Newspaper Clips October 9, 2014

HT.COM ND 09.10.14 P-10



■ Indian universities will be ranked in comparison with peer universities and the system is likely to be ready by next year.

Panel working on a ranking framework for universities

HT Correspondent

he human resource development ministry has proposed the formation of a committee that will work on developing a framework for India-specific rankings. "Indian universities (and colleges) will be ranked in comparison with peer universities/colleges. Foreign universities/colleges will be included in this. The parameters and factors will be selected based on what is relevant for bachelor's and master's programmes, research programmes, and for different disciplines such as sciences, engineering, medicine, law, liberal arts, fine arts, etc. The Indian ranking system is proposed to be ready by next academic year," says Professor Bhaskar Ramamurthi, director, IIT Madras.

Elaborating on the need for an Indiaspecific ranking, Ramamurthi says: "We need such a system because our higher education institutions are organised discipline-wise and not as comprehensive universities, unlike in most other countries. We have a vast network of affiliated colleges and their quality of bachelor's and master's degrees matter more than the universities they are affiliated to. We do not have a policy of encouraging foreign students and foreign faculty at present. Existing ranking systems are suited for globalised comprehensive universities with a foreign student population and employer footprint."

The India rankings should be conceived to serve as a tool that empowers young people to

THE PARAMETERS FOR INDIA SPECIFIC RANKING WILL BE BASED ON WHAT IS RELEVANT FOR BACHELORS, MASTER'S AND RESEARCH PROGRAMMES

make more informed choices about the study options available to them, say experts. "The rankings must grade institutions based on particular criteria that are most applicable to Indian higher education. The aim should be to give students a truly independent assessment of the strengths of institutions," says Karthick Sridhar, founder, ICAA.

ICAA has been invited by the Karnataka government to design a framework to rate all the universities in the state. "A committee comprising the higher education secretary, academic leaders and vice chancellors are discussing the framework. Some of the factors that will be considered and those which do not yet feature in the global rankings are: inclusiveness and social impact; governance and administration; patents filed and received; accreditation; infrastructure; class diversity etc. Universities will be invited to submit the necessary data and a robust analysis will be done to arrive at the ratings. The model will be on the lines of global rankings so that the ratings could be used to perform better at a national, BRICS, regional and global level," explains Sridhar.

HT.COM ND 09.10.14 P-10



Business Standard ND 09/10/2014 P-7

NOBEL PRIZE FOR CHEMISTRY

Award for seeing how life works at molecular level







(From left) American scientists Eric Betzigand William Moerner and Germany's Stefan Hell. PHOTOS: AP/PTI

REUTERS

Stockholm/London, 8 October

A German and two American scientists won the 2014 Nobel Prize for Chemistry on Wednesday for smashing the size barrier in optical microscopes, allowing researchers to see individual molecules inside living cells.

US citizens Eric Betzig and William Moerner and Germany's Stefan Hell won the prize for using fluorescence to take microscopes to a new level, making it possible to study things like the creation of synapses between brain cells in real time.

"Due to their achievements the optical microscope can now peer into the nanoworld," the Royal Swedish Academy of Sciences said as it awarded the 8 million crown (\$1.1 million) prize.

Scientists, who have been looking down microscopes since the 17th century, had long thought there was a limit to what could be seen. In 1873, Ernst Abbe stipulated that resolution could never be better than 0.2 micrometres, or around 500 times smaller than the width of a human hair.

But the three Nobel winners bypassed this limit by tagging objects

with fluorescent markers and scanning them to build up a far more detailed images. Today, such "nanoscopy" is used widely to visualise the internal molecular machinery of cells.

"This is very, very important to understanding how the cell works and understanding what goes wrong if the cell is diseased," Hell told a news conference by telephone after learning of the award.

Modern nanoscale microscopes can follow protein interactions involved in diseases like Alzheimer's, Parkinson's and cancer, or watch the transcription and translation of DNA to make proteins, or track the development of fertilised eggs as they divide and become embryos. The previous limit meant optical microscopes could see objects about the size of the smallest bacteria, but not the detailed workings of individual components inside cells.

Light is a common theme of both this award and the Nobel Prize for Physics, which was given on Tuesday for advances in low-energy light-emitting diodes.

OPINION, P11
EDIT: Blue light

Blue light

Why companies should pay attention to this year's physics Nobel

he Nobel Prize for physics has been announced, and it has gone to three researchers of Japanese origin for their work on blue light-emitting diodes, or LEDs. Blue LEDs were invented decades after red or or green LEDs, which came out in the 1960s. Once blue LEDs were developed by Isamu Akasaki, Hiroshi Amano and Shuji Nakamura in the 1990s, a revolution in lighting and in personal electronics became possible, since the three kinds of LEDs could together produce any colour — and also white light. Those reading this newspaper on a smartphone should thank the three scientists; so should those who use small LED lights in their home.

It is not a coincidence that the impact of the work rewarded by this year's physics Nobel is immediately understandable — not something that has always been the case. Explaining the Higgs boson – the insight underlying last year's prize – is not easy. But LEDs are. And this reveals something perhaps about the underlying dynamics of basic research, and about the push-and-pull between the more applied and the purer forms of physics. This is a reward for deep insight into physics that was produced with a specific tangible problem in mind. More, it was a problem to which a price tag was attached – and so for the first time in a long while, a physics prize has been awarded for work conducted while at a private company – Dr Nakamura made his breakthrough while working for a small company called Nichia Chemicals. Indeed Dr Nakamura was given only a tiny bonus for his invention; he had to sue to get the money due him. Even Professor Akasaki – decades older than his co-laureates – conducted most of the work that led to the discovery of blue LEDs at Matsushita, before it became Panasonic.

This is a throwback to a different time, when the best brains in the world worked in what British prime minister Harold Wilson called the "white heat of the technological revolution". In the 1950s, work was awarded – the transistor – that had been conducted at Bell Labs. And in the 1970s, work at Sony, General Electric and the British General Electric Company was rewarded. And then, nothing. In 2000, Herbert Kroemer's work on semiconductors at RCA in 1957 was finally recognised; and so was Jack Kilby's work at Texas Instruments on microprocessors. Private companies have a long history of supporting cutting-edge research, but one that has perhaps atrophied in recent years. This award will hopefully be a reminder that research does not have to happen only in universities. And although work done at companies has been awarded before, the 2014 prize is definitely a first in one way: Nichia, when Dr Nakamura did his work there, was not a giant company, but a small one, taking a risk on an untested technology. Perhaps that is where the future of physics lies.

Asian Age ND 09/10/2014 P-6

Nobels to appreciate

often seem esoteric for the layman to truly appreciate the discovery or invention. This year's prize for physics is quite different in that everyone can understand the nature of the invention as its application has brought a noticeable improvement to everyone's lives. Blue-light LEDs transformed lighting to such an extent that the white-light LEDs they made possible are not only easy on the eye but are also energy efficient enough to fulfil the promise of saving the world a good deal in terms of carbon footprint.

There is also a bit of folk-tale heroism. One of the recipients, Dr Shuji Nakamura, battled on individually and in collaboration with his colleagues Isamu Asaki and Hiroshi Amano to make the breakthrough on which the Blu-Ray laser DVD players also work. However, his blue LED project was first considered so uninspiring that his company told him he could pursue it only in his leisure time. Breaking a Japanese taboo, Nakamura was later to sue his company since his invention is thought to have been commercially worth at least \$500 million, but he settled for \$8.1

million.

That the doctors who mapped the brain's GPS were awarded the medicine Nobel and the scientists who fine-tuned optical microscopy won the chemistry Nobel will also be appreciated. The bonus of the story of a saint not being honoured in his own land — he was offered a paltry \$200 for his invention — but going to on to conquer the world lends a nice touch to this Nobel season.

Hindu ND 09.10.14 P-1

Common entrance for Central varsities likely

Vijetha S.N.

NEW DELHI: Soon, all Central universities might have a common entrance exam for their under-graduate and post-graduate courses. They may also get a common syllabus and a central ranking system. These proposals are part of recommendations that may soon be made to the Union Human Resource Development Ministry by seven Central university ViceUniversities may also get a common syllabus and a central ranking system

Chancellors, who met in Delhi University recently.

"Delhi University had organised a conclave of seven Vice-Chancellors who serve on two committees that are supposed to come up with a set of recommendations for evolving an India-centric at an international level. ranking system, and common entrances as well as a common curriculum for all Cenuniversities. The committees will make their recommendations very soon," said DU media co-ordinator Malay Neeray.

He added that the recommendations for a ranking syswould include parameters in tune with the needs and strengths of institutions and yet be acceptable

According to the recommendations, the "common curriculum" national meant to facilitate student mobility and credit transfers. This means that with a common syllabus, it could help students migrate to other universities. This could also mean that students might be able to take courses and get credits in one university while being enrolled in another.

Tribune ND 09/10/2014

State govt flouts UGC norms, relaxes recruitment criteria

GAGAN K TEJA

In violation of the norms of the University Grants Commission (UGC), the state government has issued a notification that allows candidates. who have enrolled for a Doctor of Philosophy (PhD) degree or obtained it prior to December 31, 2009 as per old norms, to apply for the post of lecturer/assistant professor. These aspirants have also been exempted from clearing the National Eligibility Test (NET).

As per the UGC norms amended in 2010, only candidates, who have either cleared the UGC/NET or obtained a PhD degree as per the new guidelines, can be considered for the post of lec-

TRIBUNE NEWS SERVICE AT ANALYSIS THE ISSUE at hand

- PATIALA, OCTOBER 8 Allows candidates, who have enrolled for a PhD degree or obtained it prior to 31.12.2009 as per old norms, to apply for the post of assistant professors
 - They have also been exempted from clearing the NET

turer/assistant professor. The new guidelines stipulate that a candidate should have enrolled for PhD after clearing an entrance test; must have finished a six-month regular course work before doing his/her PhD; and should be evaluated by an external examiner.

Though the universities in the state started conducting

New UGC guidelines

- The new guidelines say a candidate should have enrolled for PhD after clearing an entrance test
- He must have finished a six-month regular course work before doing his/her PhD
- He should be evaluated by an external examiner

the entrance test and got the students evaluated externally, they ignored the guidelines laid down for holding fresh recruitment.

Various universities, includ-Punjabi University, recruited around 55 teachers in the past four years as per the old norms. Following this, the Audit Department had even refused to clear the

salaries of these new faculty members. This recent notification of the state government has irked several senior professors at various universities. They allege the government and the universities relaxed the norms to recruit their "favourites".

The Delhi HC had upheld the UGC 2009 norms during a verdict in December 2010, stating that the regulations were issued to serve as a common vardstick. Prof (Dr) Jaspal Singh Sandhu, UGC Secretary, could not be contacted. Registrar Dr Devinder Singh said they relaxed the norms keeping in view the fact that many teachers had either completed their PhDs or were on the verge of finishing these before the new guidelines were issued.

IIT-K proposes IEP in Lucknow

http://timesofindia.indiatimes.com/city/kanpur/IIT-K-proposes-IEP-in-Lucknow/articleshow/44725379.cms

KANPUR: The Indian Institute of Technology-Kanpur has conceptualized an Innovation and Entrepreneurship Park (IEP) in Lucknow for which 20 acres of land has been demanded from the UP government. The park would primarily help unskilled workers employed in various industries to learn technical knowhow. The industry and the MHRD have already pledged financial support to the park.

The concept behind this initiative is to provide factory/industry employees a chance to not only get their skills honed, but also come forward to opt for entrepreneurship. At IEP, the factory employees will be provided with basic machinery and equipments. For example, a technical staff at a leather unit or someone engaged in making handicrafts would be provided these facilities to produce a quality product.

A proposal for setting up the park and need for land for the purpose was sent to the state government four months back but till date there has been no response. The institute has now decided to make a fresh initiative to pursue the matter with the government next week, said Prof B V Phani, associate dean of Innovation and Incubation at IIT-Kanpur.

"The institute plans to set up IEP in Lucknow somewhere close to the airport for which a proposal had been sent to the state government but there has been no reply. On Monday, the matter will be discussed with IIT-K director Prof Indranil Manna and Prof Manindra Agarwal and then pursued with the government," said Prof Phani.

Elaborating the objective behind setting up IEP, Prof Phani said, "We also need to pay back the society. For this, one aspect would be to train people employed in leather, sugar and various other factories in UP and hone their skills. They, with the help of basic machines and equipments which they otherwise cannot purchase, will be able to produce quality products. At the same time those with entrepreneurial interests will be provided with support to opt for entrepreneurship. We will provide them will space upto 1,000 square feet in the park to set up offices and work from there for a maximum period of three years."

He added that if land for this purpose is close to the Lucknow airport, the high-quality product could be exported as well.

Prof Phani also said that the IIT-K does not need anything except that government gives it a contribution of Rs 50 crore in the form of land for setting up the park. As soon as the land is provided to us, we will soon begin with the work, he said.

For developing the entire park, Rs 50 crore will be contributed by IIT-K, Rs 75 crore by the industry and Rs 100 crore by the Union ministry of HRD. In the next three years from the time of allotment of the land, the IEP will start functioning completely, said the IIT-K professor. He said that in one year the basic operations will begin at IEP.

IIT-M tool to detect driver fatigue to hit roads soon

Driver fatigue is one of the main reasons for accidents, the state transport corporation has realized, and IIT-Madras has developed a tool to help detect fatigue behind the wheel.

The tool was developed early this year and the government wants to test it on the road. "We are looking to test it on around 50 drivers from MTC (Metropolitan Transport Corporation) and see if it works," said an official from Institute for Road Transport (IRT). "We will draw up a schedule this week and see if we can install the system in the vehicles."

The mechanism works by keeping a tab on the muscle grip, brain activity and body pressure distribution. "The system has ECG and EEG that continuously monitors the driver's brain activity," said a professor involved in the project. "The challenge is to bring it from the lab to the road," he said. The monotony of highways, punishing work schedule and stress of driving in the city tires drivers mentally and physically. When the driver is fatigued, his body redistributes the work to ease his tired muscles. The tool developed by IIT-M will detect this change in grip and sets off an alarm. The sensors can be embedded in the seat or the steering wheel.

If the project is successful, it could be scaled up to the entire fleet. Tamil Nadu government buses are the largest killers in the country. According to National Crime Records Bureau, 1,175 people in TN died in accidents involving government buses, the highest in the country in 2013. They account for 17% of all fatal accidents caused by government buses in the country. Andhra Pradesh comes a distant second with 700 deaths.

Given these figures, government officials feel it is important to track driver fatigue. Critics and transport employees unions, however, say that the reason for fatigue is well known--shortage of drivers, long routes and longer hours of work. These have to be changed before bringing in technology, they say.

"The time charts are unrealistic. They do not take into account the actual time it takes to drive in the city," said D Nagasaila, an advocate practicing at Madras high court who represents state transport employees. "All this adds to the fatigue of the driver. The system has to be revamped."

Officials in the secretariat agreed with this but said the new technology would help too. "The system has to be improved but this new technology addresses immediate needs of trying to minimise accidents caused by fatigue," said an official.

NBCC gains on Rs 338 crore constructions order from IIT Kanpur

http://www.business-standard.com/article/markets/nbcc-gains-on-rs-338-crore-constructions-order-from-iit-kanpur-114100800093 1.html

The stock was up nearly 2% at Rs 648 on National Stock Exchange.

Shares of National Buildings Construction Corporation (NBCC) were trading higher by nearly 2% at Rs 648 in early morning deals on National Stock Exchange (NSE) after the company said it has received constructions order worth of Rs 338 crore from IIT Kanpur.

"<u>IIT Kanpur</u> has awarded to NBCC, project management consultancy work for major construction works such as engineering core lab, research complex (phase-I) and retrofitting of <u>Aerospace Engineering</u> block multistoried building for Rs 337.97 crore," <u>NBCC</u> said in a regulatory filing.

The stock opened at Rs 640 and touched high of Rs 650 on NSE. A combined around 93,000 shares changed hands on the counter in first 10 minutes of trade on NSE and BSE.

Research Team at IISc Develops Innovative Waterproof Surface

http://www.newindianexpress.com/states/tamil_nadu/Research-Team-at-IISc-Develops-Innovative-Waterproof-Surface/2014/10/08/article2467047.ece

BANGALORE: Researchers at the premier Indian Institute of Science (IISc) have developed an artificial surface that can retain its water repellant properties even when kept immersed.

The research team was also able to find a way to control the duration for which the water repellant property was maintained. They were also able to demonstrate that resistance to water flow past the surface is reduced. This can result in diverse applications like better printers and efficient and cheap blood testing.

The paper appeared in the international journal Colloids and Surfaces A: Physicochemical and Engineering Aspects last week. Such materials work because they have special structures on their surface that trap tiny pockets of air.

These tiny air pockets allow water to flow without coming in contact with the surface, and thus flow with reduced resistance. However, if the surface stays in contact with water for a long time, the air dissolves in water, just like in an immersed lotus leaf, and the water-repellent property vanishes.

Prof Bobji MS, an Associate Professor at the Department of Mechanical Engineering, IISc, and his team have discovered a novel way to control the duration for which the air pockets can stay alive longer. The team exploited the fact that the solubility of air in water depends on pressure. At low pressure, water cannot dissolve gases easily -- this is why soft drink bottles are pressurised to keep the carbon dioxide dissolved.

The team has shown that by lowering the pressure, they can even supply air to these pockets, thus prolonging the effect. Prof Bobji says, "What we have demonstrated is that even bubbles of 0.3 mm can be sustained for longer than five hours easily with our "air pump" methodology, resulting in drag reduction of up to 20 per cent." Efforts are now under way to create large surfaces with similar properties. If successful, submarines that can travel with little effort can be a reality.

Pioneer ND 09/10/2014 P-5

State can't deny approval to institute having AICTE clearance: Supreme Court

PNS NEW DELHI

In a decision that is bound to streamline setting up of technical educational institutions in the country, the Supreme Court recently held that any college or institution that gets clearance from the AICTE cannot be denied affiliation by a State Government or its affiliate University.

The bench of Justices J Chelameswar and AK Sikri held that the exclusive right to grant approval for starting new technical institutions or introduction of new courses in this field is vested with the AICTE under the AICTE Act 1987. In the event, the state government spots any shortcoming to deny affiliation to an institute or body already approved by AICTE, "the only course of action available for the respondent (State) is to bring the shortcomings noticed by them to the notice of the AICTE and seek appropriate action against the said college."

Under the prevailing system, an institute or college imparting technical courses was left at the mercy of the state University for grant of affiliation despite the All India Council for Technical Education (AICTE) certifying it to be fit for setting up or running the professional courses.

The Court was faced with a similar instance from Chhattisgarh where despite getting AICTE approval, a Bhilai-based engineering college was refused affiliation by the Chhattisgarh Swami Vivekanand Technical University, established under State Act.

Interestingly, the University cited a host of objections to disqualify the college without realising that on all these counts, the AICTE had inspected the college and found it to be matching the requisite standards. Due to clash of views, the college initially admitted students in 2013-14 batch but half-way through failed to get affiliation from the said University.

Spotting this dichotomy, the bench felt it appropriate to vest authority with AICTE and allowed it full freedom and authority to grant approval to colleges. Once this stage is over, state governments and Universities will have to offer affiliation or at best point out the shortcomings to AICTE for appropriate action.

Asian Age ND 09/10/2014 P-4

GPS, biometric-enabled ultrasound machines built

AGE CORRESPONDENT NEW DELHI, OCT. 8

In a first of its kind effort. the IIT Hyderabad has developed a built-in biometric authentication and GPS tracking for ultrasound machines. This means that users have to be registered to operate a particular machine and have to provide biometric authentication — fingerprint/retinal scan to be able to use the machine. The machine also has a built-in GPS tracker so that its whereabouts can be tracked at any time. Experts say this could be a novel solution to the problem posed by handheld' (portable) Ultrasound Machines used for conducting sex determination tests. which are rampant and illegal in India.

The project is a part India-UK Advanced Technology Centre (IU-ATC), a collaboExperts say that they are ready with a first of its kind ultrasound machine that can be boon for a country like where sex determination is a major problem

rative programme funded by the UK's Engineering and Physical Sciences Research Council, India's Department of Science and Technology (DST) industrial partners in both countries. With an aim to develop solutions that can scale to benefit the lives of millions of users as well as the Digital Economy in both the UK and India. UK had in 2012 announced £10 million funding for the joint research project with Indian Institutes to boost India's Internet capabilities with rural access to broadband and health monitoring systems.

Experts say that they are ready with a first of its kind ultrasound machine that can be boon for a country like where sex determination is a major problem.

"While, the commercially available machines are not open for research. We started designing our own ultrasound system in 2012. The state-of-the-art machine is now ready with in-built biometric system, wireless connectivity. It is more secure at the device level. It has a GPS tracking within which makes it known where the device is being used," Prof. P. Rajalakshmi of department of electrical in IIT. engineering Hyderabad said.

The trials have been done at the lab level, however experts want to take it forward with the health min-

istry.

Times Of India ND 09/10/2014 P-19

Study finds proof of 'life after death'

Man Gives 'Credible Account' Of 3-Min Experience Observing Bid To Revive Him

Kounteya.Sinha@timesgroup.com

London: Life after death - at least for a little while—is for real. British scientists have confirmed such evidence in the largest ever medical study carried out on the subject. Experts currently believe the brain shuts down within 20 to 30 seconds of the heart stopping beating — and that it is not possible to be aware of anything at all once that has happened. But scientists in the new study said they heard compelling evidence that patients experienced real events for up to three minutes after this had happened and could recall them accurately once they had been resuscitated.

Dr Sam Parnia, an assistant professor at the State University of New York and a former re-search fellow at the University of



OUT-OF-BODY EXPERIENCE IS REAL?

Southampton who led the research, said that recollections in relation to death, so-called out-ofbody experiences (OBEs) or neardeath experiences (NDEs), have frequently been considered hallucinatory or illusory in nature.

One man, however, gave a "very credible" account of what was

going on while doctors and nurses tried to bring him back to lifeand says that he felt he was observing his resuscitation from the corner of the room. Speaking about the evidence provided by a 57-year-old social worker, Parnia said: "We know the brain can't function when the heart has stopped beating. But in this case, con-markers for the first time to deterscious awareness appears to have continued for up to three minutes. The man described everything that had happened in the room, but importantly, he heard two bleeps from a machine that makes a noise at three minute intervals. So we could time how long the experienced lasted for He seemed very credible and everything that he said had happened to him had actually happened."

In 2008, a study involving 2,060 patients from 15 hospitals in the UK, US and Austria was launched. The AWARE (Awareness during Resuscitation) study, sponsored by the University of Southampton, examined the broad range of mental experiences in relation to death. Researchers also tested the validity of conscious experiences using objective mine whether claims of awareness compatible with out-of-body experiences correspond with realor hallucinatory events.

Thirty-nine per cent of patients who survived cardiac arrest and were able to undergo structured interviews described a perception of awareness, but did not have any explicit recall of events. Among those who reported a perception of awareness, 46% experienced a broad range of mental recollections in relation to death that were not compatible with the commonly used term of NDEs. These included fearful experiences. Only 9% had experiences compatible with NDEs and 2% exhibited full awareness compatible with OBEs with explicit recall of seeing and hearing events. (With input from The Independent)

Tribune ND 09/10/2014 P-1

95% aspiring teachers flunk all-India eligibility test

ADITI TANDON

TRIBUNE NEWS SERVICE

NEW DELHI, OCTOBER 8

As many as 95 per cent teaching aspirants in the country have flunked the all-India Central Teacher Eligibility Test (CTET) meant to assess their knowledge and instruction abilities.

That's hardly an improvement over the test conducted earlier this year in which 98 per cent candidates had failed to display minimum eligibility to become teachers. Most of these candidates hold B Ed degrees, calling into question the quality of teacher education being imparted in universities.

The CBSE, which holds the CTET twice every year, has computed the results for its latest test held recently for the entire country, except Jammu and Kashmir. While only 11.95 pc candidates (24,629 out of

Shocking results

- Only 11.95 pc candidates (24,629 out of 2,06,145) cleared paper 1 compulsory to be cleared by those wishing to teach primary level classes
- A shockingly low 2.80 pc passed paper II, the eligibility test for those interested in teaching classes VI to VIII
- Overall pass percentage this year is 5.63 with only 37,472 candidates clearing the two papers out of the 6,65,413 who took the test

2,06,145) managed to clear paper 1 compulsory to be cleared by those wishing to teach primary level classes. a shockingly low 2.80 pc passed paper II, the eligibility test for those interested in teaching classes VI to VIII. These eligibilities were defined under the Right to Education Act. minimum 2010 to set benchmark for teaching and to improve learning outcome of students.

No improvement has been noticed in the results.

As per the law, anyone who wants to teach in a Central

government school must clear the CTET. States can recruit teachers through CTET or their own tests. Delhi for instance follows CTET.

Overall pass percentage in TET this year is 5.63 with only 37,472 candidates clearing the two papers out of the 6,65,413 who took the test. The CBSE has failed to improve test results despite working on the difficulty levels of the test introduced in 2011 and holding the tests twice every year. The test validity is seven years post which a candidate must reappear.

Economic Times ND 09/10/2014 P-12

POINTS TO PONDER TO

Textbook Anachronism



Bibek Debroy

Every once in a while, an inter-country ranking of universities surfaces and it is discovered that India doesn't do particularly well. The recent 2014 QS rankings are a case in point. If you leave aside the IITs, the Indian performance is more dismal. Not that one should be obsessed with a specific ranking. But if all rankings show a similar picture, there is robustness in the finding.

In fairness, in all such rankings, substantial weights are attached to perceptions, through surveys. These are subjective and react with time lags. Substantial weights are also attached to international faculty and students. These, too, react with time lags, although both the Chinese and Singaporean experiences show it is possible to target these so as to improve rankings.

Other than faculty-student ratio, this leaves faculty evaluation based on papers and citations. Stated differently, good teaching is equated with research capability—also accepted by the University Grants Commission (UGC) since the mid-1970s. Especially for undergraduate teaching, this is a tenuous correlation.

Good teaching requires certain skill sets and good research a different set of skills. The two may intersect, but they aren't synonymous. I can personally think of several excellent teachers in economics who have done precious little in research. Familiarity with research is one thing

(certainly required for postgraduate teaching). Undertaking research oneself is another.

Leaving that aside, India's higher education is a multilayered mess. There are central universities, deemed universities, universities under state legislatures, distinctions between single-/multi-campus universities and between unitary and affiliating ones. There is technical education, not to speak of the Bar Council, the Medical Council and assorted other councils and bodies. If you add up all the 'universities', the figure is 682: 321 state, 129 deemed, 45 central and 187 private. This excludes IITs, IIMs and autonomous universities that can grant degrees.

We should have more than 700 'degree'-awarding institutions, with a sharp rise in recent years in deemed and private segments. The number of 'colleges' has also increased to almost 35,000 and enrolment in higher education is approaching 20 million. I wish to make a broad point. So



Still all up in the air

please don't pick holes in the backof-the-envelope number.

Including colleges, there are probably 36,000 higher educational institutions. Even with a 20-million figure, that's 555 students per educational institute. Whatever be the nature of the 'college', there is no reason why it shouldn't be able to handle 1,000 students. Indeed, the threshold should be more like 5,000. As numbers stand, in that macro sense, there is excess capacity. No wonder reports appear about colleges with teachers, but with no students. In other words, there is great variation in quality. That explains the micro excess demand for better colleges and universities, and students heading off abroad.

Why do IITs and IIMs perform better compared to the 'average' university? There are multiple reasons. For instance, if the entry bar is set sufficiently high, the exiting product won't be inferior. However, I would recommend a parallel reading of the UGC Act of 1956 and the IIT Act of 1961, separated only by five years. The UGC Act is riddled with government interference, while the IIT Act is relatively free.

How many households, even among the poor, send their children to government schools now, Kendriya Vidyalayas notwithstanding? Given an option, the preference is for private schools. It can be argued that what we have seen in school education—choice, competition, quality—and some kinds of technical education, will now be witnessed in higher education, with a time lag. But there are caveats to that argument.

First, higher education is not a public good, even if there are positive externalities. It is indeed a merit good, warranting public subsidisation (scholarships) for poor students who cannot afford it otherwise. But that's no argument for the present across-the-board kind of subsidisation, and public policy still refuses to accept this.

Second, there is an important difference between regulation and licensing control. There can be no quarrel with regulation that is in the nature of disclosure, almost like disclosure norms for companies. What is the fee structure? What are the qualifications of faculty? What is the institute spending its money on? What is the placement record? For that matter, what's wrong with making profits? If profit-making is illegal, siphoning-off will only be done in an underhand way. Using different language, regulation should primarily be about outputrelated variables. Instead, we get fixated on syllabi and methods of teaching, so-called input-related variables. That's the control mode.

There are any number of reports on higher education, the National Knowledge Commission being one example. Read the 1947 report on university education by the Radhakrishnan Commission, or the 1966 report of the Education Commission. But we will continue to go round and round in circles until the HRD ministry, the UGC and the All India Council for Technical Education (AICTE) accept the new mandate.

In 1956, the UGC Act was "to make provision for the coordination and determination of standards in universities and, for that purpose, to establish a University Grants Commission". Today's purpose is different.

For a different view, read ThinkProgress' "This Country Just Abolished Tuition Fees' at thinkprogress.org/education/2014/10/01/3574551/germany-free-college-tuition/

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It's official: World has more mobiles than people

Zachary Davies Boren

are more gadgets in the world than there are people, including a growing number that only communicate with other machines, according to data from digital analysts at GSMA Intelligence. The number of active mobile devices and human beings crossed over somewhere around the 7.19 billion mark.

As of today, GSMA's realtime tracker puts the number of mobile devices at 7.22 billion whilst the US Census Bureau says the number of people is still somewhere between 7.19 and 7.2 billion. Gadgets like tablets, smartphones and not-sosmart phones are multiplying five times faster than we are, with our population growing at a rate of about two people per second, or 1.2% annually. "No other technology has impacted us like mobile. It's the fastest growing manmade phenomenon ever .- from zero to 7.2 billion in 30 years," said Kevin Kimberlin, chairman of Spencer Trask & Co. THE INDEPENDENT

'Agnee' to 'set afire' IIT-K campus today

http://timesofindia.indiatimes.com/city/kanpur/Agnee-to-set-afire-IIT-K-campus-today/articleshow/44725282.cms

KANPUR: IIT-Kanpur's annual cultural extravaganza - Antaragni - will be off to a grand start on the institute campus on Thursday with a formal inauguration ceremony followed by live performance by 'Agnee' band. Special light and sound system has been put up at the open auditorium for the gala.

Hundreds of students from scores of institutes across the country started arriving on the campus from Wednesday afternoon itself. The number is likely to swell considerably on Thursday with the start of various events and competitions. The arrival of participants lent a sense of urgency to the organizers who were busy giving final touches to the four-day fest.

Most of the participants arriving in the institute were seen rehearsing and practicing for various competitions. While a few indulged in playing guitar, a group was busy rehearsing its play. A few others decided to take a stroll on the campus to "get a feel of the premier technical institute." Most of them were captivated by the ambience of the campus and felt that Antaragni would be a power-packed event. Interestingly, many of the participants preferred to take a rest on the campus itself.

The arrival of participants enthused life into the beautifully decorated Student Activity Centre. A light and sound system too has been set up for 'nukkad nataks' (street plays) on the campus. A beautifully decorated stage too has been prepared for informal events.

Apart from a food court, a lounge too has come up where students will get a chance to satiate their taste buds and indulge in merriment.

Colourful umbrellas hanging upside down created a mesmerizing aura in the SAC area. Several students were busy in wall paintings lending colours to every fancy associated with the event.

Akansha, a student from Delhi University, was busy playing guitar. She told TOI: "I will participate in guitar playing competition so am busy practicing." Other students too were brimming with excitement. As the four days of hard labour, fun and frolic would kick off on Thursday.