

# TRIGGER vol XXIX



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### **EDITOR'S NOTE**

Troika has been a long and exciting journey. The festival has seen some epic brain battles and has created a stupendous platform for learning. Having started with humble beginnings, the first edition of Troika was held in 1983, with only three events (thus, the name, Troika). The students of the erstwhile IEEE DCE would have never imagined the lengths to which Troika would grow. Today, Troika 2016 boasts of twelve events, including two 24-hour hackathons – a first for DTU.

Every minute step – from event ideas to conceptualisation, from implementation to feedback – offers multitudes of valuable experience to every organiser and participant involved. These experiences are cherished by everyone for years to come.

Troika has been blessed with growing participation numbers every year. The quality of events has been higher than ever before and the skills required to be the best have reached unprecedented heights. This is a trend we expect to be followed far into the future as IEEE DTU scales even higher peaks. Whether it was the online events, Mist and Bulls N' Bears (which attracted participants all over the world), or the on-campus events (which saw students from all over India), Troika 2016 has received immense positive response. The organising team deserves high acclaim for all its efforts.

**FROIKA 2016** 

On this note, the Editorial Team would like to thank the entire Publications Team and Design Team to have created another brilliant edition of Trigger. We would also like to express our sincere gratitude towards Prof. Yogesh Singh, our honourable Vice-Chancellor, Prof. S. K. Garg, the Pro-Vice Chancellor and Prof. Asok Bhattacharya sir, the Patron and ex-Branch Counselor of IEEE DTU. We are extremely grateful to Dr. Neeta Pandey, the chief coordinator of Troika, and Dr. S. Indu, our esteemed Branch Counselor. They have been our pillars of strength and have offered us excellent guidance.

At last, three cheers to Team Troika! Everyone contributed massively to realise the behemoth that is Troika. This would have never been possible without you.

We hope that everyone enjoyed participating in Troika 2016, just as much as we did, organising it.

Until next time The Editorial Team. Prof. Yogesh Singh Vice Chancellor Delhi Technological University



Delhi Technological University - a hub of bright minds, brilliant students, industrious and meticulous people continues to scale the rungs and make a name for itself in higher technical education in our country. DTU offers numerous possibilities for its students. It induces an overall skill development of the individual. Possessing the potential to build avant-garde creations, our students have proved their mettle to work diligently and efficiently in bestowing human intellect and technical knowhow to society. At DTU, we aim to inspire and motivate the genius, to blossom into a societal revolution. And what can be a better step towards it, than one of the most engaging technical fests,

IEEE DTU has given numerous opportunities to the students of DTU to express themselves and contribute towards the development and evolution of technology and innovative creators. TROIKA, the Annual Technical festival organized by IEEE DTU is an apt representation of persevering hard work of these students, which has always resulted in a magnificent and impressive evolution and innovative new product developers. One of the best technical fests of our country, TROIKA is the befitting convolution of technology, management, academics and industry. This year as well, TROIKA is gearing itself up to be one of the best technical fests of India.

I wish IEEE DTU the very best for TROIKA and wish that it continues to tread on the path of success and growth, enlightening the entire world.



Prof. S.K. Garg Pro Vice Chancellor Delhi Technological University

Since its inception, Delhi Technological University has been a forerunner in bridging the gap between technical introspection and application. IEEE DTU has provided the columns of the bridge, seamlessly allowing a connection to flow between the two. By the means of its various workshops, seminars and technical and managerial events throughout the year, IEEE DTU has initiated coalescence of engineers and practice and has helped them find their talents.

The technical festival of IEEE DTU, Troika, showcases the youth's flair for technology. Students from all around India participate in this technical extravaganza, displaying their numerous skills in the fields of technology and management. DTU students have aimed no less than the best and Troika is essentially the opportunity that provides them to do so. From technical quizzing to hardware & software conceptualization, Troika proves that it is the fusion of all aspects of engineering.

Trigger, released to mark the journey called Troika, chronicles it well with all its milestones, and sojourns, in all of its glory.

I wish Troika all the very best for its success, and extend my heartfelt congratulations to all student members who have been working day and night to turn Troika into reality. Dr. S. Indu Branch Counsellor, IEEE DTU Student Branch Delhi Technological University



TROIKA, the annual technical festival of the IEEE DTU student branch is entering its 24th year of a glorious history. The growth of TROIKA has been phenomenal over the years. One of the most eagerly awaited fests in Delhi, TROIKA attracts students from various parts of the country. Slowly but surely, TROIKA has emerged as one of the most prominent technical festivals in the country. The IEEE student branch at DTU is the largest and one of the most active student branches in IEEE's Region 10 (Asia Pacific). Established in 1982, it has a glorious history of over 3 decades. It has progressed steadily and received glowing tributes and accolades since its inception. As the branch counsellor of the IEEE DTU student branch, I have personally seen it grow from strength to strength. I attribute this to the brilliant teamwork of our cohort of enthusiastic student members. The sheer extravaganza of the events organized mirrors the creativity and enthusiasm of the closely knit team. TROIKA isn't just another technical festival but an incredible amalgamation of mindboggling and mystifying competitions. This year, TROIKA promises to live up to the grandeur of the previous years with a plethora of enthralling events, both old time hits and new ventures, offering a variety of opportunities to participants from around the country. TROIKA seeks to instill in students a scientific temperament and an opportunity to enhance their technical and managerial skills. I extend my sincere wishes to the students of IEEE DTU for the success of all their events and hope that they set a benchmark for festivals all around the country.

Dr. Neeta Pandey Co-ordinator, Troika Delhi Technological University



Troika, the annual technical fest hosted by IEEE DTU student branch, is all set to take huge leap into another symbolic chapter of its calendar. Troika as an event has grown from strength to strength, slowly but surely, to emerge as a redoubtable leviathan among tech fests across India. I feel proud to say that Troika as an event has achieved great heights and is, undoubtedly, one of the most prominent technical festivals where students from various parts of country participate and enhance their skills.

I give kudos to them for having brilliantly managed time and resources available to the optimum best! The efforts and hard work that the students have put in to take Troika from conceptualization to realization deserve plaudit. This has sculpted Troika into a piebald of events from various disciplines such as electrical, electronics, coding, mechanical, quizzing and much much more.

I take this opportunity to wish Troika all the best for its successful organization, and extend my heartfelt congratulations to all student members who have been working day and night to turn Troika into reality. Aastik Chawla Chairperson, IEEE DTU Delhi Technological University



Rated amongst the top-notch technical institutions in India, Delhi Technological University (formerly Delhi College of Engineering) aims to create and nurture world class engineers with impeccable technical knowledge. And supporting DTU in this very endeavor is the student branch of IEEE. IEEE is the world's largest professional association for the advancement of technology. It is one of the leading standards – making organizations in the world. The IEEE DTU Student Branch is the oldest student branch in the Delhi region which also enjoys the highest membership.

IEEE DTU has also received accolades on a global scale for its efforts, including the Darrel Chong Student Activity Award for three consecutive years (2013-2015). Throughout the academic year, IEEE DTU organizes a string of events both competitive and educational. The activities not only provide a platform for the students to showcase their innovative ideas, but also help inculcate technical knowledge. With each passing year, IEEE DTU scales new heights in both conceptualization and execution. We try to balance the core technical aspect of our society with the more management oriented side of things and will continue to do so.

Troika as a brand has carved a niche for itself. It has become synonymous with innovation and excellence. It has consistently served as a platform for students from all over the country for showcasing their knowledge. Troika has evolved over the years, with new events being introduced each year, having 'something for everyone'.

I would like to express my heartfelt gratitude to our honorable Vice Chancellor, Prof. Yogesh Singh, and our Branch Counselor, Prof. S. Indu for their invaluable guidance and support in all our endeavors.

Lastly, but definitely nowhere near the least, I would like to thank all my student friends, who are a part of IEEE DTU, without whom the dream called Troika '16 could never have come true.







**BITS, BYTES, BOTS** Ultimate Coding Extravaganza

### ENVISION

The Programming Boulevard

RADIX **Robotics Challenge** 

**ELECTROCUTION Electrical Circuitry Event** 

> BRAINWAVE Hardware Conceptualisation

**DESIGN PRO** 

**Creativity Infinity** 

**TECHNOVISION** Platform Your Research

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S - PAC Engineers of Today, Professionals of Tomorrow

**BULLS N' BEARS** To Dalal Street And Back, Via Facebook

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> Aastik Chawla : +91-9999211888 Saurav Agrawal : +91-9910919494



TODO EN UNO IQ Challenge

# C

Maths, Science, History unravelling the MISTery

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**MIST** 

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- 🖂 contact@ieeedtu.com

# BRAINWAVE

Brainwave, the electronics hardware design challenge of Troika provides a startling opportunity to budding hardware engineers to think out of the box and use their technical knowledge to come up with innovative hardware.

### ACUMEN:

It is the predefined hardware conceptualisation competition of Brainwave, in which a problem statement is provided beforehand and the participants are expected to come up with their own hardware device to provide feasible and practical solutions to the given problem statement. It consists of two sub-categories:

•Rodízio Veicular: Digital Image Processing Event based on the odd-even rule introduced in Delhi.

•Back Benchers: Build up a wireless Tic-Tac-Toe game, with 2 consoles for 2 players.

# BRAINWAUE Hardware Conceptualization

Å .

Chirag Gupta Saurav Chandel Shourya Gupta Shreya Mondol Shigdhaa Hasija

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## RADIX

RADIX, the robotics event under Troika attempts to provide an extensive platform to all the budding engineers to showcase their skills in Robotics. This phenomenal event covers almost all the aspects of robotics, whether it is mechanical or autonomous. It comprises of two sub events:

### 1) The Mechbot events:

These are the supreme events for all the robotics enthusiasts. In these events, the MECHBOTS battle for honor and loyalty in an arena of destructions with their pneumatic spikes, flipping tusks, angle grinders, hurling maces, hydraulic pincers and lots more. It comprises of 2 events:

- Battlestar Galactica: Metal clashes are heard and the arena is set ablaze as mighty robots battle it out to find out the mightiest amongst them in the Robo-War.
- Mario's quest for Wario: Every year, in the heart of the campus of Delhi Technological University, the most gigantic race course is set up, where the robots race against each other to establish themselves as the fastest.

### 2) The Autonomous Events:

These events judge the implementation of vision and sensing characteristics of a robot. The coding acumen of every robotics enthusiast is put to test and the artificial intelligence of every robot is checked till the very zenith to find out the best autonomous robot amongst all other participants. Again, it is divided into two events:

• Autonomous I (Water Abridged): This event judges the pick-drop capabilities of the robot by detecting White flags along its course.

• Autonomous II (Locomotive 38): It assesses the capability of a robot to follow parallel lines and detect breaks in it by lighting up an LED.

Thus the event provides a spectacular view for both the experts and the amateur enthusiasts of the robotics world to learn and enjoy to the fullest.

# RADIX

### **Robotics Challenge**

Chirag Arora Ayushi Jain Rachit Kaushal Roopali Singh Somya Verma Saurav Chandel Shourya Gupta

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# ELECTROCUTION

The event tests the participants' knowledge of electrical and electronics. It serves as a great learning experience and is very advantageous for all electrical and electronics engineering students.

The first round of the event consists of basic aptitude questions testing not only one's theoretical knowledge but also his/her practical skills. The ability to apply one's learning is the key objective of the event. Hence, the second round requires the contenders to prepare a logic circuit on a breadboard to work in various situations (given on the spot).

The event witnessed overwhelming participation from colleges all over the capital. The students were asked to prepare a logic circuit to implement a drink vending machine!

# Electrical Circuitry Event

Ayushi Jain Roopali Singh Somya Verma Vipin Prakash Pal



"There is no passion to be found in playing small - in settling for a life that is less than you are capable of living." -Nelson Mandela

Student Professional Awareness Conference (S-PAC) is the ultimate platform where one can get the opportunity to interact with the leading professionals in different sectors. It is an enlightening and informative experience where students can get to know the various opportunities that await for them in future. It aims to help students create a thorough perspective regarding the real world and is a moment for students to decide which career path suits them the best.

It acts as a perfect concluding event to the 3-day long grandeur. The event includes presentations from leading companies from different sectors. There is an Industry-Academia interaction through question-answer sessions. The participants get the coveted opportunity to understand the needs and demands of industry and mould their personalities in the right manner. S-PAC attendees are also showered with certificates and goodies.

With its fabulous valediction ceremony, complete with presentations and delightful interactions, this forum will serve to be the guiding light for the years to come and will be the perfect conclusion to TROIKA and its splendor.

# S-PAC

### Engineers of today, Professionals of tomorrow



# **BULLS N' BEARS**

"Wall street is the only place where people who drive a Rolls Royce come to take advice from people who ride the subway".

This quote nicely sums up the unpredictability of the stock market. Bulls N' Bears is Troika's attempt to simulate the fast paced, fortune-changing, and dramatic nature of Wall Street exchanges, with a virtual stock market that offers virtual money to play with. The participants are expected to possess good investment logic and look out for small details, clues or facts which can help them gain an insight into how the market will take shape and stay ahead in the competition. It is all about catching the 'bull' by its horns or becoming patient like a 'bear' to strike at the right time. Bulls N' Bears is highly addictive and provides a splash of much needed fun in a technical festival.

The online stock market continues for a period of three days. Like in a real stock market, a participant buys shares and depending upon circumstances your shares may grow or dwindle.

Participants are allowed to buy, sell and short sell their stocks within the bidding limit. The stock market operates on intensities of various events that occur amid the course of Bulls N' Bears. A News Feed is provided in text for everyone and the current scenario is shown graphically all the time. The one with the maximum number of shares at the end of three days is crowned the ultimate king of the share bazaar.

# **Bulls n' Bears**

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# TECHNOVISION

Technovision is the technical research paper presentation platform under Troika'16. Technovision aims to bring out the in-depth understanding of people with scientifically oriented minds, in their fields of interest ranging from core engineering subjects to the theoretical realm.

The thorough study and comprehensive research done by the budding young minds of our country will be showcased through their research papers, testing their sharp presentation skills at the same time. And moreover, Technovision gives you a chance to publish it in a renowned journal.

The event will have paper presentations in four categories:

Athena: This includes research papers from the streams of Computer Science, Information Technology, and Software Engineering.

**Hermes:**This includes research papers from the streams of Electrical Engineering, Electronics and Communications Engineering, Instrumentation and related.

Hephaestus: This includes research papers from the streams of Mechanical, Production and Automobile Engineering, Civil and Environmental Engineering and related.

**Zeus:**This includes research papers from Applied Physics, Applied Chemistry and Chemical Technology, Applied Mathematics and Applied Biology and Biotechnology.

The students are judged on the basis of the authenticity of the chosen topic, the originality of the research, the experimental confirmations and the practical implementation of the ideas.

# TECHNOVISION Platform your research

Kunal Gupta Pratyush Agrawal Snigdhaa Hasija

# **BITS BYTES BOTS**

"Creativity is just connecting things. When you ask creative people how they did something, they feel a little guilty because they didn't really do it. They just saw something and it seemed obvious to them after a while." – Steve Jobs

'Bits, Bytes and Bits' popularly known as 'BBB' is the programming event of TROIKA. The event focuses on providing a platform for students to test their knowledge and share their skills in various programming languages such as C, C++, Java and the like, thereby facilitating a two way learning process and enhancing one's ability. It consists of a wide array of challenges ranging from AI programming competitions to competitive coding and debugging programs. The sub-events include:

• **BITS:** The on-the-spot programming competition, is an ultimate test of the participants' coding skills in various programming languages such as C, C++ and Java. It rigorously tests the student's presence of mind at various levels. The event unfolds in two stages:

Stage 1: A preliminary written round to test the basic programming skills. Stage 2: The final round which is a 3 hour on-site programming competition.

• **BYTES:** An online programming contest in which participants are given a fixed time frame during which they have to solve some mind boggling problem statements. BYTES is organised in collaboration with CODECHEF and provides a platform to compete with some of the top notch programmers. The contest consists of 5-7 problem statements of varying difficulty levels.

• **BOTS:** An AI gaming challenge. It requires creativity and a thorough knowledge of programming. Participants are required to come up with a program which will act as their weapon as well as a shield and is able to defeat other programs to win the contest. This time, the codes have to play against each other in the game of "Chain Reaction".

# BISH BATESIO BOTS

**Unlimited Coding Extravaganza** 

Arpit Aggarwal Jatin Malik Priyank Verma Nikhil Khurana



Troika 2016 presents yet another edition of Mist, the online treasure hunt. The pre-requisites are lateral thinking, presence of mind and THE INTERNET! Mist requires the participants to answer questions based on what they know and what they can search. It is an online treasure hunt that serves as the ultimate test of the participant's general knowledge, Googling skills and the ability to connect the dots and reach the answer.

Created as an online event, the event lasts for 10 days. It has multiple levels. Each increasing level ensures a rise in difficulty. The clues to the questions may lie anywhere on the Internet – the URL, images etc. The one who clears the maximum number of levels in the least amount of time is the topper on the board and is declared the champion.

MIST 2016 crossed all expectations and saw an active participation from over 50 countries, with over 3000 visitors in total.

# TSISt

# Unravelling The MISTry



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# **DESIGN PRO**

Design Pro, the designing extravaganza, looks for the design enthusiast within you! Everything that is seen on the web, be it a sterling website, an awe-inspiring animation or the attention grabbing posters and banners, they all are a result of the genius minds working in the background, who are experts in designing. Their work is to gather the attention of the targeted sector through their visually striking advertisement campaigns.

Design Pro tests the skills of participants in CorelDraw, Flash, Photoshop, JavaScript, HTML, PHP, Solidworks etc.

The event has five subcategories:

**FROIKA 2016** 

- Design-O-Thon: The Graphic Designing Contest
- Web-O-Mania: The Web Designing Extravaganza
- Ani-Mission: The Ultimate Animation Challenge
- Sketch-It: Creating striking visuals on Paper
- 3D-Pro: The 3D Designing Skills for Mechanical Parts

Design Pro hunts for the creative geniuses who can design enrapturing websites, smart animations and captivating posters.

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## **Creativity Infinity**

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# Jasminder Singh Manmeet Bamrah Megha Rohilla Rachit Kaushal

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# **TODO EN UNO**

Todo en Uno translated in English stands for "all in one". This event comprises of quizzes based on the general knowledge and tests the intelligent quotient and efficiency of perception. With the best minds facing each other, there is a war of knowledge and the person possessing exceptional observational skills, full with confidence and remarkable preparation gets to lift the trophy. In this event, teams from numerous colleges compete against each other to establish themselves as the most intellectual and brilliant duo, by battling their way through various rounds.

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# TODO EN UNO

## **IQ** Challenge

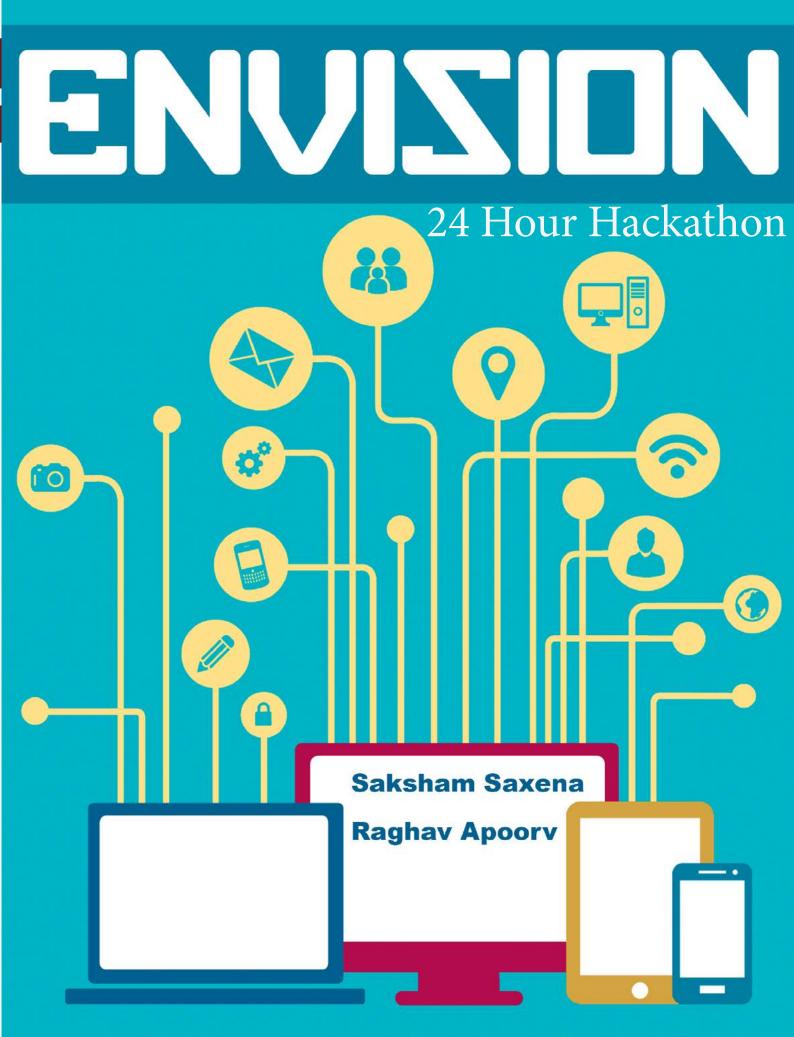
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Lakshay Nagpal Prerit Choudhary Shourya Gupta<sub>25</sub>

# ENVISION

"Software innovation, like almost every other kind of innovation, requires the ability to collaborate and share ideas with other people, and to sit down and talk with customers and get their feedback and understand their needs." -Bill Gates

An opportunity for all the budding coders out there to prove their mettle through this software development event. It is the place where all the software fanatics come together to compete with each other and exhibit their creativity and dexterity in the field of programming. The prime judging criteria are innovation, robustness, efficiency, presentation and level of interactive and user- friendly nature of the software.



the programming boulevard 27

# PLETHORA

Plethora under the aegis of Brainwave and Troika 2016, the annual technical festival aims to provide a 24 hour long intensive prototyping and development environment. It is an annual hardware hackathon that allows hackers of all skill levels to explore their creative and engineering talents. Hackers will be provided the space and equipment they need along with the mentorship to make the most out of these resources. Participants, in teams of 2 to 4 shall be encouraged to let their imaginations run wild, using a micro-controller kit or re-purposing existing hardware for unique applications. Teams shall also have access to a standard circuit laboratory bench, complete with test equipment such as power supplies and oscilloscopes. At the conclusion of the 24hr hackathon, teams shall demo their projects to other attendees and judges. Finally, the panel of judges shall evaluate and score the presented projects.

Teams with members from different colleges/disciplines are also allowed to participate.

# **DETTHORA** 24 Hour Hardware Hackathon

Chirag Arora Saurav Chandel Shourya Gupta Shreya Mondol

### **IEEE DTU STUDENT COUNCIL 2015-16**

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Ravi Prakash Ria Gupta Ria Batra **Rishabh Upadhyay** Rishav Chatterjee Rohin Bhandari Rohit Singh Shokeen Sagar Bansal Sagar Taneja Sagnik Bhowmick Saloni Singhal Sambhav Chaturvedi Samraj Agarwal SarthakChauhan Saurabh Kumar Saurabh Yadav Shankar Jha Shantanu Kumar Shashank Yadav Shivam Malik Shivam Arora Shivam Sachdeva Shubham Chander Shubhi Sareen Siddhant Jain Simran Jha Sneha Bahl Srishti Sumit Kumar Sumit Bhardwaj Sumita Tanmay Pal Tanmay Sharma Tanya Agarwal Tarun Anand Ujiwal Utkarsh Thakur Utkarsh Verma Vaibhav Sharma Varnika Gupta Vasu Goyal Vineet Sharma Vivek Raivansh Yash Bansal Yash Gupta

OUR CORRESPONDENT

#### Kejriwal, Sisodia skip At-Home reception hosted by Bassi



et Provab Shikherjes Basel at the St House with it i Ba of Date d on the o ten Balating Day in Hon Collin Nadawadan n OUR CORRESPONDENT

NEW DELHE, chief Man-iner Arvind Kelebel, who has here at legenhaud with Dub Piler Constructions? It S Basel over a emperi-tion Wellcoder deposition of the Chip Office and the Home acaption expansed by the Chip Office And Kephool and his deputy Masside Stocks shall on Tan-dry also net attended the other Delia Poler Rasing Day parade.

porade. "Torin Kajatood and Saevila today shipped the As-Horne reception isosted by the Com-missioner. The ranges behind reception insets) by the Certi-minimizer. The masses behind there not attending the evert is the arresting with Band, over issues including women's only in the city's assure solid. In October, Keistwal had unadout the Duffit bokes acong that Tangle off was presenting in the antieval Cogenit which was a present of 'long-transition's was a present of 'long-transition's been entitletten, fixed indi-ted, 'There is no issuigh out in Debhi, If works a thing has been and then it is definitely beening it that the is definitely beening it that the is definitely beening it that the is the interval that the source of the second its of the instance.

non. The AAP government has a democking from the HP-entrol government to hand the sity policies it. bee



IEEE DTU ent Branch



Mr. Kishore Jayaraman President, Rolls Royace India and South Asia



Mr. Rohan Shargava Co-founder, Cashkaro.com



Mr. Sanjeev Arera Business Head and Vice-president, ABB India Itd.

### Centre waiving loans of big businesses, says Kejriwal

UNCLASSING NOT REPORT



even place then correctly," he told a cheating crowd, "But when I give to MURO to e-rickshare drivers, I are socured of westing meany,"

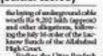
NEW ORIGIPORIAN NEW OILISE: Dolbi Chief Naiser Arood Kaywai en Widgesday accused the RP-bid Castring generations of "working" losss of big busi-tenses in the country, oling ha vaning and/a Ta Listikh corre of bad islans by public sector hashes security Addressing a suffy of childshee driver at Chila-tinsol Stadium where he immoniced a subsidy of bi-SADD as registration of the vehicles. Keyinved dia Listikh issues with working for the risk. "The Control govern-ment has very ed its Listikh power of date of the tab bio-halts and Admin. There are an any annow we can set

Noida ex-chief engineer Yadav Singh sent to 14-day judicial custody

### OUR CORRESPONDENT

GHARABAD: Aspecial over here on Windowskir sent Norda's en chief engewar Yahr Norda's 14 days jaak dal custody. The court of Special Judge G Senkert had establish their

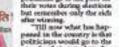
The court of Special Jodge G Smales Haal associated these extended againsty root offy of the Walay Stagle, who may averaged by the CBI on Fobrauery 3 for allogoidy viewage the official position in awarding contrasts and coasing swength likes to the government exchanges. When the weap root official position is awarding contrasts in the second state of the government exchanges. The second state of the orart suit him to tailed ca-tering and the second hashing of the second the second hashing of the second state of the second state of the second hashing of the second the second hashing of the second the second hashing in the second state of the second state of the second hashing ince, and other without second poe-ple ander version sections of the blacking Paul Code and the Perventions of Comption Ast in walking coverage prediction for the stage.



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KANSANA SACIDEVA GURGAON: The Suprante Court on Wednesday durided to set aside the Wednesday databal to set adde the Bonhay High Court order for engi-turation of an EFR spatial the Herp-ma inpo-fer kilding gaugate Stockey Galdak in an Alsayd maxourne in a Marthu horol. The Superate Court had sent the matter back to the High Goart for a feeth hereing and has asked them to include a variant of the Haryane Poline.





OUR CORRESPONDENT

OUR COMPLETENDENT NEW DELITIS.Sandor IDS-all-ore Alock Kanar Versten will be durant Canaritationse of Dollar Pillon, second zg in combert B Silans, where refiling pillon been on Pehruary 28. A 1937 And S Unice Desi-ney radie officer, 58 year sill Verste is consently new ying an D3 of Tibar person and will cel the national Capital for 17 months. Sources and the gov-encement of the nature of the national Capital for 17 months. Sources and the gov-encement of the nature of Stema as the next Canaria since of Del Fullowald officer and ecdes in supected acon.

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the sociandars for the post of Information Commissions in Cannol Information Commis-sions (2022). They is a wavery of these tarformation Commis-sions against its tool recerch of 10. Bandy amore you short-head last Xenander by a seach committee headed by Califiest Secretary P.K.Saha.

HC notice to Delhi govt on plea for neighbourhood school

OUR CORRESPONDENT

SEW DELAID: The Dubbi High Court on Welanoday issued notices to Dubbi gra-outeness sharation department non FIL sading implementation of provision of ouighboarhood achooling in the top me-ogria department school or of the chy A funch of Chad Justice G Robins and

oprised private schools of the city: A funch of chall plants of Enkins and hadres isouri Nath weight AAP generic menth oppy and whole it to take instruc-tions on the averagents missed in the pattern, before April 25. "Transmore of Education is a doed to take instruction: They will like a doed to take instruction. They will like a doed to take instruction. They will like a doed to take instruction. They will like a doed to take instruction and they doed to take instruction. The Benchraid. The once were bearing a FIL Educity on NoSO through above are Khagab it the winn admitted that thin is for the ben-ther distingtion modeling in the engl-borhood and not getting administor in the recognized usualed schools distant at a converting the addered to them for reasing auxided private school." A sold that the land was aftered to Fully gor curracted institutions and due to the school with the land was aftered to Fully gor curracted institutions and due the due to the institutions and due the school with a land with the land was aftered to Fully gor curracted institutions and the study of the due to the institutions and the study of the school with the land was aftered to Fully gor curracted institutions and the study of the school with the land was aftered to Fully gor curracted institutions and the study of the school with the land was aftered to Fully gor curracted institutions and the study of the school with the land was aftered to Fully gor curracted institutions and the study of the school with the school with the land was school with the land was aftered to Fully gor curracted institutions and the school with the sc

that their som was killed in a staged encourse. They also alloged that an ACP-rank officer of the Carpose crime team was a domar relative of Djen-de Capte – Gaddl's business straft it where beboth the was killed. Justice Raujit More and patters V& Achaly discord Marriella Policy Constitute a fipectal investigation Team to incide the allogations. Gaddhi famili who have beam composing in Mumbel against the emmande inver released to date the progetor's body and have sold the att in FIR is regulated against the Gaugase Role of the official forms the concentum of the official forms the concentum of the official forms the concentum team of the official form the concentum team of the official form the concentum team of the official forms the

One of the official term she recompter term said: To is ad that we are being parthereagh this term for elimineting a gaugater who was not table drawn people. That is ecough reidence against hins. However, we will fully cooparate in the itopatry?

SC sets aside Bombay HC order

of FIR against Haryana cops

GADOLI ENCOUNTER



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() 9:30 a.m.





Mr. Naveen Kasturia Actor and Assitant Director (TVF Fame)



Mr. Suresh Rajpal Former President, Hawlett Packard India



#### Mr. Manmohan Gupta Co-founder and Head of angles

#### Alok Kumar Verma to be next Delhi Police Commissioner

mp city 5

### डॉ. हर्ष वर्धन DR. HARSH VARDHAN



मंत्री विज्ञान और प्रौद्योगिकी एवं पृथ्वी विज्ञान भारत सरकार नई दिल्ली - 110001

MINISTER SCIENCE & TECHNOLOGY AND EARTH SCIENCES GOVERNMENT OF INDIA NEW DELHI - 110001

### MESSAGE

I am glad to know that Delhi Technological University (formerly Delhi College of Engineering), New Delhi is organizing its annual technical festival TROIKA-2016 from 19-21<sup>st</sup> February, 2016 at Delhi.

I have been told that IEEE is the world's largest professional association for the advancement of technology IEEE DTU is the most populous IEEE student branch in the Delhi Technological University. For its efforts, IEEE DTU has been the recipient of various awards both nationally and globally, TROIKA helps the students for their leadership and communication skills. On this grate occasion various eminent professional form the field are participating from all over the country.

I extend my best wishes to participants, members of managing committee and organizers of "TROIKA-2016)" for its grand success and in all its future endeavors.

your

(Df. Harsh Vardhan)



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