Soon, virtual varsity to hand out degrees

Online Initiative Started By IITs & IISc To Have More Courses, Better Infrastructure

Revathi Ramanan & Ishan Srivastava | TNN

Chennai: It's amongst the most popular educational programmes on the internet, registering more than four million hits across 17 countries, and now poised to turn into a virtual university. The online initiative started by the seven IITs and Indian Institute of Science to enhance engineering education through virtual classrooms will soon be expanded by adding more courses, even physical infrastructure, and by granting degrees and diplomas.

The National Programme on Technology Enhanced Learning (NPTEL), which got under way in 2003 with web and video content to support engineering students nationwide, will next year see an increase in number of disciplines taught from five to 20, and the number of virtual courses offered will go up from 260 to 1,000. With fresh approvals from the HRD ministry, the project coordinators soon plan to offer the equivalent of a degree or a diploma to students enrolled in the virtual university.

"Currently we offer 135 video courses and 125 web courses. By the time we launch the Open Virtual University in 2012, we will have around 1,000 courses in both undergraduate and postgraduate," said Usha Nagarajan, principal project officer of NPTEL. Unlike Phase I which offered only undergraduate courses, Phase II will see post-graduate courses being offered in five out of the 20 disciplines.

NPTEL, conceived in 1999 to support technical education in underdeveloped areas, has grown rapidly in popularity. The programme, which includes recordings of lectures by IIT faculty, has a reach that spreads across the north east and central India to institutions in the deep south. IIT Madras director M S Ananth recalled a conversation with a Nagaland university vice-chancellor, who spoke of how NPTEL had kept academic activity on his campus from being derailed during a staff strike. "What my profs took 15 lectures to teach, you teach in three," was what he said," Ananth told an alumni gathering recently.

Private engineering colleges with inexperienced staff have been the biggest beneficiaries of the NPTEL programme. The only requirement on their part is to ensure broadband connectivity to each teacher to access the online content. "After its introduction last year, the teaching staff at my college used it to the maximum and the students are now getting its benefit. There is a standing instruction for teachers here to spend at least two hours a day to learn the online courses of NPTEL," said Dr S Subrahmanyan, principal of Coimbatore's Sri Krishna Institute of Engineering and Technology. The college is planning to ensure access for all its engineering students the next academic year onwards.

The IITs are currently in the process of identifying 15 college clusters across India where lab facilities could also be provided to supplement the Virtual University. To ensure that students getting online lessons are not denied practical knowledge, colleges equipped with large labs will be identified. Most colleges do not use their labs in the summer months. Hence, students who are part of the open virtual university will be encouraged to use these labs.
‘Universe is not defined by one beginning and end’

Cosmologist Roger Penrose of Oxford University and author of the recently released book, *The Cycles of Time*, was in Delhi recently to deliver the Subrahmanyan Chandrasekhar Centennial Lecture (part-organised by the Centre for Philosophy and Foundations of Science) on a new view of black holes and the universe. He talks to Narayani Ganesh on his new theory of the origin and future of the universe:

**Q&A**

- What is extraordinary about your new view of the universe?

  My conformal cyclic cosmology theory is a departure from the Big Bang theory of the universe that is generally perceived to mean that the universe burst forth in a Big Bang from an infinitesimal point and then expanded by inflation. However, what I’m saying is that the universe is not defined by one beginning and end but goes through an infinite succession of beginnings and endings into the remote future, without a reversal or what is called crunching. It never collapses, it goes on expanding and it’s a cycle.

- Could you explain this cyclical process?

  The cycle from the infinitely expanded universe to the Big Bang of the next aeon is better explained with classical mathematical equations. However, you could say verbally that the universe is undergoing accelerating expansion. This is best understood in terms of what Einstein referred to as the cosmological constant, which he used this term in 1917 though for the wrong reasons — he was hoping to have a universe that was static in time. He later withdrew his idea but it could help us best explain the expanding, remote future of our universe where, following a succession of Big Bangs in different aeons, there is hardly anything left because particles now have little or no mass. No mass, no scale, right? As it continues to expand, it becomes indistinguishable from the Big Bang of the next aeon, the universe comes to lose its memory — it ‘forgets’ how big it really is. So the big and small, long-term and short-term, all become equivalent.

  In my scheme of things, there is no collapse; one universe leads to another. One way of discerning this is to find traces of energy bursts that get released when two galaxies collide and their black holes merge — as it might one day happen with the Milky Way and the Andromeda! My colleague Vahe Gurzadyan of Yerevan State University in Armenia studied the CMB and found signals in a circle that seem to corroborate my theory. However, you do need to see more of these concentric circles and perhaps more studies and analyses would reveal more of information of previous Big Bangs and universes.

- If concentric rings on the CMB store information of the universe’s previous incarnations, would that not be something like carbon dating or studying tree rings to fix dates?

  Come to think of it, perhaps! There’s an awful lot of information in the CMB and it requires study. My model is driven by the Second Law of Thermodynamics that says that randomness is increasing all the time.

- How different is your view of the universe from that of Stephen Hawking’s?

  Hawking is playing a crucial role; the original idea he put forward is that black holes will eventually swallow all the randomness; that the black holes will radiate and disappear and when they disappear — what they call the Black Hole Paradox — he says information swallowed by black holes is lost. He later said that the information comes back with radiation and here I disagree.

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**Africa has 2 species of elephant**

Chicago: Instead of one species of elephant, Africa has two, researchers have said, confirming suspicions about the two distinctly different looking pachyderms.

Using gene sequencing tools, teams from Harvard, the University of Illinois and the University of York in Britain have shown that instead of being the same species — as scientists have long believed — the African savanna elephant and the smaller African forest elephant are distant cousins, having been largely separated for 2 million to 7 million years.

"What our study suggests is for-
SHORT CUTS

Scientists discover gene that triggers violent anger

Researchers have discovered a genetic mutation that could trigger violent anger under alcohol's influence. They sequenced the DNA of a number of impulsive volunteers and compared those sequences with DNA from an equal number of non-impulsive people. They found that a single DNA change that blocks a gene known as HTR2B was predictive of highly impulsive behaviour. The gene affects serotonin production and detection in the brain, the Journal Nature reports. Serotonin is a neurotransmitter known to influence many behaviours, including impulsivity, according to the Telegraph.

Placebo helps, even when you know of it:
Placebos can help patients feel better, even if they are fully aware they are taking a sugar pill, researchers reported on an unusual experiment aimed to better understand the "placebo effect." Nearly 60% of patients with irritable bowel syndrome reported they felt better after knowingly taking placebos twice a day, compared to 35% of patients who did not get any new treatment, they report in the Public Library of Science journal PLoS ONE.

This robot 'feels' with fingertips, smiles:
At first sight, the pi4-workerbot looks like a clump of metal, but there's something extraordinary about this one — it has fingertip sensitivity and a variety of facial expressions. Designed by Dragojub Surdilovic at the Fraunhofer Institute for Production Systems and Design Technology IPK in Berlin, the pi4-workerbot is capable of complex movements and expressions. Its purpose is to help keep European production competitive.

'Money woes behind teeth-grinding':
An increasing number of cases of teeth-grinding in debt-ridden Ireland were being blamed by dentists on patients' financial worries. Dentists believe that the increased levels of bruxism — the medical name for teeth-grinding — are due to stress brought on by Ireland's economic crisis. Doctor Dermot Canavan of the Irish Dental Association says the condition is often linked to anxiety and stress, as well as excessive smoking, alcohol use and the consumption of too much coffee.
Melbourne: Australian researchers are close to solve mysteries of human sexual development, following an international collaboration on genetic studies that show male mice can be created without the Y chromosome.

Adelaide University researcher Paul Thomas who was quoted by AAP report said the study has found that a male mouse can now be created without a Y chromosome by activating a single gene, called SOX3. In the developing foetus, males usually have one Y chromosome and one X chromosome, while females have two X chromosomes.

A gene on the Y, called SRY, triggers testes development in the early embryo, and once these begin to form, the rest of the embryo also becomes male. SOX3 is known to be important for brain development but has not previously been shown to be capable of triggering the male pathway.

Thomas said changes in the human version of the same gene are present in some patients with disorders of sexual development. He and his team generated male mice with two X chromosomes by artificially activating the SOX3 gene in the developing gonads.

“These male ‘sex-reversed’ mice are completely male in appearance, reproductive structures and behaviour, but are sterile due to an inability to produce sperm,” he said adding “We have suspected for a long time SOX3 is the evolutionary precursor gene for SRY. By showing SOX3 can activate the male pathway in the same way as SRY, we now believe this to be true.”

Studies shows that changes in the human SOX3 gene are present in some individuals who are XX male and could provide new insight into the genetic causes of disorders of sexual development, he said.

Gender Bender: A gene called SOX3 can be used to develop males without a Y chromosome.

Indian IT majors face US visa fee heat

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WASHINGTON: Indian companies such as Infosys, Wipro, Tata and Mahindra Satyam were earlier made to pay for better policing of the US’s borders. They will now be made to pay for health coverage and treatment of 9/11 rescuers.

A Bill passed on Wednesday by the Senate provides for $4.3 billion over five years for the treatment of the 9/11 first responders - rescue workers such as firefighters and paramedics - suffering from exposure to dust, smoke and toxic fumes.

A part of this money is to be earned by extending the hike in H-1 B visa fee brought about in 2010 - to fund better policing of the borders - for another seven years to now end in 2021 instead of 2014.

“This affects outsourcing companies such as Wipro, Tata, Infosys, Satyam - but does not affect American companies such as Microsoft, Oracle, Intel, Apple, etc,” says the homepage of senator Kirsten Gillibrand, one of the sponsors of the bill. The 2010 hike in the visa fee had angered Indian IT companies such as Infosys, who had accused the US of unfair trade practices against outsourcing. Officials have then said it would be impossible to undo the hike as it was mandated by the Congress.

The Bill - called James Zadroga Health and Compensation Act 2010 (named after Zadagora), a rescuer who died of ailments suffered caused by exposure to debris and fumes) - has not become law yet, Barack Obama has still to sign it. But he is going to sign it, as the White House has let it be known. Unlike the last time when the hike was not said to be Indian-centric, this one has Indian companies very much at the forefront, as has been announced by Gillibrand’s website.

“This bill will extend this fee until September 30, 2020 to continue leveling the playing field between companies that follow the Congressional intent behind these visa programs and companies that use these visas to outsource American jobs,” the senator’s website says in support of the funding mechanism.

India had lobbied hard against the last hike. And protested loudly when it failed to stop it. And so had Nascom, the association of Indian IT companies. The Indian embassy here could not be immediately reached for a comment.

Gillibrand is a Democratic senator from New York elected from a seat vacated by Hillary Clinton when she became Secretary of state.
Newly found human relative roamed Asia

Descendants Of Denisovans Live In Pacific Islands

New York: Scientists have recovered the DNA code of a human relative recently discovered in Siberia, and it delivered a surprise: This relative roamed far from the cave that holds its only known remains.

By comparing the DNA to that of modern populations, scientists found evidence that these "Denisovans" from more than 30,000 years ago ranged all across Asia. They apparently interbred with the ancestors of people now living in Melanesia, a group of islands northeast of Australia.

There's no sign that Denisovans mingled with the ancestors of people now living in Eurasia, which made the connection between Siberia and distant Melanesia quite a shock.

It's the second report in recent months of using a new tool, genomes of ancient human relatives, to illuminate the evolutionary history of humankind. In May, some of the same scientists reported using the Neanderthal genome to show that Neanderthals interbred with ancestors of today's non-African populations. That might have happened in the Middle East after the ancestors left Africa but before they entered Eurasia, researchers said.

As for the Denisovans, the new work is probably just the start of what can be learned from their genome, said one expert familiar with the research. Eventually, it should provide clues to traits like eye and skin color, said Todd Disotell of New York University.

"We're going to be able to piece these people together in the next few years from this genome," he said.

The existence of a new human relative was first revealed just nine months ago from a sampling of DNA recovered from a finger bone discovered in the Denisova Cave in southern Siberia. Researchers proposed the informal name Denisovans for them in Thursday's issue of the journal Nature, where they report the new results.

There's not enough evidence to determine whether Denisovans are a distinct species, the researchers said.

The genome, recovered from the finger bone, showed that Denisovans are more closely related to Neanderthals than to modern humans. That indicates that both they and Neanderthals sprang from a common ancestor on a different branch of the evolutionary family tree than the one leading to modern humans.

Scientists have no idea what Denisovans looked like, said David Reich, a Harvard University researcher and an author of the new paper. Apart from the genome, the researchers reported finding a Denisovan upper molar in the cave. Its large size and features differ from teeth of Neanderthals or early modern humans, both of which lived in the same area at about the same time as the Denisovans.

Neither the finger bone nor the tooth can be dated directly, but tests of animal bones found nearby show the Denisovan remains are at least 30,000 years old, and maybe more than 50,000 years old, Reich said.
No inquiry panel to probe IIT-Kanpur suicides: RTI

KANPUR, DEC 23

DESPITE suicides by a number of students at IIT Kanpur in the last five years, one of the country's premier institutes has not constituted any inquiry committee to probe the causes of the extreme steps taken by its students, an RTI inquiry revealed today.

The RTI application was filed by PTI seeking details from the institute's authorities regarding the number of students who committed suicide, the reports of the inquiry committees formed after each suicide and the preventive measures taken after the incidents.

The response to the application stated that the concerned authorities did not have any information about the reasons behind the suicides of the eight IITians that took place over a five-year period from 2005-2010.

"No inquiry committee has been formed to investigate the cause behind these suicides but a fact finding committee led by a senior professor has been formed to suffice the purpose," IIT Kanpur Director Professor Sanjay Govind Ghande said.

He said the task of the fact finding committee is to inspect if any student or faculty member is responsible for the incidents of suicide, but no such case has come up so far.

However, Ghande declined to comment on the report prepared by the committee, saying it is an internal matter of the institution.

According to the response to the RTI application, among the eight students who committed suicide, five killed themselves by hanging from ceiling fans, one by jumping from the terrace of the faculty building and the two by jumping before a train and consuming poison respectively.

More than a month has passed since Madhuri Sale, a final year BTech student of the institute was found hanging from the ceiling fan in her hostel room here. But no progress has been made in this regard.

"A counselling centre has been formed at the premises of the institute to de-stress the students and help them solve their problems. Besides this, several social and entertainment programmes like galaxy, spectrum and yoga classes were also organised at regular intervals for the students," he said in reply to the query regarding the steps taken to prevent any further suicides.

He said the students focus less on their studies following the freedom they enjoy in the institution and those who committed suicide took the step after they were unable to bear academic pressure.—PTI
POLLUTION CHECK

Tamil Nadu, Gujarat to have pilot emissions trading scheme

BY PADMAPARNA GHOSH
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NEW DELHI

Tamil Nadu and Gujarat will soon have India’s first domestic emissions trading scheme (ETS), which will be tied to air pollution. It will be implemented under a cap on air pollutants set by the respective state pollution control boards as a pilot for the rest of the country for six months.

Jairam Ramesh, minister of state for environment and forests, described the plan as “a big innovation...in market-friendly systems of implementing environmental laws”.

The scheme works thus: A ceiling on emissions of a certain pollutant is set, based on its desired concentration in the atmosphere. The government then issues or auctions free permits to industrial units in accordance with the amount of pollutant they are allowed to emit. If the plant exceeds the level, it has to buy these permits from others and vice-versa.

“I have said before the problem is not in regulations but in regulators. That’s where the harassment comes,” Ramesh said in an interview on Wednesday. “So I have got Esther Duflo, who is called the most brilliant economist in the world today. She and her team from MIT (the Massachusetts Institute of Technology) prepared a report for us on creating an emissions trading system and we will start with this in Tamil Nadu and Gujarat and later extend it to the rest of the country,” Ramesh said.

The report that Ramesh referred to was written by Duflo, Michael Greenstone and Nicholas Ryan of MIT and Rohini Pande, Harvard Kennedy School, Harvard University.

The limits on the industrial pollutants will be set by the states themselves in consultation with the Central Pollution Control Board. Akin to the carbon market, the cap will help in lowering pollution levels at lower overall costs of compliance.

This will allow the regulator to set a cap on the aggregate level of pollution permitted, and then allow a self-regulating system to ensure that pollution does not exceed this cap. A system of credits that can be traded is most commonly used for industrial units falling above or below pollution limits.

A programme covering oxides of sulphur and nitrogen in the US did work but “this kind of ETS presupposes lots of things”, said Anumita Roychowdhury, associate director at activist group Centre for Science and Environment.

“It will need a very transparent mechanism, robust monitoring and will have to be quantifiable, for which a lot of institutional preparedness will be required,” she added. “Also, it will apply more to the organized sector. If these emissions are in the unorganized sector, it will be very hard to monitor. So it is limited. Plus, it might also need third-party checks.”

Some legal amendments may be required, said an environment lawyer, who did not want to be identified.

“For instance, for the energy efficiency market, the ECA (Energy Conservation Act) had to be changed), which was done by Parliament,” he added.

This won't be the first market-based regulatory instrument in the environmental sector in India. Under the national mission on energy efficiency, India will soon have the “Perform, Achieve and Trade” mechanism for energy efficiency, which will cover facilities that account for more than 50% of the fossil fuel used in India, and help reduce carbon dioxide emissions by 25 million tonnes per year by 2014-15.

Varad Pande, officer on special duty to the minister, said that Tamil Nadu was chosen because it has been progressive in its monitoring of air pollution. The state at present has real-time online monitoring of pollution loads at the industrial unit level, which will be scaled up and rolled out across the state.

“Gujarat was chosen because they also have shown interest in innovations in controlling pollution,” he said. "Right now, they are studying the impact of third-party monitors on pollution loads.”

There will be a meeting of the pollution control boards and the ministry on 19 January in Delhi to discuss the next steps for the implementation of the ETS, what the states will require and how the Centre can help. The framework will be set up in the first half of 2011 and implemented in the second, Pande said.
POSTAL TIE-UP

Law entrance test targets wider pool

BY NIKHIL KANEKAL
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NEW DELHI

The committee that conducts the admission test for national law schools has made changes to improve the content and the reach of the next edition. Application forms for the Common Law Admission Test, or CLAT, will now be available in more than 300 outlets across the country, said M.P. Singh, convenor of CLAT and vice-chancellor of the National University of Juridical Sciences (NUJS) in Kolkata, the university in charge of organizing the 2011 test.

Previously, CLAT distributed forms through two-three banks each in states with metropolitan cities. It has now tied up with the postal service to increase the number of outlets so the forms are available in every state.

“We’ve tied up with the post office instead of banks. Therefore, the form would be available more widely,” said Singh. CLAT will be held on 15 May.

The committee has also introduced changes to the general knowledge and legal reasoning sections of the test, according to the instructions on the test website, www.clat.ac.in.

The general knowledge section will have questions based on current affairs between May 2010 to May 2011. “We will try and ask questions on issues that are relevant to the present and the future,” Singh said over the phone from Kolkata. He explained that the committee intended “to test general awareness rather than static knowledge”.

A third change is that the test will not expect candidates to know legal terms, sections of law or legal principles. “Candidates will not be tested on any prior knowledge of law or legal concepts. If a technical/legal term is used in the question, that term will be explained in the question itself,” says the website.

“This means students don’t need to study legal principles before they write the exam—only their process of reasoning will be tested,” said Shamnad Basheer, who is on an internal CLAT committee at NUJS.

Basheer said he was not a member of the committee that was setting the test paper, since he is pioneering the project to bring students from rural areas into legal education.

Anita T., a graduate of National Law School of India University in Bangalore, who now runs Paradygm Law, a private tutorial for CLAT aspirants, said the changes were welcome from the candidates’ perspective. She said the changes in the general knowledge section “will force students to diligently follow current affairs all the year round rather than memorizing questions from off-the-shelf general knowledge books” and the new legal reasoning will “test them purely on their aptitude and logical thinking when it comes to the law”.

One-yr MBA programmes flunk AICTE test

Kirtika Suneja

New Delhi, Dec 23: In a development that is sure to disappoint students wanting to pursue a one-year MBA course, the All India Council for Technical Education (AICTE) has turned down their demand to grant recognition to such courses. The AICTE has said since the theoretical and practical content of the MBA course cannot be completed in a span of a year, it would not be possible for it to recognise such programmes.

The AICTE decision comes after some private institutions met the HRD minister Kapil Sibal, urging that the council examine the feasibility of granting recognition to a one-year MBA programme since there's huge demand for it and some developed countries do recognise such courses.

"Theory can be completed in one year but the practical aspect of the MBA programme needs more time as it includes internships. We have not approved any one-year programme as every course needs to be seen vis-a-vis its practical component also," AICTE (acting) chairman SS Mantha told FE.

The council recognises only two-year MBA courses for freshers but most top B-schools globally have one-year MBA programmes. “Currently there are no one-year programmes for freshers but only 15-month programmes for working executives and they are also not recognised by the AICTE. This programme doesn't have much practical component as these working executives already have experience,” said a professor from a second-rung business school.

“Around 20 institutes met the minister and discussed about the issue but the ministry has refused to accept such one-year programmes,” said a ministry official. Continued on Page 2
Economic Times Kolkata 23/12/2010

A tale of three jubilees

As two Indian Institutes of Management and The Economic Times celebrate their golden jubilees, the question that needs to engage the nation is how to build lasting institutions, says T T Ram Mohan.

Three well-known institutions in the country—IMI Ahmedabad (IMI), IIM Calcutta (IIMC) and The Economic Times (ET)—are currently celebrating their golden jubilees. It’s an occasion to reflect on what it takes to create and sustain institutions of excellence.

Let me take up the institutions in the order in which I got acquainted with them. I joined the two-year programme at IMC, straight from IIT Bombay. I had no aptitude or liking for engineering. I went to IIT Bombay because that is what any sensible student who had done well academically and did not want to become a doctor was expected to do. IMC provided the perfect escape.

My first impressions of IMC were entirely favourable. A smaller, more compact campus than IITB. Hostels that were better maintained. A large room with a balcony that gave onto an open expanse. A pond right in front of the hostel. And breakfast that was edible if not filling.

The director’s welcome could not have been more effusive. There was the inevitable reference to our being the cream of the crop, the brilliance standards at IITB. IMC was a relief. Attendance was not compulsory — IMC believed in running our lunches and groceries, not teachers, not needs. The quality of teaching was highly variable.

We all got duly placed and IMC alumni are now spread all over the world, many in high positions in the corporate sector. The nagging question remains: are b-schools anything more than placement agencies? I let me attempt an answer.

Customer focus. Market segmentation. Brand building. Ratio analysis. Cost allocation. Net present value. Business strategy. Optimization. Through the sheer power of repetition over two years, the concepts get so thoroughly drilled into you that they stay with you for a lifetime. IMC did a good job of that.

It might have done better. IMC was the first of the IMI. It quickly lost ground to IIMA and, some would say, later to IIMB. Perhaps being in Calcutta became something of a handicap. But the quality of leadership has certainly been an important factor. The golden jubilee is a good time for introspection.

ET was launched in April 1961 in the face of much skepticism. Who would want to read page after page of economic news and commentary? Shani Prasad Jain, the visionary proprietor of Benares, Coleman & Co., was not deterred. He encouraged the hiring of specialist writers and reporters, in some cases at pay scales higher than those in the Times of India. (This caused much heartburn in TOI’s office.)

I have heard that it took more than 10 years for ET to break even. But neither S P Jain nor his wife, Rama Jain, ever faltered in their support of the paper. Their commitment has paid off richly. Over the years, ET has extended its coverage from the economy and the financial sector to the corporate world, politics, personalities and even entertainment. From being a niche paper, it has become a mainstream paper.

My affair with ET started when I was a doctoral student in New York in the late 1980s. An avid to Mumbai, I set up meeting with the editor, Manu Shroff. I told Mr Shroff that there were many interesting things going on in the world economy that did not find reflection in Indian papers. He suggested I send articles for the edit page. I started writing for ET thereafter.

Some 40 years ago, I got a letter from Mr Shroff asking whether I was willing to serve as part-time correspondent in New York. I readily agreed and began sending a steady stream of stories on international economic affairs. One day, I received a call from Mr Shroff. A finance ministers’ meet was due in Montreal in connection with the Uruguay Round of world trade negotiations. Could I cover it for ET? I was one of two Indian correspondents at the event and learned a thing or two about ego management.

I continued to write for ET and on after I returned to India. During the East-Asian crisis, I commenced a fortnightly column. I have come to value the discipline as much as the complete freedom exercised by successive editors of the editorial page.

IMI, whose faculty I joined in late 1998, was founded in December, 1961. It got to the top quickly and has stayed there ever since. In a million in which institutions of higher learning seem admired and to decline with the passage of time, this is no mean achievement.

What explains IMI’s enduring success? Most of the success at IMI was created in the first 10 years. Two individuals were primarily responsible: Vikram Sarabhai, the founder, and Ravi Mattha, the first full-time director.

Sarabhai laid down key principles: a faculty-government institute; an emphasis on relevance and the real world; and the application of management principles not just to industry but to other important sectors such as agriculture.

Mattha translated these principles into reality. He added concepts that were startlingly innovative: administrative positions that carried responsibility but no authority; the rotation of all positions; self-regulation through norms evolved by the community instead of rules dispensed from above; a single term for the director. These principles and concepts have defined IMI. They account for its pre-eminence. They have been elements of what might today be called a sustainable business model.

To this day, IMI gets three key things right: admissions, teaching and placement. The admissions process is completely insulated from outside interference. The institute does not compromise on excellence in teaching. It goes all out to place its graduates with the best firms in the world.

In a speech that he made when he stepped down as director, Mattha said, “I think this is a good institution. Over the years, this can become a great institution.” The transition from good to great is yet to happen at IMI. It is a task that today poses challenges of leadership and governance in a different order altogether.

A decade ends. It has been a transformational decade for the country. We can now look forward to a decade in which we will become the fastest-growing economy in the world, one that promises to usher in unprecedented prosperity into the lives of millions. But where are the institutions that can live the imagination of the young? Where are the institutions built?
शिक्षा वित्त निगम से सहमति नहीं योजना आयोग

राजकेश्वर सिंह, नई दिल्ली

खर्च की वित्तीय संगठनों की दृष्टि से भी कम करने की मांग संसाधन फिक्स मंडल की कोशिश पर योजना आयोग ने नया पदार्थ में है। आयोग ने राजस्थान शिक्षा वित्त निगम के अधिकारी पर हस्ताक्षर उठाए हैं। आयोग की नजर में केवल में भी जब करी सभी योजनाओं को योजना आयोग के नित्य निरीक्षण की भागीदारी है।

इटिका

- आयोग ने उद्योग कोशिश पर सहमति की कोशिश पर सहमति

योजना आयोग राजस्थान शिक्षा वित्त निगम निम्न निम्न निरीक्षण की संख्या में है। शिक्षा अनुपात को दो तरह जनता दे दिया है। आयोग का तर्क है कि प्रसारित मंडल के पास समय तक के सबसे लाभकारी योजना है। प्रति निम्न के अनुसार, मंडल के मंडल का मंडल प्रायः की भागीदारी की संख्या में आयोग ने इन निम्न को जारी रखा है।

इटिका

- आयोग ने उद्योग कोशिश पर सहमति की कोशिश पर सहमति

योजना आयोग राजस्थान शिक्षा वित्त निगम निरीक्षण की संख्या में है। शिक्षा अनुपात को दो तरह जनता दे दिया है। आयोग का तर्क है कि प्रसारित मंडल के पास समय तक के सबसे लाभकारी योजना है। प्रति निम्न के अनुसार, मंडल के मंडल प्रायः की भागीदारी की संख्या में आयोग ने इन निम्न को जारी रखा है।

इटिका

- आयोग ने उद्योग कोशिश पर सहमति की कोशिश पर सहमति

योजना आयोग राजस्थान शिक्षा वित्त निगम निरीक्षण की संख्या में है। शिक्षा अनुपात को दो तरह जनता दे दिया है। आयोग का तर्क है कि प्रसारित मंडल के पास समय तक के सबसे लाभकारी योजना है। प्रति निम्न के अनुसार, मंडल के मंडल प्रायः की भागीदारी की संख्या में आयोग ने इन निम्न को जारी रखा है।
IIM-A नेट पर कराएगा छात्रों-कंपनियों का मेल
छटनी जैसी स्थितियों में छात्रों की मदद के इरादे से संस्थान ने फेसबुक की तर्ज पर बनाया पोर्टल