Newspaper Clips

June 7, 2011

Economic Times ND 7/06/2011 P-17

The Research Deficit in IITs

IIT alumni say there is plenty that is good about IITs. And there is plenty that could be better, starting with research, reports **Shelley Singh**

The seven Indian Institutes of Technology (IITs) churn out graduate engineers that are among the best in the world, but they are still not referred to as world-class institutes. This dichotomy exists because of the gap in research that world-class institutes are expected to deliver and for which benchmarks are set by the likes of Massachusetts Institute of Technology (MIT) and California Institute of technology (CalTech). "Graduate studies at IIT are unparalleled," says Alok Mittal, managing director, Canaan India. "But they lack in post-graduate studies and research." Mittal passed out from IIT Delhi in 1994 and went on to do a Masters at the University of Berkeley, where he also taught briefly. "IIT faculty is brilliant and many of them are regarded by peers around the world," he adds. "However, in the academic world, respect does not come from how well you can teach undergraduate students, but from research." IITians have set up companies, they have taken on leadership roles in government and the corporate sector alike, they have created millions of jobs and wealth (See graphic below). But they have demonstrated an aversion for staying on in their alma mater to do research. The Anil Kakodkar Committee, which looked into the issue of autonomy and scaling up of IITs, says the seven institutes hand about 1,000 PhDs a year. But just 1% of these were engineers who did their under-graduation from IIT. "They (the IITs) have not tried to become research-oriented," says Arjun Malhotra, chairman emeritus, Headstrong and a 1970 pass out from IIT Kharagpur. "They also emphasised education over research," adds Kanwal Rekhi, managing director, Inventus Capital Partners. "IITs lack the breadth of offerings like MIT and Stanford in that they are only technology institutes and are not great in pure sciences," says Rekhi, from the 1967 batch of IIT Bombay.

The means to more research is faculty, funding and governance. For instance, Union HRD Minister Kapil Sibal says India's annual research spend is $8 billion a year, compared to $250 billion by the US and $60 billion by China. According to the Kakodkar Committee, the US and China produce 8,000-9,000 PhDs in engineering and technology every year, compared to 1,000 by India. While funding is an issue, Mittal argues that for courses like computer science it is less of an issue than in, say, aeronautics or research. "We need a policy intent, and investments in faculty and infrastructure to scale up IITs," he says. "IITs are unlikely to be world class as long as they are under the thumbs of babus and netas," says Rekhi. "Directors are appointed for five years and that is not a long-term horizon to pursue a dream."

The IIT Impact

That IITians have impacted business and society is known. But just how much? A 2009 survey by IvyCap Ventures, a venture capital fund that finances start-ups by IIT and IIM alumni, quantifies some of the impact the 200,000-odd IIT alumni have had.

ECONOMIC IMPACT

₹15-17

Economic Impact of every rupee invested in an IIT (assumption: the government has invested **₹20,000-40,000 crore** in IITs in the last 58 years)

20 million

Number of jobs IITians have been involved in creating

₹40,00,000 cr

Annual budgetary responsibility of IITians in senior positions in industry and government across the world

LEADERSHIP

In leadership roles

40% IITians from pre-2001 batches who are in top leadership roles in companies, educational institutions, research, NGOs and government, or are entrepreneurs

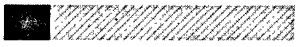
On company boards

57% Percentage of top 500 Indian companies with at least one IITian on their board

ENTREPRENEURSHIP

Entrepreneurs

About **19,000** are in entrepreneurial roles



10% Current Entrepreneurs

- **IITians have** founded 13,000 companies over the last 50 years
- **4 out** of 10 entrepreneurs have founded more than one company
- **15% of** alumni have been entrepreneurs at least once
- **10-12%** of start-ups in Silicon Valley during 1995-98 were by IITians

Funding

Most companies are self-funded

Source of Funding

37% External funding

63% No external funding

About 400 companies founded by IIT alumni have gone public; 40% are in manufacturing and 20% in software

Timing

Liberalisation has unleashed the IIT entrepreneur...

Date of Setting up Business

20% Pre-90s

80% Post-90s

Batch of Entrepreneur

...especially those from the pre-liberalisation era

40% Post-1986 batch

60% Pre-1986 batch

Survey Methodology: IvyCap contacted 3,000 IITians and non-IITians from various batches and across geographies; 1,885 responded. It also drew upon various data sources in the public domain. Various statistical methods were applied to both these sets of information to extrapolate results.

Indian Express ND 7/06/2011 P-13

Bettering the best

Our IITs fulfilled their mandate. Now they have to reach even higher

ANIL KAKODKAR

ENVIRONMENT Minister Jairam Ramesh's comments have, this time, stirred up a debate on the Indian Institutes of Technology. Our established IITs are around 50 years old. Everyone would agree that IIT graduates have a high brand value globally. In that sense IITs have in fact fulfilled the mandate with which they were started. Research at IITs started becoming a significant component a little later and there is no denying that among the technological research and educational institutions in the country, IITs stand tall. Even in terms of global ranking among institutions in its class, IITs rank fairly high. Running such institutions down in fact serves no purpose except demotivating the system.

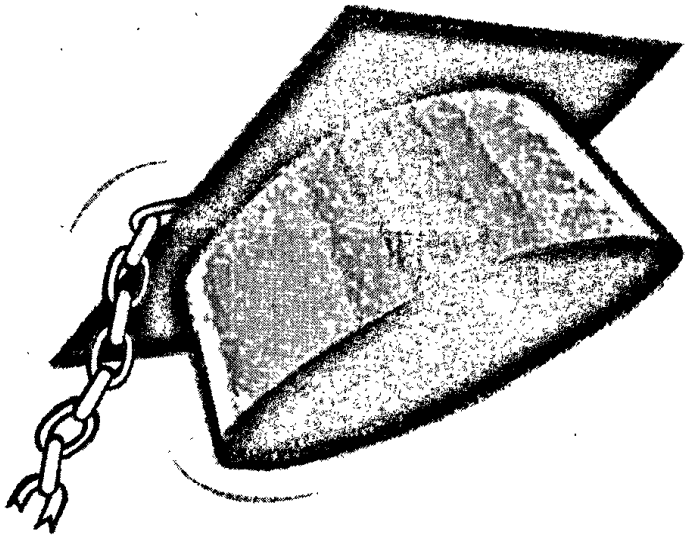
Having said that, it is important to look at the role of the IITs in the national context and search for avenues to take these institutions to even higher levels. I had an opportunity to chair a committee to do precisely that. A report on this work is available on the website of the ministry of human resource development.

A country of India's size, on a rapid economic growth path, would require in today's context a significant emphasis on large-scale technology-oriented research at the highest levels of excellence. This is necessary to push the frontiers of knowledge and create new cutting-edge technologies and thereby sustain India's progress as a leading country in today's competitive global environment. We need to nurture a large science and technology-based innovation ecosystem that creates solutions for India's inclusive development and economic growth. The creation of a large pool of researchers (with PhDs), commensurate with the size of our population and economy as well as our aspirations, is a key necessity for the realisation of these objectives. At present our PhD output in engineering and technology is an order of magnitude smaller than both the US's and China's. The IITs, being the largest system for high-quality human resource development in an ambience of high-level engineering R&D, have thus to take on the challenge of creating an advanced research-based technology and innovation ecosystem that, on a national scale, is large enough to make a significant positive difference.

Such a scale-up, apart from addressing the quality issue through high-calibre faculty in adequate numbers, should also provide for a large enough and comprehensive research infrastructure; funding support to identified groups that have the potential to be among the best in the world; innovation ecosystems in partnership with industry present on the campus; laboratories to create technologies for the socio-economic development of the nation; and address some grand challenges of national importance in a coordinated effort involving a number of faculty groups working together. It is expected that this would create a considerably enriched and holistic knowledge environment for IIT faculty and students with useful linkages between them and the external world and make research at the IITs more meaningful. To create an impact and not lose out on account of sub-critical efforts, we need systems larger than what they are at present.

The quality of research would also depend on high-quality engineering graduates taking up research and teaching as a career at the IITs in large numbers. Apart from meeting needs of the growing IIT system, this is the key to enhance quality in our higher-level technological enterprises. This would require engaging with the undergraduate students at IITs as well as at other institutions to initiate them into research right in the third year. A distinctive feature of BTech at IIT is the learning opportunity in an ambience of large-scale high-level research, a feature that needs to be emulated in other institutions.

The general engineering education scene in the country is characterised by a massive augmentation of the capacity with declining quality. This has led to difficulties in recruiting quality engineers needed for nation-building and at the same time frustration among a large number of graduating engineers. Engagement of the IITs with some of the better-performing institutions could contribute to their further upgrade while creating a feeder of requisite size and quality to support scaled-up research at the IITs.



CR SASIKUMAR

A POSSIBLE way to create financial autonomy in government-funded institutions is to make them operationally independent, while taking care of the capital investment needs. In any case, full autonomy is a must for the IITs to become world-class.

World-class institutions are characterised by the existence of a large high-quality talent pool (faculty, students and visiting researchers), vibrant academic and research linkages with external better-quality institutions, availability of liberal resources and a flexible and conducive governance system that can recognise and selectively support credible new ideas in a hassle-free manner. Funding and autonomy of the IITs are thus key areas that need serious attention. Inherent in encouraging quality research and innovation is the ability to facilitate rapid movement in new and uncharted territories following case-specific pathways. This is not possible without full autonomy for the IITs. Rigid rule-based approaches can hardly respond to such needs in a timely manner.

A possible way to create financial autonomy in government-funded institutions is to make them operationally independent while taking care of capital investment needs on the basis that R&D leads to building knowledge assets. Accountability of the institutions can be through key deliverables like number and quality of students graduating in different disciplines, quality of research as adjudged by peers, technologies and enterprise created, impact on national development and other such parameters. The operational cost of education can be recovered by the government fully supporting students for their fees and living on the campus except those undergraduate students who are in a position to pay. A hassle-free loan facility without any collateral should be available for all those who may need it. A detailed analysis shows that such an approach is feasible. In any case, full autonomy is a must for the IITs to become world-class.

The writer is former chairman, Atomic Energy Commission of India. He chaired the Kakodkar Commmittee on reforms in IITs

Financial Express ND 7/06/2011

P-5

Single engineering entrance test on cards

■ Exam likely from 2014, to also cover science courses

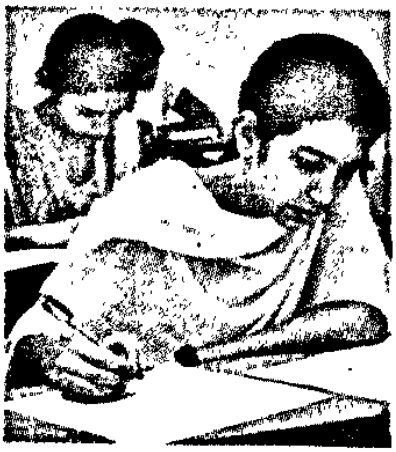
Kirtika Suneja
New Delhi, Jun 6

THE ministry of human resource development (MHRD) is planning to introduce a single entrance test from 2014 for students planning to pursue science and engineering at the graduation level.

The test, called National Test Scheme (NTS), will do away with the prevailing multiple competitive examination system for these courses. "The proposed test is motivated by the principle of inclusion for a collaborative excellence rather than exclusion through competitive excellence," says a draft paper released by the ministry.

Initially, NTS will be used only for science and engineering admissions. Almost 11.5 lakh students take the All-India Engineering Entrance Examination (AIEEE) while another 3 lakh sit for the joint entrance exam conducted by the Indian Institutes of Technology.

The present system of multiple competitive examinations has emerged because the demand-supply gap in access to tertiary education is large and the levels of excellence in educational institutions are uneven.



"We want to start with science and engineering because this is the area where almost 90% of the students take entrance exams ...Arts and commerce are not a problem today and management education is pursued usually at the postgraduation level," said an HRD ministry official.

The NTS will evaluate the ability of the learners rather than their preparedness. A committee of vice-chancellors has suggested that for admission to undergraduate courses, marks obtained in Class 12 and the scores obtained in a common national-level aptitude test should get appropriate weightage.

Officials say that the test could be designed in such a way that the first part is common for all students and the second part, which is a specialised one, tests their analytical skills and understanding of their respective subjects.

"We expect the discussion process to end in a year's time and most probably, the test could be rolled out by 2014," said AICTE chairman SS Mantha.

Education minister Kapil Sibal has also said that in an effort to reduce examination stress, the MHRD is considering merging the Central Board of Secondary Education–conducted All-India Pre-Medical Test (AIPMT) and the All-India Engineering Entrance Examination (AIEEE) as both sets of examinations have common subjects — physics and chemistry. While those opting for medical courses have to appear for an additional biology paper, the students opting for the engineering stream have to appear for a mathematics paper.

Currently, if a student wants to appear for the entrance exams for both the streams, he needs to sit for the physics and chemistry tests twice. "Merging the two examinations will resolve this problem. If the common entrance exam runs well, we may extend it to other areas and subjects also," the MHRD official added.

Asian Age ND 7/06/2011 P-4

HRD holds poll on single entrance exam

L.VENKAT RAM REDDY
HYDERABAD

June 6: With the launch of an online poll, replacing IIT-JEE, AIEEE, Eamcet, Comed-K and scores of other engineering entrance examinations with a single "National Test Scheme" (NTS) is in your hands.

In a first-of-its-kind initiative, the Union ministry of human resources development has launched a "national opinion poll" to elicit responses from students, parents, teachers and other stakeholders regarding replacing national and state-level engineering exams with the NTS.

One needs to log on to the website of the department of higher education, www.education.nic.in, and post one's opinion online before June 21.

The department has also decided to utilise social networking sites like Facebook and Twitter to popularise the online poll. The HRD ministry had appointed the T. Ramasami Committee and the secretary of department of science and technology to prepare a document for public consultation on NTS for admissions into engineering courses.

spotlight

The committee had suggested replacing multiple engineering entrance exams with the NTS as it would save students from appearing in many exams which were leading to unnecessary stress apart from being an additional financial burden on parents.

The HRD ministry has already mooted several proposals like introducing a national common syllabus for science and commerce streams at the 10+2 level, abolition of state exam boards at Class 10 and 12 levels and to introduce a single national entrance exam for admissions to graduate courses in engineering, medical, science and commerce streams.

One can give his or her opinion on all these proposals as part of the national opinion poll.

Several states, including Andhra Pradesh, have been opposing proposals like a single entrance exam and single board exam at the national-level, and though the HRD ministry had initiated these reforms two years ago, it had failed to achieve consensus in the absence of approval from big states like Andhra Pradesh and Tamil Nadu.

Mint ND 7/06/2011 p-6

Reshaping India's higher education landscape

THE TARUN KHANNA COLUMN

TARUN KHANNA
Respond to this column at thetarunkhannacolumn@livemint.com

A few months have elapsed since then human resources development minister Kapil Sibal introduced his higher education Bill. The immediate brouhaha now having subsided, I feel it might be worthwhile to point to three generalized inadequacies in our higher education landscape that I hope this Bill, with its spirit of fostering openness to educators and educational institutions from outside India, might address. Indian higher education suffers from inadequate competition among the better institutions, inadequate experimentation, and inadequate measurement of outcomes.

First, consider inadequate competition. There are sufficiently few institutes in India that merit the appellation "excellent", so that their institutional feet are not held to any individual or collective fire. The mainstay of their effort is the running of a competitive examination and ensuring it does not "leak". The sheer numbers of applicants will result in a critical mass of highly qualified candidates meeting some stringent benchmark, and end up educating each other. The Indian Institutes of Technology (IITs) and the Indian Institutes of Management (IIMs) fit this bill. But why can the IITs and IIMs not also produce world-class research? A simple hypothesis is that their mission is not currently compromised by not doing so. Were there other credible institutions of engineering and business—the Indian School of Business (ISB) in Hyderabad is one example, though we need many, many more—the super-smart attendees of the IITs and IIMs would have options, and the IITs and IIMs, and the regulators who have oversight over these institutions, would have to work smarter to earn their keep.

Another way to say this is that the severe competition among striving, smart youngsters allows institutions themselves lacking competition to live the good life. If credible global institutions enter India, it will make their professional lives harder. Expect India's "best" institutions, therefore, to resist.

Second, there is inadequate experimentation. The Indian education system reminds one of the hamster endlessly rotating its hamster-wheel with no end in sight. There is a certain mind-numbing uniformity to the path that the average upwardly aspiring family desires for its progeny. This is, to put it mildly, sad. All the ample research on education, not to mention common sense, suggests that the phrase "different strokes for different folks" is a better description of what India's youth needs. Institutions should specialize not just in classroom learning, but also in vocational skills, in experiential learning, in experimental learning, among other modes. While there are localized pockets of such experimenting in India, they are sufficiently scarce as to not to make much of a difference (yet).

There are some experiments outside of higher education—Pratham comes immediately to mind, reaching out to millions of underprivileged kids across India; so does the much-newer Teach for India, a spin-off from the intellectual parent Teach for America. No reason why experimentation shouldn't spread to higher education, as it has in many settings outside India. Look at the success of the Khan Academy in the US, with more than 2,000 video tutorials on all sorts of topics, already having delivered more than 50 million lessons speedily. Or Seoul-based Megastudy's attempt to disproportionately reward successful teachers (and implicitly penalize those who are ineffective). Perhaps one of the many corporate house-sponsored universities in the planning stages will pay attention to such cutting-edge experiments around the world.

COLUMN

Third, there is inadequate measurement. There are few credible metrics at any stage of the Indian education system (other than entrance examinations perhaps to a small handful of institutions). We do not know the effectiveness of particular curricula, probably set by a sclerotic and unconstrained bureaucracy, nor the effectiveness of particular institutions, nor the ability of particular teachers to excite enthusiasm or to inspire a lifelong commitment to learning. As the old saw goes, what is not measured is not managed.

I'm excited about one attempt to measure, started by two brothers in Delhi, from IIT and MIT, Aspiring Minds (full disclosure, I am an advisor). Aspiring Minds has managed to place more than 10,000 youngsters from outside the mainstream—that is, not from top-tier colleges, and not from major metros—into top-tier jobs, through its state-of-the-art measurement and assessment system that dramatically and cost-effectively increases the talent pool accessible to any corporate firm operating in India. The social multiplier of plugging in some of India's otherwise (economically) disconnected youth into the economic mainstream is simply enormous. And this is just one example of returns-to-measurement.

So, what we need is to foster hundreds of experiments, to measure their results, and to shut down the failures and spread the successes like wildfire. Then endlessly iterate to excellence. Simple? It is not without cost. What if one is the result of a failed experiment, after all? I have no answer to this, other than to say our current system fails many more than those who might be failed by future hypothetical failed experiments.

Let's come back to Sibal's Bill. A dose of competition from the outside will be just what the doctor ordered. Some columnists have bemoaned the inability of government institutions to compete with foreign entrants, on the grounds that the formers' institutional hands are tied by red tape. There is some truth to this, but it also smacks of the classic problems of incumbency. After all, even in the US, there are plenty of excellent state-run universities, with constraints on tuition setting and so on, that compete adequately and robustly with the best private universities.

I suspect that other than relieving the inadequacy of competition, foreign entrants will also relieve the inadequacy of experimentation, and, with a penchant for rankings and metrics of all sorts, will take a number of steps that encourage measurement and accountability.

There are many ways for institutions of learning to collaborate with, and compete with, domestic institutions. Sure, some campuses will be set up, and that is no bad thing. But there are other methods, too. My own institution, the Harvard Business School (HBS), has been in the business of seeding its own competition, so to speak, for decades. It has, for example, been involved with the founding of business schools such as the IIM in Ahmedabad, the Asian Institute of Management in Manila, INCAE in Costa Rica, and so on. These are past experiments. Recently, HBS launched the Social Enterprise Knowledge Network in Latin America, which stitches together numerous business schools in several countries in a collaborative network of research and teaching. And lately, Harvard University has reinvigorated its South Asia Initiative, an attempt to bring all of Harvard's myriad faculties—business, law, arts, medicine, public health, government and so on—to South Asia, to learn and to teach in a variety of engaged and engaging ways.

Experiment, and measure, so that we can find out which strokes work for which folks. Sibal's Bill moves us in that direction. We should celebrate the effort.

The writer is Jorge Paulo Lemann Professor at Harvard Business School, director of Harvard University's South Asia Initiative, and co-author of Winning in Emerging Markets: A Roadmap for Strategy and Execution, *Harvard Business Press, 2010.*

Deccan Chronicle Hyderabad
06.06.2011 p-3

Most toppers opt for the IIT route

DC CORRESPONDENT

HYDERABAD

June 5: T. Bhargav Reddy, who secured eighth rank in IIT-JEE and AIEEE, also plans to take the IIT route like I. Prudhvi Tej. "I will take admission in IIT-Bombay. My choice is computer science," he said.

IIT-JEE ninth ranker J. Varun, who secured fifth rank in AIEEE said, "I have decided to join IIT-Bombay to pursue computer science engineering."

In the open category at national-level, Sri Chaitanya students B. Sai Surendar Reddy secured 12th rank, M.S.R.K. Teja 33, P. Pradeep Varma 46, P. Anurag Reddy 64, N. Venkatesh 74, P. Manish 84 and T. Sri Meghana secured 85th rank. In the B.Arch stream, Sri Chaitanya student Prudhvi Tej secured second rank, S. Vijay third, M. Tarun Kumar Reddy fifth, J. Varun ninth and Abhay Singh 15th rank.

Demand for overseas education rising again

Shobha Roy
Kolkata, June 6

There is a 10-15 per cent rise in Indian students going overseas for education during the current session, according to senior officials in the industry.

The increase was due to the improvement in job markets, rise in income generation of people in the country and the easy availability of bank loans, they said.

Applications for such loans usually start pouring in from May-June for courses beginning in August-September. Close to 1,80,000 students go overseas for higher education every year and this number has gone up by about 15 per cent over the last one year, said Mr Naveen Chopra, Founder, The Chopras, which offers consultancy services for overseas education.

Demand for overseas education had witnessed a lull in the last two years due to the poor job markets, the tightening of norms in countries such as the US and the UK and the recent incidents of violence against Indian students in Australia. Though there was no significant decline in the number of students going overseas, there was a shift in the destinations chosen for studies.

"There was a significant reduction (to the extent of 70-80 per cent) in the number of students going to Australia for higher education due to the recent incidents of violence against Indian students. This traffic shifted to other countries such as Canada, Europe and New Zealand," Mr Chopra pointed out.

Banks have been witnessing a steady rise in demand for loans for overseas education during the current year.

"During the last two years, we saw a dip in sanctions and disbursements of overseas educational loans as there was a fall in demand from students for such loans. However, now things have picked up," said a senior bank official.

Close to 50 per cent of the overseas education was funded by banks.

Overseas educational loan account for 10-20 per cent of banks' educational loan portfolio in terms of the number of applications received. However, the value of such loans is higher than domestic educational loans. The average ticket size of such loans is Rs 15 lakh and the repayment period stretches between five and seven years, which is the same for domestic loans.

Overseas educational loans account for 16 per cent of SBI's educational loan portfolio, said a senior bank official. SBI's educational loan book grew by 23 per cent at Rs 10,980 crore as on March 31, 2011.

"The growth in loans for overseas education is on a par with loans for studies in India at present and is expected to be better in the coming years. This is because overseas jobs are picking up, and even if students do not find jobs overseas they come back and get employed here as the job situation in the country has improved," the SBI official said.

Assam Tribune Guwahati 06.06.2011 p-7

Shillong IIM to train NE managers

SHILLONG, June 3 – The Ministry of Development of North East Region will be sponsoring a programme to develop managerial skill for young entrepreneurs of the region.

The programme will be conducted by IIM Shillong through its Centre for Development of North Eastern Region (CEDNER), official sources said.

DoNER has sanctioned Rs 79.15 lakh for training 60 youth from the region.

The course will deal with developing managerial skills among the new generation of entrepreneurs of North East.

The DoNER Ministry and the North Eastern Council has collaborated with Shillong IIM to offer a range of short-term skill development programmes encompassing different areas of management, entrepreneurship, tourism, hospitality, etc from this financial year onwards.

A DoNER spokesman said that the Ministry has a larger roadmap to continuously train youths from the region with the focus on increasing their employability.

"The institutes like IIM, IIT and Tata Institute of Social Sciences are well positioned to cater to the training needs of the region in addition to their regular courses. We have requested them to develop such courses and we have been able to make considerable headway in designing some," he said.

Earlier, the DoNER Ministry had announced a one and a half month programme in association with IIT Guwahati to train 30 engineers from Assam Irrigation Department on mitigation of river bank erosion.

The programme will be entirely funded by the Ministry and will be conducted by the Department of Civil Engineering, IIT Guwahati. – PTI

Aiims entrance doctored: CBI

RACKET BUSTED Candidates did not answer majority of questions, still got high rank on merit list

Abhishek Sharan
■ abhishek.sharan@hindustantimes.com

NEW DELHI: An inter-state network of racketeers, who manipulated the All India Institute of Medical Sciences' (Aiims) May 8 entrance examination, had helped several candidates qualify and some even get high ranks on the merit list in lieu of money, a probe has revealed. The network had been busted by the Central Bureau of Investigation (CBI) on Friday,

The candidates had allegedly not answered a majority of the questions asked in the test, said a CBI official on condition of anonymity.

"Some candidates, who appeared in the Aiims PG exam on May 8, answered only a few questions and left most of the OMR (optical mark recognition/reader) sheet blank, but have secured high positions in the merit list published by Aiims on May 27," the official said.

The merit list had the names of 1,078 candidates.

The CBI's searches yielded several documents including original mark sheets, image of OMR Sheets of suspected candidates, computer files relating to the Aiims examination and blank cheques of suspected candidates.

> **Some candidates... answered only a few questions and left most of the OMR sheet blank, but have secured high positions in the merit list.**
>
> **Candidates were told to leave the space marked for answers empty on the OMR sheets, which were taken out by the private firm's two accused employees.**
>
> CBI OFFICIAL

After a scrutiny of these documents, the CBI found that two employees of a private firm, Pearls Technologies, had darkened the ovals in the OMR sheets, which were left unanswered by the candidates.

Pearls Technologies had been contracted by the examination authorities for result processing including manufacturing and scanning of OMR sheets.

"This was in lieu of huge bribes paid to the racketeers' network by several candidates that it had contacted," the official said.

The CBI has nabbed seven members of the racketeers' network, including its alleged kingpin Mahipal Singh, a radiologist based in Agra.

Singh had finished his PG course from Aiims last year, officials said.

"The candidates were told to leave the space marked for answers empty on the OMR sheets, which were taken out by the private firm's two accused employees while Mahipal Singh would mark the correct answers," the official said.

Two senior employees from Pearls technologies are also involved in the racket, the CBI said.

CBI spokesperson Dharini Mishra said the agency had intimated Aiims authorities about the findings.

Aiims spokesperson YK Gupta said the institute was examining the CBI's findings and would issue a formal response on Tuesday.

Besides the Aiims exam, the racketeers' network had also allegedly manipulated the examination process of the All India Pre-Veterinary test held on May 14 conducted by the Veterinary Council of India for bachelor courses in Veterinary Science and Animal Husbandry, the CBI official said.

Publication: The Times Of India Delhi;Date: Jun 7, 2011;Section: Times City;Page: 6;

Water body conservation: Panel formed

Neha Lalchandani | TNN

New Delhi: Over 700 water bodies in the capital are getting another chance at survival. Delhi government has formed an apex body, headed by the chief secretary, to catalogue and mark progress of restoration for each listed waterbody in the city. A steering committee under this body will monitor progress in monthly meetings.

"The matter has been handed over to the environment department for the first time. The chief secretary was overseeing restoration of waterbodies even earlier, but now a more focused plan has been drawn up. Both the apex body and steering committees will have representatives from various civic agencies, Delhi Jal Board, NEERI, IIT, School of Planning and Architecture and Delhi University," said Vinod Jain, director, NGO Tapas.

As per the new plan, the environment department will be responsible for filing regular action taken reports. The chief secretary has asked for a detailed database to be built for each waterbody that will include photographs, mapping, demarcation, progress of work and detailed description. "This information will be used to plan rehabilitation of waterbodies looking at areas like encroachment and waste disposal, status and possibility of revival, greening of boundaries and catchment areas, sustainable development, desilting, involvement of people, corporates and local agencies in sustainable ecological development of area and water harvesting," said a government official.

Jain added that due to a multiplicity of land-owning agencies that were responsible for revival of these waterbodies, there was no quality-control check on how work was being carried out. "The Hauz Khas lake was one such example of a waterbody that was in a mess even though revival work was being carried out. In several cases the waterbodies were simply being concretized.," said Jain.

Times of India ND
7/06/2011 p-6

AIIMS exam racket: Doc, 6 others held

TIMES NEWS NETWORK

New Delhi: The Central Bureau of Investigation on Monday arrested seven persons and claimed to have solved two cases related to manipulation in the recently held AIIMS postgraduate exam and an all India-level veterinary test. The arrests include a doctor, the alleged kingpin in both the scams.

The CBI registered a case against the main accused, Dr Mahipal Singh, the proprietor of a private firm and some employees regarding manipulation in the Optical Mark Recognition (OMR) sheets used for admitting candidates in the All India Pre-Veterinary Test held on May 14, 2011. The private firm was awarded the contract by the Veterinary Council of India for processing results, including manufacturing and scanning of OMR sheets, a CBI spokesperson said.

Sources confirmed that Singh is the main kingpin in both the scams. He is a radiologist based in Agra, however he had recently done his post-graduation from AIIMS.Singh, in connivance with the candidates, printed duplicate OMR sheets of the said candidates bearing the same bar codes and replaced the original sheets in the VCI office to get a favourable result in the said examination. Incriminating documents were recovered during searches. Prior to this, CBI had also registered a case regarding manipulation in the examination process of post graduate courses in AIIMS.

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Cloud computing in education

Richard Rekhy

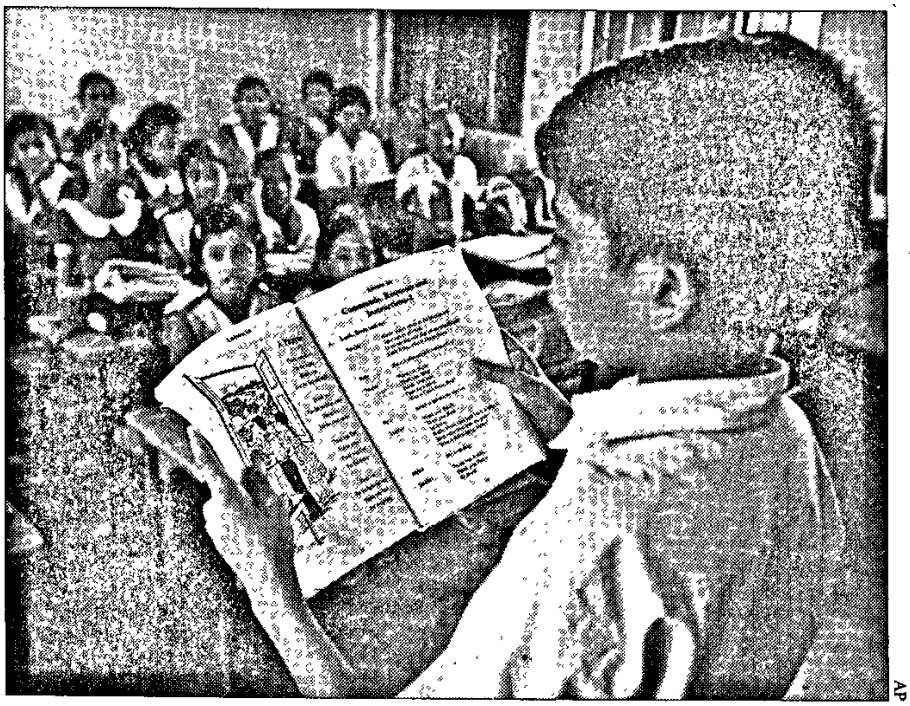
THE rise of the cloud is more than just another platform shift that gets geeks excited. It will, undoubtedly, transform the information technology industry, but it will also profoundly change the way people work and companies operate." —*The Economist*

The education sector is the second largest sector globally and Indian school system is the world's largest school system with over 1.12 million schools. The development of the sector is key for economic growth and improvement in the standard of living.

According to the 2011 census, India's literacy rate has reached 74 per cent, increasing by 9 per cent since 2001. But, what is important is the quality of this literacy. In 2009, 96 per cent of children in rural India, who were six years to 14 years old, were enrolled in schools — of these, 73 per cent were enrolled in government schools and 53 per cent could read class two texts. The government has allocated Rs 52,057 crore for the education sector in the Union budget for financial year 2011-2012, up by 24 per cent compared with the past financial year. Is this enough?

While such statistics paint an extremely positive picture of the Indian educational sector, the overall quality of education still remains an issue. There is a need for more effort on multiple fronts to enhance the quality of educational discourse, improve standardisation and increase the reach of vocational and other alternate education channels to all sections of society.

The challenges posed by the growing appetite for education requirements are immense. India will have about 45 million people in the age group of 18 years to 20 years by 2020. To train them, we need more than 20 million teachers. As per present trends, we will create only 20,000 teachers by 2020.



NEW WAVE: Cloud computing and related business models provide answers to many of the challenges faced by the Indian educational sector and can deliver education in a cost-effective manner

Traditional forms of technology in education pose a number of other key challenges. Cost of technology, both hardware and software, which are unaffordable for the masses; cost of maintenance of IT (information technology) setups; power shortage, particularly in the rural areas; and a lack of trained teachers — especially in IT awareness and knowledge are only some of the issues.

Cloud computing and related business models provide answers to many of the challenges faced by the Indian educational sector. IT in general has proven to be a catalyst in making the experience of learning more enjoyable and effective and cloud computing could provide answers to many of the challenges faced by the education sector in India. The cloud refers to wide-area networks, generally the internet, from which remote computing resources are shared. Google and others, already offer various productivity applications, and Microsoft has announced that it will offer Microsoft Office 2010 online next year. The cloud reduces costs and complexity and provides scalability.

The biggest advantage that the cloud brings is to reduce costs and improve efficiency. An institution can rely on the pay-as-you-go characteristic of the three pillars of cloud: IaaS, PaaS and Saas.

Ease of maintenance increases efficiency as the pain of maintaining the software is now shifted to the cloud services provider. Technical issues related to online portals for distance education programmes and online examinations are the responsibility of the cloud service provider.

One of the primary reasons for the high dropout rate in Indian schools is the insipid form of learning propagated by rote learning. Interactive applications delivered through the cloud can not only standardise teaching methods and content across schools, but also add richness and variety to the learning experience.

Teacher-training programmes at remote locations or rural areas are often caught in a web of ignorance themselves. Cloud computing solutions can be used for teacher-training courses and rapidly train a larger number of teachers.

Many adults, deprived of minimum education at an early stage of life, are later reluctant to go to schools or do not have the time to do so. Cloud can help bring mass awareness among the rural population through interactive applications delivered using newer means of delivering education through mobile phones and televisions.

SciCloud is a project that is studying the scope of establishing private clouds at universities. With such networks, researchers can efficiently use the already existing resources in solving computationally-intensive scientific, mathematical, and academic problems. The project established a Eucalyptus-based private cloud and developed several customised images that can be used in solving problems from mobile web services, distributed computing to bio-informatics domains.

Online tutoring has become a source of employment in India. In the rural areas, where career choices are limited, cloud online tutoring can play a major role in helping a person earn his bread and butter. At peak times, online tutoring vendors like Tutor Vista's teachers coach 2,500 American students in one to-one sessions.

Opportunity is knocking and while there is no doubt that the private sector will seize it, the government has to form partnerships to enable India to utilise the full potential of cloud computing.

"Education is not the filling a bucket but the lighting of a fire."

— William Butler Yeats

(The writer is deputy CEO and head, advisory services of KPMG, India)

Jansatta ND 7/06/2011P-7

आईआईटी और मेडिकल कालेज बनाएंगे घुटने के सस्ते इंप्लांट

कानपुर, 6 जून (भाषा)। घुटनों के दर्द से निजात दिलाने के लिए अभी जिस विदेशी इंप्लाट को आपरेशन के जरिए रोगी के घुटने में लगाया जाता है उसका एक देसी और सस्ता संस्करण डिजाइन करने का काम कानपुर स्थित भारतीय प्रौद्योगिकी संस्थान करेगा।

इस इंप्लांट की डिजाइनिंग के लिए आई आई टी और कानपुर के जीएसवीएम मेडिकल कालेज के बीच हाल में एक समझौता हुआ है। इस देशी इंप्लांट का डिजाइन तैयार हो जाने के बाद और उसके बाजार में आ जाने के बाद रोगियों को मंहगा विदेशी इंप्लांट नहीं खरीदना पड़ेगा। जो विदेशी इंप्लांट अभी रोगी को करीब 35 हजार रुपए में मिलता है उसीका देसी संस्करण रोगी को 12 से 13 हजार रुपए के बीच मिलने लगेगा।

आई आई टी के निदेशक प्रो संजय गोविंद धांडे ने बताया कि इस देशी इंप्लांट की डिजाइनिंग के लिए आई आई टी कानपुर और मेडिकल कालेज के प्रिसिंपल के बीच बातचीत हो गई है। इस काम में उन्हें सभी तकनीकी सहायता देने के लिए सहमति भी हो गई है।

शहर के सरकारी मेडिकल कालेज गणेश शंकर विद्यार्थी मेडिकल कालेज के प्राचार्य और हड्डी रोग विभाग प्रमुख प्रो आनंद स्वरूप ने बताया कि अभी तक घुटनों के दर्द से परेशान रोगियों के लिए घुटना प्रत्यारोपण ही एक मात्र विकल्प था लेकिन अब यहां एक ऐसी विधि एचटीओ (हाई टीवियल आस्टियोटामी) से रोगियों का इलाज किया जा रहा है जिसमें रोगी को न तो घुटना प्रत्यारोपण कराकर लाखों रुपया खर्च करना पड़ता है और न ही हफ्तों अस्पताल में भर्ती रहना पड़ता है।

इस माडिफाइड हाई टीवियल आस्टियोटामी विधि में रोगी के घुटने के जोड़ों के हिस्सों को नाप कर उसका एलाइनमेंट ठीक किया जाता है फिर आर्टिफिशियल इंप्लांट लगाकर उसे सीधा कर दिया जाता है। इस में जो आर्टिफिशियल विदेशी इंप्लांट डाला जाता था वह बहुत मंहगा था और उसका खर्च गरीब मरीज वहन नही कर पाते थे।

आईआईटी के निदेशक प्रो धांडे ने बताया कि इस विषय में मेडिकल कालेज के प्रिसिंपल डा स्वरूप और उनके तथा डिजाइनिंग विभाग के प्रोफेसरों के बीच एक बैठक हो चुकी है। संस्थान का डिजाइनिंग विभाग मेडिकल कालेज को तकनीकी सहायता देगा जिससे यह काम शीघ्र ही शुरू हो जाएगा।

प्रो स्वरूप को उम्मीद है कि छह माह में आई आई टी के डिजाइन विभाग के विशेषज्ञ उन्हें इस देशी इंप्लांट का डिजाइन बनाकर दे देंगे। उसके बाद वे किसी देशी कंपनी को इस इंप्लांट को बनाने की जिम्मेदारी सौंप देंगे ताकि आम जनता को यह कम कीमत पर उपलब्ध हो सकें।

स्वरूप ने बताया कि एचटीओ विधि से किए गए आपरेशन के बाद रोगी को अस्पताल में सिर्फ तीन चार दिन ही रहना पड़ता है। उसके बाद वह आराम से टहल सकता है। शहर के सरकारी मेडिकल कालेज जीएसवीएम में अब तक इस एचटीओ तकनीक से करीब 200 रोगियों के सफल आपरेशन हो चुके हैं ।