Newspaper Clips
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IIT fee hike won't fix financial woes

Tuition fee does little to even meet the institutes' operating expenses; directors differ on fee hike

KALIYANA PITHAV & M SARASWATHY
Mumbai, 8 January

The Indian Institutes of Technology (IITs) have raised the tuition fee by 80 per cent, from ₹50,000 to ₹90,000 per annum, the steepest so far after a four-year hiatus. Yet, this would do little to help the financial condition of these institutes.

IITs, 80 per cent of whose expenses are met through financial grants from the ministry of human resource development (MHRD), say tuition fee does little to even meet their operating expenses.

"Education provided at the IITs is highly subsidised. We spend around ₹2.5 lakh per student per year, considering operating costs alone. We cannot expect student fees to take care of the entire expenses — capital plus operating costs," said Devang Khakhar, director, IIT-Bombay.

IIT-Bombay's yearly expenditure is ₹250 crore. The institute receives around ₹200 crore in grants from MHRD and the rest is generated by tuition fee and other miscellaneous charges from students. Salary and staff cost, including electricity and sundry bills, goes up by around 10 per cent each year at IIT-Bombay.

The IITs say with salaries and staff cost being fixed, they have to budget for expenditures beyond that. The marginal amount left is then used for other developmental activities on the campus.

At the IITs, the fee for about 22 per cent of students, from the SC/ST category, are fully waived. Also, up to 25 per cent of the students, whose parental annual income is less than ₹4.5 lakh, are entitled to fee waivers. The remaining students pay the full fee.

"The fee had to be increased. However, since the fee cannot be increased every year, the government has to drop its plan to increase it," said Arunabha Ghosh, director, IIT-Kharagpur.

IIT-Guwhati has an annual expenditure of ₹110 crore, and nearly 15 per cent of this is about ₹15-16 crore. From fees, Barua said with the increase, it would now contribute about 17 per cent.

In contrast, the top 20 private engineering institutes in the country charge anywhere between ₹40,000 and ₹1 lakh per student, per annum. These institutes, which increase the tuition fee every few years, say they might do so this academic year, too.

BITS Pilani, for instance, is planning to increase the fee for its bachelor's engineering programme from the present ₹1.4 lakh to ₹1.7 lakh for the next academic year. The institute says it is causing the increase due to the rise in cost of living.

The fee for the Institute was ₹1.25 lakh. It subsidises the programme by getting money from industry.

IIT exam, on the other hand, has always been low. When IITS began operations in 1953, they charged an annual fee of ₹500 for their flagship undergraduate engineering programme. In the past, IITs have revised their fee only twice — in 1998 and 2008. In 2008, IITs doubled the fee for undergraduate courses from ₹25,000 to ₹50,000 a year.

Banks see biz growth

Banks said granting loans to IITs is a priority. "IITs are top institutions and, hence, loans for students taking admissions is a priority for us. With the fee in the pie, the size of loans will also increase, subject to norms. It will grow our business," said Salil Kant Saran, chief general manager (personal banking) at State Bank of India (SBI).

'SBI, the country's largest lender, had a portfolio of educational loans worth ₹13,491 crore at the end of September 2012. Another public sector executive heading retail banking said, "We never refuse a loan to anybody who gets an admission into IITs and IIMs. In fact, there is intense competition among banks and they (students) are hotly pursued. The risk of repayment defaults are negligible, as students have excellent job prospects."

BS REPORTER

Govt wants relief for girls in IIT exam

Scarce numbers prompt HRD Ministry to make suggestion

Prakash Kumar
NEW DELHI: Girls preparing for the joint entrance examination to be held in June for admissions to under-graduate programmes of the Indian Institutes of Technology may get some relaxation in qualifying marks. If the suggestion is accepted by the Joint Admission Board.

"We have suggested the JEE's joint admission board to consider giving girl candidates some relaxation in qualifying marks during admission. But, the decision has to be taken by the board on this issue," a HRD Ministry official said.

The suggestion has been given to the board, which will conduct JEE-Advance for admissions to IITs in June this year, keeping in view that very less number of girls make it to the IITs compared to boys, he added.

A total of 4,68 lakh candidates appeared in the last JEE. Of these, 13,602 candidates cleared the entrance examination. The number of successful girls in the test stood at just 1,490, nearly 11 per cent of the total number of successful candidates.

The girls have already been exempted from paying fees for appearing in JEE-Advance in an effort to encourage their participation in the IITs, the Ministry official said.

The JEE, to be conducted in two parts — JEE-Main and JEE-Advance for mainly admissions to the Centrally-funded technical institutes including IITs and National Institutes of Technology — is scheduled to be held on April 7 and June 2 this year.

For those seeking to appear online in paper I of the JEE-Main, the test will be conducted on April 8 and April 25. The JEE-Main will be conducted by the Central Board of Secondary Education (CBSE) for admissions to the technical institutes other than IITs.

Only top 20 percentile holders in their respective class XII board examinations will be eligible for taking JEE-Advance.

The joint admission board of IITs will screen about 1,500 girls for the test on the basis of their performance in JEE-Advance.

Students belonging to scheduled castes, scheduled tribes and other backward classes will be screened for the JEE-Advance on the basis of quota applicable to them. Indian School of Mines, Dhanbad, will also give admission to students on the basis of their performance in JEE-Advance.

Many deemed to be universities and the governments of Gujarat, Haryana and Uttarakhand have agreed to use the test scores for admissions to their engineering colleges functioning in their respective jurisdictions from this year.

DH NEWS SERVICE
प्रतिभाशाली नौजवानों को शोध के लिए किया जा रहा प्रेषित आईआईटी से पीएचडी कर सकेंगे इंजीनियर

चीन से काफी पीछे है हम

- देश में इंजीनियरिंग में चार हजार पीएचडी (तीन हजार आईआईटी और बाकी अन्य संस्थाओं से) होती है जबकि चीन में यह आंकड़ा करीब 15 हजार है।
- भारत में दुनिया में सबसे व्यापक इंजीनियर तैयार होते हैं।

काउंसिल की बैठक के दौरान कई अन्य प्रत्याशियों के साथ इंजीनियरिंग में पीएचडी की संख्या बढ़ने के प्रत्याशा को भी मंजूरी प्रदान की थी। अब आईआईटी काउंसिल इस योजना पर अमल के तौर-तरीके तय करेगी।

योजना के तहत उद्योगों का संबंध कंपनियों में कार्य कर रहे इंजीनियरिंग के अलावा निजी या राष्ट्रीय इंजीनियरिंग कॉलेजों में पढ़ने रहे शिक्षकों को भी शामिल किया गया है।

उन्हें भी आईआईटी से पीएचडी का माफ किया गया। लेकिन पीएचडी के लिए उन्हें न तो छह माह लेने की जरूरत पड़नी और न ही आईआईटी जाकर पढ़ने की जरूरत होगी।

मंत्रालय के एक वरिष्ठ अधिकारी के अनुसार नेशनल नॉलेज नेटवर्क (एनकेएन) के जरिए उन्हें वह सामग्री दी जाएगी जो पीएचडी छात्रों को निर्माण करवाने का काम करता है। एनकेएन के जरिए सभी 16 आईआईटी और विश्वविद्यालयों, इंजीनियरिंग कॉलेजों को पहले तीन जोड़ जा चुका है। यह एक ऐसा पोर्टल है जिस पर आईआईटी में दिए जा रहे लेकर और अन्य पाठ्य सामग्री को हासिल किया जा सकता है।

केंद्रीय मानव संसाधन विकास मंत्री पफ्लाम राजू ने सोमवार को आईआईटी
एनआईटी से सीधे आईआईटी में प्रवेश!

देश भर में 12 वीं का पेपर एक समान! नई व्यवस्था जुलाई से होगी लागू, 30 एनआईटी हैं देश भर में फिलाह

आईआईटी की पढ़ाई और महंगी

बहुत जरूरी। इस साल से आर्थिक विविधता से परीक्षार्थियों को समान मूल्य के लिए आईआईटी पढ़ाई का इतना ही महंगा हो जाएगा।
अआउटर रिंग रोड को जाम से बचाने की तैयारी
आईआईटी गेट से एनएच-8 पर राइट्स ने तैयार किए लोन्ग व मीडियम टर्म प्लान

प्रमुख संवाददाता । नाथ निवीड़
आईआईटी गेट से पैलायर इलाइन-8 तक के आउटर रिंग रोड को जाम से मुक्त करने के लिए राइट्स ने लोन्ग व मीडियम टर्म प्लान की घोषणा की है। राइट्स ने स्थानीय उद्योग और वित्तीय वृद्धि के लिए सूचना सुझाव दिया है।

इस प्रकार, राइट्स ने आउटर रिंग रोड को जाम से मुक्त करने के लिए कोई नया या प्राकृतिक उद्योग को उपयोगी बनाने की कला दी है।

कैद की भूमिका?
आईआईटी गेट से पैलायर इलाइन-8 तक की उम्र 8 यूनिटों के दायरे में 3 लॉकअप को एक जोड़ने वाली भूमिका है। इसमें एक आईआईटी गेट, एक यूनिट के हिस्से और एक आईआईटी गेट का भी हिस्सा है।

3 लॉक का प्लानआधिकार
राइट्स ने लोन्ग व मीडियम टर्म के लिए 3 लॉक का प्लान रखा है। इन 3 लॉकों का उद्देश्य यह है कि यह भूमि को समस्त उद्योगों के लिए मुक्त करने की आवश्यकता है।

भारतीय रिंग रोड ने लोन्ग व मीडियम टर्म प्लान में 20 फिल्टरिंग प्लान की घोषणा की है।
Indian scientist first to record ‘birth cry’ of black hole

Joydeep Thakur

KOLKATA: For the first time, scientists have detected the entire ‘birth cry’ of a black hole — a region in space that swallows everything including light — located nearly two billion light years away from Earth.

Just like a baby, who cries after taking birth, a black hole, which forms when a sun or a star collapses, emits large amounts of gamma radiation just after its formation. This is said to be a black hole’s ‘birth cry’.

Indian scientist Sandip Kumar Chakrabarti and Italian scientist Remo Ruffini recorded the entire process of birth lasting 50 seconds after analysing data from Russian satellite Koronas Foton. The satellite had detected the gamma radiation in June 2009.

Their findings, which surfaced in October last year, have been reported in scientific journals in the US and Europe.

“Earlier, scientists had recorded such birth cries, but none was complete. While some were contaminated with loud noises, others had only portions of the process lasting around two-three seconds. But we detected the entire cry,” Chakrabarti, head of the department of astrophysics and cosmology at SN Bose National Centre for Basic Sciences in Kolkata, said on Tuesday.

Chakrabarti said since the black hole — named GRB090618 — was nearly two billion light years (one light year is the distance travelled by light in one year) away, it was formed nearly two billion years ago. “The signals reached us only recently.”

The nearest black hole from Earth is the centre of our Milky Way galaxy, 30,000-40,000 light years away.

“The energy released by GRB090618 in one second is equal to the energy released by the sun till date since the day it was formed nearly 4.6 billion years ago. We are lucky that it didn’t form somewhere close to our solar system, otherwise the entire earth would have been wiped out within a fraction of a second,” Chakrabarti said.
Milky way has 461 new earth-sized planets

Reuters

Cape Canaveral, Florida, Jan. 8

NASA's Kepler space telescope has uncovered another 461 potential new planets, most of which are the size of Earth or a few times larger, scientists said on Monday.

The announcement brings Kepler's head count to 2,740 candidate new worlds, 105 of which have been confirmed.

"Two years ago we had around 1,200 candidate planet objects. A year later, we added a significant number of new objects and saw the trend of huge numbers of very small planets... twice the size of Earth and smaller," Kepler astronomer Christopher Burke told a news conference Webcast from the American Astronomical Society conference in Long Beach, California.

With the addition of 461 new candidate planets, collected over 22 months of Kepler telescope observations, the proliferation of smaller planets continues.

The new targets include what appears to be a planet about 1.5 times bigger than Earth circling its sun-like parent star in a 242-day orbit - a distance where liquid water, believed to be necessary for life, could exist on its surface.

In related research, astronomers have determined that about one in six sun-like stars have Earth-sized planets circling their parent stars closer than Mercury's 88-day day orbit around the sun.

The goal of the Kepler mission, which began in 2009, is to determine how many stars in the Milky Way galaxy have an Earth-sized planet orbiting in so-called habitable zones, where water can exist on its surface.

"You need very specific conditions to have liquid water. You can't have your planet too close to your star where it's too hot. You can't have it too far away for the planet conditions to be too cold. We're trying to find these planets in this very specific habitable zone," said Burke, who is with the SETI Institute in Mountain View, California.

The Kepler telescope works by tracking slight decreases in the amount of light coming from 160,000 target stars caused by a planet or planets passing by, or transiting, relative to the telescope's point of view.

Earth-sized planets located about where Earth orbits the sun would take 365 days to circle their parent star. Those located closer, in Mercury-like 88-day orbits, transit more frequently.

Scientists need at least two and preferably three or more cycles to determine whether an apparent transit is real or some other phenomena.

"In order to catch several transits of an Earth analog, you have to wait for one more year to get another transit. It's simply too early to call," said astronomer Francois Fressin, with the Harvard-Smithsonian Center for Astrophysics.

The Kepler roster also boosts the number of multi-planet systems. Of the 2,740 objects, 299 are in dual-planet systems, 112 are in triplets, 44 are part of four-planet systems, 11 systems have five planets and one system has six planets.

An artist's rendering released on Monday by Harvard-Smithsonian Center for Astrophysics shows the different types of planets in our Milky Way galaxy detected by NASA's Kepler spacecraft. A new analysis of Kepler data found there are at least 17 billion planets the size of Earth. — AP
‘₹94k/yr spent on educating a child’

Fee Hikes Eating Into Household Budget

Himanshi Dhawan | TNN

New Delhi: While the cost of private education has always been prohibitive, education in government-run institutions has also increased sharply in the last one month with the HRD ministry taking the decision to hike under-graduate fees in IITs by 80%.

Earlier, the fees for Kendriya Vidyalaya students increased three-fold from Rs 4,500 to Rs 12,000 annually. The Kendriya Vidyalaya fee hike impacts 11 lakh students in 1,090 schools. The last fee hike in both cases took place in 2006-07, and has been long overdue.

The decision to hike fees for undergraduate courses from Rs 50,000 to Rs 90,000 annually was taken on Monday at the meeting of the IIT Council. In the case of IIT, the student fees include only 30% of the total operational cost of the institute and comes at a time when the premier tech institutes are working to become self-sufficient.

The mounting cost of education in recent years has eaten into a major part of the household budget. An Assocham survey showed that 65% of parents spend more than half their take-home pay on their children’s education, extra co-curricular activities placing significant burden on the family budget.

According to the survey, parents spending on a single child’s education has gone up from Rs 35,000 in 2005 to over Rs 94,000 in 2011 on such items and activities as integral to the school curriculum like fees, transport books, uniform, stationery, building fund, educational trips, extra tuitions and extra-curricular activities.

The survey highlights that the rising cost of education has become a major cause of worry for parents. Majority of parents spend on average more than Rs 18 lakh-20 lakh in raising a child by the time their teen graduates from high school.

According to government data, average private expenditure on secondary education in private schools is as high as Rs 886 per month as compared to only Rs 275 per month in government schools primarily due to difference in high tuition fees in private institutions.

Aggregate public spending on education during the 11th Plan period is estimated at Rs124,797 crore for both the Centre and states taken together. About 43% of the public expenditure on education was incurred for elementary education, 25% for secondary education and the balance 32% for higher education.

About half of the Central government’s expenditure was incurred for higher education and the remaining for elementary (39%) and secondary (12%) education. In the state sector, about 75% of education expenditure is for school education, of which 44% is on elementary education and 30% on secondary education.

Public expenditure on secondary education has increased from 0.78% in 2007-2008 to 1.05% in 2011-2012.
Mock Mars trek discovery: Down-to-Earth sleep woes

Associated Press
Washington, Jan. 8
Astronauts have a down-to-Earth problem that could be even worse on a long trip to Mars — They cannot get enough sleep. And over time, the lack of slumber can turn intrepid space travellers into drowsy couch potatoes, a new study shows.

In a novel experiment, six volunteers were confined in a cramped mock spaceship in Moscow to simulate a 17-month voyage. It made most of the would-be spacemen lethargic, much like birds and bears heading into winter, gearing up for hibernation.

The men went into a prolonged funk. Four had considerable trouble sleeping, with one having minor problems and the sixth mostly unaffected. Some had depression issues. Sometimes, a few of the men squirreled themselves away into the most private nooks they could find. They didn't move much. They avoided crucial exercise.

"This looks like something you see in birds in the winter," said lead author David Dinges, a sleep expert at the University of Pennsylvania School of Medicine.

The experiment was run and funded by Russian and European space agencies. A report on the simulation's effect on the men was published online on Monday in the journal Proceedings of the National Academy of Sciences.

Dinges said scientists cannot tell if the men's lethargy was just lack of sleep or was also caused by other factors — the close quarters, lack of privacy with so many cameras or being away from their families for so long.

It's a problem that has to be fixed and can be before astronauts are sent to Mars, as President Barack Obama proposes for the mid-2030s, Dinges said. The trip to Mars, Earth's closest neighbour, would take about six months each way.

American astronaut Scott Kelly and Russian cosmonaut Mikhail Kornienko are scheduled to spend an entire year in space on the International Space Station, starting in 2015.

When leaving confinement in November 2011, the six volunteers three Russians, a Frenchman, an Italian-Colombian and a Chinese called their experience successful. The data scientists collected was not as rosy. Devices on the volunteers' wrists measured their movements and showed that when they were asleep and awake they were moving much less than they should have been, an unexpected and disturbing finding, Dinges said.

Of the six volunteers who were paid $100,000 to live in the mock spaceship with limited and time-delayed contact with the outside world slept nearly half an hour less each night than he did when he started the mission, affecting how he went about his day, Dinges said.

The loss of sleep matters because astronauts will have to perform intricate tasks on the way to Mars and while on the red planet. And they have to do vigorous exercises daily to fight the toll that near-zero gravity takes on the bones and other parts of the body. And most of the volunteers weren't doing that.

The Moscow study, based on the ground, could not take into account the added difficulty of near-zero gravity. Astronauts do use sleeping pills to help them sleep.