Rashtriya Sahara ND 05/02/2014   P-4

साईबर अपराध से निपटने का प्रशिक्षण देगा आईआईटी

नई दिल्ली। देश में बढ़ते साईबरअपराधों को देखते हुए भारतीय प्रौद्योगिकी संस्थान (आईआईटी) दिल्ली ने अपने यहां साईबर सिस्टम एंड इंफोर्मेशन सेंटर की स्थापना की है। 7 फरवरी को केंद्रीय मानव संसाधन एवं विकास मंत्री डॉ एमएम पल्लम राजू इसका उद्घाटन करेंगे।

कुछ अलग

इस साल आईआईटी दिल्ली से होगी इसकी शुरुआत, छात्रों की चयन प्रक्रिया में भी बदलाव किया जाएगा

आधी फीस में पांच साल का बीटेक-एमबीए

नई दिल्ली | रोहित पंवार

देश के प्रतिष्ठित संस्थान आईआईटी में अब पांच साल के भीतर ही आधी फीस में बीटेक और एमबीए एक साथ किया जा सकेगा। नए सत्र में सबसे पहले आईआईटी दिल्ली से इसकी शुरुआत होगी।

नया कोर्स इस साल से शुरू होगा: आईआईटी के सूत्रों की मानें तो इस बाबत तमाम प्रक्रिया पूरी हो चुकी है। इस साल से नया कोर्स शुरू हो जाएगा। साथ ही फीस भी 50 फीसदी तक कम करने का फैसला लिया गया है।

सामान्य बीए-बीएससी वाले भी दिल्ली आईआईटी से कर सकेंगे एमबीए

क्या होगा बदलाव ?

1. दसवीं+बारहवीं+तीन वर्ष की स्नातक डिग्री का पैमाना लागू करने की हो रही है तैयारी
2. सामान्य बीए, बीकॉम और बीएससी करने वाले छात्र भी दाखिले के योग्य हो जाएंगे

क्या है मौजूदा प्रारूप ?

1. दसवीं+बारहवीं+4 वर्ष की स्नातक डिग्री का मौजूदा पैमाना है एमबीए करने के लिए
2. बीटेक या परास्नातक छात्र ही आईआईटी दिल्ली के एमबीए में दाखिले के योग्य होते हैं

गेट से किया जाएगा चयन : सूत्रों के मुताबिक आईआईटी दिल्ली इस बार से पार्ट टाइम एमबीए के लिए छात्रों की चयन प्रक्रिया में भी बदलाव करेगा।

छात्रों का चयन गेट से किया जाएगा।

हार्वर्ड से करार होगा : दिल्ली आईआईटी हार्वर्ड, व्हार्टन, एमआईटी, आदि से करार करेगा।

कोर्स में भी होगा बदलाव : वर्तमान में कोर कोर्स, इलेक्टिव (जैसे कि मैनेजमेंट के सिद्धांत)-फंक्शनल कोर्स (इंफॉर्मेशन टेक्नोलॉजी, मार्केटिंग और मन रिसोर्स) और चुने गए प्रोग्राम के आधार पर कुरीकलम बंटा होता है। कोर कोर्स और चुना गया प्रोग्राम अनिवार्य होता है। इलेक्टिव-फंक्शनल वैकल्पिक होता है।

नए प्रारूप में कोर कोर्स के साथ मैनेजमेंट की मौजूदा प्रैक्टिस को शामिल किया जाएगा। साथ ही कुछ नए मैनेजमेंट के प्रोग्राम जैसे कि हेल्थकेयर मैनेजमेंट, मीडिया मैनेजमेंट, रियल इस्टेट मैनेजमेंट, पब्लिक सेक्टर मैनेजमेंट आदि को भी जोड़ा जाएगा।

UNIQUE IDEAS

A demonstration of engineering prowess

bright spark

YOUNG INNOVATORS

Aanchal Bedi
■ aanchal.bedi@hindustantimes.com

With an aim to provide a platform to students from across the country to showcase their technological and engineering expertise, Indian Institute of Technology, Delhi and Delhi Technological University organised a Human Powered Vehicle Challenge contest in the Capital recently. This contest was held in India for the first time under the aegis of ASME (American Society of Mechanical Engineers).

Professor PVM Rao, IIT Delhi, said, "Competitions such as Human Powered Vehicle Challenge are helpful in multiple ways. They provide an opportunity to students to work on real life engineering projects, which often do not happen in our academic settings. It also gives a message that engineering is a team-based activity where engineers from different disciplines collaborate to realise a product. It helps in honing students' project management skills, mental visualisation skills, technical communication skills and creative thinking as well."

Talking about his design, Azhar Nehal from Indian School of Mines, Dhanbad says, "Our team Wheelism designed a two-wheeled, single-seated human powered vehicle capable of safely running at high speed. Our main innovation was the front-side protection system (SPS) which is very similar to the systems used in motorcycles. This system works in combination with the mandatory roll-over protection system (RPS) that prevents the rider from falling on the ground in case of an accident and thus preventing injuries."

Another participant, Rhythima Sinde from IIT Mumbai says, "We were a four-member team, out of which only three were technical members, while the fourth was the rider. Our aim was to make a good design with minimum drag, best aesthetics, good stability and high speed. We were funded by the institute and worked with our industrial design centre."

HPVC is an inter-college design, fabrication and racing competition for students where teams have to conceptualise, design and fabricate a human-powered vehicle to participate in a three-day event comprising a design competition, an endurance race and a drag race.

Winners included teams from ISM Dhanbad, Rajarambapu Institute of Technology in Maharashtra and Jamia Millia Islamia, New Delhi.

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WRAP UP TIME

HRD Minister Pallam Raju has decided to call one last meeting of the IIT Council while he is in charge. It is planned for next month. The idea, it is learnt, is to wrap up and consolidate whatever has been worked upon in the last few Council meetings before a new minister takes over and changes are effected. The Lok Sabha elections will not only — in all probability — bring a new education minister but also effect major changes in the bureaucracy at the ministry. Secretary Higher Education Ashok Thakur is set to retire in September and Additional Secretary Technical Education Amita Sharma will retire in August.

Is common counselling in JEE a good idea?

NEW MOVE The HRD ministry is likely to propose common counselling in the Joint Entrance Exam from this year but implementing it will be a challenge, say experts

Gauri Kohli
gauri.kohli@hindustantimes.com

A proposal by the human resource development ministry may leave some engineering aspirants worried and confused.

The ministry is mulling the possibility of holding common counselling for admission to the Indian Institutes of Technology (IITs), the National Institutes of Technology (NITs) and some state-run engineering institutions meant to address vacancies at these institutes. But a few aspirants feel it may reduce choices they have to make between these institutions.

"In the existing format, the students have a choice between the IITs and NITs, through different counselling rounds. With some of the new IITs being established after the NITs, many students who are unsure about joining these new IITs opt for an NIT instead," says Jai Dhingra, an aspirant.

WHAT'S IN STORE

Sources in the HRD ministry told HT Education that the idea of combining JEE Main and JEE Advanced was also discussed when the JEE reforms were being planned. "But with the new JEE format introduced in 2013, it was agreed that these reforms must be implemented in a phased manner. This is why we are only proposing to initiate the process of joint counselling in 2014 to begin with," says

a senior HRD ministry official, adding that whether the Main and Advanced exams of the JEE are eventually combined will also depend on several other factors, including the outcome of the general elections in May this year.

The process of implementing common counselling will be discussed further with the IITs and officials from the Central Board of Secondary Education, says the official.

"Variations between joint or common counselling, such as the common choice filling format, will be explored after discussions with the Joint Admission Board to find the best solution. It's a fairly complex process because the IITs pattern is different from the NITs which is more Class 12 based. Both systems are disparate and look for different kind of candidates," he adds.

WILL IT WORK?

Experts say that one exam should be good enough to judge a candidate.

"There should be better coordination between NITs, IITs and within IITs, with a certain amount of openness. This can be achieved through credit transfers and allowing greater

mobility of students within these institutions.
Creating stages to shortlist students will not do any good," says professor SK Dhande, former director, Indian Institute of Technology of Kanpur.

The JEE 2014 organising committee, however, feels that common counselling may not be a feasible idea.

"On what grounds this has been proposed is not known to us. In a meeting of the Joint Admissions Board in September 2013, it was decided that JEE 2014 will be the same as JEE 2013 without any change.

"As an implementing agency, we are following this directive. The counselling schedule for seat allocation has already been published and we will go as per what has been decided.

"We have not been told about how it is going to be done but we will be meeting officials from the HRD ministry on February 5, 2014 to discuss it," says a member of the JEE 2014 organising committee, requesting anonymity.

According to him, common counselling is not actually common because of the fact that there are a large number of candidates who are only eligible for admission to the National

> THERE SHOULD BE BETTER COORDINATION BETWEEN THE NITS AND IITS. THIS CAN BE ACHIEVED THROUGH CREDIT TRANSFERS
SK DHANDE, former director, IIT Kanpur

THE PROCESS OF IMPLEMENTING COMMON COUNSELLING WILL BE DISCUSSED FURTHER WITH THE IITS AND OFFICIALS FROM THE CENTRAL BOARD OF SECONDARY EDUCATION

Institutes of Technology and other state-run engineering institutions.

"There are about 13 lakh candidates appearing for JEE Main. The number of candidates who are given ranks is close to 3.5 lakh (they are eligible to give their choices for various NIT courses).

"About 15,000 students will feature in JEE (Advanced) merit lists. The remaining 3.35 lakh will only be in JEE Main merit list and are only eligible for NIT and state lists.

"Out of the 1.5 lakh candidates who write the JEE (Advanced), the number of candidates selected is 1.4 times the total strength of seats at the 16 IITs and ISM Dhanbad.

"About 15,000 are allowed to fill their choices for different IIT and ISM programmes. Whereas, the number of candidates who apply for the NIT seats is much more than 15,000.

"There are two different exams, ranking systems and rules for seat allocation, so how can there be common counselling?" he asks.

WHAT NEXT?

- Admission to NITs, IIITs and other institutions participating though Central Counselling Board in JEE 2014 will be based on all-India rank. Under the existing format, first the IITs conduct student counselling, followed by the NITs and others. Experts say that candidates who get admission offers from an IIT as well as an NIT, prefer to opt for the IIT seat while awaiting their choice of subjects in an NIT. By the time a candidate takes a final call about joining an institute, it is tough for the institutions to fill up the vacant seats

- JEE 2014 committee members say that there are two different exams and set of rules for seat allocation, so the idea of common counseling is not feasible

- According to the JEE 2014 committee, the counselling schedules have already been decided. A final call will be taken after a meeting with HRD ministry officials on February 5

IMAGESBAZAAR

Battle ahead for F

Gauri Kohli
gauri.kohli@hindustantimes.com

e-paper

Hyderabad-Born, Manipal-Educated Satya Nadella Named Microsoft CEO

INDIA MAKES A POWER POINT

Faces Challenge Of Steering Tech Giant In New Era

Chidanand Rajghatta | TNN

Washington: Microsoft's board on Tuesday named Hyderabad-born Satya Nadella as chief executive of the legendary tech giant that has given the world products which have become household names like Windows, Word, Excel, PowerPoint and Outlook Express. The announcement elevates Nadella, an offspring of the Indian system, to one of the highest-profile corporate jobs globally.

Nadella, 46, will be only the third CEO of Microsoft after Bill Gates and Steve Ballmer. The elevation of Nadella, a company insider for 22 years (he recently joked that he has also been married for 22 years), was expected once heavyweight outsiders like Ford's Alan Mulally and Nokia's Stephen Elop dropped out or were passed up. The names of Google's Sundar Pichai and Motorola's previous CEO Sanjay Jha also briefly made the rounds, serving to highlight the intensity of PIOs breaking the glass ceiling.

In Nadella, Microsoft chose both a company insider and an engineer. It has often been noted that Microsoft was more successful under the leadership of Gates, a programmer, than it was under Ballmer, who had a sales background. — WITH INPUTS FROM NYT & AGENCIES

Gates: From chair to tech advisor

Bill Gates is giving up his role as Microsoft chairman to become technology advisor to Nadella, the company said on Tuesday. John Thompson, who led the search committee that chose Nadella, will be the new chairman. **P 33**

'DEFINED BY FAMILY, CURIOSITY & HUNGER FOR KNOWLEDGE'

➤ Satya Nadella, 46, becomes **world's top-ranked CEO of Indian origin**, well ahead of Pepsico's Indra Nooyi (on all parameters)

➤ The 22-year Microsoft insider was executive VP, heading the company's **$20bn cloud & enterprise group.** He earlier worked in Windows, Office, Dynamics & Bing groups

➤ His father, **B N Yugandhar, a 1962-cadre IAS,** was then PM P V Narasimha Rao's special secy and later Planning Commission member

➤ Studied at Hyderabad Public School, Begumpet. Played in the school cricket team

➤ Did BE from Manipal Institute of Technology; MS in computer science and an MBA in the US

➤ **Wife Anupama is also an HPS alumnus** and studied engineering in Manipal. Her father **K R Venugopal** was Yugandhar's batchmate in IAS and served as secy to Narasimha Rao. He **launched the ₹2/kg rice scheme** in Andhra Pradesh under N T Rama Rao

➤ Nadella joined Microsoft in 1992. The company, founded in April 1975, was once the most valuable in the world. It's blockbuster products, MS-DOS, Windows and Office made it so powerful it faced antitrust action. But **it has lost ground to Google and Apple. Still, it remains the world's 4th largest company by market cap**

WHY MS CHOSE HIM

➤ **Understands the crucial cloud computing segment** and the importance of delivering more technology as a service. A **hardcore techie,** he fulfils requirement listed by Gates that the new leader must have "a lot of comfort in leading a highly technical organization."

➤ **Played variety of roles,** understands how the 132,000-people behemoth works. Collaborative, low-key, well-liked within MS and the industry. His lack of experience in the consumer space could be a weakness, but can be addressed by Gates' move to become his technical advisor

CHALLENGES

➤ **Needs to stem erosion of PC-centric Windows and Office franchises,** and challenge Apple and Google in mobile computing. More than 90% of PCs run Windows, but only 4% of smartphones do, and an even smaller slice of tablets

> 66 I am 46. I've been married for 22 years and we have 3 kids. And like anyone else, a lot of what I do and how I think has been shaped by my family and my overall life experiences. Many who know me say I am also defined by my curiosity and thirst for learning. I buy more books than I can finish. I sign up for more online courses than I can complete. I fundamentally believe that if you are not learning new things, you stop doing great and useful things. So family, curiosity and hunger for knowledge all define me
> —SATYA NADELLA

SEEKING A TURNAROUND

Satya Nadella new Microsoft CEO, Bill Gates takes tech advisory role
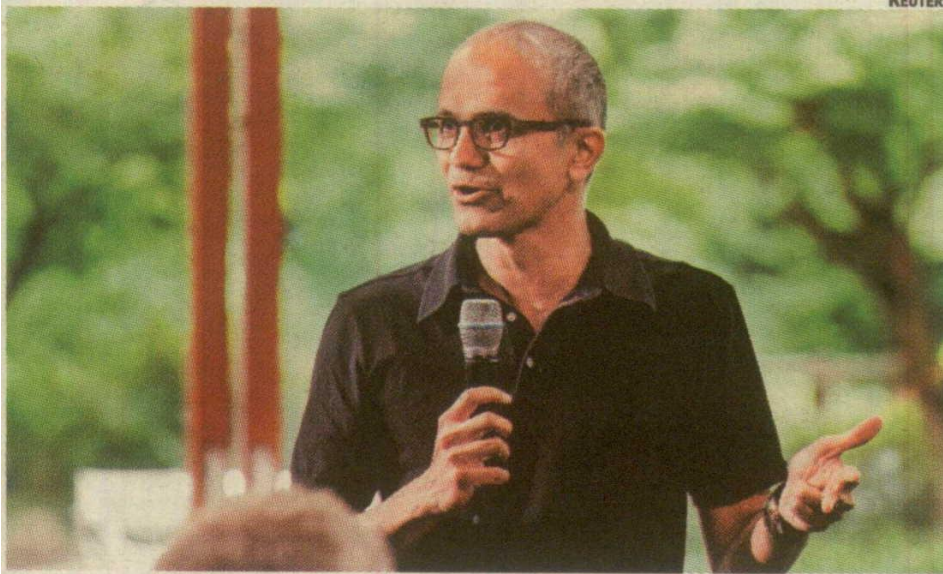
REUTERS

Tough role: *Nadella will replace Steve Ballmer effective immediately.*

BY **DINA BASS**
Bloomberg
....
SEATTLE

Microsoft Corp. named Satya Nadella chief executive officer, tapping an insider steeped in business technology to speed a turnaround at a software maker that helped usher in the personal-computing age, only to be left behind as the world shifted towards the Web and mobile devices.

Nadella, 46, will replace Steve Ballmer effective immediately after a five-month search, Microsoft said in a statement on Tuesday. Bill Gates, the company's first CEO, will step aside as chairman and devote more time to product development, while remaining on the board and running his philan-thropic foundation. John Thompson, the director who led the CEO search, becomes chairman.

The new CEO, who was born in India and joined Microsoft in 1992, takes over at a critical juncture. Consumers and businesses are shunning PCs in favour of handheld devices made by rivals, sapping demand for Microsoft's flagship products. Besides playing catch-up to the likes of Apple Inc. and Google Inc., Nadella will be tasked with completing strategy changes, begun by Ballmer last year. That includes integrating the $7.2 billion integration of Nokia Oyj.'s handset unit and turning Microsoft into a provider of services and hardware.

ALSO SEE

> Nadella could spell good news for Microsoft India
>P11

Satya Nadella is new Microsoft CEO

"He's really the complete package—he has incredible intellect but he also combines that with a deep curiosity and willingness to learn," said Doug Burgum, who sold business-software developer Great Plains to Microsoft and oversaw Nadella while at the Redmond, Washington-based company.

Nadella emerged as the top internal candidate by late November, people told *Bloomberg News* at the time.

While Nadella brings experience running cloud and enterprise businesses, he'll need to boost Microsoft's presence in consumer markets, where rivals have seized the lead. The first question on the minds of critics is whether the Microsoft veteran of 22 years can deliver the same fresh thinking as an outsider, said Daniel Ives, an analyst at FBR Capital Markets & Co.

"He has all the qualifications to take over, but the question for investors is will he be able to change things up," said Ives, who rates Microsoft the equivalent of a hold.

Much will depend on the role of Microsoft's board, where former CEOs Gates and Ballmer will remain directors. Thompson, the former **Symantec Corp.** CEO and **International Business Machines Corp.** executive, will also bring a new perspective as chairman.

"During this time of transformation, there is no better person to lead Microsoft than Satya Nadella," Gates said in the statement.

The transition at Microsoft follows the worst decline on record for PCs in 2013, when shipments dropped 10% and are projected to languish through 2017.

Microsoft's revenue growth has averaged 9.4% in the last 10 years, compared with 24% during the prior period. In the past decade, Microsoft's stock has gained 88% including dividends, compared with a 91% rise in the Standard and Poor's 500 Index. Microsoft shares advanced 1.4% to $36.99 at 9.40am in New York.

The new CEO will oversee a sprawling empire of 130,000 employees once the Nokia acquisition closes in the next few months. Microsoft is seeking to remain relevant as consumers turn to mobile devices and the Web to check email and access data, putting the brakes on sales of PCs, the main driver of Microsoft's Windows and Office software. The acquisition of Nokia is aimed at speeding up the transition to device and services.

In 2012, Microsoft's Windows operating system had 19% of the consumer-computing market, according to **Goldman Sachs Group Inc.**, down from 93% in 2000 when PCs were prevalent. In tablets and smartphones, Microsoft has less than 5% share of each market, according to researcher IDC.

Nadella, who was at Sun Microsystems Inc. before joining Microsoft, has worked on business software and services through much of his career. Born in Hyderabad, India, Nadella has a bachelor's degree in electrical engineering from Manipal Institute of Technology, a master's degree in computer science from the University of Wisconsin-Milwaukee and an MBA from the University of Chicago.

He accelerated the move to Internet-based computing and worked to better connect cloud software with Microsoft's programs for internal corporate networks. Nadella also promoted interoperability with rival programs and helped strike a deal to offer **Oracle Corp.**'s competing database software on Microsoft's Windows Azure cloud service.

"Satya has the rare combination of technological depth, business savvy and strong people-leadership skills," said Jeff Raikes, a former Microsoft executive and CEO of the Bill and Melinda Gates Foundation.

As president of Microsoft's server business, Nadella boosted revenue to $20.3 billion in the fiscal year through June, up from $16.6 billion when he took over in 2011. That unit became cloud and enterprise when Ballmer revamped Microsoft's structure in July.

Before being named to lead the server unit, Nadella held leadership roles in several different businesses within Microsoft, including Bing search engineering and technical strategy, and the company's small business applications push.

"I couldn't be more honoured to have been chosen to lead the company," Nadella said in the statement. "The opportunity ahead for Microsoft is vast, but to seize it, we must focus clearly, move faster and continue to transform."

Nadella keeps an eye on the moves of nimbler start-ups and has pushed Microsoft executives to learn from what people outside of Redmond are doing, a person with knowledge of his management approach has said. At a technology conference in Paris in December, he spent time with local start-ups like video-on-demand company Video Futur Entertainment Group SA.

"He is clearly the best choice to lead the company," Mason Morfit, the president of activist shareholder ValueAct Holdings Lp who is set to join Microsoft's board next month, said in a statement. "I look forward to working with Satya, chairman John Thompson and the rest of the board of directors to create value for all shareholders."

"Nadella won't be doing any interviews today," Mark Murray, a spokesman for Microsoft, said. "His focus today is on partners, customers and employees." Nadella will hold a webcast for partners and customers, as well as an employee town hall later on Tuesday.

Microsoft's board considered other candidates for the role, including Microsoft executive vice-president Tony Bates and Stephen Elop, the former Nokia CEO who is rejoining Microsoft as part of the merger. **Ericsson AB** CEO Hans Vestberg and **Ford Motor Co.**'s Alan Mulally were also under consideration. Steve Mollenkopf was taken out of contention when he was named CEO of **Qualcomm Inc.**, after *Bloomberg News* reported on 13 December that he was a candidate.

Nadella was paid $7.67 million for the fiscal year ended 30 June, according to compensation research firm Equilar Inc., which examines corporate filings. Nadella also had 454,062 shares of unvested stock valued at $15.7 million as of that date, Equilar said.

Amazon.com Inc. tried to recruit Nadella to serve as an executive when the world's biggest online retailer built its cloud products, a person with knowledge of the matter said.

Kerri Catallozzi, a spokeswoman for Seattle-based Amazon, didn't respond to a request for comment.

Margaret Collins in New York contributed to this story.
*feedback@livemint.com*

Restructuring deemed universities

Arun Nigavekar

DEEMED universities are in discussion once again. They became a point of dispute ever since they got de nova (or independent) status for accommodating information and communications technology (ICT) and computer education in the higher education domain in 1985. In the late 80s, ICT industries were grooming and also more freedom and liberty was given to industries in production, which enhanced demand for engineering education. Simultaneously, management education brought in a new stream altogether. A parallel change happened in medical education as well.

Neither the State Government Public University Act nor the Central University Act could match the growing demand in computer science and technology, management, engineering and medical education.

First, academic infrastructure could not match the demand pressure and secondly, both the state and central governments were locked with the general growth in education, which quenched their financial support in emerging ICT and other subjects. State governments, initially in Karnataka and then in Tamil Nadu and Andhra Pradesh, brought in the idea of self-financing discipline-oriented colleges affiliated to public universities. However, those who were the creators of first generation 'self financing' institutions immediately realised the high demands of parents and more freedom through deemed structures, and quickly switched over to a 'free and no-link' structure. By the second decade of the 21st century, deemed universities became the most profitable 'education industry' and by 2008,
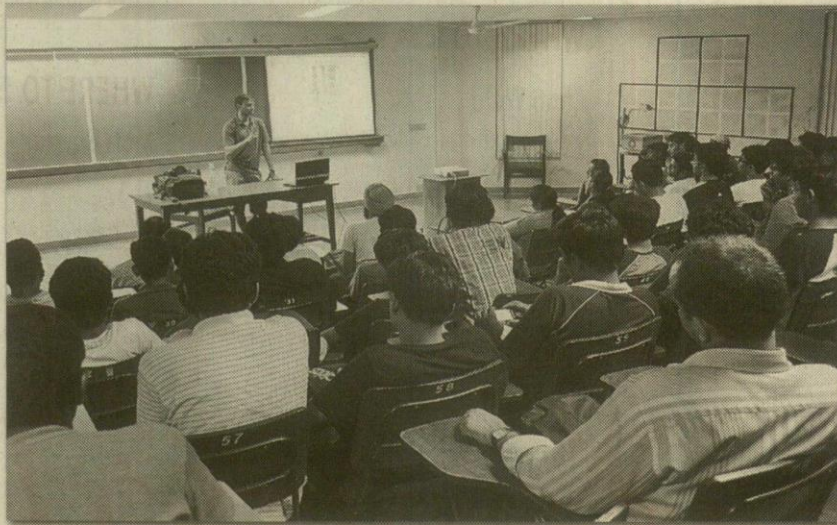
MATTER OF KNOWLEDGE: State governments, initially in Karnataka and then in Tamil Nadu and Andhra Pradesh, brought in the idea of self-financing discipline-oriented colleges affiliated to public universities

their number grew to 130. They were low quality product producers and there was a discreet flow of money amongst the sponsoring members. This is how the political entities became the masters of the higher education sphere.

The central government realised the misery of students and parents just a decade ago and appointed the Tandon Committee in October 2009. This committee examined all 126 deemed universities in the country and classified them into three categories — A, B and C. Universities that fell under category A got full clearance, while those under category B were given five years to improve their performance and the 44 universities in category C were asked to wind up their status alleging that apart from low level performance in delivery of education, they were being run as family fief-

doms rather than on academic considerations. The ministry of human resource development (MHRD) also took a decision to avoid jeopardising the future of nearly two lakh students enrolled in these universities spread over 13 states by allowing these universities to revert back as affiliated colleges of original universities. As expected, these universities went to the Supreme Court claiming that they had been harassed for no reason.

The University Grants Commission (UGC), in parallel, had become active while all this 'drama' between the MHRD and deemed universities was going on. They appointed expert committees to study each of the deemed university in terms of their academic, infrastructure and financial aspects. It is very interesting to note that many of those 44 universities had scored very high grades in

UGC's report. This allowed sponsoring agencies to further strengthen their argument of injustice to the Supreme Court. The UGC soon issued guidelines for creation and operation of deemed universities too. Apart from various aspects that were the focus of the Tandon Committee, UGC's guidelines also made it clear that a sponsoring authority member cannot become either a chancellor or vice chancellor. They desired that the deemed universities truly become academic entities. The MHRD appointed one more committee comprising the members of the Tandon Committee and four independent experts to look into all the issues that have emerged through the various Supreme Court orders and recommendations of the UGC committee.

Today, the struggle of deemed universities is still on when one studies the judicial

and executive proceedings in the battle between deemed universities and the Tandon Committee as well as the special committee of MHRD and UGC's 2010 guidelines.

The power of the Union of India to constitute the Tandon Committee is the central issue that is intensely litigated in the Supreme Court. Ever since this case was tagged with Vipalav Sharma versus Union of India (142 of 2006) during 2009, 24 interim orders have been delivered by the Supreme Court. Recently, it reserved a verdict on a batch of petitions on regulation of deemed universities and indicated that it would ask the UGC to reassess the standard of education in the 44 deemed universities which were sought to be de-recognised on the basis of the Tandon Committee's report. The Supreme Court also directed the centre to put on the internet the recommendations of the Tandon Committee and the task force on the basis of which the government had decided to de-recognise the 44 deemed universities in the country.

The 15-year litigation process in the vital higher education domain will continue. In all these years, all deemed universities must have changed and they would continue to change. The Supreme Court has given a great opportunity to UGC whose power to conduct a review flows from its parent Act. It must take clues from the court's exercise about its statutory duty and review all the deemed universities and sanitise the system. It just has 120 days to do this task to glorify its authority.

arun.nigavekar
@mydigitalfc.com
(The writer is former chairman of UGC, former vice-chancellor of University of Pune and founder director of NAAC)

A plan to transform higher education

By 2030, we need a system that delivers both excellence and inclusiveness

TV MOHANDAS PAI

Mahatma Gandhi while addressing the fourth FICCI AGM in 1931 had entrusted industry with the duty of being the trustees of society. By virtue of this, it becomes the moral responsibility of my generation to create a vibrant nation that is socially, economically and politically stable and prosperous.

This can be achieved only by educating and empowering our youth through a sound education system with a clear vision and a time-bound roadmap. We have seen our neighbouring countries like China, Korea and Singapore, transform from developing to advanced economies in a short span of time owing to a larger vision that correlated economic development to reforms in the education sector, in particular higher education and research.

Demographic dividend

In 2030, India is expected to be the fastest growing economy touching a GDP of $10 trillion and one of the youngest nations in the world with a median age of 32. The greying developed world is expected to face a skilled talent shortage of approximately 56 million by 2030 and is already looking at India as the future stock of skilled talent.

Hence, the responsibility of providing a skilled workforce to the world would rest on us, as one in every four graduates in the world would be a product of the Indian higher education system. This is an immense opportunity that could soon become a liability if we do not take corrective measures to make our education system responsive to our future needs.

In this context, FICCI has endeavoured to create a 'Vision 2030' for Higher Education in India. We need to bring in a revolution in the higher education system just as we did in telecom in the early 90s.

Vision 2030

We envision India as a largest provider of global talent, a global magnet for aspiring learners, and a role model for high-quality affordable educational system. The Indian higher education sector would be governed by the highest standards of ethics and accountability with every single institution being peer-reviewed and accredited.
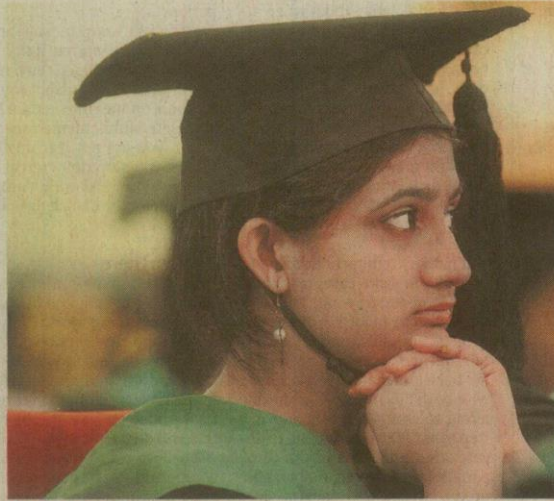
Fifty per cent of our youth would be in the higher education system, at least 23 Indian universities would be among the global top 200 and 6 Indian intellectuals would have been awarded the Nobel Prize.

Our country would be among top 5 countries globally in cited research output, its research capabilities boosted by annual R&D spends totalling over $140 billion.

In order to realise the goals we envision for 2030, we have to move to a differentiated academic system with a three-tiered structure comprising highly selective elite research universities, comprehensive universities and specialised institutions and an array of highly accessible and high quality colleges.

Three-tier system

While the first tier of universities would cater exclusively to furthering India's intellectual capital, the others would focus on delivering economic and social value, respectively. Our vision for each tier is illustrated below:

The top tier universities would develop as the centres of excellence for creation of new knowledge in multidisciplinary areas such as biosciences, the environment, climate change, material sciences, urban development, among other areas. The faculty and students would be a diverse mix of highly talented and research oriented groups with the ability to attract national and international research grants and funding and further collaborative research with top-rung universities around the world. These universities would also provide seamless access to high quality content and curriculum through open source such as

After this, what? India can be the largest provider of global talent K MURALI KUMAR

the Massive Open-Online Courses (MOOCs) model.

The second tier of industry-aligned professional education institutions needs to expand, producing highly employable graduates with technical know-how, critical thinking and problem solving skills. To correct the current model that promotes narrow specialisations, a freedom of choice coupled with a liberal arts component needs to be integrated within the curriculum. Engineering and professional graduates would take a comprehensive view, looking at the environmental, socio-economic, funding and regulatory aspects apart from the domain-specific issues. The focus of these institutions would be more on content delivery, where faculty borrows from the best open-courseware and cus-

tomises it to the needs of students. The faculty would be a mix of academics, researchers and industry professionals.

The last cluster of broad-based highly accessible foundation universities should be designed to expand the reach of higher education to all eligible and deserving students to address access and equity. They would provide holistic education to varied student populations with significant regional and linguistic diversity and gender profile. The institutions would rely heavily on online methods of teaching and learning, collaborate with ITIs, polytechnics and other vocational training providers to impart skill based training and offer both part-time and full-time options.

The system would enable seamless mobility of students, faculty, researchers and professionals across institutions of all types. It would offer the students a variety of unique and quality programmes at both the graduate and under-graduate levels and hone the natural flair of entrepreneurship in Indians.

Apart from solving the academic issues, planned expansion too is important. Our future cities should tightly integrate in their urban planning, creation of education cities where several universities are able to co-locate in a single campus and share the common facilities.

Campuses should be located in the heart of the cities and embedded in communities.

To make rapid progress in this direction over the next two decades would indeed require a committed and concerted effort from academia, industry, government and most importantly the student.

The writer is Chairman, FICCI Higher Education Committee

Data used for Yale study wasn't authentic: Centre

Jayashree Nandi |TNN

New Delhi: While Yale University researchers have claimed they couldn't find "reliable and accurate" air quality data from India, the Centre has expressed doubts over the veracity of satellite data Yale has used for Environment Performance Index 2014. System of Air Quality Weather Forecasting and Research under the ministry of earth sciences stated in a statement issued on Friday that the ranking should have been based on ground level data which gives an authentic picture of air pollution.

"The report does not consider any Indian ground-based measurements of air quality which is the most accurate method so far. Non-uniform and incomplete sampling by satellites have the potential of creating bias. Satellite samples are from one location at one particular time in a day. Since this technique does not have capability to take measurements during cloudy conditions when air quality is best in India, it cannot consider good data for that period," says a statement by SAFAR. "Sampling error of satellite-derived PM2.5 is larger in regions influenced by biomass burning, mineral dust, or persistent cloud. Hence, concluding something based on such uncertain factors may be seen with precaution," it adds.

Scientists at SAFAR told TOI that Indian agencies could have given the required data to Yale researchers if they had asked. They,

CAPITALS ON WATCH

INDIA

➤ Real time monitoring only in Delhi, Kolkata, Mumbai, Bangalore, Faridabad, Lucknow, Kanpur, Patna, Ahmedabad, Chennai and Hyderabad

➤ PM10 being monitored in most cities but not PM2.5

➤ CPCB claims it has 342 operating stations in 127 cities and 4 UTs

➤ CPCB claims to monitor sulphur dioxide, oxides of nitrogen, SPM and RSPM/PM10

CHINA

➤ Manual monitoring stations outnumber online monitoring stations. These give conservative readings and are not as reliable

➤ China started releasing hourly and 24-hour data for PM2.5 in 113 major cities at end of 2013

➤ It has a goal of increasing the number of monitoring sites to 1,500 cities by 2015

➤ China has a $277 billion dollar air pollution control plan

PM = Particulate matter; PM = Suspended particulate matter; RSPM = Respirable suspended particulate matter

however, did not deny that air quality was indeed very poor in India.

Angel Hsu, lead author of EPI, clarified that they have used only satellite data for assessment. "We produce country-level aggregations of average exposure to fine particulate matter (PM2.5) using satellite data processed by research teams at Yale, Columbia, and Dalhousie Universities," Hsu said.

Many agreed with Yale researchers, though, on lack of reliable air quality data in India.

"We have real time moni-

toring only for major cities but it has to be implemented in Tier II cities. Our manual monitoring stations outnumber automatic ones which is why the data eventually reported is not credible and often conservative. However, Delhi is now in position to replicate robust monitoring like that of China by including an air quality index and a health advisory. They should do it soon," Anumita Roychowdhury, head of air pollution and clean transportation programme at Centre for Science and Environment, said.

Govt sets up 7th pay panel

Recommendations May Come Into Force From Jan '16

TIMES NEWS NETWORK

New Delhi: The government on Tuesday set up a four-member seventh central pay commission headed by former Supreme Court judge Justice Ashok Kumar Mathur.

While the pay panel was announced in September, the government said its composition was now cleared by PM Manmohan Singh.

Apart from Justice Mathur, the other members include petroleum secretary Vivek Rae, who is due to retire later this month, National Institute of Public Finance and Policy (NIPFP) director Rathin Roy and Meena Agarwal, who is currently in the finance ministry.

The appointment of the pay

While the commission was announced in September, the govt said its composition was now cleared by the PM. Ex-SC judge A K Mathur will head the panel

commission, usually a major drain on the exchequer, comes weeks before the announcement of the general elections and is seen as a ploy to woo nearly 80 lakh central government employees and pensioners.

A pay commission is set up every 10 years to review the salary of central government employees to take into account the impact of in-

flation and cost of living.

In September, the finance ministry had said that the average time taken by a pay commission has been about two years and taking this into account, the recommendations of the panel are likely to be implemented from January 2016.

Apart from increasing the pay scales the panel will also look at other suggestions related to working conditions and may also review the retirement age, which currently is at 60 years. There is widespread demand to increase the retirement age to 62, although the move will force the government to defer hiring. The terms of reference of the seventh pay panel are, however, yet to be made public.