राजस्थान नए/पा०सधन

नई दिल्ली। बैंकलिन्टन टेस्ट अथवा माद बाच्चा की कामाचा रहे संगीत। पृथ्वीराज वायूमेल से संयुक्त, आपातति वाच्चा रहे संगीत। इसके अनुसार ऐसा तेजस्तम गृहस्त वैटिका किया गया है, जिसके लाभ के स्तर पानी की बढ़त रही है। इसलिए ह्यूं, ऐसा असाइटेड टेस्ट चला है, जिसके लाभ कार और धरोहरी के रूप में मिली है। इसके अनुसार किसी नहीं की क्या बड़ा वैटिका कार की आदत लगा है।

रत्नागिरी बैंकलिन्टन टेस्ट एवं राजस्थान ने अच्छी तरह से खेले है। इसलिए बैंकलिन्टन टेस्ट ने अच्छा स्थान पर आयोजन किया है।

मार्केट में 5 हजार में होती है आंतों : आईआईटी, दिल्ली के कोर्समेंट, इंजीनियरिंग की विभागों की फैक्ट्री टीम ने एक थोड़ा बालीक्ष एकाधिकारिता टेस्टिंग फिल्ड तैयार की है, जिससे मात्र 120 रुपये भर्ती में बैंकलिन्टन का भाग के लिए भर्ती हो सकते हैं। अब तक मार्केट में बैंकलिन्टन की जोब करने वाले 5 हजार से अधिक होते है। इसके दिन के विवाद में शरण एवं गौरव की बढ़त है।

बैंकलिन्टन से चलनी सीखन कर : आईआईटी, दिल्ली के सीटर फॉर स्कूल टेस्टिंग्स एवं माद बाच्चा के प्रोफेसर बीनी कुश्चन आयोजन ने वायूमेल को पूर्ववर्ती बनने का साधन तैयार किया है।

इसका नाम अम्बरवाला में बैंकलिन्टन का स्थान बना रहा है। दादा के मुख्य, कोर्समेंट के बनने वाले बैंकलिन्टन में 20 वर्षों में और 40 वर्षों की धरोहर अवस्था है। इस परियोजना करने के लिए 95 पैसे का निर्माण का जारी है। सेरियलिज्म में भी होना चाहिए है, भारत के बनने वाले बैंकलिन्टन में 20 पौंद्रादिक और 40 पौंद्रादिक की अभाव हो जाएगा। इस प्रकार करने के लिए 95 पैसे का निर्माण का जारी है।

इस प्रकार करने के लिए 95 पैसे का निर्माण का जारी है। भारत के बनने वाले बैंकलिन्टन में 20 पौंद्रादिक और 40 पौंद्रादिक की अभाव हो जाएगा। इस प्रकार करने के लिए 95 पैसे का निर्माण का जारी है।
आईआईटी में लगाई जाएगी छात्रों के आविष्कार की प्रदर्शनी

नई दिल्ली | आईआईटी दिल्ली में विगत वर्षों की भांति इस बार भी शनिवार को छात्रों द्वारा आविष्कृत प्रोजेक्ट्स की प्रदर्शनी लगाई जाएगी। इस दिन बाहरी लोग और स्कूली छात्र भी छात्रों के प्रोजेक्ट्स का अवलोकन कर सकेंगे। आईआईटी दिल्ली के प्रोफेसर सुनीत तुली (डीन इंडस्ट्रीयल रिसर्च एंड डेवलपमेंट) बताते हैं कि इस बार प्रदर्शनी में करीब 500 प्रोजेक्ट्स रखे जाएंगे। इसमें कई प्रोजेक्ट्स ऐसे हैं जो सामाजिक सरोकार से जुड़े होने के साथ-साथ इकोफ्रेंडली हैं। कुछ प्रोजेक्ट्स अद्वितीय हैं, जिनके लिए पेटेंट भी अप्लाई किया है।
Engineering students give wings to innovative ideas

A team of three students — Tabrez Nadi, Pavan MJ and Vignesh Arul RA — all from the aeronautical engineering department at ACS College of Engineering, Bangalore, won a prize of ₹1 lakh in the first Boeing-IIT National Aero-Modelling Competition. The team beat 170 teams from various institutes across the country. Held at the Indian Institute of Technology (IIT) Delhi last week, the competition aimed at providing a unified national competitive platform for students interested in aerospace and related engineering disciplines.

Conducted in two-staged pan India zonal and national levels, the competition assessed the participants’ expertise in building an aircraft. These aircraft were evaluated on parameters such as showcasing efficiency in climb and glide and swift manoeuvring skills. IIT Delhi hosted the finals.

“We were adjudged winners because of our strategy. The manoeuvre our aero-model performed was better than all other finalists. In fact, five to six of our exhibits crashed while being tested and we had developed the final one just a day before coming to Delhi for the event,” says Nadi, a final-year student from ACS College of Engineering.

The winners said that the competition gave them an opportunity to understand how team skills were required to come out with a final product.

Aircraft manufacturing giant Boeing, which sponsored the event, said that the response of the students and the IITs was overwhelming.

According to Pratyush Kumar, president, Boeing India, “We already have many ongoing partnership programmes in aerospace innovation with the IITs. However, we decided to encourage young minds to do some foundational work. Aerospace engineering is a multidisciplinary subject which involves mechanical, aerodynamics, electrical, computer science and many other streams. I am happy to say that it has generated a lot of enthusiasm. If we can capture a fraction of that in the aerospace pipeline, it will give a huge boost to the country and the industry”.

Says PVM Rao, professor, mechanical engineering, IIT Delhi, “It’s a unique opportunity as students get trained in skills which does not happen in laboratories and classrooms.”

IF WE CAN CAPTURE A 
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PRATYUSH KUMAR, president, boeing india

A participant at the Boeing-IIT National Aero-Modelling Competition
Boeing gives wings to student endeavours

Three students bag the first National Aeromodelling Competition

NAVADHA PANDEY

New Delhi, April 15

Tabrez Nadvi has been building planes since he was in 10th standard. His dream is to build a one-seater aircraft for himself and fly across the world.

The 21-year-old aeronautical engineer from ACS College of Engineering, Bangalore, along with his two team members, Pavan and Vignesh, has won the first Boeing National Aeromodelling Competition.

"It took us just three days to build the plane and we bunked a month of college for flying practice," says Nadvi.

The competition was organised by Boeing, in association with the IITs of Kanpur, Delhi, Bombay, Madras and Kharagpur. About 170 teams participated in the aircraft design and flying competition, of which 14 teams made it to the finals.

Nadvi’s team, which came third in the south zone by defeating 60 teams, won the final at IIT Delhi recently, bagging a prize money of ₹1 lakh.

"For the finals, we had to go through two rounds — the manoeuvre round, where the aircraft's stability was tested, and the tactical round, where the plane had to cross some hurdles. We won because of our excellent design. Our plane weighed just 500 gm," Nadvi added.

India specific

On the idea for the competition, Boeing India President Pratyush Kumar says, "We have a partnership with IITs. We were brainstorming as to how to capture the hearts and minds of young talent on aerospace engineering and manufacturing."

This is an India-specific programme by the US-based compa-
Urgent need to revitalise our examination system

O
ver the past few decades, the Indian higher education system has remained under stress. This is due to the increased number of students, the huge but ineffective administrative machinery, and a complex legal structure, which remained unchanged over time.

We have been following to the British system, therefore, today one finds that majority of public and private universities are locked into the ‘society/trust’ syndrome. We have not even created exclusive legal provisions for entities that focus on education. Every education institution is treated like any other ‘society’ that concentrates on social reform. In India, there are numerous institutes with various social interests, along with societies that set up educational institutions that fall into such a huge cluster of ‘societies’.

Education, as an entity, demands openness, flexibility and transparency. Educational institutions deliver knowledge and must have the ability to change with time. They deal with the fertile and exci
ving mind of youths. Hence, an educational institute needs to operate with demands that change with time and the present a legal structure. Today, there are 609 universities which have emerged through the state and central legal structure. Also, there are public universities — and in recent times, state private universities (a total of 145) — which have emerged as a big force in higher education.

In the 20th century, the central government enhanced deemed universities. Initially,

SAD STATE: Today, the quality of Indian graduates is questionable because universities have nurtured the compromised assessment process.

the focus was on emerging technologies like information communication technologies (ICT), computer science and technology, and bio-sciences and technologies. But the industry demanded knowledge trained youths and Indian education system could never deal with these expectations mainly because the legal structure could not manage the changes expected at academic and operative level. Hence, the central government decided to use the deemed-to-be university’s legal structure for meeting these demands of industries. The beginner’s success was cleverly expanded by owners of institutions by including degrees in engineering, medical and management into this new, flexible model that gave freedom for financial fees so as to meet investments for expanding the academic infrastructure. It was expected that these deemed universities would bring in modern delivery methods to train the youths. However, there were enormous compromises in the admission process, (controlled by the owners) and the net result was admission of low quality students, along with compromises in academic delivery and examination process.

In the ’80s and ’90s, fresh graduates were accepted by industries as trained human power was required. Both deemed universities and state private universities systemically compromised in delivery of knowledge and judging students on the basis of the knowledge earned by them.

The state and central government universities were also passing through a difficult phase. The number of students was rapidly growing mainly because poor families had no choice but to join governmental universities. The government’s funds were depleting mainly because new universities were being formed. Nevertheless, educational infrastructure was way behind what one would find abroad. ‘Face-to-face’ (F2F) learning blended with new e-learning material was spoken about at seminars and conferences, but never became an integral part of F2F education. Public universities were struggling with semester and annual system and made weak attempts to bring in a credit-based modular structure. The final result was that public universities, just like deemed and state private universities, were heavily compromising the quality of education.

The public and private university system is handling a large number of students and their examination process is controlled by two interlinked, but independent sectors. One is the academic layer that touches the academic structure and the process of curriculum. It is here that the elected representatives in boards of studies and ‘faculty and academic councils’ become critically important. The importance of such elected members has brought in an unhealthy approach in the examination process. The other sector is the one governed by university officers in examination division. There is a damaging link between various representatives of academic bodies and officers in the examination divisions. Today, the quality of Indian graduates is questionable in India and abroad mainly because universities have nurtured the compromised assessment process.

The time has come to revitalise the examination system.

(The writer is former chairman of UGC, former vice-chancellor of University of Pune and founder director of NAAC)
Women powered by technology

TECH CONNECT The Indira Gandhi Delhi Technical University for Women (IGDTUW) has started admissions for various programmes for 2014-15. This is the second year of admissions ever since the erstwhile Indira Gandhi Institute of Technology was upgraded to a university last year.

This year, the university has launched PhD programmes in computer science and engineering, electronics and communication engineering, mechanical and automation engineering, information technology, applied sciences and interdisciplinary areas like nanotechnology and environmental sciences and computer applications. These will be open to both female and male candidates. IGDTUW also offers BTech degrees in all these disciplines, an MCA and MTech in information security management; mobile and pervasive computing; robotics and automation and very large-scale integrated (VLSI) design. A part-time MTech programme in electronics and communication is also on offer. Each BTech course has 60 seats and every MTech programme has 30 seats. Admission to the undergraduate programme is based on the JEE (Main) score combined with CBSE marks and the MTech intake depends on a candidate’s GATE score. About 85% seats are reserved for students of NCT Delhi.

“We also plan to start PG diploma programme on e-governance in collaboration with the National Institute of Electronics and Information Technology. BTech in electrical and electronics engineering, BArchitecture, MArch in town planning and urban design and MTech in nanotechnology and programmes. MTech in renewable energy and green technology with a focus on smart grids is also on the cards. We are also aiming to set up a knowledge park, an incubation centre and an entrepreneur development cell by next year,” says Professor Nupur Prakash, founder vice chancellor of IGDTUW.

Elaborating on the new approach of the university, Prakash says, “Our main focus will be on research and innovation and helping our girls develop entrepreneurial skills, for which we are seeking help from the department of science and technology.”

What is creditable is that the university has 25% of its students getting into hardcore research and higher studies. The rest of them prefer to opt for careers in application-oriented areas, design, consultancy and manufacturing sector. About 75% go in for software development, software architecture design, software project management, mobile application development, automotive engineering and VLSI design.

Hardware design and telecom services and management are the other choices. It has 55 regular faculty, 30% of which are PhD holders, and is going to add another 30% faculty in the coming academic session.

WHAT YOU NEED TO KNOW

HISTORY

Set up in 1998, IGDTUW was earlier called Indira Gandhi Institute of Technology and it was part of Guru gobind Singh Indraprastha University. The university has recently been granted approval by University Grants Commission under section 22 and also get provisional membership of Association of Indian Universities

FACILITIES

IGDTUW has a learning resource centre which has a collection of over 16,000 books in the areas of science, engineering and technology. The university has one hostel for undergraduate students with about 200 seats and has added a new hostel for MTech students this year with a capacity of 120 students. In addition, there are mechanical and automation engineering laboratories, computer science and engineering laboratories and electronics and communication engineering laboratories etc.

PLACEMENTS

The institute boasts of 100% placement of its student in prestigious companies and MNCs. These include Adobe, Microsoft, Oracle, Maruti Suzuki India Ltd, GE Research, Hindustan Unilever, Mahindra and Mahindra, General Motors, Yamaha Motors, etc. Around 37 companies visited the campus during this year’s placements and made 311 offers with about 50% students getting multiple offers.

PROGRAMMES

BTech in computer science and engineering; electronics and communication engineering; mechanical and automation engineering and information technology. The university also offers MTech, MCA and PhD programmes.

Would you like to go for engineering and research? Post your comments on facebook.com/hstudio
26% GMAT TAKERS ARE WOMEN

Financial instability and societal pressure could be causes of this low percentage of women

Vanita Srivastava

There has been a tremendous surge in women taking GMAT in China. 64% of the total GMAT tests taken in China in 2013 were by young Chinese women. In contrast, only 28% of the GMAT test takers in India were women.

This was revealed in the just released mba.com Prospective Students Survey in 2014, carried out by GMAC.

Gregg Schoenfeld, Director Management Education Research, GMAC told HT: “China’s single child policy has been the most significant enabler for aiding financial security of women graduates there. The average age for females was around 25 for Indian citizens against about 22 in China. A critical factor for younger GMAT test takers in China could be their financial ability to pay for such costs.”

Other reasons for low percentage of female GMAT takers in India are lower gross enrolment ratio of women into higher education in India when compared to China, societal pressure of marriage and motherhood. According to the survey, the United States remains the most sought after educational destination for MBA by Indians. Nearly 32% of the Indians taking the GMAT exam for MBA in 2013 sent their scores to business schools in the United States. As more graduate management programmes across Asia-Pacific accept the GMAT exam in their admissions process, a higher percentage of GMAT scores are sent by Indians to Indian schools (8% in 2013, up from 16% in 2009) and other regional programmes such as Singapore (8% of Indian scores in 2013, up from 8% in 2009). Globally the top 10 study destinations prospective students prefer includes (in rank order): the United States, United Kingdom, Canada, France, India, Hong Kong, Germany, Singapore, Australia, and the Netherlands.

As compared to China, where 64% of the total GMAT tests are taken by young Chinese women, in India only 26% of the women take the GMAT exam.

China’s single child policy has been the most significant enabler for aiding financial security of women graduates there.

Among Indian citizens, adding an MBA to an undergraduate engineering discipline remains an attractive option, particularly for men who aim to become entrepreneurs, have international careers or change career paths. The majority (63%) of Indians taking the GMAT exam in 2013 studied engineering, computer science or information technology as undergraduates.

The report shows steadily growing preference for self-employment among fresh MBA graduates in India. In the 2000-2009 period, 25% of graduates opted for it while in the decade before that the figure was 14%. Between 2010-2013, 45% of B-school alumni started their own business.

64% of the total GMAT tests taken in China in 2013 were by young Chinese women
26% of the GMAT test takers in India were women
52% of Indians taking the GMAT exam for MBA in 2013 sent their scores to business schools in the United States.
63% of Indians taking the GMAT exam in 2013 studied engineering, computer science or information technology as undergraduates.
Mecca of environment education

TERI UNIVERSITY

Gauri Kohli  
gauri.kohli@hindustantimes.com

For those keen to link academics with environment, pursuing a degree at TERI University is a good idea. Aspirants get an opportunity to gain in-depth insights into world environment and climate science through a well-structured curriculum and lectures from eminent scientists and professors.

Backed by highly-experienced research teams and eminent scientists who work in TERI, the university hopes to help students develop a sense of awareness for contemporary environmental issues along with a fresh perspective on earth and its resources.

The university has started its admission process for the next academic year. It offers MBA, MSc, MTech and MA programmes. The last date for issue of application forms is April 25, 2014. This year, it will be starting a new master's programme in water science and governance. This will be a multidisciplinary, multi-track programme leading to the award of an MTech or MSc degree. The programme will focus on cross-cutting issues of water resources through courses related to the science, engineering, legal, governance, and socio-economic dimensions. The framework of the programme is in consonance with the spirit of the UN International year of water cooperation promulgated by the United Nations General Assembly in the year 2013 and the priorities defined in India's National Water Mission.

"The university is planning to set up more campuses in cities other than New Delhi. The focus will be on environment and health as well as on building capacity in the area of sustainable energy solutions," says Rajiv Seth, registrar, TERI University. TERI University has always been in the news for its eco-friendly ventures. It has recently won the 'Greenest University and Research Institution' award by Responding to Climate Change (RTCC) and other honours. Its campus is recognised as a model 'green' campus, and has features which are easily replicable and scalable in other campuses.

Use of energy efficient heating and cooling systems (eg earth air tunnel, thermal mass storage and variable refrigerant volume system) on campus result in energy savings of the order of 40% as compared to a conventional building. Energy efficiency has been achieved through passive architectural design and use of modern and traditional features and technologies. Natural elements eg the sun, the sky and air, have been taken into consideration during design.

"Students are exposed to a variety of subjects, tools and methodologies in a new way of thinking that looks at the planet's problems not just from the lens of a subject specialist, but from the perspective of one who recognises the complex linkages between man and his environment," adds Seth.

ALL IN A NUTSHEE

HISTORY

Accredited with an 'A' grade by the National Assessment and Accreditation Council of India (NAAC), the university has received accolades for incorporating new and innovative elements in education. Established in 1998, it was subsequently recognised as deemed-to-be-university by the University Grants Commission.

PROGRAMMES

Apart from doctoral research, the TERI University runs master’s programmes in environmental studies and resource management; environmental and resource economics; geoinformatics; climate science and policy; renewable energy engineering and management; urban development and management; public policy and sustainable development; sustainable development practice; and plant biotechnology. The university also offers MBA programmes in infrastructure, and business sustainability. It also offers a PG diploma programme in renewable energy, which is offered in the distance learning mode.

PLACEMENTS

The placement cell acts as the focal point for prospective employers. To facilitate interaction between them and the students, the placement cell organises pre-placement talks.
City scientists trying to grow liver in lab

DURGESH NANDAN JHA | TNN

New Delhi: You may have heard of kidney dialysis but did you know that even the liver can be flushed of its toxins using a similar method? At the Institute of Liver and Biliary Sciences in New Delhi, the doctors have been using this technology to give a window period for liver failure patients on the wait for transplant.

Not just that, using the concept of dialysis, the scientists here are also working to develop a bioartificial liver which can mimic the natural functions of human liver.

“In dialysis, toxins can be cleared from the blood. But the liver has other functions like maintaining blood sugar levels, synthesizing bile acids which take care of cholesterol, and secreting proteins crucial for blood clotting. The idea behind developing a bioartificial liver is to achieve a near-natural function so that patients suffering from the organ failure can get a longer window period for transplant,” said Dr SK Sarin, director, ILBS.

The institute, he said, has been working on the project for over two years and till now they have only been able to identify some of the human liver cells that can be cultured and induced to perform the hepatic functions by processing plasma of liver failure patients. “The matrix on which the cells will be cultured is being developed by IIIT Kanpur researchers,” Dr Sarin added.

The ILBS director said that many centres across the world are working on the project to develop a bio-artificial liver but there has been no breakthrough yet. Every year, 1 lakh people die in the country due to liver failure. At most, 1,000 livers are saved with liver transplant—the only treatment option available to such patients—due to lack of donors.

Doctors believe any breakthrough in developing a bioartificial liver or even an advanced dialysis system can help in the survival of patients at least till the time one is able to get a matching donor or for the liver to regenerate.

The liver is a very special organ: even if more than one-third of its overall mass is damaged—for instance, by hepatic toxicity—it can regenerate itself completely within a month. In patients suffering from chronic liver failure, this self-healing process is affected. Doctors at ILBS said they are using granulocyte-colony stimulating factor (G-CSF)—a cell product which makes the white cells—to stimulate this.

The liver processes the food we eat after it has been absorbed by the intestines. It also neutralises the toxins we may have taken in and produces proteins that protect us from infection and bleeding. Fatty liver disease (alcoholic and non-alcoholic), hepatitis B & C and cirrhosis are some of the common health problems that affect its functioning, often leading to failure of the organ.

Liver transplant is a treatment option available for such patients but few are able to undergo it due to unavailability of donors, costly treatment and infrastructure-related issues.