

# DEPARTMENT OF MATHEMATICS

## About the Department

The Department of Mathematics aims at providing in-depth knowledge of the subject which enables students to pursue their career in diverse range of fields like banking, civil services, corporate sector, actuarial sciences, teaching, research and many more. For the overall development of students, varied range of activities are organized which includes talks, seminars, workshops, quizzes, field visits, excursions and fun events.

**Teacher In-Charge:** Dr. Ritu Arora

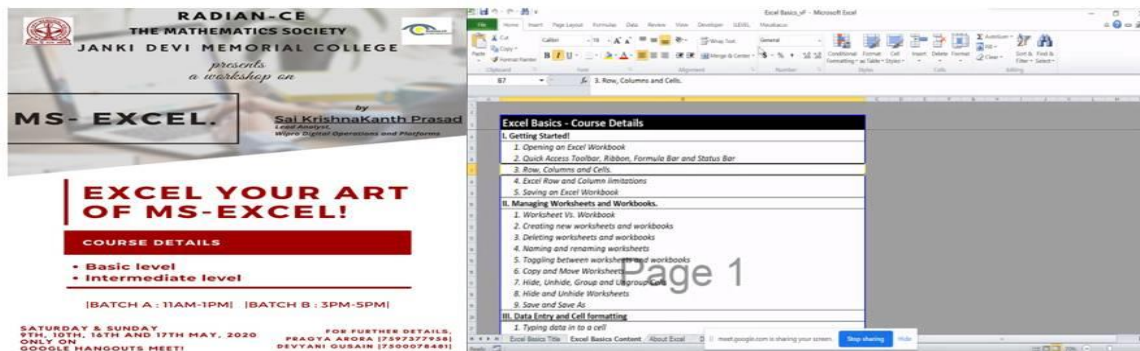
**Association In-Charges:** Ms. Geeta, Dr. Rashmi Rani

**Tenure :** 2019-2021

## Activities 2019-2020

The Department of Mathematics, Janki Devi Memorial College organized an online certificate **workshop** on “**MS Excel: Basics and Intermediate**”. The workshop was conducted by Sai Krishnakanth Prasad, Lead Analyst at Wipro Digital operations and platforms on Google Hangouts meet. The sessions were held on 9<sup>th</sup>, 10<sup>th</sup>, 16<sup>th</sup> and 17<sup>th</sup> of May, 2020. The workshop was attended by 50 participants, students as well as faculty. Each session was interactive and informative and participants were able to understand as well as communicate with the speaker at ease. The workshop was very elaborate and achieved positive feedback from each participant. It turned out to be a great opportunity to learn a skill of such significance.

## MS Excel Online Certificate Workshop



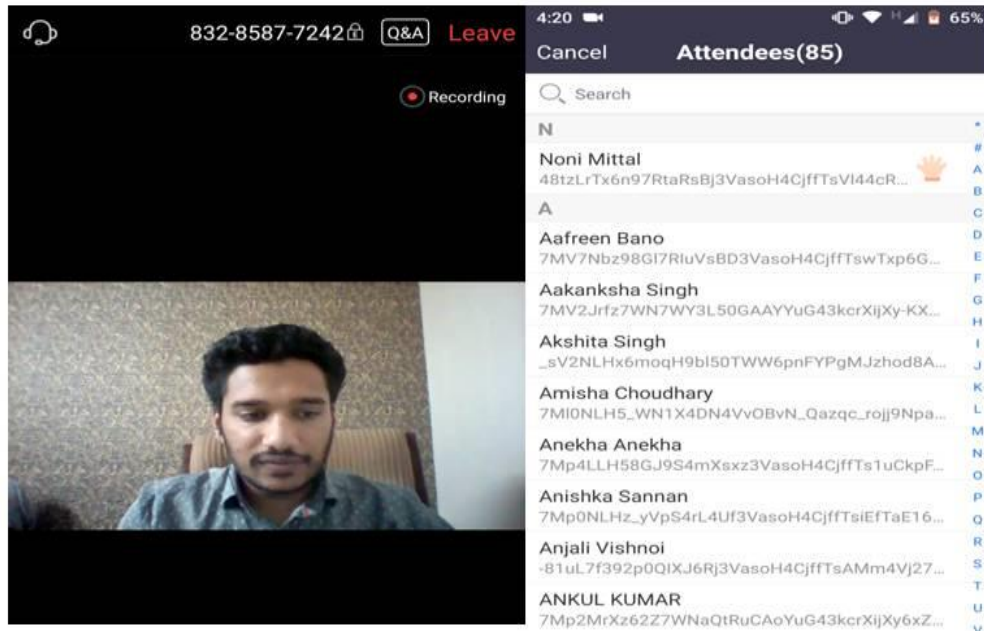
Picture 1: The poster for the workshop.

Picture 2: Online session of the workshop.

The Department of Mathematics, Janki Devi Memorial College organized a **webinar on Data Analysis**. The session was held on 27<sup>th</sup> April 2020 at 4pm on Zoom Application. The speaker for the session was Mr. Shivansh Garg, CEO and Founder of a start-up called Young Engine. Mr. Shivansh explained the importance of Data Analysis and its role in every industry. He also threw some light on LinkedIn profiles, importance of internships and preparation for MBA.

The session saw participation of around 100 students as well as faculty and was open for all Delhi University colleges. It was a very interactive session with the question answer round lasting almost 45 minutes. The event turned out to be a great success as each student benefited immensely from the webinar

# Webinar on Data Analysis



**Picture 1: Speaker addressing the attendees**

**Picture 2: List of participants of the webinar**

The Department of Mathematics, Janki Devi Memorial College organized an **interactive session** on the **Young Leaders Program (YLP)** introduced by Indian School of Business. The session was held at the Seminar Room on 5th March 2020 at 1:30 pm. The speaker of the session was Mr Yashwant Pulumati-Senior Manager Admissions at ISB. The session was aimed at giving a clear vision about the future to MBA aspirants, showing them various career options and inspire them by stories of self-made entrepreneurs. The session was open for all the departments, most of the students asked their questions and queries regarding future prospects. The event turned out to be a great success and the students left with new options to explore and research about.

## Talk by Indian School of Business



**Picture 1: Speaker addressing the students.**

**Picture 2: Faculty and students with the speaker.**

A **certificate program: The Bystander Intervention Program** in collaboration with the University of Muenster, Germany on 3<sup>rd</sup>, 5<sup>th</sup>, 6<sup>th</sup> and 10<sup>th</sup> February, 2020 was conducted in Computer Lab-3 in Janki Devi Memorial College. The program was conducted by Christina Nieder, a research scholar at University of Muenster. The session was held for students of all three years. 166 students of the Mathematics Department completed the program organized by JDMC in collaboration with the University of Muenster. The teacher coordinators present at the event were Ms. Teena Kohli and Ms. Karishma Ahlawat.

The program included a survey, a few videos and informative session, and another survey at the end of the program, all online. The topics covered were Gender, Gender Roles, Sexual Violence and Bystander Intervention. The session was very informative and talked about issues sidelined in regular curriculum. Apart from the survey, the program made the students aware about issues generally not talked about.

## Certificate Workshop: Bystander Intervention Program



**Picture 1: The students attending the program.**

**Picture 2: The speaker explaining the program to the students**

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## Distinguished Speaker Series

The Department of Mathematics, Janki Devi Memorial College organized a **public lecture** as part of the **Distinguished Speaker Series** in celebration of the Diamond Jubilee of the college. The event was held on 23<sup>rd</sup> January, 2020 at JDMC. The speaker for the event was Professor P. B.Sharma, Vice chancellor of Amity University. Prof. Sharma held the lecture on “**Education for Development and Human Excellence**”. Objective of the lecture was to enlighten the students on how education plays an important role in the Development of a country.

The event began with Teacher In-charge, Dr. Ritu Arora, Prof. Sharma and other faculty members lighting the lamp to commence the day. Prof. Sharma also planted a sapling as part of the college tradition, followed by felicitating the honorable speaker with a memento by Dr. Ritu Arora as token of appreciation. His speech included mentions of Dr. Kalam’s VISION 2020, analysis of challenges, opportunity and current world standing of the country in different fields. Throughout the speech, students were captivated by the insights shared by Prof. Sharma. In conclusion, he gave a short speech on how Mathematics is related to Indian Mythology. It was an extremely informative and learning experience as the students got the opportunity to learn from such an eminent speaker and a pioneer in the technical field.

## Distinguished Lecture Series



Radian-ce, The Mathematics Society conducted **MathBola-The Mathematical Tambola** in the college annual fest Symphony 2020. A fun event aimed at testing mathematical, analytical and logical skills of students. It was organized in room no. 14 and saw a good participation of 40 students across different universities.

**Winners of Mathbola were:**

**1st house - Shruti Gupta**

**2nd house - Lavkesh**

**1st line - Monisha Pal**

**2nd line - Riya Sharma**

**3rd line - Tanish Malik**

The winning participants received a cash prize of Rs 2000, Rs 1000, Rs 1000, Rs 1000 and Rs 1000 respectively. Students really enjoyed the event and the event concluded successfully.

## Mathbola 2020



**Picture 1: Participants at the event.**

**Picture 2: Winners of the event with the faculty**

Radian-ce, The Mathematics Society organized the event **Paper-Mania** (Fun with Paper) on the second day i.e., 9th January, 2020 of the three-day annual cultural festival Symphony of Janki Devi Memorial College. A total of 20 teams participated in the event from various colleges of the University of Delhi and other universities. In the event, participants showcased their talent of paper cutting and crafting by making 3D models on the theme, **SOLIDARITY AGAINST VIOLENCE**. It was judged by:

Ms. Rita Grover, Faculty, Janki Devi Vocational Centre.

Ms. NeeluVerma, Assistant Professor, Department of Commerce, Janki Devi Memorial College.

**Following were the winners of the event:**

**First Position - Ankur Raman-Ramjas College & Gaurang Garg-Zakir Husain Delhi College**

**Second Position – Tulsi Aggarwal-Keshav Mahavidyalaya & Shalini Mittal-Keshav Mahavidyalaya**

**Third Position – Saifali-Gargi College**

## Papermania 2020



**Picture 1: Winners with the faculty**

**Picture 2: Participants at the event.**

**TEACHER'S ENRICHMENT WORKSHOP**  
**on**  
**LINEAR ALGEBRA, CODING THEORY AND CRYPTOGRAPHY**  
**funded by**  
**NATIONAL CENTRE FOR MATHEMATICS**  
**(a joint centre of IIT Bombay and TIFR, Mumbai)**

The Department of Mathematics, Janki Devi Memorial College organised Teacher's Enrichment Workshop (TEW) funded by National Centre for Mathematics (NCM), a joint centre of IIT Bombay and TIFR, Mumbai for faculty members of various universities from 18<sup>th</sup>-23<sup>rd</sup> November, 2019. The objective of the workshop was to give participants an introduction to linear algebra and illustrate its importance through interesting and diverse applications to coding theory and cryptography.

The programme started with the Principal of the college, Dr. Swati Pal, addressing the gathering and felicitating Prof. Dinesh Khurana, Department of Mathematics, Panjab University who was also one of the organisers of the workshop by presenting a memento.

The following persons acted as speakers:

1. Prof. R. B. Bapat, Professor, Indian Statistical Institute, Delhi.
2. Prof. Dhananjay Dey, Scientist F, DRDO, Delhi.
3. Prof. Madhu Raka, Panjab University, Chandigarh.
4. Prof. Dinesh Khurana, Panjab University, Chandigarh.

It was attended by 33 faculty members from colleges of University of Delhi, Aligarh Muslim University, Jamia Millia Islamia, IIT Delhi, M. M. Degree College - UP, Invertis University - Bareilly, K. R. Mangalam University, Shri G. S Institute of Technology and Science - Indore, St. Joseph's College - Bangalore, K.J.Somaiya Institute of Engineering and Information Technology – Mumbai. It was an extremely useful learning experience as participants got the opportunity to learn from the best experts in the field of linear algebra, coding theory and cryptography.



# Teacher's Enrichment Workshop



**Picture 1: Workshop being held at Janki Devi Memorial College**

**Picture 2: Speakers and participants of the workshop**

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The Department of Mathematics conducted a seminar on “**Emerging Careers**” held by **Pearl Academy**, one of the leading institutes of fashion and design in the country. The session was held on 7<sup>th</sup> November, 2019 in the Seminar Room. It was presided by Ms. Margarita Soma, career counselor at Pearl Academy. The session was all about the various career options after bachelors for students of Mathematics and otherwise as well. It was very interactive and cleared many of the misconceptions of the students.

## Emerging Careers



**Picture 1: Ms. Margarita Soma addressing the students.**

**Picture 2: Students engaged in an interactive session with Ms. Soma.**

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The Department of Mathematics conducted a **talk** on “**Mathematics in the Entertainment Industry: The Art and Science of Animation**”, on 7<sup>th</sup> November, 2019 in the Seminar Room. The speaker for the event was Dr. Jag Mohan Rai, a professor of P.G.D.A.V College. Dr. Rai gave the students an insight on the application of Mathematics in the Entertainment Industry, mainly animation. The session included screening of a few short movies with animations explained by Dr Rai. The students were enlightened on such an uncommon and interesting topic, relating it to Mathematics was unique and attractive to the students

## Mathematics in the Entertainment Industry: A Talk



**Picture 1: Dr. Jag Mohan Rai being facilitated by Dr. Ritu Arora.**

**Picture 2: Students and faculty members attending the session.**

The Department of Mathematics conducted its annual tradition of **movie screening** on 21<sup>st</sup> September. The students were presented with the dynamic life story of the great Indian Mathematician – Srinivasa Ramanujan. The event was inter departmental, thus attracting many students for the screening: “The Man Who Knew Infinity”. The screening aimed at inspiring students and encouraging them. The event was well conducted under the supervision and presence of the faculty members of Mathematics Department.

## Movie Screening



**Picture 1: Students and faculty attending the Movie Screening.**

**Picture 2: “The Man Who Knew Infinity”**



The Department of Mathematics held its annual **Freshers Party** on 22<sup>nd</sup> August, 2019. The Miss Fresher competition was held in 3 rounds comprising of Ramp Walk, Talent Round and Question-Answer round. The event also had performances from the 2<sup>nd</sup> and 3<sup>rd</sup> years. The Students Union for the year 2019-2020 was felicitated by Dr. Neelam Sharma, Dr. Ritu Arora and Dr. Sharda Gautam. The event was graced by Dr. Swati Pal, principal, JDMC. The day ended with a DJ session, thus concluding the most awaited event of the semester.

## Freshers' 19



Picture 1: Winners of Freshers' 2019 with association heads.

Picture 2: Newly elected Students Union with faculty members.

## Students and Faculty members after the collection drive for Assam Relief Fund.

- RADIAN-CE, the Department of Mathematics joined hands with Team Avani, the environmental society of Janki Devi Memorial College and started an Assam Relief Fund. All faculty members and students actively participated and ended up raising Rs. 8000 of which items like rice, sugar, salt, biscuits, sanitary pads, clothes, general medicines etc. were bought. All items were then handed over to Team Avani who successfully delivered it to Goonj, organization working for the relief fund.
- The Department of Mathematics: RADIAN-CE held its annual Elections for the student union for the year 2019-2020 on 8 August. The entire department set out to vote in Computer Lab -3 on 8 August. By 12:30 pm, the elections were concluded and the results were declared.

Pragya Arora – President

Bhavika Arya – Vice President

Devyani Gusain – Treasurer

Prachi Sharma – General Secretary

The newly formed student union now shoulders the responsibility of carrying forward the department's legacy after a fairly held election.

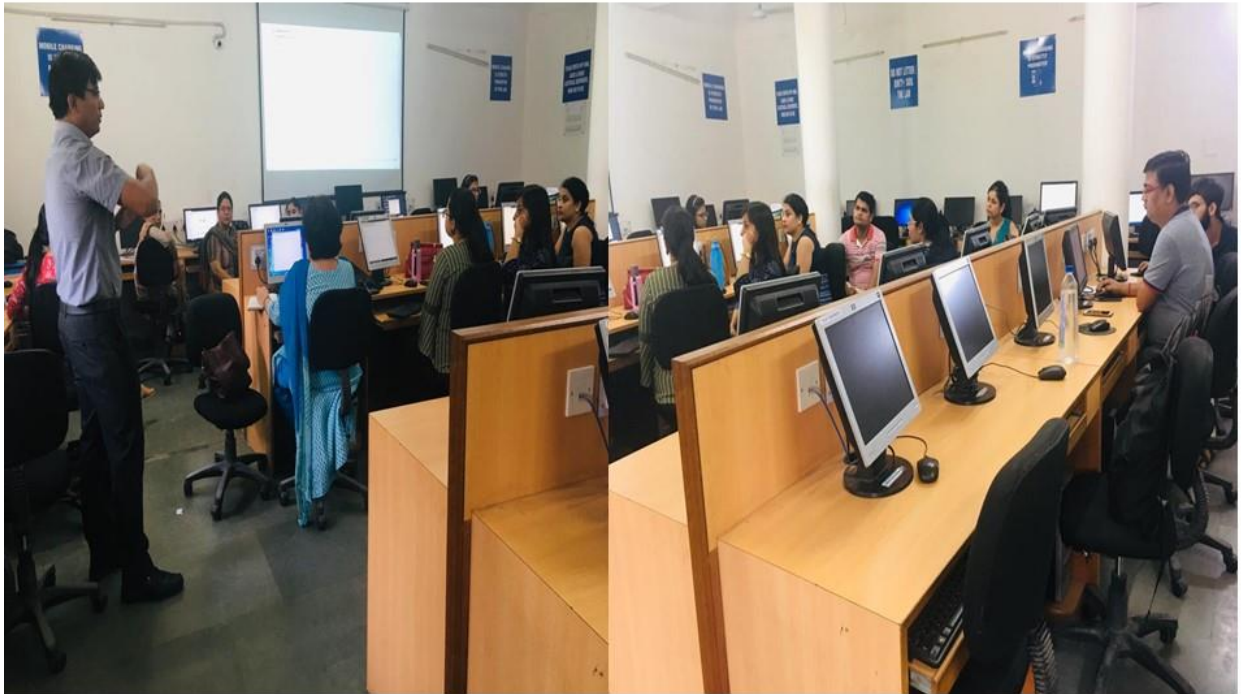
## Department Elections



Picture 1: Elections being conducted on 8<sup>th</sup> August, 2019.

Picture 2: The newly elected Students Union with the Faculty Members.

The Department of Mathematics organized a **training session** on “**Introduction to Wolfram Mathematica 12.0**”. The session held on 2 August in Computer Lab-3 had duration of 3 hours, 10:00am - 1:00pm. The speaker of the session was Mr. Devashish Bhattacharya from Scube Scientific, exclusive partner of Wolfram Research. The hand on session was held to introduce and explain the new features of the software and its application in various sectors. The session was attended by 14 faculty members as well as students.



**Faculty members being briefed at the Mathematica Training Session held in campus on 2<sup>nd</sup> August, 2019.**