malathi got appreciation award on Teacher's Day Celebration 2017 for scoring above 300 in PBAS 2016-17.
- An educational tour was successfully programmed and returned with good output to visit Vainu Bappu Observatory at Kavalur on 31/08/2017. The trip was planned to motivate the students for their higher studies and trigger their minds towards research. The journey was started by 6.45 a.m from the university with 59 students and 5 staff members. In the onward journey, one hour was spent at Amirthi falls and the students enjoyed well. Next in Kavalur, the purpose and the functioning of observatory was sketched out clearly by one staff representative of that observatory. He explained about their research work as well as how they operate the biggest telescope through the system. Also, questions raised by the students related to the recruitment process for getting a job in that field and the basic qualifications required are well explained by that staff. All accompanied staff members were cooperated well with the coordinator and the trip was ended smoothly by 11.30.p.m.



- R.Mageswari, P.Nagarajan organised the Dengue Awareness Programme and Dr.J.Sengamalaselvi participated in the program at Arignar Anna Arangam, Kanchipuram on 02.11.2017.

JOURNAL PUBLICATIONS

1. R.Mageswari, K.Srinivasa Rao, K.Sivakumar , Estimation of Protein Packing density from Protein Contact Map, International Journal of Pure and Applied Mathematics, PP:417-424, ISBN: 1314-3395, 2017.
2. P.Balaji, Analysis of Digraphs of Basic Stock Control System and Simultaneous Kanban Control System, International Journal of Pure and Applied Mathematics, PP: 353-362, ISBN: 1314-3395, 2017.
3. D.Vijayalakshmi, K.Srinivasa Rao, DD Matrix with Least Positive Eigen Value and Protein Similarity, International Journal of Pure and Applied Mathematics, PP: 331-341, ISBN: 1314-3395, 2017.
4. J.Sengamalaselvi, A.Keerthi, K.P.Chandrakiran, Real Time Application of CPM and Pert in the Field of Operation Research using Share Grin 40 Software in SCSVMV, International Journal of Pure and Applied Mathematics, PP: 403-410, ISBN: 1311-8080, 2017.
5. J.Sengamalaselvi, S.Pavithra, T.Venugopal, A Study on the Impact of ICT at the Higher Secondary Level Using Geogebra, International Journal of Pure and Applied Mathematics, PP: 191-197, ISBN: 1311-8080, 2017.
6. D.Vijayalakshmi, K.Srinivasa Rao, Protein Similarity/Dissimilarity Using Modified Weisfeiler Algorithm and Minimum Distance Sub graph, Mathematical Sciences International Research Journal, Vol.6, PP:53-58, ISSN No:2278-8697, 2017.
7. A.Dhanalakshmi, K.Srinivasa Rao, Hosoya Polynomial and Wiener Index of Hexachains, Mathematical Sciences International Research Journal, Vol.6, PP:33-38, ISSN No:2278-8697, 2017.

8. E.Geetha, S.Sarala, M.Nirmala, Consequences of Thermal Radiation on an Unsteady Nanofluid Titanium Dioxide Flow Past Over a Vertical Plate, International Journal of Pure and Applied Mathematics, Volume 116, No. 23, PP:53-59, ISSN: 1311-8080, 2017.
9. E.Geetha, R.Muthucumaraswamy, M.Kothandapani, Effects of Magneto Hydrodynamics of Unsteady Natural Free Convective Flow of Nanofluid on a Vertical Porous Plate, International Journal of Pure and Applied Mathematics, Volume 116, No. 23, PP:79-86, ISSN: 1311-8080, 2017.
10. Kalyanaraman. R, Nagarajan.P, Bulk arrival, Fixed Batch Service Queue with Unreliable Server and with Compulsory Vacation, Two Stages of Service, Delay Time", International Journal of Pure and Applied Mathematics, Special Issue, Volume 117, No.20, PP 89-103, ISSN: 1311-8080 (printed version); ISSN: 1314-3395 (on-line version) Dec 2017.
11. G.Vijayalakshmi, L.Anand Babu, K.Srinivasa Rao, Heat and Mass Transfer in MHD Stagnation Point Nanofluid Flow Over Stretching Sheet in Porous Medium with Chemical Reactions and Prescribed Surface Heat Flux, International Journal of Computer and Mathematical Sciences, Vol 6, NO. 7, PP 1-10, ISSN: 2347-8527, July 2017.
12. A.Kanchana, K.Srinivasa Rao, Distinct Minimized Equation from Unique Boolean Function in Simple Truth Table Logic, International Journal of Pure and Applied Mathematics, Vol 116, No23 , PP 115-120, ISSN: 1311-8080, 2017.

CONFERENCE PROCEEDINGS (FULL PAPER) PUBLICATIONS

1. Dr.J.Sengamalaselvi, Execution of Optic Mat in the Field of Operation Research by Using Open Source Software Geogebra, International Conference on Mathematical Computer Engineering PP: 191-197, ISBN: 978-93-81899-83-0, 2017.
2. Dr.T.N.Kavitha, A MM Algorithm For Travelling Salesman Problem, International Conference on Mathematical Computer Engineering, PP: 343-345, ISBN: 978-93-81899-83-0, 2017.
3. K.Bharathi, Design and Implementation of Evolutionary Algorithms in Multiobjective Optimization, International Conference on Mathematical Computer Engineering, PP: 35-36 ISBN:978-93-81899-83-0, 2017.
4. Dr.T.Venugopal & Mrs.S.Indra Priyadarshini, Study On Wholesale Wastage Vegetable Business Using Simulation Technique, Federated Computing in Information Reality and Mathematical Sciences, PP:1-5 ISBN:978-81-930-476-1-3, September 2017.
5. A.Kanchana, K.Srinivasa Rao, Reducing the Variables in Boolean Function Using Fuzzy Cognitive Map to Create a Circuit, National Conference on Recent Trends in Fuzzy Mathematics and its Applications, PP: 127-137, November 2017.

Summary of Academic Achievements During July-December 2017:

Number Publications	Number of seminars/ workshops etc., organized by department	Awards received	No. of papers presented in national/int conferences	No. of workshops/ seminars etc., attended	No. of outreach activities
12	3	5	12	40	3

Any criticism, opinions and encouragement will be highly appreciated by the editors of the Newsletter