IIT-Delhi students pay homage to accident victims

Four die in road mishap on their way to Jaisalmer

NEW DELHI: On the day bodies of the four final-year IIT-Delhi students reached their parents, a condolence meeting was organised at the campus.

On Sunday morning, six students of the institute were going towards Jaisalmer when a tyre of their Innova car burst, killing four of them, said police.

The students were on a road trip to celebrate their placements.

The bodies of deceased have reached their family members. Three students had died on the spot, while one succumbed to injuries later in the hospital, said Rakesh Kumar, registrar, IIT Delhi.

One of the survivors has been shifted to a hospital in Delhi for advanced medical treatment, said the institute.

“Deeksha had lot of head injuries,” said Manju Gautam, mother of the 22-year-old victim. She said that her body had reached in the wee hours of Tuesday.

Deeksha Gautam had landed a job at Goldman Sachs in Bengaluru at an annual salary of Rs 30 lakh per annum.

She was barely two months away from the dual degree BTech and MTech in computer science.

An eyewitness said the accident was a result of overspeeding, said the victim’s mother.

On Sunday morning, six students of the IIT-Delhi were going towards Jaisalmer when a tyre of their Innova car burst, killing four of them. Three died on the spot while one succumbed to injuries at a hospital.

Victims

The other three final-year students who died in the accident are Pallav from Dhanbad, Mayank from Meerut, and Aarchana Kumari from Bihar.

“Aarchana was Deeksha’s roommate at Kailash Hostel. Their plan to go for the road trip was sudden. Deeksha was to come home on Saturday,” Gautam said.

She added that Deeksha’s friends and representative from IIT administration had come for her cremation.

“I feel as if she will be coming anytime soon. But then, I realise that she is gone forever. She was a bright student and a perfect daughter,” said Gautam.

DH News Service

‘After all the hard work and sacrifices, it had to end like this’

Friends, teachers at IIT-Delhi recall the four who lost their lives during a trip to Rajasthan

SHIKHA SHARMA

NEW DELHI APRIL 1

HE WAS an avid traveller, one who loved to hit the road frequently. But last Friday morning, Mayank Goel wasn’t planning on going anywhere. A last-minute cancellation by a friend, however, saw Mayank headed to Rajasthan — a trip that was to be his last.

Four days later, his friends are still left with a sense of disbelief. “It feels like he’s away on one of his trips and will be back any day,” Mayank’s friend Manish said.

A tyre of the Innova in which he and his five friends — all from IIT-Delhi — were travelling burst and the vehicle overturned, killing Mayank and three of his friends.

While Pallav Aggarwal and Deeksha Gautam from the Computer Science department, and Aarchana Kumari from the Chemical Engineering department, died on the spot, Mayank, who was studying biotechnology, succumbed to injuries at a hospital.

“Mayank was the one whose notes we studied from. He had been placed at Axtria in Gurgaon. After all the hard work and sacrifices, it’s hard to believe that it had to end like this,” Manish said.

Aarchana got a job at Reliance, but was planning to prepare for civil services, after working for a couple of years. “Aarchana was hardworking and soft-spoken. She was always in the top 10 in her course, and captain of IIT-Delhi’s girls’ volleyball team,” one of her teachers said.

In her honour, the institute has decided to start a scholarship — the Aarchana Kumari Scholarship for needy students, from next year.

A similar sense of loss haunts the friends of Deeksha, Aarchana’s roommate at IIT’s Kailash hostel. Deeksha had landed a job with Goldman Sachs at an annual salary of Rs 30 lakh. A topper since her school days, Deeksha cleared the GATE and was an assistant teacher at IIT-Delhi until last year. “She was made for engineering. This was not how it should have ended,” one of her friends said.

Pallav Aggarwal was going to the USA to work with Rocket Fuel after his course. “Pallav was bright, but he had no airs about him. He was my teaching assistant. A day before he went to Rajasthan, we went out for dinner. Two days later, Pallav is no more,” Abhinav, Pallav’s junior, said.

“We were working on a project together, and today was our big presentation. When his name was called out, he wasn’t there. It was very unsettling,” another friend of Pallav’s said.
IIT students make a NaMo drone

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NEW DELHI: Far from the battlefields of Iraq and Afghanistan, drones are set to take poll campaigning to new heights in the Capital. A group of students at IIT-Delhi have designed a drone – an unmanned flying vehicle – to carry banners asking people to vote for BJP PM candidate Narendra Modi.

The lightweight equipment can reach a height of 4,000 feet and has a reach of 1,000 metres. The remote-controlled object will fly around open spaces – like parks and grounds – and drop pamphlets in support of Modi as PM, besides acting as a banner in the sky for the Gujarat chief minister.

“The drone is in its final stages of completion and will soon be used to reach out to voters in Delhi. The exterior of the drone will carry the message ‘Modi for PM’ while we can also drop pamphlets through it in the area of campaigning,” said Sanjay Kharwar, who developed the drone with two of his college friends – Brij Kishore Maurya and Tanmay Bunker.

Keeping Delhi’s cramped public spaces in mind, the trio installed a sensor in the drone so that it can send an alert to the operator if a building or wire is near. “The drone can work without the operator but due to narrow streets and overhead wires, it will be controlled by a remote by our volunteer. It can also carry an audio message but we will have to check with the agencies concerned before we start it,” said Bunker.

CONTINUED ON PAGE 6

Deccan Herald ND 02/04/2014 P-4

IIT students swot to make robotic soldiers come alive

ROORKEE (UTTARAKHAND): Robots braving bullets while ferrying weapons and ammunition to soldiers on the battlefront. And a broken limb will be no deterrent. “We are working on the operational prototype of a four-legged robot that consists of a chassis and can be used at the forefront of war areas, for instance to carry weapons,” said P M Pathak, associate professor in the Mechanical Engineering department.

“Even if one limb is hit by a bullet, the robot can continue to function on the remaining three limbs, and even of two,” said Dwayne Amund, a third-year student in the robotics department. Some students are working on a robotic arm that resembles a human arm with flexible finger-like extensions that can be used to pick up, hold or even push objects. The robotic arm can withstand high heat and can be used by people who work in hazardous spaces like blast furnaces.

At the annual IIT-Roorkee TechFest – Cognizance – hundreds of students from various IITs and other engineering colleges across India showcased over 4,000 robotic inventions.

One section, titled Power-Drift, focussed on robotic racing cars. A Formula I track was laid out on which miniature battery-run robotic cars whizzed around. In another fascinating event, titled Roboapachens, there were robots involved in “hand-to-hand combat” in a boxing ring.

“Robotic may not be popular in India yet, but the times are changing,” said Pathak: “A lot of research is going on in this field and we have students from the undergraduate level to PhDs who contribute.”

He said robotics has developed over the years – from the USSOs and 1960s when the first industrial robots were introduced. They were thought of as mechanical devices used in industries for mass production.

Now they are used in different fields and have become more specialised and understand complex commands and in some cases, even logic. “Robotics activity is going on mainly in the mechanical department. But since this field of study is interdisciplinary, we have people from the electrical, computer science and mathematics backgrounds who collaborate for the research,” said Pathak.

Explaining how a robot is made, Pathak said the students first design its features and functions on a computer. “We help students by making them study the structure, and tell them how to control and power the robots,” he said.
Students design robots to aid agriculture at IIT-Bombay

MUMBAI: Robots that can sow seeds in a farm, robots that can remove weeds, robots used for fertilizing crops and robots that can even pluck fruits from trees and accumulate these at one place — these were some of the final entries at the e-Yantra Robotics Competition 2013 (e-YRC 2013), which was held recently at Indian Institute of Technology Bombay (IIT Bombay).

The theme for this year’s competition was ‘Urban Agriculture’. Agriculture is a major industry in India contributing to over 15% of GDP and employing 50% of the workforce. India has been self-sufficient in food production for more than a decade — however there are problems faced at every stage of food production, which lead to inefficient produce as well as wastage of food grains.

“eYRC-2013 aims to bring awareness to problems in the agriculture domain by assigning themes that involve processes in this vital domain. Four themes are used as exemplars of important stages in the agriculture production life cycle: seeding, weeding, fertilizing, and harvesting. Student teams from around the country have worked on prototypes of robots such as the seed sowing robot, weeding robot, fertilizing robot and fruit plucking robot,” informed Prof. Kavi Arya, Principal Investigator, Project E-Yantra.

The aim of the competition was to bring awareness to students about many problems that a farmer faces and how technology may be used to provide solutions to these problems. In the process of creating these prototypes, students learn concepts of Embedded systems, micro-controller programming and hone their communication skills as well.

The top teams under the category of Seed Sowing Robot were from Walchand College of Engineering, Sangli; K J Somaiya College of Engineering, Mumbai; BITS Pilani, Goa (not necessarily in the order of 1st, 2nd, 3rd). The top positions for the Weeding Robot went to students from Dhanashri Desai University, Nadiad and R.V. College of Engineering, Bangalore. The teams that did very well in the competition for Fertilizing Robots were from again from K J Somaiya College of Engineering, Mumbai; Dr. D Y Patil College of Engineering, Pune; and Jawaharlal Nehru National College of Engineering, Shimoga.

More than 6,000 students had registered for e-YRC 2013 from across the country with several of them from institutions in smaller towns and remote corners of the country like Dhanbad, Jharkhand; Yamuna Nagar, Haryana; Sangli, Maharashtra; Jadugar, Kolkata, Rourkela, Orissa and Nadiad in Gujarat to mention some.

According to Dr. Saraswathi Kirthivasan, Senior Program Manager, E-Yantra project, “The e-Yantra Robotics Competition provides a platform for students to demonstrate their knowledge and programming skills in Embedded system and Robotics to solve real life problems with the given hardware.” What sets this Competition apart from others, is its unique model — Rather than asking students to build a robot from scratch (which involves investment from a team and usually ends up as a crude robot), each of the qualified teams is given a Robotic kit, complete with accessories, to build an application based on the theme assigned to them. This model has been a hit with students from engineering colleges as (i) this model makes the Robots accessible to even students from the remotest of regions (ii) students are helped to implement the project in a step-by-step manner in a Project Based Learning (PBL) mode, and (iii) it identifies talent across the country whereby students are encouraged to think innovatively to solve problems from their daily life.
International summer and winter terms may boost IIT rankings

Vanita Srivastava
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NEW DELHI: The Indian Institute of Technology, Kharagpur, is starting international summer and winter terms (ISWT) from this year. The ISWT will allow participants to gain knowledge and experience from reputed international faculty through intensive study and personal interaction.

Several academicians feel that this particular educational step could have a positive effect on improving the rankings of the IITs. There are 27 subjects on offer during the summer term (which starts from second week of May) and three subjects during the winter term.

These subjects are designed around current and multidisciplinary themes of science, engineering, management and law. With a blend of lectures and tutorials, each subject is spread across two weeks or ten working days.

At the end of the subject, IIT Kharagpur will issue a course completion certificate to all participants.

Alternatively, registered students will have the opportunity to obtain additional academic credits based on the evaluation and grading process.

“By bringing together participants and faculty from India and around the world, the ISWT will not only be academically stimulating but also offer an opportunity to interact with international experts. This is a unique way to enable international collaboration at academic and research level for faculty and students not only of IIT Kharagpur but also teachers, students and scientists from rest of the country,” IIT Kharagpur director PP Chakrabarti told HT.

“It is a scalable model focused not only towards advancing cooperation in niche areas of national and international relevance but also to foster sharing of best world-wide practices in teaching,” Chakrabarti added.

The faculty coordinator, A Goswami, also said, “The objective of ISWT is to start academic activities in the summer/winter where participants from all ages and countries can register in the time-bound short-term courses and participate to seek knowledge from international faculty.”
Mukherjee to meet directors of IISc and IISERs on April 3

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President Pranab Mukherjee will meet the Directors of Indian Institute of Science (IISc), Bangalore and Indian Institutes of Science Education and Research (IISERs) at Rashtrapati Bhavan on April 3, 2014.

The agenda items for discussion include status of IISc and IISERs and issues that require Government support and preparation of a road map for making IISc and IISERs world-class institutes.

Union Human Resource Development Minister M.M. Pallam Raju, and Dr. C.N.R. Rao, National Research Professor will attend the meeting apart from Directors of IISc and five IISERs.

Padma Shri for IIT-K professor

KANPUR: Professor Vinod Kumar Singh of IIT-Kanpur was conferred Padma Shri Award by President Pranab Mukherjee at Rashtrapati Bhawan on Monday.

Singh is presently working as the founder director of Indian Institute of Science Education and Research (IISER), Bhopal. He is on a leave from IIT-K for heading IISER, an institute established on the pattern of IITs by HRD ministry.
IIT STUDENTS WIN GANDHIAN TECH AWARDS

IT IS increasingly becoming clear that young engineering or science students deliver when they are given a specific challenge and an incentive. This is the experience of Techpedia, a consortium of college students incubated by innovation guru Anil Gupta at the Indian Institute of Management, Ahmedabad. Techpedia has instituted some interesting awards for young innovators — More from Less for Many Award, Socially Relevant Innovation or Technology Award and Technological Edge or Strategic Innovation award. Collectively these awards are called 1,400 nominations received this year.

diagnostic kit for rural areas, low-cost device to increase adherence to TB medication, thermal and combustion improvements in cook stoves, low-cost diagnostic for pneumoonia and herbal spermicide.

Beating odds, disabled youths finally fly high

New Delhi: Pratyush Nalain clearly remembers how his school authorities did not allow him to participate in Independence Day celebrations as they felt the audience wouldn’t like to see a wheelchair-bound child on stage. He has come a long way since. A BTech (computer science) student in IIT-Bombay, Nalain says he is humbled by the struggle of other disabled youths who came out in flying colours despite fighting numerous odds.

Nalain was among 75 students, professionals and entrepreneurs who had come to Delhi recently to attend the National Convention for Youth with Disabilities. They shared their stories and interacted with experts from corporations and HR organizations.

Nalain, for instance, recollected what a struggle it was to get admission in school. “There was no other disabled child with me in class throughout my school life, simply because regular schools did not want to take special children. But when I went to Bombay Scottish, they were extremely accommodating. They gave me a scribe and extra time to complete my paper in Class V,” said Nalain.

Nalain feels disabled children could do much more if schools were accessible. He stood second in school in his CBSE board exams, is the youngest Microsoft Certified Solution Developer and a recipient of the National Child Award for Exceptional Achievement. “But I still can’t use an ATM. Imagine I can’t go to a post office,” he said stressing on the need to make public spaces accessible to the disabled.

Sachin Singh also studied in a mainstream school in Lucknow with great difficulty. “My mother and sister are also hearing impaired. It was so difficult communicating in school as a kid. I somehow got by. But now I am so happy because I have learnt sign language. There is an interpreter with me,” said Sachin, who wants to research on the lives of hearing impaired people in India. “There are so many publications in Europe and America on hearing impaired. Why can’t we have something?”

Pratyush Nalain is a third-year undergraduate student specializing in computer science from IIT-Bombay. He is a geek, dreams of an inclusive society and cares for the environment. He is the youngest Microsoft Certified Solution Developer; member of a global organization for high IQ people, MENS; recipient of National Child Award for Exceptional Achievement by the Indian government.

Sachin Singh, pursuing BA in Sign Language from IIT, wants to research on education for deaf people in India and has plans for a special publication. He likes partying and has participated in national weightlifting competitions.

Amar Jain is an advocate specializing in banking and financial laws. He can play the synthesizer and sing. He has developed beta-testing programmes for screen readers and telephones. He chose law to prove that a disabled person can pursue any career.

Preparations for civil services and doing an MPhil in “inclusive policy”. “Why does schooling have to be so difficult for blind children? I first went to regular school, and then I was put in a blind school for a year after which I returned to a regular school. I can’t use Braille. I used to listen to recorded lessons. Why can’t schools tailor their education system for disabled children as well?” she said.

Sanya traveled alone to Delhi for the convention. She cleared her GRE and had got a scholarship from the University of Canberra. “My parents did not let me go. That’s also because society often doesn’t accept people with disabilities. They were scared of that,” she said.

Amar Jain is an advocate in Mumbai. He moved from Jodhpur to study at the Government Law College in Mumbai to prove a point. “People thought the only career option for me was teaching or singing. I wanted to prove them wrong. They thought no one will hire me, but a law firm hired me and I am finding my area of specialization—banking and financial laws—extremely interesting,” said Jain.
FEW things that happen in the education world can never be explained by logic. All justification simply falls and numbers lose their identity. That is the problem, the University Grants Commission (UGC) on the number of state funded/affiliated colleges in various state universities is very disturbing and raises questions on the merit of the link between these colleges and their parent university.

The data shows that Hyderabad's Osmania University is biggest with 901 colleges. Next comes the University of Pune with 811 affiliated colleges. Rashtrasant Tukoji Maharaj Nagpur University is third with 800 colleges. Rajasthan University at Jaipur and 735 colleges is fourth, followed by Mumbai University with 711 colleges. We must also realise that each of these colleges, on an average, teach 6,000 to 8,000 students. So the numbers game is truly big. If UNESCO sees such a huge number growth, they would be perplexed as to how the vice chancellor, along with his or her body of members and officers, would be surviving.

Affiliated colleges are the mainstay of India's higher education system. Today, there are around 13.5 million students pursuing different subjects from various faculties in the higher education sector. The affiliated colleges across the country enroll 88.3 per cent of under-graduate students and about 72.2 per cent of postgraduate students. This is certainly not a happy situation. Just like the vice chancellor, the principal of the college is literally completely loaded with administrative work, while teachers take several classes with hundreds of students in the classroom. The net outcome is that students are not educated per se; they just give examinations and the university struggles with publishing the results. It is no wonder then the classroom teaching is just a task to be done, mostly without students' presence, the conduct of examination is merely a process to be carried out and the publishing of results a few months later is just a ritual to be performed. The outcome is that we are producing a battalion of non-usable graduates.

Imagine the scenario 10 years from now. The impact of right to education and free education at school level (and completely free education to girl students right from school to university level) would start showing the change in numbers of youth knocking the doors of college. As many as 45-50 million students: that is, a four-time rise, India would be teaching an entire country in Europe.

How are the state and central government addressing this earth-shaking scenario? It appears all the central government bodies — be it the Planning Commission, ministry of human resource development (MHRD), university grants commission (UGC), or all-India council for technical education (AICTE) and 11 other councils like medical, law and dental among others — are aware of this growth problem, but have no plan to tackle it.

In a recent speech on these issues, the Planning Commission member who deals with higher education made a statement (as appeared in a national newspaper in English): "The growth has come about in the last 10 years. This growth is not by accident; it is balanced. How is one expected to interpret such a statement? The expert connected with writing of Rashtria Uchchatar Shiksha Abhiyan (RUSA) said that more colleges are coming to big universities because of their better governance and quality.

It is truly a matter of concern if just a huge number of affiliated colleges are attached to any university will enhance its governance and quality of education. Newspaper reports of the last four months reflect students' agitation towards the top five universities (as per the UGC list), whereas these universities reflect exactly the opposite picture. The growth of affiliated colleges (in numbers) has drastically destroyed the university system.

Is there a path for such a disturbed structure? Enhancing the number of universities could be one approach, but it may not necessarily be a good option. First, India is very sensitive to the history (and status) of the university. Hence, parents would like their children to have a certificate given by Mumbai, Jaipur or Pune University; even though they are aware that the affiliated colleges are doing a very bad job in teaching or in making students fully 'knowledge-enriched'. These fresh graduates won't necessarily get jobs, but that is another issue both for parents and graduates. It is the title and the history of the university that matters to them.

Under such circumstances, both central and state governments must see that policies for universities are open, flexible and transparent. Universities must encourage a credit-based modular structure with removal of boundaries between subjects and faculties. This would give freedom to students to pursue a degree mixed with knowledge in different subjects.

This does not mean that the university would compromise in core education. Students would have to do certain fundamental courses by doing relevant modules: they will have to collect points up to 60-70 per cent in fundamentals as recommended by the academic council for a particular degree. However, they would be able to enrich their knowledge base (and make themselves saleable) by taking skill-oriented modules, specialised subject modules or focused application modules. Let us hope the new government makes a radical policy change in this regard.

Arun Nigavekar

(The writer is former chairman of UGC, former vice-chancellor of University of Pune and founder director of NAAC.)
Soon, trains that can climb skyscrapers?

Futuristic Project Aims To Have Vertical Tracks On Buildings To Replace Stations

Kounteya Sinha | TNM

London: Londoners Christopher Christophi and Lucas Mazarra have drawn up a proposal for the world’s first vertical trains that will climb up skyscrapers.

The futuristic project calls for vertical giant skyscrapers to replace present day stations to reduce the amount of land needed for traditional train stations.

Named the ‘Hyper Speed Vertical Train Hub’, the skyscrapers would have super powerful magnets on its sides to allow the trains to go up the building.

Train stations take up a lot of room in a city with their long platforms and tracks. Flip it vertically and place the station, platforms and tracks in a tower and you’ve just freed up a lot of space, the Londoners said.

The proposal has won honorable mention at the 2014 eVolvo Skyscraper competition.

The two said in a statement: “Nations from around the world from the USA to UK are considering futuristic proposals for an advanced public transport network, to maximize the economic growth of their cities. The Hyper Speed Vertical Train Hub aims to resolve the inevitable challenges that cities will face by 2075.” According to them, as the world’s population dramatically increases, the demand for goods, natural resources, foods, fuel and land would have increased significantly by 2075.

The majority of the future’s population will gravitate towards living in megacities, increasing the pressure and competition for adjacent suburban land, therefore forcing cities to explore more innovative forms of public transport.

“However, our proposal will not only simplify time, it will reduce carbon dioxide emissions, increase energy security and revolutionize international trading relations. The trains will cover an average distance of 462km in 30 minutes.”

The ‘Hyper Speed Vertical Train Hub’ aims to replace existing flagships train stations and create new key connective points for the exchange of people and goods with the new hyper speed network.

The proposal will ‘flip’ the traditional form as the tall cylindrical form aims to eliminate the current impact that traditional stations have currently on land use, therefore returning the remaining site mass back to the densely packed urban megacity.

“As the train travels and transitions from its horizontal formation, and ascends up the facade vertically, the carriages will pivot similar to that on a Ferris wheel, allowing the passengers within the carriage to remain in an upright position and facing the city. The carriages will be supported by a magnetic structure located on either side, eliminating the need for rails beneath and allowing the carriages and its passengers to connect to the tower,” the proposal said.

A drone that can hack phones

London: A new drone that can be used to hack smartphones and steal personal data — all without a user’s knowledge — has been developed.

The Snoopy drone steals data from unsuspecting smartphone users by exploiting handsets looking for a wireless signal.

The quadcopter, developed by a security firm which has offices in South Africa and the UK, uses the company’s software, which is installed on a computer attached to the drone. Glenn Wilkinson, from the firm SensePost, said that when the software is attached to a drone flying around an area, it can gather everything from a user’s home address to his or her bank information. Many smartphone users leave the wireless option constantly turned on on their smartphone.

That means the phones are constantly looking for a network to join — including previously used networks, ‘BBC News’ reported. “A lot of (past) network names are unique and it’s possible to easily geo-locate them,” said Wilkinson.

Snoopy demonstrates how someone could impersonate one of those past networks.

Once a user has joined the disguised network, a rogue operator can then steal any information that the user enters while on that network — including e-mail passwords, Facebook account information, and even banking details.

Wilkinson acknowledges that the Snoopy software is not a new technology — but rather it is just a different way of gathering together a series of known security risks. The drone was unveiled at the Black Hat security conference in Singapore.
JEE Mains: More than 13 lakh aspirants to attempt the exam


The two year old Joint Entrance Exam (JEE) has gained popularity all over. These exams came into existence in the year 2012 on replacing All India Engineering Entrance Exam (AIEEE). JEE (Mains) is set to see a total of 13.57 lakh aspirants this year. Out of this total figure, 50 per cent candidates are quota based.

As per the newspaper reports, 4.7 lakh candidates come under the Other Backward Classes (OBC) category, 1.36 lakh are the ones from the Scheduled Caste (SC) category and the Scheduled Tribe consists of 57,000 candidates which means the reserved category candidates total to 6.7 lakh. The total number of applicants in the general category is 6.9 lakh.

The candidates can appear for the exam through either of the medium, online or offline. The online JEE (Mains) is scheduled to take place on April 9, April 11, April 12 and April 19 whereas offline, the exam will be held on April 6.

JEE: parents worried over marks weightage

Special Correspondent

They question weightage given to Class 12 marks in the JEE

Less than a week before the Joint Entrance Examination (Main) begins on April 6, parents whose children have studied the central syllabus have raised concerns that their children are at a disadvantage. They have questioned the weightage given to Class 12 marks in the JEE.

The JEE is conducted for admissions to Indian Institutes of Technology (IITs), centrally funded technical institutions, and other participating institutions. Under the JEE, the merit/rank list will be prepared based on 40 per cent weightage given to marks scored in Class 12 in State board or equivalent examinations, and 60 per cent weightage will be given to marks scored in the JEE (Main). However, the JEE notification specifies that weightage to school board/equivalent examination marks will be considered “only after normalisation”, which means arriving at a method to be able to compare marking systems by individual boards.

In a letter addressed to the directors of IITs and officials of the JEE Cell of the Central Board of Secondary Education (CBSE), a parent, who did not want to be named, of an IIT seat aspirant questioned how the difficulty level of the State board exam could be compared to that of the central board exam.

‘Discrepancies’

Questioning the 60:40 formula, the parent pointed to discrepancies, including the varying levels of difficulty in State board and CBSE question papers, the overall choice for the State board students vs. the internal choice for the central syllabus students, the ‘blow-up’ (condensed) syllabus and the difference in scoring in practicals. The Department of Pre-university Education introduced NCERT books for PU students in the science stream two years ago.