

Newspaper Clips

May 16, 2011

Hindustan Times ND 16/05/2011

P-8

IITs correct JEE error, sparks more confusion

BLUNDER Tech institutes have tried to address some errors, but students who skipped questions fearing negative marks will suffer

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NEW DELHI: The Indian Institutes of Technology (IIT) on Sunday admitted that question papers in their Joint Entrance Examination held last month had errors worth a mammoth 36 marks that could critically affect admission chances thousands of meritorious candidates.

The IITs have offered marks in three questions to all of the 4.8 lakh candidates who appeared for the exam. But they are likely to face uncomfortable questions from parents and students over the remaining erroneous questions, where the IITs awarded marks to some students and not to others.

The biggest sufferers of the errors and the attempt by the IITs to correct them are those students, who, on finding some-

SOME QUESTIONS HAD TYPOGRAPHICAL MISTAKES, OTHERS WHICH WERE SUPPOSED TO HAVE ONE CORRECT ANSWER, HAD MANY

thing wrong in specific question-and-answer combinations, left these questions because of negative marking for incorrect answers.

The 28 marks worth errors in math are more than the cut-off in the subject for the past four years - 1, 5, 7 and 11 - revealing the scale of the problem. The cut-offs for physics - where the 2011 JEE had eight marks worth errors - were 4, 0, 8 and 19 for general candidates over the past four years.

The magnitude of the impact

of these errors can be gauged from the statistic that just 85 marks - or about three times the math errors of 28 - separated the math score of the 2010 JEE topper and the last selected student, several thousands of ranks below.

The multiple-choice examination consisted of two question papers.

The first paper had 16 marks worth errors in four math questions, and another error in a four mark physics question.

The second paper also had a four mark physics question, and 12 marks of errors in two math questions, one of which was worth eight marks.

While some questions were critical typographical mistakes or carried logically inconsistent statements, others which were supposed to have only one correct answer, had many.

CORRECTIONAL PATH

- Apart from three questions - that will fetch 12 marks to all candidates - the IITs are only planning to award marks in other erroneous questions to those students who picked at least one of the correct answers
- Biggest sufferers of the errors are students, who on finding something wrong in specific question-and-answer combinations, left them unanswered because of negative marking for incorrect answers
- These students will not receive any marks
- The IITs have offered marks in three questions to all of the 4.8 lakh candidates who appeared for the exam.

Times of India ND 16/05/2011 P-5

JEE answer keys out before final results

Akshaya Mukul | TNN

New Delhi: Answer keys for IIT-JEE revealed that eight questions in maths and physics had wrong and incomplete descriptions. There are two other maths questions which have more than one set of correct answers. Question 57 has BC and BCD as two sets of the correct answers.

Question 64 has 3, 9 or 3 & 9 both as three sets of the correct answers. In physics, question 32 has three sets—BC, BD and BCD—as correct answers. In Paper II, physics number 32 has two sets — A and AC — as correct answers. In mathematics, question 53 has been declared open, while question 59 has two set of correct answers.

This is the first time

CBI arrests eight imposters in Kolkata

The CBI has arrested eight MBBS students for impersonating as medical aspirants during the All India Pre-Medical Test held in Kolkata on Sunday. According to CBI officials, these eight medical students were charging between Rs 5-8 lakh per candidate for sitting in the exam on behalf of the original candidates. TNN

that IIT has released answer keys before the final results are out. In 2008, due to the efforts of Rajiv Kumar of IIT-Kharagpur, IIT had released answer keys after the admission process was over. It was found that there were mistakes worth 18 marks and cut-off for mathematics was five.

Times of India ND
16/05/2011 P-1

12 marks free in IIT entry maths paper

Akshaya Mukul | TNN

New Delhi: Answer keys to this year's IIT-JEE, released by IIT-Kanpur on Sunday, reveal that eight questions of 30 marks had wrong, ambiguous and incomplete descriptions. Six worth 22 marks were in maths and two of eight marks in physics. IIT-Kanpur, which conducted the JEE this year, also said three maths questions have been declared open.

► Answer keys out, P 15

This means every student who took the paper will get 12 marks free. This is included in the overall 30 marks and will raise the cutoff for maths.

Three questions – two in maths and one in physics – have all four choices correct.

In Paper I, two maths questions, (Q. No. 55 and 66) have been declared open.

IIT-JEE encounters controversy again

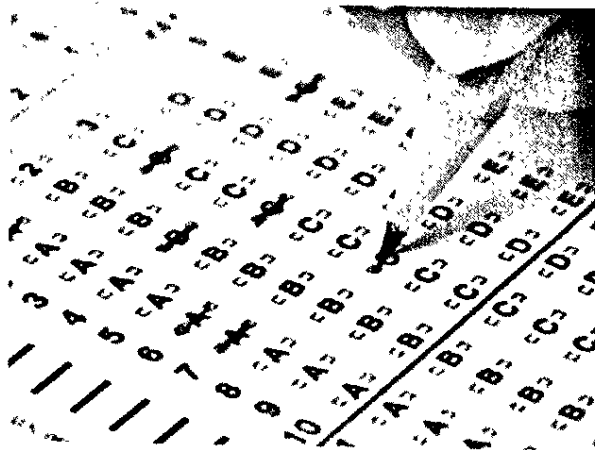
PNS ■ NEW DELHI

IIT-Joint Entrance Examinations (JEE) is once again mired in controversies. The answer keys released on Sunday has come as a shock for "wrong questions, which either had no answer or had multiple sets of answers".

The answer keys were released by IIT for the first time before the publication of results. It can be seen in the official website of the institution.

The move has come following the initiatives of Rajiv Kumar, Professor from IIT, Kharagpur, whose PIL is pending in Supreme Court. This is for reforms to bring transparency and accountability and minimisation of errors in the JEE. Kumar has however been suspended for his efforts.

Out of a total of 480 marks, total of eight questions carrying 30 marks are ambiguous, and/or incomplete questions.



These include six questions of 22 marks in Maths and two questions of eight marks in Physics. Further, three Maths questions of four marks each were declared "open", as there were no correct answers. This enabled every student to secure 12 "free for all" marks, thereby raising the Maths cutoff sig-

nificantly due to the free score. Such glaring mistakes coming from a brand name as the IIT, where even a fraction of mark can make or break a candidate's life, has shaken academicians and students.

Some professors contacted by *The Pioneer* said that in Paper I, there are two Maths questions,

Question(Q) Numbers 55 and 66, which are declared open, in absence of correct choice of answers. There are two other Maths questions which have more than one set of correct answers. Q Number 57 have BC and BCD as two sets of the correct answers. Q Number 64 have three, nine or three & nine both as three sets of the correct answers. In Physics Q Number 32 has three sets, BC, BD and BCD, as correct answers.

In Paper II, Physics Q Number 32 has two sets, A and AC, as correct answers. Maths Q Number 53 is declared open. Maths Question 59 (B) have P and PQRST, two sets of correct answers.

Analysing the mistakes in Maths, KD Joshi, Professor of Maths, IIT Bombay, "Sadly many of these good problems are marred by mistakes. Questions 21, 41 and Questions 43(D) are mathematically incorrect while the mistake in

Question nine has made it "vacuous". There is inconsistency of data in question 22 and unclear data in Question 43(B). There are also instances (Question 10 and 34) where some of the alternatives given are controversial.

The candidates grudging against the free for all 12 marks in Maths due to mistake of the IIT said, "though students may be given 12 marks, however, there were a plenty of students who have to toil hard to crack these questions, and had to spent enough time and were stressed due to not finding a proper answer". Surprisingly, there were three questions, two in Maths and one in Physics, in which all the options were correct.

IIT released the answer-keys after 35 days of conduction of examination. This is a rollback on its announcement that the answer-keys would be published within two-three days after examinations.

Financial Express ND 16/05/2011 p-18

IIT panel favours loan scheme for students

■ Personal guarantee to suffice, no collateral required

New Delhi, May 15 Proposing a steep hike in tuition fee for IIT courses, the Kakodkar Committee on the future of the premier institutes has suggested a 'special loan scheme' to offset the burden, attracting no collateral and on personal guarantee of the student.

"The quantum of the loan should be such that it meets at least 90% of the financial needs of students in way of payment of fees and personal and hostel expenses "in the range of ₹8.11 lakh for a 4-year undergraduate programme and ₹5.8 lakh for a post-graduate programme," it has suggested.

The committee, which presented its report to HRD minister Kapil Sibal on Thursday, has proposed a tuition fee of ₹2.2.5 lakh per student annually, up from ₹50,000 at present.

The IIT council would, however, take a final call on the suggestion.

The committee, headed by Anil Kakodkar, has said that "as the increase in fees would increase funding requirements for students, a special loan programme for students is recommended, which should be easily available without collateral".

The committee said the loan needs to be granted on the personal guarantee of the student without reference to the parents and without any asset backing the loan.

"It is suggested that the loan be granted along with



OFFLOADING THE BURDEN

- The quantum of loan should be such that it meets at least 90% of the financial needs of students
- Payment of interest should be deferred till at least six months after completion of the course
- 'Student Loan Fund' be created to take care of any default due to students failing the course and being unable to repay the loan

the admission documents of IIT so that it is seamless and hassle free," the report states. The committee referred to its discussion with the State Bank of India on this special loan scheme.

It further suggested that payment of interest should be deferred till at least six months after completion of the course.

Keeping in mind the risk involved, it also suggested that the HRD ministry create a fund called the 'Student Loan Fund' at the rate of 4% of the overall loan amount which will be kept in an escrow account with the bank so that the risk of default is reduced and the bank has re-

course to this fund.

This will also take care of any default due to students failing the course and being unable to repay the loan in the future, the report said.

The committee was set up to suggest a roadmap for the autonomy and future of the IITs as world-class institutions for research and higher learning.

It has also suggested that the IITs start an aggressive drive to get endowments, scholarship grants and funds from their alumni and other donors to meet at least 10-15% of their needs on an annual basis over time and a dedicated office to collect the endowments. **PTI**

Indian Express ND 16/05/2011

P-10

More is more

Let the IITs hike fees, so long as they can provide financial aid for those who need it

THE IITs have long been the pride and joy of Indian education, for embodying a rare meritocratic ideal — no matter where you're from, once you're past the ferociously competitive entrance test, the IIT experience ushers you into a different world. Or so the legend goes. In recent years, IITs have been torn over the question of greater autonomy from government fiat and stricture. Now, there's some movement in that direction. A committee set up by the human resources ministry and headed by the scientist Anil Kakodkar has recommended that IIT tuition be increased up to five times, for the B.Tech and postgraduate programmes, in proportion to the expected returns on an IIT education.

They aim to make the IITs financially independent in terms of operating expenditure, and leave only scholarships, infrastructure and capital expenditure to the government. This hike, extravagant as it seems, covers only 30 per cent of the full cost for a student — the rest will still be directly or indirectly covered

by state subsidies. What's more, to make sure that this does not deter any potential student, there will also be a special loan programme, one that will require no collateral or guarantee by a guardian.

Apart from all this, the committee suggests amping up the scholarship programme — so that a quarter of the undergraduate students are fully paid for, those whose family income is less than 4.5 lakh a year will have their tuitions covered, as well as a stipend for living expenses. This also stretches to Masters' and Ph.D. candidates, leaving them free to concentrate on research. Like the IIM model, this also leaves them free to make decisions, and not depend on the government for faculty salaries, etc. The panel also recommends that each IIT board will be given the flexibility to design its own fee structure, depending on its own special requirements. This seems like an eminently sensible plan, to ensure no one is priced out of the prestigious institutes, while giving the schools greater latitude to run their own show.

Hindustan Times ND 16/05/2011

P-3

EXAM TROUBLE

Law entrance catches students off-guard

Shaswati Das

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NEW DELHI: Thousands of aspiring lawyers found themselves defenceless after the Common Law Entrance Test (CLAT) sprang a surprise upon them with a revision in the question paper pattern that the candidates were unaware of.

"The paper was much longer than what was provided last year or what the sample papers have. The section on legal reasoning especially had very lengthy case dockets. I ended up leaving about 25 questions because of that," said Sonakshi Chaudhry, who appeared for the CLAT.

Another aspirant, Dhrupad Bharadwaj, said the English section had five passages instead of just one, which gave them less time to finish the paper.

The National University of

Juridical Sciences (NUJS), Kolkata authorities, who administered the test, however, maintain that the announcement regarding the change was made repeatedly in advance.

"The change was announced long time back. Maybe we were wrong in calculating the time and length (of the question paper), but it was done to put everyone on an equal footing," said MK Singh, convener of the CLAT exam.

The legal section along with the mathematics and verbal section, too, left students stumped. Only logical reasoning provided some relief to the harried students.

"We want only the best taking up law. There are students who think of this as a secondary option and others who come from lawyer families. This was done to introduce fairness in the system," added Singh.

Times of India ND 16/05/2011

P-17

Are humans changing Earth dramatically?

Many Feel So, & Say Humans Must Define A Geological Period

London: If alien geologists were to visit our planet 10 million years from now, would they discern a distinct human fingerprint in Earth's accumulating layers of rock and sediment? Will homo sapiens, in other words, define a geological period in the way dinosaurs — and their vanishing act — helped mark the Jurassic and the Cretaceous?

A growing number of scientists, some gathered at a one-day symposium this week at the British Geological Society in London, say "yes". One among them, chemistry Nobel laureate Paul Crutzen, has even suggested a new name: the Anthropocene.

Whether this "age of man" will be short or long is unknown, says Crutzen, who shared his Nobel for unmasking the man-made chemicals eating away at the atmosphere's protective ozone layer.

For the first time in Earth's 4.7 billion year history, a single species has not only radically changed Earth's morphology,

Now, scientists feel humans will define a geological period — the Anthropocene — in the way dinosaurs, and their vanishing act, helped mark the Jurassic and the Cretaceous

chemistry and biology, it is now aware of having done so.

For now, the man in the hot seat is University of Leicester professor Jan Zalasiewicz, who heads the group of geologists tasked with recommending whether the Anthropocene should be added to the 150-odd eons, eras, periods, epochs and ages into which Earth's history has been divided.

Evidence of abrupt change — on a geological time scale — wrought by human hands would seem to be overwhelming.

The burning of fossil fuels has

altered the composition of the atmosphere, pushing the concentration of carbon dioxide to levels unseen at least for 800,000 years, perhaps for three million.

The resulting global warming has itself set in motion other planetary-scale changes: massive melting of the parts of Earth normally covered by ice and snow, and the acidification of the oceans.

Past shifts in the biosphere — the realm of the living — show up in sediment and rock, especially mass extinctions that have seen up to 90% of all life forms disappear within the geological blink of an eye. There have been five such wipeouts in the last half billion years, and most experts agree we have now entered the sixth.

The planet's outer skin, or lithosphere, has been transformed. "We are sculpting the Earth's surface," said James Syvitski, a professor at the University of Colorado, pointing to two centuries of mining, damming, deforestation and agriculture. AFP

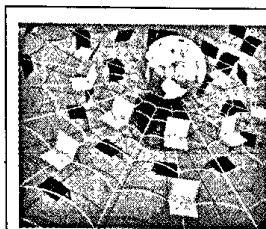
Soon, virtual varsity for tech education

■ VTU to impart training through flexible, credit-based correspondence courses

Kirtika Suneja
New Delhi, May 15

Here is good news for the students wishing to take up distance learning but apprehensive of the lesser value attached to the technical degrees obtained from these courses as compared to those from regular streams. The Centre is planning to establish a virtual university that will impart training on diverse technical areas to the undergraduate and postgraduate students as well as the newly recruited teachers through flexible, credit-based correspondence courses.

The proposed Virtual Technical University (VTU) will offer programmes in the fields of science, technology, management, architecture, pharmacy and other areas of applied knowledge. It would come up



WEB OF KNOWLEDGE

- The proposed VTU will offer courses in science, technology, management, architecture and pharmacy
- The varsity will use video courses, web-based material and live lectures using satellite and web technologies
- BITS has a virtual varsity that enables off-campus pupils to avail of facilities offered to on-campus students

as part of the National Mission on Education through Information and Communication Technology, an initiative of the ministry of human resource development.

"There is no question on the feasibility of the virtual university because the world is moving in that direction. We only need to implement it and though the idea has not come before the board as yet, we expect the

varsity to be there in the current Plan period (2007-12)," said M Anandakrishnan, chairman, board of governors, IIT Kanpur.

The Birla Institute of Technology and Science (BITS) has a virtual university that enables off-campus students to avail of the facilities offered to a normal on-campus student registered under the same programme and get a degree from BITS.

"The piecemeal approach to distance learning is leading to its misuse and a quality check is needed. The education system is large enough to accept another type of distance learning model besides IGNOU," added Anandakrishnan.

The university will use video courses, web-based learning material and live lectures using satellite and internet-based technologies.

The VTU will have a repository of video courses created by experts in the field, a website that will host learning material while live lectures will be delivered using satellite and Internet technologies.

The virtual university may also have five different schools — one each on developing teaching methodology, engineering sciences, natural sciences, management sciences and human sciences.

■ Continued on Page 2

Soon, virtual...

The school of education will look at developing inner and outer strength of the individuals and their emotional intelligence while that of engineering would focus on different disciplines of engineering. The school of management sciences will look at industrial and management engineering. Human sciences like economics and humanities would be catered to by the school of human sciences. A high-powered panel set up by the ministry for faculty development in technical institutes had recommended that each school float a suitable number of courses in order to cater to the need of various disciplines associated with the school.

It was envisaged that VTU shall have at least 300 courses for the school of engineering sciences and engage a large pool of talented faculty from IITs, NITs, IISc and other institutions and retired faculty.

Subject Matters

What's the finest of 'em all?

The debate's as old as the MBA itself. Once again, eminent professors explain their subjects

Marketing

THE great Peter Drucker once said: "There is only one valid definition of business purpose: to create a customer." Central to understanding marketing is learning about the complex relationships between the customer and the organisation and the many actors engaged in between. Because understanding customers is pivotal to any organisation's success, marketing focuses on how to build closer and more natural relationships with them, understanding their motivations and behaviours. After all, without customers businesses founder and ultimately fail.

Strategic marketing is built around the core concepts of customer centricism and customer value. This entails understanding what we mean by value from the customer's viewpoint: how we explore it, create it, deliver it and finally enhance and evaluate it. Subjects covered include the marketing concept; market orientation; segmentation, targeting and positioning; the marketing mix; relationship marketing; and marketing metrics.

Because of the natural fluidity and immediacy of marketing, we are constantly building new areas of knowledge. For example, we continue to learn about customer relationships and customer-management processes—especially about how to create the perfect customer experience. Branding is also at the core of our skills and we dig into brand equity and customer-driven brand equity.

Marketing as a philosophy and a concept must keep up to date with technological trends. As the media drives a brand's strategy the internet is becoming ever more important, particularly through social media—from both a consumer and a business-to-business perspective. Building on the ubiquity of social media, we

now also work hard on the ways in which individuals build personal brands and personal marketing plans, something which students find really helpful when it comes to exploring career options.

Finally, we have also been exploring radical new business models and firms that have been developing market-driving



strategies, investigating what we can learn from some groups outside the mainstream of business and society.

David James: Executive professor of marketing and growth management, Henley Business School

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Economics

ECONOMICS is an important component of the core MBA curriculum because economic principles are behind almost all managerial activity. Economists at business schools research and teach about how markets work (and

when they don't work); how scarce resources get produced, consumed and allocated; and how various participants in the economy make optimal decisions.

These issues will be relevant to managers in virtually all aspects of their work for the rest of their careers. This is true both at the broadest levels—such as strategic management, finance, organisational design, human resources, entre-

preneurship and managing global organisations—and also when they drill down into more specific areas, such as optimising prices, setting employee compensation, regulation and analysing how modern managerial practices affect a firm's performance.

The recent financial crisis has offered a useful lesson in economics. Microeconomic insights can be drawn from the

way that misaligned incentives in the financial industry contributed to the crunch. On the macroeconomic side, the crisis provoked discussion about how much the government should bail out institutions, how it can stimulate the economy and how it can manage the unemployment problem. This has led to a great deal of new economic research to help the recovery (and to help avoid future crises), as well as numerous case studies that provide practical lessons for fledgling managers.

One rapidly growing area of economics that has received a lot of attention from business-school economists is market design. Traditionally, economists studied the properties of existing market institutions. More recently, however, they have taken a proactive role, and have applied economic analysis to design new markets or to improve existing ones. These range from electromagnetic-spectrum auctions to mechanisms for matching medical students to residency programmes and auctions for online advertisement slots. The best business schools include some of these key ideas in their economics courses.

At Stanford, we span the spectrum from economists who study the most abstract fundamentals of economic theory to those who focus on the most practical managerial strategy issues. But we all use the ideas from our own research, and research by others in our field, to give future managers insights into how to run their businesses more efficiently and profitably.

Paul Oyer: Professor of economics and economics area co-ordinator, Stanford University Graduate School of Business

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CAMPUS OF THE WEEK: SHAILESH J MEHTA SCHOOL OF MANAGEMENT, IIT BOMBAY

The success of democracy will depend on foreign support

Manish Kumar

ZINE El-Abidine Ben Ali's 23-year reign in Tunisia and Hosni Mubarak's 30-year reign in Egypt was brought down by the civilian revolution in their respective countries. Over these years, they enjoyed the US auspices as they assented to US demands. The success of these revolutions was governed by the substantial support from their respective armies. Despite being economically stable, the poor governance, corruption and lack of democracy led to these revolutions.

Democracy is not only about electing your leaders, it's also about exercising the power of people to securing and stabilising the nation against any destabilising force. The revolutions in Tunisia and Egypt have demonstrated this power of the people. The revolutions, more or less, were driven by the peaceful and non-violent action of the people. It was an effective way to counter the dictatorship with minimal loss to the human life.

For past many years, authoritative regimes have been a norm in the Arab world. Although these revolutions put an end to existing government, but it's only a new beginning for these nations. Democracy might not be the certain outcome of these events but that seems to be more than likely as of now. Often it's easier to overthrow a dictator than to build a democracy. Also, the delay in the process of building a democracy could bring instability.

How will democracy transform the Arab nations and will it be successful? The success of democracy will depend on the kind of support it receives from foreign nations as the nascent democracy often needs support and guidance to establish itself. Moreover, the relationship with other Arab nations, who are still ruled by dictators, will be critical to establishing democracy in these nations.

Tunisia and Egypt have started the transformation of the political structure of Arab nations. In the coming years, we could see the new and democratic Arab world. But, for the moment, it's wait and watch.

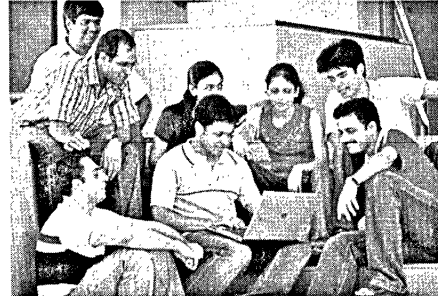
The author studies at the SJMSOM



fe@campus, a collaborative and cynosure initiative taken by The Financial Express in sync with a variety of higher education institutes representing today's youth, provides students an opportunity to pen their views on trends and trendsetters in the world of business. For this week, we put forth the topic: "What are the lessons on democracy one can learn from the revolutions in Tunisia and Egypt?" Students of the Shailesh J Mehta School of Management, IIT Bombay, sent us their essays. Here are two of the best:



THEME OF THE WEEK: WHAT ARE THE LESSONS ON DEMOCRACY ONE CAN LEARN FROM THE REVOLUTIONS IN TUNISIA AND EGYPT?



The New Middle-East will ensure greater stability

Rakesh Ishwarlal Jethani

RECENTLY the world witnessed revolutions in Tunisia and Egypt against the autocratic ruling, which resulted in the fall of dictators in both the countries, raising the hopes for democracy and liberalism. This wave of revolution has now spread to the other parts of the Middle East and Africa also.

The world as a whole has been taught many a lesson by these revolutionary successes. The first is that nowhere in the world the autocrats or governments can oppress their people. No government that will turn a blind eye to the needs and liberty of their people can last long. Another lesson is that the real power lies in the hands of the people and so whenever socio-economic conditions become unbearable and political processes repressive, people will revolt.

But now the world is worried about another question, can democracy be successful in the Arab world? The answer lies in the meaning of the word 'democracy', which means a government of the people, by the people, for the people.

Arab world has substantial extremist groups which makes the world sceptic about the success of democracy there. But these revolutions have shown that the people are not going to accept any power that is against their liberty. The world is smaller now. Thanks to Internet and social networking, people are much closer. They are aware about the liberty and the socio-economic conditions that their counterparts are enjoying in other parts of world. Thus, we can surely expect to see a democratic Arab world.

This New Middle-East will definitely provide more stability in the world because democracy ensures that the action of the government is in accordance with the voice of the majority. The rest to be seen is how the Egyptians and the Tunisians now use their civic triumphs to ensure better life for themselves. The youth of both the countries who brought about this change should now work towards making it a reality.



The author studies at the SJMSOM

Oracle gives Java a booster dose

Oracle is revving up Java, computer industry's best-known brands and most deployed technologies, to deliver advanced mobile phones, remote processors, printers, Web cameras and practically any other device with a digital heartbeat

Sudhir Chowdhary

HERE'S an ear to ground report on Java, one of the computer industry's best-known brands and most widely deployed technologies—3 billion mobile phones and 1.1 billion desktops run Java, 31 times more Java phones ship every year than Apple and Android combined, while 100% of all Blu-ray players run Java.

Around 1.4 billion Java cards are manufactured each year, growing at 1.7 billion devices per year. In short, Java powers set-top boxes, printers, Web cameras, games, car navigation systems, lottery terminals, medical devices, parking payment stations and more.

When Oracle acquired Sun Microsystems in a \$7.5 billion deal two years back, doubts were cast whether Oracle would ensure continued investment and innovation in Java technology, originally developed by James Gosling at Sun Microsystems. Java was originally designed for interactive television, but it was too advanced for the digital cable television industry at that time. Doubts were cast because Sun tried to make money off Java, but without much success. And chances were that a business-focused company like Oracle might relegate open source technology such as Java to 'the background if business returns were not forthcoming.

Cut to present day. Fact is, Java is one of the most important software Oracle has ever acquired and the US software maker has been very disciplined about extracting money from its technologies. Not surprising, Oracle is going full-force at trying to make money from Java, a path the erstwhile Sun Microsystems hadn't pursued strongly.

"Oracle is a business-focused company and Java is vital to its success. Oracle is making huge investments in making sure that Java thrives in various areas," says Nandini Ramani, vice-president of Java Client Development at Oracle.

Oracle's overall strategy is to deliver a complete, open, integrated stack of hardware, infrastructure, database,



JAVA FACTS

- 3 billion mobile phones and 1.1 billion desktops run Java
- 31 times more Java phones ship every year than Apple and Android combined
- 100% of all Blu-ray players run Java
- 8 billion devices delivered on Java cards, growing at 1.7 billion devices per year
- 85% of SIMs in Europe, USA, Canada and Latin America powered by Java cards
- Java powers set-top boxes, printers, Web cameras, games, car navigation systems

middleware, and business applications. The goal is to make hardware and software work together to provide better manageability, serviceability, and so on. In an effort to creatively integrate and optimise hardware and software, Oracle strongly supports the open source Java community.

But before we delve into Oracle's business strategy and vision of Java's future, here's a ready reckoner on the open source technology. Till date, the Java platform has attracted more than 6.5 million software developers with some nine million using Java regularly during the work

day. "Oracle itself has over Java 10,000 developers," says Ramani. It's used in every major industry segment and has a presence in a wide range of devices, computers, and networks.

A layman might wonder, why software developers choose Java? With its versatil-

ity, efficiency, and portability, Java has become invaluable to developers by enabling them to write software on one platform and run it on virtually any other platform; create programs to run within a Web browser and Web services; Develop server-side applications for online forums,

stores, polls, HTML forms processing, and more; combine applications or services using the Java language to create highly customised applications or services; write powerful and efficient applications for mobile phones, remote processors, low-cost consumer products, and practically any other device with a digital heartbeat, and many more. Many Indian colleges and universities offer courses in programming for the Java platform.

One of the great things about Java is that if you learn the language, learn the platform and the libraries, then you have an incredible variety of deployment options and ways you can target the things you are developing—whether for the enterprise, desktop, or mobile/embedded space," said Steven Harris, Oracle's senior vice-president of Application Server Development in an earlier presentation.

Oracle Fusion Middleware, Oracle's fastest growing business, is built on top of Java language and software. "Therefore, Oracle can now

ensure continued innovation and investment in Java technology for the benefit of customers and the Java community," says Harshad Oak, founder of IndicThreads & Rightrix Solutions and the author of several articles on Java technology.

Oracle seems to like the aroma of Java as it is advancing the Java platform and optimising it for new application models and hardware, including extended support for scripting languages, increased software developer productivity and lower operational costs.

Specifically, it is working to modernise the Java mobile platform by delivering Java with Web support to consumer devices. Oracle is also planning other enhancements including new language features, small-footprint CPU-efficient capabilities for cards, phones and TVs.

In short, a great deal of sweat and brain is being devoted to Oracle to maintaining Java as the most popular, productive, and successful programming language in existence.

Education in urgent need of overhaul

India's demographic advantage could well come to nought unless the inadequacies of its education system are addressed at the earliest.

David J. Karl

American politicians used the Soviet launch of the Sputnik I satellite on October 4, 1957, to spur massive new investments in technology and education, and some observers say that China and, especially India, are in need of some similar wake-up call.

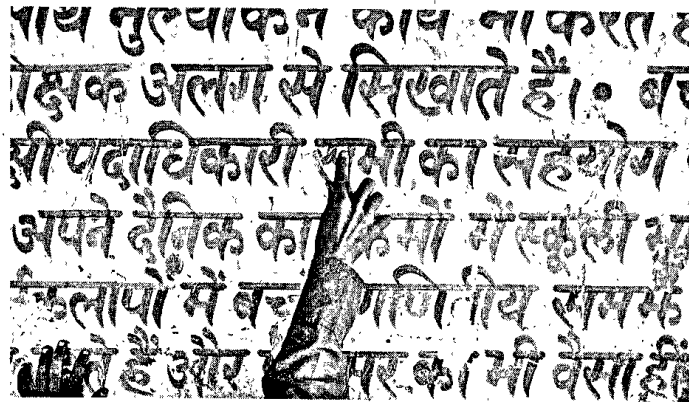
There is no doubt that both rising powers are enhancing their research-and-development profiles, churning out more scientists and engineers than the US. Yet, the calibre of their graduates is generally poor.

In India's case this reality tends to be obscured by the prominent role of India-born engineering and scientific talent in driving US prosperity and innovation, most prominently in Silicon Valley, as well as the swelling numbers of bright, diligent Indian students enrolled in American universities. For the country to become a true competitive threat, however, it must overcome the stark inadequacies of its educational system. India not only exhibits the lowest educational indicators in the Group of 20, its public-education system scores poorly relative to Brazil, Russia, China and other emerging-market countries.

Half of its children drop out of primary school. Half of the remainder fail to complete high school. Despite recent efforts to improve primary and secondary education, Indian children on average attend school several years fewer than children in many emerging countries. Deep flaws also are evident in the university system. A much smaller proportion of the college-age population is enrolled in some form of tertiary education than is common in other emerging countries. The share is twice as high in China, for example, as it is in India.

EDUCATION SYSTEM IN A STATE OF DISREPAIR

Declaring that the country's "university system is, in many parts, in a state of disrepair," Prime Minister, Mr Manmohan Singh, catalogued the problems in June 2007: "Around 10 per cent of the relevant age group is enrolled in any institute of higher education, as compared to 40 to 50 per cent in most developed economies... Less than 50 per cent of secondary-school students continue into



Woefully inadequate: India not only exhibits the lowest educational indicators in the Group of 20, its public-education system scores poorly relative to Brazil, Russia, China and other emerging-market countries. — NYT

college education in any form. Almost two-thirds of our universities and 90 per cent of our colleges are rated as below average on quality parameters. And, most important, there is a nagging fear that university curricula are not synchronised with employment needs."

Total outlays on the country's higher-education system are much lower than in many other comparable countries, affecting the capacity for teaching and research. Mr Singh's scientific adviser has warned that research from Indian universities is "hitting an all-time low." Even the research output from the world-renowned Indian Institutes of Technology is slim.

As a result, the country has few institutions of international standing, making it difficult to attract and retain top scholars and researchers. Indian faculty members publish a comparatively fewer research articles in leading international journals.

Incredibly, given the country's high-tech image, the Infosys Science Foundation in 2009 failed to find a worthy recipient for its inaugural prize honouring an Indian researcher in the field of engineering and computer science.

of its technical graduates and only about 15 per cent of its general college graduates are suited for employment in offshore IT and business-process outsourcing industries, respectively. The rest are lacking in the requisite technical knowledge, English-language capacity and collaborative skills. The report foresees a potential shortfall of 35 lakh IT workers by 2020.

Another official in the Prime Minister's office acknowledges, "The stark reality is that our education system churns out people, but industry does not find them useful."

This view is echoed by a recent report by a Parliamentary committee, which observes that the employability of graduates from the country's technical schools "remains a matter of serious concern."

The skills gap also has acute consequences in other fields. A 2009 World Bank report concludes that an acute deficit of civil-engineering skills severely jeopardises the country's growth prospects. The number of civil-engineering graduates from Indian universities must increase three-fold in order to make good on New Delhi's ambitious plans to improve the nation's decrepit infrastructure. To expand the ramshackle energy sector, India has been forced to rely on tens of thousands of Chinese guest workers.

The chairman of the Central Electricity Authority admitted in a recent interview, "We don't have that amount of skilled manpower in the country."

India's stunning transformation during the past two decades commands world respect, but that should not blind us to its daunting challenges, perhaps none more formidable than in the area of human-capital development. The country's prodigious demographic resources could one day be the basis for India's emergence as a full-fledged global power. For now, though, it remains an open question whether India has the capacity to distil that potential into actual achievement.

Like the US, India requires its own Sputnik moment to jolt it into a higher educational orbit.

(The writer is president of the Asia Strategy Initiative, a Los Angeles-based consultancy.)

From Yale Global

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The Journal of the ACM, a leading journal in the computer-science field, has for a number of years not published Indian submissions, finding them lacking in quality.

The quality of graduate education in critical technology fields lags behind the US and Europe. Concerns about the calibre of India's legions of engineering graduates have mired New Delhi's bid for full membership in the Washington Accord, which governs international recognition of foreign engineering degrees. Despite the world-class reputation of India's technology sector, the country manages to produce few Ph.Ds in computer science. Indeed, Israel graduates approximately the same number as India, despite having only 1/160 of India's population.

A senior government official in New Delhi recently acknowledged that India would never become a great power on the basis of such paltry numbers.

ACUTE SKILLS SHORTAGE

Educational deficiencies have led to an acute skills shortage. Although the country mints about 6.5 lakh new engineers a year, a recent McKinsey study reports that only a quarter



Evolutionary Leadership: A holistic perspective
Naveen Khajanchi

आईआईटी ट्यूशन फीस बढ़ातरी पर असमंजस में सरकार

नई दिल्ली, (भाषा): भारतीय प्रौद्योगिकी संस्थानों (आईआईटी) में व्यापक सुधार पर सुझाव देने के लिए गठित अनिल काकोडकर समिति की संस्थान के पाठ्यक्रमों के ट्यूशन फीस को वर्तमान 50 हजार रुपए से बढ़ाकर दो से ढाई लाख रुपए करने की सिफारिश का शिक्षाविदों ने विरोध किया है, हालांकि सरकार का रुख अभी भी इस पर साफ नहीं है।

मानव संसाधन विकास मंत्रालय के सूत्रों ने कहा कि यह अभी सिफारिश है। छात्रों पर पड़ने वाले प्रभाव समेत अन्य पहलुओं पर गहराई से अध्ययन करने के बाद आईआईटी परिषद कोई निर्णय करेगी। देश के इस प्रतिष्ठित प्रौद्योगिकी शिक्षण संस्थान में फीस में इस अप्रत्याशित वृद्धि के प्रस्ताव पर शिक्षाविद एन. श्रीनिवास ने कहा, "ग्रामीण क्षेत्र और समाज के कमजोर वर्ग से भी बड़ी संख्या में बच्चे अपनी

मेधा की बदौलत प्रवेश प्राप्त करते हैं। लेकिन ट्यूशन फीस में अप्रत्याशित वृद्धि का प्रस्ताव उनके सपनों पर कुठाराघात के समान है।" परमाणु ऊर्जा आयोग के पूर्व अध्यक्ष अनिल काकोडकर के नेतृत्व वाली समिति ने कहा है कि आईआईटी द्वारा लिये जाने वाले शुल्क में शिक्षा प्रदान करने में आई पूर्ण लागत शामिल होनी चाहिए। आईआईटी स्नातकों की भारी

मांग तथा आईआईटी से बीटेक करने वालों को मिलने वाले उच्च वेतन की संभावना को ध्यान में रखकर इस वृद्धि को बिल्कुल तर्कसंगत बताया गया है। समिति ने कुछ महीने पहले भी अपनी रिपोर्ट पेश की थी। जनवरी में हुई आईआईटी परिषद की बैठक में मानव

संसाधन विकास मंत्री कपिल सिब्बल ने वृद्धि के सुझाव पर आपत्ति व्यक्त करते हुए कहा था कि यह होनहार छात्रों के लिए बाधक का काम करेगा। मानव संसाधन विकास मंत्रालय के सूत्रों ने बताया कि काकोडकर समिति से इन आपत्तियों के बाद रिपोर्ट पर

■ काकोडकर समिति ने 50 हजार से बढ़ाकर ढाई लाख रुपए करने की सिफारिश की थी

रिपोर्ट में बिना कोई संशोधन किये इसे फिर से मंत्रालय के समक्ष पेश किया। इसपर आईआईटी परिषद कोई निर्णय लेने से पहले उसका गहन अध्ययन करेगी। शिक्षाविद एवं एनसीईआरटी के पूर्व अधिकारी के वशिष्ठ ने कहा, "समय में बदलाव आया है लेकिन

मैं यह नहीं चाहूंगा कि अपने जीवन की शुरूआत मुझे 'लोन' के दबाव में करनी पड़े।" आईआईटी की फीस में वृद्धि के प्रस्ताव का विरोध करते हुए उन्होंने कहा कि संस्थान और सरकार को कोई रास्ता निकालना चाहिए ताकि छात्रों को शिक्षा के अधिकार से वंचित न होना पड़े। काकोडकर समिति ने अपनी रिपोर्ट में कहा कि छात्रों की मदद को ध्यान में रखते हुए मानव संसाधन मंत्रालय को आईआईटी के प्रत्येक छात्र के लिए सालाना 1.5 लाख रुपये का कोष तैयार करना चाहिए। समिति की सिफारिशों में आईआईटी छात्रों को सुगम बैंक ऋण की सुविधा मुहैया करने कराने की बात कही गई है। इसके अलावा जिन छात्रों के परिवार की सालाना आय 4.5 लाख रुपये से कम हो, उन्हें 100 प्रतिशत छात्रवृत्ति के दायरे में लाया जाए और मासिक मानदेय प्रदान किया जाए।

Nai Duniya ND 16/05/2011 p-9

आईआईटी की फीस दो से ढाई लाख रुपए करने की सिफारिश

नई दिल्ली (प्रेट्र)। भारतीय प्रौद्योगिकी संस्थानों (आईआईटी) में व्यापक सुधार पर सुझाव देने के लिए गठित अनिल काकोडकर समिति ने संस्थान के पाठ्यक्रमों के ट्यूशन फीस को वर्तमान 50 हजार रुपए से बढ़ाकर दो से ढाई लाख रुपए करने की सिफारिश की है। समिति ने जरूरतमंद विद्यार्थियों के लिए विशेष ऋण योजना का सुझाव दिया है। सुझाव में कहा गया है कि ऋण की इस तरह व्यवस्था होनी चाहिए की छात्रों की 90 फीसदी वित्तीय आवश्यकता पूरी हो जाए।

केंद्रीय मानव संसाधन मंत्रालय द्वारा नियुक्त अनिल काकोडकर समिति ने अपनी रिपोर्ट में बी.टेक और एम.टेक कोर्सेज के लिए शिक्षण शुल्क को 50 हजार से बढ़ाकर दो-सवा दो लाख रुपए वार्षिक करने की सिफारिश की है। इसमें होस्टल फीस और अन्य खर्चे शामिल नहीं हैं। समिति के अध्यक्षता करने वाले अनिल काकोडकर ने कहा कि फीस में वृद्धि की पूर्ति छात्र विशेष ऋण योजना से कर सकते हैं। छात्रों को ऋण आसानी से

■ काकोडकर समिति ने
की सिफारिश

■ छात्रों के लिए ऋण
योजना का सुझाव

उपलब्ध कराया जाएगा। समिति ने कहा कि छात्रों को ऋण बिना किसी संपत्ति के अमानत पर दिया जाएगा। सुझाव दिया गया है कि आईआईटी प्रवेश दस्तावेज के साथ ही ऋण की गारंटी दी जाएगी। समिति ने विशेष ऋण योजना के लिए स्टेट बैंक ऑफ इंडिया से चर्चा करने का उल्लेख किया है। सूत्रों ने बताया कि काकोडकर समिति से रिपोर्ट पर फिर से विचार करने और इसमें जरूरी सुधार करने को कहा गया था। लेकिन शुक्रवार को समिति ने अपनी पुरानी रिपोर्ट में बिना कोई संशोधन किए इसे फिर से मंत्रालय के समक्ष पेश किया। इसपर आईआईटी परिषद कोई निर्णय लेने से पहले उसका गहन अध्ययन करेगी।

आईआईटी चली आईआईएम की राह

मनोज कुमारेंद्र @ नई दिल्ली

आईआईटी के लिए मौजूदा द्यूशन फीस को 50 हजार रुपए से बढ़ाकर दो से ढाई लाख करने संबंधी सिफारिश को मंजूरी मिलने के संकेत हैं। स्वायत्तता के नाम पर आईआईएम की भांति आईआईटी सिस्टम की सर्वोच्च समिति आईआईटी परिषद इसे स्वीकृति प्रदान कर सकती है। लेकिन इससे पहले फीस का बोझ उठाने वाले छात्रों के लिए सरकार सुगम बैंक ऋण की सुविधा सुनिश्चित करना चाहती है। मानव संसाधन विकास मंत्रालय के सूत्रों ने बताया कि सरकार सिफारिश को लेकर छात्रों पर पड़ने वाले प्रभाव समेत अन्य पहलुओं पर गहराई से

अध्ययन कर रही है। इसी कड़ी में सिफारिश को मंत्रालय के वेबसाइट पर डाला गया है ताकि सभी पक्षों की राय से सरकार अवगत हो सके।

गरीब छात्रों के कोष पर कार्रवाई जल्द

वरिष्ठ अधिकारी ने बताया कि यदि यह सिफारिश मंजूर कर ली जाती है तो इसके तहत कमजोर आर्थिक स्थिति वाले छात्रों जिनके परिवार की सालाना आय 4.5 लाख रुपए से कम होगी, उसे फीस में पूरी तरह छूट होगी। यह फीस उस छात्र के लिए सरकार वहन करेगी। इसके अलावा ऐसे छात्रों के लिए मासिक मानदेय का प्रावधान भी किया जाएगा। इस सिलसिले में सिफारिश के अनुरूप

जरूरतमंद प्रत्येक छात्र के लिए सालाना 1.5 लाख का कोष बनाने को लेकर कार्रवाई जल्द शुरू होगी।

खर्च के हिसाब से फीस का निर्धारण

उन्होंने बताया कि यह फीस अलग-अलग संस्थानों के लिए अलग-अलग होगी। आईआईटी के खर्च के अनुपात में शुल्क का निर्धारण होगा। मसलन आईआईटी गुवाहटी का खर्चा कम है, तो वहां के छात्रों को आईआईटी मुंबई के मुकाबले कम फीस अदा करनी होगी। इसी तरह जोधपुर और इंदौर समेत नई आईआईटी में भी खर्च के हिसाब से ही छात्रों के लिए फीस का निर्धारण होगा।

... ताकि कोई प्रतिभावान न रहे वंचित

अधिकारी ने बताया कि इस कवायद के पीछे सरकार की मंशा अंतरराष्ट्रीय प्रतिस्पर्धा को देखते हुए ऐसे अतिविशिष्ट संस्थान के लिए उसकी गुणवत्ता बेहतर करने की है। यह स्वायत्तता के बगैर सम्भव नहीं है। लेकिन इसके साथ सरकार प्रतिभाशाली गरीब बच्चों के लिए भी आईआईटी में प्रवेश के दरवाजे सदा खुला रखना चाहती है। केन्द्रीय मंत्री कपिल सिब्बल कहते रहें हैं कि आईआईटी में बड़ी संख्या में ग्रामीण पृष्ठभूमि के कमजोर आर्थिक स्थिति के छात्र प्रवेश पाते हैं।

Rajasthan Patrika
ND 16/05/2011 P-13

आईआईटी छात्रों को मिल सकेगा ऋण

नई दिल्ली . भारतीय प्रौद्योगिकी संस्थानों (आईआईटी) में सुधार पर सुझाव देने के लिए गठित अखिल काकोडकर समिति ने अंशतः फीस में प्रस्तावित वृद्धि से छात्रों को राहत प्रदान करने के लिए 'विशेष ऋण योजना' शुरू करने का सुझाव दिया है। इस समिति का गठन 2009 में किया गया था।

समिति ने अपनी रिपोर्ट में कहा कि मानव संसाधन मंत्रालय को आईआईटी के प्रत्येक छात्र के लिए कम से कम सालाना 1.5 लाख रुपए का कोष बनाना और छात्रों को सुगम बैंक ऋण की सुविधा मुहैया करने कराना चाहिए। इसके अलावा जिन छात्रों के परिवार की सालाना आय 4.5 लाख रुपए से कम हो, उन्हें 100 प्रतिशत छात्रवृत्ति के दायरे में लाया जाए और मासिक मानदेय प्रदान किया जाए।