



# Department of Mathematics

## Newsletter (June, 2020-Jan, 2021)

**NATIONAL LEVEL E-QUIZ ON DISCRETE MATHEMATICS**

Department of Mathematics  
CMR Institute of Technology, Bengaluru

On 10<sup>th</sup> June 2020  
Monday

Dr. Girisha. A & Dr. P. Rajendra  
Contact: 9739760112  
Email: girisha@cmrit.ac.in  
Website: cmrit.ac.in

Quiz link: <https://forms.gle/7HZDgpcKkKfZSNA8>  
Link is will be open from 10am to 4pm on the day of quiz.

### Academia / Industry connect activities

Dept COE-Modeling of Dynamical Systems Organized STP on **“Computational Techniques in Calculus and Linear Algebra”** at CMRIT, Bengaluru From 21<sup>st</sup>-29<sup>th</sup> Dec 2020.

Dept COE conducted Webinar on 16<sup>th</sup> Dec 2020. Prof.Pradeep. G.Siddeshwar gave a talk on **“Dynamical System illustrative examples from Unstable Nano Liquid Systems”**

Dept COE organized a Webinar on 14<sup>th</sup> Aug 2020. Prof.K.A.Venkatesh,IITB gave a talk on **“Linearisation Using Operator Theory For a non Linear Dynamic systems”**,

Dept organised National level e quiz on Discrete Mathematics for UG students and conducted CET mock test for PU students. Many students across the nation participated in quiz and many students across the state took CET mock test and won prizes.

CET Mock Test for PU students

Clear students, CMR Institute of Technology is conducting CET Mock test to help the students to enhance their competitive skills and knowledge for the upcoming entrance exam. Make use of it!

Date: 2 June 2020  
Time: 10 am to 12.45 pm

Test Link: <https://cmrit.ac.in/CMR/CMR/CMR/CMR/CMR/CMR>

**MOCK TEST**

CONTACT: Dr. Girish A. 9739760112, Dr. P. Rajendra 9739761100, WEBSITE: cmrit.ac.in, EMAIL: girisha@cmrit.ac.in

The Department of Mathematics celebrated **“National Mathematics Day”** 2020 on 22<sup>nd</sup> Dec 2020. Various events were conducted as a part of the celebration. Many students from various institutes of the country participated in the various competitions held as a part of this event.

CMRIT Women cell and Anti sexual Harassment committee chairperson **Dr.K.Meenakshi** conducted a webinar on 2<sup>nd</sup> Dec 2020. Ms.Pavana Lingaiah, Advocate, POSH trainer, SASHA team member, Founding member of Monsoon Hal foundation discussed about elimination of violence against women.

CMRIT CICC Chairperson **Dr. K. Meenakshi** organised POSH (Prevention of Sexual Harassment) on 24<sup>th</sup> Nov 2020. The resource person **Prof. Preeja Sreedhar**, ISBR, Bengaluru, discussed about Prevention, Prohibition and Redressal of sexual harassment issues. Students had healthy interaction with the resource person.

CMR INSTITUTE OF TECHNOLOGY  
DEPARTMENT OF MATHEMATICS

**POSH ACTIVITY**

TITLE POSH: PREVENTION, PROHIBITION AND REDRESSAL MECHANISM

with Prof. Preeja Sreedhar,  
Faculty/ Corporate

### Inside this issue:

<b>ACADEMIA / INDUSTRY CONNECT ACTIVITIES</b>	<b>1</b>
<b>JOURNAL / PAPER PUBLICATIONS</b>	<b>2</b>
<b>FACULTY AWARDS &amp; RECOGNITIONS</b>	<b>2</b>
<b>FACULTY MOOCs</b>	<b>3</b>
<b>FACULTY TECH – TALKS</b>	<b>3</b>
<b>STUDENT ACHIEVMENTS</b>	<b>4</b>

## Journal / Paper Publications

**Prof. D. Prathap** published research paper titled "On Edge Bimagic labelling of Bistar graph" in AIMS.

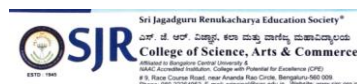
**Prof. Girisha A** presented research paper titled "i-Hamilton Laceability in Shadow Graphs" at International conference on Data Analytics, Intelligent Systems and Information security"

**Prof. Asha K N** presented reseach paper titled "Magnetic Repercussion on the Different Shaped Copper Nanoparticles to improve Vasodilatation effect in Stenosed Artery" in ICMPC2020 organized by IIT Indore.

**Prof. Asha K N** presented a review paper titled "Geometry of Stenosis and its Effects on the Blood Flow through an Artery-A theoretical Study" in EMEA 2020.

**Prof. S. Shankar Narayan** presented research paper titled "Computational simulation including interpretation of the importance of the immune system in tumor growth " in International virtual conference on bridging innovation Trends in Mathematics, Engg. And Technology..

**Prof. S. Shankar Narayan** published "A study of the blood flow using Newtonian and Non-Newtonian approach in a stenosed of artery".



To,  
Mr. Shankara Narayana S  
Assistant Professor,  
Department of Mathematics,  
C M R I T, Bangalore.

Dear Sir,

Warm Greetings from Sri Jagadguru Renukacharya College of Science, Arts and Commerce.

We thank you cordially for being generous in accepting our invitation to be a resource person to address our students on the topic "Real Life applications of Mathematics" on 21-01-2021.

Your talk was very informative, impressive and inspiring. Your command over the subject is greatly appreciable.

We expect the same kind of cooperation in our future endeavors.

Thank you once again,

21.01.2021

With Regards,

*Kavitha C*  
Kavitha C  
HoD of Mathematics

*Dr. Balakrishna M.N.*  
DR. BALAKRISHNA M.N.  
PRINCIPAL

**Dr. Nidhi S Vaishnaw** presented research papers

1.Mathematical simulation of Tumor dynamics in the presence of CD4 cells in chemotherapeutic drug intervention in EMEA intl conf

2.Modelling one risky airborne COVID 19 using SEIR model and investigating the importance of social restriction in regulating the transmission" in ICAFD Conf

**Prof.Uma Raju** published a research paper Fluid dynamics a broad review in JSST.

**Prof.Pratap .D** published a research paper On Edge magic labeling of bistar graphs in AMSJ

**Prof.Meenakshi** published a research paper A Study on Some Mathematical Concepts using Decomposition of Graphs in JSST and factorisation and abeling IINsemigraphs in AMSJ

**Prof.Girisha** published a research paper titled Edge fault toleraqaqt Hamiltonian laceability in brick product of graphs. In Journal of Physics conference series

**Prof.Rajendra .P** published Modeling of dynamical systems through deep learning in Biophysical Reviews and Modeling of dynamical systems through ML in Advances and Applications in Mathematical Sciences

**Prof.Girisha** published a research paper titled Hypoedge Hamiltonian laceability in graphs. In Journal of Physics conference series

There is geometry in  
the humming of the strings,  
there is music in the spacing  
of the spheres.

-Pythagoras

Pure mathematics is, in its way, the poetry of  
logical ideas.

(Albert Einstein)

## Faculty Awards &amp; Recognitions

## QUESTION &amp; ANSWER SESSION



**Prof. Meenakshi** was a resource person in National webinar on Linear Algebra and Graph Theory at Aiman College of Arts and Science for Women, TN

**Prof. Shankar Narayan** delivered a talk on Real life applications of Maths at SJR college of Arts, Science and Commerce, Bengaluru

**Dr. K. Meenakshi** was the resource person in the online webinar on Mathematics of Viruses at Indra Gnadhi College for Women, Trichy, TN



## Faculty MOOC Courses

FACULTY NAME	NAME OF COURSE
Dr.K. MEENAKSHI	MATH ALGEBRA
Dr.HANUMANTHA RAVI	Non-parametric Statistical Inference Scientific Computing using MATLAB
Prof.PRATAP.D	INTRODUCTION TO CALCULUS
Dr.SHWETA GAUR	CREATIVE THINKING
Dr.NIDHI VAISHNAW	MODELING ANALYSIS AND APPLICATIONS Scientific Computing using MATLAB
Dr.RAJENDRA.P	SCIENTIFIC COMPUTING USING MATLAB
Dr.BHARTI SHARMA	MODELING ANALYSIS AND APPLICATIONS
Prof.UMA RAJU	LEARNING HOW TO LEARN
Prof.SHANKAR NARAYAN	WHAT IS DATA SCIENCE?
Prof.ASHA.K.N	PATENT DRAFTING FOR BEGINNERS
Prof.THULASI.L	Introduction of programming using Matlab
Dr.GIRISHA.A	MATH ALGEBRA FOR ENGINEERS

## Faculty Tech-Talks

FACULTY NAME	TECHTALK TOPIC
Dr. K. Meenakshi	Modified Simpson Method for solving Differential Equations
Prof. Shankar Narayan	Principal Component Analysis
Dr. Nidhi Vaishnav	Mathematical modelling of Swine Flu
Dr. Rajendra P	Support Vector Machines
Dr. Shweta Gaur	Theory Of Relativity
Dr. Girisha A	Condorcet Voting
Prof. Pratap D	Behaviour of Operators on Products of functions
Prof. Uma Raju	Page Rank Algorithm
Prof. Bharti Sharma	On relations between Theorems Of Vector Calculus
Prof. Hanumantha Ravi	Some Algebra behind the Mechanics of some logics
Prof. Asha K N	Complex Numbers

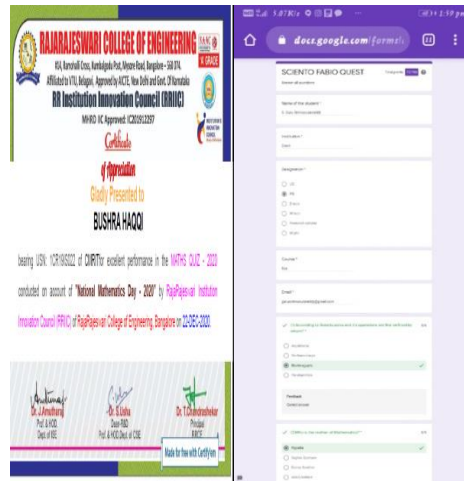
## STUDENT ACHIEVEMENTS

National and International Level

**Abirami Sreeranganathan, Bushra Haqqi, Alok Kumar and Naveena MG** of CMRIT have participated in the International Youth Math Challenge 2020 (IYMC 2020) and have been accorded Silver Honour/ Bronze Honour for having figured in the Top (10%/ 15% of all the participants respectively.

**Buahr Haqqi** received e certificate in the MATHS QUIZ - 2020 on account of "National Mathematics Day - 2020" by RajaRajeswari Institution Innovation Council (RRIC) of RajaRajeswari College of Engineering, Bangalore on 22-DEC-2020.

Student Name	USN	Achievements
<b>Abirami Sreeranganathan</b>	<b>1CR19IS005</b>	<b>Silver honour (top 7%)</b>
<b>Bushra Haqqi</b>	<b>1CR19IS022</b>	<b>Silver honour (top 8%)</b>
<b>Alok Kumar</b>	<b>1CR18EC013</b>	<b>Silver honour (top 10%)</b>
<b>Naveena MG</b>	<b>1CR19EC121</b>	<b>Bronze honour (top 15%)</b>



**Bushra Haqqi, Divya.R and Srinivasulu** participated in Science Fabio Quest an international science quiz competition and received e certificate for their excellent performance in the competition

