Newspaper Clips
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IIT Madras to conduct JEE Advanced 2017
http://indianexpress.com/article/education/iit-madras-to-conduct-jee-advanced-2017/

The JEE is the gateway into all IITs, NITs, IIITs and ISM Dhanbad.

The Indian Institute of Technology – Madras will be conducting the Joint Engineering Examination (JEE) Advanced 2017. The dates for the main examination is not released by the CBSE yet. The JEE cell at IIT Madras is in the process of finalising the events required for conducting the examination. Last year, IIT Guwahati conducted the Joint Engineering Examination.

The JEE is the gateway into all IITs, NITs, IIITs and ISM Dhanbad. The organising institute will design the question paper, answer keys, announcement of results and handling the JEE portal.

The IITs have 10,500 seats. Of these, 7.5 per cent are reserved for STs, 15 per cent for SCs, 27 per cent for OBCs and the remaining 50.5 per cent for general category students.

Nearly 11.28 lakh students had appeared for the IIT JEE Main exam in 2016.

In April this year, the Union Ministry of Human Resource Development (HRD Ministry) has decided that Class 12 marks will not be a factor for determining rankings in the Joint Entrance Examination (JEE) for admissions to engineering undergraduate courses from next year.

“After examining the Ashok Mishra Committee’s report and public feedback, MHRD has decided on a few changes in the JEE pattern for 2017. The present system of allotting 40 per cent weightage to Class 12 marks for determining ranks in JEE shall be dispensed with,” an official said.

To qualify for appearing in exam, students need to have at least 75 per cent marks or be in top 20 percentile in Class XII examination. SC, ST students should have 65 per cent marks. “All other JEE examination systems shall remain unchanged,” the official said.

IIT-B electrical engg dept made most patent claims in 10 years
http://timesofindia.indiatimes.com/city/mumbai/IIT-B-electrical-engg-dept-made-most-patent-claims-in-10-years/articleshow/53951886.cms

Mumbai: The electrical engineering department of IIT-Bombay has made the maximum contribution to the increasing number of patent claims that the institute has filed over the past decade. Almost a third of the 523 patent claims, at 164, between 2005 and 2015 were filed by the department, followed by mechanical engineering (75) and biology (53) departments. In fact, three departments with chemistry (48) together contribute approximately 65% of the claims filed. On the other hand, a department such as computer science, the most sought-after at the institute, has approximately 15 patents to its credit. The data was compiled by students from the institute for Insight, their campus magazine.

"Certain departments tend to focus on product-centric research output while others have more theoretical research to their credit. Some of the departments such as computer science, too, are actively involved in research work, but their work is published in journals and not patented," said Eeshan Malhotra, a final-year student from the computer science department, one of the students to have compiled the data using inputs from the institute. Malhotra added there are a lot of pre-conceived notions on the basis of research done by each department. "Before we started compiling the data,

we believed core engineering departments would have more numbers to their credit. But we also have a department such as biology, which has contributed the third-highest number of patents," he added.

P V Balaji, dean (research and development), said a lot of other aspects have to be factored. "The number of faculty members in the departments should also be considered to normalize the data. Electrical engineering has around 60 professors. A computer science department student or faculty can come up with a fantastic algorithm, but laws of the country do not allow it to be patented. The kind of research work done by some of the departments cannot be patented," said the professor. He added that even collaborative research with different departments had to be considered for data compilation. The number of patents filed by the institute has increased from 72 in the previous year to 128 in 2015-16.

Students also found out that maximum patents are filed in June. A professor said most find time to complete their research work during summer vacation.

Startup centre at NIT Goa to begin next week

http://timesofindia.indiatimes.com/City/Goa/Startup-centre-at-NIT-Goa-to-begin-next-week/articleshow/53970021.cms

PANAJI: A special Entrepreneurship Summit 2016, from September 9 to 11, will mark the inauguration of the startup centre at National Institute of Technology (NIT), Goa. A host of lectures and panel discussions by successful entrepreneurs, CII officials and persons from the ministry of micro, small and medium enterprises will create awareness about a career in entrepreneurship and guide creative minds to convert their innovations into viable business models.

NIT Goa, along with 12 other technical institutes and universities across the country, was chosen to establish a startup centre with funding from the ministry of human resource development and department of science and technology. The selection was made earlier this year after a proposal sent by its director, G R C Reddy, underwent intense scrutiny at various levels.

The institute will fund 10 startups, providing them minimum funds of 2.5 lakh per year, which can be increased based on performance.

NIT Goa will work closely with National Innovation Foundation India and Honey Bee Network, thereby facilitating the provision of technical and legal support to help translate innovative ideas into reality.

Assistant professor of the electronics and communication engineering department at NIT Goa, Lalat Indu Giri, said the startup centre will enable the institute assist grassroots innovations concerning societal needs.

The other 12 institutes where startups are being set up include IIT, Bhubaneswar, NIT Delhi, Motilal Nehru National Institute of Technology (MNIT) Allahabad, Visvesvaraya National Institute of Technology (VNIT) Nagpur, NIT Arunachal Pradesh, NIT Silchar, Assam, NIT, Agartala, Tripura, Atal Bihari Vajpayee Indian Institute of Information Technology and Management (ABV-IIITM), Gwalior, PDPM- Indian Institute of Information Technology, Design and Manufacturing (IIITDM), Jabalpur, IIT Indore, Babasaheb Bhimrao Ambedkar University (BBAU) Lucknow and Pondicherry University.

IIT Madras to start online app development course

http://www.thehansindia.com/posts/index/Education&Careers/2016-09-01/IIT-Madras-to-start-online-app-development-course/251769

Hyderabad: From booking a cab to buying groceries from the comfort of your home, mobile applications, popularly known as 'Apps' have become an integral part of our everyday lives.

Indian Institute of Technology Madras (IIT-M) is offering an opportunity to all those with basic programming skills to learn App development in just five weeks. The Institute will be starting a free online course on Introduction to Modern Application Development (IMAD), from September 5 2016, which will be open to all.

Prof. Gaurav Raina, faculty in the department of electrical engineering at IIT Madras, and also a visiting research fellow in the Statistical Laboratory at Cambridge University along with Tanmai Gopal, CTO and co-founder of Hasura, a core technology startup and an alumnus of IIT Madras will be conducting this course.

Commenting on the course, Professor Raina says, "Our larger objective is to get the youth excited about technology, and about building solutions for both local and global problems. The course will teach students some of the technology skills that are integral to the modern digital economy".

"The importance of the course is that it will bridge the gap between what students learn in college and what is expected of them in the highly demanding tech industry. This is a very hands-on and practical course. Students will be building a web-application as they learn the basic concepts behind building an "app"," he added.

"In this new space of application/web development almost everyone is self-taught because the technical underpinnings are not taught anywhere and universities are yet to catch up. Our motivation is to address this gap. In the true spirit of education, we want to address the hardest challenges that people face in this field - getting started on a solid foundation", says Tanmai Gopal.

Talking about the employement oppurtunities after the online programme Gaurav Raina, said, "There are over 20 companies including Mastercard, Swiggy, HackerEarth, Furlenco who will offer interview opportunities to students who complete the course and do well. This shows that students who complete the course can indeed start a career in this field".

Besides being free for everyone, anywhere, the course strives for the right balance between theory & practice by focusing on building an application quickly while also ensuring that it never breaks. Short 20-min course videos will be available online on YouTube and can be at watched anytime.

You can take the course even from the comfort of your home. The course will have graded assignments, and a final test to help one remain focused through the course. In addition, an examination will be conducted on completion of the course and on successfully clearing it, one can obtain a certification from IIT Madras.

Registration for the course has begun and can be done by visiting www.imad.tech. The website also has resources required to learn or to brush up required programming basics.

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Not just a lack of toilets

Swachh Bharat Mission could focus on using technological innovation to eradicate the problem of open defecation

INNOCOLUMN

R GOPALAKRISHNAN

To illustrate that innovation is possible even with a subject like open defecation (OD), I had earlier written two columns ("'Neat and clean' innovation", April 18, 2014, and "A big opportunity for start-ups", January 8, 2016). The popular perception seems to be that OD occurs due to a lack of toilets. OD is much more complex. The Swachh Bharat Mission (SBM) encompasses issues of public health, sociology, psychology, innovation and technology, all rolled into one. The major thrust of government policies seems to have been to provide toilets to people. Surveys by social institutions suggest that in addition to providing toilet facilities, a positive social and behavioural change is required to be brought about. Hence technology and innovation need to work with other disciplines of knowledge. This is sought to be achieved through the social and behavioural change communication elements of SBM.

Bindeshwar Pathak, a true Gandhian, has demonstrated the value of grassroots work by setting up Sulabh, an outstanding institution in Delhi wholly devoted to social, technological and psychological vectors of sanitation (*www.sulabhinternational.org*). I was humbled and fascinated by the accomplishments of his institute, including a world toilet museum and multiple models of toilets; deep, practical insight from action and experimentation rather than mere talking. The visitor is exposed to low-cost ideas, ranging from single pit and double pit to open-to-air and biogas recovery; one can discuss innovation queries such as squatting versus sitting position, vacuum evacuation (as on planes) and peeproof, hydrophobic painting of walls!

Recently at a Delhi conference, Urban Development Minister M Venkaiah Naidu warned habitual and deliberate OD offenders. I was intrigued to learn that some people, guessed to be around 40 to 50 million out of 500 million, practise OD despite having access to toilets. It would seem they require "policing", a bit like how traffic constables are needed at traffic lights or to ensure the use of crash helmets. But imagine how much manpower would be required, it would be impractical! I first spoke with Prof B S Das of IIT Kharagpur and separately with IIT Bombay alumnus Ankit Mehta. They startled me with the possibility that low-cost drone technology could be deployed for policing persistent open defecators! I felt it was a very innovative idea, if done sensitively.

Prof Das has prepared a proposal, "Monitoring Defecation Using Optical and Near-Infrared Reflectance Spectroscopy". It essentially considers using "diffuse reflectance spectroscopy" of the soil to create spectral reflectance data of OD areas. Once a base data set is created, sample data can be captured monthly, and overlaid on a GIS platform or backbone. Comparing with a library of standard data can help determine where to focus. A low-cost drone could serve as the airborne platform. Further, this monitoring mechanism can also feed the integrated MIS reporting under the Ministry of Statistics and Programme Implementation, which is responsible for SBM effectiveness monitoring.

Mehta is the co-founder and CEO of ideaForge, which, he told me, has the capability and expertise to deliver such low-cost drones. These can be used for communication as well as for hyperspectral data gathering. Thus, optimisation of the drone as a resource is possible. Drones could be deployed under the social and behavioural change framework of the government's programme and used effectively in both individual and community communication initiatives. Drones could also become effective by their novelty factor. In order to take care of any privacy/shaming concerns, the drones can as well be fitted only with loud speakers and no photography payload and will need to have a GPS-based autonomous operation feature.

Ancient wisdom teaches us that the human body is a combination of three "pipes". First is the neuro-electrical wiring from the lower spine to the cranium; second is the air pipe from the nose through the lungs; and finally, the solids and liquids pipe from the mouth through the abdomen to the point of excretion. In a TED talk, Kerala social activist Joe Madiath wonders why mankind makes so much fuss about fine dining and cuisine, all of which ends up in exactly the same way. In the interests of getting things done, like with all complex subjects, unnecessary controversy is best avoided: for example, highlighting that OD was sanctioned by the 700 BC Baudhayana Sutras (*Economist*, July 19, 2014), which, anyway, is counterintuitive to the earlier and amazing Harappan toilet system. These were long before modern western-style sanitation, which started only two centuries ago with the French *cabinet de toilet*.

Perhaps the prime minister's Swachh Bharat point man can explore appropriate drones with Mehta and Das.

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NGT notices to Delhi, MoEF

Seeks details on steps taken to implement Action Plan on Climate Change

BINDU SHAJAN PERAPPADAN

NEW DELHI: A Bench headed by National Green Tribunal (NGT) chairperson Justice Swatanter Kumar issued notices to the Union Ministry of Environment and Forests and the Delhi government on Thursday on a plea by scientist Mahendra Pandey seeking direction to draft, finalise and implement the State Action Plan on Climate Change on the lines and the spirit of the National Action Plan on Climate Change (NAPCC).

Directions

It has also sought directions to the Arvind Kejriwal government to place on record relevant material and documents related to the steps taken by it in order to implement Action Plan on Climate Change. The tribunal has sought the replies reply by October 17.

The scientist has claimed that the Capital does not have a State Action Plan on Climate Change on the lines of NAPCC. The NAPCC is a comprehensive action plan

> Plea claims Delhi does not have a State Action Plan on Climate Change on the lines of NAPCC

which outlines measures on climate change related adaptation and mitigation while simultaneously advancing development.

Environmental issues

The scientist, in his plea filed through advocate Gaurav Bansal, contended that Delhi was facing a number of environmental issues due to ill-effects of climate change. The government of NCT of Delhi claims that it formulated a Climate Change Agenda for the Capital in 2009.

However, the agenda expired in 2012 and Delhi has no Action Plan on Climate Change since then, the plea alleged.

The scientist contended that the Capital had generates around 800 million tonne of garbage daily and the same is dumped as it is on three main landfill sites, which have already completed their life.

"By continuously dumping of large quantity of solid waste, the respondents are compromising with the air quality, which ultimately is contributing to climate change... As per the report of IIT-Kanpur, the petitioner has learnt that domestic cooking, road dust, waste burning, diesel generators, etc., release PM2.5, PM10, etc., in the atmosphere and as such are major contributors to the climate change," the plea added.

Despite the July 23, 2015, directions by the NGT to prepare their respective plan expeditiously, the Delhi government has not yet prepared or approved the same till date, it said.

The NGT had last year directed all the States and Union Territories to "expeditiously" prepare action plans on climate change in according with the Centre's guidelines and get them approved by the Union Environment Ministry.