Newspaper Clips
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Hindustan ND 10/05/2015 P-5

आईआईटी एडवांस्ड परीक्षा का फॉर्म भरने की अंतिम तारीख थी पांच मई

25 हजार छात्र आवेदन से चूके

नई दिल्ली | कार्यालय संवाददाता

जेईई-मेन की परीक्षा पास कर जेईई-एडवांस्ड के लिए योग्यता रखने वाले करीब 25 हजार छात्र परीक्षा के लिए आवेदन नहीं कर पाए हैं। पांच मई आवेदन की अंतिम तारीख थी। एडवांस्ड की परीक्षा के आधार पर आईआईटी संस्थानों में दाखिला होता है।

इस साल करीब 13 लाख छात्रों ने जेईई-मेन की परीक्षा दी थी। 1,52,401 छात्र जेईई-एडवांस्ड के लिए चुने गए। मगर 25 हजार छात्रों ने एडवांस्ड के लिए पंजीकरण नहीं कराया। माना जा रहा है कि समय कम होने के कारण ये छात्र आवेदन कराने से चूक गए।

मगर, जेईई-एडवांस्ड कमेटी के पूर्व चेयरमैन एचसी गुप्ता का कहना है कि आईआईटी हर राज्य में नहीं हैं और कई छात्र अपने घर से दूर जाकर नहीं पढ़ना चाहते। ये छात्र जेईई-मेन के स्कोर के आधार पर अपने राज्य के इंजीनियरिंग कॉलेजों में दाखिला ले लेते हैं।

एक अन्य प्रोफेसर का कहना है कि जेईई-मेन पास कर एडवांस्ड के लिए क्वालिफाई होने वाले कई ऐसे छात्र होते हैं, जिनका स्कोर कम रहता है। ऐसे छात्र अक्सर एडवांस्ड न देने का फैसला करते हैं। यह परीक्षा 24 मई को होगी। इसके स्कोर के आधार पर आईआईटी संस्थानों और धनबाद स्थित इंडियन स्कूल ऑफ माइंस की सीटें दी जाएंगी।

चार नए आईआईटी में भी होगा दाखिला

इस साल चार नए आईआईटी संस्थानों में भी छात्रों को दाखिला दिया जाएगा। इनमें आईआईटी गोवा, आईआईटी त्रिपुरा, आईआईटी पलघाट और आईआईटी छत्तीसगढ़ शामिल हैं। ये चारों संस्थान 360 सीटों की बढ़ोतरी करेंगे। फिलहाल 16 आईआईटी हैं। पिछले साल जेईई-एडवांस्ड के आधार पर इन 16 संस्थानों ने कुल 9,784 सीटों पर दाखिला दिया था।

शीर्ष 20 पर्सेंटाइल छात्रों में जगह बनाना जरूरी

जेईई एडवांस्ड के बाद आईआईटी में दाखिले के लिए दो में से एक शर्त पूरी करनी होगी। पहली शर्त छात्र अपने राज्य के बोर्ड के शीर्ष 20 पर्सेंटाइल वाले छात्रों में जगह बनाने में कामयाब होना चाहिए। यदि वह ऐसा नहीं कर पाता तो उसके 12वीं कक्षा में न्यूनतम 75 फीसदी अंक होने चाहिए।

ऐसे मिलती हैं इंजीनियरिंग संस्थानों में सीटें

आईआईटी और राज्य स्तर के इंजीनियरिंग संस्थानों में दाखिले के लिए दो परीक्षा होती हैं। पहली जेईई-मेन और दूसरी एडवांस्ड की परीक्षा। एडवांस्ड में बैठने के लिए सिर्फ दो मौके मिलते हैं। वहीं जेईई-मेन तीन बार दी जा सकती है। जेईई-मेन क्वालिफाइंग परीक्षा होती है।

Hindustan ND 10/05/2015 P-5

दृष्टिहीन अपना लेखक नहीं ले जाएंगे

परेशानी

नई दिल्ली | प्रभात कुमार

आईआईटी में दाखिले के लिए होने वाली जेईई-एडवांस्ड परीक्षा में दृष्टिहीन व डिस्लेक्सिया से पीड़ित छात्र अपने पसंद के लेखक नहीं ले जा सकेंगे। इन छात्रों को आईआईटी के निर्देश पर परीक्षा केंद्र द्वारा मुहैया लेखक से प्रवेश परीक्षा में काम चलाना होगा।

इन छात्रों के लिए राहत की बात यह है कि परीक्षा केंद्र प्रभारी या निरीक्षक के सामने मुहैया कराए गए लेखक से परीक्षा

आईआईटी दाखिला

- परीक्षा केंद्र पर मिले लेखक से ही काम चलाना होगा
- अपने लेखक से एक दिन पहले ही कर सकेंगे मुलाकात

के एक दिन पहले मुलाकात कर सकेंगे। आईआईटी, दिल्ली ने हाईकोर्ट में हलफनामा दाखिल कर कहा है कि दृष्टिहीन व डिस्लेक्सिया से पीड़ित छात्रों को परीक्षा में अपने पसंद के लेखक इस्तेमाल करने की अनुमति नहीं दी जा सकती है। साथ ही दृष्टिहीन छात्रों को चित्र और ग्राफिक्स वाले सवालों के बदले दूसरे वैकल्पिक प्रश्न भी मुहैया नहीं कराए जा सकते हैं। आईआईटी ने यह हलफनामा तीन साल पहले कार्तिक साहनी की ओर से दाखिल जनहित याचिका के जवाब में दिया है।

आईआईटी ने हाईकोर्ट को बताया है कि इस बारे में अकादमी ने विस्तार से विचार विमर्श करने के बाद फैसला लिया है। आईआईटी का पक्ष सुनने के बाद हाईकोर्ट ने सुप्रीम कोर्ट के एक फैसले का हवाला देते हुए कहा कि इस मामले में आईआईटी को किसी भी तरह का आदेश देना ठीक नहीं होगा।

Asian Age ND
10/05/2015 p-4

IIT to survey quake impact

AGE CORRESPONDENT
LUCKNOW, MAY 9

The Akhilesh government has asked IIT-Kanpur to carry out a detailed survey of the impact of the recent earthquake on the historical buildings and also suggest corrective measures.

According to Lucknow district magistrate, Raj Shekhar, a preliminary report prepared by the public works department has found that no major damage has been done to historical monuments though some cracks and fissures have been seen but some of these existed even before the earthquake last month.

Hindustan Times ND
10/05/2015 P-10

IIT-B student suicide: Statements recorded

MUMBAI: The police have recorded statements of parents, friends and faculty heads of the 21-year-old student of IIT-Bombay, who had allegedly committed suicide on May 2. "We have completed all the formalities related to the investigation. On the basis of statements recorded, we can say the deceased committed suicide as he showed sufficient signs of depression," an investigation officer of Powai police station said. Jitesh Sharma, who hailed from Rohtak in Haryana, a third-year chemical engineering student, was found dead on the terrace of the hostel.

Times of India ND 10/05/2015 P-10

Has UGC run its course?

As the fate of education's apex body hangs in balance, **TOI** looks at the pros and cons

Nalin.Mehta@timesgroup.com

Writing at the turn of the last century on India's education system, Swami Vivekanand forcefully argued that the "present system of education is all wrong." The comment rings true even today. This is why HRD minister Smriti Irani announced in November last year that her ministry is reviewing most education-related regulatory bodies, including the gargantuan University Grants Commission (UGC). PM Narendra Modi too declared at the Indian Science Congress in January that his government will pay as much attention to ease of doing R&D in India as to ease of doing business. An overhaul of our outdated education system is being talked about at a time when no Indian university is ranked among the world's top 200, and India is the only BRICS nation without representation among the top 100 global universities.

A NEW ACT?

There is no dearth of money for the overhaul — the UGC dispenses grants of over Rs 10,500 crore a year on higher education — but like in other sectors that were opened up after economic liberalization, the problem lies in the structure of quality-control systems that have failed to keep up with ground realities. Last month, one of the first review panels set up by Irani to review the UGC's functioning recommended scrapping the body itself and replacing it with a National Higher Education Authority, through a new act of Parliament. That may be easier said than done and while experts debate possible solutions, all agree that the system needs an overhaul.

Queried on the possibility of a new authority, UGC chairman Prof Ved Prakash says, "We first need to answer whether we have exhausted all interventions which could be incorporated in the existing system before we go with a new system." He adds though that "there is no denying that new thinking is called for in rejuvenating higher education".

When the UGC Act was enacted in 1956, no one had foreseen that higher education would eventually grow outside the public system. Yet, by 2013, 64% of institutions and 59% of India's 2.3 crore students in higher education came from unaided private entities (*see chart*). Till recently, teachers and students from these institutions could not even access research grants provided by UGC. Compare this to the US where a private university like Stanford and the publicly funded University of California in Berkeley can "both compete for grants from the federal government," says Prakash.

What can be done? The UGC chief insists that "within the confines of the existing higher education system several academic reforms including semesterization of curricula, choice-based credit system, direct online transfers of scholarships and standardization of examinations are already being implemented. New structural reforms can also be built into the existing governance system. This may include gradual movement from state-regulated system to state supervisory system leading ultimately to a university entrepreneurial system."

Second, because India's education system is federal, states have the right to establish universities, but don't necessarily follow up with an obligation to ensure basic minimums in infrastructure or base it on actual needs. A good example is the bunch of one-room universities that popped up in Chhattisgarh after it was created in 2000 with sanction from its first government. Among states, Rajasthan has the highest number of universities at 61 (35 of them private), more than UP which has only 59 (21 private) though it is much bigger and more populous. "UGC is obliged to give recognition once a state sets up a university. It needs to have an important role in ensuring that before an institution commences work, it satisfies the prescribed norms for infrastructure and related requirements," says Prakash. Currently, UGC can only impose a Rs 1,000 fine on non-compliant universities.

BIG IS NOT BEAUTIFUL

Third, and more fundamentally, unlike in other liberal democracies like the US, Australia and the UK, where accreditation, research funding and infrastructure spending on universities are regulated by separate entities, UGC is an omnibus body tasked with multiple functions.

"These functions should be independently run by separate entities which should not be linked to each other because the skills required for each are different. Development grants for infrastructure should be governed by financial and management experts while research grants should be adjudicated only by eminent professors who are experts in their field, not bureaucrats," says a former university vice-chancellor, speaking on condition of anonymity. "When you link all these functions together like it is now, it gives too much power which can be misused."

Previous expert committees on higher education — one chaired by Prof Yash Pal in 2008, another by Sam Pitroda under the National Knowledge Commission — also talked about the need for reform, albeit from different perspectives. Prakash agrees that "reform is definitely needed". "The task of regulating the sector and providing research funding," he says, "can be separated for more effective functioning."

The sooner that happens, the better. India has the world's largest proportion of young people. If large sections of these Indians remain functionally uneducated, unskilled and unable to compete globally, our demographic dividend may soon turn into a demographic disaster.

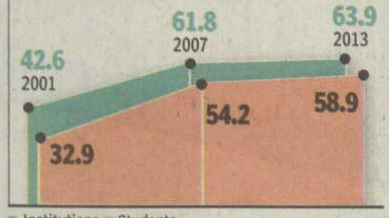
GROWTH IN HIGHER EDUCATION

	UNIVS	COLLEGES	STUDENTS	TEACHERS
1947	20	500	2,10,000	24,000
2014	666	39,671	2,37,65,000	10,50,000
Grown by	37 times	79 times	113 times	43 times

Source: UGC Annual Report 2013-14

GOING PRIVATE

Share of unaided private institutions and their student enrolment in higher education (%)



Institutions Students

Source: Ernst & Young, FICCI, Higher Education in India: Vision 2030, FICCI Higher Education Summit 2013

Nai Duniya ND 10.05.15 P-6

अनूठा आविष्कार सूरत के एक डॉक्टर व तीन प्रोफेसरों ने मिलकर बनाई साइकल

पैडल मारकर नहीं, हवा से चलेगी यह साइकल

- साइकल के निर्माण में लगा तीन साल से भी अधिक समय

सूरत (ब्यूरो)। सूरत के डॉक्टर राजेंद्र पटेल और एसवीएनआईटी के प्रोफेसर पी.आर. शिवदास, प्रोफेसर एसए चनिवाला और प्रोफेसर एवी दोषी ने साइकल के साथ प्रयोग करके हवा के दबाव से चलने वाली साइकल बनाई है।

इस साइकल में एक सिलेंडर लगाया गया है । उस सिलेंडर की वजह से पैडल मारे बिना चला सकते हैं। देखने से तो यह बहुत आसान बात लगती है लेकिन इसको बनाने में डॉक्टर राजेंद्र पटेल को तीन साल से भी अधिक समय लगा है। इस साइकल में बाइक की तरह ही एक्सलेटर लगाया गया है। इस एक्सीलेटर की वजह से सिलेंडर का वॉल खुलता है और बंद हो जाता है।

10-12 किमी रफ्तार से चलती है एयर साइकल

सात बार जितना दबाव होने पर यह साइकल 10-12 किमी प्रति घंटा की रन गति से चलती है। साइकल में ब्रेक लगते ही हवा का दबाव बंद होता है और साइकल कम दूरी पर रुक जाती है। साइकल के आगे एक बॉक्स है उस बॉक्स को चाबी से बंद करने से इलेक्ट्रिक सर्किट बंद हो जाता है और साइकल का चलना बंद हो जाता है। डॉक्टर राजेन्द्र पटेल ने साइकल को ऑनलाइन यूएसए की वेबसाइट पर पेटेंट किया है। हाल ही में इसका सिर्फ प्राथमिक मॉडल बनाया गया है।

साइकल में लगे हैं दो एयर सिलेंडर

इस साइकल की सीट के नीचे कम्प्रेस्ड हवा भरने के लिए एक टंकी लगाई गई है । जिस में 150 बार दबाव से हवा भरी जा सकती है। सिलेंडर के साथ दोनों तरफ छोटे सिलेंडर भी लगाए गए हैं जो हवा बाहर आने से पिस्टन के जैसे आगे पीछे होते रहते हैं। जब भी हवा बाहर निकले तभी मेकेनिकली सिलेंडर का रोड आगे पीछे होता है और साइकल के पीछे लगा गियर गोल घूमता है।

Dainik Jagran ND 10/05/2015 P-4

छात्रों ने बनाया हवा से चलने वाला वाहन

जागरण संवाददाता, ग्रेटर नोएडा : हवा से चलने वाली कार की बात जल्द सड़क पर दिखाई दे सकती है। जी हां, हवा से वाहन चलाने का करिश्मा सच कर दिखाया है नॉलेज पार्क स्थित एनआइईटी कॉलेज के छात्रों ने। छात्रों ने हवा से ट्राई साइकिल चलाई है। जिसकी खास बात है कि इसके चलने से नाममात्र भी प्रदूषण नहीं होगा। इसे तैयार करने में मात्र सा हजार रुपए का खर्च आया है। ट्राई साइकिल को बीटेक अंतिम वर्ष में पढ़ने वाले छात्रों चित्रांश श्रीवास्तव, अनुज ग्रेहवाल, अंकित जैन और हृदय नारायण दीक्षित ने तैयार किया है। वाहन को तैयार करने में शिक्षक शहजाद अली और मोनिका जयसवाल ने छात्रों की विशेष मदद की। टीम ने बाइक के फोर स्ट्रोक इंजन को तकनीक के माध्यम से टू स्ट्रोक में तब्दील किया है। छात्रों द्वारा तैयार की गई तीन पहिया गाड़ी पर अधिकतम चार लोग बैठ सकते है। कॉलेज प्रबंधन ने गाड़ी को कमर्शियल करके सड़कों पर उतारने के लिए एक साल का लक्ष्य रखा है। तीन पहिया एयर कंप्रेशर गाड़ी में कार्बन स्टील सिलेंडर लगा है। सिलेंडर में पेट्रोल, डीजल या गैस नहीं बल्कि हवा भरी जाती है। जितनी हवा सिलेण्डर में भरेंगे गाड़ी उतने किलोमीटर तक की दूरी तय करेगी। फिरहाल छात्रों ने गाड़ी में 25 बार का सिलेंडर लगाया है। छात्रों ने बताया कि वाहन में 300 बार तक का सिलेंडर लगाया जा सकता है।

हवा से चलने वाला ट्राई साइकिल।

IISc Honours 8 Faculty Members

http://www.newindianexpress.com/cities/bengaluru/IISc-Honours-8-Faculty-Members/2015/05/10/article2806737.ece

BENGALURU: Indian Institute of Science (IISc) felicitated eight of its faculty members on Saturday for excellence in research in various fields. The annual awards have been instituted by the institute community for its faculty.

The Alumni Award for Excellence in Research for 2015 were given to Prof Vasudevan from the Department of Inorganic & Physical Chemistry and Prof Dipankar Chatterji from the Molecular Biophysics Unit (science); Prof Jayant R Haritsa from the Department of Computer Science and Automation and Prof Giridhar Madras from the Department of Chemical Engineering (engineering).

The Professor Rustum Choksi Award for Excellence in Research went to Prof Mrinal Kanti Ghosh from the Department of Mathematics and Prof B Ananthanarayan from the Centre for High Energy Physics.

The Professor Priti Shankar Teaching Award for Assistant Professors went to Dr Santanu Mukherjee from the Department of Organic Chemistry and Dr Aditya Kanade from the Department of Computer Science.

May 11

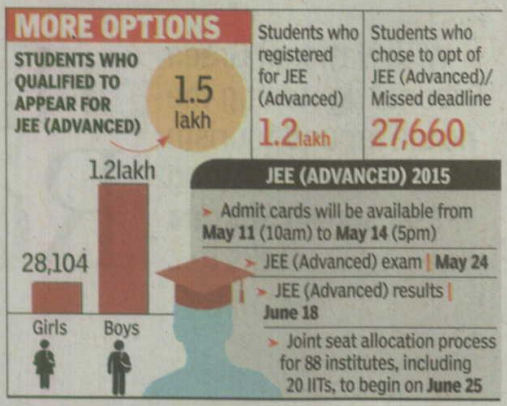
Times of India ND 11/05/2015 P-9

1 in 6 drops out of IIT race after JEE (Main)

Some Students 'Use' JEE Score For Admission In State Colleges

Yogita.Rao@timesgroup.com

Mumbai: More than one in six students eligible to appear for JEE (Advanced) for admission to the coveted IITs has preferred to drop out of the race. While lakhs of students appeared for the JEE (Main) exam with an eye on the IIT seat, 27,660 students who qualified for JEE (Advanced) either opted out of the process or might have missed the deadline to register for it. The cut-off for eligibility for JEE (Advanced) this year was 105.



While there is no single reason this trend could be attributed to, professors say some of the fence-sitters may have qualified but avoided the gruelling process of appearing for another exam. An IIT-B professor said, "The IITs are yet to analyse the data of students who have not registered for JEE (Advanced). There could be many reasons for their decision."

IITian dies in Raj accident

Mahendra Kumar, a student of IIT-Jodhpur and a resident of Chomu near Jaipur, succumbed to his injuries in Jodhpur on Saturday in a hospital. He and his classmate Hemant Pratap Singh, of Hathrath in Uttar Pradesh, had met with a fatal accident on the night of April 20 while crossing the road near their hostel. Hemant died on the spot while Mahendra had been battling for life since then. TNN

He added that 10 states, including Maharashtra, accept JEE (Main) scores for admissions to their own engineering institutions.

"There will be quite a few students from these states whose main aim is to get into a leading engineering institution in the state and remain close to their family rather than go to the IITs. These students might have appeared for JEE (Main) to use their scores for admission in state institutions," he said.

Another professor said some students who did not register for JEE (Advanced) might have secured seats in universities abroad. Others, he added, may have just made the grade and may have chosen not to go through the pressure of another competitive exam.

Praveen Tyagi, from a coaching institute, said many students who were aware of their potential chose to drop out of the JEE (Advanced) despite qualifying for it. "They prefer focusing on other competitive exams which are not as difficult as those conducted by the IITs or are happy with the scores in JEE (Main) that will ensure a seat in the NITs," said Tyagi.

Of the 1.52 lakh students who qualified in the JEE (Main) exam, around 1.24 lakh registered for the JEE (Advanced) to be held on May 24. The last day for registration was May 7. For the last two years, a two-tier exam has been conducted for admissions to IITs. The top 1.5 lakh students who qualify in the JEE (Main) are eligible to appear for JEE (Advanced). Last year, 1.27 lakh students registered for JEE (Advanced). The exam will be conducted by IIT-Bombay this year along with other IITs. This year, with the addition of four new IITs, over 10,000 seats are available for students to choose from.

Dainik Bhaskar ND 11/05/2015 P-1

आईआईटी के छात्रों ने गरीब छात्रों की मदद के लिए बनाई वेबसाइट

ऑनलाइन परीक्षा की तैयारी और काउंसलिंग भी करवाते हैं

लक्ष्मी शंकर मिश्र|पटना

मधुबनी के आशुतोष कुमार समेत आईआईटी बॉम्बे और आईआईटी दिल्ली के कुछ पूर्व छात्रों ने एक वेबसाइट बनाई है। नाम है testbook.com। इसके जरिए वे प्रतियोगी छात्रों को ऑनलाइन परीक्षा देने की तैयारी करवा रहे हैं। परीक्षा का कंटेंट मुहैया करा रहे हैं व काउंसलिंग भी कर रहे हैं। वेबसाइट पर शुरू के दो लाइव और एक डेमो टेस्ट के साथ 80% कंटेंट मुफ्त है। बाद में मामूली 10-30 रुपए खर्च पड़ेगा। वेबसाइट के पीछे मकसद गरीब छात्रों की मदद करना है, जो ऑनलाइन परीक्षा की तैयारी के लिए आर्थिक रूप से सक्षम नहीं हैं। वेबसाइट पर लॉगिन के बाद कंटेंट मुहैया कराने से लेकर लाइव टेस्ट तक की जिम्मेदारी यह टीम निभाती है। उदाहरण के तौर पर जून में एसबीआई पीओ की ऑनलाइन परीक्षा है। परीक्षा से 15 दिन पहले वेबसाइट पर इस परीक्षा के इच्छुक सभी छात्रों को एक साथ एक डेट पर निर्धारित समय पर डेमो लाइव टेस्ट के लिए बैठाया जाता है।

रजिस्ट्रेशन और लाइव टेस्ट मुफ्त

वेबसाइट पर छात्र जीमेल एकाउंट के जरिए लॉगिन कर सकते हैं। इसके अलावा वेबसाइट पर खुद का एकाउंट भी खोल सकते हैं। हर प्रतियोगी परीक्षा के लिए 20-50 टेस्ट उपलब्ध है। शुरू के तीन टेस्ट के बाद के टेस्ट के लिए आपको 10-30 रुपए तक खर्च करने पड़ेंगे।

Hindu ND 11/05/2015 P-9

The case for liberal arts education

There is an urgent need to institute well grounded liberal arts education in India to prepare for challenges of the globalised post-industrial society of the 21st century

Vishakha N. Desai

The party tents are up and bleacher stands are in place on the Columbia University's beautifully apportioned Commons (public yard) that will bring together some 45,000 people — undergraduates, graduates, Doctorates, their families, the faculty, and the university administration—to celebrate the value of higher education at one of the great universities of the world where I teach. The undergraduates, trained in the famous Columbia Core program that incorporates western and Asian Philosophical systems, great literature of the world, as well as introduction to natural sciences and maths, will proudly get their Columbia degree, confident in their knowledge that the degree from one of the most prestigious institutions of higher education will prepare them to become leaders, not just for the first job out of college.

For much of the last century, the U.S has led the way in developing and sustaining institutions of tertiary education with a focus on liberal arts education and innovative research that has allowed the country to be a global leader in developing new technologies and finding solutions to intractable problems. It is no surprise that in most international rankings of major universities, American universities take the largest number of top spots. It is equally disappointing that in none of the 150 such rankings, Indian universities figure anywhere near the top one hundred spots. There are many reasons for this glaring absence. One could argue that for a country that needs to create jobs for 14 million new entrants to the market every year, the priority has to be given to vocational training for the large masses of people who are equipped to take on the low to mid-level jobs. Some would also make the case that after all, with the establishment of the highly competitive Indian Institutes of Technology (IITs) and Indian Institutes of Management (IIMs), the country has taken care of the highly talented students who become industry leaders. But this does not take into account the stark reality of the Indian higher education system that some have described as "a sea of mediocrity with a few islands of excellence."

ILLUSTRATION: SATWIK GADE

Indian education

What is lost in the debates over meritocracy and access, or excellence and equity is the fact that in India, ever since the time of the country's Independence, we have privileged technical knowledge and applied sciences over a well-rounded liberal arts education. We all have heard stories of the pressures put on talented students, boys in particular, to pursue engineering, medical fields, or now, business administration, as they graduate from high school. There is an unspoken but well understood assumption that you pursue liberal arts or the humanities in college only if you could not get into the desired fields of science and commerce. I had a personal experience with this phenomenon when I graduated from high school almost five decades ago. I was a pretty good student, and I did extremely well in the State Board exams, with the highest marks in general science and advanced arithmetic. I had taken these subjects, not only because I was good at it, but more importantly, because I knew I could get the kind of marks that would propel me toward the top ten in the Board exams. I was pretty clear that I would not pursue these subjects in college as I was more interested in the liberal arts courses such as psychology, Sanskrit, and political science. My parents, true Gandhians, were happy with whatever choice I made, but my school teachers were so upset that they came to our home to convince me and my parents that I must pursue science and not "waste" my intelligence and academic talent! This narrow attitude has not only persisted but hardened (with a few notable exceptions of relatively new universities, such as the Ashoka, Azim Premji, and Shiv Nadir Universities), as the discussion has centered around job skills and career opportunities. There is a feeling that learning about philosophical systems or great literary classics, political theory or imaginative poetry is an intellectual luxury at best and waste of time at worst.

These are the very things that the best and the brightest of students learn in the most selective of American universities. As the President of Williams College, no. 1 ranked liberal arts college in the U.S., Adam Falk said to the 2014 graduating class, we learn these things because they give us insight into what it means to be human, and they prepare us for leading a meaningful life, not just the next job. They teach us what it means to have a moral compass and how to think critically about life's choices.

Interactive learning

In India, there is an urgent need to overhaul the higher education system, not only because there has been a systematic erosion of any serious emphasis on the study of the humanities, but more importantly, it has resulted in a lack of deep understanding of our own cultural history and our own classics. Some well-respected industry leaders in India have also pointed out that the lack of any sense of value-based leadership and moral judgment has resulted in the wide spread acceptance of corruption at all levels that we witness in India today.

Let me be clear. I am not talking about a nostalgic reverence for the past, nor am I talking about simplistic ideas about teaching Sanskrit in all government schools. I am also not advocating the cause of liberal arts education at the expense of vocational training that is required for preparing the young work force to take on the 21st century jobs. But this century, described by some very thoughtful scholars as a post-industrialised society, will need people who are capable of navigating cultural differences, have a sense of grounded-ness without being nationalistic, and to lead in an ever more interdependent, border-collapsing world. Without liberal arts education, it will be next to impossible to gain these qualities. A critical study of the humanities and of our own literary and cultural past will require a more interactive form of learning, greater financial support for scholars and teachers who have dedicated their lives to these studies without politicising the knowledge base, and making a convincing case for the importance of the liberal arts education for a more just and reflective society, confident in its millennial roots but ready to engage with the world. Let us hope that the trend of a few liberal arts universities, recently established, will lead to a bigger force, providing the sense of prestige to the liberal arts education that India so desperately needs.

(Vishakha N. Desai is Special Advisor for Global Affairs to the President and Professor of Practice, Columbia University, President Emerita, Asia Society.)

Smriti Irani's next: Common syllabus for Central Universities

http://www.dnaindia.com/india/report-smriti-irani-s-next-common-syllabus-for-universities-2084751

Be it the premier Jawaharlal Nehru University, Aligarh Muslim University or the Banaras Hindu University, all will have common syllabus, come next academic session.

Union HRD Minister Smriti Irani is pushing hard the idea, first mooted by her party veteran and predecessor Murli Manohar Joshi during the term of NDA-1. There is stiff opposition to the proposal as well, but the HRD Ministry is set to decide the syllabi at undergraduate, postgraduate as well as research level.

The sceptics see the new syllabi system, dubbed as the 'choice-based credit system' (CBCS), an attempt to saffronise the education sector. "During NDA-1, the HRD ministry pushed for teaching karma kanda from Gita and Vedic Mathematics in the college curriculum. It was opposed because universities decided their own curriculum. "The government now aims at first disabling the universities from making own syllabus and then roll out its agenda," alleged proffesor Aditya Misra of Delhi University, who had led the protest against Joshi.

The academicians feel that the uniform syllabus system will distort the individualistic character of the varsities.

"Universities are centres for creativity, thinking and innovation. What UGC and HRD are coming out with should only help in setting a minimum standard. But it should not govern the overall education system of every university," said professor GC Tripathi, Vice-Chancellor of Banaras Hindu University.

Tripathi also questioned the CBCS for interfering with the autonomy of the universities. "Central varsities are governed by own constitution and cater to the local needs of the area they operate in. The CBCS needs to ensure that the local characteristics of the universities are protected," he added.

The universities have also raised issue of faculty and infrastructure. The HRD ministry announced introduction of CBCS in November last year and wants to enroll it in the coming academic session that begins in June-July this year.

"We are open to the new system as long as the system does no harm to the autonomy of the university system," said Aligarh Muslim University Vice-Chancellor Lt General Zameer Uddin Shah. Shah, however, opposes the pace at which the system is being implemented. "The problem is that we need time to implement CBCS. We need to review faculty and infrastructure, so that we can roll out the changes," he added.

The University Grant Commission (UCG) has been at the helm of affairs to develop a common curriculum. Experts, however, feel that drafting the syllabus is not the prerogative of UGC. "The constitution of UGC does not permit it to draft syllabus. The whole exercise is in violation of the UGC Act," said Prof Apoorvanand Jha, scholar at Center for the Advanced Study of India.

Jha, who also teaches Hindi in Delhi University, questions the lack of transparency in the UGC's functioning. "The UGC has hand-picked the faculty for drafting the curriculum. Even the central universities are not aware about people behind the syllabus," he said.

Financial Express ND 11/05/2015 P-9

What if a robot can sense what you think

A 3D printed humanoid robot, completely made by an Indian and designed in India, can be taught to learn and respond like a human being

Anirban Ghoshal

SURROUNDED by small yet sturdy pieces of 3D-printed plastic, a Macintosh and a couple of 3D-printers, sits 22-year-old Diwakar Vaish at New Delhi-based A-SET Training & Research Institute's robotics lab watching a robot move its mechanical joints to groovy songs from old Bollywood movies. Vaish, who has a faint smile playing along his lips while watching the show, has jolted the robotics sector with his new first ever 3D-printed humanoid robot.

Manav as Vaish calls it is the first ever 3D-printed humanoid in the country and the robot was unveiled during the IIT-Bombay tech fest earlier this year. A humanoid robot is defined as one that is shaped to resemble a human. Weighing 2 kg and almost looking like an over-sized action figure, Manav has in-built vision and sound processing capability, allowing it to talk and act exactly like a human. It has a total of 21 sensors, two cameras for eyes in the sockets at the head and two mics on either side of its head.

"Manav is a game changer in many ways because the price proposition we are offering is approximately 85% lesser than the available products. It is designed in such a way that it takes less cost to make and hence the selling price comes down and the product becomes more affordable for end-users," says Vaish. He explains: "As all the parts are made in India, we can manufacture Manav at a very affordable prices. We are selling it at just ₹1.5-2 lakh, compared with other robots available in India at the present that are priced between ₹18 lakh and ₹20 lakh. It is completely in line with the Prime Minister's Make in India initiative."

It took Vaish two months to design, programme and test Manav whose outer frame is made of plastic, 3D-printed from Buildkart Retail, A-SET's self-owned 3D printing venture. The humanoid uses an Open Source code, that can be compared to Linux when it comes to an operating system ,and enables it to learn anything and respond accordingly like a human. It also has Wi-Fi and Bluetooth connectivity, and has a rechargeable lithium polymer battery that dole out an hour of performance after on a single dose of charge . Vaish is constantly working on it to increase battery life and change the design and size to make it more efficient.

Further explaining the humanoid's capabilities, Vaish, who is also a lecturer at some of top engineering and technical institutes in the country, says: "Also, unlike other robots, Manav's processor and programmed sensors allow it to perform tasks such as walking, talking and dancing without the help of a laptop, just in response to voice commands."

The humanoid has been made for research purposes. "In spite of having robotics enthusiasts in India since the 1970s, the availability of proper training courses especially practical in nature was difficult. Manav fits the bill perfectly. It can be easily repaired, costs less and can be bought by institutes offering courses in robotics thereby increasing the robotics ecology in India," he explains.

Vaish is in talks with some of India's top engineering colleges like all the Indian Institutes of Technology (IITs), National Institutes of Technology (NITs) and the Birla Institute of Technology and Science (BITS) Pilani, Rajasthan, and to other research institutes that offer robotics as a subject of study to ship Manav. "Manav also has two degrees of freedom in its head and neck, allowing it to move its head sideways and up and down—a feature that is not seen in other robots in India.

IT TOOK VAISH TWO MONTHS TO DESIGN, PROGRAM AND TEST MANAV WHOSE OUTER FRAME IS MADE OF PLASTIC, 3D-PRINTED FROM BUILDKART RETAIL, A-SET'S SELF-OWNED 3D PRINTING VENTURE

The 22-year-old robotics researcher, a B Tech, from Delhi's Sharda University, who tasted success with a dancing robot at the early age of 18 and also has been recognised by two Presidents APJ Abdul Kalam and Pratibha Patil—believes that robots have been restricted to playing behind-the-scenes roles in the manufacturing industry and other remote locations. Vaish is working on five-six prototypes of Manav that have more advanced features and are made from sturdier carbon fibre.

To his credit, Vaish has created India's first fully autonomous football playing humanoid soccer team. He is also working with mind control software and robotics which he plans to use in smart home solutions and other areas. He has also been working on a seven feet, life-size humanoid since the past two years that should be available by the middle of this year to research institutes in India and abroad, which can work non-stop for 10-15 hours a day.

Times of India ND 11/05/2015 P-10

Nasa's 'robotic eel' may soon crawl along Jupiter's moon

COSMIC CONCEPT

Washington: Nasa is developing a 'robotic eel' that could explore the icy water of Jupiter's moon Europa and power itself with energy derived from local magnetic fields.

The US space agency has selected 15 proposals for study under Phase I of the Nasa Innovative Advanced Concepts (NIAC), a programme that aims to turn science fiction into science fact through the development of pioneering technologies.

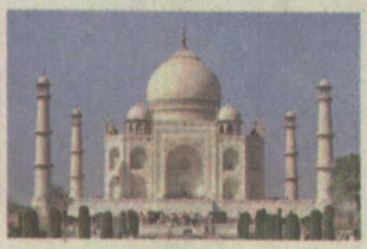
"The latest NIAC selections include a number of exciting concepts," said Steve Jurczyk, associate administrator for the Space Technology Mission Directorate at Nasa Headquarters here.

One of the selected proposals calls for the use of a soft-robotic rover for missions that cannot be accomplished with conventional power systems. This rover would resemble an eel with a short antenna on its back that harvests power from locally changing magnetic fields. "The goal is to enable amphibious exploration of gas-giant moons like Europa," Nasa said.

Another proposal looks at using two glider-like unmanned aerial vehicles connected by an ultra-strong cable at different altitudes that sail without propulsion. PTI

Rashtriya Sahara ND 11/05/2015 P-1

...ताकि ताज का 'नूर' रहे बरकरार



- संसद की एक समिति ने ताज की सुरक्षा के लिए बहुआयामी रणनीति बनाने का सुझाव दिया
- कहा, ऐतिहासिक शहर में वाहन प्रदूषण पर भी लगाम लगाए जाने की जरूरत
- इमारत के आसपास बड़े पैमाने पर हो वनीकरण

नई दिल्ली (भाषा)। विश्व विरासत धरोहर ताजमहल की रंगत फीकी पड़ने की रिपोर्टों के बीच संसद की एक समिति ने इस स्मारक के 'नूर' को बरकरार रखने के लिए 'बहुआयामी' रणनीति बनाए जाने की सिफारिश की है और भारतीय पुरातत्व सर्वेक्षण से इस संबंध में जल्द एक कार्ययोजना सौंपने को कहा है। पर्यावरण मंत्रालय की वर्ष 2015-16 की अनुदानों की मांगों से संबंधित समिति ने ताज महल के आसपास यमुना नदी के जलग्रहण वाले क्षेत्र के विकास और पर्यावरण अनुकूल संरक्षण के साथ ही ऐतिहासिक शहर में वाहन प्रदूषण पर भी लगाम लगाए जाने को कहा है। पूर्व केंद्रीय मंत्री अश्विनी कुमार की अध्यक्षता वाली समिति ने इस ऐतिहासिक इमारत के आसपास के इलाकों में बड़े पैमाने पर वनीकरण की भी सिफारिश की है।

समिति ने आईआईटी कानपुर के दो वैज्ञानिकों द्वारा किए गए शोध का संज्ञान लिया है, जिसमें कहा गया है कि ताजमहल की रंगत कार्बन अणुओं तथा जीवाश्म ईंधन के उपयोग और बायोमास से पैदा होने वाली धूल के कारण फीकी पड़ रही है। समिति ने कहा है कि पर्यावरण मंत्रालय, ताज ट्रेपेजियम जोन अथारिटी , उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड और एएसआई द्वारा प्रयास किए जाने के दावों के बावजूद प्रदूषण लगातार इस विश्व विरासत पर असर डाल रहा है और बदहाली स्पष्ट संकेत देती है कि संबंधित प्रशासन अपने कर्तव्यों का निर्वहन करने में विफल रहा है। रिपोर्ट में कहा गया है कि ताज समेत विरासत स्थलों, तीर्थस्थलों और पर्यटक केंद्रों के पर्यावरणीय प्रबंधन के लिए कोई राशि आवंटित नहीं की गई और केवल बजट आकलन के स्तर पर एक लाख रुपए की टोकन राशि वर्ष 2014-15 की योजना मद में आवंटित की गई, जिसमें से एक 'धेला' भी खर्च नहीं किया गया। समिति ने कहा है कि इस साल भी योजना मद में एक लाख रुपए की राशि आवंटित की गई है। इतनी धनराशि से कोई मकसद हल नहीं होने की ओर ध्यान आकर्षित किए जाने पर मंत्रालय ने सूचित किया कि पिछले दो सालों में ताज संरक्षण मिशन के तहत कोई केंद्रीय योजना नहीं बनाई गई है। समिति ने कहा कि मंत्रालय ने जनवरी 2012 में ऐलान किया था कि ताज ट्रेपेजियम जोन के लिए राष्ट्रीय पर्यावरण इंजीनियरिंग शोध संस्थान (एनईईआरआई) से एक समग्र पर्यावरण प्रबंधन योजना (सीईएमपी) प्राप्त हुई थी। आगरा विकास प्राधिकरण के सचिव ने उत्तर प्रदेश पर्यावरण विभाग के सचिव को सात फरवरी 2012 को सीईएमपी और 22 नई परियोजनाओं की सूची के साथ पत्र लिखा था, लेकिन कई बार याद दिलाए जाने के बावजूद उत्तर प्रदेश सरकार द्वारा कोई प्रस्ताव केंद्र को नहीं भेजा गया। समिति ने सिफारिश की है कि पर्यावरण मंत्रालय को ताज के संरक्षण का मुद्दा उत्तर प्रदेश सरकार के साथ आगे बढ़ाना चाहिए।

6000-citation feat by 4 Indian researchers

http://www.telegraphindia.com/1150511/jsp/nation/story_19384.jsp#.VVCSxkalhWU

- IIT Kanpur the common link for Tripura-born scientist and students

G.S. Mudur

New Delhi, May 10: A 13-year-old research paper that proposed a computational method to help design cars, manage financial portfolios and even select cricketers has become the first ever from India to receive 6,000-plus citations from scholars worldwide.

Kalyanmoy Deb

The paper, by engineer turned computer scientist Kalyanmoy Deb and three undergraduate students, had received 6,035 citations until this weekend --- a measure of the impact and influence of their research. All four were earlier at the Indian Institute of Technology, Kanpur.

"This should be a moment of celebration for Indian science," said Gopalakrishnan Mahesh, a bibliometrics research analyst at the National Institute of Science Communication and Information Resources, New Delhi.

Mahesh has co-authored a commentary on the paper's feat in the journal *Current Science*, published by the Indian Academy of Sciences.

Among more than 50 million research papers catalogued in a global scientific database called the Web of Science Core Collection, covering the period 1945 through 2015, only 541 have over 5,000 citations. "This paper from IIT Kanpur is the first written exclusively by researchers from India to join that elite club," Mahesh said.

Published in 2002 in the journal *IEEE Transactions in Evolutionary Computation*, the paper described a strategy to find solutions to myriad problems that involve multiple and, at times, even conflicting goals and multiple solutions of which only a few may be truly attractive.

The computational strategy the paper proposed has been picked up widely across fields for tasks ranging from engineering and drug design to financial market forecasting and portfolio optimisation for risk and return.

Medical physicists in Germany have applied the technique to plan the safest and most effective radiation dose for patients with cancer.

The Tripura-born Deb wrote the 2002 paper with mathematics undergrads Amrit Pratap and Sameer Agrawal and chemistry student T. Meyarivan. Deb is now Koenig Endowed Chair professor of electrical and computer engineering at Michigan State University, whom he joined two years ago after teaching at IIT Kanpur for 20 years.

Pratap is now with a financial analysis firm in New York while Agrawal works with Google in Seattle.

Four years ago, while still at IIT Kanpur, Deb and two students --- Faez Ahmed and Abhilash Jindal --- used the technique to form imaginary teams on their computer, relying on the batting and bowling scores of actual cricketers.

In computer simulations, they found that 10 of their teams outplayed the Chennai Super Kings, the winner of the 2010 IPL. "I guess this work hasn't caught the eye of IPL team selectors yet, but they could really benefit through such an analysis before they choose their players," Deb told **The Telegraph**.

He added: "People can apply the technique to deal with many, many real-world problems."

Product manufacturers have to deal with this class of so-called optimisation problems while planning what to offer their consumers.

"When we go to buy a product --- a car, let us say --- we don't always worry about buying the one that is cheapest," Deb said.

"For many consumers, there are other conflicting goals such as the comfort, looks, fuel efficiency, among other things."

The IIT Kanpur technique --- known in computational science circles as the non-dominated sorting genetic algorithm-II, or NSGA-II --- provides manufacturers with multiple design options for the products they can then pick to actually manufacture.

"The NSGA-II is easy to use and gives us quick solutions," said Anoop Arya, assistant professor of electrical

engineering at the Maulana Azad National Institute of Technology, Bhopal.

Arya has shown how the technique can be applied to detect faults and restore power after a blackout in an electric distribution network.

Scientists from 85 countries have cited the 2002 IIT Kanpur paper, with China, India and the US accounting for more than 2,000 of its 6,035 citations thus far.

While the next highest-cited paper with Indian authors --- dealing with physics --- has 5,447 citations, it is what Mahesh calls a "mega-authorship paper" with 127 authors from 14 countries.

The second most highly cited paper among those exclusively by Indian authors is a 1995 paper by Gautam Desiraju, a professor of chemistry at the Indian Institute of Science, Bangalore, on crystal engineering. It has drawn over 2,900 citations.

The world's highest cited is a 1951 paper by a US scientist that described a method to measure proteins in a liquid. It has received over 300,000 citations.

Deb studied mechanical engineering at IIT Kharagpur and worked at Engineers India for two years before doing a PhD in the US.

In America, Deb was drawn to the emerging field of genetic algorithms --- computational techniques that borrow rules from natural selection in biology. He first developed the technique in 1995, calling it NSGA, and then perfected it in the 2002 paper.

Deb, who says he moved to the US to work on new computational challenges and to help his children complete high school and college there, retains close ties with India. He will continue to visit IIT Kharagpur as an international visiting professor to deliver lectures and interact with faculty and students.

Since moving to the US, Deb has proposed yet another iterated version of the computational method, called NSGA-III, which can handle 10 to 20 design objectives. NSGA and NSGA-II were limited to three objectives.

Only 14,499 research papers among the 50 million listed in the Web of Science Core Collection database have more than 1,000 citations, a report in the journal Nature had said last October.

A study by Mahesh and his colleagues in 2012 had counted 36 research papers from India that had more than 1,000 citations. That number has since crossed 50.

Meet the Kraken, an intelligent underwater robot built by IIT students

Students at IIT Kharagpur are now developing a successor to the Kraken 2.0 underwater autonomous vehicle seen above. The new robot can go as deep as 10 meters underwater. Photo: IIT Kharagpur

http://www.hindustantimes.com/gadgets-updates/meet-the-kraken-an-intelligent-underwater-robot-built-by-iit-students/article1-1345928.aspx

Students at IIT Kharagpur are working on an autonomous underwater vehicle (UAV), which is more intelligent than drones and can perform assigned tasks under water like searching for debris of a flight crashed in the sea.

At the Centre for Robotics, students have developed the Kraken 3.0 a prototype UAV, a successor to the Kraken 2.0, an earlier model they created. The Kraken 3.0 can go as deep as 10 metres in a pool of water, just like a submarine.

"We pre-program it so that it can do specifically assigned tasks like under-water surveying, identifying lost objects or debris, picking them up, etc. It can also be used for conducting repairs under the hull of a ship," said Abhay Kumar, who is leading the team of students.

Armed with strong sensors and cameras to detect its surroundings, the 1.3-metre-long under-water robot is a six-thruster model which can rotate itself in five directions.

Drones can't be used under water because their wireless technologies do not work inside water.

"Once an UAV is under water it has to take its own decisions. Therefore it has a higher level of intelligence than drones. A powerful on-board computer is part of the machine," Kumar said.

The robots are also programmed to handle emergencies on their own.

"It may face obstacles under the water and so it is programmed how to act in case of an emergency," the fourth-year undergraduate student of Ocean Engineering and Naval Architecture department said.

Even in the case of the doomed Malaysia Airlines flight MH370 which went missing last year in the Indian Ocean, UAVs were assigned to locate the debris inside the sea.

UGC wants compulsory biometric tracking of students

http://www.deccanherald.com/content/476860/ugc-wants-compulsory-biometric-tracking.html

The University Grants Commission (UGC) has asked higher educational institutions (HEIs) in the country to instal biometric devices on their campus and hostels to keep an eye on the "movement and whereabouts" of students.

This is one of the measures suggested by the higher education regulator in a set of guidelines issued recently for ensuring safety of students within and outside university and college campuses.

"Biometrically marking student attendance, both in HEIs as well as hostels, can be an effective way of overcoming proxy. Such digital mechanism can enable higher educational institutes to keep an eye on a student's movement and whereabouts," the UGC has said.

Students and staff should also be provided with "easily identifiable" and authentic identity cards.
Wearing such cards on the institutional premises must be made compulsory by the administration, it added.

The UGC has also advised universities and colleges to organise parent-teacher meetings in every quarter, so "grievances and gaps in the system can be addressed and resolved". The commission has also urged the HEIs to roll out an online complaint registration system so issues are addressed "before they slip out of the hands of the authorities".

It has also asked institutes to "mandatorily" put in place a broad-based system to counsel students for effective management of problems and challenges they face.

"It should be a unique, interactive and target-oriented system, involving students, teachers and parents, resolved to address common student concerns ranging from anxiety, stress, fear of change and failure to homesickness and a slew of academic worries," said the commission.

The counselling system should bridge formal as well as communicative gaps between students and the institution, it said. Teachers to be deployed as counsellors should be trained to take care of students as their guardians at the institute. Each counsellor should be given charge of at least 25 students, said the UGC.

"They should cater to the emotional and intellectual needs of students and convey their growth report and feedback on attendance and examination results to their parents at regular intervals," the commission has advised.