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June 15

JEE Advanced 2018: IITs put out an extended merit list after Government order

https://indianexpress.com/article/education/jee-advanced-2018-iits-put-out-an-extended-merit-list-after-government-order-prakash-javadekar-5218012/

The Joint Admission Board (JAB) of the IITs held an emergency meeting Thursday, following which IIT Kanpur added another 8,954 general candidates, 3,824 OBC candidates, 771 SCs and 293 from ST category to the merit list.

THE INDIAN Institutes of Technology (IITs) Thursday released an extended merit list with another 13,842 qualified candidates for JEE-Advanced after the government issued an unprecedented latenight directive Wednesday.

The HRD Ministry ordered IIT Kanpur, the organising institute for JEE-Advanced this year, to release "a list of candidates, twice the number of seats in each discipline and category... strictly as per merit, prior to starting the choice filling through JoSAA."

The Joint Admission Board (JAB) of the IITs held an emergency meeting Thursday, following which IIT Kanpur added another 8,954 general candidates, 3,824 OBC candidates, 771 SCs and 293 from ST category to the merit list. Overall, now 31,980 candidates are on the merit list, as opposed to the first list released on June 10, which had 18,138.

In order to expand the pool of qualified candidates, the IIT-JAB agreed to dilute the cutoff for the aggregate score by 10% points — from 35% to 25%. However, the minimum marks to be scored in each subject have not been tweaked. "This ensured that the IITs do not compromise on merit and all qualified candidates have the basic aptitude that the institutes expect of their students," said Aditya Mittal, chairman of JEE-Advanced at IIT Delhi.

"Moreover, by only lowering the overall cutoff, the ranks of the first merit list remain unchanged," he said.

This is the first time that the cut-off marks have been revised after the declaration of results. The unprecedented decision was taken in wake of concerns that the merit list this year did not have enough students to fill all 11,279 seats.

In 2015, IIT-Mumbai, the organising institute for JEE-Advanced that year, had lowered the bar after evaluation as an adequate number of aspirants failed to make the cut. But this was done before the declaration of results.

On June 11, The Indian Express had reported that since 2013, when IIT-JEE was renamed JEE-Advanced and the eligibility criteria for the entrance test was tweaked, the number of candidates who qualified

has always been at least twice the number of seats on offer. This year, however, the 18,138 students on the merit list are only 1.6 times the total seats, making it the smallest list of qualified candidates since 2012.

IIT-JAB's first emergency meeting was held Wednesday, which was called after a few institutes expressed concerns over the number of students on the merit. Although JAB in the first meeting resolved to not lower cutoffs, the government's decision to intervene was influenced by the fact that the number of OBC candidates on the merit list was less than the number of seats reserved for them.

"It was pretty evident that the OBC seats would have fallen vacant and they would have eventually been converted into general seats. It's government policy that all reserved category seats should be filled. The first merit list would have compromised that," said sources.

According to sources, the IITs agreed to follow the government's directive as there was a split within their community. The newer IITs along with one old IIT were in favour of lowering cutoffs, The Indian Express has learnt.

With the government directing the IITs to release an extended merit list, the institutes will have to conduct the Architecture Aptitude Test (AAT) again — on June 17 — for the additional candidates. AAT is the entrance test for aspirants who want admission to the architecture programmes in IIT Roorkee and IIT Kharagpur. The test based on the first merit list was conducted Thursday.

June 14

A year on, plan to help police get tech-smart remains only on paper

https://theprint.in/governance/a-year-on-plan-to-help-police-get-tech-smart-remains-only-on-paper/70111/



The project was to be a collaboration between IIT-Delhi and a police research unit; stakeholders blame bureaucratic hurdles for delay.

A project to provide technical support to policing — much the same way that the Defence Research and Development Organisation (DRDO) has been doing for the Army — has been stuck for a year, allegedly because of bureaucratic issues.

The project was to be a collaboration between IIT-Delhi and the Bureau of Police Research and Development (BPR&D), a unit that conducts research in policing.

In 2017, the two organisations had proposed to set up the National Police Technology Development Centre (NPTDC) at the IIT campus, where experts could research on areas such as cyber crime, disaster management, intelligence that would help the police.

But with almost a year gone, not much has moved beyond the project being on paper.

"Eight verticals were defined for internal security purpose, all related to technology intervention for policing. These include smart policing, operation management, gadgets and sensors among others," said a professor from IIT-Delhi heading the project. "A complete detailed project report (DPR) was sent to ministry of home affairs (MHA) about a year ago but the file kept moving back and forth. The project still remains on just paper."

He blamed bureaucratic issues for the delay.

"We have not got any update from MHA so far. There was a change of MHA secretary in between, then the head of BPR&D was changed and the file is stuck in all these bureaucratic issues," the professor said.

The DRDO model

The police technology development centre was to be modelled on the way the DRDO helps defence units. Minister of State for Home Affairs Kiren Rijiju had even called for accelerating the setting up of the technology centre, at an event to discuss modernisation of police in December last year.

"The Army can rely upon DRDO for all the support, but what about police. The idea behind having the police technology centre is aid police, if not on a daily basis, but at least on a case-to-case basis," the professor said.

"For example, on cyber security, a regular policeman does not have an idea on the latest technology or how they can deal better with the cases. This is where researchers would intervene and suggest ideas," he said.

The other area where the centre would provide help is disaster management. From training the policemen on how to react when they have to deal with a disaster situation to what equipment they can use would be a part of the intervention.

While IIT and BPR&D blame bureaucratic issues, the MHA did not comment on the delay.

An official response to a query in this regard from MHA read, "Now it is coming up as a part of modernisation division of BPR&D with open interface for all tech institutes including all IITs."

Researchers at IIT Roorkee develop technology to turn waste into building bricks

https://www.firstpost.com/tech/news-analysis/researchers-at-iit-roorkee-develop-technology-to-turn-waste-into-building-bricks-4511049.html

Imagine turning plastic waste into useful products likes tiles and bricks. Researchers at the Indian Institute of Technology, Roorkee, have developed a technology that will help people do just this. All you need is polymer substance (HDPE or high density polyethylene material), some fibrous substance and a chemical developed at the Institute. People can use just about any plastic waste — old or broken plastic buckets, used pipes, bottles or mobile covers. For the fibrous substance, anything that is fibrous can be used - wheat, rice and corn straws or jute, coir, hemp fibres or even human hair.



"The technology is very simple. A person has to just heat up a mixture (up to 110 to 140 degrees) of plastic and fibrous materials in a mould with the chemical and then let it cool for some time. A nice tile or a brick would be ready for use," said Shishir Sinha, Head of the Department of Chemical Engineering at the Institute, while speaking to India Science Wire.

The proprietary chemical developed by the research group is an organic chemical based on olefins. It helps bind the polymer and fibre materials to form the composites. "We have developed this chemical by using domestically available ingredients. It would cost only around Rs. 50 per 100 gram. This means people in villages will be able to produce a set of 10 one sq ft tiles at a cost of just about Rs 100."



The technology, Dr Sinha noted, could be used with any material including waste. The research group has been focusing on using human hair as raw material for fibrous content. "Human hair has high tensile strength, is light weight and is completely bio-degradable. Products made out of hair fibre reinforced HDPE composites have been found to be highly resistant to corrosion and have good mechanical properties," he explained.



Tiles developed by IIT Researchers using waste including plastic.

He said he and his team focused on human hair mainly because it is one material that will be available in plenty in any villages and hamlets including those with the most poor. They just lay scattered, sometime even clogging drains and water bodies. "We wanted to ensure that at least some of the work we do could be of use to the poorest of the poor. This technology would help achieve that".

<u>June 13</u>

IITs see fall in number of students qualifying, to hold emergency meeting https://www.hindustantimes.com/education/iits-see-fall-in-number-of-students-qualifying-to-hold-emergency-meeting/story-ORLiR3OVn93sDz6gTvFQeK.html

Result of the JEE Advanced 2018 declared by the Indian Institute of Technology Kanpur on Sunday witnessed a drastic fall in the number of candidates who qualified.



Students who were selected in IIT JEE Advance 2018 test celebrate their result outside a coaching institute in Ranchi

The Joint Admission Board (JAB) has called an emergency meeting on Wednesday to discuss the issue of increasing the number of qualified students for Joint Entrance Examination (JEE) Advanced, responding to concerns over the likely situation of seats going vacant.

This year, the result of the JEE Advanced 2018 declared by the Indian Institute of Technology (IIT) Kanpur on Sunday witnessed a drastic fall in the number of candidates who qualified.

Students who clear JEE Advanced are eligible to take admission in any one of the 23 IITs all over the country. An aspirant has to first qualify for JEE (Main) and figure in the top two lakh candidates to sit for JEE Advanced. The Joint Seat Allocation Authority (JoSAA) will announce the first seat allotment on June 27.

As per official figures provided by IIT, out of the 1,55,158 students who appeared for Paper 1 and Paper 2 of JEE Advanced 2018 on May 20, only 18,138 students qualified.

According to officials, although most IIT directors are of the view that out of the total seats offered, 70% usually get filled, there might be an issue in filling up some seats.

Of the 10,998 seats that were offered in the 23 IITs in 2017, the number of vacancies after seven rounds of counselling stood at 121, which was more than the 96 vacancies in 2016. In 2015, there were 50 vacant seats and in 2014, three.

"There are a total of 11,279 seats that are on offer and 18,138 students have qualified. Last year, the last rank at which a seat was allotted in 2017 was less than 14,000, so it might not be a major issue. But at the same time, a number of students often don't take admission if they fail to get into the course of their choice. There is a slight chance that not all of the seats may be filled. The meeting has been called to discuss that," said a senior official.

'Human activities sole cause for warmer India'

https://timesofindia.indiatimes.com/home/environment/global-warming/human-activities-sole-cause-for-warmer-india/articleshow/64564685.cms



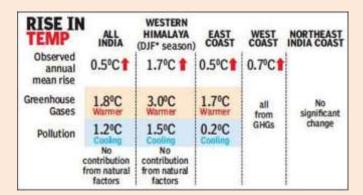
HIGHLIGHTS

- For the first time, scientists have shown that greenhouse gases released by human activities are solely responsible for the warming climate in India
- The average temperatures in India have risen by as much as half a degree in five decades
- Alarmingly, the warming caused by GHGs across India was more than three times what was actually observed during this

Scientists have for the first time shown that greenhouse gases (GHGs) released by human activities are solely responsible for the warming climate in India, where average temperatures have risen by as much as half a degree in five decades.

Alarmingly, the researchers found that the warming caused by GHGs across India was more than three times what was actually observed during this period. That the warming was confined to 0.5 degree Celsius was due to the cooling effects of pollution, another by-product of the use of fossil fuels.

The findings by IIT Delhi scientists were published on Tuesday in Scientific Reports, a journal of the Nature Group. For the study, the researchers looked at temperatures from 1956 to 2005.



"Our main finding is that greenhouse gases have raised India's temperatures much more than what we have experienced but it has been offset substantially by aerosols and land use change. Importantly, there was no contribution to warming from natural causes," said IIT professor Krishna AchutaRao, who co-authored the study.

While warming is a worldwide trend that has been scientifically linked to GHG emissions, this is the first study to trace the cause of rising temperatures in India to such emissions.



The IIT research has crucial implications for the fight against air pollution. "The findings suggest that there could be a sharper increase in warming as we reduce air pollution," AchutaRao said.

According to the models used by AchutaRao and other authors, the warming contributed by natural factors was just 0.005 degree C, while GHGs caused about 1.85 degree C warming.

The pollution and land use change was seen to have led to a cooling of 1.2 degrees C, resulting in about 0.65 degree C net warming. This compared well with the observed warming of about 0.5 degree C.

The IIT study found the sharpest rise in temperatures in the western Himalayas, specifically J&K and adjoining areas. It found that GHGs accounted for a warming of as much as 3 degrees Celsius during the 50-year period.

"Other anthropogenic factors" (pollution, land use change) offset this rise by 1.5 degrees C, resulting in a net rise of 1.5 degrees.

Western Himalayas was among the seven homogeneous temperature regions in the country the researchers looked at. The others were east coast, west coast, interior peninsula, northwest India, northeast and north-central India.

Northeast and north-central India were the only regions that showed no significant warming during the period under study.

The authors – Dileepkumar R, AchutaRao and T Arulalan – used two observational temperature datasets together with results from a multi-model archive of forced and unforced simulations. They estimated the contribution of natural and anthropogenic (human-caused) influences through a two-signal optimal fingerprinting analysis.

The study further isolated the anthropogenic influences due to GHGs from other human-induced factors to arrive at their results.

"We can attribute surface temperature changes over India between 1956 and 2005 to anthropogenic forcing mostly by greenhouse gases and partially offset by other anthropogenic forcings including aerosols and land use land cover change," the study concluded.

How India is using fellowships to tackle brain drain

https://www.dailyo.in/technology/brain-drain-iit-science-workforce-ramalingaswamy-scheme/story/1/24810.html

They let scientists test waters in India and build a research career early on in their career.

Brain drain describes migration of skilled workforce from developing countries to developed ones for better professional opportunities. India has seen brain drain since its Independence, more prominently among engineers, scientists and doctors. In the 1980s, a former director of an Indian Institute of Technology (IIT) had said that the moment someone joins an IIT, he is physically in India but his spirit flies away to the US, and after five years his body follows.

Brain drain, which is globalisation of skilled manpower, actually preceded the economic globalisation in the early 1990s. Since then, governments have been grappling with ways to deal with brain drain in the science and technology sector.

The response came in the form of various schemes — "scientists' pool" launched by the Council of Scientific and Industrial Research (CSIR) in 1957 to "transfer of knowledge through expatriate nationals" in the 1990s. The entire focus was to give those who return job opportunities in IITs or research and academic institutions. This approach perhaps yielded moderate results.

Given the significant shifts taking place in the S&T landscape in India and globally, new avenues had to be devised to arrest brain drain in the post-2000 era. In 2006, the Department of Biotechnology (DBT) launched the Ramalingaswamy Re-entry Fellowship for scientists willing to return to India to pursue their research interests.

The Department of Science and Technology (DST) launched Ramanujan Fellowships to attract brilliant scientists and engineers from all over the world to take up research positions in any scientific institutions and universities in India where they are eligible for receiving research grants. In 2011, the "Innovation in Science Pursuit for Inspired Research (INSPIRE)" Faculty Award was launched for young scientists to come and work in India. All three fellowships are for five years.



These three schemes aren't meant for offering direct jobs. Instead, they let scientists test waters in India and build a research career early on in their career.

While the fellows work in a host institution of their choice for five years — they can also migrate from one to another — there is no guarantee that they will be absorbed after five years. The idea is to prepare them for a research career in these five years.

"The fellowships empower them to compete for research grants and positions globally after this period", points out prof Ashutosh Sharma, secretary, DST. The fellowship period acts like a buffer period during which fellows get assured research grants, infrastructure and funds to travel and attend scientific meetings or invite experts from abroad.

For the first time, a joint meeting of fellows of the three programmes was held in Jaipur. It emerged that despite hiccups like bureaucratic delays in implementation and apathy of some host institutions, the schemes have yielded good results. For instance, a survey of Ramanujan Fellows shows that 69.7 per cent of them could get permanent positions within two years of joining.

Under the Ramalingaswamy scheme, 312 scientists have returned to India since 2007, of which 203 have been absorbed as faculty. The quality of research output is also very high. Hopefully, the trend will gain more momentum in the years to come.

June 12

JEE Advanced Counselling 2018: Check important dates here

https://www.indiatoday.in/education-today/notification/story/jee-advanced-counseling-2018-check-important-dates-here-1258034-2018-06-12



The JEE Advanced results 2018 were announced on June 10, 2018 on the official website, the link for which is jeeadv.nic.in. For the first time, JEE Advanced was held completely in the online mode.

The Joint Seat Allocation Authority (JoSAA) will start the online registration process for the counselling and seat allotment from June 15.

JEE Advanced Results 2018: Topper

This year, Pranav Goyal from Roorkee zone secured All India Rank 1 and is JEE Advanced topper 2018.

Zone wise top rankers

IIT Bombay Zone: Rishi Agarwal, CRL (Common Rank List) 8

IIT Delhi Zone: Sahil Jain, CRL 2

IIT Guwahti Zone: Prashant Kumar, CRL 150

IIT Kanpur zone: Ayush Kadam CRL 78

IIT Kharagpur zone: KVR Hemant Kumar Chodipilli, CRL 5

IIT Madras zone: Mavuri Siva Krishna Manhohar, CRL 5

JEE Advanced Counselling 2018: Important dates

Candidate registration and choice filling for academic programs begins: June 15

Candidates who would write AAT can fill their choices: June 18

Display of mock seat allocation: June 19

Last date for registration and choice filling: June 25

Reconciliation of data, seat Allocation, verification, and validation: June 26

Seat allocation (Round 1): June 27

Document verification and acceptance of seat by reporting at reporting centres (Round 1): June 28

Display of seats filled/availability status: July 3

Seat allocation (second round): July 3

Document verification and acceptance/ withdrawal of seat by reporting at Reporting centres (Round 2): July 4, 2018 to July 5

Display of seats filled/ availability status: July 6

Seat allocation (Round 3): July 6

Document verification and acceptance/ withdrawal of Seat by reporting at reporting centres (Round 3): July 7, 2018 to July 8

Display of seats filled/ availability status: July 9

Seat allocation (Round 4): July 9

Document verification and acceptance of seat by reporting at reporting centres (Round 4): July 10, 2018 to July 11

Display of seats filled/availability status: July 12

Seat allocation (Round 5): July 12

Document verification and acceptance/ withdrawal of seat by reporting at reporting centres (Round 5): July 13, 2018 to July 14

Display of seats filled/ availability status: July 15

Seat allocation (Round 6): July 15

Document verification and acceptance/ withdrawal of seat by reporting at reporting Centres (Round 6): July 16, 2018, to July 17

Last round for seat withdrawal: July 16, 2018 to July 17

Display of seats filled/availability status: July 18

Seat Allocation (Round 7): July 18

Document verification and acceptance of seat by reporting at reporting centres/ admitting institutes (Round 7): July 19

Registration fee:

No fee will be charged for registration and choice filling.

How to register for JEE Advanced 2018 counseling:

Log on to the official website, jeeadv.nic.in

Log in using the JEE Main 2018 roll number and password

Fill the choices as per your preference

Lock your choices (If you do not lock your choices then the last saved choices will be locked automatically)

Download the "Provisional Seat Allotment letter" and e-challan

About IIT JEE Advanced exam 2018

The JEE advanced exam was held on May 20, 2018, after the JEE mains results declared in April this year. Over 1, 60,000 students appeared for the JEE Advanced exam this year. Reports, however, suggest that a much lesser number of students appeared for the examination.

The JEE Advanced is conducted for admissions in 23 IITs and NITs across the country.

IITD to Hold Open Day for Girls

https://www.campusvarta.com/campus-updates/iitd-open-day-girls-cracked-jee/

The Indian Institute of Technology, Delhi (IITD) will hold an Open Day session on June 17 for all women candidates who have cleared the Joint Entrance Exam (JEE Advanced), it was announced on Tuesday.

The Open Day is aimed at providing counselling to the students about the courses they should pursue and their career choices.

JEE Advanced 2018 was held on 20 May. The computer-based test, which is the entry to 23 IITs, was held in two sessions for the two mandatory papers.

Meenal Parakh is the female topper. Her common ranking list in JEE is 6; she got 318 marks of 360.

"Girls who have qualified in JEE... My hearty congratulations. Please attend this special event," IITD Director V. Ramgopal Rao said.

The session will be held from 10 a.m. to 5 p.m. at the institute's Lecture Hall Complex. "All girls who have qualified in JEE (Advanced) 2018 are invited to join us at IITD, to discuss (with faculty and current students), their choices of branch/institute during the counselling process and find out more about how life is for women at IIT in general and IITD in particular," the invitation said.

In the results announced on Sunday, a total of 2,076 women qualified the JEE (Advanced) to become eligible for taking admission in 23 IITs of the country.

A new guideline from the MHRD to improve the gender imbalance has resulted in the creation of 800 supernumerary seats exclusively for female candidates. In addition, supernumerary seats will be created to foreign candidates along with DS candidates (with a restriction of maximum two DS candidates per IIT).

This is also the first time that about 500 super-numerary (over and above the total) seats were being reserved across these institutions for women to narrow the gender gap.

The IITs are redesigning their courses to produce "good human beings" https://qz.com/1302003/the-iits-are-redesigning-their-engineering-courses-to-produce-good-human-beings/



The Indian Institutes of Technology (IITs) don't want their students to be known as just tech-nerds anymore.

India's best-known engineering schools want the country's most successful techies to be more holistically skilled. So the IIT Council, the governing body of the 23 such institutes in the country, has reportedly decided that subjects related to the humanities, arts, and social sciences will be given more emphasis in their undergraduate programmes.

Some of the institutes have already begun to redesign their core undergraduate programmes. For instance, IIT Kharagpur plans to introduce courses in music and musical instruments.

"Engineers can be more creative if they are given exposure to subjects other than core ones," V Ramgopal Rao, director of IIT Delhi, told The New Indian Express. "Also we are not looking only to produce engineers but also good human beings."

Well-rounded skills

For a while now, the IITs have been conducting non-technical courses in subjects such as economics, sociology, western philosophy, and psychology. Now they want to increase their numbers and encourage more students to spend time studying these.

"We've reached a stage where having such, almost parochial, view on technical education will not help. The world is changing and we need engineers who think beyond engineering," said Narayanan Ramaswamy, head of the education and skill development practice at KPMG India.

Over the last few years, India's engineers have had a tough time finding jobs. Many Indian engineering colleges are anyway infamous for producing thoroughly unemployable graduates. Of late, even students of the IITs, which are highly selective in their admission processes, are beginning to face trouble in the job market.

Therefore, taking this holistic approach to technical education could help.

"If I'm getting into this world and I know nothing but technology...I'm not successful; I tend to get nerdish," Ramaswamy said. "For research, very clearly the focus is on collaborative research. Our IITs...lack research because of this. If they want to do research now, they have to go and collaborate with institutions outside."

IIT alumni, too, believe that the little non-technical education they received came in handy in their careers. So giving future students more such exposure will only benefit them a lot, they say.

"What happens with joint entrance examination aspirants is that their mind is just one track—that they have to crack IIT. (Humanities courses) open innovative minds towards new fields, make them more creative and knowledgeable," said Amit Kumar Agarwal, an alumnus of IIT Kanpur who now runs a realty platform NoBroker.com.

Besides, a basic understanding of finance, economics, culture, and society is useful as the graduate might end up working in any industry, said Satish Kannan. An alumnus of IIT Madras, Kannan cofounded digital medical consultation platform DocsApp. "(It) gives you a larger view...People should at least take two or three such courses," said Kannan, who himself took a course on how technology influences culture and society.

Moreover, the need to develop non-tech skills has become particularly important as engineers are increasingly taking to entrepreneurship in India.

Over a third of Indian startups are founded by IIT graduates and the number of students choosing to launch their own companies is increasing. They stand to gain from formal training in non-technical subjects.

"Today engineers aren't using the engineering concepts (alone). The thing they carry from IITs is an analytical aptitude. That aptitude can be mixed with humanities to make education very wholesome," Agarwal said.

Breaking the inertia

However, the IITs may find it difficult to do a course correction immediately.

"Mindset is a real challenge. (The) IITs have been run by technocrats and this is a different animal. The biggest challenge would be in people adapting to it and finding the right faculty and the management of IITs getting broad-based in their mindset," Ramaswamy pointed out.

It would also have to be a balancing act eventually to ensure that students aren't forced to take up multiple humanities courses.

"IIT (students) are mostly left-brain analytical thinkers and humanities can be handy with lateral thinking but keeping it an elective would be the right way to do it because it is not directly relevant to many students," said Shreya Mishra, an IIT Bombay alumna, who founded rental portal Flyrobe.

HRD backs IIT-Delhi on Metro signage row

http://indianexpress.com/article/delhi/hrd-backs-iit-delhi-on-metro-signage-row-5213592/

Metro station has the name 'FIITJEE- IIT' emblazoned on it, which, the institute authorities feel, gives the impression of a partnership between IIT-Delhi and the coaching school.

Taking up cudgels on behalf of IIT-Delhi, the Human Resource Development (HRD) Ministry is learnt to have written to Durga Shanker Mishra, secretary at the Ministry of Housing and Urban Affairs (MoHUA), seeking his personal intervention in the ongoing row over the name of a Metro station outside the institute's campus.

The premier engineering institute has objected to the Delhi Metro Rail Corporation (DMRC) selling the branding rights of the IIT Metro station to FIITJEE, a private coaching school. This was done as part of DMRC's revenue generation efforts in which it has been auctioning naming rights for selected Metro stations. The Metro station, as a consequence, now has the name 'FIITJEE- IIT' emblazoned on it, which, the institute authorities feel, gives the impression of a partnership between IIT-Delhi and the coaching school.

In addition to filing a petition in the Delhi High Court last month, the institute also approached the HRD Ministry on May 29 informing the government of its concerns.

In a letter written to Mishra last week, a copy of which has also been marked to IIT-Delhi director Ramgopal Rao and DMRC managing director Mangu Singh, the HRD Ministry has endorsed the institute's concerns.

The letter, sources said, states that many private coaching institutes have come up in the country to help students crack the JEE (Advanced), which is the single gateway to securing a seat in any one of the 23 IITs.

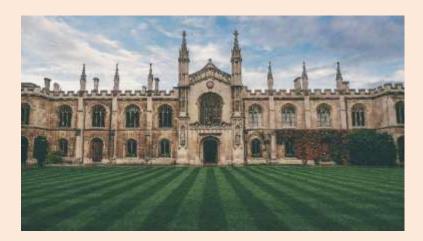
Since FIITJEE is one such tuition centre, its association with IIT-Delhi, even though only on the facade of a Metro station, gives the false impression that it is coaching engineering aspirants in association with IIT-Delhi, it further states.

The HRD Ministry has requested Mishra's personal intervention in this matter to ensure that the general public is not misled by the association of a coaching institute with IIT-Delhi, The Indian Express has learnt. The Indian Express could not reach Rao for a comment on Monday.

Speaking to The Indian Express earlier, he had expressed unhappiness over the institute not being consulted by DMRC even though the Metro station was built on its land. "The station is inside IIT-Delhi; we gave land to DMRC and it's being named after FIITJEE, a private coaching institute. This creates a direct conflict of interest. People are getting misled by the signage, thinking we have a contract with them," he had said.

"We only got to know of FIITJEE's name being used when the signage was put up. That is when we approached the DMRC. They told us that the contract had already been given, so nothing could be done, and that if the contract had to be breached, IIT should compensate FIITJEE. We said why should we pay? So, we went to the Delhi High Court," he had further said.

IIT Bombay dethrones IIT Delhi in QS World University Rankings 2018 https://www.indiatoday.in/education-today/story/iit-bombay-dethrones-iit-delhi-in-qs-world-university-rankings-2018-1253148-2018-06-12



After acquiring a place in the top 200 universities of the world, IIT- Bombay has become the country's best university according to the latest edition of QS World University Rankings which was released on June 6, 2018.

IT Bombay now the top college of India with a world ranking of 162 according to QS Ranking IIT-Bombay has been on a rise since last year when it jumped up from rank 219 to 179, entering the top 200 and joining IIT-Delhi and IISc Bangalore in this league.

In the rankings released for 2019, IIT-Bombay trumped IIT-Delhi by moving up to rank 162 while the latter remained on its unchanged position of rank 172.

IIT-Delhi dethroned

As IIT-Delhi has been maintaining its rank of 172, other Indian universities have been moving up from their previous spots.

Apart from IIT-Bombay, IISc Bangalore has also toppled over IIT-Delhi as it acquired a position of 170 by moving up 20 spots. Despite this, IISc Bangalore failed to regain its postion in the top 150.

Indian universities leave their mark in QS Rankings

Along with the aforementioned universities, the top 6 IITs have also maintained their previous positions steadily in the list.

New entries such as Amrita University, Amity University, Jamia Millia Islamia, Thapar University and Vellore Institute of Technology have also been part of the list this year with only Jamia Millia Islamia placed in the 751-800 ranks while all the other universities fall in the 801-1000 ranks.

All in all, 24 Indian universities have been a part of the QS Ranking this year out of which there have been five new entries. Seven out of the 24 have improved their ranking.

'Research produced by the faculty at the 19 (Indian) universities ranked in both the 2018 and 2019 rankings have yielded, cumulatively, 803,000 citations. This is 85,000 more than in 2018's edition of the rankings, which is creditworthy. The rise is also responsible for India's overall citations-perfaculty ratio rising from 46.90 in 2018 to 50.74 in 2019.

- Ben Sowter, Research Director at QS

Overall, the first rank is held by Massachusetts Institute of Technology (MIT) for the seventh year in a row, followed by Stanford University, Harvard University, and CalTech Institute respectively.

Inshorts' AI-based news summarization to generate 100,000 'shorts' per month

https://www.newsbytesapp.com/timeline/Science/24865/112984/inshorts-introduces-ai-based-news-summarization-on-its-app



India's highest rated news application Inshorts introduced Artificial Intelligence-backed algorithmic summarization on its app which will help in summarizing more than 100,000 articles per month.

With this new feature called "Rapid60", Inshorts is another step closer to achieving the goal of creating a fully-automated AI system which can convert a full-length news article to a crisp, coherent 60-word "short".

In context: Inshorts introduces AI-based news summarization on its app

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Training'Rapid60' trained through database of articles summarized by Inshorts editors

The training set of data for "Rapid60" is the database of more than half a million articles which the editors at Inshorts have manually summarized in 60 words over the course of the last five years.

As of now, the feature will generate articles in English only and the news aggregator plans to expand to vernacular languages in the future.



Words from CEO

Hopefully, we'll be able to create new benchmarks: Inshorts CEO

Azhar Iqubal, Co-founder and CEO, Inshorts, said, "We are hopeful that in the long run, we will be able to create new benchmarks in the ecosystem."

Given an input article, "Rapid60" will generate shorts of 60 words, along with the headline and the card image automatically.

Inshorts has the largest set of training data in the world for the AI to learn to summarize.

We had run lot of pilots to achieve accuracy: CTO

Anunay Arunav, Co-founder and CTO of Inshorts, said, "Before finalizing, we had to run a lot of pilots in order to achieve a certain level of accuracy. With the existing solution, we are sure that we have been able to remove inefficiencies from the system."

Inshorts

Inshorts has over 10 million downloads on Android, iOS

Inshorts is India's highest-rated news app, with more than 10 million downloads on Android and iOS. The app curates the most significant news items of the day across categories like national, world, politics, business, sports, technology, and entertainment.

This enterprise was set up by a team of IITians, Azhar Iqubal and Anunay Arunav of IIT Delhi and Deepit Purkayastha of IIT Kharagpur in 2013.

Inshorts recently became operationally profitable

Hitting a net revenue run rate of Rs. 25 crore in 2017, as compared to Rs. 3 crore in 2016, Inshorts is targeting a net revenue rate of Rs. 100 crore in FY2018, with revenue coming in through branded partnerships and sponsored content.

IIT Madras students build robots that can prevent rail accidents

https://theprint.in/science/iit-madras-students-build-robots-that-can-prevent-rail-accidents/68927/



File image of Prakash Javadekar launching the Smart India Hackathon in New Delhi | Ministry of Human Resource Development

'Artemis', the robot, developed by IIT-Madras students can detect cracks on rail tracks, send out real-time data and help prevent accidents.

Students from Secunderabad's Gurunanak Institute of Technology (GIT) have developed a smart glove that can detect sign language and translate it into audio, helping the deaf and mute communicate with others. The prototype has been developed as part of the human resource development ministry's innovation challenge 'Hardware Hackathon'.

Through sensors embedded in the gloves, the technology will detect sign language and convert it into sound which will be audible to the other person through a small speaker attached with the glove. When a deaf and mute person starts making gestures with their hands, the glove translates the signs into language, thereby communicating what they are trying to say.

A similar technology was developed by scientists in the United States last year. However, that focused more on controlling objects in virtual reality games.

"With this project we hope to help physically challenged persons who are unable to communicate. The project is still at a prototype stage but if get good support from the industry we can really turn this around into a refined product that can be launched in the market," said a student from GIT.

Competing projects

Students from technical institutions across India, including Indian Institutes of Technology (IITs), National Institutes of Technology (NITs) and a number of other engineering institutions from smaller towns, have developed projects under Hackathon.

Over 100 projects have been shortlisted by experts. They will get a chance to get patent and work with the industry or government.

IIT-Madras students have developed an automated system to detect cracks along the railway tracks in what could be a revolutionary technology in India, where rail accidents have claimed a number of lives. 'Artemis', the robot, developed by a team of students from IIT-M, when fitted along a railway track, can detect cracks as small as 2 cm with sensors and send out real time data.

The robot can even work when the train is running on track.

This technology could potentially save India the cumbersome process of deploying nearly 2 lakh men patrol railway lines to check the length and breadth for cracks and repair them manually.

Hackathon finals

Hardware Hackathon is an innovation challenge where students from across institutions will be working to find hardware solutions for various problems that the country faces. The final round of this challenge will be held between 18 to 22 June at various IITs, IISc and CEERI Pilani.

Agriculture, waste management, rural technology, clean water, security and smart vehicles are some of the subjects that these students will be working on. Over 600 students, with one third women participants, are working on various projects related to these themes.

<u>June 11</u>

IITs to add more arts content in B Tech courses

http://www.newindianexpress.com/nation/2018/jun/11/iits-to-add-more-arts-content-in-b-tech-courses-1826393.html

IIT-Delhi Director V Ramgopal Rao says engineers can be more creative if they are given exposure to subjects other than the core ones.

India's top engineering institutes are redesigning their core B Tech programmes to add credits on arts and humanities, including creative arts. Authorities in the Indian Institutes of Technology said while components of arts in engineering programmes have always been included in the course content, now a conscious effort is being made to raise them by 25-30 per cent.

"With IITs updating their course, we will see subjects related to humanities, arts and social sciences going up in undergraduate programmes," a senior member of IIT Council, the governing body of all 23 functional IITs in the country, told The New Indian Express.

"The inclusion of more arts content is aimed at promoting all round holistic development of our engineers and to boost innovation and research in classical music, art forms, and architecture," he added.

In B Tech, students choose minor subjects apart from the major, which can be from a department different from her/his parent department or from across multiple departments and inter-disciplinary subjects. A minor is a sequence of three-four courses accounting for 24-36 credits, sources said.

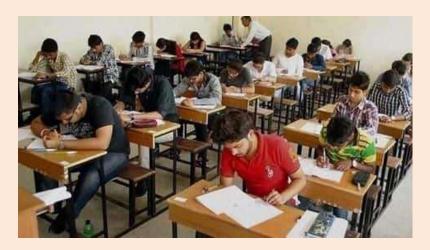
IIT-Delhi Director V Ramgopal Rao said the basic learning premise for engineers is to find solutions for problems. "But engineers can be more creative if they are given exposure to subjects other than the core ones," he said.

Dheeraj Sanghi, a senior professor of Computer at IIT-Kanpur said the institute has been leading in encouraging students to study art components. "About 12-15 per cent of our course content is already related to humanities and social sciences apart from courses in economics, psychology, philosophy, English, sociology, and art," he added.

A senior office-bearer at IIT-Mandi said a proposal to include components on creative art and design is now on the table. They had not been offered before. A report by IIT-Kanpur prepared a few years ago on deficiencies in course structures at IITs had listed several weaknesses such as less emphasis on working with hands and tinkering, too much content and lack of flexibility for students to select courses depending on their maturity, aptitude and interest.

Former students pointed out that many of them did not understand the importance of content — other than core subjects — that afterward play a crucial role in shaping careers and lives.

JEE-Advanced qualifiers drop to seven-year low: Cause for concern? https://www.newsbytesapp.com/timeline/India/24790/112697/jee-advanced-results-throws-admissions-into-uncertainty



The JEE-Advanced 2018 results were declared yesterday, and with them came a shocker: the number of qualified candidates has fallen by two-thirds of last year.

In fact, it is the lowest figure in seven years.

This has thrown into uncertainty a basic question: will the IITs get enough students to fill their seats this time?

But Shalabh S, JEE-Advanced Chairman (IIT-Kanpur), insists there's nothing to worry.

Results

Number of qualifiers over 1.6 times the number of seats

This time, 18,138 students have qualified in the Advanced, more than 1.6 times the number of seats available.

Pranav Goyal (Roorkee zone) emerged the all-India topper. Meenal Parakh (Delhi), with All-India Rank (AIR) 6, topped among girl.

A total of 8,794 general candidates passed, compared to 3,140 OBC candidates and 6,204 SC/ST candidates.

Chosen students will now have to undergo counseling to determine course and institute.



Factor
IIT-Kanpur attributes fall in qualifier to "error-free question paper"

According to IIT-Kanpur, the organizing body of the JEE-Advanced this time, an "error-free question paper" is the main reason behind the fall in the number of qualified candidates.

An error-free question paper means no grace marks have to be provided to students for wrongly printed questions.

Compared to this year's 18,138 qualified candidates, in 2017, more than 51,000 had cleared it.

Impact

Nothing to worry about, officials insist

Aditya Mittal, JEE-Advanced Chairman (IIT-Delhi), echoes Shalabh S, saying this isn't anything to worry about.

"Last year, the last rank at which a seat was allotted was less than 14,000. So with over 18,000 candidates, filling up seats should not be a problem," he explained.

Incidentally, when IIT-Mumbai faced a similar situation in 2015, it had to lower the bar to get enough students.

Counseling

Application for counseling to open this week

However, a lot of students who don't get their preferred course, branch or institute during the counseling process tend to drop out, and experts are worried more than the minimum required candidates might leave.

Application for counseling commences June 15 till June 25.

The first round will be conducted on June 27, followed by at least two more, depending on requirements.

JEE Advanced 2018 results: 2,595 from IIT Madras zone qualify

https://timesofindia.indiatimes.com/city/chennai/jee-advanced-2018-results-2595-from-iit-madras-zone-qualify-second-in-the-national-list-next-to-delhi/articleshow/64534114.cms



IIT Madras zone secured the second position in terms of number of candidates who cleared Indian Institute of Technology - Joint Entrance Examination (IIT-JEE) 2018

Of the total 35,600 candidates who appeared for this test from IIT Madras zone (comprising of Tamil Nadu, Puducherry, Kerala, Andhra Pradesh and Telangana), a total of 3,595 were declared qualified.

With 5,072 qualifiers, IIT Delhi zone topped the overall performance chart.

However, none of the toppers from IIT Madras zone were from Tamil Nadu. All five were from residential institutions in Telangana and Andhra Pradesh.

P Girinath from FIITJEE, a private coaching centre in Chennai, with an All India Rank of 51, topped Tamil Nadu in the test. R Raghu Raman (AIR-56) and Aniswar Srivatsa Krishnan (AIR – 67) secured the second and third positions respectively.

Mavuri Siva Krishna Manohar from Vijayawada, topper from IIT Madras zone, stood sixth in the national rank list by scoring 319 out of 360. All the others were from Telangana.

Speaking to TOI, these toppers said that they underwent training for IITJEE for more than four years, opted out from regular schools and joined residential institutions to get trained for competitive entrance exams.

Private coaching centres in Tamil Nadu say that performance of candidates from the state was below par compared to their counterparts from the neighbouring states.

Overall, only 18,138 out of the 1.55 lakh candidates who appeared for the test in seven different IIT zones scored above the cut-off required for qualification, according to an official release from IIT Kanpur, which organised the IITJEE 2018.

This is 1.6 times more than the number of seats that are being offered. A total of 11,279 seats are being offered through various IITs this year.

Of the total qualified, only 2,076 were girls. Nearly 800 supernumerary seats were created in 2018 specifically for female candidates in IITs in order to improve the gender balance in IITs as per directive of the Union Education Ministry.

This year, many students found the paper II tough as it had many tricky and lengthy questions, said D Kannan, a IITJEE candidate from Chennai.

In spite of this year paper being tough and online for the first time in the history of IIT JEE, more than 200 students have qualified JEE advanced examination with rank below AIR-12000, FIITJEE said in its statement.

Admission to IITs are conducted in two stages - JEE (Mains) and JEE Advanced. Those who cleared these tests will be invited for counselling to be conducted by Joint Seat Allocation Authority (JsSAA) later this month.

JoSSA website was launched on Wednesday and first seat allotment will be announced on June 27. The final allotment for the seventh round will be announced on July 18, said IIT Kanput in its statement.

Rising atmospheric carbon dioxide levels may spark a shift towards wetter winters and drier summers: Study

https://www.firstpost.com/tech/news-analysis/rising-atmospheric-carbon-dioxide-levels-may-spark-a-shift-towards-wetter-winters-and-drier-summers-study-4506001.html

Rising atmospheric carbon dioxide levels may spark a shift towards wetter winters and drier summers, warns a new study based on evidence from climatic history preserved in 65 million year old oyster shells.



Earlier research shows that about that time, in the cretaceous period, atmospheric carbon dioxide levels were almost thrice the present amount. It was the most intense greenhouse phase in history of the earth with unusually high temperature and sea levels. There is also some evidence of torrential rainfall and cyclones.

In the wake of rising atmospheric carbon dioxide levels and increasing unpredictability of premonsoon showers, researchers from Indian Institute of Science (IISc), Bengaluru decided to recreate precipitation trends of the cretaceous era. "The idea was to learn from the past to probe what the future holds," Prosenjit Ghosh, Associate Professor at the Centre for Earth Sciences, IISc and the lead author of the study, told India Science Wire.

Since there is no direct way to establish ancient rainfall trends, scientists addressed this problem by studying clams and oyster shells. These animal shells grow at different rates depending on temperature and salinity of their environment. In times of rainfall, greater amounts of water are discharged into the sea which reduces mineral deposition and shell growth.

Similarly, shell composition also varies with ambient temperature and moisture. "The amount of delta-o-18, an isotope of oxygen, varies with temperature while the amount of clumped aggregates is affected by moisture," Ghosh explained. Scientists, therefore, used both these parameters as proxies for tracking changes in temperature and precipitation.

To test, if the strategy would work, researchers collected black clams from Kochi and studied their shells. Prior to this they had grown clams for a year in the lab and found that on average shells grew by 8.3 mm each year. So they drilled through clam shells obtained from Kochi and checked the isotopic composition for each mm. Based on changes in the fraction of isotopes, scientists recreated monsoon history for the year 2009-10. The recreated rainfall pattern matched with actual meteorological data of the region.

The method was then applied to analyse mollusc shells from the Cauvery basin. Oyster fossils in the basin belong to the early maastrichtian era in the cretaceous period and therefore hold the key to rainfall pattern of that era. Scientists carefully drilled through oyster shells layer by layer and used the collected dust to map delta-o-18 levels and the amount of clumped aggregates for each layer. The data was used to recreate the rainfall pattern.

Results showed that the weather was drier during summers, while greater rainfall was experienced during winter months. A similar weather pattern has recently been observed in the western Australian coast. Because this region occupies the same position that India did in the cretaceous period the observation provides more weight to the findings, researchers said. This will help climatologists map future weather changes and predict climatic trends with more certainty, say scientists.

The research team included K. Prasanna (Birbal Sahni Institute of Palaeosciences), Yogaraj Banerjee, Atanu Chaudhuri and Satyam Suwas (Indian Institute of Science, Bangalore) and Ian S. Williams and Michael K. Gagan (Australian National University, Australia). The study was published in the journal Scientific Reports.

IIT Roorkee gets 10-cr design Innovation Centre

http://www.thehansindia.com/posts/index/Young-Hans/2018-06-11/IIT-Roorkee-gets-10-cr-design-Innovation-Centre-/388335

Indian Institute of Technology Roorkee is going to establish a Design Innovation Center (DIC), named (Navonmesh) at a cost of Rs. 10 crore. Funded by the Ministry of Human Resource Development (MHRD), Government of India, It will address issues of the Himalayan Region using resources available locally as well as National Priorities.

The objective is to develop innovative designs primarily to addressthe local issueswhich need low cost solutions and to nurture and advance the culture of design and innovation in the region to improve the quality of life.

Highlighting the importance of this Center to the Himalayan Region and the country, Prof Ajit K Chaturvedi, Director, IIT Roorkee, said, "I am happy that IIT Roorkee has been selected for setting up a Design Innovation Center. We already have an ecosystem in place and I am sure our faculty members and students will take full advantage of the frameworkprovided byDIC."

"The DIC aims to produce region-specific products and will support innovative proposals for product development. It has also some unique outreach programs such as COMAL (Common MAn to Laboratory), under which DIC will connect with the common man, who often has innovative ideas,

but usually gets deprived of proper mentoring, to takehisideas to reality. I am sure the Design Innovation Center, along with the Spoke partners, will focus on the specific problems of the region which will benefitthe society," said Prof Ajit K Chaturvedi.

The DIC has already identified several products that are going to be developed. They include:

- ¬ Crop harvester for terrains,
- ¬ Green furniture based on forest waste materials,
- ¬ Assistive device differently-abled persons.
- ¬ High yield loom design for Uttarakhand local weavers
- ¬ Lab-on-chip
- ¬ Inclusive Education Kit

The DIC will also take up Industrial Consultancy and Collaborative Activities besides conducting Workshops/Seminars and U2U (Udbhavan to Utpadan). Speaking about the vision of this Center, Prof Manoranjan Parida, Dean (Sponsored Research and Industrial Consultancy), IIT Roorkee, said, "The DIC will evolve a unique model of focusing on the development of a culture of collaborative partnership with society, industry and other stakeholders to develop state-of-the-art outcomes. Addressing the needs of differently-abled persons is among the priority areas."

The MHRD approved the proposal of IIT Roorkee to establish the DIC under the National Initiative of the Ministry for setting up of Design Innovation Center, Open Design School and National Design Innovation Network. Mr. Krishna Rao who just graduated (B.Tech., Production and Industrial Engineering), IIT Roorkee, said, "The P2P (Prayogshala to Prayogkshetra) initiative gives students a chance to learn and develop productsfrom the research work that they've done for their final year project."

The DIC is a path to 'Make in India.' It will act as a mediator to help students and researchers go the extra mile forward and give a physical form to their ideas, help them realise how their products will perform in the market, added Mr. Krishna Rao.

The proposed DIC will operate in the 'Hub and Spoke' Model, in which IIT Roorkee will be the Hub Institute; three other premier Institutions of the region – National Institute of Technology Uttarakhand (NITUK), Indian Institute of Management Kashipur (IIM-Kashipur) and College of Technology, G.B. Pant University of Agriculture and Technology (GBPUA&T), Pantnagar, shall participate as the Spokes.

The other institutions have also developed their specific proposals –to address local problems. As per guidelines of MHRD, the Spokes are allocated one-third of the total budget.

The proposed activities of the DIC will be carried out under three major categories:

- (i) Supporting innovative product-based projects of faculty members and students,
- (ii) Academic activities, and
- (iii) Outreach activities.

IIT-Hyderabad open day for JEE (Advanced) on June 14-15

https://timesofindia.indiatimes.com/home/education/news/iit-hyderabad-open-day-for-jee-advanced-on-june-14-15/articleshow/64545753.cms



The Indian Institute of Technology (IIT), Hyderabad is all set to host open day for the joint entrance exam (Advanced) qualified candidates on June 14-15, 2018.

According to a public notice issued by the institute on its website soon after the JEE (Advanced) results were declared on June 10, qualified candidates will get to "explore various departments, see the facilities, the research being carried out at IIT Hyderabad and talk to people, including faculty members" during the open day.

An exclusive session for female candidates will also be held on June 15 from 10 am to 5 pm at the Kandi campus in Sangareddy, Medak district.

It may be noted that IIT Hyderabad is among the most sought after institutes among the new IITs established in the country. The IIT Hyderabad had all their seats taken between 2013 and 2017. The institute also improved its ranking in the National Institutional Ranking Framework (NIRF) by the ministry of human resource development by bagging the ninth rank this year as against 10th rank secured in 2017 among all engineering institutes.

IISc scientists lead the way to smart cities with a novel software framework https://researchmatters.in/news/iisc-scientists-lead-way-smart-cities-novel-software-framework



Scientists at the Indian Institute of Science (IISc), Bengaluru have developed a data driven software platform that can efficiently manage Internet of Things (IoT) resources and applications. The software, if commercialized, could be employed for efficient management of smart cities.

Imagine a place where every object could communicate to every other object. Your car can talk to other cars, avoiding accidents. Your car could inform about your arrival to your air conditioner at home, so that your home is at an ideal temperature as you enter. Your refrigerator can remind you of groceries needed by sending you an alert on the phone. Internet of Things, where devices and systems can communicate with each other over the internet, could in fact make such a place a reality. A smart city is a city or town (generally an urban location) that uses data from different assets in the area to efficiently manage resources and services within the city. This can be data about individual households, power plants, traffic management systems, water management systems, peoples (and sometimes vehicles) movement on footpaths and boulevards, and even the quality of the air. Data is collected with the help of sensors, which can then communicate with a computer. The computer may be a centrally based cloud computing device or an edge device located closer to the sensors. Once the data center receives the data, software can then decide the most efficient way to manage those resources. Such a data-driven approach is essential for the realization to smart cities.

"The Internet of things (IoT) is emerging as the next big wave of digital presence for billions of devices on the Internet. A data-driven IoT software platform is essential for realizing manageable and sustainable smart utilities and for novel applications to be developed upon them" remark the authors about the importance of a data-driven platform.

In their new research published in the journal of Software: Practice and Experience, researchers have proposed data-driven software architecture for management of smart city applications. An image of the research was selected as the cover image for the June 2018 edition of the journal.

The software architecture is designed to address two key operational activities: the IoT fabric for resource management, which manages the sensors and routers that form the IoT architecture, and the data and application platform for decision-making, which manages and processes the data received from the sensors.

The design requirements were further fine-tuned using the smart water management domain. "Some of these requirements are unique to developing nations" remark the authors. Campus-scale software

architecture was then put to the test at IISc. The researcher further claim that the architecture is "scalable to a township or city while also generalizable to other smart utility domains"

Politicians call for ordinance against UGC circular on faculty reservation

https://timesofindia.indiatimes.com/home/education/news/politicians-call-for-ordinance-against-ugc-circular-on-faculty-reservation/articleshow/64547718.cms



The Delhi University Teachers Association (DUTA) held a press conference on Monday that was attended by representatives of various political parties.

Following an Allahabad High Court order - upheld by the Supreme Court - the University Grants Commission (UGC) had on March 5 announced a new mechanism for implementing faculty reservations, which is calculating total posts department-wise rather than institution-wise.

The UGC had said that its new reservation formula was in response to a direction of the high court in April last year.

It is believed that the move would cut down the number of posts available for SC and ST candidates. The government has filed a special leave petition (SLP) to undo the move and it will come up for hearing next month.

"Till the Supreme Court gives its final ruling, restore status quo ante. That is necessary and that can be done. If an ordinance is required for it, bring in an ordinance," CPI (M)general secretary Sitaram Yechury had said.

Supporting Yechury's views, AAP leader Atishi Marlena said the Delhi government will be a party to the SLP.

"If the matter does not come up in the Supreme Court on July 2, it is my appeal to everyone to build pressure on the Centre government to bring in an ordinance to ensure that the appointments for the upcoming academic session happen according to the existing rules.

"We also have our own higher education universities and they are also being impacted. The reservation policy should not be narrowed down to an extent that it becomes ineffective," she said.

Congress MP Sushmita Dev said she found it "shocking" that the SLP came at such a late stage and

questioned the government's intention over not staying the roster.

BJP MP Udit Raj targeted the judiciary and said more than the parliamentarians, who were elected by the people, it are the judges who are making laws.

Others who voiced their views on the issue were RJD's Manoj Jha, CPI's Amarjeet Kaur, SUCIC's Pran Sharma, G Devarajan from the Forward Bloc and Kavita Krishnan from CPI(ML).

They appealed to the president to intervene and resolve the crisis, so that the Constitutional rights of the marginalised sections are protected, ad-hoc teachers are reappointed on the basis of the old roster and permanent appointments resumed at the earliest.

All current ad-hoc teachers have been appointed according to the 200-point college/university-wise roster, which is to be discontinued, according to the March 5 notification.

While the press conference was on, some ABVP members protested outside the venue against the evaluation boycott being carried out by the DUTA.

The DUTA had begun the evaluation boycott from May 9 to oppose the UGC notification and the probability of some of the DU colleges being made autonomous colleges.

However, some student bodies --the All India Democratic Students Organisation, All India Students Association, Disha, Krantikari Yuva Sangathan, Parivartankami Chhatra Sangathan, Students' Federation of India and Democratic Students Union --have extended support to the teachers' body in their fight.

IIMs face fresh threat to autonomy as HRD ministry seeks more control https://www.livemint.com/Education/RDY8w9IMTFj8puD99X2K10/IIMs-face-fresh-threat-to-autonomy-as-HRD-ministry-seeks-mor.html

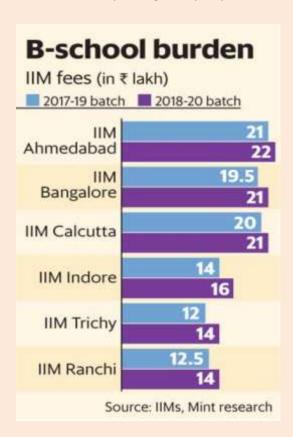
HRD ministry is working on a set of rules, which may influence the fee structure, student intake, gender equation on campus, degrees offered and the corpus IIMs can maintain



HRD minister Prakash Javadekar. The HRD ministry is deliberating whether the government should have a say on the appointment of an IIM chairman.

The government is framing rules to partially control how the Indian Institutes of Management (IIMs) function to curb potential misuse of the powers accorded to the board of the elite B-schools under the IIM Act.

Accordingly, the human resource development (HRD) ministry is working on a set of rules, which may influence the fee structure, student intake capacity, gender equation on campuses, degrees offered and the amount of the corpus the IIMs can maintain. Besides, it is also deliberating on whether the government should have a say on the appointment of the chairman to the board of IIMs, or their retrenchment "without flouting the autonomous spirit of the IIM Act", at least two government officials said, requesting anonymity.



"All the IIMs are not of the same quality or stature, you have to build in rules, which will save IIMs from decaying. There is a consensus across political and administrative spectrum that adequate accountability and safeguards must be built in through these rules," said one of the officials cited above.

The IIM Act gives the institutions autonomy in administrative, academic and financial matters.

The government, however, feels that the fees should be in "commensurate with the expense". "Unfortunately, several IIMs are building corpuses without any plan to use them. When you are building a corpus of 2500 crore from student fees, you will have to justify, whether you are planning an expansion, or you are going to use it for R&D?" said the second official.

"We do not want to cap fees, but it has to be in commensuration with the expense. In the name of autonomy, should an IIM be allowed to charge, let us say, 235 lakh? The Act talks about autonomy,

but how will you build in welfare of students. Are IIMs offering 100% scholarship to 10% of their students, while charging higher fees?" the second official added.

While IIMs charge between 210 lakh and 222 lakh for the two-year flagship management course, fees have been steadily rising. IIM Ahmedabad (IIM-A), for instance, has fixed the fees at 222 lakh for its two-year MBA course for the 2018-20 batch, from 219.5 lakh two years ago.

The proposed changes to the Act will also push for better gender representation on IIM campuses. Though it will not be directly binding, its non-adherence will impact the performance appraisal of the institute and the director. Similarly, it may ask the IIMs, especially the older ones, to accept more students, given that they take far fewer students than their global peers, said the first of the two officials cited earlier.

IIM-A and IIM Calcutta admitted 395 and 440 students, respectively, while the Harvard Business School gives admission to 1,000 students and Stanford Business School accepts 854.

The government is also looking to have a say in the appointment of the chairman. "Without quality chairmen, IIMs', especially new IIMs', quality check and mentoring will suffer. Before the government had a say, but the IIM Act is not absolutely clear on this," the second person said.

"IIM Act is very reformative, but there is a chance of its misuse at the institution level. All IIMs are not equipped to take a call on their future growth, hence some government guidance is necessary. Rules with due checks and balances will be welcome, but it should not completely negate the autonomy granted via the Act," said a professor at one of the older IIMs, requesting anonymity.

June 10

How will you use autonomy? Centre to ask universities

https://www.hindustantimes.com/education/how-will-you-use-autonomy-centre-to-ask-universities/story-TfiX6VBtkkLedWYNsIwEAJ.html

HRD ministry officials said varsities that have been granted autonomy will be free to launch new courses and departments, and enter into collaborations with foreign educational institutes, without seeking the UGC's permission

The Human Resource Development ministry will invite universities such as Jawaharlal Nehru University, University of Hyderabad, Aligarh Muslim University (AMU), and Banaras Hindu University (BHU) that were given graded autonomy to make a presentation on how they plan to use their newfound autonomy, to ensure that they do not sue their new-found freedom to hike tuition fees or make other student-unfriendly changes, according to a ministry official.

The universities, which were given freedom on several academic, operational, and administrative issues earlier this year will also be expected to present a five-year plan, this person added, asking not to be identified. The apex administrative body of universities, the University Grants Commission (UGC) took this decision at a meeting last month.

"During the meeting it was suggested that all the 35 universities that were granted graded autonomy (level I and II) in March should be invited to make a presentation on how they would use the autonomy. It will also give the ministry an idea about their action plan for the next five years," said a senior HRD official.

A fresh meeting is likely to be held by the end of this month.

HRD ministry officials said varsities that have been granted autonomy will be free to launch new courses and departments, and enter into collaborations with foreign educational institutes, without seeking the UGC's permission. They will also be exempt from UGC inspections, obtaining appraisals on the basis of self-reporting. Besides this, they'll be allowed to hire global talent for 20% of their faculty strength .

"Although these universities will remain within the UGC's ambit, they will have the freedom to launch new courses, off-campus centres, skill development courses and new academic programmes," HRD minister Prakash Javadekar had said at the time of granting autonomy to the universities. Comments from the universities on the matter weren't immediately available.

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IIT Madras Students Turn Plastic Waste Into Fuel Using Solar Power! https://www.thebetterindia.com/144733/iit-madras-students-turn-plastic-waste-into-fuel-using-solar-power/

The technology can process plastic into fuel that can substitute diesel used in generators, furnaces and engines.

"India produces approximately 15,000 tonnes of plastic waste in a day. Centralised systems for plastic waste management cannot work to effectively deal with this much plastic waste on a daily basis", said a team of researchers at the Indian Institute of Technology (IIT) Madras to DNA. The researchers have now developed a solar-powered system to convert non-recyclable plastic into fuel.

The technology can process plastic into fuel that can substitute diesel used in generators, furnaces and engines. The mobile unit is powered by solar energy and can currently yield around 0.7 litres of fuel oil per kilogramme of plastic.

It uses the technique called pyrolysis. It is a thermochemical treatment that exposes the material to high temperatures in the absence of oxygen, which make way for physical and chemical changes.

This creates a low-density fuel oil by breaking down the polymer chain of plastic at the temperature of 350-500 degrees Celsius.



Ramya Selvaraj, a research student at IIT Madras, told DNA, "We thought that if the plastic can't come to the industry, let the industry come to the plastic." He added, "We found that the current plastic waste management systems were not working because of the logistics involved; there were cost and space requirements that could not be met."

The team showcased its project on the occasion of the World Environment Day, where the theme this year was "Beat Plastic Pollution". It was hosted by the United Nations (UN) in New Delhi.

The team was led by Divya Priya, assisted by technical guide Professor Indumathi Nambi of IIT Madras, and industrial mentor Sriram Narasimhan of Samridhi Foundation, a Chennai-based NGO.

The IIT Team had won the Zero Carbon Challenge 2018, which included initial funding of Rs 5 lakh for developing the prototype, and another Rs 10 lakh for incubating the idea.

Selvaraj concluded, "We have approached the government and municipal corporations in multiple cities in Tamil Nadu to put up the small recovery units at the material faculty in all the wards for waste collection and management. This can reduce costs involved in transportation, dumping sites and increase the efficiency with which the waste is dealt."

IIT robot goes the distance

https://www.telegraphindia.com/calcutta/iit-robot-goes-the-distance-236515



The team that won (left to right) Rahul Krantikiran, Indu Kan Deo, Sanskar Agarwal, Poojan Shah and Harsh Maheshwari; and robot-driven vehicle, Eklavya



A robot-driven vehicle called Eklavya won IIT Kharagpur the runner-up position in the Intelligent Ground Vehicle Competition at Oakland University in Rochester, Michigan, recently.

The robots were ranked according to the distance they covered in the designated arena while keeping to the lanes given by GPS coordinates, all the while avoiding obstacles on the way.

Eklavya, designed by the Kharagpur institute's autonomous ground vehicle (AGV) team, covered 260 feet, said an official of the institute.

The AGV team is a multidisciplinary research group.

"For prototype purposes, we work on Eklavya which is a three-wheeled, front-driven and front-steered electric vehicle fitted with cluster wheels," an official of the institute said.

Work for building the robot started in December last year under the supervision of Debasish Chakravarty, a professor of mining engineering at IIT Kharagpur.

"Students were required to work on image perception, simultaneous localisation and mapping, path planning algorithm, mechanical design and electronic design to come up with the robot-driven vehicle," Chakravarty said.

Rahul Krantikiran, one of the five members of the participating team, said they were asked to cover a distance of 600 feet.

"We covered a distance of 260 feet. Though the time was not specified, I think we took around 2.5 minutes to 3.2 minutes to cover the distance. The only team that could outperform us was the team from CART (Center for Applied Research and Technology), Inc. from Bluefield State College, US," said the student of computer science and engineering.

The team is exploring whether Eklavya can be fitted to an existing fuel-run vehicle.

"It requires advanced research. If it can be fitted to fuel-driven car, it will gain popularity," Chakravarty said.

Seven teams from India, including ones from IIT Kanpur and IIT Madras, took part in the competition held from June 1 to 4.

Government's flagship research scheme has few takers from IITs, IISc

http://www.newindianexpress.com/nation/2018/jun/08/governments-flagship-research-scheme-has-few-takers-from-iits-iisc-1825524.html

A recently launched scheme that the Narendra Modi government had projected as a way to prevent brain drain from the prestigious IITs has few takers from the country's top technical institutions.



A recently launched scheme that the Narendra Modi government had projected as a way to prevent brain drain from the prestigious Indian Institutes of Technology has few takers from the country's top technical institutions.

As the applications received from the flagship Prime Minister's Research Fellowship are now being scrutinised for approval, it has turned out that less than 25 per cent of the total students belong to IITs and the maximum number of applications have been received from the National Institutes of Technology.

After first announcing it in the Union budget the government had launched the fellowship scheme for PhDs at IITs and Indian Institute of Science, Bangalore offering "lucrative" stipend.

Under the scheme, the Union human resource ministry had invited application from the engineering graduates from IITs, IISc, NITs, Indian Institute of Information Technology and Indian Institutes of Science Research and Education.

A total of 3209 applications have been received from 1189 students but only 317 are from IITs and IISc.

"Data show that in the first year not many from the IITs have shown much interest for the fellowships and a very few from IISc—have come forward," an official in the ministry conceded. "We are hoping that things improve from the next year."

The scheme promises up to Rs 80,000 stipend to about 1000 students apart from Rs 2 lakh annual research grant and wanted students to come up with research idea in subjects with clear deliverables and outcomes.

It also made it clear that only those students who have the Cumulative Grade Point Average upward of 8 will be considered.

While announcing the scheme, the government functionaries had stressed that as every year about 20 per cent brightest minds from premium engineering and technology institutes leave country either for jobs or higher studies this scheme should put a brake on that practice.

The figures, however, clearly show that not many in India's premier engineering institutes have taken it so enthusiastically.

"About 1000 fellowships are on offer but only 1889 students applying for them is a disappointing number," conceded an official in IIT, Hyderabad which is processing the applications before finally publishing the list of projects approved later this month. "Possibly only about 500-600 projects will be approved this year."

Teacher at IITs however had an explanation.

"The fact is that IITs are best regarded for B Tech programmes and the best of the minds prefer going abroad for PhDs for better exposure and academic research," said a professor at IIT, Bombay. "Also those who want to pursue studies and not take up high paying jobs, money is not a very important criterion."

Total number of students who applied: 1889

Total number of applications received (project wise): 3209

Institutes from where students have applied

InstituteStudents
NITs1382
IITs303
IIITs94
IISERs106
IISc, Bengaluru14

Top streams in which the projects have been proposed: Electrical engineering, inter-disciplinary projects, chemical engineering, civil engineering, computer sciences, metallurgical engineering.

IIT Madras conducts career counselling for children of Army Staff

https://www.indiatoday.in/education-today/news/story/iit-madras-conducts-career-counselling-for-children-of-army-staff-1255292-2018-06-08

Indian Institute of Technology Madras is hosting a three-day program to train children of Indian Army Staff in Computer Science and Life Skills besides career opportunities in Engineering and Science from June 8 to June 10, 2018.

Called 'Sanjog 2018', the workshop features experts on Mathematics, Artificial Intelligence and Robotics besides Entrepreneurs interacting with 30 children (Age group: 15-20 years) of Subedars, Havildars, Junior Commissioned Officers (JCO), war widows and retired servicemen. The applicants are selected by the Indian Army.

This is what Prof V Kamakoti, Department of Computer Science and Engineering and Workshop Coordinator, said:

"I consider this as our duty towards the family of great soldiers who work tirelessly at remote places, away from their family, for the security of our country."

As Artificial Intelligence has gained a lot of importance, there is a session titled 'SpeedoBotix - Introduction to Intelligent Robotics.' Students will be taught to build, in less than three hours, a Robot that can follow a path and detect obstacles. They will be trained in writing programs and given an introduction to Intelligent Robotics.

This is the third edition of Sanjog. This year, it features lectures on Beautiful Mathematics, Problem Solving Using Computers, Gameistry - Games for a stress-free life without digital gadgets, Information Security Awareness, BreakFree to Success - enhancing analytical, Communication and Life Skills, and, SpeedoBotix - Introduction to Intelligent Robotics. Sanjog 2018 is sponsored by the City Union Bank as part of the Corporate Social Responsibility program.

GAMEISTRY

The session titled 'Gameistry' involves a startup of the same name explaining to the participants a board game developed by them which is as entertaining as any electronic gadget.

Prof Kamakoti said that the total number of participants is restricted to 30 so that individual attention could be paid to each of them. The students coming for this program will be between Class XI and final year of their under graduation.

WORKSHOP TO FOCUS ON LATERAL THINKING

This workshop focuses on enhancing their lateral thinking, especially in mathematics, creating awareness about opportunities in science and engineering, life skills such as communication and analytics and will also feature lectures by experts in engineering topics of huge interest such as Data Sciences and Chemical Engineering.

Further, sessions will also be held on 'State-of-the-art' subjects such as Information Security. Innovation is also of huge interest and the students will be taken to the Center For Innovation, IIT Madras.

OTHER AREAS OF THE WORKSHOP INCLUDE:

- 1. Bringing out the various entry schemes into IITs for BTech/ MS/ MTech/ PhD with stress on research-oriented programs.
- 2. Overview of the academic research programs in IITs, specific to MS/ PhD highlighting the advantages of the direct PhD program.
- 3. The methodology of preparing for getting admission into IITs and other prominent universities for research programs.
- 4. Talks by prominent persons for developing Lateral Thinking and How to become successful by taking leadership positions in one's workspace.
- 5. Sub-workshop on generating awareness on the information security essentials required during use of the Internet on desktops/smartphones to avoid leakage of information along with recent trends in cyber-attacks.

ABOUT IITM

IITM has been ranked No.1 among Engineering Institutions in the India Rankings for three consecutive years - 2016, 2017 and 2018. The activities of the Institute in various fields of Technology and Science are carried out in 16 academic departments and several advanced interdisciplinary Research Academic Centres. The Institute offers undergraduate and postgraduate programmes leading to the BTech, MSc, MBA, MTech, MS, and PhD, degrees in a variety of specialisations.

IIT Madras just incubated a startup that will help build other startups

 $\frac{https://www.indiatoday.in/education-today/news/story/iit-madras-just-incubated-a-startup-that-will-help-build-other-startups-1255111-2018-06-08$



The Indian Institute of Technology, Madras has incubated a startup whose objective is to help other startups. It will work to enhance the success of early stage startups using machine learning and data sciences tools and techniques.

The startup named YNOS Venture Engine CC Private Limited was incubated at IIT Madras Incubation Cell.

It was founded by Prof Thillai Rajan, Department of Management Studies, IIT Madras, who has been researching Indian Venture Industry for close to a decade now.

As a Professor in the Department of Management Studies at IIT Madras, Prof Thillai Rajan also brings out an annual report on the Indian venture capital and private equity industry, which gives him a lot of insight into funding issues of startups.

He used his research insights to develop the various offerings of YNOS, which is managed by a team of faculty, students and alumni of IIT Madras.

Speaking about this venture, Prof Thillai Rajan said, "Information and decision making analytics are not easily accessible for early stage entrepreneurs. Sell-side intermediation is virtually nil for early stage start-ups."

"YNOS uses research insights and technology to provide information and intermediation services for early stage entrepreneurs. Using advanced marker analytics tools, our platform provides estimates of valuation and also identify appropriate investors for the start-up," he added.



The YNOS Technology Team, Sitting (Left to Right): Prof Thillai Rajan, Department of Management Studies, IIT Madras and Founder, YNOS Venture Engine; Vishwanath, Head, Product Development; Standing (Left to right): Praveen Kumar, Programmer; Niroopa Rani, Research; and Ramesh Kuruva, Data and Research.

STARTUP MORTALITY RATES STILL HIGH: FUNDING EXPANDED BUT MORE COMPLICATED

The time has never been better for venturing and creating startups. However, startup mortality rates have not fallen.

While the funding landscape has expanded, it has also become more complex. The proportion of startups getting funded is still low. The challenges continue to confound the early stage entrepreneurs.

The objective of YNOS is to help the start-up founders to navigate the terrain in the early stages of their venture lifecycle. The technology platform and hybrid offerings have been designed to cater to specific needs of early stage entrepreneurs.

The gamut of offerings covers a wide range such as providing the competitive landscape for start-ups, valuation estimates, identifying appropriate investors, and hands-on understanding of start-up fundraising.

FUND RAISING AND INVESTMENT PROBLEMS FACED BY STARTUPS

Speaking on the importance of such an initiative, Dr. Tamaswati Ghosh, Chief Executive Officer, IIT Madras Incubation Cell, said, "As one of India's leading incubators with over 140 of deep-tech startups we are keenly aware of the challenges faced by early stage technology entrepreneurs, especially in raising investment and finding matched mentors. Services offered by YNOS are addressing some of these critical issues and I am confident that they will create a strong impact on the entrepreneurial ecosystem in this country."

"Start-ups that approach professional investors for the first time tend to be under prepared on various fronts. This tends to cause a lot of delay in fundraising -- if not completely derail it," Arun Natarajan, Founder, Venture Intelligence and an investor in YNOS, said, while commenting on the relevance of the offerings.

"By aiming to provide actionable information on this front, YNOS is poised to play an important role in making Early Stage funding process in the country more efficient," he added.

"There have been several efforts to help investors find startups, but very little done to help the entrepreneur find the right investor. This is a very tough problem because information is largely unavailable and even when it is, they are anecdotal and unreliable. As a result, identifying investors today is largely left to chance for the entrepreneur," said Dr. Rajan Srikanth, Managing Director, Smart Kapital and President, Keiretsu Forum, Chennai Chapter.

"The offerings of YNOS would not only lead to better matches of entrepreneurs and investors but also help the entrepreneur to understand the start-up landscape that can lead to better decisions. This will benefit the whole eco-system greatly," he added.

"Despite being most vibrant, navigating the entrepreneurial ecosystem continues to be a challenge for the early stage entrepreneurs in India," said R Ramaraj, an active angel investor and Advisor, Elevar Equity.

"Starting with the competitive landscape and investor matching, the services and offerings of YNOS can significantly help young entrepreneurs in building their ventures. The offerings leverage insights from several years of research on Indian venture industry and use of data sciences tools and techniques," he added.



Pune University's research park to be on lines of IIT-Madras

http://digitallearning.eletsonline.com/2018/06/pune-universitys-research-park-to-be-on-lines-of-iit-madras/



The Savitribai Phule Pune University (SPPU) is planning to set up a research and incubation park on the campus, similar to one at IIT-Madras, after receiving autonomy and a grant of Rs 100-crore for infrastructure and innovation under the Rashtriya Ucchatar Shikshan Abhiyan (RUSA) scheme.

The incubation park is likely to help students and faculty members in developing innovative products and bring them into the market.

As per the university's plan to make it a hub of innovation and startups, senior university officials including Vice-Chancellor Dr Nitin Karmalkar recently visited IIT-Madras Park. It is the first university-driven research park with a significant number of incubation in rural, social and industrial technologies.

Confirming the development, Karmalkar said, "Since its inception, the incubation cell at IIT-Madras has helped set up 140 startups and investors have raised millions of dollars. We also want to create a model like that where our students and faculty can start developing their ideas into products and work closely with industry."

According to Karmalkar, a meeting was also convened with some of the most senior university officials, retired scientists, researchers and industry leaders including representatives of top executives from Praj Industries and Persistent Systems. Experts like former director of IIT-Kanpur Dr Sanjay Dhande and representatives from CoEP's Bhau Institute of Innovation also attended the meeting.

The park will serve three main purposes. First, it will provide incubation facility and mentoring to faculty and students who have created a product and bring it into the market. Second, it will support the industry projects which require university resources for research and development projects through faculty-industry collaborations. Thirdly, it will help faculty or students who might have an idea but need industry support to develop the product or conduct R&D.

UGC Attempts to Reform Examination System

https://responsiblecorporate.com/2018/06/09/ugc-attempts-to-reform-examination-system/



UGC Attempts to Reform Examination System

The higher education authority, UGC on Thursday asked controller of examination, teachers, students, education personnel, eminent educationists and the public at a large scale for their suggestions on examination reforms in the higher education domain.

Propositions on Exam Reforms

The University Grants Commission (UGC), in a notice issued on Thursday, said it has formed a committee to "recommend and suggest reforms in examination system" in the higher education institutions.

Stakeholders have been asked to send their valuable suggestions to the commission by June 22.

"Development and regular revision of curriculum on 'leaning Outcomes-based Curriculum Framework' by HEIs is one of such quality initiatives of UGC," the statement said.

"Examination reform is one of the major tasks initiated in this direction. Keeping in consonance with these initiatives a Committee has been constituted to recommend and suggest reforms in the Examination system," the disclosure added.

The suggestions are requested on themes like models of the examination system, which can be followed in India, objectives of the examination system, Structural and procedural changes needed in the examination system, moderation procedure, grade and credit-transfer in the examination system, an internal examination and external examination, on-demand examination and many more.

"All concerned are, therefore, requested to kindly send their views/suggestions/opinions/propositions (not more than 150 words) for each theme in the prescribed format latest by 22nd June 2018 to cflouqc@gmail.com," the UGC statement said.