

Newspaper Clips May 13-16, 2016

March 16

Asian Age ND 16.05.2016

P-14

IIT: Students can only choose first priority

SUSHMITA GHOSH
NEW DELHI, MAY 15

IIT, which has decided to bring changes in its advance exam from next academic session 2017, has also brought a big change in its counselling process. After identifying the first priority, the student will not be given a second chance to change it. It simply means that while filling the form, the students have to carefully choose either IIT or NIT as their first preference to enrol in. This change was applicable till 2015. "If a student does not chose his or her first priority in advance, then whatever institution has been chosen by them at the last would be considered their final priority," a university official said. Indeed, while applying under this process, the student has to click on the name of an institution they would like to enrol in. After this, in second phase the candidates have to choose their priority out of those selected institutions. Recently, it was decided that Class 12 marks would not be considered a factor in the Joint Entrance Examination rankings for admissions in engineering undergraduate courses starting 2017. "I guess this decision is somewhere unfair. What if a student feels like switching to other institute because of better facilities and academic standards?" said Nirmal Bora, a third year student.

Navodaya Times ND 16.05.2016 P-7

जेईई परीक्षा के लिए ड्रेस कोड जारी

जेईई एडवांस की परीक्षा का आयोजन 22 मई को

नई दिल्ली, 15 मई (ब्यूरो): भारतीय प्रौद्योगिकी संस्थान (आईआईटी) एनआईटी में जाने वाले छात्रों के लिए देश की प्रमुख परीक्षा मानी जाने वाली जेईई (एडवांस) में पारदर्शिता रखने के लिए छात्रों को ड्रेस कोड का पालन करना होगा। तभी वे परीक्षा में बैठ पाएंगे। इस बार जारी सर्कुलर के अनुसार छात्र पुरुष अभ्यर्थी फुल बाजू की शर्ट पहनकर परीक्षा नहीं दे पाएंगे। वहीं, महिला अभ्यर्थियों के हाई हील को सेंडल पहनने पर रोक रहेगी।

जेईई एडवांस की परीक्षा का आयोजन 22 मई को किया जाएगा। अभ्यर्थियों की सुविधा के लिए जेईई (एडवांस) की वेबसाइट पर ड्रेस कोड की पूरी लिस्ट अपलोड की गई है। अभ्यर्थियों को परीक्षा केंद्र पर ड्रेस कोड के अनुरूप ही कपड़े पहनकर आना होगा। ऐसा नहीं करने वाले अभ्यर्थियों को प्रवेश नहीं दिया जाएगा। लिस्ट के अनुसार महिला अभ्यर्थी गले की चेन, कंगन, अंगूठी, चूड़ी, हाथ के लॉकेट किसी भी तरह की पट्टी इयर रिंग और हाई हील पहनकर परीक्षा नहीं दे पाएंगी। वहीं, पुरुष अभ्यर्थियों के लिए जूता, मोबाइल, घड़ी, कैलकुलेटर, लैपटॉप और वाई-फाई डिवाइस आदि पूरी तरह से प्रतिबंधित किया गया है। इसके अलावा पूरी

**JEE Advanced
(IIT-JEE)
2016**

■ चेन, कंगन, अंगूठी, चूड़ी, जूता, मोबाइल, घड़ी, कैलकुलेटर, लैपटॉप पूरी तरह प्रतिबंधित

बाजू की शर्ट, फुल टी-शर्ट, शर्ट बटन वाली टीशर्ट बड़े बटन वाली शर्ट पर भी रोक रहेगी। ज्ञात हो कि पिछले वर्ष सीबीएसई द्वारा आयोजित कराई जाने वाली एआईपीएमटी की परीक्षा का पेपर लीक होने की वजह से उसको दोबारा करना पड़ा, जिसके चलते सीबीएसई ने आगे होने वाली ऐसी प्रमुख परीक्षाओं में सख्ती बरतनी शुरू कर दी। साथ ही सीबीएसई ने इन परीक्षाओं में ड्रेस कोड जारी कर दिया है जिससे नकल आदि पर रोक लग सके।

Techies come up with special security device, smart helmets

HIGH ON IDEAS IIT-Delhi was the venue of a contest on innovations that could simplify your daily life



TECH INNOVATIONS

Rozelle Laha

rozelle.laha@hindustantimes.com

Ideas, ideas and more ideas. For students of technical institutes across the country, it was a race to come up with the most innovative ways to simplify day-to-day life.

Students had to come up with innovations in cloud computing, human-machine interface, and the Internet of Things as a part of the recently held Ericsson Innovation Awards India 2016 at Indian Institute of Technology Delhi. Three winning teams will get financial support of ₹13 lakh each to incubate their projects. "They will be mentored by Ericsson during the incubation phase. The patents for their innovation remain with the students," says Paolo Colella, head of region India, Ericsson.

Let's take a look at what the winners did.

SECURITY SURVEILLANCE

Students from the Birla Institute of Technology and Science (BITS) Pilani designed a device for secure, private, cheap and efficient security checks at various places including banks, defence areas and other high security areas.

Chandradeo Arya, one of the team members said, "Currently,



■ Four Indian Institute of Technology (Banaras Hindu University) students have designed a 'smart helmet' that can keep drunk drivers off the road

applied systems based on face, fingerprints, iris recognition have certain limitations. In fingerprint systems, for instance, you have less privacy of data and your fingerprint can be re-developed and used to gain access to your system. Similarly, face recognition requires good lighting condition, and iris based systems are too costly."

Arya had seen how a Microsoft Kinect sensor tracked a person's movements and realised its potential to track and recognise movement, body features like the height and length of different body joints. So he, with friends Anuj Bansal and Homney Goyal created a prototype using the Microsoft Kinect sensor that can enable security surveillance by recognising a person based on their way of walking, length of body joints, enabling a better and robust system with full privacy

and security.

The only cost involved in creating this prototype was the price of the Microsoft Kinect sensor, which was ₹10,000.

"The final product will be cheaper and more accurate. We need to improve its correctness by improving the algorithm currently being used. We also need to make a customised infrared sensor for better tracking," says Arya.

COMMUNICATING AT SPEED OF LIGHT

Now, if you are unable to view the status of your train on the railway information display LCD board, don't panic.

Four third year students of the Indian Institute of Technology Bombay have designed an information broadcasting device (termed beacon) that allows you to transmit information on the

nearest digital display boards to your smartphones and laptop using visible light.

Not just a railway station, the students aim to set up this technology at public spaces such as shopping complexes, museums, auto-expos where there is a need for indoor navigation and localised information broadcast.

This is how it works - Every LED bulb will have an electronic module, containing the information, attached to it.

Users can access all the information on their laptop or smartphones, by plugging in a USB dongle in their handheld devices. Information is basically encoded in the subtle changes of light intensity which the human eye cannot perceive.

Dheeraj Kotagiri, Rishabh Gupta, Sambhav Jain and Nithin Murali designed a prototype of both the transmitter to be connected to the LED bulbs and the USB dongle that can receive the information being broadcast with the help of light around it.

The most important aspect of this project is that any LED bulb can be converted into a beacon by connecting transmitter module to it which opens us to nearly limitless opportunities.

According to the estimates, the cost of the final product will be ₹500 for the transmitter LED bulbs. "We intend to form a start-up in the field of indoor navigation and loca-

tion based localised information broadcasting in the near future as we see a huge business opportunity in this field," says Kotagiri.

IIT BHU STUDENT BID TO REDUCE ROAD MISHAPS

A 'smart helmet' designed by four Indian Institute of Technology, Banaras Hindu University students can help keep drunk drivers off the road. It's integrated with the two-wheeler and once worn by the rider, it analyses whether he/she has an allowable alcohol breath level for riding the vehicle.

In case of an accident, the helmet will help send the victim's location to the ambulance, inform family members and also connect to a cloud server that will offer him/her the necessary medical help immediately.

"This helmet will not only keep the riders safe but also pedestrians who might otherwise become victims of drunk driver. "The features of our product will help reassure parents that their children are being monitored when they take two-wheelers out on roads," says Naman Singhal, one of the team members.

The helmet is unique to the two-wheeler as the vehicle cannot be started without it, making it theft-proof says the team, comprising Shubham Jaiswal, Rishabh Babeley, Devendra Gupta and Jagjeet Shyamkunwar.

To start with, the helmets will be sold through the channel of showrooms in Delhi.

<http://paper.hindustantimes.com/epaper/viewer.aspx>

campuscocktail

Students grab opportunity to learn and earn

INTERNSHIP Getting research published in journals, earning money and honing skills lure students to pursue internship programmes during vacations

Aishwarya Iyer and Musab Qazi
✉ aishwari@hindustantimes.com

MUMBAI: Parth Chholak, an undergraduate mechanical engineering student at the Indian Institute of Technology Bombay (IIT-B), wanted to explore complex network theory — a relatively new, but booming multi-disciplinary topic that involves the study of a group of objects or human beings working in concert to produce results.

While discussing the topic with Sarika Jalan, a Physics professor at IIT-Indore, it occurred to him that the huge crowd visiting TechFest — the IITB's annual technological extravaganza where Chholak volunteered, can provide him a template to study complex networks. He is now researching the topic under Jalan's mentorship.

Students are increasingly working on various research projects during vacations for various reasons — the chance of getting their research published in academic journals, earning some money and accolades, hone their skills or simply to understand the subject better.

Research interns, as these students are called, are often guided by their teachers in college.

Take the example of Aslesha Bhide and Radhika Thanvi, both students of Bachelor

RESEARCH INTERNSHIPS

Students often choose to work on research projects in colleges, under the guidance of their teachers, during vacations. There could be several reasons for this, such as

- Research internships help students develop a better understanding of their subject
- It helps them build and sharpen their skills
- It allows them to push the boundaries of their curriculum and gain practical experience by working in a laboratory or on field

ACADEMIC ADVANTAGES

- During internships, students, who produce original work, get an opportunity to have their research published in academic journals
- They also get certificates and accolades from the institute
- Some students also get paid for their work

studentspeak



There are many perks of getting published in research journals alongside well-known scientists. These include invitations for higher education from some of the best universities globally and a highly paid job.

PARTH CHHOLAK, student IIT-B



Next year, we have industrial plant training as part of our curriculum. So this summer, I wanted to get some experience doing research on it.

ASLESHA BHIDE, student, ICT

teacherspeak



"Our college does several industry-sponsored projects in which our students work. It gives them real-life experience and they also earn a stipend. Of course it helps them in terms of building their career."

GD YADAV, vice-chancellor, ICT

the condition of people living in rural India.

"Instead of interning at a corporate firm, our students work with NGOs in rural settings. In the past, they have come up with case studies involving bringing more efficiency in the farm supply chain, which have been published," said KG Karmakar of SPJIMR.

There are other perks of working as a research intern. Neeraj Hatekar, director, department of Economics at the University of Mumbai (MU), said, "The students learn professional skills while assisting teachers in research projects. Sometimes, they even get paid or are at least given a certificate for their work."

The students have become more aware of the importance of research and are striving to join projects within the institute, as well as outside it, said Hatekar.

Experts said internships help students grow holistically. "A number of students these days are doing research fellowships. Our college does several industry-sponsored projects in which our students work. It gives them real-life experience and they also earn a stipend. Of course it helps them in terms of building their career," said GD Yadav, vice-chancellor, ICT.

of Technology (BTech) at the Institute of Chemical Technology (ICT), Matunga. As soon as the summer vacations began, the duo started working on a stereochemistry

project headed by a professor at the institute.

"During internship, we get first-hand experience at laboratories and if our research paper is good enough to get published,

it will be an added advantage for me," said Bhide.

However, Thanvi said there's more to internship than acquiring practical experience. "In all, internship is helping me clear

my concepts of chemistry. Since this research involves going beyond our syllabus, it helps me understand the subject better," she said.

The duo is required to work in

the college laboratory five days a week.

Students at SP Jain Institute of Management and Research (SPJIMR) have been working on projects involving improving

March 15

Hindustan Times ND 15.04.2016 P-7

Pvt varsities will soon get to adopt, develop villages

Heena Kausar

✉ heena.kausar@hindustantimes.com

NEW DELHI: Private and state universities of the Capital will soon be able to adopt villages under the Centre's Unnat Bharat Abhiyan (UBA).

The Unnat Bharat Abhiyan is a scheme of the Union human resources development ministry to help provide technical and knowledge based solutions to local problems.

As of now, institutes of higher learning such as Indian Institute of Technology (IITs), National Institute of Technology (NITs) and Indian Institute of Management (IIMs) have adopted village clusters in 89 districts across 14 states.

The decision to allow Delhi



■ IIT-Delhi has adopted village clusters in four states of India. HT FILE

universities to adopt villages was taken at the first steering committee meeting of UBA, held recently at IIT-Delhi. The meeting was chaired by Union human resource

development minister Smriti Irani, who also inaugurated the Unnat Bharat Abhiyan cell at IIT-Delhi. The BJP government had launched the scheme in 2014.

"Private institutes, universities and state universities can adopt villages and help in their development. Till now, only Central government universities and institutes were working under UBA. The new move will help us in targeting more villages. Those institutes which are interested in working in rural areas can approach us and work as per the scheme guidelines," said a source.

The flagship scheme of the ministry is coordinated by IIT-Delhi and at present forty-five institutes are part of it.

"Each institute will adopt village clusters and work closely with district officials, gram sabha and panchayat to develop technological solutions specific to the needs of the people," VK Vijay, national coor-

ordinator of the programme, said.

Sources said that in every state a mentoring university or institute will be selected, which will help other institutes to work as per the scheme's vision of development. The mentoring institutes will be in turn trained by IIT-Delhi.

IIT-Delhi will also come up with a booklet on guidelines to be followed by all institutes working under UBA.

Officials said that a video-conference meeting of all 89 institutes will be done on May 21 to access the work that has been done till now.

IIT-Delhi has adopted village clusters in eight districts across different states of Uttar Pradesh, Haryana, Madhya Pradesh, Jharkhand to develop them so far under the scheme.

No cheating! IIT students now have a dress code for JEE

<http://www.newsx.com/national/28603-no-cheating-iit-students-now-have-a-dress-code-for-jee>

New Delhi: Indian Institute of Technology Joint Entrance Examination (IIT-JEE) (Advanced) is scheduled to take place on May 22. Along with the pressure of the exam, now there is pressure of managing the restriction on clothing on students appearing for the entrance exam.

IITs have released a list of items prohibited in the exam centres and have also mentioned a specific dress code for the same. In order to avoid malpractices, IIT has restricted the dresses to half/sleeveless shirts and T-shirts. In footwear, shoes and heel sandals will not be allowed.

Restrictions on clothing, the students' feel, are still acceptable, but IIT has gone a step further and has decided to ban wristwatches and writing pads from the examination room. For examinees, a wristwatch is one of the essential items that they carry for time managing themselves. In this case, students might face difficulty as there is a general tendency to look at ones watch while writing an exam.

As justification, the instructions in the list mention that the invigilator will be announcing the time every half an hour to the students.

The IITs have also appealed to the students to cooperate with physical frisking that will take place at the exam centres.

This is not the first time that such a thing has happened. The Central board of Secondary Education (CBSE) had formulated a dress code for the National Eligibility Test (NET). While appearing for the exam, the students were not allowed to wear full sleeve shirts, and belts along with covered footwear were restricted.

Simple, analog watches will be allowed in JEE (Advanced) exam halls

<http://timesofindia.indiatimes.com/city/mangaluru/IIT-Kanpur-bags-first-prize-at-Aerophilia/articleshow/52275414.cms>

MUMBAI: IIT aspirants who will be appearing for JEE (Advanced) on May 22 will now be allowed to wear simple analog wrist watches to the exam hall.

IITs made the modification in the 'list of instructions' to students on Sunday, after several aspirants and parents wrote to the JEE (Advanced) office against prohibition of all type of wristwatches in the exam centre.

On Sunday, in the modified list of instructions on the JEE (Advanced) site, it was mentioned, 'Candidates will be allowed to bring simple analog watches. Smart/programmable watches will not be allowed'.

TOI, on Saturday, reported about the inconvenience the new set of rules may cause students. Parents claimed that watches are essential for students for time management as JEE (Advanced) is a highly-competitive exam. After CBSE, IITs also introduced a dress code and released a list of prohibited items in the examination centre, to avoid instances of malpractices, from this year. Full-sleeve shirts and kurtas, brooches and footwear with heels and shoes are also banned from this year. While the dress code will remain, students will now be allowed to wear simple watches to their centres.

A JEE (Advanced) official said that they reviewed concerns raised by students. "We were told that it was difficult to ensure a functioning wall-clock in all exam halls at the centres during JEE (Main), which was conducted by CBSE. Also, students' concerns seemed genuine as they tend to check their wristwatches while writing the exam. We do not intend

to add to their stress by disallowing watches." Till last year, IITs prohibited only the use of smart watches. This year, however, they mentioned that no type of watch will be allowed and that invigilators will be announcing the time after every half-an-hour.

IIT Kanpur bags first prize at Aerophilia

<http://timesofindia.indiatimes.com/city/mangaluru/IIT-Kanpur-bags-first-prize-at-Aerophilia/articleshow/52275414.cms>

Mangaluru: IIT Kanpur, NIT-Karnataka, Surathkal, AISSMS College of Engineering, Pune Delhi Public School, Mangaluru and Mount Carmel High School, Mangaluru, were shortlisted during the second round of the flying competition at Aerophilia 2016, held at Sahyadri College of Engineering and Management. The winners were selected on the basis of flight scene formula.

During the valedictory of Aerophilia 2016, Kimmene Ratnakar, minister for primary and secondary education was the chief guest. Manjunath Bhandary, chairman of the institute, Dr Hansraj Alva, a renowned physician, A V Aravindh, control engineer, presently working as systems engineer for the Light Combat Aircraft, LCA-Tejas Programme at Aeronautical Development Agency and other were present.

The winners of Aerophilia 2016 are: First prize - Team Pushpak (Karthik, and Deepak), IIT Kanpur; Second Prize - Vaibhav, AISSMS, Pune; Third Prize - Vishan, IX std, Manipal School, Attavar; Consolation Prize I - Team Enterprise (Aquib, Sharan, Mousin, Vishwas), NIT-K, Surathkal; Consolation Prize II - Omkar V Rao, VII std, Mount Carmel School, Mangaluru.

Prizes were also distributed for in-house competitions: Paper Plane competition - Abhilash; Maze running - Darshan and team; Rubik's cube - Harshat B R and Photography - Deepak N Katri, IIT Madras

IISc Scientists One Step Closer Towards Breakthrough In Curing Cancer

<http://www.indiatimes.com/news/india/iisc-scientists-one-step-closer-towards-breakthrough-in-curing-cancer-255114.html>

Indian scientists are closing in on a breakthrough in cancer treatment that will see a variety of cancers being cured using just a series of injections without side-effects on the body, that is characteristic of chemotherapy. The new technology has the potential to completely bypass chemotherapy.

Scientists from the Indian Institute of Science (IISc) in Bengaluru are on the verge of developing just such a non-invasive technique to deal with cancers.

A team of scientists from the Centre for Nano Science and Engineering (CeNSE) of IISc have just achieved sending microscopic nano-voyagers, each measuring five nanometres in length (one nanometre is one-billionth of a metre), directly into pre-identified cells. These nano-voyagers are planned to be vehicles carrying anti-cancer drug molecules into the cells to destroy them, in the bargain restricting and eliminating the cancer.

Sources in CeNSE informed Bangalore Mirror that the team is now collaborating with cancer specialists in Bengaluru-based Kidwai Memorial Institute of Oncology (KMIO) and a group of radiation experts to perfect the technique and finding out precisely what kinds of drug molecules can be used to kill cancer cells.

The CeNSE experiment is primarily being conducted to target cervical and lung cancer cells on body parts taken from mice. But the scientists are yet to conduct such an experiment on live mice. Only when these experiments are successfully conducted on live mice would trials be taken up on humans.

"We were able to send in the nano-voyagers into the exact cells that we were targeting," said Prof Ambarish Ghosh, assistant professor, CeNSE, who is leading the team. "These nano-voyagers were able to accurately map the cells they entered, which is a big thing for us."

He explained that this exercise implied that the nano-voyagers had the potential to carry anti-cancer drug molecules right inside the cancerous cells and destroy them.

The nano-voyagers, after being injected, are manoeuvred using an external magnetic field to ensure they reach the precise destination cells.

The nano-voyager is made of silicon-dioxide, also known as silica, a chemical compound that is an oxide of silicon.

"We first experimented in water and it had gone well. But when we did it in blood (in lab conditions), we realised that the irons in the blood corroded the nano-voyagers. So that was a major issue," he said. But a chance meeting with Prof Srinivasrao Shivshankar of IISc's Materials Research Centre came as a blessing. The MRC researchers had developed zinc ferrites - a very thin film of material that fights corrosion - which was found to be biocompatible, and the silica nano-voyager were coated with that to avoid corrosion.

The CeNSE teams experiment were initially researching how these nano-voyagers with drug molecules could be sent into the human brain through the bloodstream to treat brain degenerative diseases like Schizophrenia and Alzheimer's Disease.

But Ghosh explained that cancer cells being softer tissues provided easier access to the nano-voyagers into targeted cells.

The technology will be extended to treat other types of cancers after it is proven successful in human trial to treat cervical and lung cancers.

March 14

Hindustan ND 14.05.2016

P-2



Dainik Bhaskar ND 14.05.2016 P-6

आईआईटी, आईआईएम से निकलते हैं सिर्फ 16.4 फीसदी आंत्रप्रेन्योर

देश के सिर्फ 16.4 फीसदी आंत्रप्रेन्योर ही आईआईटी और आईआईएम से आते हैं। बाकी 83.6 फीसदी देश के विभिन्न सेक्टर से आते हैं। एशिया की तीसरी सबसे बड़ी इकोनॉमी से निकलने वाले टेक्नोलॉजी आंत्रप्रेन्योर की औसत उम्र 28 से 29 वर्ष की होती है, जबकि 32 वर्ष की उम्र तक आते-आते उनके वेन्चर को फंडिंग मिलने लगती है। देश के लगभग 50 फीसदी आंत्रप्रेन्योर ग्रेजुएट होते हैं। 38 फीसदी पोस्ट ग्रेजुएट होते हैं और 12 फीसदी आंत्रप्रेन्योर डॉक्टरेट की डिग्री कर चुके होते हैं। लगभग 2300 फर्म पर किए गए सर्वे में यह बात भी सामने आई है कि देश में आंत्रप्रेन्योरशिप चुनने वाली महिलाएं सिर्फ 9 फीसदी हैं।

Virat Vaibhav ND 14.05.2016 P-8

अर्ली वार्निंग सिस्टम के तहत लगाए जाएंगे सेंसर

एजेंसी ■ रूड़की

रूड़की आइआईटी गढ़वाल के बाद अब कुमाऊं में भूकंप की चेतावनी देने को अर्ली वार्निंग सिस्टम के तहत सेंसर लगाएगा। इसके लिए पृथ्वी विज्ञान मंत्रालय की अनुमति का इंतजार है इन सेंसरों के लगने से भूकंप से होने वाली क्षति को कम किया जा सकता है। पृथ्वी विज्ञान मंत्रालय के अर्थक्रेक अर्ली वार्निंग सिस्टम फार नार्थन इंडिया प्रोजेक्ट के तहत आइआईटी रूड़की की ओर से चमोली से

उत्तरकाशी तक 84 सेंसर लगाए जा चुके हैं। सेंसर लगने के बाद अब इस क्षेत्र में भूकंप आता है तो ये सेंसर चंद सेकंड में चेतावनी जारी कर सकेंगे। प्रोजेक्ट के प्रिंसीपल इंवेस्टिगेटर और भूकंप अभियांत्रिकी विभाग के प्रो. आशोक कुमार माथुर के अनुसार पृथ्वी विज्ञान मंत्रालय को कुमाऊं क्षेत्र में सेंसर लगाए जाने का प्रस्ताव बनाकर भेजा गया है। जैसे ही वहां से स्वीकृति मिलती है तो उस क्षेत्र में सेंसर लगाए जाने का कार्य शुरू कर दिया जाएगा।

March 13**Deccan Herald ND 13/05/2016**

P-10

Interference in varsities needless

The academic life in universities and their independence have been under various kinds of attack from centres of power in recent past. Their administrations have also been under pressure. Central universities like the University of Hyderabad and the Jawaharlal Nehru University and centres of higher learning like the IITs have suffered from high-handed and political interference in their affairs. Institutions like the Aligarh Muslim University are facing threats. A state government has gone a step further and prescribed PhD topics for the students of its universities while the Central government has prescribed courses for the IITs. The BJP-run Gujarat government has given a list of 82 “preferred” topics to universities which students can pursue for their research that leads to the PhD degree. Human Resource Development Minister Smriti Irani has requested the IITs to include Sanskrit as a course of study for engineering students. Both proposals will not do any good, and can do harm.

The prescription of PhD topics by a government for research scholars is unheard of. The general practice is topics for research are identified by students and their research guides on the basis of factors like the students’ interests, aptitude and skills in particular areas, the guides’ knowledge of that field and the availability of resources. The topics are chosen after much discussion. But the offer of a ready-made menu for a PhD thesis

devalues research and serious academic pursuit. The topics which have been offered make it worse. The list includes Central and state government programmes like the Swachh Bharat mission, state government schemes for girls, good governance in Gujarat etc. The states’ universities have accepted the recommendations and defended them, saying that the students’ research will shed more light on the working of the programmes. But it is not for students to evaluate the programmes of governments. There are better equipped agencies to do that work.

The problem is that such research will become propaganda work for the government. Students will take up such topics because they will think that such favoured topics will make their PhDs easier to get. They may not critically study the topic because they will not want to antagonise the government. The result will be a fall in standards of research work which, as it is, is not high. It shows how poor an understanding the government has got about the needs of higher education and research. The move to offer Sanskrit in IITs is driven by the wish to showcase the scientific and engineering knowledge hidden in the language to students. That knowledge includes genetic science and cosmetic surgery.



“Offer of ready-made menu for a PhD thesis devalues it.”

Economic Times ND 13/05/2016

P-03

ACADEMIC TIES WITH GLOBAL INSTITUTIONS

IIT Alumni Centre to Help Identify Visiting Teachers

Anubhuti.Vishnoi
@timesgroup.com

New Delhi: The government is working on a plan to rope in several Indian academics abroad to help top educational institutes in the country forge long-term academic ties and research associations with global schools such as MIT and Berkeley.

IIT Alumni Industry Interaction Centre, Chennai (IIT AIIC) has already helped identify 50 global institutions and Indian academics for building long-lasting relations with Indian institutes that may include some top professors teaching a full course or a whole semester in India, officials said.

Among institutes identified so far are University of California Berkeley, Georgia Institute of Technology, Massachusetts Institute of Technology, Yale University, Princeton University, Wharton School of Business, Purdue University, Universities of Michigan and Illinois, and Virginia Tech.

Some of these institutes have already indicated their willingness to collaborate

with Indian institutes under the scheme — Global Research Interactive Network, officials said.

Among Indian academics identified are Venkat Ananthram in Berkeley’s electrical engineering department, Farrokh Ayazi from Georgia Tech, Hari Balakrishnan

**ON GLOBAL MAP**

IIT-AIIC
has al-
ready

helped identify 50
global institutions
for the programme

and Pawan Sinha from MIT, Sugata Mitra from the Educational technology department of Newcastle University, Sharad Malik from Princeton, Anand Sivasubramanian from Pennsylvania State University, Arun Phadake from Virginia Tech, Anjan Bose from Washington State University’s engineering department and Dr Shankar Ramamurti from Yale.

आईआईटी दिल्ली के छात्र ने तकनीक विकसित की, डायबिटीज के सुगर स्ट्रिप की तरह इस्तेमाल कर सकेंगे एनीमिया की जांच 10 सेकंड के भीतर कर सकेंगे

नई दिल्ली | निशि माट

एनीमिया की जांच 4 इंच की स्ट्रिप से अब 5 से 10 सेकंड में हो जाएगी। सुगर टेस्ट स्ट्रिप की तरह हीमोमीटर में केवल एक बूंद खून की जरूरत होगी। नई स्ट्रिप से घर बैठे हीमोग्लोबिन की जांच हो सकेगी। इसे आईआईटी के बायोटेक्नोलॉजी विभाग ने तीन साल के शोध के बाद तैयार किया है। इसे एम्स से मंजूरी मिल गई है।

शोधकर्ता अंबर श्रीवास्तव ने बताया कि नैनो बायोइलेक्ट्रॉनिक विधि से यह डिवाइस तैयार की गई है। एनीमिया की जांच के लिए 2-3 एमएल खून लिया जाता है। इससे खून के आरबीसी जांच के जरिए हीमोग्लोबिन की जांच होती है। नई स्ट्रिप में परिणाम के लिए केवल 10 सेकंड का इंतजार करना होगा। सैपल देने के तुरंत बाद सुगर की तरह रीडिंग मशीन पर आ जाएगी। खास तरह की स्ट्रिप बाजार में लांच कर दी गई है।



हीमोग्लोबिन का सामान्य स्तर

♂ **13.5**
ग्राम/डीएल
से 17.2
जी/डीएल

♀ **12.1**
जी/डीएल से
15.1 जी/डी
एल

नोट : सामान्य वयस्क
महिला व पुरुष का स्तर

एनीमिया की पारंपरिक जांच विधि

दो से तीन एमएल खून का सैपल ट्यूब में लेने के बाद प्लाज्मा और सीरम डालकर स्लाइड पर फैलाया जाता है। पांच मिनट बाद स्लाइड माइक्रोस्कोप से देखा जाता है। इसके जरिए आरबीसी की जांच होती है। इस दौरान लाल रक्त कणिकाओं की मात्रा से पता चलता है कि मरीज के खून में हीमोग्लोबिन का स्तर कितना है। जबकि वर्तमान जांच से केवल एक बूंद खून के सैपल से परिणाम मशीन पर खुद डिस्प्ले हो जाएगा।

हीमोमीटर तकनीक

मशीन से चार्ज होने वाले उपकरण को 5 से 45 डिग्री सेल्सियस के तापमान में ही इस्तेमाल किया जा सकता है। स्लाइड पर आधारित जांच में सैपल को न्यूनतम तापमान पर संरक्षित करना जरूरी होती है। परिणाम तुरंत मिल जाता है, इसलिए सैपल कम तापमान पर रखने की जरूरत ही नहीं होती। पूर्व की जांच भी सुरक्षित रखी जा सकती है।

इसमें मशीन की कीमत 5 हजार रुपए और एक स्ट्रिप की कीमत 30 से 50 रुपए रखी गई है। एम्स के हेमेटोलॉजी विभाग की डॉ. रेनु सक्सेना ने बताया कि पारंपरिक विधि की अपेक्षा नई तकनीक

से एनीमिया की जांच अधिक कारगर और बेहतर है।

इसमें सैपल में किसी अन्य तरह का रीजेंट या रसायन डाले बिना भी आरबीसी की जांच हो सकती है। 80

ग्राम की मशीन को आसानी से पॉकेट में रखकर कहीं भी ले जाया जा सकता है। प्रोजेक्ट को डीएचआर ने फंड दिया था। शरीर में खून की कमी हो जाने से कई तरह की दिक्कत शुरू हो जाती है।

गांधी सेतु के पाए जांचने आई आईआईटी की टीम

पटना | महात्मा गांधी सेतु के सुपरस्ट्रक्चर को हावड़ा ब्रिज की तर्ज पर स्टील से बनाने की योजना है। इसके लिए सेतु के पायों की जांच करने के लिए गुरुवार को आईआईटी रुड़की के प्रोफेसरों की छह सदस्यीय टीम यहां आई। टीम ने गंगा में पानी की गहराई एवं अन्य बिंदुओं पर जांच-पड़ताल भी की। टीम दो माह में अपनी रिपोर्ट सड़क परिवहन एवं राज्य मंत्रालय को सौंपेगी। दोपहर करीब दो बजे आईआईटी रुड़की के प्रो. जेड अहमद, प्रो. एमएन विलाट, प्रो. महेंद्र सिंह, प्रो. उमेश कुमार शर्मा, प्रो. उपेंद्र सिंह और प्रो. आरडी गर्ग गायघाट पहुंचे। टीम में हाइड्रोलिक, ज्योमेट्रिक, स्ट्रक्चर व हाइटोलॉजी विभाग के प्रोफेसर थे।

UGC to notify changed academic performance indicators soon

Akshaya.Mukul@timesgroup.com

New Delhi: The contentious Academic Performance Indicators (API) that had the university teaching community up in arms across the country since 2010 has been modified and made flexible with onus back on teaching while caps on various sub-categories of research have been removed.

Also for the first time, student feedback has been introduced. Only students with 75% or more attendance will be able to evaluate their teachers. UGC will shortly notify the modified API. "The existing API despite few amendments in the past was not favourable to teachers who only do teaching and was also resulting in poor quality research and publication in all sorts of academic journals," a source said.

In the new API, under the category of teaching/learning/evaluation, a teacher will have to annually get 100 points at the level of assistant professor, 90 at the level of associate professor and 80 for professors. Student evaluation has been introduced and the five sub-categories of earlier API has been made into four.

For the first time, student feedback has been introduced. Only students with 75% or more attendance will be able to evaluate their teachers. In the new API, under the category of teaching/learning/evaluation, a teacher will have to annually get 100 points at the level of assistant professor, 90 at the level of associate professor and 80 for professors. Student evaluation has been introduced and the five sub-categories of earlier API has been made into four

Categories of co-curricular activities and research earlier evaluated together will now be evaluated individually as well as collectively depending on certain factors. Sources said in the earlier API too much subjectivity was involved in case of co-curricular activities with college principals and vice-chancellors often acting as final authority. Now it has been simplified and scores have been reduced. Also, evaluation of these two categories will not be done annually. Even new fields of co-curricular activity has been introduced to inculcate value education. The new fields are sports, NSS, NCC, field trips and few others.

In case of research, sub-catego-

ries remain the same but cap of minimum score from each sub-category has been removed. For instance, in earlier API a teacher had to get 55% from research papers/publications, 20% from research projects, 10% from research guidance/undergraduate dissertations and 15% from training course and conference/seminars. Now a teacher can score from any sub-category. Also, to ensure that research papers are not published in shady journals, UGC will be listing out the name of peer-reviewed national and international journals where publications can take place. Also, for the first time research journals in Indian languages will be included.

'Need regional plan to tackle pollution'

THE TRIGGER Experts say higher fossil fuel consumption and unclean industry has exacerbated the problem

Mallica Joshi
mallica.joshi@hindustantimes.com

NEW DELHI: The World Health Organisation's (WHO) report on air pollution has made one trend very clear - cities that lie north of the Vindhyas need to watch out. Ten of the top 20 polluted cities in the world lie in this region. The list includes Gwalior, Allahabad, Patna, Raipur, Delhi, Ludhiana and Kanpur.

The problem of air pollution, clearly is more aggravated in this region and experts say it is high time a special regional plan is developed to deal with the issue.

"There is an urgent need of coordinated inter-agency efforts to address air pollution at national and regional levels. That a whole region is suffering from the problem has been reinforced by the findings of various research bodies, including IIT Kanpur, the WHO and the government's own Central Pollution Control Board," said Greenpeace India campaigner Sunil Dahtya.

According to him, the rise of fossil fuel consumption in India and unclean industry has contributed to an increase in air pollution levels. The significant increase in secondary particles such as SO₂ and NO_x in particular are contributing to the overall pollution, he said. The co-author of the IIT Kanpur report on air pollution, Mukesh Sharma, said recently that biomass burning, secondary particles, vehicular pollution and road dust were the biggest air pollution issues.

Wind speed, direction and location make cities such as Delhi

and Agra more prone to dust from arid parts of Rajasthan. Farm fires in Punjab and Haryana add to the problem. The same thing is applicable to industrial pollution from towns and cities with an unregulated industrial sector.

The most polluted town in the world, Zabol, is the most polluted not because of heavy industrial presence or large number of vehicles but because it sees up to 80 big dust storms in a year. Meteorological and local conditions, too, impact air pollution in a significant way.

"We absolutely need a regional plan that targets these places. New reports and studies show that this belt needs urgent action. We need to look at cleaning shared air. The three things we need to look at is controlling motorisation, especially that which runs on unclean fuel, providing LPG connections and assistance to poor families that still use wood and coal to cook, and controlling polluting industry in the entire region," said Sunita Narain, director general, Centre for Science and Environment.

In an urban setting, vehicular emissions are an important consideration, particularly with populations living in close proximity to roads. The problem of air pollution can only be addressed through multi-sectoral cooperation," said Poonam Khetrapal Singh, WHO Regional Director for South-East Asia. She said increasing use of clean energy such as LPG, renewable power sources like solar and wind, and prioritising public transportation, walking and cycling amenities in cities are among a number of affordable strategies that can be adopted.



A pollution meter set up outside the Delhi Secretariat. WHO report says Delhi is the 11th most polluted city in the world. RAVI CHOUDHARY / HT FILE PHOTO

A LONG WAY TO GO

Delhi is one of the most polluted cities in the world. There is a need to make a sustained, coordinated effort to reduce pollution.

Average PM 2.5 levels in Delhi over last six years



Level in 2015 is less as warm winter dispersed pollutants faster

Expert advice to control pollution

- Regional plan for the entire area
- Promoting clean industry, banning polluting units
- Moving to cleaner fuel

*Micro gram per cubic metre; Source: DPCC

What is PM2.5

- PM2.5 or Particulate Matter 2.5 is the term used to describe particles found in the air, including dust, dirt, soot, smoke, and liquid droplets, which are less than 2.5 micrometres in diameter
- They remain suspended in the air and are also referred to as respirable suspended particulate matter or RSPM

Health effects

These fine particles pose the greatest health risks. Because of their small size they can get lodged deep inside the lungs. They can cause eye irritation, asthma, bronchitis, heart and lung damage, cancer, premature delivery, birth defects, and premature death

AAP rushes to claim credit for pollution dip

HT Correspondent
htreporters@hindustantimes.com

NEW DELHI: No sooner the World Health Organisation (WHO) released its report dislodging Delhi from the dubious title of being the most polluted city in the world, there was a rush to claim credit.

AAP leaders took credit for the decrease in pollution levels, not realising the data that took Delhi from number 1 to number 11 dates to 2013. "BJP/Congress made Delhi Most polluted city in the world. AAP gov't brought pollution down. See new WHO report. Modi speaks, AK works," (sic) tweeted party leader Ashutosh.

The report is based on data collected in 2013. The AAP formed its first government that year but on December 28.

There was a hue and cry after the WHO report released in 2014 ranked Delhi as the most polluted city in the world. The issue entered public discourse after 2014.

The Delhi government said air

quality had improved over the past year because of its efforts.

"According to information provided by the Delhi Pollution Control Committee scientists, important factors behind the reduction in air pollution measurements for Delhi during the last one year are increased awareness about pollutant availability of the pollution related data in public domain and concrete action to control emissions from construction activities and control on industrial emissions," the statement read.

According to the WHO report, Delhi ranked 11th out of 3,000 cities/towns for PM 2.5 concentration levels and 25th for PM 10. The city ranked 1st and 8th on the two parameters in 2014.

Twitter was abuzz with the new rankings with a number of people congratulating the AAP government. Delhi CM Arvind Kejriwal took to twitter to congratulate Delhiites.

expertspeak

Pollution does not recognise political boundaries, with polluted air travelling across long distances. Air pollution is a national crisis, and demands a concerted national action plan in response.

SUNIL DAHTYA, campaigner, Greenpeace India

All sources of pollution need to be tackled. You don't have a choice anymore. You need to give incentives to farmers so they don't burn agricultural waste and need to tackle poverty to make more people opt for LPG.

SUNITA NARAIN, director general, CSE