ACTIVITIES OF

DEPARTMENT OF MATHEMATICS AND STATISTICS (2019-20)

College was reopened for the Staff on 6-6-2019, under the principal Ship of

Dr.Sr. Marietta D'Mello

Mrs.K.Harika was newly appointed in the Department of Mathematics

The even semester results reviewed in the Department on 6-6-19 were as follows

| Semester | Paper | No.of | No.of | No.of.Students | Pass |
|----------|---------------|----------|----------|----------------|------------|
| | | Students | Students | Failed | Percentage |
| | | Appeared | Passed | | |
| VI | VII(A)&(B) | 250 | 250 | 0 | 100% |
| Cluster | VIII(A1)&(B1) | 38 | 38 | 0 | 100% |
| | VIII(A2)&(B2) | 38 | 38 | 0 | 100% |
| | VIII(A3)&(B3) | 38 | 38 | 0 | 100% |
| IV | II | 263 | 258 | 5 | 98.10% |
| II | Ι | 335 | 324 | 11 | 96.72% |

Extra Curricular & cocurricular activities assigned to the faculty in Department of Mathematics (2019-20)

| Name | Designation | | Activity Assigned | | |
|-------------------|-------------|---|-------------------------------|--|--|
| Dr.K.L.Saraswathi | Lecturer | & | • Coordinator of Placement & | | |
| Devi | HOD | | Career Guidance Cell. | | |
| | | | Convener Boards of Studies of | | |
| | | | Mathematics, Adikavi Nannaya | | |
| | | | University,Rajahmahendravaram | | |

| | | Vice President of Theresian Alumnea Association Academic Council Member |
|----------------|----------|--|
| Mr.V.Gopinath | Lecturer | Placement member Member of Boards of Studies of Meeting Cource coordinator of Analytical skills |
| Ms.S.Nagadurga | Lecturer | Member in Theresian Alumnae Association. Incharge of Snehaahar |
| Mrs.A.Jyothi | Lecturer | Member in Theresian Alumnae Association. Mentor for analytical Skills |
| Mrs.G.Jyothi | Lecturer | Mentor for analytical Skills |
| Mrs.P.Poojitha | Lecturer | Secretary of the Department Member in Theresian Alumnae Association Mentor for analytical Skills |
| Ms.R.Sravani | Lecturer | Incharge of Snehaahar |
| Mrs .P.Rajita | Lecturer | Mentor for analytical Skills |

| Mrs. G. Kusuma | Lecturer | |
|-------------------|----------|------------------------------|
| | | Incharge of Snehaahar |
| Ms. B.Sai lakshmi | Lecturer | Mentor for analytical Skills |

On 6-06-19 Members of the department attended the General body meeting Conducted By Dr.Sr. Marietta D'Mello ,Principal ,

On 10-06-19 all the lecturers who are having less than 5 years experiences attended the T-Tips Classes. For II and III year UG Students the classes were Started on 1-6-19

Graduation Day was Celebrated. On 15^{th} June, 2019,in which all the departmental members were actively participated .





College became more brightful with the entry of I Years on 24th June, 2019

The Department of

Mathematics and Statistics conducted various competitions such as essay writing, Quiz on 26^{th} and 27^{th} of June respectively for all UG Students in view of Statistics Day



III B.Sc M.P.C Students Submitted Rough Draft project work to Mrs.Dr.G.Jyothi' Head of the department of Chemistry On 27th June 2019.

The 10 B.Sc statistics students under the guidance of Mrs.G.Kusuma attended 13th National Statistics day celebrations organized by Field Operations Division (FOD) National Statistical Office, at Andhra Loyola(A) College, Vijayawada and P.Jhansi III B.sc M.S comp, Secured II Prize in Elocution on the topic "Quality Assurance in official Statistics" On 29th June 2019,

Mrs.S.Naga Durga ,Mrs.A.Jyothi, Mrs.G.Jyothi, Mrs.P.Poojitha ,Mrs.P.Rajita and Ms.R.Sravani were attended" Training program in soft skills"of duration 45 hrs which was organized Capacity building Programm of RUSA from 8th July to 16th August . The Resource person wasMr.Mahesh Jain trainer in softskills .

All the Members of the department were attended Seminar on Counseling Procedures and skills Organised by IQAC on 13th July 2019 under Capacity building Programm of RUSA. The Resource person was Fr.John Antony, OFM

Members of the department attended the Seminar on "Intellectual Property Rights and patents" Organised by IQAC on 20th July 2019. The Resource person was M.N.V.Prasad from university of Hyderabad.





Department of Mathematics & Statistics conducted Quiz competition for all Students on 23rd July 2019, on the topic "Fundamentals of Mathematics". In that competition 9 batches (Each batch consists of 5 members) were participated. For those 9 batches firstly screening test was conducted. After Screening test 7 batches were selected for 4 rounds of Quiz Competition. Finally the following batches stood in the first three places.

1st Place – II M.S.Computers & Actuarial Science

- 1. R. Jaya Sri (180907)
- 2. R. Sai Mallika (181627)
- 3. G. Glory (181651)
- 4. D. Anusha (180909)
- 5. MD. Tarannum (181630)

2nd Place – II MPC- II

- 1. B. Amulya (181256)
- 2. G. Geethanjali (181239)
- 3. Ch. Keziya (181227)
- 4. R. Poorna Prathibha (171254)
- 5. S. Gnana Prasuna (181202)

3rd Place- I M.E.Computers

- 1. D. Suchitra (191401)
- 2. S. Vasavi (191409)
- 3. T. Gnana (191406)
- 4. T.Manohitha (191413)
- 5. A.N.Pavani (191421)

Special Prize: P.Kiran Kumari I MPC- I

The Department of Mathematics joyfully celebrated the feast of St. Ann in the college on 25th July at 11.00Am. The Students depicted the life of St. Ann through a skit beautifully and variety of dance programmes were put up in honor of St. Ann. The sisters were honored by all the staff club members and students by offering fruits and sweets.

Glimpses of the Feast







Dr.K.L.Saraswathi Devi, Mr.V. Gopinath ,Mrs.S.Naga Durga ,Mrs A.Jyothi and Mrs.G.Jyothi attended a two day International Forum on" Transformation of Public Health and Community Responsibility "on 8th and 9th August 2019, Organized byDepartment of Zoology

Department of Mathematics Organized an internship programm on "OCTAVE" (A Mathematical tool for advanced Mathematical calculations) in Association with Spectrum Solutions ,Pondicherry,under the guidance of Coordinator as Dr.KL.Saraswathi Devi Head of the Department of Mathematics and Staststics .This Programm was Sponsored by Ministry of

Human Resource Development, Department of Higher Education ,Government of India Under (RUSA) Rashtriya Uchchatar Shiksha Abhiyan. Duration of the programm was three days i.e. from 19th August to 21st August 2019. The Target group for this Programm was all the Final year Mathematics combination Students . About 235 Students were benefitted

Workshop - OCTAVE

A Mathematical Tool for Advanced Mathematical calculations

Department of Mathematics and Statistics Organized Intracollegiate internship on "OCTAVE (the language of technical computing)" for 3days i.e., from 19th August to 21st August 2019 for all the final year maths and computer combination students with the co-ordination of spectrum solutions, pondicherry. The event Co-coordinator was Dr.K.L.Saraswathi Devi, Head of the Department of Mathematics and Statistics, CH.S.D.St.Theresa's Autonomous college for women, Eluru. The Resource person was Mr. Raushan Kumar Singh, Technical Director, Spectrum solutions Pondicherry. He was accompanied by Mr.Sandeep Kumar, Senior Software Developer, Spectrum Solutions, Pondicherry. Both of them were trained students in a systematic manner through which students gained the knowledge of OCTAVE Software.

The programme helps students to understand theoretical things practically. This Software serves as a key for students to implement their innovative ideas in future. "OCTAVE" a Software featured high level programming language, primarily intended for numerical computations OCTAVE helps in solving linear and non – linear problems numerically and for performing other numerical experiments using a language that is mostly compatible with 'MATLAB'.

The workshop 'OCTAVE' was a '3' days scheduled programme which includes both theory and hand on practical sessions.

Objectives of the Programme:

- ❖ To provide a theoretical and practical introduction to OCTAVE
- ❖ To write simple OCTAVE Programmes
- **❖** To Learn OCTAVE Functions
- ❖ To Learn how to deduce solutions of problems in a fraction of minutes
- ❖ To connect Mathematical calculations with programming Language and to experience the application of computer science in Mathematics.

The workshop began with the Inauguration ceremony. Honorable Principal Rev. Dr. Sr. Marietta D'Mello, Dr.K.L.Saraswathi Devi, Head of the Department of Mathematics and Statistics, Mr.Raushan Kumar Singh, Technical Director, Spectrum Solutions, Pondicherry, Mr.Sandeep Kumar, Senior Software Developer, Spectrum Solutions, Pondicherry were present for the Inaugural ceremony. Inaugural ceremony was carried out by Mrs.M.Naga Durga, Lecturer







in Mathematics. After a brief prayer service and Lighting of the Lamp by the dignitaries on the Dias, Rev. Dr.Sr. Marietta D'Mello, Principal delivered the welcome address. Then Dr.K.L.Saraswathi Devi, Convener of the workshop gave the opening remarks and explained the significance of the workshop. Later, Mr. Raushan Kumar Singh gave the key features of the program and finally vote of thanks was proposed for this Inaugural session.

The workshop was conducted in two shifts with great care and expertise of Mr.Raushan Kumar Singh, Technical Director, Spectrum Solutions, Pondicherry. The faculty of the host institute assisted the participants in leaning the basic concepts of OCTAVE and solving the given OCTAVE Problems. Each day the pre-lunch session was theoretical session of OCTAVE where as the post lunch session was the more advanced part of the course i.e., practical session.

Students experienced a special hands on practice learning session through which they got a better understanding of OCTAVE. Students understood the importance of OCTAVE. The content delivery was as per needs of every student along with the huge interaction.

 On the first day, in the morning session, first of all students learned how to download and install OCTAVE Software. Then students performed manual calculations of number system i.e., conversion of decimal numbers to binary,

binary to decimal, decimal to octal, octal to decimal, decimal to hexadecimal and hexadecimal to decimal. After that students learned the OCTAVE programs for conversion of all these systems from one form to another and they experienced the importance of



OCTAVE which is more faster than manual calculations. Non computer students got an idea about programming language.

In the afternoon session, students had hands on practice on Number system. Afternoon session was come to an end by conducting an exam for all of them on the topics that they covered through out the day.

 On the second day, in the morning session, students learned the programs of Arithmetic and Trigonometric operations. Students were introduced to plotting of graphs, drawing multiple functions on the same graph, drawing of subplot, features of 2-D plot, 2-D subplot, 2-D plot designing, 3-D plot, 3-D subplot, 3-D plot designing of various Trigonometric functions. Then students performed



manual calculations of Matrices i.e., Determinant of a matrix, adjoins of a matrix, inverse of a matrix, interchange of rows and columns of a matrix, product of matrices and addition of matrices. After that students learned the OCTAVE

Programs for all the matrix operations. At the end of the session, Students came to know how to solve the problems in a fraction of seconds through OCTAVE.

In the afternoon session, students had hands on practice on the above mentioned topics and they got outputs for the programs that they performed. The day was come to an end by conducting a test for all the participants.

• On the third day, students learned the topic "Implementation" i.e., Image processing. Firstly students learned the programs for Implementation. In this

session students covered the topics how to change the given image into another

required form, how to change the colour of given image, how to rotate image using OCTAVE programming language.

In the afternoon session, students had hands on practice for the topic Implementation. Finally the program was come to an end by



conducting an exam on the topics that they learned during 3 days of sessions in which all of the students got qualified which shows the efforts of both trainers and students.

All the sessions were very interactive and the students were demonstrated with various programs related to daily performed calculations of Mathematics. Through this workshop the students were able to explore the impact of OCTAVE in the industry and in academics.

After attending this workshop, participants got an idea on how to use OCTAVE tools to enhance their teaching/ research and make learning more effective. The participants learnt about different features of OCTAVE and how to combine them with their theoretical knowledge to analyse and visualize data for



their teaching and research. Participants learned how to use octave for Technical computing (Programming, plotting etc), how to do image processing and its applications.

We feel immense pleasure to announce successful real- time hands on training on OCTAVE. The 3 days program was a multidisciplinary intercollegiate event in which 245 students participated and learnt OCTAVE Software in order to understand the minute concepts of Mathematics.

Mr.V. Gopinath attended the BOS Meeting as the subject expert on 13th September 2019 at St.Joseph college for Women (Autonomous), Visakhapatnam, affiliated to Andhra University.





On 13-9-2019 Mr.V.Gopinath Delivered a Guest Lecturer On "Homomorphism of Rings" for III B.S.c Students at St Joseph college (Autonomous), Visakhapatnam.

The Department of Mathematics in the College **arranged Guest Lecture** on "Group Theory" on 18th **September 2019.** with the **target group** as IIB.sc (MPC,MPCOMP,MECOMP& MSCOMP) **The Resource Person was Mr. B.Srinivasa Rao**,Associate Professor,Department of Mathematics, Sir.C.R.R.eddy College (A)







Mr. V. Gopinath, Lecturer in Mathematics attended a one day Hands on Training program on "Digital classroom with integrated learning Management System "on

26th September ,2019 at Acharya university , Guntur .





Dr.K.L.Saraswathi Devi chaired a session in the international Conference on Recent trends in physics chemistry and allied sciences for sustainable development 2019 Organized by Department of Chemistry and Physics on 27th September.



Nagarjuna

On 8-11-19 and 11-11-2019, About 80 Students of I,II and III year Degree Maths Combinations were attended the online certificate course Examinations – GEOGEBRA, Conducted by IIT Bombay Spoken tutorial . 40% of Students got certificates of course completion.

On 8-11-19, About 111 Students of I,II and III year Degree Staatistics students were attended the online certificate course Examinations –LIBRO OFFICE CALC, Conducted by IIT Bombay Spoken tutorial . 67% of Students got certificates of course completion.

Mrs. G.Kusuma, B.V.Sailakshmi and K.Harika from Department of Mathematics and Statistics, took active role in conducting library week Celebrations which were held from 14^{th} November to 21^{st} November.

On 14th November, 2019, ward extension program was performed by The Ward students (III B.Sc M.S.Computers) of Mrs.Naga Durga & Mrs. P.Poojitha with title "The Great Math Mystery". In this Extension how Mathematics is involved in the following topics

Math in Nature, Math in Music, The Mathematics of the human body, Math in Dance, Maths in Architecture, Mathematics in Murder Mystery.

Ms.R.Sravani attened a Overseas 7 Day Faculty development Program on Innovative Teaching learning Methodlogies held during 14-11-2019 to 20-11-19 organized by IMRF Institute of Higher Education and Research Thailand Chapter in association with IIM Australia at Bangkok, Thailand.

Dr.K.L.Saraswathi Devi, Mr. V.Gopinath, Mrs.A.Jyothi and Mrs. P.Poojitha attended A Two Day National Conference on "Recent Advances in Mathematics and Mathematical Sciences. Jointly Sponsored by Uttara Andhra Society for Mathematical Sciences, Visakhapatnam & Prof. S. Minakshi Sundaram Memorial Society, Visakhapatnam Organized by Department of Mathematics and Statistics, at St.Joseph's college for women (A) Visakhapatnam on 15 th and 16th Novermber ,2019. In this Conference Mr.V.Gopinath Presented a paper on the Title "Applications of the Principles of Permutation and combination in present world".

Mrs. S. Naga Durga attended the work shop on SWOC Analysis for Teacher Excellence on 26th November under RUSA, Organised by Department of English in association with IQAC for which Mr. M.Naga Raju, Eminent soft skill trainer, Telangana.

Dr.K.L.Saraswathi Devi and All the Department members attended a national

Seminar on Modern Tools in Evaluation –A Shift From Quantitative to Qualitative

techniques on 5th December ,2019. Organized by Examination committee ,T-Tips &

Research wing in Ch.S.D.St. Theresa's college for women(A), Eluru

Mr.V.Gopinath and B.V.Sai lakshmi presented paper on "Modern Trends in

Education System –A Shift from Class –room learning and off-line examination to

e-learning and online examination ".

On 6th and 7th Dec 2019 Dr.K.L.Saraswathi Devi and Mr.V.Gopinath attended

national Seminar On Recent Trends in Functional foods in the Context of Health

and Technology. Organized by the department of Applied Bio Sciences in

Ch.S.D.St. Theresa's college for women(A), Eluru.

Dr.K.L.Saraswathi Devi and Mr.V.Gopinath attended 7-Day Teacher training

Programme (TTP)on usage of ICT in teaching –learning process from 2nd to 9th

December 2019 .Organized by IQAC in MVN JS and RVR College of Arts and

Science, Malikipuram E.G.Dt.A.P

On the eve of birth anniversary of Srinivasa Ramanujan on 22nd December,

Department of Mathematics Organized National Mathematics Day Celebrations

from 16th Dec 2019 to 18th December 2019. As a part of it, Various Competitions

were conducted for all the students such as Quiz Competition ,essay writing

Competition ,Poster presentation Competition.

The Prize winners were as follows.

Quiz Competition

Ist Prize II B.sc M.pc-II

B.Amulya

G.Geetanjali

Ch.Keziya

S Swathi

Second Prize III B.sc M.E.Comp

N.Raja Harshitha

M.Sai Spandana

M.Divya

B.Sindhu

Third Prize III B.sc M..S.comp

N.Sitara

S.Sumathi

k.Swetha

B.Navya

Essay writing

U.G I Prize V.Vijaya Sri II MPComp

II **Prize** T.Bhavani I MCComp

P.G I **Prize** V.Deepika I M.sc maths

II **Prize** B.Hima Bindhu

Poster presentation

I **Prize** (U.G) A.Nikhita sri sai bala Tripura and Ch.S.S.Sravani III B.Sc M.S.Comp

II Prize N.Sandhya II B.Sc M.B.N

I Prize(P.G) S.Naga Bhargavi and sk. Alkesha

TAA meeting was held on December 14th 2019, at 2:00 p.m in multimedia centre. The chief guest was Prof Sujatha Mukire Dean, Campus planning and Development English and Foreign Languages University, Hyderabad -500007. The Correspondent, Rev. Sr. Lurdu Mary, The Principal Rev. Dr. Sr. Marietta D'Mello and vice Principal Dr. Sr. Showrilu, and all the staff from various departments were actively participated. This year many of the Students from 1985-88, 1992-95, batches were present. Many of the retired staff were also present. The chief guest shared her memories and She also mentioned about her great teachers teaching and how their teaching made her life, and helped her to be in such a good position. She also remembered the then Principal Rev. Sr. Winifred and how she encouraged them to do the stage programs. After that many of the old students are shared their experiences in the college at that time and They performed the Dances and Skits. After that all were enjoyed the Christmas and new year celebrations and had a nice fun time.

Lastly, they shared the Chrismas gifts. Dr.Sr. Marietta D'Mello, Principal and Sr. Lurdu Mary correspondent wished the gathering and invited the old students for dinner to the Hostel. After having the Dinner at 8'0 clock in the Hostel, all were dispersed.