



# ZAKIR HUSAIN DELHI COLLEGE UNIVERSITY OF DELHI



## SUPPORTING DOCUMENT: 3.4.3

*Title: Number of extension and outreach programs conducted by the institution through organized forums including NSS/NCC with involvement of community during the year 2019-20*

## **Extension and Outreach Programs (AY: 2019-20)**

### **NSS (National Service Scheme)**

Students' Union has worked for the betterment of students during the whole year. Apart from extra-curricular activities, it also organized academic activities. It organized freshers' welcome 'Aaghaaz' on October 23, 2019. Various competitive events (inter-college) were organized for students for wider participation during freshers' welcome. Students' Union organized a blood donation camp in 2019. On the occasion of Gandhi Jayanti, Students' Union participated in an Outreach Program of the college in collaboration with Ministry of Jal Shakti on Oct 2, 2019. Students' Union also participated in Swachhta Abhiyan (cleanliness drive) inside the college premises. It organized inter-college essay writing competition in January 2020. Like previous year, it co-organised and sponsored prestigious Zakir Husain Memorial Parliamentary Debate Competition in February 2020. Students' Union also co-organized a special lecture by Prof. Margrit Pernau, Max Planck Institute for Human Development, Berlin, Germany on October 10, 2019. Before the pandemic forced us to go online, it organized Annual College Fest "Aadaab" 2020 on March 4-5, 2020. Classical artist Prof. Sumangala Damodaran, young artist Nabeel Khan (Sarangi Player), Russian artist Denis Kucherov (Master Percussionist), Sammohan Band (Rock Music), and The Landers were invited to perform on this occasion. Various competitive events were also organized including the solo singing, solo dance, group dance, ethnic wear fashion show, poster making, rangoli, mehndi and poetry amongst many others. The event witnessed huge participation from various colleges across the university.

## List of activities:

### ▪ 24<sup>th</sup> September, 2019

- NSS-Orientation Program - Lecture on Health Issues and Motivational Skills  
Dr. Jasjeet Singh Wasir (Medanta Hospital)
- NSS-Mr. Gaurav Thakral (an Alum of ZHDC and MTV Roadies Contestant)



**Number of Participants:300**

- **31<sup>st</sup> January, 2020**
  - NSS-Stem Cell Donation Workshop
  - Best Out of Waste Competition

**National Service Scheme**  
Zakir Husain Delhi College



NOT ME BUT YOU

**Organizes**

**A WORK SHOP ON BLOOD STEM CELLS**

**Speaker- Ms.Ravinder Walia (DATRI STEM CELL)**

**Date- 31<sup>st</sup> Jan 2020**

**Time- 11:30 AM**

**Venue-A.V Room**

(A Swachhta pledge will be taken at 11:15 am in A.V Room)

**A BEST OUT OF WASTE COMPETITION**

**Date-31<sup>st</sup> Jan 2020**

**Time- 12:30 PM**

**Venue- A.V Room**

(Prizes will be provided to top 3 position holders. Students are requested to bring their own materials. Certificate of participation will be provided.)



**Stem Cell Donation Workshop**  
**Number of participants 100**





**Best Out of Waste Competition**  
**Total Number of Participants: 50**

- **6<sup>th</sup> November, 2019**
  - **NSS-Cloth Distribution in Nearby Locality**



**Number of Participants: 50**

- **23<sup>rd</sup> October, 2019**
  - NSS-Diwali Mela



**Number of Participants: 300**

- **24<sup>th</sup> October, 2019**
  - NSS-Visit to Aashram



**Number of Participants: 50**

## ➤ Open Day Session at Lok Sabha TV



**Number of Participants: 30**

**List of Participants**

| S.No | Name             | Course         | Year |
|------|------------------|----------------|------|
| 1.   | Rubaab Jahan     | B. Com(H)      | III  |
| 2.   | Jyoti Rastogi    | B. Com(H)      | III  |
| 3.   | Vishal Saini     | B. Com(H)      | III  |
| 4.   | Konishk Sharma   | BA Hindi(H)    | III  |
| 5.   | Sakshi Bansal    | B. Com(H)      | III  |
| 6.   | Shivi Mishra     | B. Com(H)      | III  |
| 7.   | Monomay Hussain  | Arabic(H)      | III  |
| 8.   | Sneha            | B. Com(P)      | III  |
| 9.   | Tasmea           | BA Prog        | III  |
| 10.  | Atika            | BA (Soc)       | III  |
| 11.  | Navneet          | Electronics(H) | III  |
| 12.  | Kajal            | Pol-Sc.        | II   |
| 13.  | Yajna            | B. Com(P)      | II   |
| 14.  | Muskan Singh     | B. Com(P)      | II   |
| 15.  | Gagan Mathotra   | Life Sci       | II   |
| 16.  | Aarti            | B. Com(H)      | III  |
| 17.  | Shakid           | Hindi(H)       | III  |
| 18.  | Udit             | B. Com(P)      | III  |
| 19.  | Robinson Gomes   | B. Com(H)      | III  |
| 20.  | Rishabh Jain     | B. Com(H)      | III  |
| 21.  | Yagesh           | B. Com(H)      | III  |
| 22.  | Vaishav          | B. Com(P)      | II   |
| 23.  | Shikhar          | B. Com(H)      | II   |
| 24.  | Rishabh Aggarwal | B. Com(P)      | II   |
| 25.  | Lata             | Life Science   | III  |
| 26.  | Piya             | Life Science   | III  |
| 27.  | Shivani          | Life Science   | III  |
| 28.  | Shazia           | BA Prog.       | III  |
| 29.  | Madecha          | Chem(H)        | II   |
| 30.  | Aknan            | B. Sc. Maths   | III  |



- **30<sup>th</sup> September, 2019**

- **NSS-Poster Making Competition**



**Number of Participants: 50**

- **2<sup>nd</sup> October, 2019**

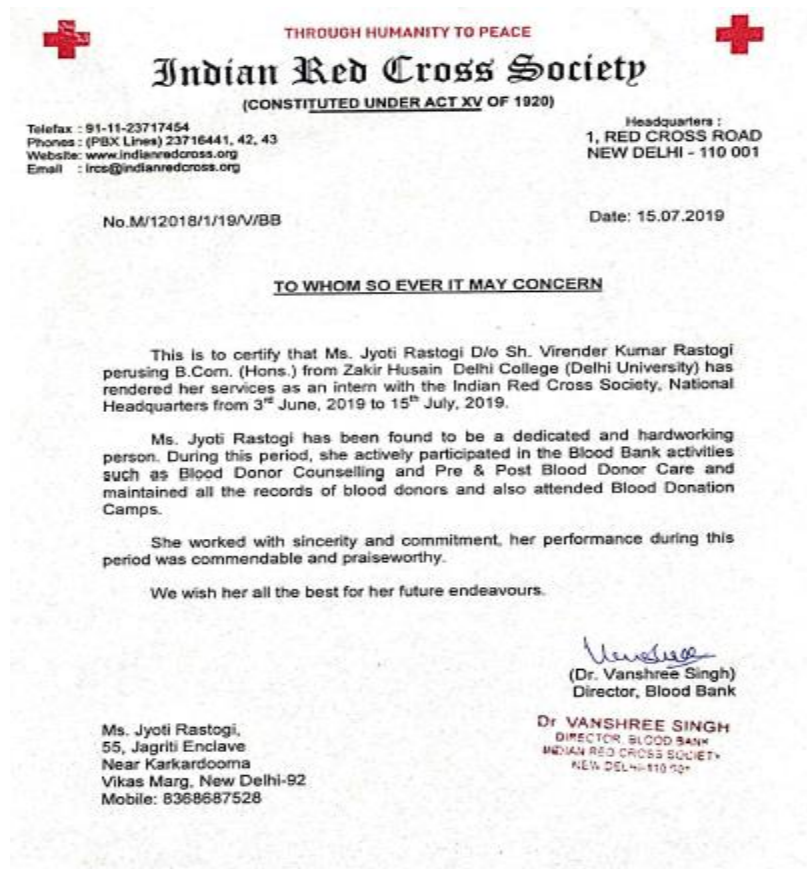
- **NSS-SwachhtaPakhwada, Ministry of Jal Shakti, GOI Sparsh Ganga**



**Number of Participants: 20**



- 3<sup>rd</sup> June, 2019 to 15<sup>th</sup> July, 2019
  - NSS-Internship Program, Indian Red Cross Society, Internship on Blood Donation Awareness



- 16<sup>th</sup> to 21<sup>st</sup> October, 2019
  - NSS-Raddi Collection Drive  
Number of Participants: 100
- 12<sup>th</sup> to 16<sup>th</sup> January, 2020
  - NSS-National Youth Festival Ministry of Sports and Youth Affairs, GOI National Youth Festival  
Number of Participants: 2

## **Nature and Environment Society: Aranya (*Srishti*)**

The 'Nature and Environment Society' has taken the responsibility of educating the students about the importance of the environment and the ways to keep it healthy, clean and pollution free.

The society held various activities in September 2019 with great zeal and enthusiasm. It organized an orientation programme in association with the 'Chintan Environment Group' to spread awareness amongst students about the importance of waste segregation and the harmful effects of plastic through an interactive session. As an initiative to stop disposal of plastics coming back to us, the society's association with Chintan Environment Group ensured proper disposal of the plastic waste and E-waste. Every month Chintan picks up the plastic waste and E-waste from the college campus.

The society members also volunteered for the 'India Plog Run' on 2nd October 2019, organized by WWF in association with United Way. It was another opportunity to take the initiative forward and be responsible and concerned towards the use of plastic. It was a 3 km walk/run in which participants picked up plastic trash and brought it all the way to the finish line where collection agencies or recyclers were available to collect the plastic waste and then dispose it in the best way possible.

The activities were inaugurated by the society by organizing a lecture in collaboration with the Department of Environmental Studies on October 14, 2019. The inaugural lecture was given by Dr. Monalisa Sen, Program Coordinator (Biodiversity), ICLEI South Asia. Dr. Sen's lecture on 'Various Aspects of Urban Biodiversity' made the students aware of the various aspects of conservation of biodiversity. Moreover, it also gave an insight of how conservational aspects are connected to the service sectors.

An online poster making competition on 'Defeat Day Zero' was held in order to make the students realize the importance of water conservation and taught them the various ways to curb the wastage of water.

On Diwali, the society organized an 'Inter College Mono Acting Competition' on the topic 'Ill Effects of Diwali Due to Crackers.' It was an initiative to make people aware of the egregious effects of crackers and persuade them not to burn them. A collection drive for Plastic and E waste collection was organized to ensure its proper disposal by a tie up with Chintan Environmental group.

The society also performed a 'Nukkad Natak' titled "*Dilli teri Yamuna Maili*" at the awareness workshop on 'River Yamuna' at Delhi Secretariat, organised by Department of Environment, Government of NCT, Delhi to make people aware about the current scenario of the Yamuna.

The Nature and Environment society in association with Department of Environmental Studies also organized a 'National Conference on Water Sustainability: Conservation, Policy, Ethics and Science' from 20th-21st January 2020. A lot of eminent environmentalists, scientists and academicians including Dr. Rajendra Singh (also known as the Waterman of India), Sh. Kalyan Singh Rawat and Professor Dinabandhu Sahu were invited. The conference was organized with the aim of apprising students about the impending threat of environmental challenges which are looming large and with the message that it is time to act rather than deliberate.

Students of the society attended the 'World Wetland Day' celebration event at Yamuna Biodiversity Park with great enthusiasm to understand the importance of wetlands and the need to conserve them. An intercollege Paper Reading Competition on the topic "Can the Environment be a Political Issue?" was organized on 20th February 2020. Members of our society also attended an event by 'Youth Clean Air Network (YCAN)' which aimed to engage young people in finding solutions for better air quality.

With these activities, we hope that the society has played a significant role in making the students wake up from their slumber and take steps to face the environmental challenges in front of us and contribute to the society.

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## **Bengali Literary Society**

**Student Coordinator: Ms. Bedisha Sarkar and Ms. Mumtaz Parveen**

The Bengali Literary Society of Zakir Husain Delhi College began the academic session with the Freshers' welcome event. Students of senior classes welcomed the juniors and performed a number of programmes for them. Mr. Samrat Hembram, who has joined the department in the current academic year, was also welcomed by the students. On the basis of their performances, Ms. Nargis and Mr. Akash were conferred the titles of Miss and Mr. Freshers.

The International Mother Language Day was also celebrated on 21st February by the students of the department. To celebrate this occasion, a cultural program was organized and a Bengali film made by students of B.A. (H) Bengali III year was screened under the supervision of Ms. Supriti Roy. The students and teachers worked together to organise the 8th Gopa Dey Memorial Lecture on 06 March 2020. Dr. Debjani Sengupta, Department of English, I.P. College for Women was invited to deliver the lecture titled "Simanto o Svadhinata: the partition literature of North-East India". Ms. Sunanda Bhattacharya, an author from the North-East of India, chaired the session.

The Society plans to hold an excursion trip outside Delhi at the end of March/April. The farewell function of the third-year students will be held on 20th April 2020.

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## **Department of Mathematics**

The Department of Mathematics strives to be recognized for excellence among academic institutions in Delhi University. The Department offers to join the mathematical activities/fests to our students. The aim of such programs is to prepare students to successful research careers in mathematics. Department of mathematics has aimed to be a center of

excellence in mathematics and been vigorously engaged in teaching, conducting invited talks and workshops.

**August 9, 2019:** The Department has organized a talk on “**Big Data: A Statisticians Perspective**” by **Dr. Sudesh K Srivastav, Professor & Fulbright Scholar in the Department of Global Biostatistics and Data Science Tulane University, USA**



**Dr. Sanjay Mehra is presenting welcome bouquet to Prof. (Dr.) Sudesh K Srivastav**



**Dr. Mohd. Arif is presenting welcome bouquet to Prof. (Dr.) M.A.Beg (Principal , ZHDC)**



**Faculty members and students are with Prof. (Dr.) Sudesh K Srivastav**





### **Prof. (Dr.) Sudesh K Srivastav is delivering his talk**

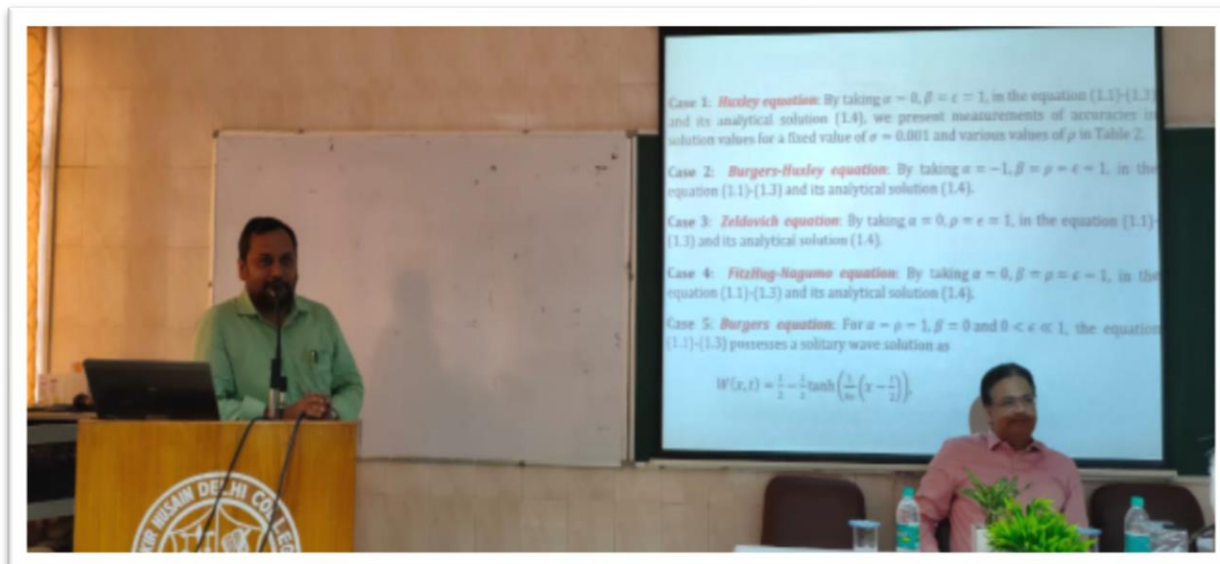
In his talk he has mentioned that with the progress in the **biotechnologies and digital information technologies** such as sensors, **data capture and mobile phone devices**, many complex and big datasets on genomic sequence data, **medical imaging data, epidemiology data, behavioral** and environmental data, gene expression data, etc. have been created. **Big data is not just about the size of data but it also deals to the tools or methods of organization to create, handle, retrieve, storage, manage and manipulate as well as statistical analysis.** It plays a significant role to find the insights or extracting potentially useful information and relevant interest of variables from the complex, noisy, diverse, and commodious of massive high-dimensional data sets through answering questions that were previously unreciprocated and hidden in the complexity and the sheer size of the data. In this talk the focus will be on the outlook for analyzing big

data that include extracting and organizing data from complex sources, exploring patterns and configurations, setting statistical problems through hypothesis generation, building computational algorithms, and disseminating reproducible research.

**November 13, 2019:** The Department has organized a talk on “*Computing Nonlinear Convection-Diffusion Models*” by **Dr. Navnit Jha**, Associate Professor, Department of Mathematics, South Asian University (SAU). South Asian University (SAU) is an international university established by the eight member nations of South Asian Association for Regional Co-operation (SAARC) viz. Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka.



**Dr. Sanjay Mehra is presenting welcome bouquet Dr. Navnit Jha**



**Dr. Dhiraj Kumar Singh (Teacher-In-Charge) is giving welcome speech**



**The audience is enjoying the talk of Dr. Navnit Jha**

His talk is based on the **convection–diffusion equation**, which is a combination of the diffusion and convection equations, and describes physical phenomena where particles, energy, or other physical quantities are transferred inside a physical system due to two processes: diffusion and convection. Depending on context, the same equation can be called the



**advection –diffusion equation, drift–diffusion equation or (generic) scalar transport equation.**



**The faculties of Department of Mathematics, ZHDC saw off to Dr. Navnit Jha at the door**

***February 6, 2020:* The Department has organized a talk on “Artificial Intelligence for Cyber Security” by Dr. Girish Mishra, Scientist E, Defence Research and Development Organization (DRDO), India**



**Prof. (Dr.) M.A.Beg (Principal , ZHDC) is presenting welcome bouquet to Dr. Girish Mishra**



**Welcome speech is given by Prof. (Dr.) M.A.Beg (Principal )**



### **Dr. Girish Mishra is delivering his talk**

As the whole world is becoming more digitalized, cybercrime is now one of the biggest threats to all businesses and government organizations around the world. Various types of cyber-attacks – such as unauthorized access, ransomware or malware, misconfiguration, Phishing, API, credential stuffing, and malicious insider, are causing a huge loss to the global economy. Several industries such as healthcare, financial services, and government were among the most attacked sectors by cyber attackers.

To minimize the impact of cyber-attacks, companies and organizations are looking to apply AI technologies to combat these threats more effectively. Artificial intelligence in cyber security plays an important role in threat detection, pattern recognition, and response time reduction. It also helps in combating threats such as distributed denial-of-service (DDoS) attacks. Since data has become the biggest valuable for any modern business, cyber attackers are trying everything to hack this information. Traditional computer defence software is no longer enough to protect companies' data from fast-increasingly sophisticated cyberattacks. In response to this



worldwide struggle of data security, the [global cyber security market is booming](#), with emerging features such as ‘artificial intelligence’ or ‘machine learning’ fast becoming some of the best solutions to tackle this global issue. Although many AI based innovations still require maturity and still have their drawbacks, no one can deny that the great power of artificial intelligence in cyber security is making this world of digitalization better and safer.



**Dr. Pradeep Singh (Faculty, Department of Mathematics) is giving Vote of Thanks to Dr. Girish Mishra**



**The faculties of Department of Mathematics, ZHDC saw off to Dr. Girish Mishra at the door**

***February 28, 2020:*** The Department has organized the Annual Fest “OPTIMA -2020. The fest included the “IPL Bidding, Stick-O-Stick, Paper Presentation, Chess, Treasure Hunt, Poster Making and Quiz”.

In spite of the fact that it appears extraordinary fun , the annual fest of department of mathematics started out it’s journey of narratives by bringing together students and staff for a plantation drive . The students from various colleges and institutions are also invited. The event ended with a vote of thanks and a sense of courage to bring one’s own narrative to life.

**DEPARTMENT OF MATHEMATICS  
ZAKIR HUSAIN DELHI COLLEGE**

Presents  
Annual Fest  
**OPTIMA  
2020**  
FEBRUARY 28, 2020

Activities: IPL BIDDING, QUIZ, STICK-O-STICK, PAPER PRESENTATION, CHESS, TREASURE HUNT, POSTER MAKING COMPETITION

For more info :  
 ☎ SHHAAN : 7279900005  
 ☎ ANKUR : 9917720889  
 @optima\_zhdc  
 @OptimaZhdc

Register at :  
 [QR Code]

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 # Campus Bloggers

OPTIMA- 2020







**Students are preparing for the annual fest- OPTIMA 2020**





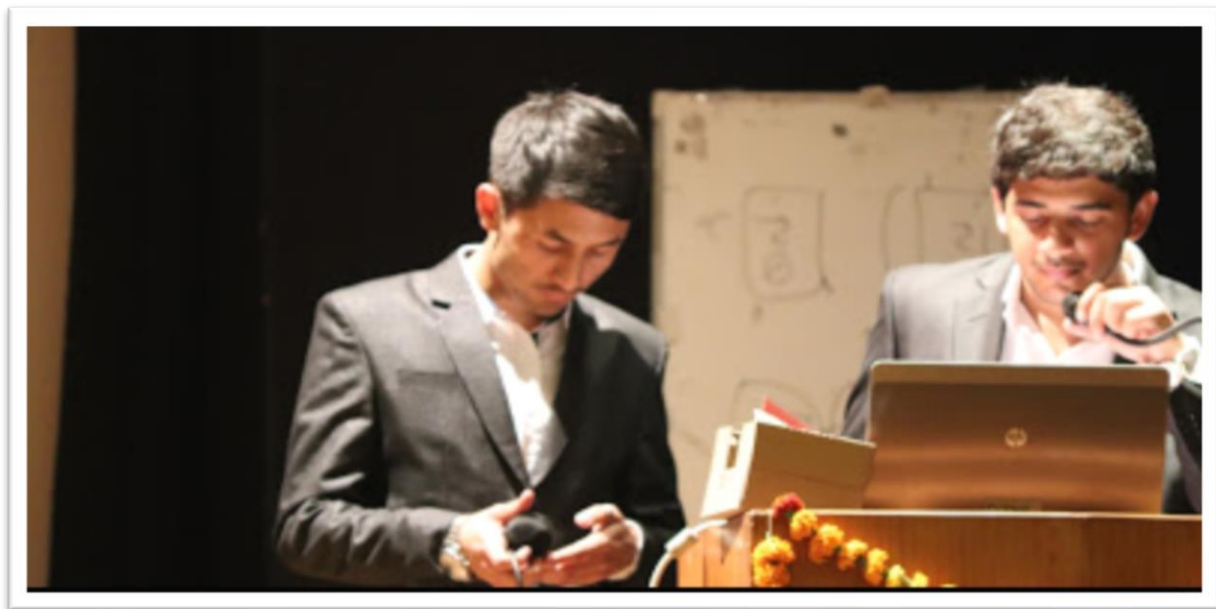
**Inauguration for the annual fest -OPTIMA 2020**



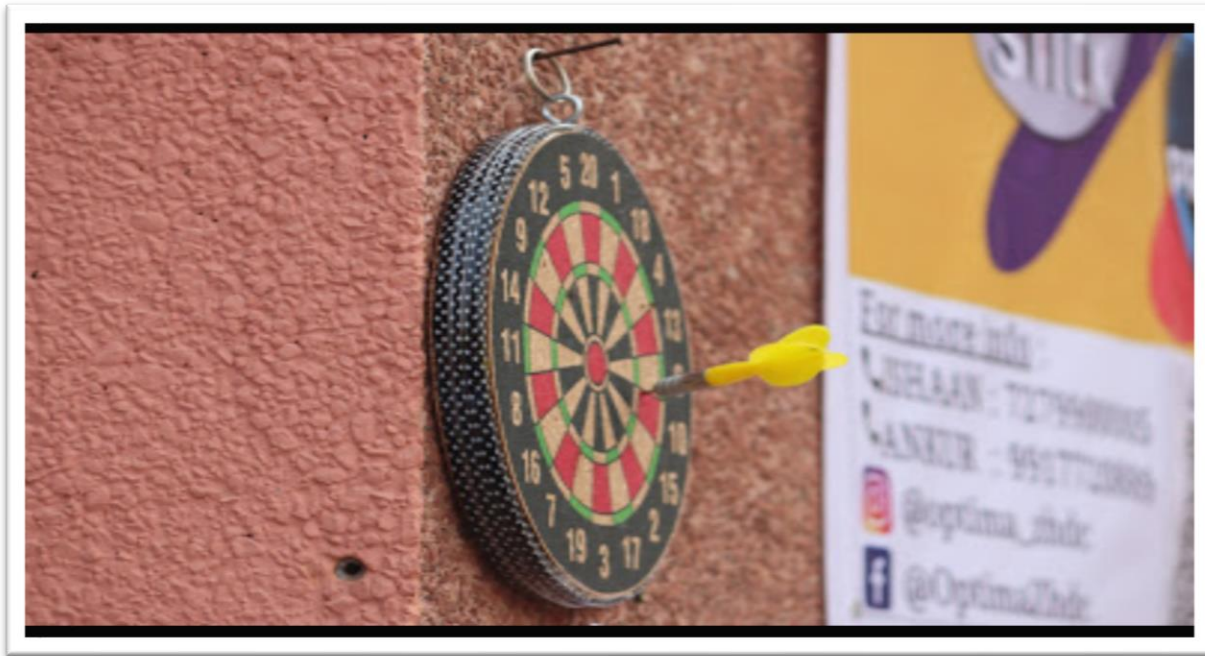
**Inaugural speech given by Prof.(Dr.) M.A.Beg(Principal, ZHDC) for the annual fest -OPTIMA 2020**



**Dr. Dhiraj Kumar Singh is presenting welcome bouquet to Prof. (Dr.) M.A.Beg (Principal , ZHDC)**



**Students are participating in Inauguration for the annual fest-  
OPTIMA 2**

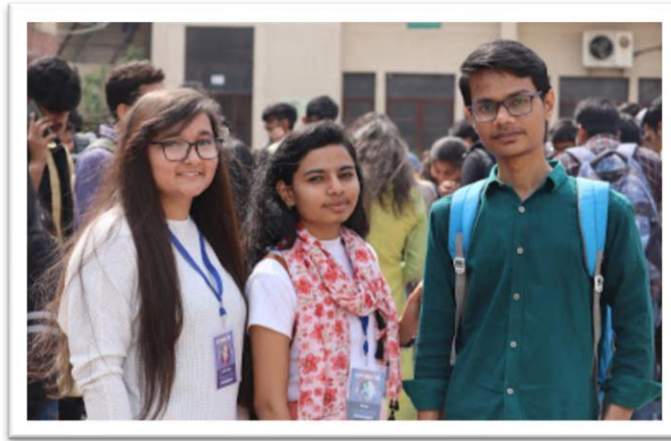


**Students are Participating in Different Activities**



**Faculty is Motivating the Students**





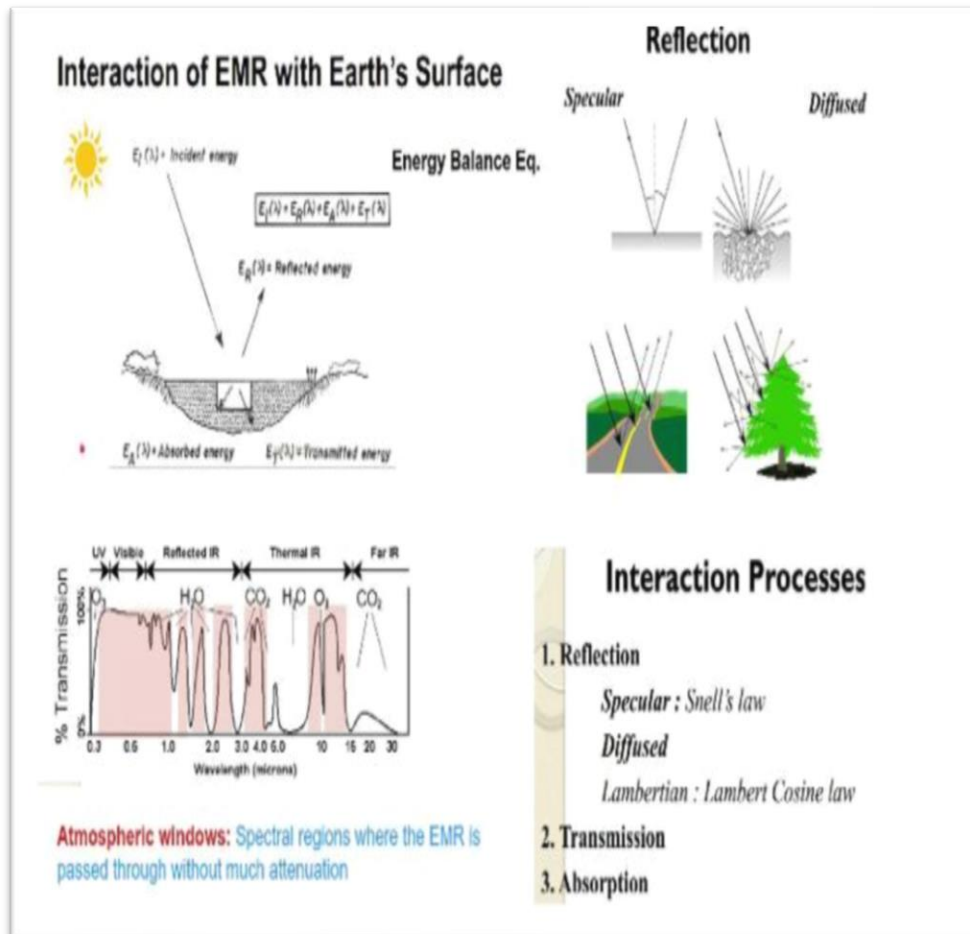
### Registration Desk

**May 2, 2020:** The Department has organized a WEBINAR on “Emerging Trends in Remote Sensing” by **Dr. Touseef Ahmad, Scientist ‘SD’, Indian Space Research Organization (ISRO), India.**

From the earliest need to be able to see an enemy over a hill to sending semi-autonomous platforms with advanced sensor packages out into space, humans have wanted to know more about what they are around. Issues of distance are being minimized through advances in technology to the point where remote control of a sensor is useful but sensing by way of a non-collocated sensor is better. We are not content to just sense what is physically nearby. However, it is not always practical or possible to move sensors to an area of interest; we must be able to sense at a distance. This requires not only new technologies but new approaches; our need to sense



at a distance is ever changing with newer challenges. As a result, remote sensing is not limited to relocating a sensor but is expanded into possibly deducing or inferring from available information. Sensing at a distance is the heart of remote sensing. Much of the sensing technology today is focused on analysis of electromagnetic radiation and sound. These are important and the most mature areas of sensing.



characteristics of an area by recording it is reflected and emitted radiation energy without having any physical contact with the object under study. This is done by capturing the reflected radiation/energy.

**HUMAN SENSES**

5 SENSES

### REMOTE SENSING PROCESS

**Source of Illumination (A)** - provides electromagnetic energy to the target of interest.

**Atmosphere (B)** - media by which energy travels through from and to target.

**Interaction with the Target (C)** - after passing through the atmosphere the energy interacts with the target depending on properties of both the target and the energy.

**Recording of Energy by the Sensor (D)** - after the energy has been scattered by or emitted from the target a sensor collects and records the received energy.

**Transmission, Reception, & Processing (E)** - the energy recorded by the sensor has to be transmitted to a receiving and processing station where the data are processed into an image (both analog and/or digital).

**Interpretation/Analysis (F)** - the processed image is interpreted, visually and/or using computer software to provide information about the target.

**Application (G)** - the information is used for analysis, and decision.

**EMF SPECTRUM**

non-ionizing | ionizing

wavelength |  $f(\text{frequency}) = \frac{C(\text{speed of light})}{\lambda(\text{wavelength})}$

geomagnetic extremely & sub-ELF low frequency sources | radio frequency spectrum | microwaves | infrared | visible | ultra violet | x-rays | gamma cosmic rays

EMF Sources: earth & subways, AC power, CRT monitors, mobile AM/FM, TV, cell/PCS & satellite, microwave, sunlight, medical x-rays, radioactive sources

**Violet** : 0.4 - 0.446  $\mu\text{m}$   
**Blue** : 0.446 - 0.500  $\mu\text{m}$   
**Green** : 0.500 - 0.578  $\mu\text{m}$   
**Yellow** : 0.578 - 0.592  $\mu\text{m}$   
**Orange** : 0.592 - 0.620  $\mu\text{m}$   
**Red** : 0.620 - 0.7  $\mu\text{m}$

Near Infrared: 0.7 - 1.5  $\mu\text{m}$   
 Short Wave Infrared: 1.5 - 3  $\mu\text{m}$   
 Mid Wave Infrared: 3 - 8  $\mu\text{m}$   
 Thermal Infrared: 8 - 15  $\mu\text{m}$   
 Far Infrared: >15  $\mu\text{m}$

**Microwave**

|         |                               |
|---------|-------------------------------|
| F band  | 0.3 - 1 GHz (30 - 300 cm)     |
| L band  | 1 - 2 GHz (30 - 30 cm)        |
| S band  | 2 - 4 GHz (15 - 10 cm)        |
| C band  | 4 - 8 GHz (7.5 - 3.8 cm)      |
| X band  | 8 - 12.5 GHz (3.8 - 2.4 cm)   |
| Ku band | 12.5 - 18 GHz (2.4 - 1.7 cm)  |
| K band  | 18 - 26.5 GHz (1.7 - 1.1 cm)  |
| Ka band | 26.5 - 40 GHz (1.1 - 0.75 cm) |

**Electromagnetic wave**

**Atmospheric windows**

Transmission (%) vs Wavelength ( $\mu\text{m}$ )

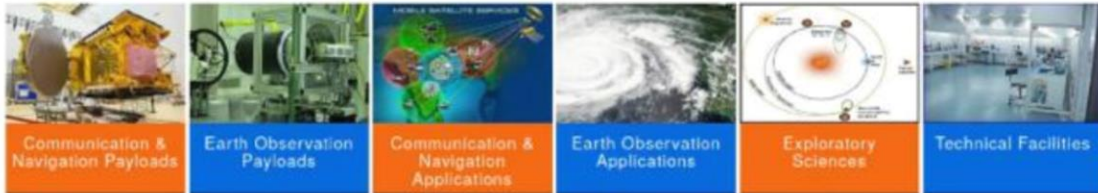
UV, VISIBLE, INFRARED, MICROWAVE

Sun, Earth

# SPACE APPLICATIONS CENTRE, ISRO

## What We Do

Space Applications Centre (SAC) is one of the major centres of the Indian Space Research Organisation (ISRO). SAC focuses on the design of spaceborne instruments for ISRO missions and development and operationalisation of applications of space technology for societal benefits. The applications cover communication, broadcasting, navigation, disaster monitoring, meteorology, oceanography, environment monitoring and natural resources survey.



### TREES

#### Training and Research in Earth Eco-System

<https://www.sac.gov.in/VyomTREESProgram.jsp>

### SMART

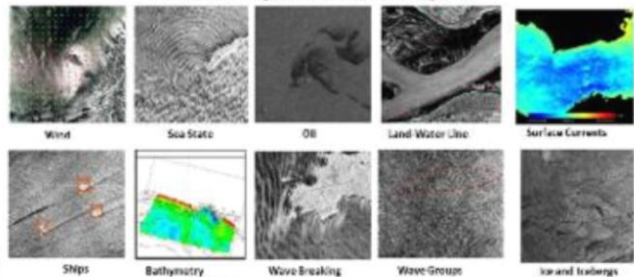
#### Satellite Meteorology and Oceanography Research and Training

<https://www.sac.gov.in/VyomSMARTProgram.jsp>

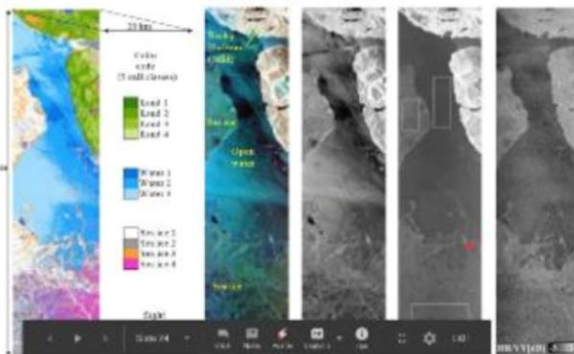
## Synthetic Aperture Radar (SAR) & Applications

- **Active** ⇒ independent of sun illumination
- **Microwave** ⇒ penetrates clouds and (partially) canopy, soil, snow
- **Wavelengths** ⇒ X-band: 3 cm, C-band: 6 cm, L-band: 24 cm
- **Coherent** ⇒ interferometry, speckle
- **Polarization** can be exploited
- **Spatial resolution** ⇒ space-borne: 5 m - 100 m  
air-borne: > 0.2 m

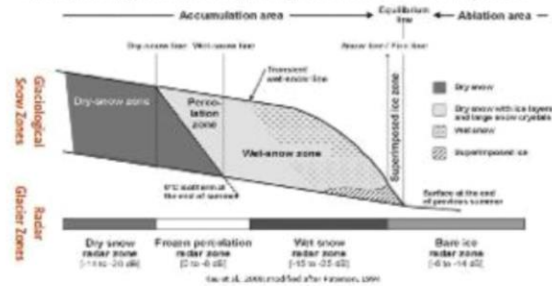
Processes and objects in ocean observed by SAR

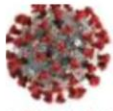


Sea ice from multi-polarized SAR



Snow and radar glacier zones and glaciological facies zones from C-band, VV SAR



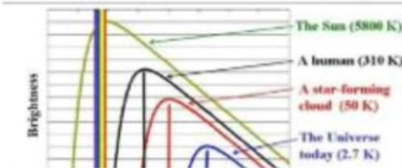


# Infrared Thermography For Covid-19 Screening

"Elevated human body temperature, or fever, is often a reliable indicator of many serious infections".



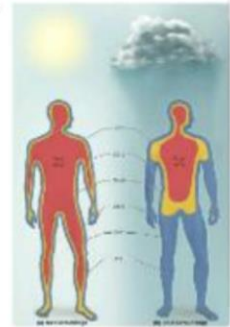
Instead of the 400–700 nm (nanometer) range of visible light, thermographic cameras are sensitive to wavelengths from about 1,000 nm (1 μm) to about 14,000 nm (14 μm).



an infrared camera for smartphones



IR-Thermometer



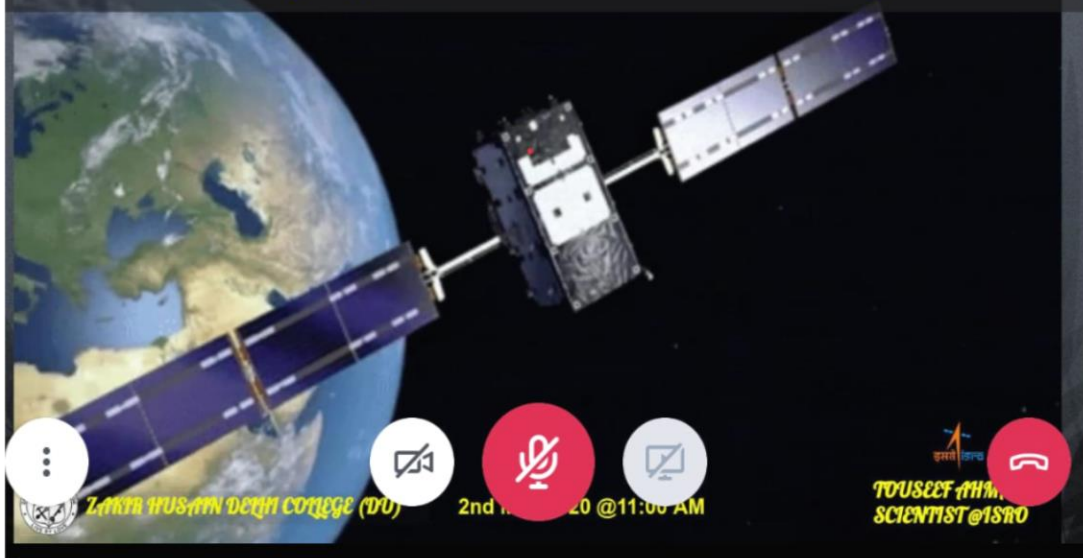
Thermal Cameras: Why is everyone talking about them and how is India using them?



HARPAL KUMAR is talking

## EMERGING TRENDS IN REMOTE SENSING

85





## **Department of Psychology**

The Department of Psychology organised and participated in the following events during the academic year 2019-2020:

**Ice breaker:** This pre-fresher event was held to welcome the new students to the department and allow them to familiarise themselves with their seniors and batch mates. The attendees were grouped in teams of 2 or 3, with each participant belonging to a different year, to participate in activities like Relay Narration, Graffiti, Best out of Waste, Quiz, and Poster making. The event was a great success.

**Karuna Ma'am's Farewell:** The Psychology department bid adieu to their senior most teacher, Dr. Karuna Mehta this year on 30th August, 2019. A Zakirian herself, Dr. Karuna joined the department in 1976, and served a tenure of over 40 years. Her farewell was attended not only by the current students but also by various alumni. The students from all three years gave an address and expressed their gratitude. The department also had a small birthday celebration for Ma'am at the end.

**Freshers' Party:** This long-awaited event was held with great gusto under the theme "Dynamic Duo". It was a great opportunity for the freshers to introduce themselves to the department and the day was full of activities such as musical performances and games. The event was graced by the presence of our Principal, Dr. Masroor Ahmad Beg.

**Talk by Mr Sopan Joshi:** On 4th October 2019, the Department of Psychology jointly with the Department of Botany organised a talk by the Freelance Journalist and Author Mr. Sopan Joshi, on the topic "Are We Evolved Enough to Save The World". The listeners found the talk very informative and thought provoking. As the academic year draws to a close, the department now looks forward to their year-end fest "Psychedelics". This year's theme for the same is Psyche, Society and Peace.

## **Botany Department**

The department of Botany organized an outstation trip for the students of B.Sc (Hons.) second and third year to Manali, Himachal Pradesh from 16 - 21 September 2019. The trip started on September 16, 2019 at 5pm from the college campus. During this trip the students visited places like

Himalayan Trout Fish Farm which is famous for freshwater fish farming besides other attractions. The students visited the well-known high mountain pass –Rohtang Pass which is situated 50 Km from Manali and 3979 m above sea level. Some lichens were spotted in this area. The students also got an opportunity to visit G.B. Pant National Research Institute of Himalayan Environment and Sustainable Development, Mohal Kullu. It is an autonomous institute of Ministry of Environment, Forest & Climate Change, Govt. of India. The students got an exposure to discuss on very pertinent topics as institute is mainly focussed on activities like, Centre for Land & Water Resource Management, Centre for Biodiversity Conservation and Management, Centre for Socio Economic Development & Centre for Environmental Assessment & Climate Change.

## List of Participants

| <b>DEPARTMENT OF BOTANY</b>  |                         |                 |
|--|-------------------------|-----------------|
| <b>List of students joining the excursion from 16.09.19 - 21.09.19</b> |                         |                 |
| <b>B.Sc. (Hons) Botany Sem-III</b>                                     |                         |                 |
| <b>S. NO.</b>  | <b>STUDENT NAME</b>     | <b>Roll No.</b> |
| 1  | Prasoon Kumar Mishra    | 18/69           |
| 2  | Kumar Abhishek          | 18/193          |
| 3  | Ajay                    | 18/243          |
| 4  | Swati Singh             | 18/466          |
| 5  | Kirti                   | 18/475          |
| 6  | Soundarya               | 18/484          |
| 7  | Mitakshara Singh Aditya | 18/553          |
| 8  | Aditi Singh Pal         | 18/1139         |
| 9  | Manish Kumar            | 18/1140         |
| 10   | Tanupriya               | 18/1240         |
| 11   | Shubham Das             | 18/1242         |
| 12   | Sonam Lamo              | 18/1322         |
| 13   | Divya                   | 18/1437         |
| 14   | Dolly Kaushik           | 18/1468         |
| 15   | Stanzin Rinchen         | 18/1487         |
| 16   | Ishita Hazra            | 18/1893         |
| 17   | Sandham Alka Devi       | 18/2091         |

The other institute that the students visited was IARI Regional Station Katrain, Kullu Valley, Himachal Pradesh. After a long and tedious travel, the last spot of the visiting list was Great Himalayan National Park- the UNESCO World Heritage Site. It is a home to numerous species of flora

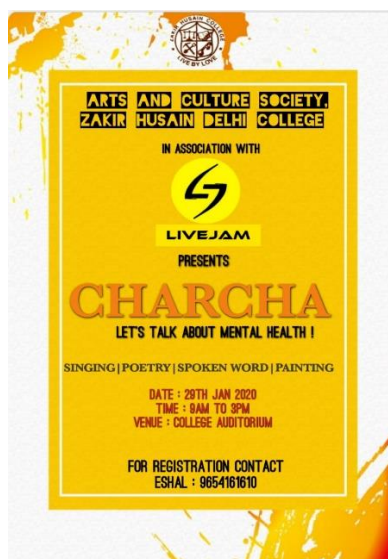
and fauna. It is known for its “outstanding significance for biodiversity conservation”. The students were taken for a trek in the park where they witnessed the rich biodiversity.

Faculty members, Dr. Malti Gupta and Dr. Babeeta C Kaula (Trip incharge) organized the trip. Laboratory staff, Mr. Mohd. Afzal and Mr. Faizaan Hasan accompanied the group. The tour ended successfully on September 21, 2019. The Department also organized a field visit to **Mohan Meakin Limited Visit Ghaziabad** on March 5, 2020. for B.Sc. Botany (H) students of III<sup>rd</sup> years.

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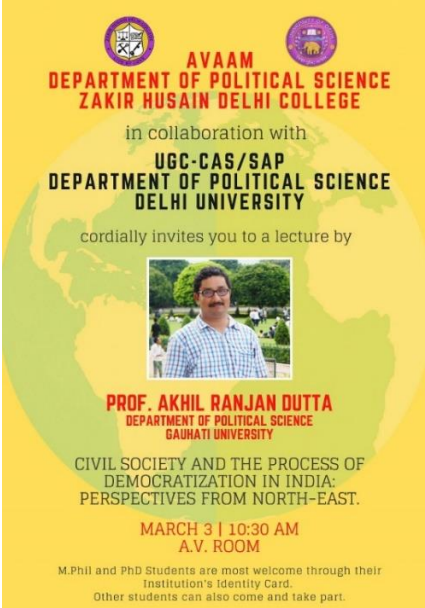
### Arts and Culture Society

The Society began the winter semester with a significant event for addressing mental health issues among college students. In association with LiveJam Foundation New Delhi, the Society organised **Charcha Sessions and Open Mic: Let’s Talk about Mental Health for students of the college on 29 January 2020**. The event included discussions and expert talk on mental health, Q&A sessions, Band Performance by LiveJam Band and Open Mic performances by various students and alumni of the college. The participants rated this event to be a life changing experience and need of the hour event organised by the Arts and Culture Society.



## Department of Political Science

A lecture on "Civil society and the process of democratization in India: Perspectives from North-East Organised by Political Science Society, Avaam in collaboration with UGC-CAS/SAP, Department of Political Science, University of Delhi




The poster is yellow with a green world map in the background. At the top, it features two circular logos: the left one is the University of Delhi logo, and the right one is the logo of the Department of Political Science, Zakir Husain Delhi College. Below the logos, the text reads: "AVAAM DEPARTMENT OF POLITICAL SCIENCE ZAKIR HUSAIN DELHI COLLEGE". This is followed by "in collaboration with UGC-CAS/SAP DEPARTMENT OF POLITICAL SCIENCE DELHI UNIVERSITY". The text then says "cordially invites you to a lecture by" and includes a small portrait of Prof. Akhil Ranjan Dutta. Below the portrait, it identifies him as "PROF. AKHIL RANJAN DUTTA DEPARTMENT OF POLITICAL SCIENCE GAUHATI UNIVERSITY". The lecture title is "CIVIL SOCIETY AND THE PROCESS OF DEMOCRATIZATION IN INDIA: PERSPECTIVES FROM NORTH-EAST." The date and time are "MARCH 3 | 10:30 AM A.V. ROOM". At the bottom, it states: "M.Phil and PhD Students are most welcome through their Institution's Identity Card. Other students can also come and take part."

**AVAAM**  
**DEPARTMENT OF POLITICAL SCIENCE**  
**ZAKIR HUSAIN DELHI COLLEGE**

in collaboration with  
**UGC-CAS/SAP**  
**DEPARTMENT OF POLITICAL SCIENCE**  
**DELHI UNIVERSITY**

cordially invites you to a lecture by



**PROF. AKHIL RANJAN DUTTA**  
DEPARTMENT OF POLITICAL SCIENCE  
GAUHATI UNIVERSITY

CIVIL SOCIETY AND THE PROCESS OF  
DEMOCRATIZATION IN INDIA:  
PERSPECTIVES FROM NORTH-EAST.

**MARCH 3 | 10:30 AM**  
**A.V. ROOM**

M.Phil and PhD Students are most welcome through their  
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