Newspaper Clips

January 25, 2011

Times of India ND p-21
25-Jan-11

SHORT CUTS

'Social networking sites are a modern form of madness'

They may be a venue to socialise and keep in touch with people, but social networking websites like 'Facebook' and 'Twitter' are making people "less human" by isolating them from reality, a US sociologist has claimed. According to Prof Sherry Turkle of Massachusetts Institute of Technology, the way in which people frantically communicate online via social networking sites can be seen as "a modern form of madness". In her new book, 'Alone Together', Turkle writes that a behaviour that has become typical may still express the problems "that once caused us to see it as pathological".

Volcanoes caused largest extinction:

Violent volcanic eruptions caused the largest ever mass extinction in history that occurred some 250 million years ago, scientists have claimed. Scientists from the University of Calgary who found layers of coal ash in rocks from the extinction boundary in Canada's High Arctic, said huge volcanic eruptions were the reason behind the mass extinction that devastated life on Earth at that time.

Simulated Mars walk in February:

Three men will simulate walking on Mars in February as part of a project in which a multinational crew has been locked up inside a mock Moscow spaceship since June. The team of six participants will "land" on the Red Planet on February 12 after spending more than eight months in isolation in the module, which was constructed at Moscow's Institute for Biomedical Problems (IBMP).

Times of India ND 25-Jan-11 p-21

Final frontiers? Cellphone set for a space odyssey

The Device Is To Be Put In Orbit To Control A Satellite

London: Can your mobile phone survive the swings in temperature and the harsh radiation found in space? Well, to find this out, British engineers are planning to put a smartphone into orbit which will be used to control a satellite.

The team at Surrey Satellite Technology Limited (SSTL) want to see if the sophisticated capabilities in today's smartphones will function in the most challenging environment known. The phone, which will run Google's Android operating system, will control a 30cm-long satellite and take pictures of the Earth in the mission expected as early as later this year, the BBC reported.

Although mobile phones have been flown on high altitude balloons before, this would likely be the first time such a device has gone into orbit several hundred kilometres above the planet, the report said. "Modern smartphones are pretty amazing," SSTL project manager Shaun Kenyon was quoted as saying. "They come now with processors that can go up to 1GHz, and they have loads of flash memory. First of all, we want to see if the phone works up there, and if it does, we want to see if the phone can control a satellite."

TOUGH TEST: Experts seek to find if smartphones will function in the most challenging environment known

The mission is part of the company's quest to find whether more inexpensive and off-the-shelf electronics can be used to lower the cost of its spacecraft designs. According to the researcher, the phone will be placed inside the the satellite casing so that it can survive the great swings in temperature and the harsh radiation found in space. A hole will have to be cut in the side of the casing therefore to allow the phone's camera lens to see out. The phone itself will not "call home"; messages and pictures will come back via the satellite's radio link. PTI

Times of India ND 25-Jan-11 p-21

'Being plump is good for health'

London: Are you a reluctant dieter? Then, it would be a perfect excuse for you, as scientists have claimed that staying fat may be better for your health.

The researchers said the idea that weight is harmful has been "exaggerated" and people who are little heavier may actually live longer. The California University (CU) study that looked at about 350,000 people in the US also suggested that the obese put their health in greater danger when they obsessively try to slim down.

It recommended that people should eat a varied and balanced diet, and take "enjoyable" amounts of exercise — even if they still end up carrying a few extra pounds. The researchers also noted that society's obsession with dieting is "ineffective" and often leads to people becoming fatter as they crave food and binge, the Daily Mail reported.

Linda Bacon, a CU professor who led the study, claimed there is evidence to show that overweight people live longer than normal. Those who are obese in old age also tend to live longer than elderly people who are thin, they said. They are also more likely to survive certain health conditions, such as type 2 diabetes, heart disease and kidney failure, added the researchers.

Although it's known that obesity puts people at higher risk of heart disease and other illnesses, the scientists said that "being fat" is not the cause. Instead, they blame poor diet and lack of exercise — which almost always come with obesity. PTI

FAT FACTOR: The idea that weight is harmful has been 'exaggerated' and people who are a little heavier live longer, say experts

Times of India
ND
25-Jan-11 p-21

Breast cancer drug shields lungs too

London: A drug commonly used to treat breast cancer may also help reduce the risk of lung cancer deaths, a new Swiss study has claimed.

Researchers at the University of Geneva found women who were given "Tamoxifen" to treat their breast cancer had a very low death rate from lung cancer. The scientists said that their research, if backed up, could have substantial implications for clinical practice, the BBC reported. Tamoxifen, which cancels out the sex hormone oestrogen, was first used to fight breast cancer more than 40 years ago.

Elisabetta Rapiti, who lead the study at the Geneva Cancer Registry, said: "Our results support the hypothesis that there is a hormonal influence on lung cancer, which has been suggested by findings such as the presence of oestrogen and progesterone receptors in a substantial proportion of lung cancers. PTI

Publication: The Times Of India Delhi;Date: Jan 25, 2011;Section: Front Page;Page: 1;

Dr's 6-point advice to win cancer fight

Kounteya Sinha | TNN

Sanjay Sekhri

CANCER CHRONICLER: Siddhartha Mukherjee, who went to school in Delhi, is author of the bestselling 'The Emperor Of Maladies'

New Delhi: Dr Siddhartha Mukherjee, author of the bestselling 'The Emperor of Maladies: A Biography of Cancer', has a six-point formula to help India control and combat the cancer epidemic.

"Put in place a strong tobacco control programme, initiate sexual health education to prevent sexually transmitted cancers like cervical and oral, encourage vaccination, conduct mammography and screening of vulnerable women for breast cancer and those above the age of 50, start screening for and vaccination against Hepatitis B that causes liver cancer and create centralized systems modelled on comprehensive cancer centres in the US that allow researchers to share data and engage in high quality clinical work," says Mukherjee.

It's simple and achievable advice. But as he says, "The will of the highest authorities is crucial."

Currently an assistant professor of medicine at Columbia University, Mukherjee studied in St Columba's School before becoming a Rhodes scholar. With degrees from Stanford University, Oxford and Harvard Medical School, he feels sad when somebody refers to effective and affordable cancer prevention and care as synonymous with the first world.

▶ Cervical cancer prevention, P 13

Publication: The Times Of India Delhi;Date: Jan 25, 2011;Section: Times Nation;Page: 17;

Now, common test for PG, MPhil, PhD in central univs

Akshaya Mukul | TNN

New Delhi: A committee of vice-chancellors of Central Universities (CUs) has recommended common entrance test for admissions into postgraduate (PG) and MPhil/PhD courses across 42 CUs.

Sources in the committee said if the model works well, it can be adopted at the undergraduate level. However, the report is silent on admissions into undergraduate courses.

Another panel on Navaratna Universities — Indian equivalent of Ivy League varsities — has recommended direct funding from the central government, freedom to fix salaries, fee structure; reward for performing teachers, cutting increment to non-performers and flexibility to invite the best faculty from any part of the world.

The recommendation on common entrance test could evoke strong reactions. Set up late last year by HRD minister Kapil Sibal, it said common entrance for PG courses should be based on both performances in entrance test and in the graduate examination. Performance in the first two years of graduation would be factored. The weightage for performance in graduate course may be 30%, and 70% weightage could be given to performance in the entrance test.

The entrance test will consist of two sections: scholastic aptitude and knowledge of subject in which admission is being sought. The committee has suggested that relative weightage between the two could be in the ratio of 40:60. The panel has said universities with special character/historical reasons could be free to have their own admission process.

In case of MPhil or PhD courses, the committee has recommended, common entrance could be similar to the UGC National Eligibility Test for Junior Research Fellowship. The varsities would be free to have their own interviews for MPhil and PhD courses. The institutions would also have the freedom to decide weightage for the interview, but it should not be more than 40% in any case.

Publication: The Times Of India Delhi;Date: Jan 25, 2011;Section: International;Page: 21;

Kilogram sheds weight, needs new definition

London: Scientists say they are close to achieving a 200-year-old goal of creating a universal system of measurements based on stable quantities, as they progress towards changing how the kilogram is defined.

The kilogram is the only base unit in International System of Units (SI) still defined by a physical object — a prototype of platinum-iridium kept at the International Bureau of Measurements (BIPM) in France. The stability of the kilogram is crucial as it forms the basis from which many other units are derived.

But measurements made over more than 100 years suggest that the mass of the international prototype may have changed by about 50 micrograms — the size of a small grain of sand — prompting the BIPM to try to develop a new definition based on a fundamental physical property.

The international prototype of a kilogram. Its mass has changed by a grain of sand

Scientists will gather at the Royal Society, Britain's national academy of science, to present their progress on redefining the kilogram according to "the Planck constant", a fundamental constant of quantum physics. The International System of Units is the most widely used system of measurements. It is made up of seven base units — metre, kilogram, second, ampere, kelvin, candela and mole — each of which represents a physical quantity. REUTERS

Hindustan Times, ND 25-Jan-11 p-15

IITs hostels set for major hike

ON CAMPUS IIT Delhi, Bombay & Madras may be costliest

ht SPECIAL

Charu Sudan Kasturi
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NEW DELHI: Thousands of students in Indian Institutes of Technology (IIT) hostels may soon need to pay significantly higher fees to live on campus. The country's premier engineering schools are set to hike their hostel fees significantly from the ₹850 a semester charged at present, top IIT and government sources said.

The decision of the IIT Council to remove hostel fees from a list of statutory fees last week will facilitate the hike in hostel fees, the sources said.

IIT Council is the highest decision-making body of the institute.

> **Current hostel fee was set decades back. It is ridiculous to continue with the same figure now.**
> AN IIT DIRECTOR

Over 10,000 students — cutting across streams and including undergraduate and postgraduate students — live in the hostels of India's 15 IITs.

The hike in hostel fees was allowed by the IIT Council even as it blocked a proposal by a government panel under former atomic energy chief Anil Kakodkar to hike the tuition fees significantly at the IITs.

"You could call the decision to allow a hike in hostel fees some compensation to allow us to reduce the subsidy to students," an IIT director said.

"The current hostel fees are paltry and set decades back. It is ridiculous to continue with the same figure now," he added.

Till the approval of the IIT Council last Friday, hostel fees were among a number of fees that were fixed under statues and could only be changed by statutory amendments.

Now, the board of governors of each IIT will independently decide the amount by which it will hike the hostel fees.

Sources indicated that IIT Delhi, IIT Bombay and IIT Madras are expected to hike their hostel fees the most -using the argument that living in hostel would still be much cheaper than finding accommodation outside campus in these cities.

The IITs follow a residential education model, with lectures and assignments that require students to generally live on or near the campus.

Indian Express ND 25/01/2011 P-1(IEN)

War of words over questions on semester, radioactive leak

DEEPU SEBASTIAN EDMOND
NEW DELHI, JANUARY 24

** On behalf of the Science students, prepare a representation to your college principal stating how a major portion of the syllabus for the Semester Examination could not be covered due to frequent strikes in the (Delhi) University.*

** It has been discovered that one of the laboratory attendants was negligent in handling the radioactive pencils used in science practicals. Prepare a memorandum to be issued to the employee giving him stringent warning for his carelessness and warn him that any such repetition would result in a serious action against him.*

The Delhi University science students who took the first semester exams were expected to answer these two question that featured on the 'Technical Writing and Communication in English' paper.

The fact the two 'sensitive' subjects — semester system and mishandling of radioactive material — featured on the question paper and the way in which the questions were posed, has raised many an eyebrow.

The examination was held on January 13 and was taken by the first semester students of BSc (Hons), BSc Physical Sciences and BSc Life Sciences.

The identity of the teacher who drafted the question paper is unknown, thanks to the secretive nature of the examination process. Both posers are part of the fourth question, which carries 10 marks. Students can opt to answer either.

EXPRESS PHOTO

Also featured in the question paper, which carries 75 marks, is a question asking students to prepare a speech to be delivered by a candidate for a Delhi University Students' Union seat. Students have also been asked to write a speech that their principal would deliver as part of the Save the Tiger campaign and have been asked their opinion on whether "the (sic) politicians be allowed to exploit the religious sentiments of people for their vote bank".

While the question on the semester system is being read as a move to make students give evidence against their teachers, the question on the radioactive leak is misleading. On April 30 last year, *Newsline* had reported that a laboratory assistant in the Chemistry department of the DU had warned the Head of the Department of the dangerous nature of the Gamma Irradiator. This was corroborated by a three-member committee which later looked into the case. The examination question, however, chooses to fault the laboratory assistant.

Course and correction

When the syllabus for the Technical Writing course was placed before the University's Academic Council on May 13, 2009, Head of the Department of English Sumanyu Satpathy had objected to its approval, as the course was not designed by his Department. Later, English teachers decided not to teach the course. For most part of the first semester, the course remained un-taught in most colleges. Teaching started only after the Delhi High Court intervened in the matter. Even now, ad hoc teachers handle the course in some colleges.

Indian Express ND 25/01/2011 p-2(IEN)

What AIIMS students live with: Dirty water, no doors in women's washrooms, stray dogs

Meanwhile, NDMC once again returns institute's masterplan for new hostel at Masjid Moth, asks for more details

PRITHA CHATTEREE & HAMARI JAMATIA
NEW DELHI, JANUARY 24

UNHYGIENIC drinking water, missing doors in women's washrooms, naked high-tension wires are a few of the many ailments that students of All India Institute of Medical Sciences (AIIMS) have been living with as they wait for a promised new hostel building for postgraduate students at Masjid Moth.

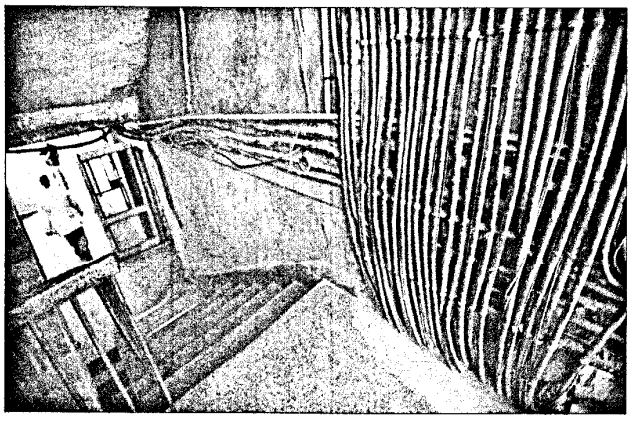
The construction of the building, which has been in the pipeline for the past seven years, has been pushed back once again, with the New Delhi Municipal Council (NDMC) returning the AIIMS 2011 masterplan. The civic agency, which had received the revised copy of the plan on December 28, has asked for more information.

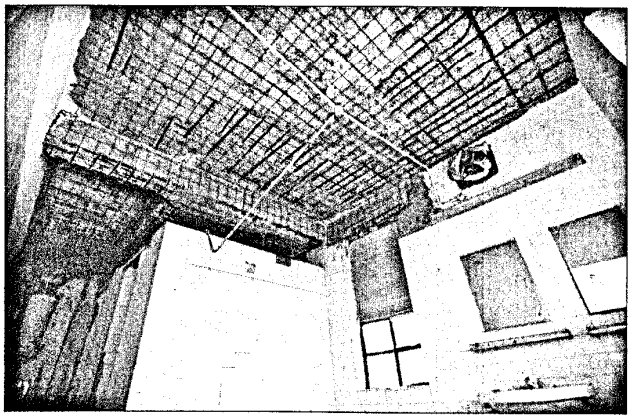
Students, meanwhile, have sent repeated complaints to the authorities, hoping for redress.

In September last year, faecal coliform bacteria were found in samples of the institute's drinking water supply in the boys' hostel and the swimming pool — the water pipeline has, however, not been examined till now by the Engineering department.

"Engineering personnel came and cleaned the tanks, but the drinking water is still visibly muddy. This effectively means that sewage water has been coming in contact with the drinking water for over four months now," said Dr Debjyoti Karmakar, president of the AIIMS Resident Doctors' Association (RDA).

+ The hostel's drinking water purifying plant has been dysfunctional for the past two years.





Bigger problems lie at the women's hostel, where the washrooms either do not have latches on the doors or do not have doors at all. While new doors were installed in October last year, students said they fell apart within a month.

"It is barbaric. Not only do the doors not shut, most of the lights don't work either. Dogs roam inside the bathrooms and it is terrible to use them at night," said a woman resident doctor.

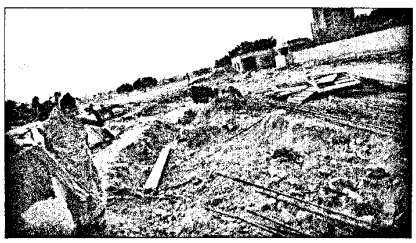
Getting hot water for bathing is another issue, as most of the geysers are not working. "Two men's hostels have solar heaters. This year, despite repeated reminders, the heaters were activated only at the end of December," said another resident doctor.

According to Dr Karmakar, six doctors have complained of dog bites inside hostel premises in the last six months.

High-tension naked wires, lack of parking facility and the non-working "free Internet Wi-Fi" facility also feature on the list of complaints.

"We were promised special parking stickers months ago, but that never took off. At first faculty members started using the space, but now even patients park their vehicles in our allotted space," said Dr Karmakar, talking about the reserved parking facility for resident doctors.

Meanwhile, the 1,700-bed hostel site at Masjid Moth continues to lie deserted. After five years of non-activity, the masterplan was first sent to the NDMC in October 2009. After additional information was sought, the institute sent a revised copy on December 28 last year, which has now been labelled inadequate.



NDMC officials said they have asked the AIIMS administration to provide additional inputs in their proposal, such as the FAR ratio of the buildings and ground coverage. "In the past, AIIMS built structures without proper clearance of the building plans."

AIIMS RDA representative Dr Bhaumik Shah has now filed an RTI with the NDMC to get details of the delays in the promised new hostel.

At present, 70 per cent men and 80 per cent women doctors have to wait for around 20 months to get a hostel seat, even as the residency programme itself runs for three years. "We are called at odd hours due to the nature of our job, and it is difficult for women who rent places far away from the hospital to report for duty at night. There have been repeated complaints of eve-teasing," said Dr Karmakar. In October last year, a junior resident was beaten up and robbed while returning to his rented house in Janakpuri.

CLOCKWISE FROM LEFT: AIIMS site at Masjid Moth; naked high-tension wires inside hostel premises; washrooms at the Women Junior Resident Doctors' hostel. OINAM ANAND

While the AIIMS administration refused to comment on record, senior administrative officials told *Newsline* that the delay in the Masjid Moth hostel is due to the "finicky" nature of the civic body. "AIIMS is a very old institution. A lot of structures have come up, which may not necessarily meet strict building requirements, but it is not practical to bring them down. We have now been asked to furnish details of all existing buildings, which is resulting in additional delay," said a source.

For the new masterplan 2014, the NDMC has asked AIIMS to submit the FAR of all its buildings. "Once the submission is done, we can clear the plans and forward them to Delhi Urban Art Commission," said a senior official of the NDMC. The official also highlighted the fact that part of the AIIMS land in Gautam Nagar belonged to the MCD.

"The process of giving sanction to the masterplan is complicated, but it has recently been sorted out. The NDMC can now clear the building plans on the land on behalf of the MCD," he said.

MINT ND 25/01/2011 P6

NEW COURSES

IIM-Raipur plans research on Chhattisgarh's natural resources

By Prashant K. Nanda
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NEW DELHI

The Indian Institute of Management, Raipur (IIM-R) plans courses and research centres to study Chhattisgarh's natural resources and energy management, hoping to contribute to its home state's development.

"The state we are in is zero power-cut state. At least 44% of its geography is forest cover. This will be our focus, to be different and more worthwhile," IIM-R director B.S. Sahay said.

"Chhattisgarh will become a developed state within 10 years, and we will play our role in helping them achieve it," he said in an interview on Wednesday. Sahay was in Delhi to attend a conference organized by the All India Management Association.

The 10 IIMs are India's elite business schools, and IIM-R became the youngest of the lot when it began operations last year. While IIM graduates form the cream of India's business leaders, the institutes have been criticized for neglecting research.

That is where IIM-R wants to make a difference, said Sahay, who was earlier director of the Management Development Institute, Gurgaon. "We have to do research of contemporary relevance, which is beneficial for the growth of the economy," he said.

The institute plans to introduce courses in energy management and forest management in the next academic year beginning July. It will also carry out case studies on power generation and coal, focusing on how to use the mineral for economic development.

Chhattisgarh has 17% of India's coal reserves as well as the potential to harness solar energy. The state plans to add 1,500MW of generation capacity by the end of 2012 with the help of two power projects being set up by **Chhattisgarh State Power Generation Co. Ltd**, taking total capacity to 3,500MW.

Such an energy rich state is bound to attract energy-intensive industries. IIM-R said it wants to contribute to the process by drawing up case studies and preparing research papers that the government and the private sector would find useful. "This will increase exposure for our students," Sahay said.

Sahay said that in addition to its flagship two-year master's in business administration programme, IIM-R plans to offer executive courses for managers as well as customized courses for companies.

Besides training students to become corporate executives, IIM-R also wants them to be aware of social and cultural concerns, he added.

"While we have arranged for a luncheon meeting with a corporate czar for our students, they have just finished a project on museums in the state. This should help the department concerned in the state to devise ways for its conservation and other issues," Sahay said.

To lead the institute's research work, IIM-R plans to hire 10-15 faculty members with a rich research background this year. It currently has very few full-time teachers.

IIM-R admitted 70 students in its first batch last year, and plans to increase that number in the next academic session. "Being new is not a constraint, but an opportunity for us," Sahay said.

M.R. Rao, dean emeritus at the Indian School of Business, Hyderabad, said new IIMs will find it easier to establish themselves as global brands.

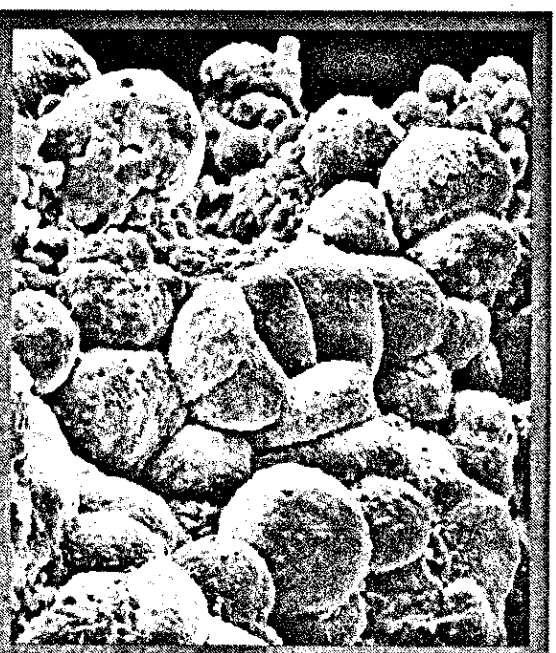
"When you start, you don't have the baggage of the past. You can orient yourself with a global vision. Research and desire to give solutions to society will be key for better brand building," Rao said. "The problem in India is we talk about global standards but end up as teaching institutes only. We have to be research-oriented institutions in the higher education space. If they (new IIMs) are thinking of giving solutions, then it's great."

Sahay said the central and state governments have been supportive.

"The state has allocated 200 acres of land for the permanent campus and we hope it will be ready in two-three years," he said. "Once we move to the new campus in New Raipur, you will see some centres of excellence there. The effort is to address regional issues while aiming for international stature."

Mail Today ND, 25-Jan-11 p-14

Gotcha! A rogue gene that could halt cancer in its track



The gene is found inside a cancer cell (above).

BRITISH scientists say they have made a breakthrough in our understanding of how cancer spreads through the body.

Researchers from the University of East Anglia said their findings could lead within a decade to the development of new medicines to halt a critical late stage of the disease known as metastasis, when cancer cells spread to other parts of the body.

They have discovered a rogue gene which — if blocked by the right drugs — could stop cancer in its tracks.

The culprit gene, called WWP2, is an enzymic bonding agent found inside cancer cells, the researchers explained in their study, published in the journal *Oncogene* on Monday.

It attacks and breaks down a naturally-occurring protein in the body which normally prevents cancer cells from spreading.

The team found that blocking WWP2 boosted levels of the natural inhibitor, which left the cancer cells dormant.

If a drug was developed that deactivated WWP2, conventional therapies and surgery could be used on primary tumours, with no risk of the disease taking hold elsewhere.

Lead author Andrew Chantry said the discovery could lead to a new generation of drugs within the next decade that could stop the aggressive spread of most forms of the disease, including breast, brain, colon and skin cancer.

"The late-stages of cancer involve a process known as metastasis — a critical phase in the progression of the disease that cannot currently be treated or prevented," Dr Chantry said.

"The challenge now is to identify a potent drug that will get inside cancer cells and destroy the activity of the rogue gene. This is a difficult but not impossible task, made easier by the deeper understanding of the biological processes revealed in this study."

The research was funded by UK-based charity the Association of International Cancer Research (AICR), with additional support from the Big C Charity and the British Skin Foundation.

Dr Mark Matfield, of AICR, said: "This is a very exciting new discovery and a perfect example of the way that basic research into cancer can open up ways to develop new ways to treat cancer."

The initial discovery was made while researchers were studying a group of natural cancer cell inhibitors called "Smads".

Dr Surinder Soond, who spearheaded the experimental work in the laboratory, said: "This is a very novel and exciting approach to treating cancer and the spread of tumours which holds great potential."

Daily Mail and Agencies

Deccan Herald Bangalore 22.01.2011 p-13

Govt rejects fee hike proposal for IIT undergraduates

Committee had recommended a four-time increase in fees

NEW DELHI: IIT aspirants can now heave a sigh of relief as the government has rejected a proposal to increase fees for undergraduate programmes of premier technical institutes by about four times.

The Anil Kakodkar committee, set up by the government to study the roadmap for the autonomy and future of the IITs, had recommended that the fee be raised from Rs 50,000 to Rs 2 to Rs 2.5 lakh per annum.

As the committee report came for discussion at the 42nd meeting of the IIT Council here on Friday, Union Minister for Human Resource Development Kapil Sibal rejected the fee increase proposal, noting that it will be a "deterrent" for aspiring students, ministry sources said.

The council asked the committee to rework the fee structure taking into account the aspirations of all sections. During the meeting, Sibal announced setting up 50 research parks at a cost of Rs 200 crore during the 12th Five Year Plan period.

Under the programme, industry will undertake research on various subjects with the support of experts from the IITs.

The research parks have been proposed to be set up on public-private-partnership (PPP) model. One such research park has already come up in Chennai.

The meeting took note of the fact that credit-based practices were being followed by different IITs for promoting students from one semester to the next, and agreed that academic bodies of the IITs should consider acquisition of credits as a criteria for students and granting of degrees to bring uniformity.

This came after the report of the S G Dhande committee on uniform and homogeneous criteria for promoting students in the IITs was placed before the council for discussion.

The council decided that a panel for visitor's nominee for a particular department would be created which all IITs could use for faculty selection. "This will ensure timely selection of professors," the council noted.

It also decided that the appointment of directors should be through advertisements so that a wider base was created. "It was decided that in principle approval may be granted for setting up an institute in Mauritius with the help of the IITs," an official said.

At the meeting, a presentation was made on adopting cyber security as part of the curriculum for the IITs. So it was decided that a committee be set up to develop a roadmap for the future and give a report in next three months.

"The committee would involve all educational institutions as well as government departments," the HRD Ministry official said.

DH News Service

Tribune ND 25-Jan-11 p-12

Grounding B-school curriculum

P. K. VASUDEVA

WITH globalisation taking its root and the inter-connectivity of the global economy asserting itself, the demand for management education is experiencing exponential growth. Nowhere is the craze more conspicuous than in India.

The number of MBA graduates churned out by about 2,000 government-approved B-schools in the country is around two lakh annually. China has some 200 B-schools and an annual turnover of 40,000 graduates, while the corresponding figures for the US are around 900 B-schools churning out 1.5 lakh MBA students.

A comparative analysis of the figures made by the Technopak Consulting Group, shows that India has 100 management school seats per billion dollars of GDP, as against six in China, 11 in the US, and 13 in the UK. The All-India Council for Technical Education (AICTE) and the University Grants Commission (UGC) are flooded with applications from 200 new institutions every year for accreditation of their MBA courses. With the numbers registering a steep rise exceeding 20 per cent every year, it is becoming difficult to separate the chaff from the grain.

Management education has become a sort of El Dorado, with aspirants willing to pay whatever asked for in the hope of making up in the placements and salaries they hope to command.

The result is that fees are skyrocketing with no regulating authority going into whether they are commensurate with the quality of education and teaching and the employability of the products. The AICET has to be very strict in allowing such poor quality institutions to stop mushrooming.

A more disturbing aspect is that most of the so-called B-schools are content to be clones of each other. They offer identical courses, use indistinguishable nomenclature and parrot similar jargon, unabashedly imitating Western B-schools, especially those of the US.

They take pride in flaunting their tie-ups with B-schools abroad, importing a large number of their faculty members and case studies at a huge cost. Most of the case studies generated abroad make no attempt to draw on the lessons provided by the phenomenal achievements of Indian private and public sector institutions and civil society.

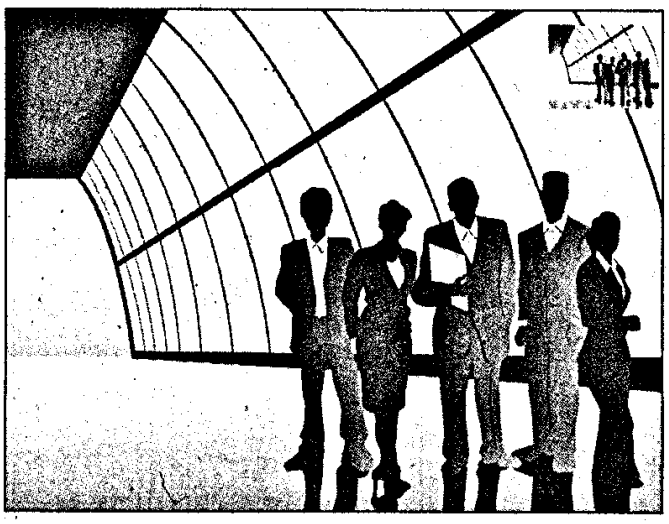
Private sector luminaries, Western scholars and some like-minded Indian academics dominate their governing bodies. There is no display on the premises of any of the B-schools the geniuses of this great country, whose profound insights could vastly enrich the quality of management education and make it relevant to India's cultural and social contexts.

They can only be of minimal help in finding Indian solutions to Indian problems viewed through Indian eyes. The curriculum in B-schools continues to be silo-like, functionally focused. Not surprisingly, the mantra that has echoed in the halls of B-schools in the recent past has been "integrative thinking". Although that is vital, tomorrow's B-schools will fail in their mission if they are focused on facilitating integrative learning of the business functions only. These functions are obviously critical, but they may not be sufficient for successful business leadership.

To help produce the type of transformative leaders, B-schools should provide students access to non-traditional knowledge areas. For example, the training that one needs to run a successful financial institution goes beyond the knowledge of business functions and likely includes an understanding of public policy, law and politics.

The importance of New Delhi to Dalal Street or Washington to Wall Street is more critical than we think, and the distance between them is shorter than one would imagine, if you are trying to succeed in business. The latest competition law needs to be included besides sustainable development of the country.

Tomorrow's curriculums in B-schools will have to break free of the legacy of Western business education and focus on the unique needs of the vast growth markets of tomorrow — that include Prahalad's insights on the "bottom of the pyramid and strategic intent".



Most of the so-called B-schools are content to be clones of each other. They offer identical courses, use indistinguishable nomenclature and parrot similar jargon, unabashedly imitating Western B-schools, especially those of the US.

Also, new methods of marketing research for the "bottom-of-the-pyramid" require creative approaches to survey and measure key issues such as customer needs, preference and choice because of hurdles such as customer illiteracy or semi-literacy. These methods are being developed and can be expected to become a part of curriculums in the successful B-schools of tomorrow.

Today, management education is at a crossroads. There are unique opportunities emerging from the changes, challenges, and expectations shaped by technology, market needs, the public's perception of business, and discerning MBA aspirants.

The B-schools that excel tomorrow will likely be those that grab these opportunities by modifying existing curricula to address the public's expanded expectations of business leaders and cater to new priorities in emerging markets. Further, these schools will need to make available to their students areas of knowledge outside traditional business functions, and facilitate life-long learning for their alums by providing access to modern knowledge from faculty involved in cutting edge research, and offering these faculty incentives to be involved in beyond-the-classroom teaching and mentorship.

This is a high order; however, the B-schools that pursue such an agenda are likely emerge as true catalysts of change in the personal growth of budding business leaders, and through them, in the growth of corporations and communities of tomorrow.

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Hindu ND 25.01.11 p-10

MMR vaccine & science fraud

A 1998 paper linking a measles, mumps, rubella (MMR) vaccine with a 'new syndrome' of autism and bowel disease was retracted by *The Lancet* in February 2010. The retraction came after the U.K. General Medical Council's Fitness to Practise Panel conducted a 217-day hearing and found Andrew J. Wakefield, the lead author of the paper, guilty of dishonesty in relation to "the study's admissions criteria, its funding by the Legal Aid Board, and his statements about it afterwards." Deep-going investigation by Brian Deer, a journalist based in London, and published online recently as a series (www.bmj.com/content/342/bmj.c5258.full) in the *British Medical Journal* (BMJ), has revealed that the researcher from the Royal Free Hospital and School of Medicine, London, whose licence to practise has been revoked by the GMC, indulged in acts that went far beyond dishonesty as specified by the GMC. For instance, the critical data of all the 12 children included in the study had been "misrepresented or altered," especially the symptoms and the timeline when the symptoms first showed up. Dr. Wakefield's conflict of interest included a patent for a diagnostic test to "detect a new syndrome — autistic enterocolitis." The doctor also stood to gain financially from the proposed development of the test kit and a 'safer' vaccine. The journalist has revealed how Dr. Wakefield had the support of his institution when he sought to exploit the MMR scare for financial gain.

Dr. Wakefield's research will remain a textbook case of how falsified medical research involving 12 handpicked children can discredit the safety of a vaccine used for a few decades on millions of children. Scientists were quick to point out the flaws in the paper. No study has been able to replicate his work, and more than a dozen large-scale studies have found no link between the two. Yet it took more than a decade to fully expose the science fraud owing to the inexplicable failure of several institutions and individuals. The fallout of the 1998 study has been severe in some developed countries — public fear has been whipped up, and suspicion about a link between MMR vaccine and autism strengthened. Measles, once considered eradicated in the United States, emerged with a vengeance in 2008 when 131 cases were reported, double the annual average for the previous six years. The same year, England and Wales declared measles as an endemic, the first time in 14 years. Although signs of autism appear around the same time children receive the MMR vaccine, there is an urgent need to educate the public that no link has been found between the two. Awareness-building is all the more important as Dr. Wakefield continues to defend his work.

Courting talent

Is the government ready to provide funds for necessary infrastructure and recruit people with proven track records, particularly the large community of expatriates presently engaged as scientists, technologists and basic science teachers in US and British universities on a comparable pay structure, asks ardhendu chatterjee

Renowned scientist Dr CNR Rao is heading a committee set up by the Centre to oversee the establishment of 50 "completely autonomous centres of excellence".

Learning and innovation go hand in hand. The arrogance of success is to think that what you did yesterday will be sufficient for tomorrow. ~ William Pollard

ECONOMIC growth is inseparably linked with the concomitant advancement of higher learning in science and technology. It probably accounts for the Centre's latest plan to make a "comprehensive attempt" to set up 50 "centres of excellence" in "frontline fields" like biotechnology, nano-materials, mechatronics, bio-informatics, nano-technology and high performance computing, to name a few, over a period of six years.

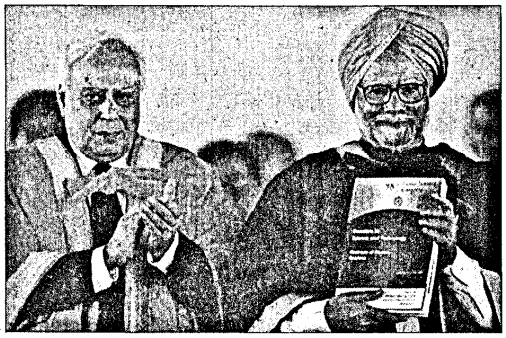
These "emerging areas of science" are presently taught only in select institutes in India. Interest in research in these areas, too, has so far been very disappointing. The move, therefore, reflects the Centre's obsession with the need to improve the quality of higher education and research in science and technology in keeping with that of top universities like Cambridge, Oxford, Harvard, MIT, Yale and Stanford.

The proposed "centres of excellence", conceived to be "completely autonomous", would not only conduct courses at the post-graduate, PhD and post-doctoral levels but also offer short term training courses such as summer and winter schools and separate courses to enhance "the competence levels of teachers and post-graduate students".

A sum of Rs 150 crore has been earmarked for the purpose in the 11th Five-year Plan ending on 31 March 2012. Only outstanding teachers and scientists will be appointed on a contractual basis on a very handsome compensation package to avoid attrition. To implement this ambitious plan the government has constituted a committee with scientist CNR Rao as its head.

The committee has received proposals from as many as 30 educational institutions interested in the project and identified 35 among them as potentially viable. On the basis of their technical merit the accepted proposals have been placed in two categories — A+ and A. The committee claims to have applied "rigorous tools" and global standards to evaluate the research potential and past achievements of the institutes like the total number of applications received during the past five years and the number of post-graduate and PhD students produced by them. It has also considered "the profile of the leader of the group" that has come up with proposals.

So far so good. But we first need to be very cautious and pragmatic while giving a concrete shape to the plan considering the constraints and imponderables and evolve measures to overcome them. So the basic question is, are we at all in a position to compete with the world's best?



At the recently concluded 98th Indian Science Congress in Chennai with its focal theme of "Quality Education and Excellence in Scientific Research in Indian Universities" both Dr Manmohan Singh and minister for science and technology Kapil Sibal said young learners were moving away from science and given the mushrooming of private and foreign players in an unregulated educational environment the government has to provide quality higher science and technology education at an affordable cost.

Frankly speaking, we are not. Inability to pump money in the higher education sector to encourage world-class research to advance knowledge and promote excellence, opposition of Indian political parties to create centres of excellence, which, in their political jargon, is a reflection of elitism or meritocracy, caste-based reservation in respect of admission of students and selection of teachers forcing merit to take a backseat, sharp differences between the Centre and the states over educational issues and, finally, reluctance of the private sector to set up research or innovation universities in the face of increasing government desire to control them are the major stumbling blocks to creating such centres.

Another very important factor has forced India to lag behind in research output. Most of our brilliant students opt for a career either in medical and technical fields. While little or no research is virtually carried out in our medical universities, few engineering students pursue higher studies in view of the lucrative offers that come in their way in campus interviews. They earn more than their teachers even in the early period of their corporate careers. Why should they go in for an MTech or PhD?

Moreover, as education is on the concurrent list, the Centre and the states often work at cross purposes. So there were few takers for the suggestion of a single uniform board at the high and higher secondary levels throughout the country. The West Bengal government's apprehension that once the Bengal Science and Engineering University or Jadavpur University are awarded IIT status it would have no power over them in respect of admission of students and appointment and promotion of teachers is another case in point. Many also see a blatant attempt to recruit party loyalists in the proposal that people without PhDs could also be considered for the posts of assistant professors in Presidency University, trumpeted to be qualitatively different from other state universities.

Another major impediment to the creation of centres of excellence is Indian universities' (the IITs included) traditional emphasis on teaching rather than on research in science and technology— the key to the phenomenal rise of American and British universities. Even Chinese universities are now more research-oriented than their Indian counterparts. So a paradigm shift from teaching to research without compromising with the quality of teaching is needed in keeping with the demands of our times. Is the government ready to provide funds for necessary infrastructure including research laboratories and recruit people with proven track records, particularly the large community of expatriates presently engaged as scientists, technologists and basic science teachers in US and British universities and advanced research institutes on a comparable pay structure?

Instead of looking forward to foreign experts we can attract our own people settled abroad not only for better pay packets and good living conditions but also for right working conditions in which one would like to give one's best.

Fee hike is often thought to be the solution to fund crunch. The countrywide students' demonstration in the UK might dampen those who endorse such a proposal. Often it turns into a hot button political issue that forces a government to do a rethink. No wonder, the Council of the Indian Institutes of Technology has turned down the recommendation of the Anil Kakodkar committee to hike the fees of the Indian Institutes of Technology from the current Rs 50, 000 to about Rs 2 lakh a year.

Eventually, private participation seems to be inevitable. But no private player in India will be ready to run such centres of excellence at a loss. So students would have to be charged astronomically, which in turn would prevent meritorious students from a poor background to seek admission in such institutes. At best, a few philanthropic private organisations may fund some chairs for professors of eminence.

Against this financial cul-de-sac one also fails to understand why the proposed 50 centres should invariably be located in the campuses of leading government and private institutions instead of being developed as completely new ones for it will be a Herculean task for the existing institutions to disown the legacy of the past and imbibe the philosophy of cosmopolitanism that a true centre of excellence practises.

One would also like to know whether these 50 centres of excellence include 14 innovation universities supposed to come up across the 11th and 12th Plan periods in Amritsar, Bhopal, Bhubaneswar, Coimbatore, Gandhinagar, Guwahati, Jaipur, Kochi, Kolkata, Mysore, Noida-Delhi, Patna, Pune and Vizag. Of course, these days the term "ivy league" has caught the fancy of academic institutions in Asian countries. So when China has styled a few of its universities as C-9 or the Chinese Ivy League to create a brand image, can India remain far behind? It now harbours an illusion to brand some of its universities as the "Indian Ivy League".

Finally, one rues the fact that both the Centre and the state governments seldom learn from experience or mistakes. Imbalance in plan allocation often leads to a feeling of regional deprivation that later explodes as a separate statehood demand. Why should all prestigious educational institutions and industries be concentrated in cities? They should be spread across district towns so that people living outside the state capitals do not feel let down.

The writer is assistant professor of English at the Durgapur Institute of Advanced Technology and Management, Rajbandh

The urge to excel

Indian entrepreneurs are a hardworking lot. With social and academic recognition, says samrendra kumar, **they can go a long way in driving economic growth**

ENTREPRENEURS are driving economic growth. For the first time in 200 years, India is getting back its position as an economic power. With GDP growing at over eight per cent, experts are expecting the Indian economy to overtake developed countries in the decades to come. Indians have entrepreneurial capacity.

However, society and government are not very encouraging. To a large extent, society is risk-averse. People usually seek secure and long-term employment, such as government jobs. The physical infrastructure needs to be improved. Social attitudes, lack of capital, inadequate physical infrastructure and lack of government support are major hindrances.

Our parents emphasised the importance of study. According to them the best way to survive was to be an officer. People do have ideas but realising them involves risk we are not accustomed to. To realise ideas, the gap between ideas and investors should decrease.

Nurturing an idea is key to entrepreneurship. If India continues on the free market path, stresses on education leading to greater awareness and accountability, develops physical and economic infrastructure to facilitate enterprise, the Indian license raj will someday equal that of the USA in its effectiveness.

Entrepreneurship historically flourished in India. We have the history of ancient Indian coins being unearthed as far as in Rome, Indonesia and Singapore. The license raj did its best to punish entrepreneurs. India is ninth in the Global Entrepreneurship Monitor survey of entrepreneurial countries. It is highest among 28 countries in necessity-based entrepreneurship", while fifth from the lowest in opportunity-based entrepreneurship.

Liberalisation and the IT boom of the 1990s have been significant factors leading to a wave of entrepreneurship sweeping the country. India is the fifth largest economy in the world (above France, Italy, the UK and Russia) and has the third largest GDP in entire Asia. It is also the second largest among emerging nations. The liberalisation of the economy has paved the way for a huge number of people to become entrepreneurs.

Over the years, India and China have followed opposing development strategies for development. While China's growth has been fuelled by the heavy dose of foreign direct investment, India has followed a much more organic method and has concentrated more on the development of the institutions that support private enterprise by building a stronger infrastructure to support it.

Its corporate and legal systems operate with greater efficiency and transparency than China's. The government has encouraged entrepreneurship by providing training as well as facilities, particularly in rural areas.

One style of innovation that really works in a country as large and diverse as India is grassroots innovation, which includes inventions for a milieu that is quintessentially Indian. In terms of improvement, there needs to be an increase in the quality and quantity of venture capitalists/angel investors.

Also, the government needs to continue reducing the administrative burden on entrepreneurs and coordinate among its various agencies to ensure that the necessary resources are directed where they are needed most. India is adapting a more risk-friendly environment and also looking for jobs in the private sector.

Another serious impediment to the growth of entrepreneurial culture in India is the relatively high "cost of failure". The word "risk" assumes a whole different meaning out here. In the developed world with social security and other safety nets one can start, fail and start all over again. One can, at least, keep walking.

To develop entrepreneurship in India, we have to stop promoting only technological entrepreneurship.

Venture capitalists are more interested in funding technological innovations rather than good or great ideas. Most educated Indians take the safe path of getting a job unless they have a family business. It is the not-so-educated who are willing to take the risk. Our educational system rewards "remembering" as opposed to "learning" with limited scope for creativity. Engineering schools focus on imparting fantastic technical skills while business schools focus on pure management techniques. This ensures a strong ability to replicate ideas and reverse engineering and reinforces our dependence on a cost-based competitive advantage.

Schools in the West have a greater focus on leadership and entrepreneurship. Our educational system needs a revamp to be able to create more leaders and entrepreneurs. The focus of entrepreneurship needs to move to innovation, including process innovation, product innovation, management innovation and business model innovation to succeed in the global market.

A lot of entrepreneurship activity is centered on the IT and BPO industry; but, there are a few outstanding examples in other fields. These companies have successfully exploited a product, service or business model to change the market structure. This new breed of entrepreneurs made their own rules and revolutionised the way business was done. They used a winning combination of customer insight, industry knowledge, and out-of-the-box thinking to create winning innovations. While Ambani's Reliance Communications made mobile telephony affordable to the common man, Captain Gopinath's Air Deccan made air travel commonplace and Kishore Biyani's Big Bazaar changed the face of retail in India. Tata Motors with its $2,000 car promised to do the same to the auto sector. The entrepreneurial spirit is slowly developing but only a few get the chance to set up their own ventures. A vast majority of perceptive minds with great ideas do not get the opportunity to showcase their ideas to financing companies or experts.

India offers a unique incubation environment for most entrepreneurs, greatly distinguishing it from other Western democracies. A country where almost half the Indian population is below 35 years, it is apparent that India has a large working class.

Because of ineffective implementation, society has become chaotic. Although this may sound quite daunting, but it is this very chaotic environment that trains Indians to make sure that things get done in time irrespective of the hurdles. Although our roads are terrible and the ports have waitlists, most Indian businesses try out creative strategies to make sure their services or products reach overseas customers on time. It is this struggle to stick to the promised schedule that differentiates an Indian entrepreneur from his/her Western counterpart.

The writer is director of the career service division at the Indian School of Business and Finance

Navbharat Times,ND 25-Jan-11 p-7

ऑनलाइन एआईईईई टेस्ट लाइन पर नहीं

ज्यादतर स्टूडेंट्स ने इसमें नहीं दिखाई रुचि, सिर्फ 4904 ने ही किया अप्लाई

भूपेंद्र ॥ नई दिल्ली

केंद्रीय माध्यमिक शिक्षा बोर्ड (सीबीएसई) ने ऑल इंडिया इंजीनियरिंग एंट्रेंस एग्जामिनेशन (एआईईईई) में पहली बार ऑनलाइन टेस्ट का विकल्प भी स्टूडेंट्स को दिया है लेकिन इस साल ऑनलाइन टेस्ट में स्टूडेंट्स की रुचि न के बराबर देखने को मिली है। बोर्ड की प्लानिंग के मुताबिक 1 लाख स्टूडेंट्स के लिए ऑनलाइन टेस्ट कंडक्ट किया जाना था लेकिन सिर्फ 4904 कैंडिडेट ने ही इसके लिए अप्लाई किया है। खास बात यह है कि एआईईईई के लिए अप्लाई करने वाले कैंडिडेट की संख्या 11 लाख से अधिक है और इनमें से पांच हजार से भी कम ऑनलाइन टेस्ट देंगे।

सीबीएसई के डायरेक्टर (स्पेशल एग्जाम) पीतम सिंह के मुताबिक, बोर्ड ने पहली बार ऑनलाइन टेस्ट की प्रक्रिया शुरू की है और अगले साल इसके बारे में स्टूडेंट्स को और जागरूक किया जाएगा और निश्चित तौर पर ऑनलाइन टेस्ट को लेकर स्टूडेंट्स का रुझान बढ़ेगा। पीतम सिंह के मुताबिक, इस बार एआईईईई में अप्लाई करने वाले स्टूडेंट्स की संख्या पिछले साल से ज्यादा है और यह संख्या 12 लाख तक पहुंच सकती है यानी इस बार मुकाबला और कड़ा होने जा रहा है।

खास बात यह है कि ऑनलाइन टेस्ट के लिए जिन कैंडिडेट ने अप्लाई किया है, उसमें सबसे ज्यादा स्टूडेंट्स दिल्ली के हैं। दिल्ली के 776 स्टूडेंट ऑनलाइन टेस्ट देना चाहते हैं। उसके बाद मुंबई के 624 व चेन्नै के 543 स्टूडेंट हैं। गुवाहाटी से सबसे कम 34 स्टूडेंट्स ऑनलाइन एग्जाम देंगे। बोर्ड इस समय ऐप्लीकेशन फॉर्म की स्कैनिंग कर रहा है और 6 लाख से अधिक फॉर्म स्कैन किए जा चुके हैं। सीबीएसई ने पायलट प्रोजेक्ट के तौर पर ऑनलाइन एग्जाम का ऑप्शन शुरू किया है। यह एग्जाम देश भर में नैशनल इंस्टिट्यूट ऑफ टेक्नॉलजी (एनआईटी), इंडियन इंस्टिट्यूट्स ऑफ इन्फर्मेशन टेक्नॉलजी (आईआईआईटी), डीम्ड यूनिवर्सिटीज और सरकारी सहायता प्राप्त इंस्टिट्यूशन में बीई/ बीटेक, बीआर्क/ बीप्लानिंग कोर्सेज में एडमिशन के लिए आयोजित किया जाता है। बोर्ड के मुताबिक इस बार एआईईईई में अप्लाई करने वालों की संख्या और बढ़ी है क्योंकि कुछ और इंस्टिट्यूट एआईईईई के साथ जुड़ रहे हैं। सीबीएसई द्वारा 10वें साल यह एग्जाम कंडक्ट किया जा रहा है। एग्जाम में फिजिक्स, केमिस्ट्री, मैथ्स से जुड़े क्वेश्चन होंगे। आर्किटेक्चर कोर्स में एडमिशन लेने के इच्छुक स्टूडेंट्स को एप्टीट्यूड टेस्ट एंड ड्राइंग के क्वेश्चन का जवाब भी देना होगा।

गौरतलब है एआईईईई के जरिए देश के प्रतिष्ठित इंस्टिट्यूशन में एडमिशन मिलता है। दिल्ली में डीटीयू, एनएसआईटी जैसे टॉप इंजीनियरिंग इंस्टिट्यूशन में भी इसी टेस्ट के जरिए स्टूडेंट्स का सिलेक्शन होता है।

उदासीनता

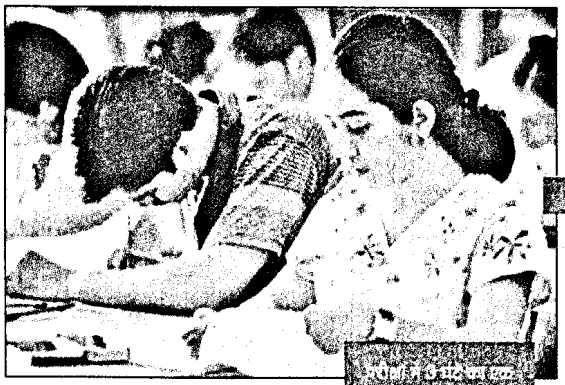
- एक लाख छात्रों का ऑनलाइन टेस्ट लेने की बोर्ड की तैयारी
- इस टेस्ट के लिए दिल्ली रीजन से सबसे अधिक 776 स्टूडेंट्स
- एआईईईई के लिए हुए हैं 11 लाख से अधिक रजिस्ट्रेशन
- सीबीएसई ने पहली बार शुरू की है ऑनलाइन टेस्ट की प्रक्रिया

Rashtriya Sahara ND 25/01/2011 p-16

17/12

गेट सेट गो

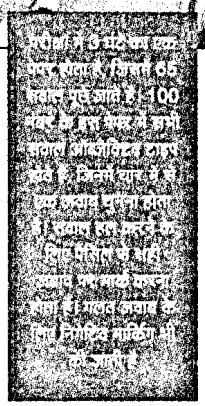
IITs : GATE परीक्षा



16

इंडियन इंस्टीट्यूट ऑफ टेक्नोलॉजी 13 फरवरी को ग्रेजुएट एप्टीट्यूड टेस्ट इन इंजीनियरिंग (गेट-2011) का आयोजन कर रहा है। इस साल परीक्षा का आयोजन इंडियन इंस्टीट्यूट ऑफ टेक्नोलॉजी, मद्रास कर रहा है। अखिल भारतीय स्तर पर आयोजित यह परीक्षा मास्टर डिग्री के लिए है। इंजीनियरिंग, टेक्नोलॉजी, आर्किटेक्चर और अन्य विज्ञान विषयों में डॉक्टरेट प्रोग्राम के साथ ही यह परीक्षा मानव संसाधन विभाग के स्कॉलरशिप प्रोग्राम के लिए भी बहुत महत्वपूर्ण है।

- गेट-2011 में शामिल होने लिए इंजीनियरिंग, टेक्नोलॉजी, आर्किटेक्चर में स्नातक होना जरूरी है। गणित, विज्ञान, स्टेटिस्टिक्स या कम्प्यूटर एप्लिकेशन में मास्टर की पढ़ाई कर रहे छात्र भी गेट-2011 में शामिल हो सकते हैं।
- गेट की परीक्षा उत्तीर्ण करने वाले छात्र सीएसआईआर के लैब या उससे जुड़े अन्य प्रोजेक्ट में जूनियर रिसर्च फेलोशिप अवार्ड के लिए चुने जा सकते हैं। कई सरकारी विभाग में गेट का स्कोर साइंटिस्ट या इंजीनियर के जॉब के लिए जरूरी होता है।



परीक्षा तिथि : 13 फरवरी, 2011

- परीक्षा में तीन घंटे का एक पेपर होता है, जिसमें 65 सवाल पूछे जाते हैं। 100 नंबर के इस पेपर में सभी सवाल ऑब्जेक्टिव टाइप होते हैं, जिनमें चार में से एक जवाब चुनना होता है। सवाल हल करने के लिए पेंसिल से सही जबाव पर मार्क करना होता है। गलत जवाब के लिए निगेटिव मार्किंग भी की जाती है।
- गेट की परीक्षा में आपको 21 में से एक पेपर चुनना होता है। इसमें एयरोस्पेस इंजीनियरिंग, एग्रीकल्चर इंजीनियरिंग, आर्किटेक्चर एंड प्लानिंग, बायो टेक्नोलॉजी, सिविल इंजीनियरिंग, केमिकल इंजीनियरिंग, कम्प्यूटर साइंस एंड इनफॉर्मेशन टेक्नोलॉजी, केमिस्ट्री, इलेक्ट्रॉनिक्स एंड कम्युनिकेशन इंजीनियरिंग, इलेक्ट्रिकल इंजीनियरिंग, जियोलॉजी एंड जियोफिजिक्स आदि शामिल हैं।
- छात्रों को यहां ध्यान रखने की जरूरत है कि एयरोस्पेस इंजीनियरिंग, जियोलॉजी एंड जियोफिजिक्स, माइनिंग इंजीनियरिंग, टेक्सटाइल इंजीनियरिंग एंड फाइबर साइंसेज में पेंसिल से जवाब देने का विकल्प नहीं है। इसमें छात्रों को की-बोर्ड या माउस की मदद से कम्प्यूटर पर जवाब देना पड़ता है। गेट के हर पेपर में 15 नंबर का एक जनरल एप्टीट्यूड टेस्ट होता है।
- गेट की तैयारी के लिए हमेशा स्टैंडर्ड बुक्स पर भरोसा करें।
- सिलेबस पूरा करने की कोशिश करें।
- अगर सिलेबस पूरा नहीं हो पाए तो जितना तैयार करें, उतना बिना किसी गलती के करें।
- जमकर प्रैक्टिस करें, ऑनलाइन मॉक टेस्ट की सहायता ले सकते हैं।
- हर चैप्टर को पूरा करने के बाद नोट्स तैयार करें। इससे आपको रीवीजन करने में मदद मिलेगी।
- मॉडल टेस्ट पेपर को हल कर अपनी तैयारियों को परखें।
- किसी चैप्टर को तैयार करते वक्त क्यों, कैसे और क्या जैसे सवाल करें और उसे हल करने की कोशिश करें।
- मॉडल टेस्ट पेपर में अपने स्कोर का मूल्यांकन करें। इससे आपको अपनी कमजोरियों का पता चलेगा। इसके बाद कमजोर हिस्से को दुरुस्त करें।
- अगर किसी सवाल पर या उसके जवाब पर शंका हो, तो विशेषज्ञों से बात करें या ऑनलाइन प्लेटफॉर्म पर उसे डिस्कस करें।
- तुक्का मारने की बजाय जानकारों की मदद लेकर सवाल को हल करें। निगेटिव मार्किंग आपकी मेहनत पर पानी फेर सकता है।
- जरूरत हो तो समय रहते कोचिंग सेंटर ज्वाइन करें।
- मॉक टेस्ट के लिए भी प्रोफेशनल सेंटर की मदद ले सकते हैं।
- गेट के आयोजन या पैटर्न में हुए बदलाव के लिए उसकी वेबसाइट की मदद लें।
- रिवीजन पर पूरा ध्यान दें।

■ अमित त्यागी