

Newspaper Clips

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How IIT-Delhi is making smart moves for India's defence

<http://economictimes.indiatimes.com/news/defence/how-iit-delhi-is-making-smart-moves-for-indias-defence/printarticle/58361241.cms>



The IIT-Delhi is developing two UUVs—the Hydrocopter and the Nemo.

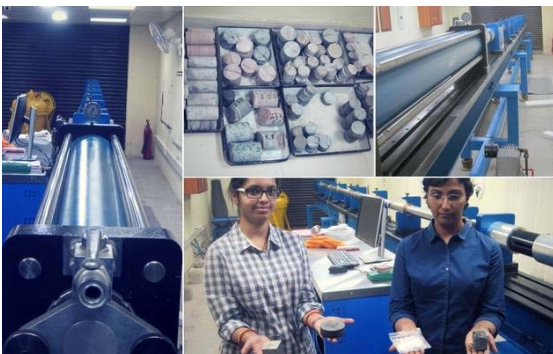
Indian Institute of Technology (IIT)-Delhi is developing several cutting-edge defence technologies— from blast-resistant buildings to uniforms fitted with sensors.

In collaboration with Defence Research and Development Organisation (DRDO), IIT-Delhi has launched a 'science park' under the Joint Advanced Technology Centre to develop smart technology for India's defence.

Below are a few of the new-age defence technologies in the works at IIT-Delhi:

Blast-resistant design

IIT-Delhi is creating a material called aluminium cenosphere syntactic foam which will be placed as a layer in buildings, bridges and flyovers to protect them from collapsing or suffering severe damage during a bomb blast. Dr. Tanusree Chakraborty, Associate Professor, Department of Civil Engineering, explains that during an explosion the voids inside the material would absorb the blast and the material would shrink in volume. This material can also be used in tunnels, ammunition depots, armoured vehicles and tanks. If a tank with a layer of this material moves over a mine, 80 per cent of the blast impact will be taken by the material.



From left to right- 1) The material is being tested in a machine which has a gas gun. "Striker bars" hit the material at different levels, which are correlated to different intensities of blasts. 2) Different models of the material. 3) The machine can conduct experiments at 120 psi. At this level in a real life blast, a building will be obliterated. 4) Dr. Tanusree Chakraborty, Associate Professor, Department of Civil Engineering, and Sunita Mishra, a PhD student with IIT-Delhi, who are creating the material.

Ballistic helmet

The helmets being used by the Indian Army can only protect a soldier from splinters, rocks and a bullet that only grazes the helmet and not directly hitting it. But the helmet being made by IIT-Delhi will contain layers of varied materials, including ceramic and cellular foam, which will blunt the bullet, reduce its velocity and absorb its energy. Professor Puneet Mahajan, Applied Mechanics, IIT-Delhi, says they have tested a few types of material. The new helmet will make sure the bullet does not penetrate the helmet there is no 'back face signature', which is a deformity caused on the helmet by the bullet. A deformity on the helmet will cause injuries to the soldier.



Professor Puneet Mahajan, Applied Mechanics, IIT-Delhi with an experimental plate whose centre has a bullet entry, following a test for the ballistic helmet.

Unmanned Underwater Vehicle (UUV)

Indian Navy officers studying in IIT-Delhi are designing these vehicles in collaboration with Botlab Private Limited. Ishaq Makkar, a faculty at Applied Mechanics, Naval Construction, IIT Delhi, explains that these machines would be able to relay better information and images to a ship from under water than by navy divers. "When a diver goes underwater, he can sustain himself there only for a few hours. The report he gives after coming back up is incomplete because he does not have the adequate technical expertise. But with the UUV, I can see what it sees," Makkar says.



From bottom left to bottom right: 1) Vishnu Sreedhar, a student at IIT-Delhi, holding the hydrocopter. 2) The hydrocopter under water. 3) The Nemo.

The IIT-Delhi is developing two UUVs—the Hydrocopter and the Nemo. The Hydrocopter will be used for underwater surveys of the hull of a ship to ascertain damage to it, says Vishnu Sreedhar, a student working on the project. The Nemo will be used for finding sea mines. Work is in progress for also placing payloads on these UUVs.

"There are several variants of UUVs internationally. But we are developing ones that will be best suited for Indian waters, which have very low visibility," said Makkar.

Aerostat

Aerostat is an airship or hot-air balloon, which can be used for surveillance along India's borders with a high-resolution camera attached to it, explains Dr Suddhasatwa Basu, Associate Dean, Research & Development, IIT Delhi. Work is to start on this.

The aerostat is similar to an Unmanned Aerial Vehicle, but is a cheaper option even when compared to satellite imagery. As the aerostat will float at an altitude of about one km, it will provide much-higher-resolution photographs than satellite images.

Intelligent textile

IIT-Delhi is creating a uniform for soldiers with a metal strip containing an antenna and sensors. The antenna could be used for communication between a unit of soldiers and their commander. The sensors will detect poisonous gas, even if it has leaked several kilometres away from the soldier. "The smallest gas leak, chemical weapons and nuclear radiation will be detected by the sensors embedded in the soldier's uniform and information about it will be relayed to the commander," says Basu. This system will replace heavy communication equipment that soldiers carry now.

Terahertz technology

The terahertz technology will be able to detect liquid explosives mixed with non-harmful liquids. For example, explosives being carried inside a bottle of water. It can also detect explosives placed inside the body of a person. "This technology can detect explosives up to a distance of 50 m, even before the person carrying it comes near a security checkpoint at an airport," said Basu. The terahertz device emits waves which are reflected back to the device from objects in its view.

B-schools of IITs in Kharagpur, Delhi and Roorkee make it to NIRF Management's top 10 list

<http://www.financialexpress.com/education-2/b-schools-of-iits-in-kharagpur-delhi-and-roorkee-make-it-to-nirf-managements-top-10-list/643490/>

The Business schools of three IITs - Kharagpur, Delhi and Roorkee - have featured in the top 10 list of NIRF Management ranking this year.

The business schools of three Indian Institute of Technology (IITs) – Kharagpur, Delhi and Roorkee – have been featured in the top 10 list of the National Institutional Ranking Framework (NIRF) for Management this year. The top 10 B-schools were selected out of a pool of 542 business schools whose data was submitted for the ranking purposes. The ranking list of NIRF is approved by the Ministry of Human Resource and Development. According to a PTI report, IIT Kharagpur's Vinod Gupta School of Management (VGSOM) was ranked seventh, while the management schools of IIT Delhi and IIT Roorkee were ranked sixth and eight.

As quoted in the report, the Acting Dean of the Vinod Gupta School of Management (VGSOM), IIT-KGP, Prof Prabina Rajib said, "Faculty must undertake innovative and deep-learning R&D projects to add new dimensions to classroom teaching." In 1993, IIT-Kharagpur was the first among the other IITs to set up a business school. According to a statement released by IIT-Kharagpur, "The key strength of these three B-schools have turned out to be research and professional practice for which they are the top-ranking B-schools in India."

Earlier in the month, the Ministry of Human Resource Development (MHRD) released the National Institutional Ranking Framework (NIRF) Ranking 2017 for Indian Universities. The list was released by Union HRD Minister Prakash Javadekar in a press conference at the PIB Conference Hall.

The National Institutional Ranking Framework (NIRF) 2017 list includes colleges like (not in order)- Indian Institute of Management(IIM) Ahmedabad IIM Bangalore; IIM Calcutta; IIM Lucknow; IIM Kozhikode; IISc Bangalore; BHU, Varanasi;

Miranda House, Delhi; Loyola College, Chennai; Shri Ram College of Commerce, Delhi; Jamia Hamdard, New Delhi; National Institute of Pharma Education and Research, Mohali among others.

दस शिक्षण संस्थानों पर पाक का साइबर हमला

<http://www.livehindustan.com/news/todaynews/article1-pak-cyber-attack-on-ten-educational-institutions-801167.html>

डीयू, आईआईटी दिल्ली समेत देश के 10 प्रमुख शिक्षण संस्थानों पर पाकिस्तान ने साइबर हमला कर दिया। सभी संस्थानों की वेबसाइट को पाकिस्तान के पीएचसी समूह ने मंगलवार को हैक कर लिया। यह हैकरों का वही समूह है जिसने पिछले साल भारत की लगभग 7100 वेबसाइट को हैक करने का दावा किया था।

हैकरों ने संस्थानों की साइट के मूल कंटेंट को हटाकर होमपेज पर संदेश छोड़ा है। इसमें लिखा है, हम भारत के लोगों से कहना चाहते हैं कि कश्मीर से सैनिकों को वापस बुला लो। हमने साइटों का डाटा चुराया है, डिलीट नहीं किया है। भारत सरकार को संदेश देने के लिए ऐसा किया है। डीयू के कंप्यूटर सेंटर के प्रमुख अजय गुप्ता के अनुसार हैकरों ने वेब होस्टिंग कंपनी का डीएनएस सर्वर हैक किया, इससे कई साइट एकसाथ हैक हो गईं।

नतीजा: जेईई मेन्स का रिजल्ट आज,जानें इस बार क्या बदला

<http://www.livehindustan.com/news/tarakki/article1-jee-mains-results-today-some-ranking-pattern-has-changed-this-year-802638.html>

ज्वाइंट एंट्रेंस एक्जामिनेशन (जेईई मेन्स)- 2017 का रिजल्ट 27 अप्रैल को जारी होने की संभावना है। सीबीएसई से संचालित यह परीक्षा गत दो अप्रैल को ऑफलाइन और 9 अप्रैल को ऑनलाइन हुई थी। वाराणसी में करीब 20 हजार परीक्षार्थियों ने परीक्षा दी है। विभिन्न कोचिंग संस्थानों ने भी गुरुवार को रिजल्ट जारी होने की सूचना दी है।

इस बार जेईई (मेन्स) के पैटर्न में बदलाव किया गया है। 12वीं के बोर्ड परीक्षा के अंक फाइनल रैंकिंग में नहीं जोड़े जाएंगे। जेईई (मेन) की रैंकिंग ही फाइनल होगी। पांच साल पहले जेईई (मेन) की रैंक जारी होने के बाद 12वीं के रिजल्ट का इंतजार किया जाता था। रिजल्ट आने के बाद नंबर जोड़कर फाइनल रैंक जारी होता। इसमें काफी उलटफेर हो जाता था। यह आईआईटी, एनआईटी, आईआईआईटी, डीएमड विश्वविद्यालयों और अन्य केंद्रीय तकनीकी संस्थानों में दाखिले के लिए अखिल भारतीय इंजीनियरिंग प्रवेश परीक्षा है।

28 से शुरू होगी एडवांस की प्रक्रिया

जेईई मेन्स का रिजल्ट जारी होने के साथ जेईई एडवांस के फॉर्म भरने की प्रक्रिया शुरू हो जाएगी। 28 अप्रैल से शुरू होकर 2 मई तक चलेगी। जेईई एडवांस परीक्षा 21 मई को होगी। जेईई मेन्स में शीर्ष मेरिट में रहने वाले जेईई एडवांस के लिए क्वालीफाई करेंगे।

IIT Madras Scholar wins Gandhian Young Technological Innovation 2017 Award

<https://indiaeducationdiary.in/iit-madras-scholar-wins-gandhian-young-technological-innovation-2017-award/>



Students also bag several GYTI Appreciations given to celebrate the spirit of student innovation in engineering, science and technology

Chennai: Students and Research Scholars of Indian Institute of Technology Madras have won several laurels at Gandhian Young Technological Innovation (GYTI) Awards 2017.

Dr. Vikram Singh, former Research Scholar in the Department of Chemistry, IIT Madras, won the BIRAC GYTI Award for his project 'White Light Emission from Vegetable Extracts' (<http://gyti.techpedia.in/project-detail/white-light-emission-from-vegetable-extracts/7414>). He was guided by Prof. Ashok Kumar Mishra, Professor, Department of Chemistry, IIT Madras.

Prof. Ashok Kumar Mishra, Department of Chemistry, explains, *"Plants are rich sources of many classes of molecules that absorb light and emit in the visible wavelength ranges. Our reported work shows that judicious choice of such molecules can provide cheap and environment-friendly sources of white light emission systems. This is essentially a 'proof of concept' work and further research is necessary to address the issues of molecular/material stability and device compatibility"*.

Dr. Vikram Singh says, *"Receiving the prestigious GYTI Award at Rastrapati Bhawan was a big honour for me and I am delighted. I will be using the Rs 15 lakh award grant to continue my research on white light emitting material from plant sources. I plan to research on RGB Emitting Carbon Quantum Dots from Vegetables/Fruits extract"*.

The BIRAC-SRISTI award for biotechnological/medical/healthcare innovation is given to a technology having the potential to reach the masses and/or address a felt social need or making it extremely affordable compared to the available solution. Up to fifteen of the selected innovations may be given a grant of Rs.15 lakh each and another hundred ideas may be granted Rs. 1 lakh each for taking the idea forward.

Several students also won GYTI appreciation awards. They include:

- Anupam Chandra and Ramesh Kumar (Project Associate) for their project entitled Portable Geo-specific Water Filtration Bottle. They were guided by Prof. T. Pradeep.
- Arvind Pujari, Tanay Garg, Shashwat Jain, Kushal Kumar Reddy DVSS and Subham K Sahana for their project entitled A Mechanism for Toilet Seat Sanitation. They were guided by Prof. Anil Prabhakar.
- Avisek Barla, Abrar Ali Khan, Sameer Sharma, Vijay Anand and Nitish Kumar Singh for their project entitled Affordable Paper Microfluidic Device for Blood Glucose and Cholesterol Detection. They were guided by Dr. Vignesh Muthuvijayan.
- Mallikarjunachari G. for his project entitled Design of a Mechanical Device (Nanorobot) for Diagnosis and Removal of Plaque from Human Heart Artery System. He was guided by Dr. Pijush Ghosh.
- Mannam Naga Praveen Babu for his project entitled Fish-Inspired Propulsion for Remotely Operated Surface Ships and Underwater Vehicles. He was guided by Prof. P. Krishnankutty.

Jamuns can be used to make low-cost solar cells, say IIT Roorkee scientists

<http://www.livemint.com/Science/ymfe3m9bx7FMzeGSJhFYMK/Jamuns-can-be-used-to-make-lowcost-solar-cells-say-IIT-Roo.html>

IIT Roorkee scientists used naturally occurring pigment found in jamun as an inexpensive photosensitiser for Dye Sensitised Solar Cells or Gratzel cells



Researchers extracted dyes from jamun using ethanol. They also used fresh plums and black currant, along with mixed berry juices which contain pigments that give characteristic colour to jamun.

Plucking and feasting on fresh, delectable *jamuns* is a favourite childhood pastime during summer months, but scientists at IIT Roorkee have found a novel use for the juicy Indian fruit—making inexpensive solar cells.

Researchers used naturally occurring pigment found in jamun as an inexpensive photosensitiser for Dye Sensitised Solar Cells (DSSCs) or Gratzel cells.

Gratzel cells are thin film solar cells composed of a porous layer of titanium dioxide (TiO₂) coated photoanode, a layer of dye molecules that absorbs sunlight, an electrolyte for regenerating the dye, and a cathode.

These components form a sandwich-like structure with the dye molecule or photosensitizer playing a pivotal role through its ability to absorb visible light.

“The dark colour of jamun and abundance of jamun trees in IIT campus clicked the idea that it might be useful as a dye in the typical Dye Sensitized Solar Cells (DSSC),” lead researcher Soumitra Satapathi, assistant professor at Indian Institute of Technology (IIT) Roorkee in Uttarakhand, said.

Researchers extracted dyes from jamun using ethanol. They also used fresh plums and black currant, along with mixed berry juices which contain pigments that give characteristic colour to jamun.

The mixture was then centrifuged and decanted. The extracted coloured pigment called anthocyanin was used as a sensitizer.

“Natural pigments are way economical in comparison to regular Ruthenium-based pigments and scientists are optimising to improve the efficiency,” said Satapathi, who is also a visiting professor at the University of Massachusetts Lowell in the US.

“The increasing pressure on fossil fuels and concern of global warming has inspired continuous search for alternate energy,” said Satapathi. Uncertainty over the pace at which new large dams or nuclear plants can be built means strong reliance on solar power - an area where India has high potential and equally high ambition - to deliver on the country’s pledge to build up a 40 per cent share of non-fossil fuel capacity in the power sector by 2030, researchers said.

“In principle, we have a large social need for renewable energy especially solar energy. For quite sometime, our lab is actively engaged in low cost high efficiency solar cells production,” said Satapathi.

The research team, which includes Nipun Sawhney and Anubhav Raghav, is very optimistic that the process can easily be replicated for mass production of solar cells.

The simplicity and cost effectiveness of the overall fabrication process, widespread availability of fruits and juices, and ease of extraction of anthocyanin dyes render them novel and inexpensive candidates for solar cells application, researchers said. The research was published in the Journal of Photovoltaics.

IISc Scientists Develop Molecules That Can Fight TB More Effectively Than Most Antibiotics

<http://www.thebetterindia.com/97792/iisc-scientists-tb-health/>

The research has been published in the journal Antimicrobial Agents and Chemotherapy.

In 2015 alone, 2.8 million people developed tuberculosis in India. As doctors, policy makers and other stakeholders continue to work towards combating TB, a group of scientists from the Indian Institute of Science (IISc) developed two forms of bacteria that can aggressively fight TB.

Most of the antibiotics used to treat TB target the metabolism of mycobacteria (that includes Mycobacterium tuberculosis, the causative agent of tuberculosis), but the IISc team has developed molecules that end up inhibiting the stress response pathway of the mycobacteria instead. When it does that, it automatically cuts off the mycobacteria from getting any form of nutrients, thus killing it in the process.

The treatment through this method might actually be faster and more aggressive than other traditional antibiotics.

Dr. Kirtimaan Syal from the Division of Biological Sciences, IISc, who was also the first author of the paper that was published in the journal *Antimicrobial Agents and Chemotherapy*, spoke to *The Hindu* about how the molecules treat TB.

Syal said, “The major reason for prolonged treatment of TB is the bacterium’s ability to persist in dormant form, which is tolerant to most antibiotics used in the treatment regimen. So inhibition of (p)ppGpp-mediated persistence could help in shortening the treatment regime, dealing with the emergence of multiple drug resistance and treatment of chronic infections.”

Both molecules that were synthesised by the team act as ideal inhibitors and neither is toxic to human cells, thereby making it a safe form of treatment. India has a notoriously high TB occurrence rate — 27 percent of the total number of TB cases reported across the world, according to statistics from the World Health Organization.

CBSE to conduct NET confirms UGC

<http://www.enaindia.in/news/newsdetails/policy/regulatory-bodies/cbse-to-conduct-net-confirms-ugc>

Approximately 5 lakh aspirants will be eager and happy to know that the University Grants Commission (UGC) has influenced the Central Board of Secondary Education (CBSE) to conduct UGC NET 2017 July session. It is the first time in 33 years, UGC NET was uncertain as CBSE had emailed to HRD Ministry expressing its inability to organise UGC NET 2017 this year.

It has now been decided that CBSE NET June 2017 will be conducted. This decision was taken after the student protest outside UGC office for two days regarding confusion over UGC NET. UGC has convinced CBSE to hold the NET Exam 2017, which is held twice the year.

“NET will happen in time – at max a week here and there. We have sorted out the issue with CBSE over the NET exam,” V.S. Chauhan, officiating chairman of the UGC said on the sideline of an education event in New Delhi. Chauhan also said CBSE, UGC and HRD ministry held the meeting over the issue and it was taken into consideration that previous government had issued an executive order entrusting the CBSE to conduct NET exam. The results also help the UGC in granting junior research fellowships.

For some time now, CBSE was communicating that due to capacity crunch, it won’t be able to handle a lot of entrance exams. In fact, Budget 2017-18 had a proposal to set up a National Testing Agency to conduct all academic entrance examinations.

In the absence of any national testing body, CBSE conducts major higher education related entrances apart from school leaving exams at Class 10 and Class 12 level for CBSE affiliated schools.

University Grant Commission or UGC has ended up the confusion regarding the suspension of CBSE UGC NET June 2017 session.

UGC's National Eligibility Test may be held only once a year

<http://economictimes.indiatimes.com/news/industry/services/education/ugcs-national-eligibility-test-may-be-held-only-once-a-year/printarticle/58385972.cms>

The National Eligibility Test (NET), a qualifying exam for recruitment of college and university teachers, may not be conducted twice a year as the CBSE has proposed that it should be made an annual exercise.

Also, the University Grants Commission (UGC) has ended the uncertainty over the July edition of the exam and has decided that the CBSE will continue to conduct it even as the board had earlier expressed its inability to do so.

According to sources, the proposal, which is at a very nascent stage, is being considered keeping in mind the resources required to conduct the exam as well as the number of candidates appearing for it.

"While conducting the exam once a year will make candidates more serious about it, resources can also be utilised judiciously as holding a national-level exam is a massive exercise. However, the idea is at a very nascent stage," a source said.

"The CBSE has proposed the idea keeping in mind that only 17 per cent of the registered candidates take the exam and only four per cent of them clear it," the source added.

At present, NET is held twice a year -- in July and December -- for the grant of junior research fellowship. Also, it is a qualifying exam for recruitment of assistant professors in universities and colleges.

The Central Board of Secondary Education (CBSE) had last year approached the HRD Ministry expressing its inability to conduct the exam due to capacity crunch as it was overburdened with other tests such as the JEE-MAIN and NEET for under-graduate engineering and medical courses.

While the ministry had not issued any guidelines in this regard, the CBSE is still to issue a notification for the exam scheduled in July, which is usually out by April first week.

Scores of students had protested outside the UGC last week demanding that the uncertainty over the exam be cleared and a notification be issued.

"The CBSE had approached the HRD Ministry expressing their inability. We had a meeting with HRD officials over the issue recently and it was decided that the board will conduct the exam in July without any delay," a senior UGC official said.

"The arrangement is likely to continue till the proposed National Testing Service (NTS) is set up by the government for the conduct of all exams," he said.

NET was conducted by the UGC till 2014 following which the job was handed over to the CBSE.

AICTE, Stanford hold online test to judge engineering education

<http://timesofindia.indiatimes.com/city/bhopal/aicte-stanford-hold-online-test-to-judge-engineering-education/articleshow/58388189.cms>

A private college from Bhopal, IES Institute of Technology and Management was selected for an online test organized jointly by All India Council of Technical Education (AICTE) in association with Stanford University. The test, is a part of national survey to assess quality of education in technical colleges.

The test sought students' response on their basic understanding of core branches and quality of studies being imparted in their colleges.

Survey is the result of feedback about poor standards of engineering education in the country which produces lakhs of engineering graduates every year. Almost 50% of them fail to get a job, a survey said.

Depending on the results, AICTE will decide where and how to intervene to improve education standards. The online test comprises technical skills in physics, mathematics, informatics, critical thinking, creativity and quantitative literacy skills.

Sources said other colleges from state are being also involved to conduct such tests. PRO, IES College, Nitin Chaurasiya said the test in their college is being conducted from April 17 to April 30.

"It is a part of international study to understand and improve quality of technical education received by youth in large economies like China, Russia, Korea, Japan and India," said Chaurasiya.

Students, who appeared in the test said focus was to know as what kind of studies are being provided in the college. "There were two pages wherein 35 questions each were asked. Questions were to judge the basic knowledge about physics and mathematics. Besides, there were other 36 pages wherein questions were asked about the college facilities and competence of teaching faculty," said first year student of computer science branch, Slesha Nidhi.

Another student who had appeared in the test, Shubhankar Tiwari of final year electronics branch said, "It was choice-based test. Even in few questions students were asked to grade the college regarding engineering studies."

Bright but 'depressed' NIT student hangs self

<http://timesofindia.indiatimes.com/city/patna/bright-but-depressed-nit-student-hangs-self/articleshow/58387054.cms>

A third-year engineering student of the National Institute of Technology (NIT)-Patna committed suicide by hanging herself with a bedsheet from the ceiling fan in her hostel room on Day 1 of her sixth-semester exams on Wednesday.

Police said Shikha Shukla of Farrukhabad in UP was found hanging in the New Ganga Hostel on the college campus on the bank of Ganga. Her family has been informed about "a medical emergency" and asked to come to Patna, a police officer said.

The incident came to light around 4.30pm when Shikha's roomie Prerna Vishwas returned to the hostel after taking her examination.

"The door was bolted from inside, but Prerna managed to open it after reaching her hand inside through the ventilator just above the door. She screamed hysterically as she stepped inside," a hostel employee told this newspaper.

The girl was brought down and rushed to the Patna Medical College and Hospital nearby. She was declared brought dead.

An NIT-P teacher said Shikha was a bright student and had written the first paper of her examination on Wednesday forenoon. "Her score up to fifth semester was 7.15 CGPA, which is considered a good show," the teacher said, preferring anonymity.

Police recovered a five-page suicide note from a diary in the room. It said no one was responsible for her death, according to Pirbahore police station SHO Mohd Qaisar Alam.

The girl was taking anti-depressants. "Her suicide note says she wanted to end life even after passing out of Class XII as she did not attach any importance to marks and CGPA," the SHO said, adding further investigations were on.

NIT-P director Ashok Dey said a four-member committee headed by dean (students' welfare) Prakash Chandra has been formed to suggest measures to prevent such incidents in future.

City psychiatrist Dr Manish Kumar attributed such tragedies to increasing stress level, parental pressure for performance and relationship issues within family.

"Suicidal tendency is a disorder mostly spawned by hopelessness... Such a 'patient' does give clues to family before taking the extreme step," Dr Kumar said and added the elimination of joint family was also a factor behind spurt in incidents of suicide by youngsters.

Give us your religion, caste, Aadhaar: HRD to all college teachers

<http://indianexpress.com/article/education/give-us-your-religion-caste-aadhaar-hrd-to-all-college-teachers-fake-teachers-4629813/>

Teachers who are yet to furnish personal details have another month to comply. Moves are also afoot to create a similar students' database next year.

To set up a national teachers' portal and detect "fake teachers" in the country, the Ministry of Human Resource Development has, over the last four months, profiled at least 60 per cent of more than 15 lakh university and college teachers, complete with individual details such as religion, caste, Aadhaar and phone numbers.

Teachers who are yet to furnish personal details have another month to comply. Moves are also afoot to create a similar students' database next year.

R Subrahmanyam, Additional Secretary, HRD Ministry, told The Indian Express: "We believe there are a lot of ghost lecturers. These are teachers who show up in multiple institutes, the ones not run by the government. Individual details such as Aadhaar numbers will help us identify such duplication."

PUTTING NAMES TO THESE NUMBERS

University and college teachers in India

	Male	Female	Total	%
All	924965	593848	1518813	100
General	593287	394491	987778	65.03
OBC	237407	148159	385566	25.39
SC	74399	38896	113295	7.46
ST	19872	12302	32174	2.12
Minorities	55796	46012	101808	6.70
Muslim	34423	16585	51008	3.36
Other Min	21373	29427	50800	3.34
Disabled	3190	1610	4800	0.32

Source: AISHE 2015-16

Acknowledging that religion and caste identities of individuals will not help check duplication, Subrahmanyam said “those parameters were already part of the survey” process.

“Getting all the details directly from individuals will now reduce the workload of institutes that prepared the abstract for the Ministry in the past. It will also reduce mistakes,” he said.

Since 2010-11, the government has been conducting the annual All India Survey on Higher Education (AISHE). But this is the first time that individual profiles of the teaching staff has been sought. Until last year, every institute provided generic data on their teaching staff with numerical break-ups under the heads of designation, selection mode, gender, category (general/SC/ST/OBC), religion (Muslim/other minority) and disability.

For AISHE 2016-2017, in addition to the existing data collection format (DCF), a new Teacher Information Format (TIF) has been introduced “to collect data on teachers profile to create ‘Gurujan’ — a teachers’ portal (gurujan.gov.in).”

Asked if the University Grants Commission (UGC) was instrumental in introducing the TIF in AISHE this year, Professor Ved Prakash, whose term as the Commission chairman ended earlier this month, said: “The HRD Ministry conducts the survey and analyses the data. The UGC only helps by asking the institutes to provide data. You have to talk to the Ministry about the survey formats.”

On the question of privacy being compromised, Subrahmanyam said: “Initially, we may not make gurujan.gov.in open to public. We will not make any personal information public. The data will be absolutely safe with the National Informatics Centre (NIC). But I don’t think putting someone’s Aadhaar number in public is a problem as long as the information linked to the number remains protected.”

Many in the teaching community, however, remain unconvinced. “Whether they want to make it public or not, creating a database identifying individuals on the basis of religion and caste is a reckless idea, particularly in the prevailing atmosphere. Data is always vulnerable to selective leakage,” said a Chandigarh-based lecturer who is yet to furnish personal details in TIF.

“This is not only about privacy. Who stands to benefit from the big data? Will our Aadhaar numbers be made available so that economic profiling helps foreign interests keen to set up campuses here hire efficiently? Will we profile students next to target high-income parents who can afford education loans necessary for private institutes,” asked a Delhi-based lecturer who was unsure if he could hold out any further against “persistent TIF reminders”.

Subrahmanyam, in fact, confirmed that the government wanted to create a students’ portal in line with Gurujan next year.

“Once the teacher-specific data from the AISHE website is shifted to the Gurujan portal, we plan to make a similar student portal, may be next year, so that all three can be used together seamlessly. We are still considering all the possibilities,” he said.

Sources said the HRD Ministry took stock of the survey’s progress with state-level coordinators on Tuesday and decided to extend the April 13 deadline by “a month or so” to maximise coverage.

In June 2015, the government amended the University Grants Commission (Returns of Information by Universities) Rules, 2004, by introducing a penalty — reduction of annual grant by up to 25 per cent and other punitive action as the UGC or the Centre may deem fit — for failure to provide information on AISHE or for “any other purpose” as directed by the UGC.

“Many institutes do not receive any funds from the UGC. Anyway, we are thinking of incentivising rather than penalising to ensure compliance. For example, our ranking framework will be based on AISHE from next year,” Subrahmanyam said.