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 2020-2021

Farewell 2021

The Department of Mathematics, Janki Devi Memorial College organized a Virtual Farewell for its graduating batch of 2021. The event was held on 28th June, 2021 on Zoom, an online platform.

It was attended by the entire department, students as well as faculty.

The event started with a heartfelt farewell message by Dr. Sharda Sharma Gautam, Teacher In-

charge, Department of Mathematics. The event was graced by Dr. Swati Pal, Principal, Janki Devi Memorial College who enlightened the students with her inspirational words and extended her best

wishes to all the students. A lot of performances from both 2nd and 1st year students were displayed

and much enjoyed by everyone.

The farewell was based on the theme "Olde Worlde" and was conducted in two parts. The entries

for Round 1 were taken in advance and judged by the judges, Ms. Sonia and Ms. Chanpreet Kaur.

Based on Round 1 results, entries of Round 2 were taken and the results were announced on the

day of the farewell along with Round 3.

The results are as follows: -

Miss Farewell 2021- Megha Chauhan

First Runner Up- Nikita

Second Runner Up- Rishita

Ms. Fashion Plate- Renu Meghwal

Ms. Million Dollar Smile-Shubhica

Ms. Graceful- Athira Rajan

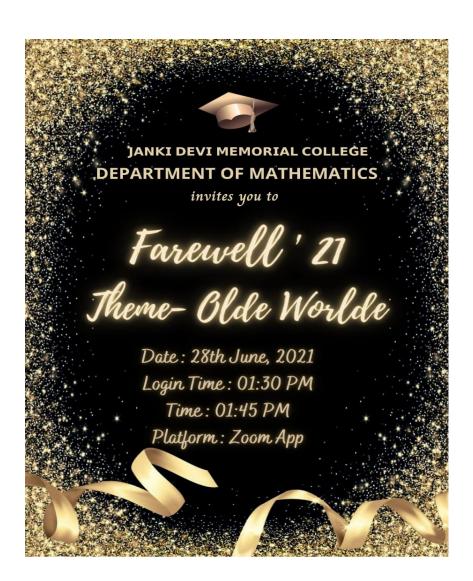
Ms. Nightingale- Priyanka Joshi

Gift vouchers were given to all the finalists.

Farewell speech was given by some students of 3rd year. A goodbye video was also displayed for the graduating batch at the end. Thereafter, Dr. Ritu Arora, gave a hearty and insightful farewell message to all the students.

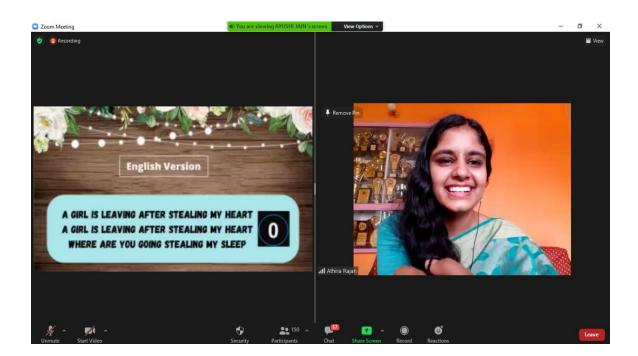
To conclude, Farewell 2021 was great, filled with nostalgia, fun and excitement.

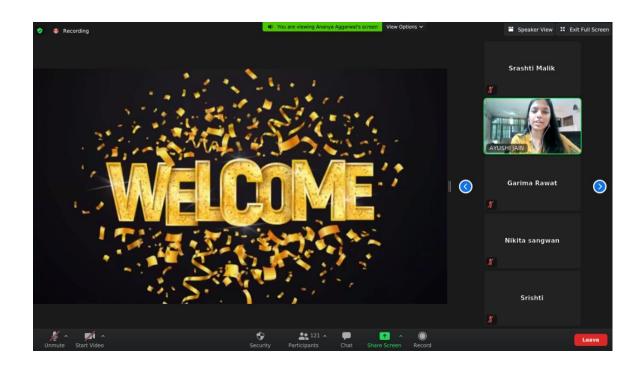
Poster of Farewell 2021





Pictures of Farewell 2021







National Webinar

On

"National Education Policy 2020 and Its Implications on Mathematics"

The Department of Mathematics, Janki Devi Memorial College, University of Delhi organized a national webinar on "National Education Policy 2020 and Its Implications on Mathematics". The webinar was organized for all the students and faculty members of different universities and colleges on 16th April, 2021.

Objective of the webinar was to make participants familiar about National Education Policy 2020 and its significant provisions involving mathematics and how it provides a platform to build, nurture, foster, encourage and multiply mathematical thinking.

The webinar started with the welcome address proposed by Dr. Ritu Arora, Teacher In-charge, Department of Mathematics. She highlighted the importance of holistic approach, interactive teaching and research-oriented education needed in today's world.

The resource person for the webinar was Prof. Shobha Bagai, Cluster Innovation Center, University of Delhi.

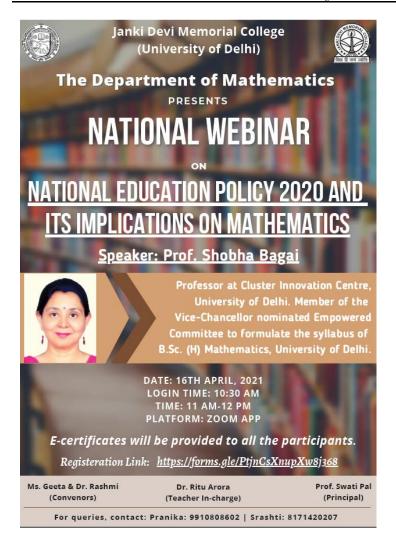
She explained the key points of National Education Policy (NEP) 2020 in detail. She elaborated the fundamental principles of NEP and simplified why we need NEP 2020. Prof. Bagai discussed about the previous NEPs and highlighted the changes in NEP 2020.

There was an overwhelming response from the audience which was extremely interactive throughout the Q&A round and proved to be yielding.

The webinar was attended by more than 245 participants from different domains and colleges. The webinar ended with a vote of thanks proposed by Ms. Pranika, President, Students' Union (2020-21), Department of Mathematics.

Feedback, using Google form was also sought after the event. The analysis of the responses from the participants revealed that approximately 89.9% of the participants rated the webinar in the higher category in the overall rating and 89.1% expressed their willingness to attend such programmes in future.

Poster of the webinar on National Education Policy 2020 and Its Implications on Mathematics

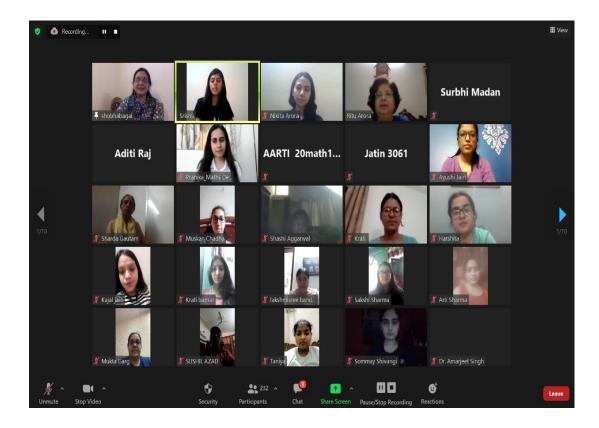


Pictures of the webinar on National Education Policy 2020 and Its Implications on Mathematics









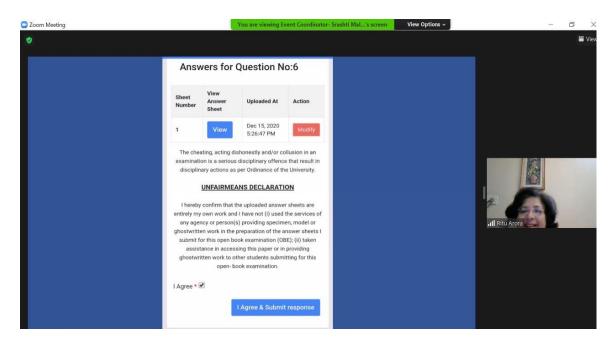
OBE Guidance session

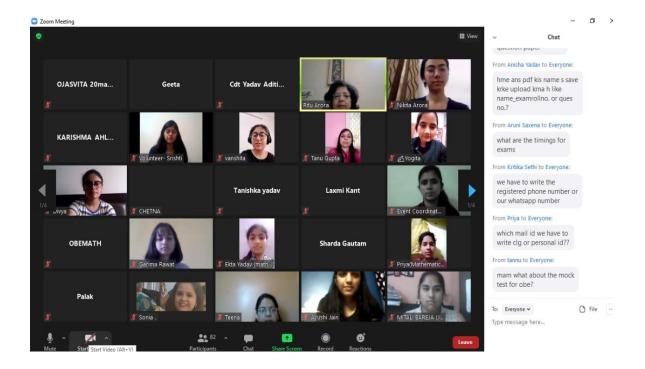
The Department of Mathematics, Janki Devi Memorial College organized an informative session regarding OBE (Open Book Examination) for the 1st year students of the department. An online Zoom meeting was organized on March 12, 2021 to explain the procedure of OBE.

The total numbers of attendees including faculty members were more than 80. The students of third and second year who previously appeared for online examination shared their experience, provided guidance and useful tips regarding the exam. Queries regarding OBE examinations were addressed by faculty members and students familiar with OBE exams.

It turned out to be very helpful and informative session for the students. It also gave comfort and confidence to the students.

Pictures of OBE Session







Alpana, Mathematical Rangoli Competition

Radian-ce, The Mathematics Society organized an inter-college Mathematical Rangoli Competition-*Alpana* from 1:30 pm to 3:30 pm on February 19, 2021 as a part of the annual college festival, Symphony 2021. Due to the pandemic situation of Covid-19, competition was held online on the Zoom platform.

Prof. Swati Pal, Principal, Janki Devi Memorial College welcomed the participants with her inspiring words and boosted their confidence.

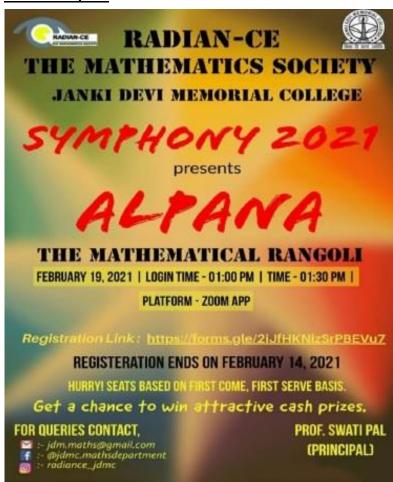
The judges for the competition were Ms. Geeta Kwatra, Artist, Ms. Deepti Sethi and Dr. Tanu Gupta, Faculty, Janki Devi Memorial College. A total of 20 students from various colleges were shortlisted on the basis of first-cum-first serve for the competition, out of which 5 students appeared on the day of the competition. The students put their best foot forward and took part in the competition with zest. Innovation and creation are the words that best describes their efforts. Their respective combination of Maths and art were tempting.

The event was attended by more than 35 participants including students and faculty members.

Deepak, a student of Sarada Ukil School of Art, Delhi Polytechnic University was announced as the winner of the competition.

The prize winner was felicitated by cash prize of Rs. 2500 and certificates were given to the all the participants.

Poster of Alpana



Pictures of Alpana









Unveiling Math- Paper Presentation Competition, Symphony 2021

Radian-ce, The Mathematics Society organized an inter-college Paper Presentation Competition from 11:30 am to 1:30 pm on February 17, 2021 as a part of the annual college festival, Symphony 2021. The theme of the competition was *Vedic Math.* Due to the pandemic situation of Covid-19, competition was held online on the Zoom platform.

The judges for the competition were Dr. Neha Agrawal, Faculty, Kiroli Mal College, Ms. Teena Kohli and Dr. Arti Sharma, Faculty, Janki Devi Memorial College. 8 students from various colleges participated in the competition and presented the concepts of Vedic Math including its origin, 16 Sutras, applications in different fields as well as benefits like increased concentration and innovation ability.

The event was attended by more than 70 participants including students and faculty members. During the competition a short video clip on *Vedic Math* was also shown.

The result of the event is as follows:

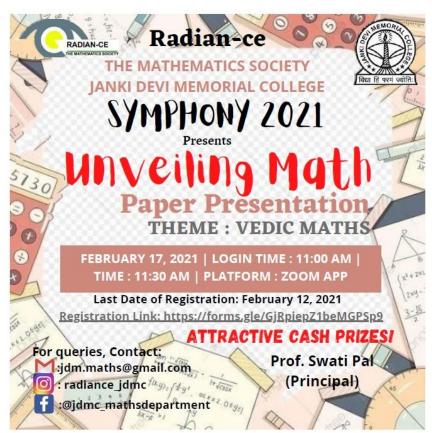
First prize- Ishita Pandey, Indraprastha College for Women, University of Delhi.

Second prize- Adityendra Tiwari, Hansraj College, University of Delhi.

Third prize- Simran Ahlawat, Janki Devi Memorial College, University of Delhi

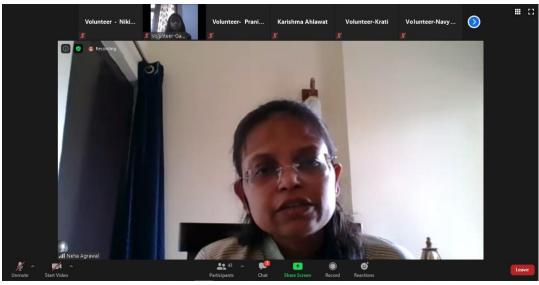
The prize winners were felicitated by cash prizes of Rs. 2500, 2000, 1500 respectively and certificates were given to all the participants.

Poster of Unveiling Math, Paper Presentation Competition

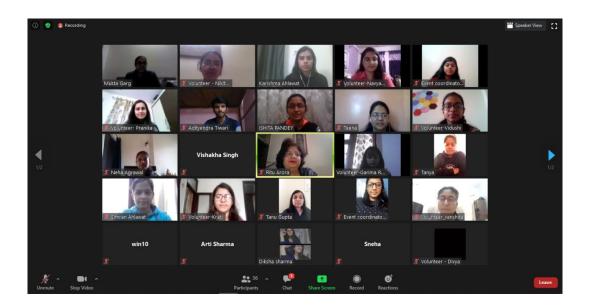


Pictures of Unveiling Math, Paper Presentation Competition









International Webinar

On

"Image Compression and Linear Algebra"

The Department of Mathematics, Janki Devi Memorial College, University of Delhi organized an International Webinar on "Image Compression and Linear Algebra". The webinar was organized for all the students and faculty members of different universities and colleges on 28th January, 2021.

Objective of the webinar was to showcase how Linear Algebra can make the Image Compression process faster and more efficient.

The webinar started with the welcome address proposed by Dr. Ritu Arora, Teacher In-charge, Department of Mathematics. She told how linear algebra comprises of methods which help a lot in real world especially in the study and manipulation of images.

This was followed by Principal Prof. Swati Pal; her enlightening words provided a necessary boost to the session.

The resource person for the webinar was Prof. Rekha Thomas, Walker Family Endowed Professor in Mathematics, University of Washington, Seattle.

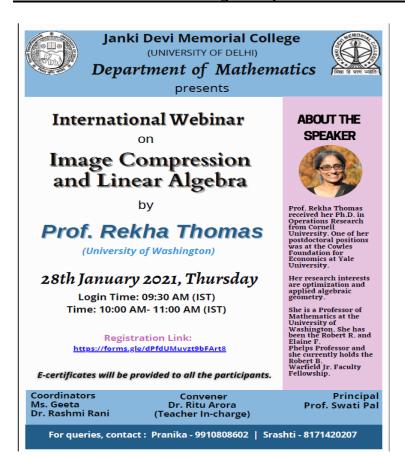
She explained how SVD (Singular Value Decomposition) is extensively used in image compression process resulting in saving computer's memory. She also discussed the basic idea behind an pixel image and how linear algebra plays a role in it.

There was an overwhelming response from the audience which was extremely interactive throughout the Q&A round and proved to be yielding.

The webinar was attended by more than 300 participants from different domains and colleges. The webinar ended with a vote of thanks proposed by Ms. Pranika, President, Students' Union, Department of Mathematics.

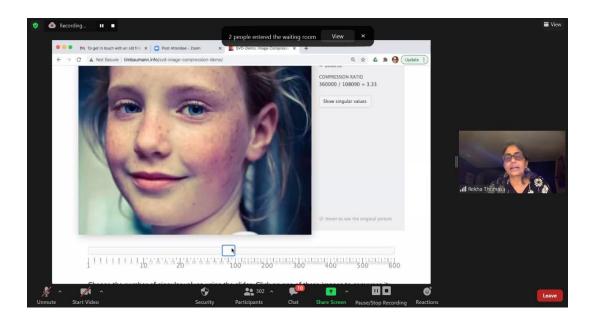
Feedback, using Google form was also sought after the event. The analysis of the responses from the participants revealed that approximately 94.7% of the participants rated the webinar in the higher category in the overall rating and 90.6% expressed their willingness to attend such programmes in future.

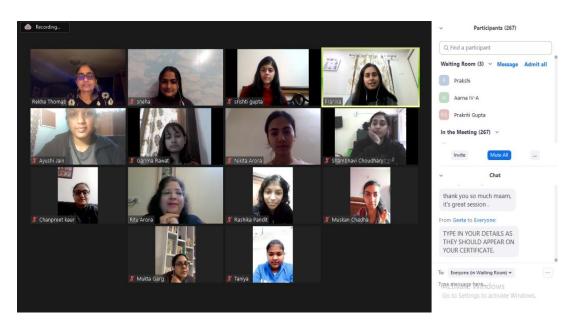
Poster of the webinar on "Image Compression and Linear Algebra"

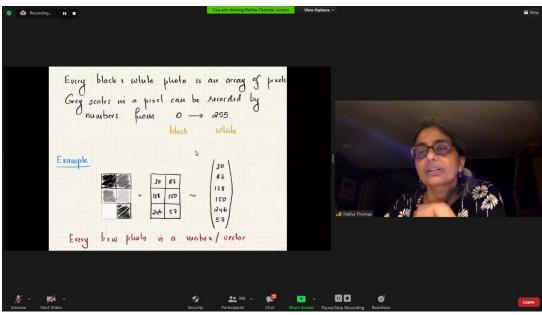


Pictures of the webinar on "Image Compression and Linear Algebra"







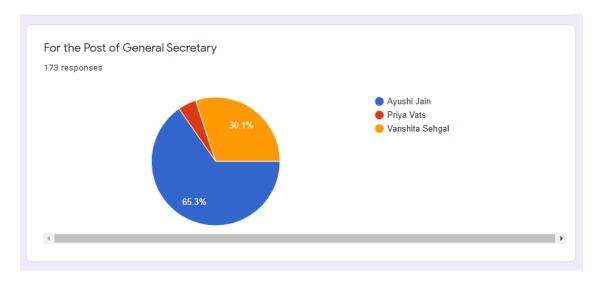


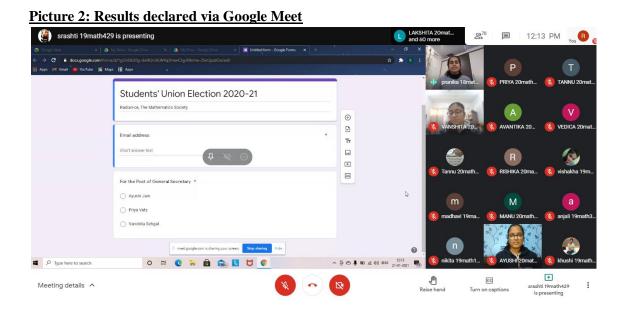
Departmental Elections for the Post of General Secretary

RADIAN-CE, The Mathematics Society conducted its annual Departmental Election for the academic year 2020-2021 to elect General Secretary from the 1st year students on 20th January, 2021. The entire department set out to vote digitally via Google forms on 20th January, 2021. The total number of votes casted by the students between 8:30 am – 11:15 am were 173. The results were declared via Google meet, an online platform at 12:00 pm on 21st January, 2021. Everything turned out to be so smooth, without any discrepancies and results were displayed with proper statistics as:

Ayushi Jain – General Secretary

Picture 1: Statistical view of results





Freshers' 2021

The Department of Mathematics, Janki Devi Memorial College organized its Virtual Freshers' Party on 12th January, 2021. The event was held on Zoom app, an online platform. It was attended by the entire department, students as well as faculty.

Dr. Ritu Arora, Teacher Incharge, Department of Mathematics, welcomed the students with her warm words. The event was graced by Prof. Swati Pal, Principal, Janki Devi Memorial College. Students felt motivated by her inspiring words. Ms. Teena Kohli and Dr. Arti Sharma were the judges of the Competition.

Theme of the Freshers' Party was 'Anyone But You'. The Miss Freshers' Competition was held in 3 round: Self Introduction, The Talent Hunt and The Questionnaire Round. Students were asked to send their freshly recorded videos in the first two rounds, prior to the event and the 3rd round was held live, which was further conducted in three different levels: Guess the movie by its dialogue, Guess the song by its music, The Questionnaire Level.

A lot of performances from 2nd and 3rd years, were enjoyed by one and all.

The three winners were felicitated by gift vouchers.

Miss Freshers': Vanshita Sehgal

First Runner-up: Lakshita Madaan

Second Runner-up: Akshita

Janki Devi Memorial College

Department of Mathematics

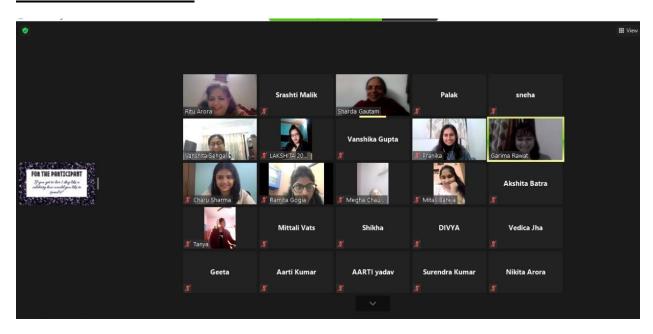
presents

Freshers 21

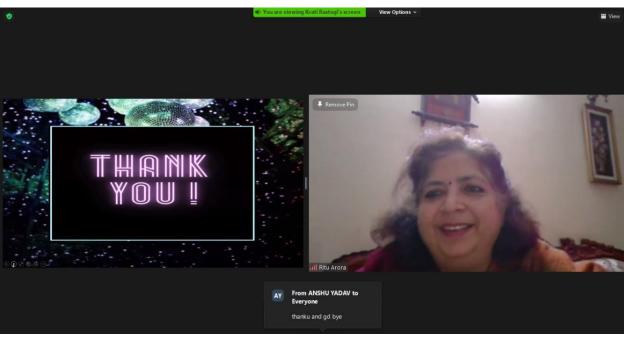
Date: January 12, 2021
Login Time: 2:45 P.M.
Time: 3:00 P.M.
Theme: Anyone But You
We invite you all for Virtual
Freshers on Zoom app

Live now, worry later.

Pictures of Freshers' 2021









OBE Guidance Session

The Department of Mathematics, Janki Devi Memorial College organized an informative session regarding OBE (Open Book Examination) in December 2020 for the students of II and III years of the department. An online Google meet was organised on December 10, 2020 to explain the procedure of OBE.

There were two sessions and was attended by 200 students. Few Students of Batch 2020 who passed out by giving online examination were invited to share their experience, provide guidance and useful tips regarding the exam. Queries regarding OBE examinations were addressed by the faculty members and students familiar with OBE exams.

It turned out to be very helpful session for the students who had appeared for OBE in August. It gave comfort and confidence to the students.

Pictures of OBE Guidance Session





National Webinar

On

"How We Can Secure Our Online Communication"

The Department of Mathematics, Janki Devi Memorial College, University of Delhi organized a National Webinar on **"How We Can Secure Our Online Communication"**. The webinar was organized for all the students and faculty members of different universities and colleges on 19th November, 2020.

Objective of the webinar was to showcase the importance of cyber hygiene to protect ourselves from all types of cyber threats as the significance of online services has increased.

The webinar started with the welcome address proposed by Dr. Ritu Arora, Teacher In-Charge, Department of Mathematics. With growing Online Communication, Dr. Ritu Arora discussed the need to secure it. The resource person for the webinar was Dr. Dhananjoy Dey, Associate Professor, Interim Dean (IPR) & Dean (A), IIIT, Lucknow (Former Scientist 'E', DRDO, Delhi).

Dr. Dey explained and elaborated about cyber attack and the role of cryptography to secure communication. He recommended some practices for safer internet banking and mobile device security. He also inspired us all to maintain good cyber hygiene by using anti-viruses, network firewalls, strong passwords, multi-factor authentication, device encryption and regular backups. The webinar was of utmost importance and aimed at spreading different practices to secure our Online Communication.

There was an overwhelming response from the audience which was extremely interactive throughout the Q&A round and proved to be yielding.

The programme consisted of over 220 participants from different domains and colleges. The webinar ended with a vote of thanks proposed by Ms. Pranika, President, Students' Union, Department of Mathematics.

Feedback, using Google form was also sought after the event. The analysis of the responses from the participants revealed that approximately 92% of the participants rated the webinar in the higher category in the overall rating and 87% expressed their willingness to attend such programmes in future.

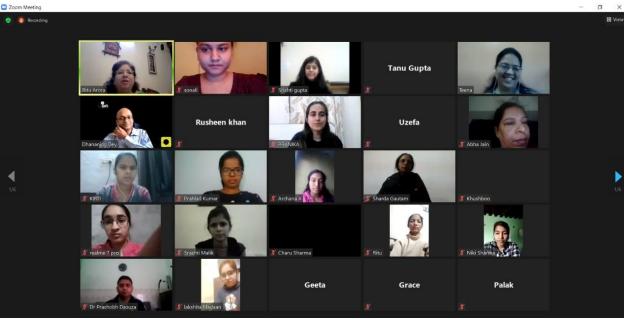


Pictures of the webinar on "How We Can Secure Our Online Communication"







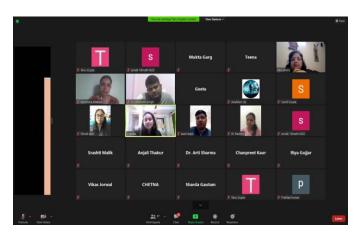


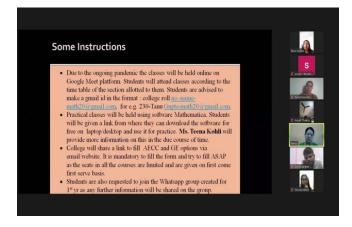
Orientation Program

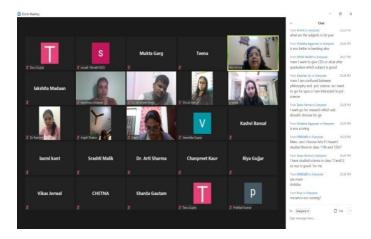
The Department of Mathematics, Janki Devi Memorial College held its Departmental Orientation Program on 18th November, 2020. It was held virtually via Zoom app, an online platform. The program consisted of more than 80 attendees.

Newly admitted students were cordially welcomed by Dr. Ritu Arora, Teacher In-Charge of the department. Dr. Tanu Gupta introduced all the Faculty Members and Student Union Members to the freshers. The Faculty Members made the new students familiar to their respective subjects. Students were set free to ask their queries or doubts regarding the course and the college as well. All the queries were taken care of by the considerate faculty members.

Pictures of Orientation







Department Elections

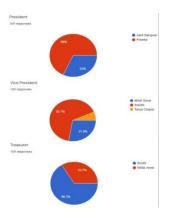
RADIAN-CE, The Mathematics Society conducted its annual departmental election for the year 2020-2021 on 6th November, 2020. The entire department set out to vote digitally (COVID times) via Google forms on 6th November, 2020 . The total number of votes casted by the students between 8:30~am-11:45~am were 169. By 12:15~pm, the elections were concluded and the results were declared via Google meet, an online platform. Everything turned out to be so smooth, without any discrepancies and results were displayed with proper statistics as:

Pranika Batra - President

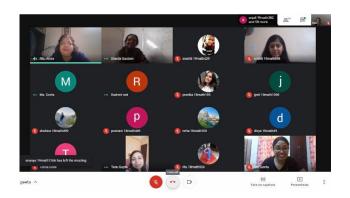
Srashti - Vice President

Srishti - Treasurer

Picture 1: Statistical view of results



Picture 2: Results declared via Google Meet



'Quizzard - The Game of General Trivia''

The Intra College level technical event "Quizzard" organised by Radian-ce, The Mathematics

Society, Janki Devi Memorial College, University of Delhi, virtually via Zoom app on 31st

October, 2020 in the presence of Dr Ritu Arora (Teacher In-Charge), Dr. Sharda Sharma Gautam

and other faculty members of the Department of Mathematics.

The event is organised with the objective to provide platform for the students to showcase their

talent with a competitive spirit.

The event was successful enough to attract as many as 75(approximately) registrations from

various departments and attended by more than 85 students.

"Quizzard" was a general quiz competition where each student participated solely. The

competition consisted of three rounds viz. Round 1(Elimination Round), Round 2 (Audio Visual

Round) and Round 3 (Rapid fire Round). Round 1 was an online round through Google Form

where the participants were given 30 multiple choice questions to be solved in 13 minutes. Total

of 10 participants were selected to further compete in the Round 2. Round 2 was a 12 minutes

round where a series of questions (based on Logos, Tag line of various companies and Puzzles)

through images were given to the participants. In the final round i.e. Round 3, each of 6 shortlisted

participant was given 35 seconds to answer a series of 5 questions. Based on this round, three

participants were declared the winner of the event. The winners were encouraged with the gift

vouchers worth Rs 1200, 1000 and 800.

The winners of the event are as follows:

Winner- Aakanksha Singh

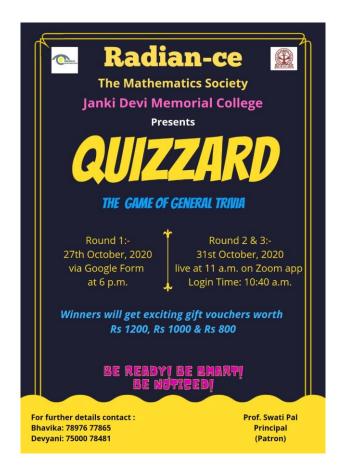
1st Runner-up- Jyoti

2nd Runner-up- Vidhi Mittal

The event turned out to be a great success with questions ranging from all spheres and was

successful in keeping the audience engaged at all points.

Poster of the event.



Pictures of Quizzard







National Webinar

on

"Impact of Diet on Health and Immunity"

Department of Mathematics in collaboration with the Internal Quality Assurance Cell (IQAC), Janki Devi Memorial College, University of Delhi organized a National Webinar for all the students, faculty and non-teaching staff on 08.10.2020. The topic of the webinar was "Impact of Diet on Health and Immunity". The speaker of the day was Dr. Richa Garg, a renowned Dietician based in Delhi and Founder of Arogyam Nutrition.

Welcome note by Dr. Ritu Arora, Teacher In-charge, Department of Mathematics and introductory address by honorable Principal Prof. Swati Pal marked the beginning of the webinar. Dr. Shilpa Chaudhary (IQAC Coordinator) introduced the guest speaker.

Dr. Richa Garg explained in depth about the concept of a balanced healthy diet, its mental and physical outcomes. She recommended that we should include fresh fruits, vegetables, herbs, nuts and seeds in our daily diet to boost our immunity. She also touched upon the PMS and PCOD among teenage girls. The participants queries were answered towards the end of the session.

The programme saw an overwhelming response from the audience with over 375 attendees from different domains and colleges. The webinar ended with a vote of thanks proposed by Dr. Sharda Sharma Gautam.

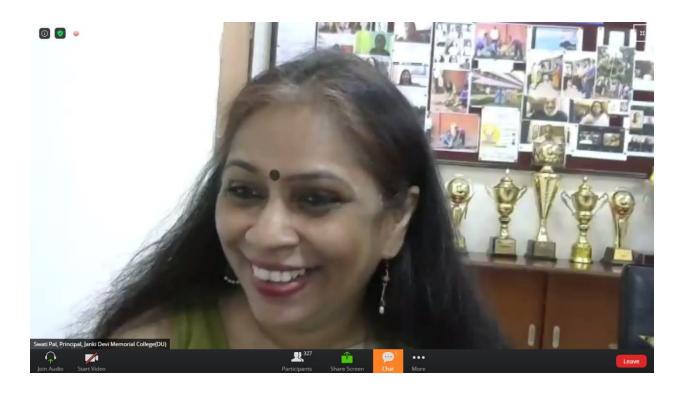
Feedback, using Google form was also sought immediately after the event. The analysis of the responses from the participants revealed that 95% of the participants rated the webinar in the higher category in the overall rating and 90% expressed willingness to attend such programmes in future.

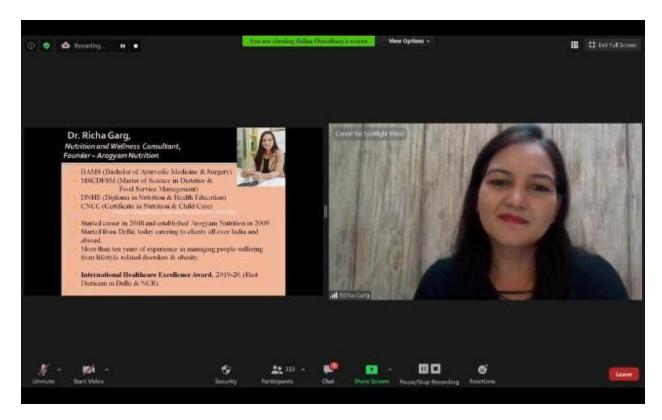
Poster of the webinar on "Impact of Diet on Health and Immunity".

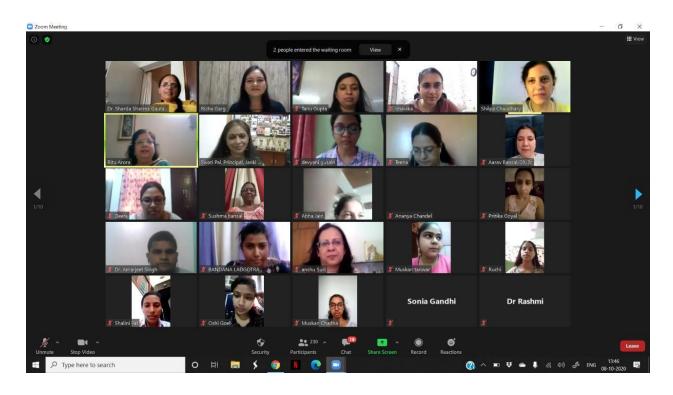


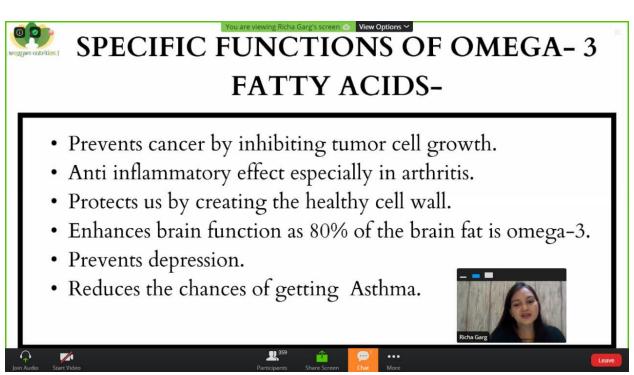
Pictures of the webinar on "Impact of Diet on Health and Immunity".



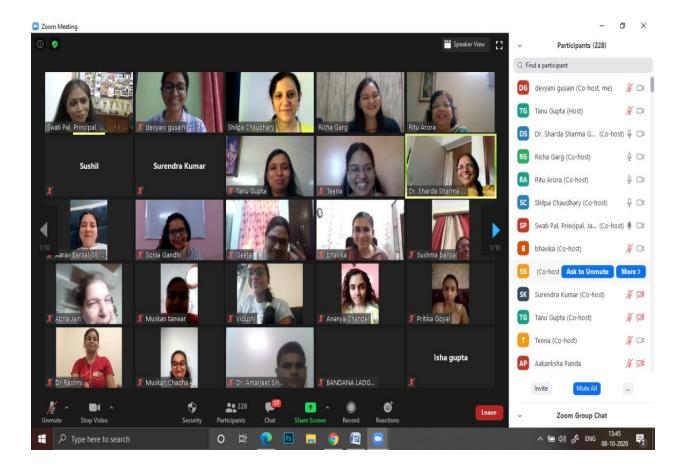












The Department of Mathematics, Janki Devi Memorial College organized a first of its kind Virtual Farewell for its graduating batch of 2020. The event was held on 29th July, 2020 on Googe Meet, an online platform. It was attended by the entire department, students as well as faculty.

The event was graced by Dr. Swati Pal, Principal, Janki Devi Memorial College who addressed the students and gave them a hearty farewell message. A lot of performances from both 2nd and 1st year students were displayed and much enjoyed by everyone.

The farewell was based on the theme "Bollywood Throwback" and was conducted in two parts. The entries for Round 1 were taken in advance and judged by the judges, Mr. Vikas Jorwal and Ms. Karishma Ahlawat. After the results were declared, Round 2 entries were taken and the results were announced on the day of the farewell along with Round 3.

Miss Farewell 2020- Nikita Kohli First Runners Up- Ritika Jain Second Runners Up- Juhi Jha

The event concluded with Dr. Ritu Arora, T.I.C giving a heartfelt farewell message to the graduating batch.

Farewell 2020



Picture 1: Farewell 2020 invitation.

Picture 2: The event being held on Google Meet.