By Prashant Panda

The government's multi-university world-class institutions plan may change the face of the country’s new premier institutions—the Indian Institutes of Technology (IITs) and Indian Institutes of Management (IIMs)—by making them more beyond the respective areas of specialization (technology and management), and admit more students.

The world-class institutions will be deemed universities instead of institutions of national importance, which is the present status of IITs and IIMs. The plan to set them up was first mentioned in this year's budget by Finance Minister Arun Jaitley.

The plan is still a work in progress and will probably require legislative changes, especially when it comes to the authority that will designate world-class institutions. Earlier this month, the human resource development ministry released a draft policy regarding this and sought comments.

Such an institution should comprehensively satisfy the following criteria within a reasonable time frame from the date of notified declarations as a World Class Institution. It should preferably be multidisciplinary and have both teaching and research focus of exceptionally high quality. The draft guidelines state.

Last month, HRD minister Prakash Javadekar had asked the IITs and IIMs in separate meetings to prepare and bid for the world-class institution tag.

A professor at one of the older IIMs, who asked not to be named, said IIMs were administration schools and could not be called multidisciplinary.

"When the first criteria about this, it indicates that they perhaps wish the IIMs bidding to be world class institutions is to obviously, the professor said.

Only some of the IIMs are likely to apply, he added, and they need to address the question of multidisciplinary education.

A professor at an IIT, who has not been identified, agreed and said institutions bidding to get the world-class institution tag may have to change.

This person added that during United Progressive Alliance's second term (2009-14), there was a discussion on IITs turning multidisciplinary like a full-fledged university. "But it did not materialize. Then the context was improving global ranking."

The guidelines envisaged that world-class institutions need to have at least 20,000 students across four years. They have to work towards approximately 1,000 students by 2022, with various government agencies covering the way they are run.

The draft guidelines also suggest that the government wants to internationalize the campuses of world-class institutions, with one in four interactions and at least one in three students from overseas. The lack of internationalization is palpable in India's top institutions and is considered one of the reasons why they lag in the global rankings. For instance, IIT-Delhi has only four international teachers in its faculty of 1,600 and only four of its 6,000 students are from overseas.

"For some of our top institutions to become world-class in a real sense, they need to change the character. So far, they haven't done so, and why, there is a sweet reason to give a jolt to them—by changing the academic and administrative standards, and admit more students from overseas," said a government official, who spoke on condition of anonymity.

Govt wants IITs, IIMs to go multidisciplinary for world-class institutions tag

October 17

Hindustan ND 17.10.2016 P-01

Mint ND 17.10.2016 P-01
आईआईटी में विदेशी छात्रों से फीस लेन पर मतभेद

सीमा शर्मा

वही दिल्ली।

देश के 23 आईआईटी में पढ़ने वाले विदेशी छात्रों की फीस पर फीस निर्धारण समिति और मानव संसाधन विकास मंत्रालय के बीच मतभेद है। समिति ने अपनी रिपोर्ट में भारतीय छात्रों की तरह पर विदेशी छात्रों की फीस भी दो लाख रुपये सालाना लेने की सिफारिश की है। लेकिन मंत्रालय का कहना है कि सरकार को एक छात्र पर प्रति प्रतिवर्ष छह लाख रुपये खर्च आता है, ऐसे में विदेशी छात्रों को फीस में छुट्टी नहीं दे। फीस पर अंतिम फैसला प्रकाश कांवर जादव देकर को ही ले रहा है।

मानव संसाधन विकास मंत्रालय ने फीस को लेकर आईआईटी मुंबई के डायरेक्टर प्रो. देवेंद्र को खबर की अव्यज्ञता में समिति की नवाबता थी। समिति ने अपनी रिपोर्ट में कहा है कि विदेशी छात्रों से भी दो लाख रुपये सालाना फीस ली जाए।

हालांकि मंत्रालय समेत अन्य आईआईटी प्रबंधन का कहना है कि हजारों भारतीय छात्र विदेशों में पढ़ने जाते हैं, लेकिन वहां की सरकार भारतीय छात्रों को फीस में कोई छुट्टी नहीं देती है। जहां, आईआईटी में पढ़ने वाले एक छात्र की फीस वेशक दो लाख रुपये सालाना है, लेकिन सरकार को प्रति छात्र सालाना छह लाख रुपये का खर्च आता है। ऐसे में विदेशी छात्रों को फीस में छुट्टी नहीं दी जाए। अतः विदेशी छात्रों से छह लाख रुपये सालाना फीस ली जानी चाहिए।

सरकार ने पहली बार सभी आईआईटी में दस फीसदी आतिरिक्त सीट पर विदेशी छात्रों को पढ़ने का मौका देने का फैसला लिया है। इस बोधना के तहत श्रीलंका, इथोपिया, बांग्लादेश, यूएई, नेपाल व सिंगापुर में जेईई एडवांस की परीक्षा के लिए सेंटर बनाए जाएंगे।
States may have to offer bids, compete now to get projects, events

AMITAV RANJAN
NEW DELHI, OCTOBER 16

The Centre plans to introduce bidding among states for infrastructure projects, hospitals, educational institutions and for hosting national events. According to a communication from the Cabinet Secretariat, the NDA government plans to adopt the Swiss Challenge Method for "selection of location" for future IITs, IIMs, AllIs, ports, refineries, LNG terminals and food processing units, as well as film festivals, national games and Pravasi Bhartiya Divas, among others.

Depending on the issue, states would have to compete over ease of providing land, extent of fiscal concessions, connectivity, provision of utilities, speedy statutory clearances, and quantum of employment to be generated.

Different weightage would be assigned to each parameter, to arrive at a cumulative score. The state with the highest score would be the winner for a particular project, institution or event.

“The basic intent of the Challenge Method is to provide a transparent, objective and merit-based decision-making process, that may be adopted for site selection across various sectors and to encourage competition among states to offer the best-suited sites and commit resources in terms of infrastructure support, financial incentives etc,” says the letter.

Each department has been asked to submit a list of projects, institutions or events under them with a matrix of indicative parameters and possible weight assigned to each parameter to the Cabinet Secretariat by this month.

The collated list would then be put up in the public domain for any state to start the bidding. A state’s original offer would be made public so as to invite competing counter proposals. Under the Swiss Challenge Method, if a third party’s bid is more efficient, the first bidder is asked to resubmit a fresh bid. If the first bidder comes up with a better proposal, it gets the project, and if it fails, the one with the more efficient bid wins the project.

The Challenge route has been widely used in recent years, including to approve redevelopment of 400 railway stations, and to award roads and housing contracts.
Jansatta ND 17.10.2016 P-01

कुड़ा जलाने से बदरंग होने लगा ताजमहल

दिल्ली, 16 अक्टूबर (टाइम्स)

एक भारतीय-अंग्रेजी अभियाण ने नए नियोजन तकनीक के लिए धार्मिक हुई। कुड़ा जल जलाने के बाद ताजमहल उत्तर प्रदेश में जलता हुआ।

दिल्ली, 16 अक्टूबर (टाइम्स)

Times of India ND 16.10.2016 P-13

10% extra IIT seats for foreign students

Exams To Be Held In Six Countries

Sodatta Basu
@timesgroup.com

Kolkata: Up to 10% additional seats in each IIT course can now go to foreign students. Casting the enrolment net for foreign students wider, the IITs will now hold their entrance exams at six international centres instead of just one so far.

“Foreign candidates will have to qualify the JEE advanced examination for an IIT seat. The Graduate Aptitude Test in Engineering (GATE) for entry to MTech courses will be held in these six countries as well,” said an official. Foreign candidates, however, will not have to take the JEE main examination.

Induction of foreign students will not mean less seats for Indian students. “The 10% intake is in addition to the existing seats available in each of the 23 IITs,” the official clarified. Also, 20,000 more candidates will be eligible to write the exam after clearing the JEE main, thus taking the total number to 2,20,000.

The examination will be held in six countries outside India — Ethiopia, Sri Lanka, Bangladesh, UAE, Nepal and Singapore. The number of foreign students can’t exceed 10% of the total seats in each course offered by the IITs and ISM-Dhanbad. There will also be no quota in this category.

“Various interactive features are conceived to make the process of registration, fee payment, result announcement, choice filling, etc, less strenuous. Features like short video tutorial and SMS services will be used extensively to help the candidates,” said a senior official.

From next year, candidates who register late for the IIT-JEE advanced exam will also be charged a late fee of Rs 500.

The registration fee has been increased to Rs 1,200 from Rs 1,000 for girls and reserved category students, and to Rs 2,400 from Rs 2,000 for others. Students from Saarc countries will pay $135 and those from other other countries $270. The late fee for them is $80.

In another change, candidates applying under PWD category with dyslexia must submit a certificate from a doctor specialising in psychiatry and associated with Rehabilitation Council of India (RCI) or Dyslexia Associations. The medical certificate must mention the word ‘severe’.
Where to go in Chennai to feel the entrepreneurial buzz

HANGOUTS FOR FOUNDERS
Amethyst, Royapettah | Chamiers, Nandanam | Ashwita Nirvana, Adyar | Anna Centenary Library, Kotturpuram | Starbucks, multiple locations | Besant Nagar beach

CO-WORKING SPACES
Karya Space | @works, multiple locations | iKeva, OMR

INCUBATORS / ACCELERATORS
IIT Incubation Cell, IIT Research Park, Guindy | TBI, Anna University | The Startup Centre, Thiruvanmyur | Nasscom Warehouse, Tidel Park | Paypal Startank, Sholinganallur | GSF India, Guindy

SEASIDE CITY STARTUP GUIDE

INVESTORS
Peepul Capital, RA Puram | TVS Capital, Alwarpet | Ventureast Fund Advisors, Alwarpet | Keiretsu Forum, Alwarpet | The Chennai Angels, Adyar

PROMINENT ANGELS
Suresh Kalpathi | Narayanan | Gopal Srinivasan | Padma Chandrasekaran | Girish Mathrubootham | Vellayan Subbaiah

WHAT MAKES CHENNAI'S STARTUP ECOSYSTEM UNIQUE
The city probably has the highest number of SaaS (software as a service) and IT product-based startups in the country. Tamil Nadu boasts of a massive pool of engineering graduates and while several of them migrate to cities such as Bengaluru, most prefer to stay home and innovate in the IT products space. IIT Madras and its IIT Research Park (in pic below) is among the first incubators to be set up in the country. It draws engineering students from across the country, who seek to be mentored by as well as partner with IIT-M faculty to build apps and products. Industry sources say the educational institution is well on its way to becoming the Stanford of India

No. of startups: 1,181
Total funding received from Jan to June 2016: $16.65mn (11 rounds)

BEST-KNOWN STARTUPS: Freshdesk, Zoho, Mad Street Den, Magzter, BankBazaar, Uniphore Software, Caratlane, Vakilsearch, Sulekha, Chargebee, OrangeScape, Termiles

Compiled by Ronjini Aviar
It is crucial to understand if a founder can handle criticism

A decade ago to the day, a small but brave initiative, the Rural Technology Business Incubator (RTBI) at IIT Madras, was started. Under the stewardship of Ashok Jhunjhunwala, who received the Padma Shri in 2002, the organization has grown into a vibrant hub for entrepreneurs aiming to build socially-inclusive startups that serve people in rural areas. Jhunjhunwala, 63, who has been at IIT M for 35 years, tells STOI about the early days of the incubator and the challenges he faces while nurturing entrepreneurs in domains as varied as education, healthcare, agriculture and financial inclusion.

How did RTBI come into being?
In the late 1990s, when I was with the Telecommunications and Computer Networks group (Tenet) at IIT Madras, social ventures were cropping up, and the government was interested in supporting entrepreneurship. We realised that business and technology were not thriving. Everyone saw the success of Tenet and it was decided that a one-of-its-kind incubator to support ventures that combined social, rural and technology was needed, with funding from the department of science and technology. Since we had limited resources, my lab at IIT Madras was used at first. As soon as I started RTBI, I met a lot of people eager to work for the incubator and youngsters outside IIT interested in starting social ventures. Though we had very little money, this gave me the confidence to bring people in, train them and set the ball rolling.

Social ventures have unique challenges. How did you overcome them?
Social ventures take more time than usual so entrepreneurs need to be prepared to run patient ventures. It is not enough to have an idea to set up shop. One has to explore, build the technology and business model to back the idea, and then set up the venture. Because the market is the rural population, the benefit they perceive has to be significant [for the entrepreneur] to see any reward.

What is your role in shaping the companies RTBI incubates?
I have a personal rapport with the founders and have their complete confidence. I am also extremely critical. I am never satisfied and keep pushing them to aim higher. Some have the ability to take the pressure, some don’t. It is crucial to understand whether a founder can handle my criticism or not.

What remains the biggest challenge, and what makes it worth the trouble?
It is hard when entrepreneurs who are capable choose to be laid back and take the easy way out. With one startup that I helped with financing, they were not moving in the right direction and pace. I insisted on a personal guarantee from the founders. I kept the papers in my drawer till the day they came to me and said they had succeeded. As a teacher, we have to play the balancing act of being critical and motivating them.

I have experienced moments of pride when founders strive to do their best. Once, I learnt that a founder had stopped eating lunch as the startup was going through a financial crunch. The founder was barely managing to pay salaries of her employees and when I asked why she didn’t come to me, she said she wanted to stand on her own feet.

What is lacking in the Indian startup ecosystem?
The concept of incubation is still in its infancy. Careful nurturing is required for the ecosystem to mature. There is dearth of experienced entrepreneurs, repeat ventures, trained resources and support. Social ventures, though popular, have a negative connotation. A charity culture seeps in, which does not help drive business. The thought that if one is in a social venture, one need not do business has to change. While the government is supportive, it is still difficult for startups. Compliance requirements and one-sided deals eat into the founder’s time and money, and there is no redressal mechanism.

What is your vision for RTBI for the next 10 years?
I want the organization to live beyond me. While it is fairly independent, its true success will be when it lives beyond the people who build it.

What is your message to aspiring entrepreneurs?
For those who do not have an immediate obligation on graduation, there is no better career option than entrepreneurship. The learning and growth is unparalleled and if one chooses to build a venture with RTBI, one will not only be working for this generation but the next as well.
B-schools snub start-ups from placement list

New Delhi: The Indian Institutes of Technology (IITs) had earlier this year put a blanket ban on 31 start-ups after Flipkart had delayed the joining of freshers from IITs. Following that, the placements from e-commerce industry and start-ups have dipped in B-Schools as well. Experts in the industry believe that the trend will catch up with all prominent B-schools.

According to the data shared by Xavier School of Management (XLRD), for their summer jobs this year, the number of placements have dipped by half to 4 per cent this year, as compared to 8 per cent of the total placements last year.

The top recruiters on campus in terms of numbers were Accenture, Aditya Birla Group, BCG, General Electric, ITC, Hindustan Unilever, Mahindra, Mondelez among others. The top recruiting sectors were FMCG, BFSI, conglomerates, manufacturing, and consulting among others.

While e-commerce was a major recruiter last year, accounting for 8 per cent of the offers, this number has halved this year and the share has reduced to 4 per cent.

In another institute, MDP Gurgaon, placements in e-commerce sectors have gone down by 10 per cent, while manufacturing has gone up by by 3 per cent.

While e-commerce contributed to 3 per cent of the total offers, five per cent of the offers came from telecom. Some of the major recruiters included Godrej, JPMorgan Chase, American Express and Axis Bank.

Explaining the reason behind, IIM Ahmedabad Director Ashish Nanda told DNA, “The Flipkart fiasco was actually not the cause but a symptom of this whole change. The e-commerce industry has a greater variability, which means the rate at which it grows, it can slow down at the same rate. When they are growing, they are hungry for people, when they are slow, the first thing they do is cut down on people.”

While B-schools cannot put blanket ban on any industry, students and placement cells have been less encouraging towards start-ups.
When complex equations led to simple decisions

PRAVEEN SRIRAM

“Praveen have you done your homework?”

“No mom! I am not interested in studying! I don’t want to do it!” This used to be the typical conversation between my mother and me. When I was in class eight, I had no interest in academics. I decided to be a cricketer and don the Indian jersey like Sachin Tendulkar.

One day, my mother invited Shaikh Sir home, and entrusted him with the task of teaching me concepts in Physics, Chemistry, and Math. Initially, I hesitated to attend his class; I’d find excuses to bunk it. But the way he explained various concepts, and showed how everything manifested in the physical world, caught my attention. I started developing an intense curiosity, and soon it started becoming an enjoyable experience to see how some complex equations on paper were translated to beautiful theorems and laws which governed the world around us. I also started participating in many competitive exams and Science Olympiads.

My school - Kendriya Vidyalaya, IIT Powai, is located in the IIT Campus, and I used to attend TechFest, a technology festival organised by the students of IIT Bombay. I wanted to become ‘like’ them and study in India’s premier institute for engineering. Once I completed my class ten board exams, I was sure that I wanted to prepare for the JEE.

But I had to take a very important decision at that point - to either continue in a conventional school, or get admission in a junior college and attend the IIT coaching classes in the evenings, or to enrol myself in an integrated programme which had IIT coaching and junior college, all under one roof.

Bala uncle, my guide for everything in life, helped me in making a decision by clearly stating the pros and cons of each option. With the conventional school option, I’d get a more all-round education with the opportunity to participate in extra-curricular activities (which I was very fond of) and a comparatively less time for IIT preparation. After giving it some thought, I decided to join the integrated programme. I was ready to sacrifice the conventional college education.

So that was it. I started my class eleven in the Pace integrated coaching centre. I did well in the first couple of tests, but my performance kept fluctuating. I felt very dejected and started studying a lot more. But again Bala uncle taught me a very important lesson - the two-year IIT-JEE preparation is like a marathon. There’s no use putting too much effort in the beginning and getting burnt out towards the end. He said that it was important to peak at the right time. I also learned to focus on concepts, rather than on short-cuts to solve problems. These words of wisdom helped me endure these tough years. And I made it to IIT Bombay!

Praveen Sriram is pursuing his third year in Electrical Engineering at IIT Bombay.
Deccan Herald ND 15.10.2016 P-6

Centre mulls giving IITs autonomy in structuring fee

NEW DELHI: The Centre is considering giving permission to all seven older Indian Institutes of Technology (IITs) to decide the structure of their tuition fee.

The board of governors of IIT-Kharagpur, Bombay, Kanpur, Madras, Delhi, Guwahati and Roorkee will be vested with the power to fix their respective tuition fee structures.

A proposal for giving these seven premier technical institutes freedom to decide their tuition fee, fill 20% vacancies with foreign faculty, open up campuses for PhD programmes and admit 20% international students to their undergraduate and postgraduate level programmes was approved by the IIT council at its meeting last month.

“The proposal to allow IITs to enjoy autonomy in these matters has been approved by the council to help them figure in the list of top 200 institutions in the global ranking under project Vishwajeet,” sources in the HRD ministry said.

DH News Service
Pfizer and IIT-Delhi announce their Innovation and IP Program for healthcare startups

Healthcare is slowly becoming one of India’s largest sectors, both in terms of revenue and employment. The healthcare sector in the country is growing at a brisk pace and is expected to reach $280 billion by 2020, a compound annual growth rate (CAGR) of 22.9 percent.

Given the talent, infrastructure, academic and research capabilities in the country today, this should come as no surprise. With the growing demand for healthcare solutions, cost-effective, easy-to-deploy and scalable innovations are the need of the hour. On the other hand, there has never been a better time to be an entrepreneur in this space, with the Indian Government’s increased focus on innovation, entrepreneurship, and intellectual property rights.

The Pfizer IIT-Delhi Innovation and IP Program is an incubation accelerator co-created by Pfizer and the Foundation for Innovation and Technology Transfer (FITT) at the Indian Institute of Technology, Delhi (IIT-Delhi). The programme, supported by the Startup India initiative, aims to fulfil the campaign’s fundamental aim of fostering entrepreneurship and promoting innovation by creating an ecosystem that is conducive for the growth of startups.

The programme promotes, celebrates, and rewards advancements in healthcare – innovations that take shape in India and can help patients, healthcare professionals, and other targeted beneficiaries in the country. From devices to diagnostics, mobile health to medical informatics – the programme will bring to life innovations that are made in India and made for India. Those selected will receive comprehensive support in the form of funding, resources, expertise and infrastructure, to propel their healthcare innovations from idea to IP.

An independent panel of subject matter experts established by FITT and Pfizer Limited will review and recommend the shortlisted proposals to the FITT Board. The Board will select the final proposals for the programme.

Pfizer will provide an unencumbered grant of upto Rs 50 lakh to each innovator selected by the committee. Patents obtained as a result of the incubation will belong to the innovators, who will be free to commercialise them as they desire.

Programme details

This programme is open to Indian nationals – both individuals and startup companies. For innovators seeking comprehensive support to translate their healthcare ideas into patents, the programme provides two years of residential incubation at IIT Delhi, with funding of upto Rs 50 lakh for each innovator. Participants will get mentoring support from IIT Delhi’s faculty and access to the institute’s top-level infrastructure and prototyping laboratories. They will also get support with IP search and filing services and guidance from Pfizer’s global experts, in addition to access to venture capitalists and other industry connections.

Innovators who already have a ready proof of concept and are seeking to obtain a patent, will gain access to IP attorneys and services (covering the patent fee).
IIT Bombay researchers a step closer to treating Parkinson’s


Work in progress: Further studies will reveal if the mesenchymal stem cells become matured neurons, says Subhadeep Das from IITB-Monash Research Academy. — Photo: Special arrangement

Researchers from the Indian Institute of Technology, Bombay (IIT B) have taken the first successful step at regenerating neurons in a Parkinson mouse model by using mesenchymal stem cells (MSCs) encapsulated in an amyloid hydrogel. The hydrogels which provide scaffolding for stem cells to develop into neurons when implanted in the brain are developed from a special class of proteins called amyloids. The results were published in the journal NPG Asia Materials.

Neuron-like cells

The hydrogel enabled the delivery and engraftment of mesenchymal stem cells in two regions of the mice brain — substantia nigra and striatum — where the cells were injected. “We do not have direct proof that mesenchymal stem cells have become neurons. But the stem cells transplanted at the substantia nigra site were differentiating into neuron-like cells,” says Subhadeep Das from IITB-Monash Research Academy, IIT Bombay and the first author of the paper.

“We wanted to first know if the cells were surviving and were contained at the site. So the time point was short, and we sacrificed the animals at the end of the seventh day after transplantation,” he says. “Further studies for prolonged periods will tell if the mesenchymal stem cells become matured neurons.”

In the case of Parkinson’s, neurons based in the substantia nigra region of the brain release dopamine at the striatum. Since the connection between the two regions is lost in the case of Parkinson’s, the researchers implanted the stem cells at both the sites.

But before transplanting the stem cells encapsulated in the hydrogel into the brain of the mice, the researchers tested the hydrogel in the lab for toxicity. Both neural precursor cell lines and mesenchymal stem cells were cultured in the amyloid hydrogel. And 2D and 3D culture tests for toxicity were carried out for both short (24 hours) and long (120 hours) term and the results compared with a collagen hydrogel, which served as control. “The compatibility of amyloid hydrogel was similar to collagen,” says Das.

Besides being a good scaffold that facilitates the differentiation of stem cells into neurons and not being toxic, the hydrogel should also not trigger the immune system from mounting a violent reaction against it when implanted into the brain. So the researchers injected the hydrogel into rat brain to test for any possible inflammatory response or immune rejection of the amyloid hydrogel. While two types of inflammatory cells - microglia and astrocytes - accumulated near the hydrogel, their levels subsided by 21 days.
In a next step, they implanted the hydrogel containing the mesenchymal stem cells in the brain of the Parkinson mouse model. “The hydrogel was able to improve the viability of the transplanted cells and were able to contain them at the site where they were implanted,” says Das. The control cells that were not contained in hydrogel were three times less viable than the cells contained in the hydrogel.

“Amyloids are among the most robust protein/peptide-based materials ever evolved in nature. We just utilised these superior materials property of amyloids for targeting stem cell delivery in the brain and their differentiation to neurons. On the one hand, amyloid-based hydrogels are capable of protecting delicate stem cells within the hydrogels matrix, while on the other hand, they are able to guide the differentiation of stem cells towards neurons,” Samir K. Maji from the Department of Biosciences and Bioengineering, IIT Bombay and the corresponding author of the paper says in a release.

Major challenges

There are three major challenges when stem cells are transplanted or injected into the brain - the cells should survive, should not migrate to different places where they are not required, and should become functional neurons and integrate with the existing neural circuit. “Our material has solved the first two challenges. We are now working on the third one,” says Das confidently.