CONSULTATION WORKSHOP

The department of Management Studies (DMS), IIT Delhi, organised a MBA Curriculum Review Stakeholders’ Consultation Workshop, at the institute.

The chief guest for the occasion Dr RP Singh, chairman, BoG, IIT Guwahati, (ex-chairman, Power Grid Corporation) and guest of honour Arup Roy

Choudhury, CMD, NTP inaugurated the workshop.

The workshop focused on developing content that relates to the industry interests and demands. The workshop gathered viewpoints from key stakeholders and sought inputs on the course design, specialised courses and pedagogy for the MBA programme.
No solution in sight for IIT-UGC row on degrees

New Delhi: The IIT-UGC row over degrees may take longer than expected to get resolved. The IIT Council has decided to set up a three-member committee to look into the issue. It will consist of HRD secretary Ashok Thakur, UGC chairperson Ved Prakash and scientist Anil Kakodkar.

Earlier the HRD ministry was thinking of seeking the law ministry’s opinion but it has been put on hold. One IIT director said, “A non-issue has been allowed to become a serious problem. It could have been resolved through talks earlier. Hope the committee finds a way out.”

IITs continue to insist that UGC had no business to write to them to give degrees only approved by the Commission. They claim that IITs are governed by an act of Parliament not the UGC. IITs, one director said, are empowered to ‘institute courses of study’ without UGC’s approval. “UGC is confused about IITs’ autonomy and powers. It is UGC that needs to understand both the acts,” the IIT director said. On its part, UGC says Institutes of Technology Act, 1961 stipulates that IITs can institute courses of study, hold examinations and grant degrees/diplomas and other academic distinctions or titles.

UGC says ‘courses of study’ does not mean ‘degrees’ since the two phrases are used at different places in the IT Act, 1961. UGC says provisions of the UGC Act 1956 and IT Act should be understood in a harmonious manner rather than to the exclusion of the other.
IIT entry norms

It is most unfortunate that at a time when we are still lagging far behind universities and higher educational institutions in the world as far as overall academic standards are concerned, we are now trying to make compromises in the selection procedures to the IITs (“Entry norms for IITs relaxed,” Sept.23). To quote Professor Stephen Pinker (Sept.10), “If colleges admitted kids with the highest score and companies hired applicants with the highest score, many of the perversities of the current system would vanish overnight.”

M.J. Kuruvilla,
Kochi

The report has induced a sense of euphoria among IIT aspirants. Last year, when the 20 percentile rule was prevalent, one witnessed the dismal scene of students, despite securing excellent school final marks, finding all avenues to the IITs closed. The new rule now will certainly help bright students have a shot at the IIT.

Sankata Tiwari,
Varanasi
The governing council of the IITs has made a few adjustments to ease the strict dual norms just introduced for the JEE (Main) and JEE (Advanced) examinations this year. The qualifying norms were tweaked to reward the more rounded students, who should be expected to do well in the entrance test to elite institutions as well as in the school curriculum and the board exams. The IITs are merely swinging back a bit towards correcting the anomalies thrown up by the new system.

The most recent proposal for entry to counselling, that stipulates a minimum of 75 per cent in board exam marks (70 per cent for SC/ST) rather than an insistence on students finishing in the top 20 percentile ranking of their respective boards, is not a genuine academic reform. However, it does level the playing field somewhat because students from the matriculation stream nursed a genuine grievance — that their cut-off marks were very high.

The new rules allow fringe candidates only a shot at counselling rather than a guaranteed seat in the IITs. The principle of establishing a more inclusive system that allows the creme de la creme of young and bright talent to get the best possible technical education is to be welcomed. However, the IITs have some way to go, as is evident by their not figuring in the top 200 of the world’s best universities. The only sore point is, instead of accepting that there is a lot of scope for improvement, the council has thought if fit to moot a domestic ranking system.
यूपी-बिहार के लिए घटेगे आईआईटी में मौके

चारों को नुकसान

- आईआईटी प्रवेश परीक्षा के लिए कॉर्स परीक्षा के नए पश्चिमी व विभिन्न परीक्षा के लिए मुक्त
- काउंसल की बैठक में भी नहीं थी आम सहमति
- सीमित, अंतर्प्रदेश संभाग बोर्ड में नवल प्रबंधक का समस्त लेखन सहमति

जन्म दिली | गदन जैड़
आईआईटी प्रवेश परीक्षा के नए पश्चिमी व परीक्षा के लिए मुक्त। इसके नए पश्चिमी व आईआईटी का आयात के अन्दर दर्द बुझाकर होने लगा। नये पश्चिमी व बिहार के छात्रों के लिए मौके का मौका हो जाएगा।

मानव संसाधन विकास मंत्रालय के सूत्रों के अनुसार लोगों का आईआईटी काउंसल की बैठक में प्रवेश परीक्षा के लिए मौके में बदलने हुए। मना, इन पर काउंसल में एकमात्र नहीं होगी। काउंसल के अनुसार बैठक में विनियमक एक अधिकारी ने कहा कि नया पश्चिमी वार तक करने से सीमित और अंतर्प्रदेश के 40 पश्चिमी व बिहार के परीक्षा के दायरे में नहीं होंगे। परीक्षा के लिए मौके में 20 करेंगे।

चुंगी बिहार, यूपी, झारखंड, मध्य देश के पंचायत और अंतर्प्रदेश सार में नवल प्रबंधक का समस्त लेखन मौके में बदलने हुए। काउंसल के अनुसार बैठक में यह मुद्दा भी उठा कि सीमित और अंतर्प्रदेश के छात्रों के लिए अवसर का समाप्त होना अन्य परीक्षा के छात्रों के लिए मुक्त।

दरअसल, काउंसल के समस्त छात्र यह मामला बुझाएँ सकते हैं। तकतली विद्या प्रमाण राजनीति ने विकल्प लिया कि इसकी तैयारी करना हो तो बरसात का अंतर्प्रदेश सार में 200 परीक्षा के चक्कर में नवल प्रबंधक के सार में एडमिशन से नहीं गए, उनमें सबसे ज्यादा अंतर्प्रदेश के पन्ने और सीमित के छात्रों के हैं।

आईआईटी धनबाद को आईआईटी बनाने का ममला लटका: हैदराबाद स्कूल आफ माइंड (आईआईटी) धनबाद को भारतीय प्राइवेट विद्यालयों में दर्जा देने का ममला बनाया गया है। मानव संसाधन विकास मंत्रालय द्वारा लिखित एक विशेष नोटिस, जिसे आईआईटी को आईआईटी में सीमित नहीं किए जाने की संभाली है।

संभालने का कहना है कि आईआईटी को यदि आईआईटी बनाया जाए तो यह आईआईटी रह पाएगा और नहीं आईआईटी बन पाएगा। संभालने का कहना है कि आईआईटी को यदि आईआईटी बनाया जाए तो यह आईआईटी रह पाएगा। उन्होंने सरकार के आपत्ति की कहने के कारण को आईआईटी नहीं बना सकता। वे इंदिरा गांधी की आपत्ति के कारण सरकार का कहना है कि आईआईटी नहीं है शामिल।
वरिष्ठ संवाददाता, लोडी रोड
आवार्दी बढ़ते के साथ साथ हमें घर-मकानों, बिलिंगों और इंफ्रास्ट्रक्चर की भी जरूरत पड़ रही है। सीमेंट के बिना कंस्ट्रक्शन संभव नहीं है। ऐसे में सीमेंट इंडस्ट्री पर स्थायित्व डिमांड के साथ सीमेंट बनाने में पर्यावरण का ख्याल रखने का भी दबाव पड़ रहा है। इसे देखते हुए दिल्ली, चेन्नई और मुंबई आईआईटी ने हिंदिएल्विंग अल्टरनेटिव्स (डीए) के सहयोग से ऐसे सीमेंट बनाने का दावा किया है जो सर्वांगे होने के साथ इको फ्रेंडली भी होगा।

इको फ्रेंडली, लो कॉस्ट सीमेंट टेक्नॉलॉजी डीए के सहयोग से आईआईटी दिल्ली, आईआईटी मद्रास और आईआईटी मुंबई ने लो जर्नन LC3 सीमेंट तैयार किया है। जिसे लाइफस्टाइल बैल्कोनी और पोर्टलेड सीमेंट या LC3 सीमेंट कह सकते हैं।

इस सीमेंट के फायदे
- इंडस्ट्री द्वारा पेयों की बचत।
- लाइफस्टाइल माइल्स्टोन से सीमेंट का प्रारंभ 50 से 60 फीसदी बढ़ जाएगा।

सीमेंट से बनी एक बिलिंग
- मौजूदा समय के बुकाबले LC3 सीमेंट से 20 से 30 फीसदी कम CO2 रिलीज़ होगी।
- सीमेंट बनाने के लिए जरूरी संसाधनों की उपलब्धता से सीमेंट की बढ़ती कीमतों पर लगात लगी है और इस कारण कंस्ट्रक्शन कॉस्ट में भी कमी होगी।

वर्कशॉप में रिसर्च का किया खुलासा
वर्कशॉप का उद्घाटन करते हुए हिंदिएल्विंग अल्टरनेटिव्स(डीए) के चेयरमैन डॉ. अशोक खेमला ने कहा कि अभी तीन दशकों में मौजूदा बिलिंगों से कहीं ज्यादा नई बिलिंग और इंफ्रास्ट्रक्चर देखने को मिलेगा। इकोनमी के किसी अन्य सेक्टर में इतना मद्दत नहीं लगता जितना कंस्ट्रक्शन में। सीमेंट में सबसे ज्यादा प्रकट कंस्ट्रक्शन संसाधन का इस्तेमाल होता है। जाहीर है, इस अविष्कार के जरिए यदि किसी भी संसाधन की बचत होती है तो इससे पर्यावरण और इकोनमी को बहुत फायदा होगा। आईआईटी दिल्ली के डिपार्टमेंट ऑफ सिविल इंजीनियरिंग में असिस्टेंट प्रोफेसर शर्कर बिंगो के मुताबिक इस टेक्नॉलॉजी से यह सुनिश्चित हो जाएगा कि एनजी और ब्लूपूल रिसोर्स की लिमिटेशन का प्रभाव आगे आने वाले समय में हासिल करेगा इंफ्रास्ट्रक्चर के विकास पर न पड़े। आईआईटी मद्रास से डा. रविकृष्ण ने कहा कि कंस्ट्रक्शन मटरियलों के क्षेत्र में तर्कबंदी एक्सट्रिमा, मैन्युफैक्चरिंग, इंडस्ट्रिएंस और यूजर्स के साथ काम करने से ही संभव है।
Applying Research' at IIT-B

Smart phone users often complain about the poor battery life of their device. One solution to the problem without increasing the weight of the phone is, to use fuels like LPG or methane which provide more than 40 times the energy of electric batteries used in mobile phones. However, it is difficult to convert the chemical energy in these fuels into electrical energy. Students and faculty members at the Indian Institute of Technology (IIT), Bombay have decided to innovate and find solutions to this problem. “The available technology to fuels to electrical enables an efficiency rate of just 2.6 percent. We have built a micro thermoelectric power generator, which enables this conversion at an efficiency rate of almost 5 per cent,” says Shamboo Yadav, one of the students involved in the project. With this any mobile phone using fuels will run at least 3-4 times longer than they do now with conventional batteries. According to Sudarshan Kumar, professor, aerospace engineering, IIT-B, though the project is at a developing stage, it has applications even beyond mobile phones. “It will help micro airplane systems, power generation, quick recharge when needed,” he says.

This fuel based mobile battery is one among the 1000 research projects being carried out at IIT- B. With more than Rs 215 crores received for research and development, the scope of such projects is on the ascendancy. “Around 55 per cent of students at the institute are masters and PhD students, both of which require a significant amount of research work,” says Krishna Kaliappan, associate dean, research and development, IIT-B. An internship, which was the genesis of the above mentioned research project is also offered to final year undergraduate engineering students across the country. “It is to provide innovative ideas with adequate infrastructure,” explains Kaliappan.

Another project at the institute aims to predict floods based on the rainfall received and the level of water in catchment areas through an online platform. The tool uses Geographical Information Systems (GIS) and can be used to generate flood maps. “The main objective of GIS based flood prediction is to know the extent of flooding for given rainfall conditions. If we get data quickly, then we can predict floods in real time,” says
Eldaho TI, faculty, civil engineering, IIT-B. While the tool has already been tested in Airoli, Ghansoli, Nerul and Vashi, it is still a work in progress. “Once perfected, this tool can be effectively used to manage and maybe even prevent flood related disasters,” adds Anand Kulkarni, PhD student working on the project.

According to UNICEF, more than 665 million Indians i.e almost half the population of our country defecates in the open. Paucity of water is the major reason behind this shameful statistic. To tackle this problem, the Industrial Design Centre (IDC) at IIT- B has developed Dry-San, a toilet that does not need water for flushing. “The idea is to convert the waste material into a resource — liquid fertiliser from urine and manure from solid waste by a non-chemical and natural decomposition process,” informs Kishor Munshi, faculty, IDC. These toilets which have a 20 year life period, cost around Rs 20,000 right now but are expected to cost around Rs, 7000 once mass production begins. “Dry –San is targeted specifically towards rural India which faces severe water shortages,” adds Munshi.

While there is a perception that students from IITs are inclined towards lucrative career options, the professors agree that research is becoming increasingly popular. “An increasing number of our undergraduate students often get bored with a regular job after a couple of years and return to the institute to pursue research,” signs off Kaliappan.
Want to go on a space odyssey?

The PSLV-C25 rocket carrying the Mars Orbiter Spacecraft blasts off from the launch pad at Sriharikota.

AFP PHOTO/ISRO

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Mangalyaan, the Mars Orbiter Mission (MOM) launched by the Indian Space Research organisation (ISRO) passed a crucial test early this week and is expected to enter the Martian orbit today. This milestone is also testimony to India’s burgeoning interest in space research and technology. Besides, missions such as these have sparked the enthusiasm of young star-gazers who are now keen to play a part in unravelling the mysteries of the universe. However, there is a dearth of institutes that offer undergraduate and postgraduate courses related to space science in India.

A senior faculty from the astronomy department at the Indian Institute of Space Science and Technology (IIST), Thiruvananthapuram, points out, “There are few universities which have full-fledged postgraduate courses in astronomy and astrophysics. Apart from IIST, Osmania and Pondicherry Universities offer master’s programmes in these subjects. IIST is the only institute where astronomy and astrophysics form an appreciable part of the curriculum of the science stream at the undergraduate level. Compared to some Western countries, India does lag behind as far as facilities like large telescopes are concerned. But that is changing with India’s participation in large global projects like the TMT (Thirty Metre Telescope) and SALT (South African Large Telescope).”

IIST offers a core course on Introduction to astronomy and astrophysics and is also offered to BTech (physical sciences) students. Entry to the bachelor’s course is through JEE (joint entrance exam) scores; for the MS programme (astronomy and astrophysics), students must clear the GATE (graduate aptitude test in engineering) or JEST (joint entrance screening test).

Osmania University in Hyderabad has a department of astronomy that offers master’s programmes in astronomy and astrophysics. Besides, Pondicherry University also has a department of astrophysics which offers an MSc in astrophysics. As far as career prospects go, “Pursuing a PhD in astronomy and astrophysics throws open a lot of opportunities, especially with upcoming facilities like TMT where India is a stakeholder.” There are dedicated research institutes like Indian Institute of Astrophysics, Inter-University Centre for Astronomy and Astrophysics, Raman Research Institute, Tata Institute of Fundamental Research, National Centre for Radio Astrophysics, to name a few, that offer jobs in a range of fields,” says the IIST faculty.