Short on faculty, IITs look towards students

Himanshi Dhawan | TNN

New Delhi: Under-graduate engineering students from technical institutes may be able to teach and earn as they learn at the premier Indian Institutes of Technology (IITs).

Faced with a severe faculty shortage, IITs have proposed mentoring the top 15% under-graduate students from IITs, National Institutes of Technology (NITs), Indian Institutes of Science Education and Research (IISER) and National Institute of Science Education and Research.

The proposal will be discussed at the IIT council meeting on January 7 to be chaired by human resource development minister M M Pallam Raju. IITs hope this joint program will enhance teacher quality and mitigate faculty shortage.

The selected students could be asked to undergo a trainee teacher program at NITs. “While initially they would assist in teaching they would simultaneously go through part-time post-graduate and doctoral programs so they can acquire higher education qualification that is a prerequisite for teaching at IIT and NITs,” sources said.

Students taking up teaching programmes is not an unusual feature in many western universities but they are more typically pursuing post-graduate programmes.

IITs hope to produce well-qualified and skilled teachers and researchers while addressing the faculty needs for under-graduate students.

The ministry had set up a committee to suggest solutions to the lack of faculty in all central government-funded institutes and student-teachers is one of the proposals being considered.

According to HRD ministry, IITs suffer from a nearly 33% vacancy while the faculty shortage is about 35% in the NITs. The teacher-student ratio in the seven older IITs is about 1:16 at present, higher than the suggested 1:10. In the eight new IITs, the ratio is about 1:8, in adherence to the international standards.
Spat between alumni, faculty stalls IIM-A chief’s appointment

A tug-of-war between faculty members and alumni has stalled efforts to find a new IIM-Ahmedabad, director for the last eight months. At the last board meeting in December, members of the governing board had expressed the debate over the appointment should conclude. But the five-member search committee, comprising of alumni, has failed to arrive at a consensus on a panel of three, who would succeed Samir Barua, who is on extension, as the director. Barua’s extension ends on February 7 but there are doubts if the successor would be nominated by then. TNN

Vibrant Gujarat: Govt to mobilise colleges for online training under IIT-Bombay

VINAY UMARI
Ahmedabad, 5 January

Taking its knowledge-sharing and innovation theme further this Vibrant Gujarat Summit 2013, the Gujarat government has roped in Indian Institute of Technology, Bombay (IIT-B) to conduct its ‘Spoken Tutorial Project’ for state varsities and colleges.

The premier technical institute conducts online courses for training educational institutes in open source software under the ‘Spoken Tutorial Project’.

"IIT Bombay has been conducting this online programme on training institutes in open source software since some time now. Since, our focus this Vibrant Gujarat Summit is also on knowledge sharing and innovation, we wanted the universities and colleges in Gujarat to make the most of it. Hence, we are mobilising all universities and colleges in Gujarat to tie-up with IIT Bombay for getting trained under the Spoken Tutorial Project," said Jayanti Ravi, commissioner, higher education.

Under the project, IIT Bombay offers 5 different packages of various open source softwares.
Dancing robot gets all the attention at IIT-B Techfest

DIPTI SONAWALA
MUMBAI, JANUARY 4

TECHFEST — the annual technological event of Indian Institute of Technology’s (IIT), Bombay on Thursday unveiled several exhibits for gadget buffs. However, the highlight of day one was the ‘Gangnam’ robots.

The robot has been designed by Aldebran robotics, a French company that is into building state-of-the-art social and service robots. The company has managed to bring in ‘Nao Robot’, a humanoid robot all the way from France. These robots perform dance moves to the worldwide music hit ‘Gangnam’ Style, by South Korean rapper Psy.

“These robots win your hearts instantly with their looks. And while you’ll still be in much awe looking at these bots, it will show you its ‘Gangnam style’ dance. On day one, over 12,000 people thronged just to take a glimpse of the Nao Robot. I think the popularity of the Gangnam style was something which managed to attract a large crowd to this stall,” said Shrey Singh, Media manager, Techfest 2013. However, if you plan to buy this robot, you will have to shell Rs 15 lakh.

Another attraction at IIT-Bon Thursday was the SONIN based HIRO robot. HIRO is also a very popular robot created by Hasegawa Lab Tokyo, because it can make educated guesses based on past experiences, which means it can learn, react and think just like a human being. The robot was programmed using an unsupervised learning mechanism created by the researchers called Self-Organising Incremental Neural Network that processes information in a dynamic way making it easy for the robot to think up future patterns. The creator of HIRO, Osamu Hasegawa, is also among the list of prominent personalities who will address the people on robots at Techfest.

Another popular exhibit was AirBurr; a robot designed specifically to study the physical interaction between flying robots and their environment. A team of PhD students, Adrien Briod and an engineer, Przemyslaw Korniatowski from Ecole Polytechnique Federale de Lausanne college in Switzerland, have developed a multisensor, lightweight robot capable of flying in clustered environment. “The robot weighs just about 350g and does not need to avoid obstacles, and its design ensures there is little scope for damage. The robot can stand upright on its flexible legs.” Briod said.

Day one witnessed a footfall of over 24,000 people on the Powai campus. The international exhibitions had students lining up to see some world-class technology from close quarters. There are overall 150 events spread over three days and a total prize money of Rs 17 lakh. Speaking on the events and exhibitions, Singh said the 16th edition of Techfest is even better than last year as some of the best known inventors and their inventions have been displayed. “There are nano robots, exhibits on light and sustainable energy sources and many other exhibits from USA, Japan, France, Switzerland and from India. Being a working day we had expected a very low turnout on Thursday however, we had over 24,000 visitors which included 1,500 school children from Mumbai and Pune,” he said.
IIT-M’s tech fest
Shaastra opens

DC CORRESPONDENT
CHENNAI, JAN. 4

The Union government spends 70 per cent of its higher education budget on top institutes like IITs, so students should have a social commitment when doing research, said Prof L.S. Goenka, dean (students), IIT Madras, inaugurating IIT Madras’ Shaastra on Friday.

He said students should not only look at quality but the detail of each innovation they do. “India lags behind in competitiveness and is ranked far behind several small countries. We need to look why we are so far behind.”

The Union government spends 70 per cent of its higher education budget on top institutes like IITs, so we have a social commitment which I want students to keep in mind when doing research,” he said.

Shaastra began with a bang on Friday with students from IIT-M displaying their innovative projects. A team of students has developed a cycle fitted with a motor which would propel the bicycle at a maximum speed of 40 kilometres per hour.

The cycle, according to the developers, converts mechanical energy into kinetic energy to power it.

Another team displayed their miniature flight ‘Want to Fly’, which would go around the institute during Shaastra to enthrall the audience.

A group of students has embarked on a project to develop an underwater vehicle which they will exhibit in an international competition to be held soon. IIT Madras provided a platform for its students through confluence to exhibit their spirit of innovation and achievements in technical fields in the presence of distinguished alumni.

This conclave also brought together stalwarts from different fields of research, industry and public policy with a focal theme: ‘Ignite your imagination’.

Even B’desh
beats India
in gender
equality: Sen

Mumbai: Nobel laureate
Amartya Sen has expressed
shock at some suggestions
made by politicians in the
wake of the horrific gang rape
in New Delhi. Speaking at the
G. L. Mehta memorial lecture
titled ‘India: A defence and a
critique’, at IIT-Bombay on
Saturday, he said, “Ever since
the gangrape, silly statements
about men and women have come from extremely conser-

vative quarters.”

Slamming the state for the way it has approached human development and the prevalent gender inequality, he said, “Some people think the atrocities that this woman suffered, and many others suf-
fer, is a problem of urban areas and that it does not exist in rural areas. But I think women have been violated and subjected to violence day in and day out without any group taking up their cause. The whole issue of death and neglect is far greater than we assume. It has an immediate effect on human life because half the people in the world are women.”

Sen spoke at length in the lecture that lasted for an hour and a half. He elaborated on the need to rectify the place of women in India and spoke of how Bangladesh has overtaken India in every parameter of human development, which has a lot to do with gender equality. “In Bangladesh’s politics, gender equality became increasingly important,” said Sen. “Not too long ago Bangladesh was behind India on all indices. Today Bangladesh is the only country with more girls in schools than boys. It has a higher life expectancy, lower mortality rates, and women in the labour force.”

Quoting Mahatma Gandhi, Sen said, “Gandhi made an important statement about counting women as equal partners. I think it is important to recognize that the father of the nation was clear on this subject.”
अस्सी फीसदी बढ़ेगी आईआईटी की फीस

एजेंटी

नई दिल्ली। देश के सर्वश्रेष्ठ इंजीनियर तैयार करने वाले भारतीय ग्रीनोगिकी संस्थानों (आईआईटी) में भी भारी फीस बढ़ोतरी की तैयारी की जा रही है।

संभवतः कि आईआईटी काउंसिल का समिति को होने वाली मीटिंग में 80 फीसदी फीस बढ़ोतरी के फैसले पर मुहर लगेगी। फीलहाल आईआईटी संस्थानों में स्नातक कोर्स की फीस 50000 रुपए सालाना है, जिसे बढ़ाकर 90000 रुपए किया जा रहा है। इससे पहले आईआईटी संस्थानों में फीस बढ़ोतरी 2008-09 में हुई थी और उस दौरान फीस को 25000 रुपए से बढ़ाकर 50000 रुपए सालाना किया गया था। फीस में बढ़ोतरी की सिफारिश दी गई साल नवंबर में आईआईटी स्टूडेंट कॉन्सेप्ट क्रिया की जा सकती है।

आईआईटी काउंसिल का समिति को मीटिंग में फैसले पर मुहर लगेगी मुहर

फीस को 50000 रुपए सालाना से बढ़ाकर 90000 रुपए किया जा रहा है।

आईआईटी संस्थानों में स्नातक कोर्स के लिए करीब 10000 स्टूडेंट्स दर्जे लेते हैं। मानव संसाधन विकास मंत्रालय के सूची का केंद्रीय संस्थान के आईआईटी जैसे संस्थान, और ही अधिक संस्थान आईआईटी के मुख्य तीन गुना से अधिक फीस ले रहे हैं।
प्रयोगशालाओं से बाहर निकलेगा विज्ञान

विज्ञान का नया मका बन रहा है भारत

विज्ञान और जन नीतियों में मेल जारी है
Different boards to have similar papers

Manash Pratim Gohain | TNN

New Delhi: Come 2014, class 12 students of maths and science from one particular education board will not be able to complain about having to face tougher question papers and marking systems than their counterparts studying under other boards.

The majority of educational boards conducting class 12 exams across the country have agreed in principle to have a common design of question paper to make the school-leaving exams as uniform as possible in terms of difficulty.

This is being done to give students a level playing field.

Efforts began in 2010, when 20 educational boards, including the Central Board of Secondary Education (CBSE) and Council for the Indian School Certificate Examinations (CISCE) adopted the core curriculum in maths and science.
IIT board asks CBSE to work on common design of Q paper

Manash Pratim Gohain | TNN

New Delhi: Science and maths students will soon face similar question papers, regardless of the board under which they study.

In 2011, all 29 boards conducting senior secondary exams had adopted a core curriculum. Taking forward the uniformity, the Apex Board of IIT has asked CBSE to work on a common design of question paper for Class XII exams for mathematics and science subjects.

Coordinating on behalf of the boards, Council of Boards of School Education in India (COBSE), a common platform for all educational boards in the country, has instituted a sub-committee comprising of state board members from Assam, Maharashtra, Bihar, Kerala and Rajasthan to work on the common design of question paper.

"We are going to have the first batch that will appear in Class XII exams from various boards based on the core curriculum. With a common design of question papers the difficulty level as well as marking system will be equivalent and therefore there will be complete uniformity in the system," said chairman of COBSE as well as CBSE, Vineet Joshi.

The move is also likely to offer a level playing field to science students from different boards while appearing for centralized entrance examinations like the Joint Engineering Entrance (JEE) as well as the single medical entrance test. From this year the JEE (main) merit list to be conducted by CBSE will give 40% weightage to board results.

"Initially, once the design is ready, a pilot run will be introduced by five state boards for Class XI. Based on the experience, and in case there is any need for improvement, finally it will be introduced in Class XII from 2014. The idea is to have uniformity in the level of difficulty as the curriculum is already uniform so that students get a level playing field," said Puran Chand, joint secretary, COBSE. Once the recommendations of the sub-committee are ready, the matter will be placed at the COBSE for approval.
Kerala front-runner for IIT: Pallum Raju

Staff Reporter

KOCHI: Kerala is the front-runner for an Indian Institute of Technology (IIT), Union Human Resource Development Minister M.M. Pallum Raju has said.

Talking to reporters on the sidelines of a function here on Sunday, he said in the 11th Plan, some IITs were granted. They were in various stages of progress. “We need to consolidate and definitely we will look into new requests. I think definitely Kerala is the front-runner.” he said.

Prime Minister Manmohan Singh, during his visit to Kerala in September for the inauguration of ‘Emerging Kerala’ investors meet, had said the Centre was seriously considering a proposal to set up an IIT in the State. — PTI

Staff Reporter writes from Kozhikode: Union Minister of State for Human Resource Development Shashi Tharoor said that he would not give up his fight for getting an IIT for the State though the Planning Commission had ruled out the possibility of the project.

Addressing an interactive session organised by the Malabar Chamber of Commerce here on Sunday, Mr. Tharoor said he was not in favour of dismissing the realisation of the project here as all Parliament members from the State were battling for it.

He said that Kerala would present its stance once again before the Planning Commission to win a favourable stance. Mr. Tharoor made it clear that the task would not be that easy as India was following a centralised planning system where the demands of other States too should be taken into account.

“As per the existing status, there is no provision for sanctioning an IIT for Kerala in the 12th Five Year Plan, which we have to overcome in the first phase,” he said.
आईटी-जेएई पंजीकरण में जबरदस्त उठाल

कल्पना पाटलक और एम सरस्वती

सत्र कुल इंजीनियरिंग परीक्षा (जेएई) का नया अंतर कुछ रंग लाए है। यह 2013 को परीक्षा के लिए पंजीकरण करने वाले छात्रों की तादाद दिक्कर्ड 25 प्रतिशत बढ़कर 14 लाख तक पहुँच गई है। यह लगातार सात वर्षों के लिए 11 लाख छात्रों के पंजीकरण करता था।

प्रतिष्ठित भारतीय प्रौद्योगिकी संस्थानों (आईआईटी) में दाखिले के लिए अप्रैल 2013 में दो चरणों वाली संस्करण इंजीनियरिंग परीक्षा ली जाएगी- मेन और एडवांस्ड। आईआईटी के लिए आवेदन करने वाले छात्रों को जेएई- मेन में शामिल होना पड़ा।

इंजीनियरिंग संस्थानों में दाखिले के लिए, नई जांच परीक्षा अलग भारतीय इंजीनियरिंग प्रेमिया परीक्षा (एआईटी) और आईआईटी-जेएई का समुक्ष रूप है, जहां मेन परीक्षा एआईटी-जेएई के बारा होगी और एडवांस्ड परीक्षा आईआईटी-जेएई के बारा।

इस क्षेत्र के विशेषज्ञों का कहना है कि आईआईटी-जेएई के लिए पंजीकरण करने वाले छात्रों को यहां में इजाफा करना चाहिए यह छात्रों की तरफ से राष्ट्रीय इंजीनियरिंग परीक्षा की अवधा करने का नतिजा है।

इसके अलावा मानव संसाधन विकास मंत्रालय ने वर्ष 2013 को जेएई परीक्षा में उन छात्रों को दूसरी मात्रा में प्रवेश करने को भी इजाफा दे दी है, जिसके लिए वर्ष 2012 में जांच परीक्षा दो रोपी।

जांच परीक्षा ने यह अनुमति दी है कि इजाफा दे दी है कि ऐसे छात्रों को भी आईआईटी-जेएई को एडवांस्ड जांच परीक्षा में वैसे वाले लाख 20 फीसदी छात्रों की भावना में शामिल होने का माफिक मिल सके। जेएई मेन में जिन छात्र शामिल होंगे, उनमें से केवल छात्र 1,50,000 छात्र ही जेएई-एडवांस्ड परीक्षा में बैठने के योग्य होंगे, जो मेन परीक्षा के कुछ सार्थक बाद अवांछित होंगे। जेएई-एडवांस्ड परीक्षा के आवेदन पर आईआईटी में दाखिले के लिए छात्र को संबंधित 12वीं कक्षा के बोर्ड के संबंधित 20 भागित में आए ना। वर्ष 2012 तक 12वीं बोर्ड में 60 प्रतिशत अंक लाने वाला छात्र आईआईटी में दाखिले के लिए होने वाली परीक्षा में शामिल होने के कारण होता था। वर्ष 2012 में 12वीं कक्षा का परीक्षा लेने वाले 32 छात्र हो गए, जिनमें पैटर्न और मूल्यांकन के लिए सीता- सीता अंक-अंक है।

जहां जेएई- मेन रीव्यू लेने, वहां जेएई-एडवांस्ड आईआईटी की सदीमें आवाज आएगी। नैसर्गिक इंजीनियरिंग और टेक्नोलॉजी (एआईटी) और आईआईटी में दाखिले जेएई- मेन के अंतर्दोष अधी भावना होगी। कुल 20,000-25,000 छात्र पंजीकरण करने हैं।
Fee hike, peer review on IIT Council’s table today

EXPRESS NEWS SERVICE
NEW DELHI, JANUARY 6

WHEN the IIT Council meets on Monday, it will take a call on a slew of significant proposals, including those for a fee hike, external peer review of IITs and a drive to adopt, teach and espouse ‘green technology’.

In a far-reaching move towards bringing in accountability in IITs, it is proposed that every IIT be peer-reviewed every five years by eminent persons from the industry and academia. The new IITs — once they have operated for five years — will also be subject to this peer-review, according to the proposal on the agenda of the IIT Council.

Before the review exercise begins, each IIT will also be required to undertake in-house department wise review. As per the tentative time line arrived at, while the review committee is to be notified by April, the reports of these committees will be submitted by October.

The review will address aspects like where the institute has reached in relation to its charters and the projections. That apart, the institute’s future plans and metrics that it adopts in assessing itself will also be observed. The institute will be reviewed on factors such as teaching quality, research, governance quality, range of degrees on offer, environment for research, contribution to research and the bottlenecks in the way.

The IIT Standing Council had met in November to approve an 80 per cent hike in the annual tuition fee at IITs — from Rs 50,000 to Rs 90,000 per annum — with exemption for SC/ST category students. The proposal is now expected to get the final nod from the IIT Council, which has on board IIT Directors, Chairpersons of Board of Governors of IITs besides eminent persons and is presided over by the HRD Minister.

The fee hike apart, the IIT Council will also mull over a National IIT Scholarship programme that will take care of up to 100 per cent tuition fee for reserved category students.

Another interesting proposal approved earlier by the Standing Council of IITs is introduction of green programmes in the curriculum, work on ‘green’ technology, management practice. As part of this initiative, ‘green offices’ will also be set up on campus.
आईआईटी की फीस वृद्धि को आज मिल सकती है मंजूरी

नई दिल्ली | विशेष संवाददाता

भारतीय प्रौद्योगिकी संस्थानों (आईआईटी) में फीस बढ़ोतरी और अन्य मुद्दों को लेकर मानव संसाधन विकास मंत्री सोमवार को आईआईटी काउंसिल की बैठक की अध्यक्षता करेगी। इन संस्थानों में फीस बढ़ोतरी के प्रस्ताव को स्वीकृति मिलने की संभावना है। इसमें फीस मौजूदा 50 हज़ार से बढ़कर 90 हज़ार की जा सकती है।

मंत्रालय से जुड़े सूटों के अनुसार, फीस बढ़ोतरी के प्रस्ताव के साथ-साथ साठ लाख रुपये से कम आय वालों के लिए संस्थानों में 25 फीसदी सीटों आरक्षित करने के प्रस्ताव पर भी चर्चा होगी। ऐसे छात्रों की फीस की राशि केंद्र सरकार स्कॉलरशिप के जरिए देगी।

इससे आईआईटी को फीस बढ़ाने पर आलोचना से बचने का मौका मिलेगा।

काउंसिल बैठक

- फीस में 40 हज़ार की वृद्धि के साथ इसे 90 हज़ार करने का प्रस्ताव
- आर्थिक रूप से कमजोर छात्रों के लिए 25% आरक्षण देने की योजना

को मैट में बैठने की अनुमति देकर सीधे पांच वर्षों एमटेक और पीएचडी कोर्स के लिए अनुमति देना शामिल है। यानी छात्र बीटेक, एमटेक और पीएचडी साथ-साथ कर पाएंगे। दूसरे आईआईटी के बीटेक छात्रों को एमआईटी और दूसरे संस्थानों में एमटेक करने के साथ-साथ बतौर ट्रेनिंग शिक्षक कार्य करने की अनुमति देना शामिल है।

इसके अलावा आईआईटी के बोर्ड ऑफ़ गवर्नर्स में नियुक्ति प्रक्रिया के नियमों में बदलाव, आईआईटी कैप्स की प्रीन कैप्स में बदलने की योजना पर चर्चा, शिक्षकों की नियुक्ति में तेजी आदि आहम मुद्दों पर चर्चा होगी।
PILOT PROJECT

At IIT-Bombay, tech takes the cash out of shopping

2,000 students are using the ‘virtual wallet’ initiative of ItzCash, Rupay and Canara Bank

or an ID card and make payments at shops on the campus through it,” said Vaihav S. Joshi, Head, Government Business, ItzCash.

About 2,000 students are using this cashless card initiative since its launch in September last year. “This is the first time that we have introduced the system in an educational institution. We aim to extend it to 4,000 students in the next few months,” Joshi added.

ItzCash plans to expand the cashless card system to other IITs and corporate campuses soon.

There are three active reloading spots and 35 stores enabled with this technology at the IIT-B campus. Through this system, students can, among other things, make day-to-day purchases, such as books and stationeries, and settle canteen bills.

The TECH IN USE

The technology being used is near field communication, where devices establish radio communication with each other by touch or bringing them into close proximity.

The technology being used is near field communication, where devices establish radio communication with each other by touch or bringing them into close proximity.

Countries such as Germany, Austria, Finland, New Zealand and Italy have tested NFC in ticketing systems for public transport, while China has implemented it in bus services across the country. Still at a nascent stage in India, NFC technology is now being explored as a new medium of transaction, which may gradually eliminate the usage of smaller currencies.

It costs the Government nearly a rupee to print a currency note of Rs 10 denomination and Rs 1.79 to make a Rs 100 note, according to information provided by the Reserve Bank of India.

CHALLENGES

The pilot project at IIT-B campus has had some teething issues in setting up a smooth transaction process. “Enabling device and application readiness and handling merchants to move to this new automated system were some of the initial challenges that we faced,” Joshi said.

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Hindustan ND 07/01/2013 p-1

2010-11 में ग्रामीण छात्रो ने विदेश में शिक्षा के लिए 30 हजार करोड़ रुपये खर्च किए, केंद्र का बजट 15 हजार करोड़

उच्च शिक्षा के बजट से दोगुना विदेशों में पढ़ने पर खर्च

2.64 लाख विदेश छात्र विदेश में शिक्षा प्राप्त करते हैं। ये अनुमान में उच्च शिक्षा के लिए जीवन की निवेश के लिए लोगों की निवेश करते हैं।

2010-11 में ग्रामीण छात्रों के लिए विदेश में शिक्षा के लिए निवेश की गई रुपये की संख्या 30 हजार करोड़ रुपये थी। केंद्र का बजट 15 हजार करोड़ रुपये था।

उच्च शिक्षा के लिए अधिक मात्रा में विदेश में निवेश की जाती है। ये अनुमान नहीं है विदेश के लिए तथा अन्य संबंधित क्षेत्रों में निवेश।

जनरल के लिए विदेश में शिक्षा के लिए अधिक मात्रा में निवेश की जाती है। ये अनुमान नहीं है विदेश अनुमति के लिए तथा अन्य संबंधित क्षेत्रों में निवेश।

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ये अनुमान नहीं है विदेश अनुमति के लिए तथा अन्य संबंधित क्षेत्रों में निवेश।
Bengal project to trump CERN

Particle Accelerator Will Be More Powerful Than At Geneva Facility

Subhro Niyogi | TNN

Kolkata: Scientists at the Salt Lake-based Variable Energy Cyclotron Centre (VECC) are making advanced components for a particle accelerator more powerful than the now-famous Large Hadron Collider at the CERN in Geneva that was used to detect the Higgs-boson, or God particle. This new accelerator, being built for a German facility, will be used to study simulations of the second-old universe as well as research on the neutron and other physics fields.

“The VECC has been entrusted with building the world’s largest superconducting magnet, beam stopper and power converters for the super accelerator at the Facility for Antiproton and Ion Research (FAIR) in Darmstadt, Germany. They are on the job and we are confident of them delivering the projects on time,” said Horst Stoecker, scientific director of GSI Helmholtz Centre for Heavy Ion Research, the German lab that will be ungraded to FAIR, an international facility in which India is the third-largest shareholder. FAIR will feature a double-ring synchrotron with a circumference of 1,100 metres connected to the existing GSI facility in Darmstadt.

What makes the FAIR accelerator unique is that though the energy of the particles will be considerably lower than that at Cern, the intensity of the beam will be of a magnitude higher than any other existing facility.

The beam stoppers being built for the new facility will be able to detect collissions at the rate of 10 million per second while detectors currently being used in other laboratories deal with 10,000 collissions per second,” VECC director DK Srivastava told TOI on Saturday. The VECC had built the Photon Multiplicty Detector for ALICE, one of the four major detectors at Cern.

The draft design of the beam stopper is ready, but is yet to be finalized. The components—being built at a cost of Rs 260 crore — will be India’s equity contribution in the $2 billion FAIR GmbH.

Degree certificate cannot be held as lien

Mail Today ND 7/01/2013 P26

CAN a university retain or refuse to issue the degree certificate of a student due to non-payment of fees? The question came up recently before the National Consumer Disputes Redressal Commission (NCDRC) in the Registrar of Manipal University v. Dr. Sushith, decided on the December 6, 2012.

Dr. Sushith got enrolled for a post-graduate course in MD in biochemistry with Manipal University for the academic year 2005-06. He completed the course in 2008. The university was required to issue him degree certificate confirmed by Manipal Academy of Higher Education. In spite of repeated requests, he was not provided the certificate.

The university, in response to Dr. Sushith’s allegations of deficiency in service, said that he was given concession because his fees had been waived off. Besides, there was an understanding between the university and Dr. Sushith that he would undertake to serve the petitioners for five years after completion of the course failing which he would repay the entire fees. It was contended by Dr. Sushith that the university further contended. The university also said that it had no objection to providing the certificate provided Dr. Sushith paid Rs 25,000 or furnished a bank guarantee or any other surety.

It was clearly stated that the certificate would be returned as a lien till Dr. Sushith fulfilled the terms of the aforesaid agreement, the university said.

The Dakhina Kannada District Consumer Disputes Redressal Forum, Mangalore, allowed Dr. Sushith’s complaint and directed the university to hand over the original certificate. The order was challenged before the state commission, which dismissed the university’s appeal.

Subsequently, the university filed a revision petition before the NCDRC, which held that the agreement between the respondent and the petitioner did not contain any condition or clause of lien of the university. The university was contended to retain the degree certificate of Dr. Sushith as a lien till he fulfilled the terms of the aforesaid agreement.

The Commission quoted with approval the following observations of the state Commission, “On going through the pleadings of the parties, one thing is clearly established that the complainant completed his course and the Manipal Academy has conferred on him the MD degree in biochemistry. OPs got the said degree but they failed to give the same to the complainant. Even if it is held for a while that there is breach of the said agreement and complainant is liable to refund the tuition fee, the remedy is still open to the OP to recover the same by approaching an appropriate civil court for recovery of the same. When such an equitable remedy is readily available to the OP, they cannot illegally retain the said degree certificate.

On going through the entire agreement, it does not disclose that the OPs have a right to withhold the MD certificate if the complainant violates any terms and conditions of the agreement. The aforesaid is also not Class 1 or Class 4. It is not the case of the OP that the complainant has pledged the said MD certificate as a security. Under such circumstances, OPs cannot exercise lien over the said certificate. There is no proof that the OP terminated the complaint from his service or that he rejected their appointment. On the other hand, there is a proof that the complainant paid nearly about Rs 90,000 each year towards the college fees. Retaining the degree certificate is otherwise compelling the complainant to serve under them. Such kind of practice is not fair.”

Holding that there was no jurisdictional or legal error in the orders passed by the two forums, NCDRC dismissed the revision petition and ordered the university to pay Rs 10,000. (The writer is an advocate and editor of Consumer Protection And Trade Practices Journal (CPTP).)

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Hardware Final, Govt Builds Ecosystem for Aakash Applications

SHELLEY SINGH
NEW DELHI

Now that the hardware of Aakash is more or less completed, the government is driving a big offensive to introduce software on the world’s cheapest tablet. A four-member technical committee formed by the government is looking to see how the ecosystem, which is continuously being released for Aakash, primarily related to learning and academia, in the last two years.

According to Ashok Jhunjhunwala, a professor in IIT Madras and a committee member, about 25 academic institutions and private companies have signed up to build applications for Aakash, and the aim is to double that count by March. Simultaneously, IIT Madras is putting together 5,000 engineering students through a four-day crash course on Aakash in the hope that they will build applications for it, perhaps even businesses around it. “The focus of app development is around education — it could be live broadcast of lectures or interactive e-books apps,” says Jhunjhunwala.

The tablet, an Android-powered Aakash tablet, the government plans to sell for Rs2,250, but gives students for Rs1,150 — comes with 26 apps, but in gaming, email or chat. “We need apps specific to Indian education requirements and that’s where the need to develop a homegrown Aakash apps ecosystem,” says Deepak Bhattacharya, a professor at IIT Bombay. Besides IITs and IIT Madras, the committee has included personnel from the Centre for Development of Advanced Computing (C-DAC) and an entity from the ministry of human resources and development, which is funding Aakash.

The list of 25 organizations includes academic institutions (for example, the IITs and American University, private companies (Mango Learning, TopChalks and Digital BackPack), and service providers (ITZCash). So, for example, the British Council in India is working on two apps: one on English language learning and another to prepare students for interviews. At its open source lab, IIT Bombay is working on a Lab (which will post engineering software to Aakash) Click is a live assessment tool for instant quizzes and Proximity is made available to IIT professors.

Elsewhere, US-based Mango Learning is developing a lesson plan through games. “The tablet, by itself, is an unloved device, and that’s where you need apps,” says Prakash Ahuja, founder of Mango Learning. “We will embed Aakash with one free app and charge Rs5 per app to download any of our 400-plus maths learning.”

Taking note of the ongoing shift of the public delivery and government welfare system to an Aadhaar-based platform, developers are also planning apps believed to be sold by government to bring about biometric authentication to identify a person. “On the health side, there are apps like one by Hims, which can be used for eye testing and iris scan,” says Sunet Singh Tuli, CEO of Datasync, the current only maker of Aakash. Similarly, Neelam-based SmartID is developing biometric apps to expand the use of devices for authentication. “I need to,” says Tuli.

Some of these apps will be free, others paid. According to Jhunjhunwala, in the next three years the government will look at other ways of making all Aakash apps on a common online location, as Apple or Nokia does. Building apps for Aakash presents its own unique challenges: the tablet is not as powerful, robust or visually rich as, say, top-end tablets like an Apple iPad or a Samsung Galaxy. “The challenge is that Aakash is the system is not good enough to support feature-rich apps,” says Vishal Pal Chaudhary, CEO of TopChalks. “For example, we can’t teach the working of internal combustion engine via video on Aakash.”

According to Tuli, an Aakash app should meet three conditions. One, it should not be heavy and should run easily on Aakash’s modest specs: Android OS, 4 GB internal flash memory and 64 MB of RAM. Two, it should work on low Internet speeds (as broadband networks are still not prevalent). Three, its user interface should be simple enough so that it is accessible even to users who are not computer-savvy.

Developers will have more latitude with the next version of Aakash, expected by March. According to Jhunjhunwala, the third version of Aakash, will have a faster processor, choice of operating system (Android or Linux), more memory and a SIM slot to use a mobile phone and connect to the Internet. “The devices will go to places where there may not be any broadband connectivity. That’s why a SIM slot is a must,” says Tuli of Datasync.

The upgraded Aakash will also implement the basics of the full-sized desktop, which is likely to see the government buying 56 million tablets in phases, from multiple vendors. At present, just one company, Datasync, is supplying 100,000 tablets to the government. “Aakash is not a one-off programme, but a decade-long project that will see computer-based delivery of education on the low-cost tablet,” says Jhunjhunwala.

That’s partly the thinking, he adds, behind training engineering students to build apps for Aakash. “Students will be using the lab,” says Jhunjhunwala. “The idea of training them so they know what is needed to learn and are hence sensitive to requirements. Besides, since Aakash is a long-term project, some students could get entrepreneurial ideas, and set up companies to support Aakash.”

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Twice colleges claim ₹1.14 cr UGC grants with forged papers

Times of India 07/01/2013 p-5

New Delhi: Two colleges in Punjab and Uttar Pradesh have received grants of around ₹1.4 crore from UGC allegedly on forged documents. When the matter came to light, UGC deputy secretary RC Khurana filed FIR (copies of which are with TOI) with IP Estate police.

UGC had issued demand drafts of Rs 54 lakhs and Rs 45 lakhs to Patel Memorial National College located at Rajpuria area in Patala and Rs 40 lakhs to Sri Baldev V Singh College in Varanasi, said a cop. The colleges however are not eligible for the grants, UGC has informed police.

After a preliminary investigation, cases of cheating and forgery were registered on December 19 and 26.

Another one in central Delhi, Aditi Library and Shree Vani College, also located in Varanasi, were found guilty of cheating and forgery.

UGC had also issued a letter to the chairperson, UGC, in this regard, but the college did not respond in time.

Forged papers were used to secure the grants, police sources said.
Internet emits 830m tonnes of CO2/year

Melbourne: Internet and other components of information communication and technology (ICT) industry annually produces over 830 million tonnes of carbon dioxide (CO2), the main greenhouse gas, and is expected to double by 2020, a new study has found.

Researchers from the Centre for Energy-Efficient Telecommunications and Bell Labs explain that the ICT industry, which delivers internet, video, voice and other cloud services, produces about 2% of global CO2 emissions — the same the aviation industry produces.

Researchers said their projections suggest that ICT sector’s share in emissions is expected to double by 2020. They have also found new models of emissions and energy consumption that could help reduce their carbon footprint.

The study said that controlling those emissions requires more accurate but still feasible models, which take into account the data traffic, energy use and CO2 production in networks and other elements of the ICT industry.

Existing models are inaccurate, so they set out to develop new approaches that better account for variations in equipment. PTI
Curiosity spots ‘flower’ on Mars

Washington: A peculiar petal-shaped cluster spotted on Mars by Nasa scientists has sparked speculation that flowers might be blooming on the red planet.

The “Martian flower” is seen in an image captured by Nasa’s Curiosity rover last month. In the image, pearl-coloured petals appear to sprout from a rock’s surface.

Space fans on online discussion forums remarked that it might be quartz embedded in the rock. One optimistic commenter suggested it might be the pistils of a blooming flower, the New York Daily News reported.

A similar find in October last year had turned out to be a piece of plastic that had fallen from the rover itself.

“But the cluster appears to be part of the rock,” Nasa spokesperson Guy Webster told the Daily News in an email.

“I would guess that the ‘flower’ was someone’s descriptive term for its appearance, not meant as an interpretation that flowers exist on Mars,” he wrote. PTI

HOPE BLOSSOMS: A peculiar petal-shaped cluster spotted on Mars has sparked speculation

Nasa gifts space photos to Earth

A large new collection of unique space photos taken at wavelengths that are invisible to the human eye and blocked by Earth’s atmosphere has been released as a New Year’s gift to the people of Earth by Nasa. The photographs have been released by Nasa in collaboration with Penn State University. The images have been captured by Swift observatory’s Ultraviolet/ Optical Telescope that studies ultraviolet light. PTI
January 8

Publication: The Times Of India Delhi Date: Jan 8, 2013 Section: Delhi Times Page: 29

They'll go for off-campus placements, do their masters, or do nothing at all, rather than work in what they've deemed the 'Unsafe City'.

We're offering you a ₹10 lakh package in Delhi

Ummm... Delhi? NO THANKS!

IIT GIRLS DITCH DELHI JOBS

Reena Singh

Career comes first, but never at the cost of life. And as the placement exercise is on at IITs across the country, the aftereffects of the Delhi gang rape are clearly visible on campus. The female students are hesitant to accept job offers from Delhi companies, making them either reject the offer or go for off-campus placements, or consider other options.

PARENTAL WOES

Not just the girls, the parents' concern for the safety of their daughters is obvious. Radhika Goel, a student of B Tech, 4th year, from IIT Bombay shares, "I never thought I'd have to refuse the job offer after competing and excelling in the interview. The company was planning me in Delhi, with a package of ₹1.2 lakh. When I told my dad about the offer, he asked me to refuse it straightaway. Knowing that Delhi has become the most unsafe city to work in, I couldn't contemplate his decision. So, now, I'd rather appear for the entrance exams and go for an off-campus placement."

THE UNSAFE CITY

Sahil Galani, 4th year B Tech student from IIT Guwahati, has turned resident; would be," she says. Aditi Mantri, a BTech 4th year student from IIT Bombay says, "I got placed with a package of ₹1.2 lakh. I'll be joining her in Delhi or Mumbai. I hail from Chhattisgarh, and Delhi is closer to my home town, but the city has always been considered unsafe for girls. So, even before this incident, I had left the company representatives during the interview that I'll prefer joining in Mumbai."

WON'T GO IF IT IS DELHI

The same apprehension is looming over the students who are finished with placements and are waiting for their offer letters to find out which location they've been allotted. Avani Gangurde, a BTech student from IIT Roorkee says, "I got placed with a package of ₹1.2 lakh in an MNC and I will receive the offer letter sometime in March or April. I have been told the location would be either Mumbai or Gurgaon. My parents and I wanted it to be Mumbai because Gurgaon is close to Delhi and, in all probability, I'll have to commute between the two cities often. I hope it's Mumbai and I don't have to consider other options." Another girl from IIT Guwahati, Shibani Sat, who is also waiting for the offer letter, has decided not
down an offer from a company in Delhi offering a package of ₹6.5 lakh, despite the fact that she will not be allowed to sit for interviews with other companies on campus after rejecting the offer. It is not the first time that a similar scope has happened in Delhi, but this incident was so horrific that it has left everybody shocked. The students on campus who are from Delhi have told us about how unsafe the city has become in recent years. One of my friends lives in Vasant Vihar and she says she feels unsafe stepping out of the house after 6 PM. And so, I have decided to tone down with the offer. If people living in the city are so scared, imagine how terrified a non-

**The Company Was Placing Me in Delhi, With a Package of ₹6.5 Lakhs. When I Told My Dad About the Offer, He Asked Me to Refuse It Straightway!**

Not just rocket science for progress, India must motivate scientists.

**What is often not appreciated is that good science-based ideas originate in non-market amateur labs or in academic environments rather than in private industry.**

The challenges of creating an Indian science industry are numerous. The government has to provide the necessary support to encourage innovation and research. The need for a conducive environment for scientific research and development is critical. There are several initiatives underway to promote innovation in India. However, there is a need for a comprehensive approach to foster the growth of the science-based industries. This includes providing funding, setting up incubators, and creating a supportive ecosystem. The government needs to work closely with the private sector to drive innovation and research. This can be achieved through collaboration between public and private entities.

Any policy that aims to create an innovative ecosystem must take into account the specific problems faced by Indian scientists. Academic environments where ideas are free to flow and are tested and refined are crucial. The government needs to provide adequate infrastructure and resources to foster innovation. Young scientists need to be encouraged to pursue their passions and contribute to the growth of the science-based industries. Collaboration between educational institutions and industry can help to create a supportive environment for innovation.

India has a significant potential to be a leader in science-based industries. The government needs to take a proactive role in driving innovation and research. By creating a conducive environment, India can become a hub for scientific research and development. The challenges of creating an Indian science industry are numerous. However, with the right support and encouragement, India has the potential to become a leader in science-based industries.
IITs raise tuition fee to Rs 90K per year, agree to peer review

EXPRESS NEWS SERVICE
NEW DELHI, JANUARY 7

THE IIT Council on Monday approved an 80 per cent increase in tuition fee at the Indian Institutes of Technology for the 2013-14 session. The fee, which was doubled to Rs 50,000 per annum in 2008-09, will now be Rs 90,000 per annum.

SC and ST students, who do not pay the tuition fee, will not be affected, Human Resource Development Minister Pallam Raju announced.

The Anil Kakodkar Committee had made a strong case for increasing tuition fees in 2011, arguing that it cost Rs 2.5 lakh to educate an undergraduate student at IIT. In November 2012, the Standing Committee of the IIT Council agreed to increase the fee.

Raju said the larger aim of increasing fees is to enable the 16 IITs to work on a self-sustainable basis like the IIMs. Fees would be reviewed every year, the minister said, while assuring that no qualified student would have to leave an IIT for financial reasons.

The IIT Council pitched for greater accountability at the institutes, and endorsed the ministry’s proposal for a peer review every five years. The review will assess the institute’s position against its charter and projections, as well as its future plans. The institute will be reviewed on teaching quality, research, governance quality, range of degrees on offer, environment for research, contribution to research and bottle-necks in the way.

New IITs will be eligible for the review on completion of five years of operation. Central universities and IIMs too have agreed to being peer reviewed, Raju told reporters.
IIT undergrad fee hiked by ₹40k

Fee Structure To Be Reviewed Annually, Revised Rates Applicable For New Entrants

Manish Pratim Gohakar | TNN

New Delhi: Studying at Indian Institutes of Technology (IITs) will be more expensive by ₹40,000 from this academic session. The Council of IITs decided to increase the annual tuition fee for undergraduate students to ₹80,000 at a meeting in IIT-Delhi on Monday.

Announcing the decision, the minister for state for HRD, Pallam Raju said that the fee structure will be reviewed annually and that the revised rates will be applicable for the new entrants only and that the fee-waiver schemes for SC/ST and 25% of the students from economically disadvantaged background will continue.

At present, the annual fee is ₹50,000. The last fee revision was done in the 2008-09 academic session when the tuition fee was increased from ₹25,000 to ₹50,000. An IIT annually spends ₹2.25 lakh on a student.

Announcing the hike, Raju cited the Anil Kakodkar Committee’s recommendation to make IITs financially independent on non-plan (operation) budgetary support to meet their operating expenditure. “We have enhanced the tuition fee to ₹90,000 per annum from 2013. Revised rate will be applicable to new entrants of UG programmes and fee will be reviewed every year; but it doesn’t mean that it will be hiked every year. Like the IIMs, we want the IITs to be sustainable and fee is one of the ways. Rarely 20% of the entire budget comes from fees in IITs,” said Raju.

The minister, however, said that no qualified student will be turned away because of financial constraints and “SC, ST students don’t have to pay any hostel or tuition fees. Also 25% of the students whose annual household income is ₹4.5 lakh or less will continue to get 100% scholarships.”

Among other decisions taken at the meeting are that IITs will train graduates from National Institutes of Technology (NITs) to teach as they pursue their masters or PhDs at IIT. The IITs also resolved to ramp up their Ph.Ds from 3,000 to 10,000 by 2023.

The Council decided to enable top 15% students from IITs for a joint IIT-NIT trainee teacher scheme, whereby the NIT graduates will get teacher training at IITs and simultaneously pursue their master or PhD programmes to salvage the shortage of teaching faculty in the country.

Comparing technical research environment in the country, Raju said, “We are third compared to the United States and the second in the forms of technical PhDs. To boost PhD programmes, we want to increase the number of Ph.Ds in the IITs to 10,000 by 2023 from the present 3,000. We are preparing an enabling framework so that more PhD scholars can join.”

IITs to increase fee by 80 per cent in 2013

By Ritika Chopra
In New Delhi

ON MONDAY, M.M. Pallam Raju made a decision which is probably one of the biggest since he took over as the minister for human resource development (HRD) in October last year.

He approved an interim, but substantial fee hike, proposed by the Indian Institutes of Technology (IITs) at a meeting of the IIT Council.

All IIT aspirants seeking admission to undergraduate programmes from this year will have to pay ₹90,000 per annum as against the current fee of ₹50,000 per annum. The fee was last revised from ₹25,000 per annum to ₹50,000 per annum in 2008-09.

This latest increase of almost 80 per cent was endorsed by Raju on the ground that the IITs, like the IIMs, should now start striving for self-sufficiency. Currently, almost three-fourth of the non-plan (operational) expenditure of the IITs is borne by the HRD ministry.

However, this increase in the annual fee will not affect students from the reserved SC/ST categories and also students from disadvantaged backgrounds whose education is being funded via scholarships and free ships. So in effect, this hike is meant for 50 per cent of the student population that will take admission in 16 IITs this year.

“The fee structure will be reviewed every year but that does not mean that it will be increased every year. But let me also say that no qualified student has ever had to leave his or her programme incomplete because of his or her economic circumstances. IITs are committed to their cause,” Raju told reporters immediately after the Council meeting.

“If you look at the IIMs, financially they have been come fairly independent. We want the IITs to also be sustainable and increasing fee is one of the ways in which it can happen,” he added.

Raju’s support for the IIT’s longstanding demand is interesting as his predecessor Kapil Sibal wasn’t in favour of a fee hike. Last year, he along with all IIT directors had agreed “in principle” on an alternative by which the IIT graduates would have to reimburse their alma mater the expenditure incurred on them after having found a job. According to ministry estimates, the government spends about ₹2.25 lakh every year on educating each IITian, but a student only pays ₹50,000.

However, the minister assured that plan has not been scrapped. “The intention is still there, he said.”
IITs hike fees by 80%, agree to external review

Charu Sudan Kasturi
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NEW DELHI: The Indian Institutes of Technology (IITs) have decided to raise their annual tuition fees for both undergraduate and postgraduate courses by 80% — from ₹50,000 to ₹90,000 — to achieve financial autonomy from the government.

The IIT Council — the apex decision-making body of the institutes — in return, have agreed on Monday to submit to a five-yearly external review of performance for the first time.

The council, chaired by HRD minister MM Pallam Raju, also decided to exempt students from the IITs and National Institutes of Technology from clearing the GATE, a national-level test, for PhD admissions.

HT was the first to report on October 23, 2012 on this plan, aimed at encouraging scientists and engineers to pursue research.

There is nothing in the move to show that the fee hike will hurt economically weak students.

CONTINUED FROM PAGE 1
About 25% of all students who clear the test typically come from families with incomes less than ₹4.5 lakh a year — and they do not need to pay any tuition fee.

All scheduled caste and scheduled tribe students — another 22.5% of those admitted — are also exempt from paying.

“We stand committed to ensuring that no student who clears the IIT Joint Entrance Examination (IIT-JEE) will have to give up his or her IIT seat because of financial reasons,” Pallam Raju said. A panel of external experts — including international academicians — will review the performance of IITs once every five years, benchmarking them against global standards.

The IITs will also allow the top 15% of students from the NITs to directly join their PhD programmes under a special project to train them as potential teachers at the IITs.

(For the full story, go to hindustantimes.com/iitfee)

CONTINUED ON PAGE 6
IIT council bites the bullet

Annual fee at IITs to rise 80%; fee revision to be carried out periodically

BS Reporter
Mumbai, 1 January

Now, an engineering degree from India’s most coveted engineering institutes would come at a higher price.

The premier Indian Institutes of Technology (IITs) on Monday decided to raise academic fee from Rs 50,000 to Rs 90,000 a year, a rise of 80 per cent. This means students would have to spend about Rs 3.6 lakh for the four-year bachelor-of-technology programme, against Rs 2 lakh now.

The fee could be revised every year. A decision on this may be taken at another IIT council meeting.

“The fee hike would be applicable to students who would come in from the 2013 academic year,” said an IIT director, on condition of anonymity. IIT directors said operating expenses for campuses had risen, thanks to the high inflation. The rise in fees would provide the institutions a much-needed cushion, they added.

A fourth of the students whose parental income is less than Rs 4.5 lakh a year are given 100 per cent scholarships. Also, no tuition is charged from Scheduled Caste (SC) and Scheduled Tribe (ST) students. Free mess, free hostel and book bank are also provided to SC and ST students.

IITs have been considering increasing the programme fee to Rs 4 lakh a year. But given the resistance, this may be done in a staggered manner.

“After the Sixth Pay Commission, IITs’ faculty costs have risen about 70 per cent. As salaries have risen, the money realised through a fee rise would partly go towards meeting the increasing burden of salaries and scholarships,” M Ananda Krishnan, chairman of the board of governors, IIT Kanpur, had told Business Standard.

The IITs acknowledged a substantial rise in fees would burden students — the number of students from the upper middle class had declined and that from lower classes had risen. Such students said the fee at IITs is high. They are reluctant to take loans. IIT officials said once the National Academic Depository Bill is passed, it would enable a shift to “demat” degrees. Then, the degrees of IIT graduates would reflect an obligation to repay the institution and money would come through the employer.

If one compares the fee to those in engineering and technology institutions in the West, the difference is stark. For instance, at the US-based Massachusetts Institute of Technology, consistently ranked among the world’s top 10 engineering institutions, the annual tuition is $22,55 lakh ($41,770). At Carnegie Mellon, the annual tuition for the graduate engineering programme is $34,23 lakh ($44,880). After factoring in other costs, the fee stands at $27,54-31,86 lakh ($51,000-59,000).

Peer review
The IIT council also said peer reviews of each IIT would be carried out once every five years. The review committee would comprise five eminent people from industry and academia. For new IITs, a similar exercise would be carried out on the completion of five years.
आईआईटी में तिगुनी होंगी पीएचडी सीटें

बाहर दिली| बरिष्ट संस्थादाता
आईआईटी में पीएचडी सीटें तीन गुनी हो जाएंगी। आईआईटी में पीएचडी की सीटें की संख्या को वर्तमान 3,000 से बढ़ाकर 2020 तक 10 हजार कर्मने की कार्यकाल के तहत परिषद ने कांग्रेस कर निष्ठुरता की पीएचडी प्रणाली को मजबूत बनाने की सिफारिश की भी मंजूरी दी है।

इसके तहत आईआईटी में पीएचडी में दाखिले के लिए शर्तों में क्षूद्र प्रदान करने का प्रवेश है। इसके तहत पीएचडी में बिना घर स्कोर के दाखिला दिया जा सकता है बाहरी तीसरा वर्ष में उसका सीजीपीए 7 हो। दक्षात्मकता प्राप्त करने के लिए गेट स्कोर जारी होगा। पत्र पाठक की गुणवत्ता को और भेदभाव बनाने के लिए आईआईटी परिषद ने रविवार को अपने प्रत्येक संस्थान के शिक्षकों की प्रत्येक पाँच वर्ष पर समीक्षा करने का निर्देश दिया है। अधिकारी ने बताया कि प्रसारित समीक्षा समूह में पांच सरदार होंगे जिनमें से एक मानुष शिक्षाविद और बाकी खंडों में विभिन्न शिक्षाविद और उद्योग क्षेत्र के प्रमुख लोग शामिल हैं।

पहल
- सीटें की संख्या तीन हजार से बढ़कर 10 हजार तक हो जाएगी।
- बिना घर स्कोर के दाखिला दिया जा सकता है।

उन्होंने कहा कि संबंधित संस्थाओं के संचालक पारित द्वीप पर संबंधित द्वीप नामों की सूची में से आईआईटी परिषद के अध्यक्ष समिति के सदस्यों का चयन किया जाएगा।

नए आईआईटी में पीएचडी सीटें वर्तमान पूरा होने के बाद शुरू होगी। शिक्षकों की समीक्षा विश्व स्तरीय संस्थाओं में समीक्षा के स्पष्टता मापदंडों के अनुरूप होगी और यह आगे की ओर बढ़ने वाली कार्यकाल होगी। आईआईटी परिषद की 48वीं बैठक में यह भी तय किया गया कि शिक्षकों की समीक्षा करने से पूर्व विभागीय स्तर पर आंतरिक समीक्षा भी की जायेगी। उन्होंने कहा कि 25 प्रतिशत ऐसे छात्र जिनके अभिनववादकों की आय प्रति वर्ष 4.5 लाख रुपये से कम है, उन्हें 100 प्रतिशत छात्रवृत्ति अपनाने का जाएगी।

आईआईटी परिषद के सदस्यों ने जोर दिया कि छात्रों की सुविधाओं का सम्बन्ध प्रदान करने जाएंगे और उन्हें उनकी कृतियों किसी छात्र का पहला अभिनववाद के अभिनववाद देने से मना नहीं किया जायेगा। गौरवत्ता है कि कांग्रेस समिति को एक प्रमुख संस्थान से उन्मूलित होना चाहिए और उनका संस्थान संबंधी खर्च जटिल होना चाहिए।

छात्रवृत्ति:- सहयोग के और आधारपूर्व संस्था का विस्तार अंतर्राष्ट्रीय संस्था के विस्तार सरकार के बनाब सहयोग के तत्काल प्रदान किया जाता है।
IIT annual fees up 80% to ₹90k, external peer review every 5 yrs

fe Bureau
New Delhi, Jan 7

Students wishing to enter the premier Indian Institutes of Technology (IITs) will have to shell out more after the government on Monday decided to increase the tuition fee for undergraduate B-Tech courses from ₹50,000 to ₹90,000 per year from 2013.

The IIT Council, which met on Monday, agreed to a 80% hike in tuition fees apart from an external peer review of IITs every five years.

"The revised rates will be applicable and the fee may be revised periodically," human resource development minister Pallam Raju said after the council meeting here.

Though the hike in fees is not to the tune of ₹2 lakh or a four-fold increase as suggested by the Anil Kakodkar committee two years ago, the panel had suggested a peer review, which the government has accepted. The last fee hike was in 2008-09 when it was doubled from ₹25,000 to ₹50,000.

Significantly, the Kakodkar committee had suggested that each institute subject itself to a comprehensive institutional review by an internationally eminent group every five years. "Such reviews, which will be overseen by the IIT Council, will focus on quality programmes, their direction and size, working of the institutions and suggestions for change, including new initiatives," the panel report said.

The council also exempted PhD aspirants at IITs and other central and state engineering institutes from taking the Graduate Aptitude Test in Engineering (GATE) to apply for a PhD in IITs. Students with a CGPA score of 7 out of 10 would be eligible for a PhD.

As per the committee's report, around 500,000 lakh engineering students graduate from India's engineering colleges, which will cross 1 million in three to four years. Only about 1% of IIT BTechs pursue a PhD at IITs.

The committee had suggested a minimum of 0.6 PhDs per faculty annually, eventually reaching 1 PhD per faculty. On this basis, the committee was aiming at scaling up the IIT system to 16,000 faculty and 160,000 total student strength (with 40,000 at the PhD level, 40,000 at the master's level and 80,000 UG students) by around the year 2020. Each year, then, the IIT system will admit 10,000 PhDs.

Moreover, the council also allowed 15% students from IITs, National Institutes of Technology (NITs) and engineering departments of central universities to pursue PhD in the IITs and simultaneously teach at the NITs.

(Continued on Page 2)
IITs, IIMs to be put to peer review test

Himanshi Dhawan | TNN

New Delhi: India's premier technical institutes, including IITs and IIMs, will be put to test soon. All centrally funded technical institutions, Indian Institutes of Technology (IITs) and Indian Institutes of Management (IIMs) will conduct internal departmental reviews and be assessed by an external panel every five years. This peer review by academia and industry according to international benchmarks is expected to bring about transparency and accountability to the institutes and could start from next year.

On Monday, the IIT Council gave the nod for all IITs to be subjected to a peer review. Elaborating on the decision, minister for state in the HRD ministry M M Pallam Raju said, "The Council of IITs decided that the peer review of each institute would be carried out on a periodic basis, once in every five years. IITs need to review themselves in terms of what is happening academically, in terms of research, in terms of evolutions towards meeting world standards."

The minister added that the IIMs were already in an advanced stage of discussion regarding the review, while CFTIs had also agreed to the process. The move comes at a time when only a handful of India's tech institutes have made a mark globally.

The peer review will be based on similar well-established review systems in world-class institutions and would be rigorous and forward looking. Besides periodic review of the institutions, each IIT will similarly undertake an in-house, department-wise review before any external peer review is carried out, the minister said.

The review committee would consist of five eminent persons from the industry and the academia. The committee members would be selected by the Chairman of the Council of IITs from a panel of 10 names given by the Board of Governors of respective institutes, Raju said.
IITs to enrol more PhD candidates

Special Correspondent

NEW DELHI: The IIT Council that decided to increase the tuition fee for undergraduate students also decided that the peer review of each institute would be carried out every five years.

The review committee would consist of five eminent academicians from academia and industry.

The committee members would be selected by the Board of Governors of respective Institutes from a panel of 10 names. For the new IITs, a similar exercise would be based on well-established review systems in world-class institutions. Besides a periodic review of the institution, each IIT will similarly undertake an in-house, department-wise review before any external peer review is carried out.

With a view to increasing the number of PhDs from 3,000 at present to 10,000 by 2020, the Council of IITs also decided to relax the conditions for enrolment into Ph.D Programme in the IITs. The admission would be given without GATE (Graduate Aptitude Test in Engineering) score to students with CGPA (cumulative grade point average) of more than 7.0 at the end of the 3rd year but GATE score would be required for scholarships.

However, students from Centrally Funded Technical Institutions with CGPA of less than 7.0 would be eligible for Ph.D programmes and fellowships without GATE scores.

The Council also approved the Trainee teacher Award National Institute of technology/IIT Joint Scheme with an aim to enhance the teaching quality and to address the faculty shortage.

The scheme is open to all graduating candidates who are in the top 15 per cent in the Centrally Funded Technical Institutes. All other candidates who are in the top 15 per cent from other AICTE/UGC approved institutions and universities and having a valid GATE score would also be eligible.

HRD Minister Pallam Raju said they would be engaged as trainee teachers at NITs. While initially they would assist in teaching, they would simultaneously go through the part-time M.Tech and Ph.D programmes of the IITs to acquire higher academic qualification, which is a prerequisite for faculty at NITs.
NEW DELHI: Students of centrally-funded technical institutes, who have scored over 70 per cent marks in semester examination, can now pursue post-doctoral programmes at the Indian Institutes of Technology (IITs) without appearing for the Graduate Aptitude Test Examination (GATE).

They will also be eligible for assistantship or fellowship at the IITs without a GATE score, the Council of the premier institute decided in a meeting headed by Human Resource Development Minister M M Pallam Raju here on Monday.

Students pursing BTech from institutes which are not centrally-funded, will also be eligible for admission to the PhD programmes at the IITs without a GATE score, if their cumulative grade point average (CGPA) is over 7.0 after third year. If such students want to avail scholarship to pursue post-doctoral programmes at the IITs, GATE score will be required, Raju said.

“All others will have to appear for GATE to get into MTech and PhD programs in IITs,” he added.

The Council decided to relax conditions for enrolment to increase the number of post-doctorates from the present 3,000 per year to 10,000 by 2020, he added. The Council also decided to introduce a PhD programme at the IITs for working persons or teachers in engineering colleges. “The course requirement will be fulfilled through courses to be delivered remotely using the National Knowledge Network (NKN),” the minister said.

In view of the faculty crunch in technical institutes, the council also approved a scheme to train graduating engineers as teachers, jointly with the National Institute of Technology. Under this scheme, the top 15 per cent students from technical institutes, either funded by the Centre or approved by the AICTE and the UGC, will be eligible to take up the training programme.

The National Institutes of Technology will identify and implement the initial screening criteria for selection of potential candidates, which is being worked out.

“They will be engaged as trainee teachers at NITs. Initially they will assist in teaching. They will simultaneously go through part-time MTech and PhD programs of IITs to acquire higher academic qualifications, which is a prerequisite for being a faculty at the NITs,” Raju said.

DH News Service
UGC plans two degrees at a time

Isha Jain | TNN

Lucknow: Pursuing two degrees simultaneously may become a reality in the near future. The University Grants Commission (UGC) is thinking of introducing a system under which students enrolled in a regular degree course can pursue an additional degree at the same time under open, distance, or part-time basis from the same or different university.

The UGC had constituted an expert committee under Prof Furqan Qamar, vice-chancellor, Central University of Himachal Pradesh to look into the feasibility of such a course. The panel has also suggested that similar rule should apply if a student doing a regular course wanted to do a certificate, diploma, advanced diploma or PG diploma programme as an additional course simultaneously either in regular or open and distance mode in the same or other institutions. The committee, however, suggested that the views of the vice-chancellors of all universities in the country should be taken before taking a final decision on implementation of dual degree in the country.

Talking to TOI, former vice-chancellor of Lucknow University and member of the expert committee Prof Manoj Kumar Mishra said, “The dual degree programme is the need of the hour. It is very common in western countries and in India, IITs already offer such dual degree programmes. To implement it, universities will have to make statutory provisions. Therefore, we have sought the opinions of the VCs across the country.”

When asked whether the dual degree programme will be offered at undergraduate (UG) or PG level, Prof Mishra said, “It can be anything. It can be UG with a PG like integrated BSc with MSc or two PGs or two UGs together, though there are complexities in its implementation.” But allowing two degrees in regular mode will not be possible due to academic and administrative problems.
Next on Mars, a city for veggie space explorers

Tycoon Planning A Settlement For 80,000 People

London: Private space entrepreneur and billionaire co-founder of PayPal, Elon Musk is planning to build a small city on Mars for 80,000 space explorers — but only vegetarians are invited!

Musk, whose Falcon 9 rocket delivers NASA cargo to the International Space Station, wants to construct a futuristic settlement on the red planet. The new civilization would run off sustainable technology and cater only to vegetarians, The Sun reported.

Speaking to the Royal Aeronautical Society, Musk, 41, revealed he had been waiting for 10 years to share his vision.

"Then it seemed ridiculous because there were no rockets, no infrastructure and NASA was the only game in town — and it had no schedule for exploring Mars," said the co-founder of PayPal, a global e-commerce business.

"But with my work, and many others working in the private sector, the mission is coming closer to reality," he added.

"On Mars you can start a self-sustaining civilization and grow it into something really big," he said.

The 146-year-old Royal Aeronautical Society last November awarded Musk, who founded his third company SpaceX in 2002, a gold medal for his contribution to space exploration.

The California-based engineer has previously talked about sending the Mass Cargo Transport rocket — powered by liquid oxygen and methane, to Mars — carrying volunteers for about £300,000 a person.

One of America's most respected private space entrepreneurs, Musk — worth about £1.25 billion — has admitted the challenges remain daunting.

These include the dangers of deep-space radiation, bone-rot and toxic dust. He recommends the size of the new society should be around 80,000 people.

"Too few, and the gene pool dries up. Too many and you risk civil war," he said. 🌍
‘Flower on Mars’ report is baseless: Nasa scientist

Vanita Srivastava
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NEW DELHI: Amitabha Ghosh, chairman, Science Operations Working Group — Mission Operations at the Nasa Mars Exploration Rover Mission, says that reports on spotting a 'Martian flower' is nothing but frivolous.

"Earlier also, while we were working on Opportunity Rover, there were pictures which triggered speculative reports of a mermaid being on Mars," the Nasa geologist told Hindustan Times over phone.

The comment on a flower being on Mars, he said was not from a scientist involved in the mission and is not an official statement of the Nasa.

"I think the report is an offshoot of an online conversation and I guess the flower is some blogger's description of its appearance. This does not really mean that flowers exist on Mars."

On Sunday, there were reports that a peculiar petal-shaped cluster spotted on Mars by Nasa scientists had sparked speculation that flowers might be blooming on the red planet.

"The so-called "Martian flower" is seen in an image captured by Nasa’s Curiosity Rover in December 2012. In the image, pearl-coloured petals appear to sprout from a rock's surface," the report said.

Space fans on online discussion forums remarked that it might be quartz embedded in the rock. One optimistic commenter suggested it might be the pistils of a blooming flower, the New York Daily News had reported.

Mars exploration has become one of the hot topics for research and study space explorers. India's mission to Mars is scheduled for November this year.
Online varsities look for profits

No guarantee that online courses will keep their position in exploring education technology marketplace

Tamar Lewin

NEW YORK: In August, four months after Daphne Koller and Andrew Ng started the online education company Coursera, its free college courses had drawn in a million users, a faster launching than either Facebook or Twitter.

The co-founders, computer professors at Stanford University, watched with amusement as enrollment passed 2 million last month, with 70,000 new students a week signing up for over 100 courses, including Human-Computer Interaction, Songwriting and Gamification, taught by faculty members at the company’s partners, 30 elite universities.

In less than a year, Coursera has attracted $25 million in venture capital and has created so much buzz that some universities around the world are leaping onto the bandwagon.

Other approaches to online courses are emerging as well. Universities nationwide are increasing their online offerings, hoping to attract students around the world. New ventures like Udemy help individual professors put their courses online. Harvard and the Massachusetts Institute of Technology have each raised $50 million to create edX. Another Stanford spin-off, Udacity, has attracted more than $20 million in venture capital.

All of this could add up to the future of higher education — or if anyone can figure out how to make money.

Coursera has grown at warp speed to emerge as the current leader of the pack, striving to support its business by creating revenue streams through licensing, certification fees and recruitment data provided to employers, among other efforts.

But there is no guarantee that it will keep its position in the exploding education technology marketplace.

“Next year could be a model that’s going to work well,” said James Grinnell, a New York University School professor who specializes in computer and Internet law. “I think all the current ventures are small, but because the expectations are too high. People think something will catch on like wildfire. But more likely, it’s maybe a decade later that somebody figures out how to do it and make money.”

For their part, Koller and Ng proclaim the goal is to keep courses freely available to poor students worldwide. Education, they say, has an important role to play in solving critical problems.

“With our courses, you can learn to speak Chinese or learn to code,” said Ng. “With our courses, you can learn to code.”

But with the first tricks of the trade now coming in, Coursera’s partners expect several revenue streams soon.

“We’ll make money when Coursera makes money,” said John Langer, the provost of Duke University, one of Coursera’s partners. “I don’t think it will be too long down the road. We don’t want to make the mistake of charging more than $200 for a course, or even $50 for a certification of completion. And our company, like Udacity, has begun to charge corporate employers, including Facebook and Twitter, for access to high-performing students, starting with those studying software engineering.

Coursera is the payment of licensing fees from other educational institutions that want to use the Coursera classes, either as a ready-made “course in a box” or as a video lectures students can watch before going to class to work with a faculty member.

Koller has plenty of other ideas, as well. She is planning to charge $200, or maybe $50, for certificates of completion. And her company, like Udacity, has begun to charge corporate employers, including Facebook and Twitter, for access to high-performing students, starting with those studying software engineering.
Tepid growth in jobs and salaries ahead

KALPANA PATHAK & M SARASWATHY
Mumbai, 7 January

Information technology giants Samsung Electronics and Google may have made big pre-placement offers at two Indian Institutes of Technology (IITs) in 2012, but this may not be the case for prospective graduates in other institutes in the coming year. Human resource (HR) consultants predict a cautious year ahead for hiring, with salary hikes being lower in some cases.

Hay Group, a global management consultancy, in its annual General Industry Compensation Report covering all levels of management, expects a pay increase of an average 11.2 per cent across job roles in 2013. The amount represents a slight fall against an actual average salary increase of 12 per cent across companies in 2012.

The year 2012 was a slow year in terms of job creation and salary hikes. Double-digit salary hikes were rare and the sentiment was gloomy across sectors. "I would like to believe that it was more the play of negative sentiment in the job market than the actual dearth of jobs. However, facts state otherwise. The fall in GDP (gross domestic product) growth to an average of just 5.4 per cent in the first six months of 2012 may have cost jobs. There is a massive difference in the number of new jobs created at five per cent and at seven per cent (growth rate in 2011-12). That number is 3 million," said Ganesh Shermon, partner and head of human capital at KPMG.

He added sectors such as healthcare, media and entertainment witnessed more-than-expected hiring in 2012. Similarly, the education sector also saw growth in overall salaries. "Also, it's interesting to note that even though companies hired cautiously at the entry level, many of them were reasonably bullish in hiring on the key middle and senior management level positions," Shermon said.

Churn in the senior management level was also witnessed in 2012. Sangeeta Lala, vice-president, Team Lease Services, said the year saw some change of guards at the top level. While most companies hired cautiously at the entry/trainee levels (given the continued shade of uncertainty), they were reasonably bullish in hiring the skilled workforce at the middle management and the senior management levels.

Looking at 2013, HR consultants expect employability of graduates to be a crucial issue. In India, according to Shermon, there is always a difference between the number of fresh graduates and the number of new jobs. "The skills acquired by the fresh graduates are not in alignment with the marketplace requirements."

Endorsing this view, Lala said there was a supply in excess of the right jobs today.

"Employers are facing this puzzle when they have jobs to offer, but they continue to search for the good-old-days when students were willing to work hard and come up with genuine effort, learning and earning along the way," she said.

The Teamlease-IIT Employment Outlook Report for the January-March 2013 quarter said both the net employment and the business outlook had registered a drop in their Indexes, indicating stagnant hiring outlook in the forthcoming quarter. "IT/ITeS and Infrastructure are the laggards dragging the index down while other sectors report flat outlook," said the report.

Added E Balaji, chief executive officer of HR services company Randstad India: "If you go by the general expectations from economic reforms and stock market, there are mixed reactions. We expect stock market-related sectors to show recovery in 2013. With FDI (foreign direct investment) coming in, retail will be a sector to watch out for, in terms of new jobs. So, the overall mood is of cautious optimism in hiring."
बातें नहीं क्रियान्वित

सरकार ने भारत को 2020 तक दुनिया की पांच सबसे बड़ी वैज्ञानिक शक्तियों में शामिल करने का लक्ष्य रखा है। लेकिन वर्तमान नीतियों और सरकारी लालचपीताशिकों के इस दौर में इस लक्ष्य को पाना बहुत मुश्किल लग रहा है।