### Newspaper Clips May 25-26, 2014

<u>May 25</u>

### Deccan Herald ND 25/05/2014 P-6

# Campus blues of new IITs put HRD ministry on backfoot

### Prakash Kumar

NEW DELHI: If the Modi government were to go on a sanctioning spree after taking over on Monday, here is a word of caution from the officials of the Human Resource Development Ministry—no new educational institute should take off unless all necessary infrastructures are in place.

In a presentation prepared for the new HRD Minister, the officials have cited several instances from the past to drive home the point that allocation of land, construction of campus and other necessary infrastructure should first be ensured before a new institute is operational. No new institute should be allowed to operate from a temporary campus as the process to shift to a permanent campus takes time due to various reasons, including delay in allocation of land by the state governments. This not only leads to escalation of establishment cost but also takes a toll on its "branding", sources said.

The higher education department of the HRD Ministry learnt this lesson from its past experience, especially during a decade-long regime of the Congress-led United Progressive Alliance (UPA) government, which ended this year following a resounding victory of the Bharatiya Janata Party (BJP) in the just-concluded Lok Sabha elections. The UPA government set up eight new Indian Institutes of Technology (IITs) and seven Indian Institutes of Managements (IIMs) during its regime. Except IIT-Mandi, all the rest are still operating from temporary campuses, though work is in progress to shift them to permanent campuses with adequate infrastructure and facilities for students.

On July 17, 2008, the Union Cabinet approved setting up of new IITs in Bihar, Andhra Pradesh, Rajasthan, Odisha, Gujarat, Punjab, Himachal Pradesh and Indore in Madhya Pradesh at a total cost of Rs 6,080 crore.

**DH News Service** 

### Hindustan Times ND 25/05/2014 P-1

# Own a varsity 'chair', all for ₹1 crore

### Neha Pushkarna

letters@hindustantimes.com

**NEW DELHI: Jaswinder S** Chadha, president of a data analytics company in the US, owed a lot to his mother and alma mater IIT-Delhi.

So when he decided to give back, he decided to institute a chair in his mother's name at IIT-D by donating ₹50 lakh. The Jaswinder and Tarvinder Chadha Chair will exist at IIT-D for 20 years, etching the names of the donors in the institute's history.

Chadha isn't the only one. There are as many as 40 endowed chairs at IIT-D. many named after people who instituted them. According to the latest

guidelines, IIT-D allows an individual to establish a chair with a minimum donation of ₹1 crore. A professor appointed to the chair for five years gets ₹6 lakh annually. The donor has the right to name the chair and the area of research.

While the chairs are a major source of funds for research and development in an institute, they hold a special meaning for the donors.

"My mom and I were the first parent-child graduates of IIT-D. We wanted the name of the chair to reflect this legacy and the impact IIT-D has had on our careers," said Jaswinder.

**CONTINUED ON PAGE 6** 

## **Own a varsity** 'Chair' all for **₹1** crore

He chose the inter-disciplinary field of Operations Research to institute a chair.

The concept of chairs or endowed fellowships - is well-established in the West. Universities worldwide teem with such positions of repute. which are awarded only to top professors in acknowledgement of their work.

Traditionally, such positions in India have been established either with funds from the government or industrialists, with a majority of the investment made in the science disciplines.

But at professional institutes, former students and faculty are increasingly coming forward to fund such positions. "Unlike corporates. individual donors take an active interest in the work of the professor," said an official at IIT-D.

Professor MC Chaturvedi-who retired from IIT-D a few years ago -- established the Vipula and Mahesh Chaturvedi Chair in 2007. He gives a cheque to the institute twice a year -on his wife's birthday and death anniversary. Chaturvedi is also setting up two more chairs at **IIT-Kanpur and IIT Roorkee.** "All our funds are dedicated to the development of our country," he said.

IIT-Bombay, too, has about 40 such chairs, which help attract bright students and investigators. Appointment to an endowed chair is one

### **IIT alumnus set up Water ATMs in Kanpur**

### ANI | Kanpur

May 25, 2014 Last Updated at 13:54 IST <u>http://www.business-standard.com/article/news-ani/iit-alumnus-set-up-water-atms-in-kanpur-114052500313\_1.html</u>

An alumnus of Indian Institute of Technology (<u>IIT</u>) in <u>Kanpur</u> has set up water ATMs to provide water to the common man at cheap rates.

Though such ATMs themselves are not the first of their kind, being found in <u>China</u> already, they are quite the novelty in <u>India</u>.

Vaibhav Bajpayee, an I.I.T. alumnus and the founder of Akshay Jal ATMs, aims to provide clean mineral water to the less fortunate at cheap rates.

"A commodity like mineral water is available only to the upper sections of the society because of its high cost. So we designed the water ATM in a way that would provide water to the lower strata as well," said Bajpayee.

The water ATM works like any other cash dispensing one. The water ATM card is touched upon a panel on the machine which then dispenses water into a container.

Water at these ATMs is available at a low cost of rupees five for 20 litres while mineral water costs from rupees 12-15 per litre otherwise.

Though the technology itself has been taken from China, the filtration facility at the ATM's plant is made up using Indian parts. Around 1,500 litres of water take one hour to be processed in the plant.

"The whole plant has 11 filtration units. After going through these 11 units, the water is dispensed through the ATM. We aim to take this invention into rural areas. But since there is a problem of electricity there, we have set up solar systems to run our plant," said ATM plant in-charge, Anuj Kaushik.

The ATM also offers home delivery service at rupees 10 per delivery.

### IIT Gandhinagar to move to new campus by next year

### The first phase will see construction of classrooms and the next phase construction of hostels

http://www.business-standard.com/article/economy-policy/iit-gandhinagar-to-move-to-new-campus-by-next-year-114052500713\_1.html

### BS Reporter | Ahmedabad

May 25, 2014 Last Updated at 20:57 IST

With the first phase of construction of its new <u>campus</u> nearing completion, the Indian Institute of Technology Gandhinagar (IIT-Gn) may move to its own permanent campus by early next year.

IIT-Gn is in the process of developing its permanent campus on a 400-acre site on the banks of the Sabarmati River at Palaj in Gandhinagar, first phase of which is nearing completion. The institute has begun preparing for the second phase

of construction of its permanent campus which will more than double the student strength at the Institute.

For now, once constructed the first phase will allow the campus to host around 1200 students. Since last few years, IIT-Gn has been functioning from a temporary facility at Vishwakarma Engineering College (VEC) on the outskirts of Ahmedabad. While the first phase will see construction of classrooms, the next phase will comprise construction of hostels, guest house and the director's residence. What's more, the Institute is conducting a national-level design competition to select the architect who will design the next phase of the campus. In the first instance of the two-stage competition, the Institute had received concept designs for the proposed buildings from 43 architectural firms. A fivemember evaluation committee comprising of Prof. Sudhir K. Jain, Director, <u>IIT Gandhinagar</u> (Chairman); Prof. Keya Mitra, Professor of Architecture, IIEST Shibpur, Howrah; Prof. Jigna Desai, Assistant Professor of Architecture, CEPT, Ahmedabad; Ar. Durganand Balsavar, Principal Architect, Artes Human Settlements Research Collaborative, Chennai; and Ar. Prashant Pole, Principal Architect, Genesis, Bangalore, reviewed proposals from interested architectural consultants. So far eight eight architectural firms have been shortlisted for the next stage of competition including the likes of NMA, New Delhi; Kalayojan Architect, Mumbai; ABRD Architects Pvt Ltd, New Delhi; Space Design Consultants, New Delhi; Flying Elephant Studio, Bangalore; Inscape, Ahmedabad; Team for Eng. Arch. And Management (TEAM), New Delhi; and Architects Combine, Mumbai.

In the next stage, these eight shortlisted architectural consultants will be expected to carry out a more detailed design for student hostels, guest house and director's bungalow. Another evaluation committee will evaluate these proposals to select the consultant who will be awarded this project. IIT-Gn is also engaging a number of outstanding architects and consultants to developing a unique campus, which draws inspiration from traditional Ahmedabad architectural styles.

"We aspire our campus to have three main attributes: 1) it should invite visitors to want to come and see a beautiful campus, 2) it should encourage interaction between different members of the Institute community, and 3) it should be sustainable, consuming minimal energy and water, and require low maintenance. We intend to select architects who can provide most creative and interesting design," said Sudhir Jain, director of IIT-Gn.

### <u>May 26</u>

### Financial Express, ND 26/05/2014 P-12

# IIT Bombay's first MOOC courses on edX platform

EdX, the online learning initiative founded by Harvard and MIT, had announced the addition of IIT Bombay in its distinguished group of xConsortium members across the globe, last year. As a result of this partnership, IIT Bombay has launched its first three courses on the edX platform, namely Introduction to Computer Programming, Part 1, Introduction to Computer Programming, Part 2, and Thermodynamics'. These courses aim to help students as well as learners become better equipped for the hundreds of thousands of jobs across India and the world that require understanding of Computer Programming and Thermodynamics. "We are excited to announce the launch of courses by IIT Bombay on our edX platform," said Anant Agarwal, CEO, edX. "India is home to the + largest population of edX learners outside of the **US.** The Introduction to Computer Programming and the Thermodynamics by IIT Bombay are excellent courses." The courses are being taught by Deepak B Phatak who has been working with IIT Bombay since 1971. Registrations have started and more than 35,000 learners worldwide have already registered for these three courses.

# No negative marking for physics, chemistry, maths

### HT Correspondent

htmetro@hindustantimes.com

MUMBAI: Students who took the JEE Advanced test on Sunday were surprised to hear there will be no negative marking for any questions for paper 1 of physics, chemistry and maths. The lastminute announcement came as a relief to many, as last year, the negative marking for wrong answers had cost many students a seat in the coveted IITs.

Around 1.26 lakh students appeared for the exam for admissions to the 16 Indian Institutes of Technology (IITs) and ISM Dhanbad. Unlike the JEE Main exam, where many students found multiple errors in the maths and physics paper, no errors were reported in both paper 1 and 2 of the JEE advanced. While the physical chemistry section was easy, many found the organic chemistry paper the toughest in recent years.

"The physics paper took me the longest to solve as in the multiple choice questions, all four options had to be solved. Also, the chemistry paper's Organic chemistry section was very tough. I lost a lot of time figuring out the questions," Harsh Goel, an IIT aspirant said.

RL Trikha, director, FIITJEE, a coaching institute, said scoring on an average was expected to be lower compared to last year as the mathematics part of the paper was not balanced.

### Printed from THE TIMES OF INDIA

# JEE Advanced exam held, no negative mark in Paper

TNN | May 26, 2014, 04.37 AM IST

JEE Advanced exam was held on Sunday, with Nagpur bein unlike previous year, there were no negative marks in pape for every wrong response.

Paper I had 10 MCQs with more than one correct option, m Paper I quite tough. It also had 10 integer type questions w Those who have attempted integer type questions first shou

Paper II had 10 MCQs with single correct option, three parcolumns converted to MCQs of one option correct type. The type and this feature has made paper II relatively easy. Also questions, it is possible to arrive at correct answer without attempted match the columns type first, followed by parage

### CBSE Std XII results likely today

There are speculations that CBSE results might be declared on Monday. Last year, the results were declare that this year it could be a day earlier. The Central board has, however, not given any date as of now. The o came early because of on screen marking (OSM). For Std XII, the OSM was used on a pilot basis in Delhi re It is expected that by next year OSM will be used for both classes.

### Printed from THE TIMES OF INDIA

# IIT-JEE advanced pattern throws up surprise

TNN | May 26, 2014, 11.27 AM IST

INDORE: Aspirants for admission to Indian Institute of tec the IIT-JEE advanced on Sunday when they found unexpec a change in paper pattern.

Coaching experts said paper-1 of the examination had no n questions with more than one correct answer in all three su mathematics. Last year, paper-1 and paper-2 too both had :

In paper-2, which had negative marking, there were 10 que also had comprehension type and matrix mathematic ques solving them. Physics paper was a bit lengthy and was on e coaching experts are estimating that those who score 300 r 50.

"To be among top 10,000 ranking one needs to score 30-35% marks. Overall paper threw surprises this yea at Indore.

Nearly 1,100 candidates from Indore took the test. There were nine centres in the city.

Yathansh Kathuria, an aspirant said, "The paper was tough. There was a change in pattern as well as negat negative marking beforehand, a number of students guessed the answers on the basis of previous year's ma

Examination was conducted in two sessions of three hours each. The first session started at 9 am. Second s of each subject. Each question had three marks for right answer however they attracted one negative mark

### **Tough Questions: JEE shocker for students**

DC CORRESPONDENT | May 26, 2014, 07.05 am IST

http://www.deccanchronicle.com/print/140526/nation-current-affairs/article/tough-questions-jee-shocker-students

JEE (Advanced) Examinations (Photo: File)

**Hyderabad:** Students who appeared for JEE (Advanced) on Sunday were shocked to see tough question papers in Part-II in the noon session. The relief they felt at seeing the comparatively easy question papers in Part I was wiped out as they struggled to solve the questions in Part II. Even those who had been preparing for the IIT entrance exams since the last couple of years and faced many mock tests were in for a rude shock and left many questions unanswered.

"There was a huge variation in the format and also the quality of questions. They were somewhat lengthy and tougher. There wasn't enough time to answer the questions in maths and physics," said P. Avinash, who took the test at HPS-Ramanthapur. According to subject experts, chemistry and physics papers in the noon session are likely to play the deciding factor compared to the morning session papers. The Paper- I was held from 9 am to 12 noon and Paper-II from 2 pm to 5 pm.

The two papers of three-hour duration consisted of three separate sections on chemistry, physics and mathematics. However, some students had a different version to tell. "I found maths to be easy in both the sessions. physics and chemistry were tougher in noon session than the morning session," said K.Tanvi, who appeared for the test.

Interestingly, IIT trainers opined that morning session papers were comparatively tougher from the teachers point of view over noon session papers. Sivaramakrishna of Sri Chaitanya Colleges said that chemistry and Physics papers of the morning session would have an impact on the scores. He said all the three papers had 20 questions each both in the morning and evening sessions and the total marks were 360 with each question carrying three marks. The morning session did not have any negative marks, while the second session papers had three marks for the right answer and one negative mark for the wrong answer.

Kondala Rao of IIT Narayana Academy said physics and chemistry papers of the morning session were tough compared to the evening papers. However, mathematics was easy in both the sessions. "The quality of the paper was on par with the IITs' reputation," he said. Each paper had nine codes and it meant the same question paper was set in nine different types with questions jumbled.

Only 16,000 candidates from the state appeared for the JEE Advanced though 21,818 candidates were declared eligible in the JEE (Main) as the rest have opted for other technical institutes like NIT, IIIT and other central institutes. The results will be declared on June 19.

# HT.COM ND,16.05.2014, P-3

# STUDENTS FIND IIT EXAM LENGTHY AND OF A DIFFERENT PATTERN

**NEW DELHI:** More than 1.2 lakh students took the JEE(Advanced) exam on Sunday. Many students found the papers a little lengthy and of different pattern.

"Although the number of questions and maximum marks of the paper remain same as in 2013, there was a drastic change in marking pattern. Almost all questions require comprehensive thinking/working and analytical reasoning for solutions. But students must attempt all questions, since there is no negative marking," says R L Trikha, Director, FIITJEE

"Scoring on an average is expected to be lower compared to last year. Students who have put in regular study with practice of concepts should not have any problem of sailing through," he said. Agrees Shailendra Maheshwari of Career Point, Kota. "Paper one presentation was a bit different." HTC

#### Rashtriya Sahara, ND 26/05/2014 P-3



था। आईआईटी जेईई एडवांस के लिए पहला प्रश्नपत्र सुबह नौ से 12 बजे के बीच लिया गया। जबकि दसरे के लिए परीक्षा दोपहर दो बजे से शाम पांच बजे तक चली। पहले प्रश्नपत्र की जटिलता से परेशान परीक्षार्थियों के लिए दूसरा प्रश्नपत्र राहत भरा रहा। इसमें 60 सवाल पछे गए और इसमें एक अंक की नेगेटिव मार्किंग भी थी। प्रत्येक प्रश्न के लिए तीन अंक निर्धारित थे। विशेषज्ञों ने बताया कि बीते साल की तुलना में इस बार जेईई-एडवांस का दूसरा प्रश्नपत्र आसान था।

देशभर आईआईटी में दाखिला मिलेगा। जेईई एडवांस परीक्षा सुबह व शाम

रविवार को आयोजित आईआईटी जेईई एडवांस-2014 की परीक्षा में प्रश्नपत्र एक के बदले प्रारूप के चलते जहां परीक्षार्थियों को खासी परेशानी हुई वहीं दूसरा प्रश्नपत्र बीते साल के मुकाबले आसान रहा। परीक्षार्थियों ने माना कि सबसे ज्यादा परेशानी पहले प्रश्नपत्र के बदले प्रारूप ने खडी की। विशेषज्ञों का कहना है कि जिस तरह से इस बार जेईई-एडवांस का पेपर सामने आया है. उसके बाद आईआईटी में दाखिले के लिए स्कोर बीते साल के मुकाबले कम

# Rajasthan Patrika, ND 26/05/2014 P-5

पहले पेपर ने छुड़ाए

पसीने, दूसरा आसान

जेईई एडवांस परीक्षा, परिणाम १९ जून को

सीकर. आईआईटी संस्थानों में प्रवेश के लिए जेईई एडवांस परीक्षा रविवार को दो पारियों में हुई। परीक्षार्थियों ने पहले प्रश्न पत्र को कठिन तो दूसरे को आसान बताया है। शहर में पांच परीक्षा केन्द्रों पर पहली पारी में सुबह नौ से बारह व दूसरी पारी में दो से पांच बजे तक परीक्षा हुई। इसमें करीब दो हजार परीक्षार्थी शामिल हुए है। परीक्षा के कारण शहर में युवाओं की खास चहल-पहल रही। युवाओं व

अभिभावकों का सुबह से ही परीक्षा सेंटरों के सामने मेला लग गया। अभ्यर्थियों ने बताया कि पिछले वर्षो के मुकाबले इस बार प्रश्न पत्र काफी टफ रहा। इस कारण कट ऑफ भी कम रहने के कयास लगाए जा रहे है। पहले प्रश्न में रसायन विज्ञान के कई प्रश्नों को लेकर अभ्यर्थी काफी असमंजस में रहे। वहों दूसरे प्रश्न पत्र में फिजिक्स के प्रश्नों को आसान बताया है। अभ्यर्थियों का कहना है कि पहले प्रश्न में ऑप्शन चुनने वाले प्रश्न होने के कारण समय भी काफी अधिक लगा। सीकर में दूसरी बार यह परीक्षा हुई। परीक्षा का परिणाम 19 जून को जारी होगा।

### Dainik Bhasker, ND 26/05/2014 P-2

# जेईई एडवांस में फिजिवस ने रुलाया

नई दिल्ली। जेईई एडवांस में पेपर वन में जहां छात्रों को फिजिक्स ने परेशान किया, वहीं पेपर टू छात्रों के लिए राहत भरा रहा। गत वर्ष की तुलना में जेईई एडवांस का स्कोर कम रहेगा। रविवार को पेपर वन के बाद कुल मिलाकर अधिकांश प्रश्नों को हल करने का दावा छात्रों ने किया। फिजिक्स का प्रश्न अमूमन छात्रों को गत वर्ष की भांति ही लगा, जबकि गणित के प्रश्नों को विद्यार्थियों ने बैलेंस श्रेणी में नहीं ठहराया। छात्रों ने कहा कि 50 फीसदी प्रश्न कैलकुलेशन, 30 फीसदी अलजेबरा और 20 फीसदी प्रश्न कोऑर्डिनेट ज्योमेट्री से पूछे गए। पेपर टू पर फिट्जी के निदेशक आर एल त्रिखा ने कहा कि तीन घंटे की परीक्षा में कुल 60 प्रश्न पूछे गए, जिसमें से 3 पैसेज के अंदर हर पैसेज से 2 प्रश्न पूछे गए। पिछले साल चार पैसेज पूछे गए थे। आठ प्रश्न मल्टी च्वाइस आधारित थे, जिनके छात्रों ने सूझबूझ के आधार पर सावधानी से जवाब दिए होंगे। लेकिन 10 प्रश्न मल्टी च्वाइस के काफी सीधे पूछे गए, जिन्हें छात्रों ने आसानी से हल किया होगा। जिन छात्रों ने रेगुलर और फोकस्ड तैयारी से यह परीक्षा दी है, उन्हें बेहतर परिणाम मिलेंगे।

### Hindustan ND26/05/2014 P-5



### Printed from THE TIMES OF INDIA

# Kurukshetra NIT debars 4 boys from BTech exam for

TNN | May 25, 2014, 01.49 AM IST

KURUKSHETRA: Four boys studying in the National Instit debarred from taking the B Tech (Computer Science) final after offering her lift in their car. Two of the four students I campus placement, but NIT has told the companies to canc

The students who were barred from taking the exam are M Manish and Mahtav were selected for jobs in the campus p guilty of harassing the girl following an inquiry conducted l ordered by the NIT director.

On May 15, the four boys had offered lift to their classmate Kurukshetra University. "Instead of taking me to the mark all the four of began to harass me. When I cried help they s

music loudly. At last I threatened to jump from the car and they stopped the vehicle at Pipli. I took an auto reported the matter the director," said the complainant.

### HT.COM ND 26.05.2014, P-2

# NAAC RATINGS TOHELPIN VARSITY CHOICF **HEADS UP NAAC** has already rated varsities like DU, Jamia and JNU

Neha Pushkarna

NEW DELHI: The National Assessment and Accreditation Council (NAAC) is all set to start rating colleges in the Capital from this summer, to help students make better and informed choices.

NAAC will also rate all universities in the city on the basis of the quality of education they offer.

Since the accreditation of higher education institutions became mandatory last year, NAAC has been flooded with applications from universities and colleges country-wide. This time though, many soughtafter universities in the city, which so far have refrained from an external assessment, have decided to go through with the rating process.

"NAAC has already accredited seven universities and 14 colleges in Delhi. The universities which are under process are Delhi University, Jamia Millia Islamia, Bharat Ratna Dr BR Ambedkar University and School of Planning & Architecture."



The NAAC ratings will help students make better and informed choices **FILE PHOTO** 

said Professor AN Rai, director of NAAC. The good news is that the institutes that have already gone through the process have fared quite well.

Jawaharlal Nehru University, which was assessed under the new methodology -Cumulative Grade Point Average - received an A Grade as did Guru Gobind Singh Indraprastha University, Dwarka. The other A-Graders include Jamia Hamdard University besides Teri University and Rashtriya Sanskrit Sansthan, which are both deemed universities.

Times of India, ND 26/05/2014 (Education Times) p-6

# ON THE RADAR

#### TIMES NEWS NETWORK

Indira Gandhi National Open University (Ignou) has launched a postgraduate certificate programme in geoinformatics.

The move responds to the need to train teachers in geoinformatics because it is now taught in schools, says Meenal Mishra, associate professor, School of Science, Ignou.

"Geoinformatics is a part of our daily lives. There was a need to develop these skills for schoolteachers, so we introduced it now. The programme has been designed and developed with the help of experts from IIT, IIIT, ISRO, DRDO, C-DAC and various universities across India," he explains.

With three theory papers and a practical component, the programme covers areas such as remote sensing, geographic information system, global positioning system, image interpretation, digital image processing and cartography. It is meant to provide knowledge and hands-on training in the basics of geoinformatics technologies, acquaint the learners with the use of technology in analysing spatial data and widen opportunities for careers in different sectors related to geoinformatics. The 16credit programme is expected to lead to employment opportunities in agriculture, environment management, rural planning, e-governance, social sciences, among others.

"This programme provides opportunity to learners interested to develop basic skills and willing to go for higher studies in geoinformatics. It will also be helpful in strengthening the efficiency and effectiveness of personnel working in various organisations dealing with geospatial data," says Mishra.

The programme can be completed in six months to two years. Any graduate who has read science at the 10+2 level is eligible to apply, in the January or July session. There is no age bar.

### Times of India, ND 26/05/2014 P-19

# Nasa's high-tech cages to ferry lab rats to ISS

Washington: Nasa has developed high-tech cages to carry rodents from Earth to the International Space Station (ISS) to allow researchers to study the long-term effects of microgravity on mammalian physiology. The Rodent Habitat modules will first fly in August aboard an unmanned SpaceX Dragon cargo ship.

Developed at Nasa's Ames Research Center in Moffett Field, California. the new modules are designed for transporting the animals to the space station and to serve as their longterm accommodation. They consist of a transport module, which fits inside the racks in the pressurized cargo section of the Dragon spacecraft, and an access module for moving the rodents from the transporter to the station's rodent habitat without having the mice escape and take up residence behind the control panels.

Each habitat module provides as many as 10 mice or six rats with all of the basics they need to live comfortably aboard the station, including water, food, lighting and fresh air. Rodents can easily move around the living space by grasping grids that line the floor and walls.

The modules include data downlink capability that enables monitoring of environmental conditions such



**ON BOARD SPACEX DRAGON** 

as temperature.

A visible light and infrared video system allows the crew in space and scientists and veterinarians on the ground to monitor behaviour and overall health of the rodents on a daily basis.

The modules, which are based on recommendations of the National Research Council in the US, are part of a study of the effects of prolonged weightlessness, such as would be encountered on a mission to Mars, Gizmag reported. Since rodents develop and age much faster than humans, studying rodent model organisms accelerates the understanding of diseases that may take years to develop in humans.

Rodents may be studied in space during different developmental stages. Additionally, spaceflight rodent studies are important for developing drugs or devices to protect health during spaceflight. AGENCIES

#### INTERVIEW: MAHENDRA BAPNA FOUNDER & CEO, UNIVERSITY-21

# 'Higher education needs to embrace the 21st-century mindset'

Mahendra Bapna, former CEO of Tata enterprises HV Axles and HV Transmissions, has recently launched University-21, along with Harvard Graduate School of Education, New York Univer-

sity and Arizona State University. In this interview, Mahendra Bapna tells FE's Abhishek Chakraborty that a largepercentage of engineers and MBA graduates lack critical thinking ability, attention span, comprehension and reasoning skills. Excerpts:

#### It has often been talked about that the quality of graduates being produced by the Indian education system is largely not employable...

During the last 12-15 years, I have interviewed thousands of engineering and MBA graduates and have found that a large percentage of them lack critical thinking ability, attention span, comprehension and reasoning skills. Except from a few elite (top 10%) institutes, it is hard to find graduates who can articulate and even write proper English. Therefore, I feel the employability of graduates varies from role to role, based on varying degrees of proficiency required in language and cognitive skills. As a result, there is rush for low-skill, back-office kind of jobs rather than aspiring careers in manufacturing, engineering, science and technology.

#### How can we fill these gaps?

Our higher education system will need to embrace a 21st-century mindset, which is all about creativity, leadership, innovation, problem-solving, social engagement and entrepreneurship. Our institutes and industry have to work seamlessly in order to ensure that we are imparting our students the requisite skills in sync with the changing business needs.

While working as the CEO of two Tata Motors enterprises, did you face any inertia challenge?

As the CEO of HV Axles and HV Transmissions, I set up a 70-member strong faculty to retrain about 4,000 employees. There was a series of technical and adaptive challenges that I faced during the turnaround phase. New product development, initiatinga captive engineering research centre, THE SUCCESS OF ANY CURRICULUM HINGES ON THE QUALITY OF TEACHING AND AN APPROPRIATE STRATEGY OF ACTIVE LEARNING. THIS INCLUDES THE CHALK-AND-BOARD METHOD, THE AUDIO-VISUAL TOOLS, AND THE REALISTIC PROTOTYPE DEMONSTRATION MODELS

factory-facility planning and investments were few initiatives to fix technical problems. This was relatively an easy part. Improving leadership bandwidth at all levels, changing mindsets of alarge workforce and translatingvision to actions were the real transformational challenges. It was relentless communication, opening two training academies to gear up the workforce to approach improvements through the innovation concept, customer orientation and adopting TBEM for performance improvement that helped us manage our teams better.

#### How can University-21 help improve the quality of higher education in developing countries?

Ibecame a Harvard Advanced Leadership Initiative Fellow in 2012 to take on new challenges and potentially make an even greater societal impact than I was able to in my career. I wanted to put together in qualified team of educators and business leaders who can actually help institutes improve their quality of higher education. Besides my deep functional expertise in leading large enterprises, I am glad that, among the founders of University-21, I have the support of eminent academicians who have played pivotal roles in making NYU the largest private university in the US; in transforming the largest state-owned university (ASU); and in working closely in reforming education in countries like Brazil, Chile, Colombia, Guatemala, the Dominican Republic, Mexico, Venezuela, Paraguay and the Middle East.

### How can we make education more engaging for students?

The success of any curriculum hinges primarily on the quality of teaching and an appropriate strategy of active learning. This includes the traditional chalk-and-board method, the modern audio-visual tools, and the realistic prototype demonstration models. Together, these three can make the classrooms not only exciting but also meaningful.

In particular, to facilitate those students who need repetition, additional strategies are required, which include recording of lectures and discussion held in classrooms, and de-

veloping tools to facilitate students to internalise concepts learnt in classrooms by recasting them by simulating the same in a virtual electronic environment.

### The Times of India Title : SCIENCE FOR THE MASSES Author : ADITYA HARIKRISHNAN | TNN Location : Article Date : 05/26/2014

Three Pune-based youngsters created a collaborative on line learning network for students, researchers and enthusiasts of maths, science and technology. Pioneered by Adit Gupta (28), Sakshi Majmudar (26) and Sumit Maniyar(29), Function Space is an open platform, equivalent to a social media portal, for science enthusiasts, students and professionals, that students and researchers can leverage to post news articles, debate and discuss a topic of interest, learn about recent developments in science and technology, etc. The website allows one to write complex mathematical equations, draw complex physics diagrams and post maths or science problems which can be solved while also allowing users worldwide to comment on it.

On what motivated them to start this particular enterprise, Gupta, a BTech graduate from University of Petroleum and Energy Studies, Dehradun, who has in the past, donned the hat of a graphic designer, product developer and researcher, says, "All three of us share the same thirst for scientific knowledge. But, whatever information exists about it on the web is fragmented and various websites offer different solutions to a particular problem. That's when we decided to provide a complete learning ecosystem for science that reaches the masses globally."

The venture was first conceptualised by Gupta and Majmudar, in early 2013. They launched the finished prototype by April that year, after which Maniyar joined the group as the COO.

While Gupta and Majmudar are in charge of programming, product development, designing, operations and other technical aspects, Maniyar, an IIT-Mumbai graduate with a charter from the CFA Institute, spearheads business development, product strategy and marketing.

Although their passion for science led them to quit their cushy jobs, the prospect of being an entrepreneur had its own rewards. Says Majmudar, previously employed as a project lead at an IT firm, "I believe that the exposure one gets while leading a start-up is a whole new universe of learning and development at personal and professional level. There are growth prospects at various levels. It is like a roller coaster ride where there is the adrenaline rush, fear, anxiety and fun, all at the same time."

While the website was operational from 2013, their enterprise only recently received funding from a venture capitalist firm. Says Gupta "There was a 10-month period when the cost of operating the website was running high. We had to spend a great deal of money from our savings and were on the verge of going bankrupt."

In the meantime, their website was receiving accolades not only from users, but also corporates. Function Space was selected among the first 100 start-ups in NASSCOM's 10,000 startup programme which aims to nurture start-ups and help them secure investments from India and abroad.

They now have users across 190 countries including students from institutions such as MIT, Stanford, Princeton, Caltech, Cornell, Berkeley, UCLA, IITs and, IISc, among others. Concludes Gupta, "Features like messaging and following helps people over the globe to connect and collaborate irrespective of their geographic location. We hope one day it can become a `one-stop' solution for learning science."