

Activity Report

On

**National Mathematics Day
(2021-22)
Celebrations**

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National Mathematics Day (NMD)

Our Country observes the **National Mathematics Day** every year on **22 December** since 2012. The day is celebrated to commemorate the birth anniversary of Mathematician **Srinivasa Ramanujan**. This year nation celebrates his **134th** birth anniversary of Ramanujan. The main objective behind the celebration of National Mathematics Day is to make people aware of the development of mathematics and its importance in the growth of humanity.

The day was announced on **26 February 2012** by the then Hon'ble Prime Minister Dr. **Manmohan Singh** to mark the **125th** anniversary of the birth of the Indian mathematical genius Srinivasa Ramanujan (22 Dec 1887- 26 Apr 1920). **2012** was also observed as **National Mathematics Year**. Ramanujan had a wealth of ideas that have transformed and reshaped 20th-century mathematics. These ideas continue to shape the mathematics of the 21st century.

Since time immemorial, various scholars have contributed greatly to the world of mathematics. The legendary Ramanujan started showing signs of unfolding genius from a very young age. His contributions in number theory, infinite series, mathematical analysis, etc. are considered instrumental.

Objectives

- 1) The objectives of National Mathematics Day (NMD) is to communicate the importance of mathematics and its applications in various fields to the students, research scholars, faculty members and also to people from different walks of life, with a view to impress upon them to understand the need for proficiency in mathematics to solve critical problems and also to elicit interest among youth on mathematics, rather than staying away from its.
- 2) The celebrations are also intended to communicate the abilities of great Indian scientists and mathematicians and their immeasurable contributions in solving crucial problems using mathematics.

Details of Project Coordinator and their implementing agency

Sl. No	Name of the Project Coordinator, Implementing Agency
1	2
1	Prof. P Ananth Lakshmi Narayan , Indian Institute of Technology (IIT), Hyderabad
2	Prof. P K Sahoo, Birla Institute of Technology & Science (BITS), Pilani, Hyderabad
3	Dr. Y Nagender, CR Rao Advanced Institute of Mathematics Statistics and Computer Science, HCU Campus, Hyderabad
4	Er. P Shankar Prasad, Telangana Water Resources Development Corporation Ltd.
5	Prof. N Kishan, Dept. of Mathematics, Osmania University
6	Dr. G. Upender Reddy, University College of Science, Mahatma Gandhi University, Nalgonda
7	Dr. K Sampath Kumar, Dept. of Mathematics, Telangana University, Nizambad
8	Dr.K. Somaiah, Kakatiya University
9	Dr. T.Umamaheswari, PJTS Agricultural College, Sircilla

**Symposium on Algebra and Number Theory
on the occasion of National Mathematics Day held on 22nd December 2021**

Indian Institute of Technology (IIT), Kandi, Hyderabad

Prof. B S Murthy, the Director of IIT Hyderabad, opened the symposium and addressed all of the attendees. Prof Rajat Tandon of the University of Hyderabad then gave the first talk on the abc-conjecture and some of its repercussions. The symposium featured speeches from Prof Narasimha Kumar of IIT Hyderabad, Prof B Sury of ISI Bangalore, Prof Sudhir Ghorpade of IIT Bombay, and Prof Mohan Chintamani of the University of Hyderabad.

We held a quiz for 8th, 9th, and 10th-grade children at various schools in and around Sangareddy on the eve of National Mathematics Day. Prof. B S Murthy, Director of IIT Hyderabad, graciously greeted at the concluding ceremony and distributed the prizes to all of the quiz winners.

Program Schedule

Time	Speaker	Title
8:45 am - 9 am	Prof. B S Murthy, Director, IIT, Hyd	Welcome
9 am - 10 am	Prof. R. Tandon	FLT and abc conjecture
10:15 am - 11:15 am	Dr. Narasimha Kumar	Galois representations and congruences for coefficients of modular forms
Tea/Coffee		
11:30 pm - 12:30 pm	Prof. B. Sury	Ramanujan's Mathematics: some glimpses
Lunch		
2:30 pm - 3:30 pm	Prof. S. R. Ghorpade	Consecutive integers, arithmetic progressions, and a theorem of Pillai
3:45 pm - 4:45 pm	Dr. M. Chintamani	On Zero-sum Constants in Combinatorial Number Theory
4:45 pm - 5 pm	Valedictory Program	
Tea/Coffee/Snacks		

Summary of talks:

Prof. Rajat Tandon spoke about the famous the Fermat's last theorem and abc conjectures that have drawn the attention of many famous mathematicians. He stated their analogues in the setting of polynomial rings in one variable over a field. In fact, he proved the Fermat's last theorem under this setting. He finished by talking about the abc conjecture for integers, showing several of its implications in number theory.

Dr. Narasimha Kumar began with displaying some congruences between Ramanujan's τ -function and the σ -function modulo certain primes and their powers. These congruences are due to Lehmer, Ramanujan and many other mathematicians. He then explained the theory behind the existence of such congruences and the primes that occur in them. This talk is based on the work of Ono, Serre and Swinnerton-Dyer.

Prof. B. Sury talked about a wide spectrum of contribution by Ramanujan. This included several work on partitions function, tau functions, Ramanujan primes, denesting radicals, taxicab and house numbers, continued partial fractions among other things. He also mentioned several of their implications and the current state of art concerning the problems that evolved from Ramanujan's work. He mentioned several anecdotes that made his talk really interesting for the young students.

Prof. Sudhir Ghorpade spoke about S. S. Pillai who arguably can be considered as the second best Indian mathematician of nineteenth century. Besides Pillai's contribution on Warings's problem, he described a theorem by Pillai that states that in a set of at most 16 consecutive integers there is one that is coprime to others. Prof. Ghorpade mentioned several generalizations of this result including one of his recent work with Samrith Ram where this theorem was generalized to the setting of arithmetic progressions in unique factorization domains.

Prof. B S Murthy, Director, IIT delivering the inaugural address



Celebration of National Mathematics Day-2021 on December, 22nd, 2021
Birla Institute of Technology & Science (BITS) - Pilani, Hyderabad Campus

On the 134th birthday of Sri Srinivasa Ramanujan, the Dept. of Mathematics, BITS-Pilani, Hyderabad campus has organized a day long program to celebrate the genius of Sri Srinivasa Ramanujan through various activities under financial support of DST & TSCOST

ACTIVITIES

- Plenary talk by Prof. Anupam Saikia, IIT Guwahati.
- Poster Presentation by students on 'BEAUTY OF NUMBERS' and 'FUN WITH GEOMETRY' at Auditorium foyer
- Movie on Srinivasa Ramanujan's life.
- Second Plenary talk by Prof. Atul Dixit, IIT Gandhinagar
- Essay presentation on 'THE BEAUTY OF NUMBERS IN NATURE' and 'MYSTERY AND IMPORTANCE OF PRIME NUMBERS IN MATHEMATICS'
- Faculty-students' interactions
- Prize and Certificate distributions by Prof. G. Sundar, Director, and Prof. N. Swain, Dean Administration, BITS-Pilani, Hyderabad Campus at Library quadrangle (in front of auditorium)

PROGRAM SCHEDULE

Time	Activities
9.00 - 9.30AM	Registration of participants at Room# H015 , Department of Mathematics, BITS-Pilani, Hyderabad Campus
9:45 - 10:00 AM	Inaugural session (Online)
10:00 - 11:00 AM	First Plenary talk by Prof. Anupam Saikia , IIT Guwahati. Title of the talk: <i>The Fascinating World of Numbers and The Applications (online)</i>
11:00 - 11:15 AM	Tea-break (Auditorium foyer)
11:15 - 1:00 PM	Poster Presentation by students on 'BEAUTY OF NUMBERS' and 'FUN WITH GEOMETRY' at Auditorium foyer.
1:00 - 2:00 PM	Lunch-Break (Auditorium foyer)
2:00 - 2:30 PM	Movie on Srinivasa Ramanujan's life for participants at Room# F206
2:30 - 3:30 PM	Second Plenary talk by Prof. Atul Dixit , IIT Gandhinagar Title of the talk: <i>An introduction to the theory of Partitions (online)</i> .
3:30 - 4:15 PM	Presentation of winners of essay competition at Room# F206 on 'THE BEAUTY OF NUMBERS IN NATURE' and 'MYSTERY AND IMPORTANCE OF PRIME NUMBERS IN MATHEMATICS' <i>(online)</i>
4:20 - 5:00 PM	Faculty-students' interactions (Auditorium foyer)
5:00 - 5:15 PM	Prize and Certificate distributions by Prof. G. Sundar , Director, and Prof. N. Swain , Dean Administration, BITS-Pilani, Hyderabad Campus at Library quadrangle (in front of auditorium)
5:15 - 5:30 PM	Vote of thanks and closing of the event with High Tea at Library quadrangle (in front of auditorium), group photography.



చిన్నప్పటి నుంచే గణితంపై పట్టు సాధించాలి



గణితంలో ప్రతిభ సాధించిన విద్యార్థులతో బిట్స్ డైరెక్టర్ సుందర్



గణిత శాస్త్రంపై అవగాహన కల్పిస్తున్న విద్యార్థులు

- ఐఐఐటీ గౌహతి ప్రొ. అనుపమ్ సైకియా
- బిట్స్లో ఘనంగా జాతీయ గణిత దినోత్సవం

జవహర్ నగర్: చిన్నప్పటి నుంచే గణితంపై పట్టు సాధించాలని ఐఐఐటీ గౌహతి ప్రొఫెసర్ అనుపమ్ సైకియా అన్నారు. శ్రీనివాస రామానుజన్ జయంతిని పురస్కరించుకుని బిట్స్ పిలానీ హైదరాబాద్ క్యాంపస్ లో గణిత శాస్త్ర విభాగం ఆధ్వర్యంలో నేషనల్ కౌన్సిల్ ఫర్ సైన్స్ అండ్ టెక్నాలజీ కమ్యూనికేషన్ డిపార్ట్ మెంట్, తెలంగాణ కౌన్సిల్ ఫర్ సైన్స్ అండ్ టెక్నాలజీ శాఖ సహకారంతో జాతీయ గణిత దినోత్సవాన్ని టుదవారం ఘనంగా నిర్వహించారు.

● జవహర్ నగర్ కాలోరేషన్ పరిధిలోని హైదరాబాద్ బిట్స్ క్యాంపస్ లో విద్యార్థులను ఆహ్వానించి ప్రతిభను చాటుకునేలా పోటీలు నిర్వహించి అవకాశం కల్పించారు. గౌహతి ఐఐఐటీ ప్రొఫెసర్ అనుపమ్ సైకియా ముఖ్యఅతిథిగా వ్యవహరిస్తూ ఆన్ లైన్ లో ఈ కార్యక్రమాన్ని ప్రారంభించి విద్యార్థులకు సందేశాన్ని అందించారు.

● ఈ సందర్భంగా అనుపమ్ సైకియా మాట్లాడుతూ... సంఖ్యల ఆకర్షణీయ ప్రపంచం, ఆన్ లైన్

ఆప్టికేషన్ (డి ప్యాసివేటింగ్ వర్ల్డ్ ఆఫ్ నంబర్స్ అండ్ ది ఆన్ లైన్ ఆప్టికేషన్) అంశాలపై విద్యార్థులకు అవగాహన కల్పించారు.

● గాంధీనగర్ ఐఐఐటీ ప్రొఫెసర్ అతుల్ దీక్షిత్ విభజన సిద్ధాంతానికి ఆన్ లైన్ పరిచయం (ఆన్ ఇం బ్రుడక్షన్ టు ది థియరీ ఆఫ్ పార్టిషన్ ఆన్ లైన్) అంశంపై ప్రసంగించారు. బిట్స్ లో నిర్వహించిన పోటీలకు ప్రకృతిలో సంఖ్యల అందం, గణితంలో ప్రధాన సంఖ్యల మిస్టరీ ప్రాముఖ్యతలపై వ్యాస రచన పోటీలను నిర్వహించారు.

● స్థానీ కళాశాల విద్యార్థిని వైష్ణవి మొదటి స్థానంలో నిలిపింది. భవన్స్ వివేకానంద కళాశాల విద్యార్థి ఆదిత్య మూడో స్థానంలో నిలిచారు.

● పేపర్ ప్రజెంటేషన్ లో 30 మంది విద్యార్థులు పాల్గొనగా మొదటి స్థానంలో ఎం.దినకర్, రెండో స్థానంలో మేధాన్లు సింఘల్, మూడో స్థానంలో అర్జున్ ప్రసాద్ సాహా నిలిచారు. విజేతలకు బిట్స్ క్యాంపస్ డైరెక్టర్ జి.సుందర్ జ్ఞాపికలు, ప్రశంస పత్రాలను అందజేసి అభినందించారు. కార్యక్రమంలో క్యాంపస్ గణిత శాస్త్ర ప్రొ. పీకే సాహూ, కన్వీనర్లు సుమిత్, కె.విశ్వకర్మ, డాక్టర్ నబీన్, డి.చక్రవర్తి తదితరులు పాల్గొన్నారు.



బిట్స్-పిలానీలో రామానుజన్ జయంతి

దిశ. జవహర్ నగర్: శ్రీనివాస రామానుజన్ 134వ జయంతి సందర్భంగా బిట్స్-పిలానీ క్యాంపస్ లో విద్యార్థులకు వ్యాసరచన పోటీలు నిర్వహించారు. ఈ కార్యక్రమానికి ముఖ్య అతిథిగా ఐఐఐటీ గౌహతి ప్రొఫెసర్ అనుపమ్ సైకియా హాజరయ్యారు. ఈ సందర్భంగా పలువురు మాట్లాడుతూ రామానుజన్ ప్రతిభా శక్తిని గుర్తుచేసుకున్నారు. అనంతరం పోటీలలో గెలుపొందిన విద్యార్థులకు ప్రశంసా పత్రాలు అందజేశారు. కార్యక్రమంలో గాంధీనగర్ ఐఐఐటీ నుంచి ప్రొఫెసర్ అతుల్ దీక్షిత్, బిట్స్-పిలానీ డైరెక్టర్ ప్రొఫెసర్ సుందర్, బిట్స్-పిలానీ గణిత శాస్త్ర విభాగాధిపతి ప్రొఫెసర్ పి.కె.సాహూ, కన్వీనర్లు ప్రొఫెసర్ సుమిత్, విశ్వకర్మ, డాక్టర్ దేబోపం చక్రవర్తి, డాక్టర్ నబీన్ మెహార్, విద్యార్థులు, సిబ్బంది, తదితరులు పాల్గొన్నారు.



జయంతిలో ప్రొఫెసర్లు, విద్యార్థులు

**One day Workshop on “Mathematical Ideas for High School Students”
on the occasion of National Mathematics day (Sri Srinivasa Ramanujan’s Birth Day)
22nd December 2021**

**C R Rao Advanced Institute of Mathematics, Statistics and Computer Science (AIMSCS),
University of Hyderabad Campus, Prof. C R Rao Road, Gachibowli, Hyderabad-46**

C R Rao AIMSCS celebrated 10th National Mathematics Day on 134th birth anniversary of the Indian Mathematical genius Sri Srinivasa Ramanujan. On this eve, AIMSCS conducted a Poster Presentation competition and a one day workshop titled “Mathematical Ideas for High School Students” targeted higher secondary school students. This programme sponsored by National Council for Science & Technology Communication (NCSTC), Department of Science & Technology, Govt. of India through Telangana State Council for Science and Technology (TSCOST), Dept. of EFS&T, Govt. of Telangana.

The celebrations inaugurated by Dr. Sarma Venkataraman, Director, CRRao AIMSCS, and the Guests of Honors and speakers, Prof. S. B. Rao, Former Director, C R Rao AIMSCS & Former Director, ISI Kolkata, Prof. C E Veni Madhavan, Former Professor, IISc, Bengaluru, Mrs Deepthi Haridas, Scientist, ADRIN, Dept. of Space, Shri Marupaka Nagesh, Member Secretary, TSCOST, Govt. of Telangana, and Dr. U. Yugandhar, Chief Executive (BD), C R Rao AIMSCS proceeded with the Lamp Lighting Ceremony. As we all believe “Light is considered as a symbol of auspiciousness, prosperity and abundance”.

Dr. U. Yugandhar, Chief Executive (BD), C R RAO AIMSCS delivered the welcome address. The guests, Prof S.B. Rao, Former Director, AIMSCS and Prof C E Veni Madhavan, Former Professor, IISc Bengaluru addressed the gathering. Finally, Dr Sarma Venkataraman, Director, AIMSCS address the gathering about C R Rao AIMSCS. Shri C V Ramakrishna, TSCOST, Govt. of Telangana also joined the workshop.

The Chief Guest of the workshop, Shri Marupaka Nagesh, Member Secretary, TSCOST, Govt. of Telangana, gave a speech on National Mathematics day (NMD-2021) celebrations and distributed cash prizes for the poster presentation competition winners.

About the workshop:

Workshop conducted in both online and offline modes. Around 120 students participated in the workshop from various schools/colleges. Only prize winners have attended physically due to Covid-19 pandemic. As part of this workshop, the eminent speakers: Prof. S B Rao,

Prof. C E Veni Madhavan, Dr. S. Venkataraman, and Mrs. Deepthi Haridas, Scientist, ADRIN, Dept. of Space, have delivered lectures on mathematical applications in various fields.

Lecture-1:

Title of the talk: “**Mathematical Ideas**” by Prof. S B Rao, former Director, AIMSCS and former Director, ISI Kolkata.

Lecture-2:

Title of the talk: “**Ramanujan and Trillions of Digits of Pi and a Taste of his Friable numbers: Arithmetic+Geometry+Algebra+Combinatorics+Analysis**” by Prof. C E Veni Madhavan, Former Professor, IISc Bengaluru.

Lecture-3:

Title of the talk: “**Latin squares and Quasi groups**” by Mrs Deepthi Haridas, Scientist-F, Advanced Data Processing Research Institute (ADRIN), Dept. of space.

Lecture-4:

Title of the talk: “**Virtual arrangements and 3-D graphics related mathematics**” by Dr S Venkataraman, Director, C R Rao AIMSCS.

Poster Presentation Competition:

AIMSCS conducted a poster presentation competition on “Applications of Mathematics in the real world”. A total of 34 students from various schools and colleges across India have submitted their posters for the competition. The posters are scrutinized by Prof. S B Rao, DR B V Subrahmanyam, Dr T Appala Naidu, and Dr. G Padmavathi. 10 students got selected out of 34 and awarded cash (Rs. 5000, Rs. 3000, and Rs. 2000) prizes for 1st, 2nd, and 3rd rankers respectively.

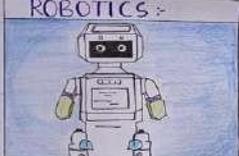
Most of the posters are related to applications of mathematics in real world such as applications related to Artificial Intelligence, Health sector: diameters of bacteria, virus, DNA molecule, atoms, and applications of Fibonacci numbers in the Nature, population dynamics, periscopes in submarines, finding heights and distances from the sea, building bridges, distance between the sun and the earth, etc.

Prize winners have displayed and explained their posters at workshop venue during the workshop. These prize winners were awarded cash prizes and certificate of poster presentation by the chief guest and guests of honor of the workshop. After distributing the prizes, all the winners have shared their interests on mathematics and its applications in real world. They are showing interest to attend such workshops and seminars in future.

APPLICATIONS OF GEOMETRY & ALGEBRA IN REAL WORLD

MATH CONCEPTS ARE IMPORTANT IN :-

ROBOTICS :-



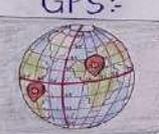
Most human designed environments such as buildings present regular geometrical properties that can be predicted on the maps that are built and used. If some information about the general layout of the environment is available, it can be used to build more meaningful world and improve the accuracy of the maps.

ARCHITECTURE :-



Algebra helps a machine engineer in calculating & making the design and plan of a structure. Engineer apply their mathematical skills to design the outline & drawing points of the structure. Architects applied highly on algebra to also design the structure. Architecture is directly the point to make their calculations for the size of the structure to be steady and safe. But only this algebra is also used to find suitable layout & measurement of structure to create the one durable.

GPS :-



In a GPS the longitude and the latitude of a place are all coordinates. The distance between 2 places in GPS is found using the distance formula. In real life, when people find out the best way to travel, they use the shortest distance and program have to find the path of the same & predict the best path.

VIDEO GAMES :-



Video game graphics are all about geometry. They provide multiple 3D structures like of circles, squares, cubes, rectangles and many other geometric shapes. When video game programming first began, developing games in 2D space. They have to take basic geometric shapes of their objects.

COMPUTER PROGRAMMING :-



Algebra is being used in real world computer programming. The algebraic expressions to design software, create multiple projects and build complex code using algebra. Program like 3D and 3D modeling require linear algebra. Being with developers use algebra in part of their life.

BUSINESS :-



We can use algebra to conduct market research. And predict the demand to produce items. This can be done by using algebraic expressions. We can use linear equations and other algebraic operations to forecast sales, determine the profit and loss from a company and also calculate the time. This serves as an essential component of running a business in a market.

NAME: ANANYA BINTOLA
Class: X-A
Roll No.: 7

APPLICATIONS OF MATHEMATICS IN EVERYDAY LIFE

MAPS OF THE EARTH



Representing our spherical three-dimensional earth on a flat two-dimensional map is difficult. Cartography is the study of making maps.
Math Concepts: Area, shape, direction, geometry, metric spaces, angles, projections.

POPULATION DYNAMICS



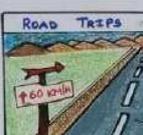
Ecosystems are complex systems of plants and animals that share and compete for resources. If one species doesn't have anything to keep it in check, it can grow so big that it consumes resources that other species need.
Math Concepts: Logistic function, rate, population modeling, geometric population.

FASHION DESIGNING



Fashion is a popular style or practice of clothing, jewelry, accessories, etc. designed via measurements for the style of clothes.
Math Concepts: Shapes, geometry, ratios and percentages, patterns.

ROAD TRIPS



Math comes in handy when traveling. Speed, time and distance - all these three things are related in mathematical models, which are the basis of finding the shortest of any route of transportation.
Math Concepts: Algebra, distance formula, GPS, directions, speed, time.

BUSINESS BRIDGES



Suspension bridges are elegant structures that span distances between 300 and 2900 meters. Their flexibility and low deadweight are great for engineering. Research is a phenomenon modelled using second-order differential equations.
Math Concepts: Geometry, volume, trigonometry, surface areas, graphs, golden ratio.

SPORTS



Maths improve the cognitive and decision-making skills of a person. Such skills are very important for a sportsperson.
Math Concepts: Probability, statistics, logical reasoning, area, volume, classification.

POLLING AND VOTING



In a democracy, every vote is supposed to count. But the outcome of an election really depends on how you do the math. Some systems encourage citizens to vote tactically.
Math Concepts: Statistical estimation, probability models, Binomial, Poisson, Poisson, Bernoulli counts.

COOKING AND BAKING



For cooking or baking anything, a series of steps are followed. Baking is how much of the quantity to be used for cooking.
Math Concepts: Ratio and proportions, area, temperature, fractions, measuring quantities.

$1/3 = 0.3333333333333333$ $\sqrt{2} = 1.4142135623730950488$ $\pi = 3.141592653589797230$

NAME: TANISHA
CLASS: IXth



**C R Rao Advanced Institute of Mathematics, Statistics
and Computer Science (AIMSCS)**



One Day Workshop on
Mathematical Ideas for Higher Secondary Students
On
10th National Mathematics Day
22 December 2021

**Venue: Ramanujan Auditorium, C R Rao AIMSCS
University of Hyderabad Campus, Gachibowli,
Prof. C R Rao Road, Hyderabad — 500 046**

Catalyzed and Supported by



**National Council for Science & Technology
Communication (NCSTC),
DST, Govt. of India**

**Telangana State Council for Science and
Technology (TSCOST)
Dept. of EFS&T, Govt. of Telangana**



One day Seminar on Artificial Intelligence in Irrigation Systems Management (irmatix 2022)

Organized by Telangana Water Resources Development Corporation, Hyderabad

Background

Irrigation is the artificial application of water made for supplementing the moisture in the soil that is deficient and does not meet the full requirements of growing crops. Regulating the activities based on the various resources for its efficient use and better output i.e., allocation of all the resources for maximum benefit and to achieve the objectives, without eroding the environment is called management. Management of irrigation structures, conveyances, reservoirs constitute Irrigation Engineering. Irrigation management is a complex process of art and science involving application of water from source to crop field.

Irrigation management is very important

1. To proper management of water resources for the purpose of crop production and other activities such as industrialization, power generation etc., which in turn provides employment opportunities and good living condition of the people.
2. To store and regulate the water resources for further use or non-season use.
3. To allocate the water with proper proportion based on area and crop under cultivation. (Balanced equity in distribution).
4. To convey the water without much loss through percolation and seepage (Efficiency in use).
5. To apply sufficient quantity to field crops (Optimization of use).
6. To distribute the available water without any social problem (Judicial distribution).
7. To meet the future requirement of agricultural and other sections (Resource conservation).
8. To protect the environment from over use or misuse of water (Environment safe use).

The irrigation projects are facing the problems of lower Water Use Efficiency than expected due to the unavailability of real time data capturing mechanisms. In this scenario the spatial data acquisition techniques and data synthesis models will make the Irrigation Engineers job easy. Artificial Intelligence and Machine Learning is becoming a hope for developing the new tools in the area of Irrigation Management. In this context, one day seminar is proposed to be conducted on Artificial Intelligence in Irrigation Management.

The seminar discusses on the feasibility of employing AI in Irrigation Systems including present technologies available in this sector. Seminar gives an opportunity to the innovative irrigation engineers to share their ideas to formulate a policy paper to be submitted to the government.

The seminar is organized into two parts: 1. AI in Irrigation Project Management, 2. AI in On-farm Irrigation Management. About 100 Irrigation Engineers who are interested in Mathematics and Artificial Intelligence have been selected and nominated to participate in the program.

PROGRAM SCHEDULE

Technical Session-I : 11.30 AM to 1.30 PM

AI in irrigation Project Management

11.30AM to 12.30PM

Keynote Address for the Session:

Er N Venkateshwarlu, Engineer-in-Chief, Ramagundam, ICAD

Chairman: Sri.Er.T.Vijay Karan Reddy, CE Rtd

Co-chairman1: Er.T.Khagender, CE Rtd

Co-chairman2: Er Sridhar Nune, EE, ICAD

Moderator: Sri.Er.T Venkatesham, Associate President, TREA

12.30 PM to 1.30 PM Technical Discussion

01.30 PM to 2.00 PM Lunch

2.00 PM to 3.00 PM

Key Note address on Seminar:

Dr S K Joshi, IAS(Rtd), Former Chief Secretary to Govt

Technical Session-II : 3.00 PM to 6.00 PM

AI in On-farm Irrigation Management

3.00 PM to 4.00 PM

Keynote Address for the Session:

Dr Abdul Hakeem, Head, Water Resources Information Division, NRSC

4.00 PM to 5.00 PM

Address by Dr G Sridhar, Digital Agriculture, Infosys

Chairman: Er Z Srinivasa Rao, DG WALAMTARI

Co-chairman 1: Er M Anitha, Dy EnC, ICAD

Co-chairman 2: Er S Bheem Prasad, Jt Secy to Govt, TS

Moderator: Er C Mahendar, SE Rtd, ICAD

5.00 PM to 6.00 PM Technical Discussion

IRRIGATION DECISION SUPPORT SYSTEM

FOR REALTIME RESERVOIRS AND PUMP HOUSE OPERATIONS Er N Venkateshwarlu, Engineer-in-Chief, Ramagundam, ICAD

The Government of Telangana is putting in extraordinary efforts for achieving Golden Telangana, Irrigation & CAD Department of Telangana State is making every effort to harness and utilize all the available water resources for benefitting of Agricultural sector, Industrial Sector and providing drinking water for overall development, state is building several large scale multi stage lift irrigation projects like Kaleshwaram and Palamuru Rangareddy ect., to bring water security to the state. For optimized operation of large-scale lift irrigation projects and reservoir, it started leveraging latest technologies like IoT, Artificial Intelligence and Machine Learning tools and developed decision support system for kaleshwaram project and now planning expand the system to entire state and named it as Irrigation Decision Support System IDSS

Irrigation Decision Support System (IDSS) will assist planning and operation team of state projects by providing Realtime total monitoring on available water in reservoir/barrages and minor irrigation tanks, Irrigation, Drinking and industrial water demand in the project command areas , Flood inflow forecast at key points of interest, flood inundation assessment to alert areas, communities and properties at risk, provide targets on how much to pump, by installing new sensors for measuring storage in reservoirs, for measuring inflows in upstream rivulets, and for measuring outflow in pump outlets in Gap locations where sensors are not available, installing interfacing system on existing SCADA systems, establishing local and central command center for managing series of lift schemes and water conveyer systems, building cloud based software platform that will integrate with existing data from CWC, IMD, TSDPS etc., integrate satellite data, and run hydrology models, machine learning models, optimization models and various decision support systems

As part of Decision Support system

1. Sensors were installed to measure real time storage in reservoirs, inflows in upstream rivulets, and outflow in pump outlets
2. Installed interfacing system on existing SCADA systems to monitor pump running status remotely
3. Established local and central command centers
4. integrated with existing data from CWC, IMD, TSDPS, ECMWF etc,
5. Integrated satellite data to assess water availability in minor irrigation tanks and
6. hydrology models, machine learning models, optimization models were setup to predict inflows at key points of interest and provide operational advisory for pump houses and reservoirs to meet the demand

The Decision Support System Provides

- a) One integrated real-time view on current water availability in reservoirs, pump wise status, river inflows, reservoir releases, energy consumption, current demand, Ground water status etc. in easy-to-understand map-based dashboards.
- b) Inflow forecast at key points contributing to Kaleshwaram project, results of which were in the last monsoon season to foresee upcoming flood events.
- c) Assisting in filling of MI Tanks by providing visibility into water availability of Minor Irrigation tanks based on periodic satellite data.
- d) Helping to Improve Irrigation efficiency by implementing Canal Irrigation Management System (CAMS) that will assess irrigation water demand using actual crop area, rainfall & ground water in the command area, and conveyance losses to provide optimized irrigation schedules.
- e) Help in assessment of the project impact by providing details on actual areas under cultivation, gap ayacut, crop intensity etc.
- f) Chief Engineer level dashboards are being created for Project level demand indentation and priorities to provide integrated and optimized advisory for 10 daily operational schedule for pump operations and reservoir releases .

Key Note address on Artificial Intelligence in Irrigation

Dr S K Joshi, IAS(Rtd),

Former Chief Secretary to Govt

Introduction

Water, one of the Panch Tatvas (Agni, Vayu, Akaash, Jal and Pruthivi) essential for survival of life forms on Earth. Overall sufficient quantity of water, however due to increased demand, fresh water resources under stress. Spatial and temporal variations getting further accentuated due to climate change. Irrigation crucial for water management. Irrigation supplements the rainfall for growing crops and consumes 80% of water. Required amount, frequency and time are important for optimum yields. Wide variation in irrigated area in the different parts of the country. Low reliability needs to be addressed.

Various Stages

- I. Development stage - Identification and execution of new Projects
- II. Operational phase when existing resources need to be used efficiently
- III. Challenges of Water stress/ excess should be addressed.

Objectives of Water Management

- a. Economic, environmental and social cost to be minimized.
- b. Efficiency both at the operational level of project and on farm to be continuously raised
- c. Increased dependability and coverage.

Artificial Intelligence or Hardwired Common Sense Ground Situation

- a) Individuals (engineers, farmers and end users to be made aware)
- b) Enabling Eco-System to be created
- c) Deficit and excess situation to be tackled
- d) Institutions and processes to be upgraded

The Road Ahead

- i. Efficiency related improvements required at each stage
- ii. Water Resources, Agriculture, Land Development and Forest Development needs to be done in integrated manner
- iii. The biggest challenge is to opt for short term gains
- iv. In the next five years AI machine learning and deep data mining will have prominent share in the management of water resources

Hydro-informatics for Water Resources Management

**Dr G Sridhar,
Digital Agriculture, Infosys**

Globally, managing water resources keeping in mind the growing threat from Global warming and associated disasters like droughts and floods pose several challenges and risks. In addition to this water quality is also posing challenge to the water supplying agencies and also crop cultivation. With the advent of Information and communication technologies the above challenges that prop-up in water supply chain planning and management could be addressed using hydro-informatics. Hydro-informatics deals with the flow of information and generation of useful knowledge and insights pertaining to water movement in space, using information technology tools like Industrial internet of things, Artificial intelligence, & data analysis considering sustainable development for decision making and smart management of water based systems. An overview on Hydro-informatics architecture and also the application of hydro-informatics for flood forecasting, smart water grids, river basin management, canal irrigation, water quality etc were briefly discussed.

National Seminar on National Mathematics Day

Osmania University, Hyderabad

To commemorate the birth anniversary of The Great Indian Mathematician Srinivasa Ramanujan, the Department of Mathematics, Osmania University has organized a two day National Seminar on the eve of National Mathematics day during December 19-20, 2021.

The day one has started with inaugural ceremony at 10 am with the Chief Guest being Prof. A. Balakishan, Dean, Faculty of Science; Prof. B. Veeraiah, Guest of Honour, Principal , UCS,OU and Convener Prof. N.Kishan. All the guests stressed the importance and relevance of the national mathematics day in their speeches.

On the day one we have conducted

- 1) **Essay Writing** competition on “The Relevance of Srinivasa Ramanujan works in today’s world of mathematics” in which 60 participants actively took part from various UG, PG and Engineering colleges
- 2) **Elocution** on “Ingenuity of Srinivasa Ramanujan”. Eighteen participants spoke on the topic effectively.
- 3) **Quiz** on “Life and works of Srinivasa Ramanujan”. About 80 students from various UG, PG and Engineering colleges took part in essay writing competition.

The day two has started at 10 am with the lectures by the following experts

Dr. Narasimha Kumar, IIT-Hyderabad, delivered a talk on “Galois Representations and Congruences for coefficients of modular forms - Ramanujan’s work”. He has explained about the Ramanujan τ -function satisfies well-known congruence’s modulo the so-called exceptional prime numbers 2,3,5,7,23,691. Ramanujan was the first to observe that certain powers of small primes there are congruence’s which connect $\tau(n)$ with some $\sigma_k(n)$. In 1916 Srinivasa Ramanujan studied the Δ -function which is known as discriminant function. The Ramanujan τ -function $\tau : \mathbb{N} \rightarrow \mathbb{Z}$ is defined by the Fourier coefficients of Δ . This plays an important role and has many applications in Number Theory. Ramanujan made several conjectures about the Fourier coefficients of the Δ -function which have profoundly influenced mathematics. In 1968, Serre put forward a conjecture relating l -adic Galois representations and coefficients of modular forms. He showed that existence of congruences of $\tau(n)$. He also expressed that the Congruences have implications about Lehmer’s conjecture. The theory of congruences of modular forms is a massive and central topic in contemporary Number Theory.

Prof. Sudhir R Ghorpade, IIT Bombay, delivered a talk on “Solvability of Polynomial Equations”. The aim of the talk is to explain about the solvability of polynomials of equations and its different degrees. Polynomials are functions of the type $P(x) = a_n x^n + a_{n-1} x^{n-1} + \dots + a_1 x + a_0$ where $a_n \neq 0$. The root(s) of a polynomial are the value(s) of x which satisfy $P(x) = 0$. Being able to solve for polynomial roots using radicals is not about finding a root, as this is known by the fundamental theorem of algebra that any polynomial of degree n has n complex roots, which need not be distinct. Solving a

polynomial by radicals is the expression of all roots of a polynomial using only the four basic operations: addition, subtraction, multiplication and division, as well as the taking of radicals, on the arithmetical combinations of coefficients of any given polynomial.

The polynomials which are solvable by radicals, the Galois- theoretic derivation of the general solution to the polynomial are sought. The solvability by radicals is possible through the use of Galois Theory as well as aspects of Group and Field theory. Research into the study of polynomials and the solving of its roots is of practical and widespread use in computer aided design and other computer applications in both the fields of physics and engineering.

Dr. C. Goverdhan, Osmania University, delivered a talk on “**Magic Squares**”. In recreational mathematics, a square array of numbers, usually positive integers, is called a magic square if the sums of the numbers in each row, each column, and both main diagonals are the same. The order of the magic square is the number of integers along one side (n), and the constant sum is called the magic constant. If the array includes just the positive integers $1, 2, \dots, n^2$, the magic square is said to be normal. Some authors take magic square to mean normal magic square. Magic squares that include repeated entries do not fall under this definition and are referred to as trivial. Some well-known examples, including the Sagrada Familiar magic square and the Parker square are trivial in this sense. When all the rows and columns but not both diagonals sum to the magic constant we have semi magic squares (sometimes called orthomagic squares).

Prof. Rajat Tandon, Retd. Professor, HCU, Hyderabad delivered a talk on “**Ramanujan, the man with the Golden Touch**”. He has given a complete life history and glimpses of Ramanujan. Throughout the history of mathematics, there has been no one remotely like Srinivasa Ramanujan. There is no doubt that he was a great mathematician, but had he had simply a good university education and been taught by a good professor in his field. As the years pass, I admire more and more the astonishing body of work Ramanujan produced in India before he made contact with any top mathematicians. Not because the results he got at the time changed the face of mathematics, far from it, but because, working by himself, he fearlessly attacked many important and some not so important problems in analysis and, especially, number theory - simply for the love of mathematics.

He explained a detailed incidents, with whom he interacted in his life journey and explained the mathematical works of Ramanujan.

All the lectures have drawn utmost attention from the participants. The participants have well interacted with the expert speakers.

ESSAY COMPETITION

1	First Prize	D. Pragna, M.Sc Mathematics	University College of Science, O.U
2	Second Prize	Vinay Kumar, M.Sc Mathematics	University College of Science, O.U
3	Third Prize	K. Mounika, M.Sc Mathematics	University College for Women, Koti
4	Consolation Prize	M. Ajay Kumar, M.Sc Mathematics	University College of Science, O.U

ELOCUTION COMPETITION

1	First Prize	Mohammed Aman Alimy Zada	University College of Science, O.U
2	Second Prize	Datla Udayanjali, M.Sc,	Holy Mary Degree College, Hyderabad
3	Third Prize	Muthyala Shireesha	University College of Science, Saifabad.
4	Consolation Prize	D. Pragna. M.Sc Mathematics	University College of Science, O.U

QUIZ COMPETITION

I -PRIZE (Team A)

S.NO	Name	College Name
1	J. Vishnu Vardhan	University College of Science, OU Campus
2	Ch. Vinay Kumar	University College of Science, OU Campus
3	Gowthamraj Goud	University College of Science, OU Campus
4	Karingula Satheesh	University College of Science, OU Campus
5	E. Sai Krihna	University College of Science, OU Campus
6	B. Sharath Babu	University College of Science, OU Campus
7	T. Bheema Rayudu	University College of Science, OU Campus
8	T Ravindar	University College of Science, OU Campus

9	Ch. Vamshi	University College of Science, OU Campus
10	Arun Kumar	University College of Science, OU Campus

II-PRIZE(Team B)

S.NO	Name	College Name
1	A. Varun Raj	University College of Science, OU Campus
2	Deshamoni	University College of Science, OU Campus
3	Kasarla Rasagna	University College of Science, OU Campus
4	M Suresh	University College of Science, OU Campus
5	Kuthadi Mounika	University College of Science, OU Campus
6	Eraveni Harika	University College of Science, OU Campus
7	Kommini Anuradha	University College of Science, OU Campus
8	Dandeboaina Yashpal	University College of Science, OU Campus

III-PRIZE(Team C)

S.NO	Name	College Name
1	J. Usha	University College for Women, Koti
2	Maseera Afreen	University College for Women, Koti
3	Syed Amera	University College for Women, Koti
4	Mohammed Taqjuddin	B.Sc, M.S.Cs, Little Flower Degree College
5	Ch. Ashnini	B.Sc, M.E.Cs, Little Flower Degree College
6	S. Gopi	B.Sc, M.S.Cs, Little Flower Degree College
7	N. Tulasi	B.Sc, M.S.Cs, Little Flower Degree College
8	M. Ajay Kumar	Nizam College, O.U

Valedictory function commenced at 4.30pm. Prof. P.Laxminarayana, Registrar, OU has kindly consented to be the chief guest on the occasion and has attended the same and spoke on the occasion. Prof. B.Veeraiah, Guest of Honour addressed the participants. Prof. N.Kishan , Convener of the Event spoke on the occasion and gave report on the two day event. The winners and participants have received their prizes and certificates through the chief guest of the function. Participants gave positive feedback on the event. The Convener thanked the event sponsors TSCOST, NCSTC,DST, EFS&T AND DST-PURSE-II Programme, OU for their financial support to conduct this event.



Seminar on Recent Mathematical Applications”
Department of Mathematics
Mahatma Gandhi University, Nalgonda, T.S-508254

REPORT

The Department of Mathematics, Mahatma Gandhi University, Nalgonda has taken initiative to organize Celebrations of National Mathematics Day-2021 (NMD-2021) at the University Campus under the financial support of National Council for Science & Technology, DST, New Delhi coordinated by Telangana State Council of Science and Technology (TSCOST)

between 20-22 December 2021. The Department of Mathematics has organized One-Day National Seminar on “Recent Advances in Mathematical Applications” on 22nd December 2021 on the occasion of birth anniversary of Srinivasa Ramanujan. The Seminar was began with lighting of lamp by Hon’ble EC Member & Director IQAC Dr.K. Sridevi, M G University and Dr. D. Sudheer Reddy, Scientist, ADRIN, Department of Space ISRO. During the seminar three popular lectures were organized as follows.

S.No.	Name	University	Lecture
1	Prof.P.MallaReddy	Dept of Mathematics, Kakatiya University, Warangal	Applications of Stochastic Process
2	Dr.D.Sudheer Reddy	Scientist,ADRIN, Department of Space ISRO,Hyderabad	Function Approximation and Data Models
3	Dr.M.Raghava	Prof of Computer Science, CVR Engineering College.	Image Processing Using Variational Approach

The Seminar has created awareness among the PG students (45), Degree students (87) and Faculty members about the contribution of Srinivasa Ramanujan towards Mathematics development. The students are understood the techniques and evaluating trends in the field of mathematics. The mementoes and certificates to the winners (I&II prize) and certificates for participants were distributed by Dr.D.Sudheer Reddy and Dr.M.Raghava.

On this occasion the department has conducted Elocution (Importance of study of Mathematics in daily life) and Essay writing (Ramanujan lie and his works) competitions to the students Degree and PG Level. For conducting these competitions the Mahatma Gandhi University jurisdiction has been divided into 3 District zones namely Nalgonda, Yadadri Bhongir and Suryapet. The number of student's zone wise and competitions wise participated are as follows.

Sl.No	Zone	No of students participated in Competitions	
		Essay Writing	Elocution
1	Nalgonda District	24	10
2	YadadriBhongir District	11	10
3	Suryapet District	78	18
Total		113	38

The list of prize winners in all competitions at 3 district level as follows.

1.

Nalgonda District

Competition	Student name	Course	Name of the college
Elocution 1ST PRIZE	N.Shirisha,	Bsc, MPCS, III year	Govt Degree College (W), Nalgonda
Elocution 2ND PRIZE	K.Keerthi Priya,	Bsc, MPCS, I year	Nagarjuna Govt Degree College , Nalgonda
Essay writing 1ST PRIZE	Ayesha Tabassum,	Bsc, MPCS, III year	Nagarjuna Govt Degree College , Nalgonda
Essay writing 2ND PRIZE	N.Shirisha,	Bsc, MPCS, III year	Govt Degree College (W), Nalgonda

2. Yadadri Bhongir District

Competition	Student Name	Course	Name of the college
Elocution 1 ST PRIZE	G.Madhuri	Bsc, MPCS, III year	Sri Navabharathi Degree college, Bhongir
Elocution 2 ND PRIZE	R.Nikitha,	Bsc, MSCS, II year	Jagruthi Degree college, Bhongir
Essay writing 1 ST PRIZE	M.Bhaskar	Bsc, MPCS, III year	SLNS Degree College, Bhongir
Essay writing 2 ND PRIZE	K.Bhargavi,	Bsc, MPCS, III year	Navabharathi Degree college, Bhongir

3. Suryapet District

Competition	Student Name	Course	Name of the college
Elocution 1 ST PRIZE	B.Naga Jyothi,	Bsc, MPC, II year	Telangana Social Welfare Residential Degree College, Suryapet
Elocution 2 ND PRIZE	G.Tejaswi,	Bsc, MPC, II year	SV Degree College, Suryapet
Essay writing 1 ST PRIZE	A.Dharani,	Bsc, MPC, II year	Sri Sai Triveni Degree college, Suryapet
Essay writing 2 ND PRIZE	A.Shravani,	Bsc, MCCS, II year	Spandana Degree college





గణిత సెమినార్ను సద్వినియోగం చేసుకోవాలి

నల్లగొండ క్రైం, డిసెంబరు 15: శ్రీ నివాస రామానుజన్ జయంతి సందర్భంగా ఈ నెల 22వ తేదీన ఎంజీయూలో నిర్వహించే జాతీయ స్థాయి గణితశాస్త్ర సెమినార్ను సద్వినియోగం చేసుకోవాలని ఎంజీయూ వీసీ ప్రొఫెసర్ చొల్లెటి గో



పోస్టర్ ఆవిష్కరిస్తున్న ఎంజీయూ వీసీ గోపాల్ రెడ్డి

పాల్ రెడ్డి సూచించారు. బుదవారం సెమినార్కు సంబంధించిన పోస్టర్లను ఎంజీయూ ప్రధాన క్యాంపస్లో ఆయన ఆవిష్కరించి మాట్లాడారు. రీసెంట్ అడ్వాన్సెస్ ఇన్ మ్యాథమెటికల్ అప్లికేషన్ అనే అంశంపై గణిత శాస్త్ర విభాగం ఆధ్వర్యంలో స్టేట్ కౌన్సిల్ ఫర్ సైన్స్ అండ్ టెక్నాలజీ సహకారంతో నిర్వహించనున్నట్లు తెలిపారు. ఈ నెల 20వ తేదీన విద్యార్థులకు వ్యాసరచన, వక్రత్వ పోటీలను నిర్వహించనున్నట్లు తెలిపారు. కార్యక్రమంలో రిజిస్ట్రార్ ప్రొఫెసర్ విష్ణుదేవ్, ప్రోగ్రాం కోఆర్డినేటర్ ఉపేందర్ రెడ్డి, హెచ్బోడీ హైమావతి, మద్దిలేటి కిరణ్ కుమార్, శ్రీనివాస్, రామచంద్రు తదితరులు పాల్గొన్నారు.

మానవ మనుగడకు గణితం ఎంతో అవసరం



ఎంటీయూలో రామానుజన్ కు వివాళి అర్పిస్తున్న అధ్యాపకులు

ఇక్రికాట్ సైంటిస్ట్ డాక్టర్ సుధీర్ రెడ్డి

నల్లగొండ క్రిం: మానవ మనుగడకు గణితం ఎంతో అవసరమని ఇక్రికాట్ హైదరాబాద్ సైంటిస్టు డాక్టర్ సుధీర్ రెడ్డి అన్నారు. ఆస్ట్రేలియాలోని ఎంటీయూ సైన్స్ కళాశాలలో మ్యాథ్ విభాగం ఆధ్వర్యంలో రామానుజన్ జయంతిని పురస్కరించుకుని బుధవారం నేషనల్ కౌన్సిల్ ఫర్ సైన్స్ అండ్ టెక్నాలజీ కమ్యూనికేషన్ డీఎస్సీ గవర్నమెంట్ ఆఫ్ ఇండియా నహకారంతో నిర్వహించిన రీసెంట్ మ్యాథమేటికల్ ఆప్టికేషన్స్ అనే ఆంశంపై నిర్వహించిన జాతీయ సదస్సుకు ఆయన ముఖ్య అతిథిగా హాజరయ్యారు. ఈ సందర్భంగా రామానుజన్ చిత్రపటానికి ఫలమాలలు వేసి నివాళులర్పించి ఆయన మాట్లాడారు. కార్యక్రమంలో ఎంటీయూ ఈసీ మెంబర్ శ్రీదేవి, సీవీఆర్ ఇంజనీరింగ్ కళాశాల ప్రొఫెసర్ రామవ, కేయా ప్రొఫెసర్ మల్లారెడ్డి, కో ఆర్డినేటర్ ఉపేందర్ రెడ్డి, హెచ్ ఓడీ హైమావతి, అధ్యాపకులు మద్దిలేటి, శ్రీనివాస్ పాల్గొన్నారు.

● నల్లగొండలోని ఏకలవ్య పాఠశాలలో నేషనల్ మ్యాథ్ డేను నిర్వహించారు. ఈ సందర్భంగా పాఠశాల డైరెక్టర్ ఆలుగుజెల్లి కరుణాకర్ రెడ్డి, అశోకమిక్ డైరెక్టర్ మారం శ్రీనివాస్ రెడ్డి, డైరెక్టర్లు, ఉపాధ్యాయులు రామానుజన్ చిత్రపటానికి ఫలమాలలు వేసి నివాళులర్పించారు. కార్యక్రమంలో పాఠశాల వైస్ ప్రెసిడెంట్ వాణి ఉన్నారు. పట్టణంలోని రామగిరిలో ఉన్న నీలగిరి జూనియర్, డిగ్రీ, పీజీ కళాశాలలో జాతీయ గణిత ఉత్సవాలను నిర్వహించారు. కార్యక్రమంలో కళాశాల ప్రెసిడెంట్ మారం నాగేందర్ రెడ్డి, అన్యూ,

అనూప ఉన్నారు.

మిర్జాలగూడ: ఆవంతిపురం గిరిజన్ గురుకుల కళాశాలలో విద్యార్థులకు క్విజ్, ప్యానరచన, ఉపన్యాస పోటీలు నిర్వహించారు. పోటీలలో గెలుపొందిన విద్యార్థులకు బహుమతులు ప్రధానం చేశారు. ఈ సందర్భంగా ఆంగ్ల అధ్యాపకుడు రాజారత్నం మాట్లాడారు. కార్యక్రమంలో కళాశాల ప్రెసిడెంట్ సుధాకర్, వైస్ ప్రెసిడెంట్ అజయ్ కుమార్, అధ్యాపకులు సక్రు, పిజికల్ డైరెక్టర్ మంగ్యనాయక్, సికిందర్, మంగయ్య రమేష్ పాల్గొన్నారు.

చిట్టాల రూరల్: మండలంలోని పెద్దకాపర్తి, తాళ్లవెల్లంల ప్రభుత్వ పాఠశాలల్లో నిర్వహించిన కార్యక్రమాల్లో ప్రధానోపాధ్యాయులు రామలింగాచారి, శెరిపోతుల శ్రీనివాస్, ఉపాధ్యాయులు ఫాలమాల వేసి నివాళులర్పించారు. కార్యక్రమం లో శకుంతల, శేఖర్, కైలాసం, విజయలక్ష్మి, బ్రహ్మయ్య, ప్రేమలత, శ్రీనివాసులు, లింగయ్య అంజనేయులు పాల్గొన్నారు.

చిట్టాల: మండల కేంద్రంలోని కాగూర్ విద్యాలయంలో మ్యాథ్ ఎగ్జిబిషన్ ను స్థానిక మునిసిపల్ డైరెక్టర్ కోమటిరెడ్డి వెంకటేరెడ్డి ప్రారంభించారు. కార్యక్రమంలో వైస్ డైరెక్టర్ కూరెల్లి లింగస్వామి, ప్రెసిడెంట్ పెద్ది నరేందర్ పాల్గొన్నారు.

కేతెపల్లి: గణిత సాధనలో విద్యార్థుల్లో మేధాశక్తి పెరుగుతుందని మూసీ బీసీ గురుకుల పాఠశాల ప్రెసిడెంట్ బాబాక్ పెర్లాన్నారు. కార్యక్రమంలో ఎంపీపీ మంజుల బాబాక్, ఉపాధ్యాయులు ఏనుగు రవీందర్ రెడ్డి, వనజ, అరుణ్, శ్రీనివాస్ పాల్గొన్నారు.

త్రిపురారం: మండల కేంద్రంలోని లిటిల్ ఫ్లవర్ పాఠశాలలో గణిత శాస్త్రవేత్త శ్రీనివాస్ రామానుజన్ జయంతి వేడుకలను నిర్వహించారు. కార్యక్రమంలో కరస్పాండెంట్ తుమ్మలపల్లి వెంకటేరెడ్డి, ఉపాధ్యాయులు వెంకట్, మహేష్, నాగరాజు, క్రాంతి, కవిత, సరిత పాల్గొన్నారు.

కొండమల్లేపల్లి: కొండమల్లేపల్లి మండల కేంద్రం జిల్లాపరిషత్ ఉన్నత పాఠశాలలో నిర్వహించిన కార్యక్రమంలో పాఠశాల ప్రధానోపాధ్యాయుడు మండ సత్యనారాయణ, ఉపాధ్యాయులు శేరిపల్లి శ్రీనివాస్, శ్రీపతిరావు, సూర్య ఎమ్మనెజర్, నాగేంద్రమ్మ వెంకటేశ్వర్లు, సరస్వతి పాల్గొన్నారు.

Two-day program on NATIONAL MATHEMATICS DAY -2021 (NMD-21) Celebrations

Department of Mathematics, Telangana University

Department of Mathematics, Telangana University has organized NATIONAL MATHEMATICS DAY - 2021 (NMD-21) celebrations on 25th & 26th (2 days) and conducted **Two Day National Workshop on NEP 2020 with Reference to under Graduate Mathematics**. The day-1 program forenoon session on 25th March, in

inauguration ceremony Dr. K. Sampath Kumar, Convener of this workshop given opening remarks. Guest of Honour Prof. M. Aruna, Dean, Faculty of Science and Controller of Examinations, Telangana University was inaugurated the workshop. She demonstrated the participants about NEP 2020 and the effect on UG curriculum.

Dr. P. Rammohan Reddy, Senior Mathematics Faculty member and Principal, Govt. Degree College, Dharpally invited as Guest of Honour explained about, how mathematics faculty can improve their teaching skills due to NEP 2020. In Inauguration, keynote speaker Prof. K. Satyanarayana, Retd. Professor, Department of Mathematics, Osmania University, Hyderabad elaborated on National Mathematics Day. He explains why we have been celebrating National Mathematics Day.

Session I:

In this session, Mr. M. Chandra Shekar discussed key points in NEP 2020 also demonstrated 30 minutes videos related to NEP 2020 implications on Mathematics curriculum.

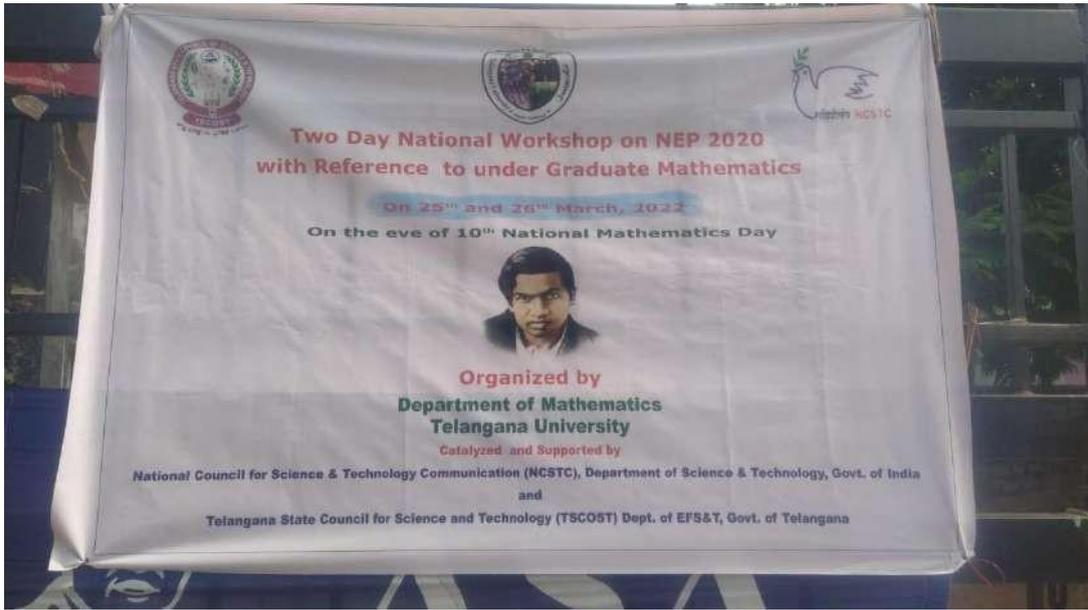
Session II & Session III:

These two sessions Prof. K. Satyanarayana, Retd. Professor, Department of Mathematics, Osmania University, Hyderabad discussed on applications of Abstract Algebra. He covered some theorems, applications of Algebra, most of the UG faculty feels, these topics are tough to teach. He also discussed about MathematicalModelling and how to guide student projects in mathematics. At the end of sessionIII, he interacted each and every participant and clarified their doubts.

Session IV & Session V:

In Day 2 recourse person was Dr. Goverdhan, Associate Professor, Department of Mathematics, Osmania University, Hyderabad. He covered Session IV & V. In these sessions Dr. Goverdhan sir covered many mathematical softwares, explained how these softwares useful in Degree Mathematics teaching and research. At the end of session V, he interacted each and every participant and clarified their doubts.







జాతీయ కార్యశాల కరపత్రాలను అవిష్కరిస్తున్న వీసీ ఆచార్య రవీందర్, రిజిస్ట్రార్ ఆచార్య శివశంకర్

25 నుంచి జాతీయ కార్యశాల

తెవివి క్యాంపస్, న్యూనీటడే: తెలంగాణ విశ్వవిద్యాలయంలో గణిత శాస్త్రం నేషనల్ కౌన్సిల్ ఫర్ సైన్స్, టెక్నాలజీ కమ్యూనికేషన్, తెలంగాణ స్టేట్ కౌన్సిల్ ఫర్ సైన్స్ అండ్ టెక్నాలజీ సంయుక్తాధ్వర్యంలో ఈ నెల 25, 26 తేదీల్లో నిర్వహించే జాతీయ కార్యశాల కరపత్రాలను వీసీ ఆచార్య రవీందర్, రిజిస్ట్రార్ ఆచార్య శివశంకర్ ఆవిష్కరించారు. సైన్స్ డీన్ ఆచార్య అరుణ, విభాగాధిపతి సంపత్ కుమార్, అధ్యాపకులు నందిని, శ్వేత పాల్గొన్నారు.

25, 26 తేదీల్లో జాతీయ వర్క్ షాప్

దీనిపట్టి, మార్చి 21 : టీయూ మ్యూడమెంటరీస్ విభాగం ఆధ్వర్యంలో ఈనెల 25, 26 తేదీల్లో జాతీయ వర్క్ షాప్ నిర్వహించనున్నట్లు కమ్యూనికేషన్ అండ్ మ్యూడమెంటరీస్ విభాగాధిపతి సంపత్ కుమార్ తెలిపారు. వర్క్ షాప్ కు సంబంధించిన డ్రోయింగు వీసీ రవీందర్ సోపానాలం ఆవిష్కరించారు. వీసీ ప్యాటర్న్ గా వీసీ రవీందర్, ప్యాటర్న్ గా రిజిస్ట్రార్ శివశంకర్ వ్యవహరించున్నారు. ప్రధాన పక్షాలుగా టీయూ మ్యూడమెంటరీస్ అసోసియేట్ ప్రొఫెసర్ గోపర్లస్, కాకతీయ యూనివర్సిటీ ప్రొఫెసర్ మర్తాలెడ్డి హాజరవుతారని సంపత్ తెలిపారు.

గణితంపై భయాన్ని వీడాలి

తెలంగాణ(డిసెంబర్): గణితంపై మనసులో ఏదైనా అయిన భయాన్ని వీడేట సులభంగా అర్థమవుతుంది. చురుకు వంతు మార్పులు సాధించగలిగే ఒక ఒక విద్యార్థి గణితం అని ప్రొఫెసర్ కె సత్యనారాయణ అన్నారు. తెలంగాణ యూనివర్సిటీ కంప్యూటర్ సైన్సు కళాశాల నెహ్రూ హాల్లో ఉత్తరప్రదేశ్ వెంతు రోజుల జాతీయ శాస్త్రాంశ (ఎన్టీసీఎం) ప్రారంభమైంది. పబ్లీకేషన్ గణిత చింతనను మొదలైంది. మొదటి లాంఛన్ పత్రం ప్రకటించారు. కంప్యూటర్ సైన్సు విభాగం అధ్యక్షులు ప్రొఫెసర్ కె సత్యనారాయణ ఆధ్వర్యంలో ఈ కార్యక్రమం నిర్వహించారు. సులభంగా అర్థమవుతుంది. యూనివర్సిటీ ఓపెన్ ప్రొఫెసర్ కె సత్యనారాయణ.

ప్రొఫెసర్ కె సత్యనారాయణ మాట్లాడుతూ విద్యార్థులు గణితంపై భయాన్ని వీడాలి. ప్రొఫెసర్ కె సత్యనారాయణ మాట్లాడుతూ



అంతర్జాతీయ కన్ఫెరెన్స్, ప్రొఫెసర్ కె సత్యనారాయణ ఆధ్వర్యంలో తెలంగాణ యూనివర్సిటీ కళాశాలలో నిర్వహించిన కన్ఫెరెన్స్. ప్రొఫెసర్ కె సత్యనారాయణ మాట్లాడుతూ విద్యార్థులు గణితంపై భయాన్ని వీడాలి. కన్ఫెరెన్స్లో ప్రొఫెసర్ కె సత్యనారాయణ మాట్లాడుతూ విద్యార్థులు గణితంపై భయాన్ని వీడాలి.

'ఆల్ జీబ్రా'పై అవగాహన ఉండాలి

డిసెంబర్, మార్చి 2018 మ్యాథుమెటిక్స్ సబ్జెక్టులో భారత విషయాలుపై డి.ఎల్.ఎల్. గ్రూపు ఆల్ జీబ్రా విషయాలపై పరిష్కారమైన అవగాహన ఉండాలి. ఓయూ ప్రొఫెసర్ కె సత్యనారాయణ మాట్లాడుతూ కంప్యూటర్ సైన్సు కళాశాలలో వెంతు రోజుల సెషన్లు నిర్వహించారు. సాధించారు. 10వ జూలై 2018

సాధనతో గణితం సులువు



తెలంగాణ(డిసెంబర్): విద్యార్థులకు లెక్కలంటే (మ్యాథ్) చాలా భయమని, కానీ సాధన చేస్తే దీని కన్నా సులభమైన సబ్జెక్ట్ లేదని ఉస్మానియా యూనివర్సిటీ మ్యాథ్ విభాగం అసోసియేట్ ప్రొఫెసర్ సి.గోవర్ధన్ అన్నారు. లెక్కలను బోధించేందుకు కొత్తగా వచ్చిన యాప్లను ఉపయోగించడం ద్వారా విద్యార్థులకు నేర్చుకోవాలనే ఉద్దేశం కలుగుతుందన్నారు. తెలంగాణ యూనివర్సిటీలో గణితం వర్క్ షాప్ నిర్వహిస్తున్నారు. మ్యాథ్ విభాగాధిపతి కె సంపత్ కుమార్, చైన్ ప్రెసిసిపాల్ సత్యనారాయణ తదితరులు పాల్గొన్నారు.

తెలంగాణ యూనివర్సిటీ సమాచారం

గణితశాస్త్రం అంటే భయం పోవాలి



సచిన్ మాట్లాడుతున్న ప్రొఫెసర్ గోవర్ధన్

డిసెంబర్, మార్చి 2018. విద్యార్థులకు గణిత శాస్త్రం అంటే చాలా భయమని, సాధన చేస్తే దీనికంటే సులభతరమైన సబ్జెక్టు మరొకటి లేదని ఉస్మానియా యూనివర్సిటీ మ్యాథుమెటిక్స్ అసోసియేట్ ప్రొఫెసర్ డాక్టర్ గోవర్ధన్ అన్నారు. శినివారం డి.ఎల్.ఎల్. జాతీయ వర్క్ షాపు ముగింపు సందర్భంగా ఆయన ముఖ్యఅతిథిగా హాజరయ్యారు. గణితశాస్త్రంలో గల మెలుకువలు క్లిష్ట సమస్యలు, వివిధ సిద్ధాంతాల గురించి వివరించారు. విద్యార్థులకు గణితంలో సులభతరమైన అంశాలతో అర్థమయ్యేలా బోధిస్తే మేధానంపని పెరుగుతుందని, జయోజీబ్రా, డెన్మోస్ అప్లికేషన్లలో తలెత్తే సమస్యలను సాధించవచ్చని అన్నారు. యూనివర్సిటీ కళాశాల ఉప ప్రధాన చార్యులు సత్యనారాయణ మాట్లాడుతూ... ఈ వర్క్ షాపు ద్వారా అధ్యాపకుల్లో ఆలోచన సర్దిమరింపే పెరుగుతుందన్నారు. వర్క్ షాపు కన్వీనర్ సంపత్ కుమార్ మాట్లాడుతూ... ఈ సందర్భంగా ఎంతో హాదం చేస్తూ యన్నారు.

PUBLIC NOTICE
General notice are hereby informed that my client M/s. Shriram City Union Finance Ltd, Nizamabad Branch-II, Dist: Nizamabad agreed to accord Loan to (Sri) Vijay Kumar S/o Eera Gangadhar. Agred about 20 Yrs. Car: Business. P.O: H.No.64, Jankaraly (V), Jankaraly (M) (Nizamabad Dist.) Mortgage of the school related property of Nafees Sultan. The above prospective source agreed to create

One-Day National Workshop on Srinivasa Ramanujan Inventions in Mathematics & Abstract Algebra

Department of Mathematics, Kakatiya University, Warangal

On the occasion of National Mathematics Day (NMD) celebrations-2022, the Department of Mathematics, Kakatiya University, Warangal, T.S. has organized "**One-Day National Workshop on Srinivasa Ramanujan Inventions in Mathematics & Abstract Algebra**" on March 22nd, 2022 with the sponsor of TSCOST and support of NCSTC, by making participation of 160 students, UG & PG teachers from various affiliated colleges of KU, OU, SU. in Telangana State.

The Chief Guest, Prof. K. David, in his message, said that teachers with a commitment make their students not only useful to themselves but also the society. Also he stated that Mathematics tools are essential for all the science subjects like Physics, Chemistry, Pharmacy, Geology etc. The Guest of Honor of the Program and Principal of University College, Prof. B. Suresh Lal advised in his speech, the students to be punctual to the classes and make use the library for enriching themselves with the latest trends in their subject. Also he advised the teachers to update their knowledge to teach Mathematics in easy manner and making the subject more comfortable to the students.

Keynote Speaker, Prof. S.S.V.N. Sarma, explained some of Srinivasa Ramanujan Contributions to the Mathematics society also he was presented **Ramanujan Applications to Abstract Algebra** through power point presentation. As a resource person, Prof. S.S.V.N. Sarma, also delivered a Lecture on "**Applications of Cosets to Permutations Groups**" through power point presentation.

In another technical session, Prof. K. Satyanarayana, Rtd. Professor of Mathematics, Osmania University, Hyderabad delivered one Lecture on "**Check- Digit Scheme based on D_5** " and second Lecture on "**the Rotation Group of a Cube and a Soccer Ball**" by explaining suitable applications with power point presentation.

The One-Day National Workshop has ended with speech of valedictory session's Chief Guest Prof. K. Vijaya Babu, Coordinating Officer, UGC Unit, KU. Warangal. He said that there is great importance and respect to the Mathematics teacher in the society. Also he advised to the teachers that share and explained their updated knowledge to the students in easiest way. Many of the participants shared their feedback of the program and the program was concluded with the presidential remarks.







Dr Srinivas Vooradi

KU DEPT OF MATHS HOLDS ONE-DAY WORKSHOP

Hanumakonda, March 22: "Teaching is a noble profession with a lot of responsibilities and duties. Teachers not only impart knowledge but also inspire and motivate students to take important steps in life. They boost the confidence of students and encourage them to proceed in the right direction," said Dean of the Faculty of Science of Kakatiya University Prof K David. Participating as the chief guest in the one-day national workshop on 'Srinivasa Ramanujan Inventions in Mathematics and Abstract Algebra' sponsored by Telangana State Council of Science



and Technology (TSCOST) and supported by National Council for Science and Technology and organized by the Department of Mathematics of Kakatiya University at

Ramanujan Seminar Hall on Tuesday, Prof. David said, "Teachers with a commitment make their students not only useful to themselves but also to the society." Speaking

on the occasion, Principal of the University College Prof B Suresh Lal advised the students to be punctual to the classes and make use of the library for enriching themselves with the latest trends in their subject, advising the teachers to teach Mathematics in an easy manner and making the subject more comfortable to the students, Prof SSVN Sharma explained about the Ramanujan Theory and Groups and their importance. Explaining about the objective of the workshop, Convenor of the seminar Dr K Somaiah said that the workshop was intended to

expose the undergraduate and postgraduate students and teachers of Mathematics to Ramanujan contribution to the fundamental concepts of groups, subgroups and cyclic groups besides to offer an understanding of various abstract concepts and their applications. Coordinators Dr LP Raj Kumar, Dr R Bharavi Sharma and Prof K Satynarayana from Osmania University also spoke.

Controller of Examinations and members of the Executive Council of Kakatiya University Prof P Malla Reddy and Prof T Sumathi Uma Maheshwari and teachers Dr M Tirumala Devi, teachers and students were present.

KU Dept of Maths holds one-day workshop



DR SRINIVAS VOORADI
SPECIAL CORRESPONDENT

Hanumakonda, March 22: "Teaching is a noble profession with a lot of responsibilities and duties. Teachers not only impart knowledge but also inspire and motivate students to take important steps in life. They boost the confidence of students and encourage them to proceed in the right direction," said Dean of the Faculty of Science of Kakatiya University Prof K David. Participating as the chief guest in the one-day national workshop on 'Srinivasa Ramanujan Inventions in Mathematics and Abstract Algebra' sponsored by Telangana State Council of Science and Technology (TSCOST) and supported by National Council for Science and Technology and organized by the Department of Mathematics of Kakatiya University at Ramanujan Seminar Hall on Tuesday. Prof. David said, "Teachers with a commitment make their students not only useful to themselves but also to the society." Speaking on the occasion, Principal of the University College Prof B Suresh Lal advised the students to be punctual to the classes and make use of the library for enriching themselves with the latest trends in their subject, advising the teachers to teach Mathematics in an easy manner and making the subject more comfortable to the students, Prof SSVN Sharma explained about the Ramanujan Theory and Groups and their importance. Explaining about the objective of the workshop, Convenor of the seminar Dr K Somaiah said that the workshop was intended to expose the undergraduate and postgraduate students and teachers of Mathematics to Ramanujan contribution to the fundamental concepts of groups, subgroups and cyclic groups besides to offer an understanding of various abstract concepts and their applications. Coordinators Dr LP Raj Kumar, Dr R Bharavi Sharma and Prof K Satynarayana from Osmania University also spoke. Controller of Examinations and members of the Executive Council of Kakatiya University Prof P Malla Reddy and Prof T Sumathi Uma Maheshwari and teachers Dr M Tirumala Devi, teachers and students were present.

అమ్మకోపగించు కుంటే బిడ్డ టీ-చర్ దగ్గరికి పోయే రోజు రావాలి

కేయా క్యాంపస్,
మార్చి 22 (పంచవలం):

కాశీయ విశ్వవిద్యాలయం గణిత విభాగం ఆర్గనైజ్మెంట్ ఒకరోజు కాశీయ సదస్సు మంగళవారం గణిత విభాగం అధిపతి డాక్టర్ కే సోమయ్య ఆధ్వర్యతన నిర్వహించారు. ఈ కార్యక్రమానికి ముఖ్య అతిథులుగా యూనివర్సిటీ కళాశాల ప్రిన్సిపల్ ఆచార్య సురేష్ లాల్, డీన్ ఫ్యాకల్టీ ఆఫ్ సైన్స్ ఆచార్య డేవిడ్, గణిత విభాగ రిటైర్డ్ ప్రొఫెసర్ ఎస్ ఎస్ విఎస్ శర్మ, ఉస్మానియా విశ్వవిద్యాలయ గణిత విభాగ ప్రొఫెసర్ ఆచార్య కే సత్యనారాయణ పాల్గొని ప్రసంగించారు. ఆచార్య ఎస్ ఎస్ శర్మ, ఆచార్య సత్యనారాయణ గణితము ఇంజనీరింగ్ మరియు కంప్యూటర్ సైన్స్లో ఏ విధంగా ఉపయోగపడుతుందో తెలుపుతూ,



అల్ట్రాస్ట్ అల్టిమా యొక్క ఉపయోగాలను, అప్లికేషన్లు తెలిపారు. ముగింపు సదస్సు లో యుజీసీ కోఆర్డినేటర్ ఆచార్య విజయ్ బాబు మాట్లాడుతూ విద్యా వ్యవస్థలో గణిత దీవెనకు ఉన్న ప్రాముఖ్యత చాలా గొప్పది అని, బిడ్డపై అమ్మ కోపగించు

కుంటే నేను దీవెన దగ్గరికి పోతా అనే రోజులు రావాలని అన్నారు. అంత గొప్ప అనుభూతిని విద్యార్థులకు అందిస్తూ, జ్ఞానాన్ని పంచుకోవాలని అన్నారు. ఈ కార్యక్రమంలో గణిత విభాగ సీనియర్ అధ్యాపకులు ఆచార్య మల్లారెడ్డి ఆచార్య

సుమతి ఉమామహేశ్వరి మరియు వర్మి షాన్ కోఆర్డినేటర్ డాక్టర్ బాలి శర్మ, డాక్టర్ రాజకుమార్, వివిధ కళాశాల అధ్యాపకులు పాల్గొన్నారు.

One Day Workshop on “Application of Statistical Techniques in Agriculture”

National Mathematics Day - 2021 (22nd March, 2022)

Professor Jayashankar Telangana State Agricultural University, Sircilla

Importance of statistics is very well recognized in agriculture which originated as a science in education. As on date, there is no branch of Agricultural Science without interpretation of Statistics. Statistics is concerned with scientific methods for collecting, organizing, summarizing, presenting and analyzing the data to derive valid conclusions and make reasonable decisions based on the analysis. In Agricultural Research, there are different statistical techniques that can be used for crop research both for laboratory and field experiments for genetic and physiological research and so on. Choosing a correct statistical procedure for a given experiment must be based on expertise in statistics and the subject matter of the experiment. Hence, to give the Agricultural Researchers a statistical background as well to choose the most appropriate statistical technique, One day Workshop on “Application of Statistical Techniques in Agriculture” was conducted.

Important Topics Covered:

- Experiments for Agricultural Research
- Open Source Software for Statistical Analysis

The inaugural session was addressed by Dr. T. Uma Maheswari, Associate Dean, Agricultural College, Sircilla by welcoming all the participants and stated that collection, organization and analysis of data is the most critical component for getting valid conclusions from any experimental findings for which statistical support is essential. A total of 25 teaching faculty from Agricultural Colleges located at Sircilla, Jagtial and Warangal, Private and Government Degree Colleges located at Sircilla and Satavahan University, Karimnagar have participated in the One Day Workshop.

Technical Session

Dr. A. Dhandapani, Principal Scientist (Agril. Statistics), ICAR - National Academy of Agricultural Research Management, Hyderabad has given a power point presentation on “Experiments for Agricultural Research”. At the outset, he explained in detail about the basic concepts like treatments, factors, levels, experimental units, observational units, the three basic principles of experimental designs and underlined the importance of adopting basic principles for getting valid and accurate results. Later, he explained in detail about various experimental designs like Completely Randomized Design, Randomized Block Design, Incomplete Block Design, Alpha Lattice Design, Augmented Design, Split Plot, Strip Plot and the situations under which these designs could be implemented for getting valid and conclusive results from the experiments. He further explained the differences between fixed and random effect models, correlation and regression analysis, importance of data

transformation techniques in agriculture, types of transformations, the conditions for the use of transformation techniques and handling of pooled data collected over a period of years or locations.

Dr. Ch. Sharada, Principal Scientist (Agril. Statistics), ICAR - Indian Institute of Oilseeds Research, Hyderabad delivered lecture on “Open Source Software for Statistical Analysis”. She outlined the importance of data analysis, organization and interpretation of the data and advantages of using various open source software for computation and analysis of the data. She stressed that among various open access softwares, R- Studio is a powerful programming language designed by the statisticians for data analysis. As per the instructions of the speaker, all the participants have downloaded the R-software and live demonstration was given on processing and management of the data for various statistical designs using R-Studio and XLSTAT.

In the valedictory address, Dr. T. Uma Maheswari, Associate Dean, Agricultural College, Sircilla detailed the importance of organization of data in Agriculture and highlighted that the programme had enhanced statistical skills of the participants. Associate Dean of the College along with the guest faculty Dr. A. Dhandapani and Dr. Ch. Sharada awarded certificates to the trainees. The session ended with the vote of thanks.



**PROFESSOR JAYASHANKAR TELANGANA STATE
AGRICULTURAL UNIVERSITY**

National Mathematics Day - 2021

One Day Workshop on
“Application of Statistical Techniques in Agriculture”
on 22.03.2022



Catalyzed & Supported by
National Council for Science & Technology Communication (NCSTC)
Dept. of Science & Technology, Govt. of India
and
Telangana State Council of Science and Technology (TSCOST)
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Organized by
AGRICULTURAL COLLEGE, SIRCILLA

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Associate Dean

Member
Dr. K. Kanaka Durga
Professor (Genetics & Plant Breeding)

Target Group : Young Scientists / Teachers of
Northern Telangana Zone of PJTSAU

Venue : Agricultural College, Sircilla

Topics & Guest Faculty

- Experiments for Agricultural Research**
Dr. A. Dandapani, Principal Scientist (Agril. Statistics)
NAARM, Rajendranagar, Hyderabad
- Open Source Software for Statistical Analysis**
Dr. Ch. Sharada, Principal Scientist (Agril. Statistics)
Indian Institute of Oilseeds Research
Rajendranagar, Hyderabad



**PROFESSOR JAYASHANKAR TELANGANA STATE
AGRICULTURAL UNIVERSITY**

Certificate

This is to certify that Mr./Ms./ has attended Workshop on “Application of Statistical Techniques in Agriculture” organized by Agricultural College, Sircilla on 22.03.2022. This programme has been organized as part of National Mathematics Day - 2021 celebrations, catalyzed & supported by National Council for Science & Technology Communication (NCSTC), DST, GoI and Telangana State Council of Science & Technology (TSCOST), Dept. of EFS&T, Govt. of Telangana.

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MEMBER SECRETARY
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ASSOCIATE DEAN
AGRICULTURAL COLLEGE, SIRCILLA

ఒక రోజు శిక్షణా కార్యక్రమం



రాజన్న సిరిసిల్ల,మార్చి 23 : భారత ప్రభుత్వము, తెలంగాణ రాష్ట్ర విజ్ఞానము. సాంకేతిక విభాగము వారి ఆర్థిక సహకారము సౌజన్యంతో రాజన్న సిరిసిల్ల జిల్లా సిరిసిల్ల,సర్దాపూర్ వ్యవసాయ కళాశాల, యందు. మార్చి 22 వ తేదీ మంగళవారం రోజున “వ్యవసాయంలో గణాంక పద్ధతుల అప్లికేషన్ అనే అంశంపై ఒక రోజు శిక్షణా కార్యక్రమములు నిర్వహించారు. జాతీయ గణిత దినోత్సవం 2021 నిర్వహించి హించారు. ఇందులో భాగంగా వ్యవసాయంలో గణాంకాల ప్రాధాన్య వినియోగము, కంప్యూటర్లు ఉపయోగించి డేటాను విశ్లేషించటం గణాంక విశ్లేషణ కోసం ఒపెన్ యాక్సెస్ సాఫ్ట్వేర్ అనే అంశాలపై డా॥ఎ. పి. దండపాణి , ప్రధాన ఆచార్యులు, నేషనల్ అకాడమీ ఫర్ అగ్రికల్చరల్ రిసెర్చ్, మానేజ్మెంట్, డా.సి. శారద, ప్రధాన ఆచార్యులు, జాతీయ నూనెగింజల పరిశోధనా స్థానము హైదరాబాద్ శిక్షణ ఇచ్చారు. ఈ శిక్షణా కార్యక్రమంలో వ్యవసాయ కళాశాల, సిరిసిల్ల, వరంగల్, జగిత్యాల, డిగ్రీ కళాశాల, సిరిసిల్ల శాతవాహన యూనివర్సిటీ, కరీంనగర్ లో పనిచేయుచున్న బోధన సిబ్బంది శిక్షణ పొందడం జరిగింది. ఈ శిక్షణా కార్యక్రమంలో వారు సందేహాలను నివృత్తి చేసుకున్నారు. వ్యవసాయ కళాశాల అసోసియేట్ డీన్ డాక్టర్ టి ఉమా మహేశ్వరి, ప్రొఫెసర్ డా. కె.కనకదుర్గ, పాల్గొని ఈ కార్యక్రమాన్ని నిర్వహించారు.

వ్యవసాయంలో గణాంక పద్ధతుల అప్లికేషన్ పై శిక్షణ

నాగావళి న్యూస్ రాజన్న సిరిసిల్ల,మార్చి 23,,భారత ప్రభుత్వం,తెలంగాణ రాష్ట్ర విజ్ఞాన,, సాంకేతిక విభాగం వారి ఆర్థిక సహకారం సౌజన్యంతో రాజన్న సిరిసిల్ల జిల్లా సిరిసిల్ల ,సర్దాపూర్ హో వ్యవసాయ కళాశాల, యందు. మార్చి 22 వ తేదీ మంగళవారం రోజున హో “వ్యవసాయంలో గణాంక పద్ధతుల అప్లికేషన్ అనే అంశంపై ఒక రోజు శిక్షణా కార్యక్రమములు నిర్వహించారు. జాతీయ గణిత దినోత్సవం 2021 నిర్వహించి హించారు. ఇందులో భాగంగా వ్యవసాయంలో గణాంకాల ప్రాధాన్య వినియోగము, కంప్యూటర్లు ఉపయోగించి హో డేటాను విశ్లేషించటం హో హో గణాంక విశ్లేషణ కోసం ఒపెన్ యాక్సెస్ సాఫ్ట్వేర్ అనే అంశాలపై డా॥ఎ. పి. దండపాణి , ప్రధాన ఆచార్యులు, నేషనల్ అకాడమీ ఫర్ అగ్రికల్చరల్ రిసెర్చ్, హో మానేజ్మెంట్, డా. సి. శారద, ప్రధాన ఆచార్యులు, జాతీయ నూనెగింజల పరిశోధనా హో స్థానము హైదరాబాద్ శిక్షణ ఇచ్చారు. ఈ శిక్షణా కార్యక్రమంలో వ్యవసాయ కళాశాల, సిరిసిల్ల, వరంగల్, జగిత్యాల, డిగ్రీ కళాశాల, సిరిసిల్ల హో శాతవాహన యూనివర్సిటీ, కరీంనగర్ లో పనిచేయుచున్న బోధన సిబ్బంది శిక్షణ పొందడం జరిగింది. ఈ శిక్షణా కార్యక్రమంలో వారు సందేహాలను నివృత్తి చేసుకున్నారు. హో వ్యవసాయ కళాశాల అసోసియేట్ డీన్ హో డాక్టర్ హో టి ఉమామహేశ్వరి, ప్రొఫెసర్ హో డా. కె.కనకదుర్గ , హో పాల్గొని ఈ కార్యక్రమాన్ని హో నిర్వహించారు.

