<p style="text-align:center">Newspaper Clips
July 27-31, 2017</p>

<p style="text-align:center">July 31</p>

Fall in admissions, vacant seats may push IITs to discontinue unpopular courses

http://www.hindustantimes.com/education/fall-in-admissions-may-push-iits-to-discontinue-unpopular-courses/story-F94J0AfNLj2HhshCA7UHFP.html

A concerned Human Resource Development (HRD) ministry has asked IITs to look at ways to address the situation, including the option of scrapping unpopular courses.

The Indian Institutes of Technology (IITs) may soon discontinue some courses, with an increasing number of students refusing admission after counselling in the most sought after institutes.

Of the 10,998 seats in the 23 IITs, the number of vacancies after seven rounds of counselling stood at 121 this year, up from 96 last year, and 50 in 2015, and three in 2014.

A concerned Human Resource Development (HRD) ministry has asked IITs to look at ways to address the situation, including the option of scrapping unpopular courses.

The issue will be taken up at a meeting of the Joint Admission Board (JAB) on August 20.

"This is something we will see growing over a period of time — students will not run after IITs," said Pradipta Banerji, professor at IIT Bombay, stressing that there is "certainly a shift in the culture".

"For instance, students may take the JEE Advanced exam to satisfy their parents and are likely to get good ranks, but they may then opt for something else, say English literature, which they want to do," he said.

However, experts believe that the decline in admissions results from the unpopularity of certain courses due to their value in the job market.

For instance, IIT Varanasi, which has the most vacancies (32), was found wanting 15 students in pharmaceutical engineering and technology, and eight in ceramic engineering.

The vacancies in IITs in Bombay (1), Delhi (2) and Kharagpur (9) this year were for chemistry, biochemical engineering, bio-technology, architecture, physics and mining engineering.

Banerji suggested the IITs should reduce the intake in such courses rather than completely do away with them.

A senior IIT official attributed the loss to students' desire for popular courses in other institutes.

"As a special round counselling is going on in NITs, students prefer to opt for a good course, say in computer science, in NITs than an ordinary one in an IIT," he said, requesting anonymity.

There were over 6,000 vacancies in the National Institute of Technology/IIITs and other government-funded technical institutes at the end of the seventh round of counselling.

While admissions have ended in IITs, for NITs, a special round is being conducted till Sunday to fill up all the vacancies following which admissions will close.

One of the major reasons behind the vacancies in NITs and IIITs is due to the 50% state quota, according to official sources.

The HRD ministry has relaxed the eligibility criteria for admissions in eight NITs based in north-eastern states. Under the new criteria, 75% mandatory marks in Class 12 for general and OBC categories have been reduced to 45% in the same categories.

Also, as per the new rule, if any home quota seats are left in NITs, they can be converted into all-India quota. For instance, if in Jammu and Kashmir, seats under the home state quotas are left after offering it to eligible candidates from the state, they can be given to eligible students from other states.

Amitabh Kant urges students to come up with edutech innovations at IIT Delhi

http://www.forbesindia.com/article/special/amitabh-kant-urges-students-to-come-up-with-edutech-innovations-at-iit-delhi/47717/1

The premier engineering institute is hosting a week-long education HackWeek on artificial intelligence to bring together young talent in the sector

India is projected to achieve a growth rate of 7.4 percent in 2017. Going forward, in 2018, it could go up to 7.6 percent in the backdrop of strong consumption. However, the desired growth rate is much higher and that can be achieved if the youth comes forward with innovative ideas in sectors including education, said Niti Aayog CEO, Amitabh Kant.

"We need to change students from studying books to solving problems of the country," said Kant while addressing students at IIT Delhi in a week-long education HackWeek on artificial intelligence (AI) that's ending on August 4.

The government, too, on its part is doing its bit to woo youngsters and make India more innovative and dynamic by creating the right ecosystem for startups. "We already have an Atal Tinkering Lab that is supporting tinkering labs in schools and supporting incubators," said Kant urging students to come up with their innovations in education technologies. "Recent developments in machine learning and AI have created unprecedented opportunities to solve the critical issues of personalisation, scale, and quality in our education system. We at NITI Aayog are committed to harnessing such technologies to shape a better future for India" added Kant.

In the hackweek organised by OpenEd.ai, a non-profit organisation, top 4 winners will receive a total of $17,000 in prizes for their open-source AI projects that have the capacity to solve problems in education.

So far, research and applications have favoured well-capitalised industries in the field of robotics, autonomous vehicles, enterprise intelligence (big data analytics, sales, advertising), among others.

The hackweek organised in IIT Delhi is backed by NITI Aayog, venture capitalist Omidyar Network, tech giant IBM, Amazon Web Services, and Google Developer Groups. As many as 1,200 people have signed in to participate and this includes students from MIT, Harvard, Stanford, the various IITs, to name a few.

India vulnerable to cyber crime, must upgrade defence: Study

http://timesofindia.indiatimes.com/india/india-vulnerable-to-cyber-crime-must-upgrade-defence-study/articleshow/59838381.cms

NEW DELHI: Demonetisation and the subsequent push for digitisation has escalated risks relating to cyber crime and India needs to urgently upgrade its defences by setting up a cyber security commission on the lines of the Atomic Energy and Space Commissions, according to an IIT Kanpur study shared with Parliament's committee on finance.

Noting that the government has initiated a number of programmes to enhance the participation of citizens in the fully digitalised economy, the study said cyber security centres set up by the Reserve Bank of India would be insufficient. "While RBI centres often come to IITs such as IIT-K for expert opinion, IITs do not engage in relevant research on cyber security," the study said.

Incidents of cyber crime in India are rising sharply, recording an increase of over 100% in 2015 from 2014. The number grew from 71,780 in 2013 to 1.49 lakh in 2014 to 3 lakh in 2015.

The study said attacks from the 'Equation group' — which WikiLeaks reports said was a clandestine CIA and NSA programme — infected India's telecom and military sectors and research institutes.

The committee was briefed by Profs Manindra Agrawal and Sandeep Shukla from IIT Kanpur.

The study pointed out that since the government was pushing Aadhaar-based financial transactions, securing the Aadhaar database against unauthorised usage must be looked at carefully.

It has come to light that certain banks were making hundreds of transactions on the Aadhaar numbers of unsuspecting citizens.

Cyber attacks affected over 3 million ATM, debit cards in 2016

Recent revelations about leakage of Aadhaar data and corresponding transaction data are serious concerns as the government is integrating Aadhaar number to various services," the study said.

Post-demonetisation, digital wallets such as PayTM and BHIM gained prominence.

However, with increase in online transactions, last year also saw cyber attacks that compromised more than 3 million ATM and debit cards through Hitachi-engineered ATM machine hacking.

The experts said a wider net needed to be cast by the Indian banking system and the government to engage cyber security experts from top institutes as an advanced layer of protection was missing in most financial institutions.

Quoting a report, IIT-K experts said India may need $4 billion investment in the private-public model.

In their recommendations, experts said companies must have a chief cyber security officer and data systems should function on a need-to-know basis.

The experts felt that existing cyber security frameworks like CERT-IN was inadequate as there were insufficient inter-disciplinary connections and the government-private sector partnership was neither deep enough nor did it provide the required expertise.

UGC wants 20% foreign faculty at universities; teachers create uproar

http://www.catchnews.com/india-news/ugc-wants-20-foreign-faculty-at-universities-teachers-create-uproar-75156.html

Criticism from Delhi University teachers over a recent University Grants Commission (UGC) proposal is pouring in from all quarters.

As part of its draft regulations, UGC stipulated a provision that foreign faculty be mandatorily hired in up to 20% of the total sanctioned faculty posts in Category I universities/ Higher Educational Institutes (HEI).

In June, Delhi University Teachers' Association (DUTA) responded to the UGC's draft regulations with feedback and called the proposed provision "unacceptable". DUTA had even appealed to the

teachers' community to reject the entire proposed draft regulations that emphasises on privatisation of higher education and autonomy.

THE ISSUES AT HAND

In their feedback to the UGC, DUTA had said, "The provision for hiring, without approval, Foreign Faculty in up to 20% of the total sanctioned faculty posts in Category I universities/ HEIs is an unacceptable assault on the younger generation of post-graduates who are already suffering from years of contractual and ad hoc employment and lack of job security due to insincere and inadequate initiative in the filling-up of substantive vacant posts."

"It also paves the way for further contractualisation in teaching and research jobs, and contributes to the growing instability of standards of teaching-learning in institutions. Instead of increasing the allocation of substantive teaching and research posts in universities/HEIs in accordance with the need to offer wider academic choices to students, the UGC will end up curtailing and discouraging local talent at the national and state levels even further, unless this provision is withdrawn," DUTA added.

The UGC's draft regulations also state that salaries for the foreign faculty members will have to be negotiated and paid by the university itself - that the UGC will not be held responsible for any payments. The draft regulations also state that foreign faculty members will be hired on a contractual basis.

A BURDEN

President of DUTA Nandita Narain spoke to Catch about the regulations: "What this regulation means is that the UGC will reduce their funding of these universities by 20% since the salary of these faculty members will have to be funded by the university/college itself. These funds will eventually be recovered from the students in the form of increased fees structure. The burden will have to be borne by students and their parents. Permanent appointments have not been made in central universities deliberately for the last several years. This way they can wash their hands from the responsibility of hiring permanent faculty members."

She further added, "All the UGC regulations are aimed to privatise higher education in the country. Eventually, universities will have to reach out to private sector cooperations to bail them out to pay salaries for teachers and other expenditure. The point is to convert universities into money-making shanties which are a clear violation of our constitution. Quality of education is already taking a nose dive."

Many other teachers' bodies in the country have also opposed the UGC's draft regulations including the aspect of compulsory hiring of foreign faculty.

Rajib Ray, an elected representative of Democratic Teachers' Front (DTF) told Catch, "The UGC asked the universities to respond to the draft regulations with feedback. But they have not yet adhered to any feedback provided by universities and teachers' associations. The govt is not interested in feedback at all. These proposed regulations will become the final regulations very soon."

According to Ray, quality education has nothing to do with having foreign faculty teach in Indian universities. "The UGC claims that the quality of education will improve by having foreign faculty members. But how? There is no dearth of very accomplished scholars in India who should get these appointments. And why must we consider foreign faculty better than our own? Will they be able to teach students about Indian history, political science, geography and sociology? In order to increase international rankings, we are compromising our own teaching community."

July 30

India to see launch of 2 moon missions in early 2018

http://timesofindia.indiatimes.com/india/india-to-see-launch-of-2-moon-missions-in-early-2018/articleshow/59828341.cms

HIGHLIGHTS

Isro will use GSLV Mk II for Chandrayaan-2 as payload is heavier this time (combined launch mass 3,250 kg).

Orbiter will be deployed at an altitude of 100km above lunar surface.

Scientific payloads on board orbiter, lander and rover will perform mineralogical and elemental studies of lunar surface.

NEW DELHI: The country will witness the launch of two lunar missions from Indian soil early next year: Indian Space Research Organisation (Isro) will launch its Chandrayaan-2 mission, an advanced version of its previous 2018 mission with the objective of deeper lunar surface probe, and another mission by Team Indus, a group of space enthusiasts who want to unfurl the tricolour on the moon's surface as part of a global lunar competition.

Team Indus, comprising mostly young engineers and led by IIT-Delhi alumnus Rahul Narayan, is planning the mission as part of a global contest to win $30 million Google Lunar XPRIZE, which stipulates the rover of a competing team has to move 500 metre on the moon's surface and should

be able to beam back high-definition images back to Earth.

To fulfil its ambition, Team Indus has roped in investors like Infosys co-founder and former UIDAI chairman Nandan Nilekani and space experts such as former Isro chairman K Kasturirangan and many experienced old hands from the Indian space agency.

Praising the aerospace startup, Nilekani told TOI, "Team Indus is pursuing a big hairy audacious goal. I invested in Team Indus as I believe in their audacious mission to reach and land on the moon."

Confirming the use of PSLV service for the Team Indus project, Isro chairman A S Kiran Kumar told TOI, "Team Indus has signed an agreement with Antrix (Isro's commercial arm) for using the launch service of PSLV."

Explaining the difference between the two missions, the Isro chairman said, "Both the missions are scientifically and technically totally different.

Even the instruments used in the two spacecrafts will be different. There is no question of any comparison." Kiran Kumar wished Team Indus "all the best for the mission". Besides Team Indus, a US team (Moon Express), an Israeli team (SpaceIL) and an international team (Synergy Moon) have also procured launch contracts.

While Team Indus is using the service of PSLV to take its 600-kg baby spacecraft to the lunar orbit, Isro will use its heavylift rocket GSLV Mk II for the mission. Dr K Sivan, director of Thiruvananthapuram-based Vikram Sarabhai Space Centre, told TOI, "Unlike the 2008 Chandrayaan-1 mission when PSLV rocket was used for carrying the spacecraft, this time Isro is planning to take a heavier payload (combined launch mass: 3,250 kg) comprising orbiter, lander and rover to the moon. Therefore, GSLV Mk II is the preferred choice."

Aadhaar data hack: IIT Kaharagpur grad created eKYC Verification app on his own

http://www.financialexpress.com/india-news/aadhaar-data-hack-iit-kaharagpur-grad-created-ekyc-verification-app-on-his-own/786456/

In a major setback for authorities, an IIT Kharagpur student Abhinav Srivastava has been accused of accessing Aaadhar data without any authorisation.

Srivastava has been accused of illegally accessing the Aadhaar data repository of Unique Identification Development Authority of India (UIDAI) according to the complaint. After developing the app Srivastava placed it on Google Play Store.

In a major setback for authorities, an IIT Kharagpur student Abhinav Srivastava has been accused of accessing Aaadhar data without any authorisation. He allegedly accessed the central identities data repository through an online app eKYC Verification which he had developed as a software developer on his own, according to sources close to him. The app was developed by him and not as part of the companies he is associated with. Indian Express reports that it did not belong to his current employer cab aggregator Ola (ANI Technologies Ltd), nor Qarth Technologies, the startup founded by him which was bought by Ola way back in March 2016.

Srivastava has been accused of illegally accessing the Aadhaar data repository of Unique Identification Development Authority of India (UIDAI) according to the complaint. After developing the app Srivastava placed it on Google Play Store. Notably, Srivastava's batchmate Prerit Srivastava has said that he was not involved in it. The app delivered demographic data such as names, the address of individuals from the central identities data depository of Aadhaar. Archival data suggest the app was on Google Play store at least till June. According to Indian Express, the UIDAI has accused Abhinav Srivastava of illegally accessing Aadhaar data between January to July 26 2017.

5 Ways BHIM-Aadhaar App Will Change Your Life
Ola had bought Qarth Technologies last year for its mobile wallet app X-Pay. According to start-up industry experts, X-Pay is the "fastest way to make person-to-person payment in India, with transaction time as close as 10 seconds". If we go by Abhinav's profile, he has proclaimed himself as a hacker and had worked as a security researcher at Iviz Security and has experience in exploring vulnerabilities in Internet Payment Gateways.

After UIDAI's complaint against Shrivastav and an accomplice, Bengaluru Police have filed a case under Section 37 and 38 of The Aadhaar (Targeted delivery of financial and other subsidies benefits and services) Act, 2016.According to a senior officer of Bengaluru Police, "We do not know the number of people whose unique identity was verified using this app. It is a highly technical investigation and it has only begun.''

July 29

IIT ROORKEE ALUMNUS ELECTED AS FRSC FELLOW

ttp://www.dailypioneer.com/state-editions/iit-roorkee-alumnus-elected-as-frsc-fellow.html1

Hailing from the district of Bijnor in UIttar Praesh, this 49 year old scientist has brought laurels to the country by being elected as a fellow of the Royal Society of Chemistry (FRSC) in recognition to his outstanding contributions to the chemical sciences. His research on solid waste conversion to 'Bio-Char' if adopted by the government can offer a fool proof solution to the perennial problem of agricultural/solid waste disposal which the country is confronting for the past few decades.
Dinesh Mohan, who completed his masters degree and PhD in 1995 from Indian Institute of Technology (IIT) Roorkee is undertaking a research to find a smart and sustainable alternative to

destruction of agricultural residues of wheat, rice and sugarcane which are typically burnt in the agricultural fields. Burning agricultural residues in the field generates black carbon particulates responsible for air quality deterioration. This problem is more severe during winter in Indo-Gangetic plains. He has developed technology to convert these wastes into bio-chars which can be used for water purification, soil fertility and carbon sequestration.

Speaking to The Pioneer, Dinesh Mohan said, "Our country generates considerable quantity of solid agricultural waste every year of which most of it is burnt, causing air pollution. My research is on converting this agri-waste into Bio-char, to remove that agri-residue and use it for water purification. It can also be used to increase soil-fertility, increase water holding capacity of the soil. The main benefit is that it helps in sequestering Carbon from the environment."

When asked about the cost-effectiveness of his proposed model in today's scenario, the scientist said that NGOs and Government can take the initiative to implement the technology. "We have also used pine needles collected from mountainous areas of Uttarakhand to convert them to Bio- char. To implement this, it would just need a mobile van which collects waste from fields, a small reactor where bio-waste can be burnt for conversion to bio-char and then given to farmers free of cost in return for increasing their soil quality. Bio-char can stay in soil for hundreds of years."

Notably for the last three years Dinesh had been selected in the list of a Thompson Reuters Highly Cited Researchers. Presently working as a Professor in School of Environmental Sciences, Jawaharlal Nehru University, New Delhi, he worked on water issues be it in Gomti river of Lucknow or Ganga in Unnao and suggested ways to purify water by developing low cost technologies. He has been named to the World's Most Influential Scientific Minds 2014 and 2015 published by Thomson Reuters. He was awarded the Scopus Young Scientist Award 2007 given by Elsevier for his outstanding work. He has also received Hiyoshi Environmental Award 2009 given by Hiyoshi Corporation Japan. Prof. Mohan was recently conferred with adjunct Professor at Chemistry Department, Mississippi State University, USA and University of Southern Queensland (USQ), Australia.

University Grants Commission to offer open online courses

http://www.thehansindia.com/posts/index/Andhra-Pradesh/2017-07-29/University-Grants-Commission-to-offer-open-online-courses/315388

UGC Joint Secretary Archana Thakur addressing the participants at an interactive session on SWAYAM at RSVP in Tirupati on Friday

Tirupati: The University Grants Commission (UGC) has proposed to prepare fresh Massive Open Online Courses (MOOCs) which are in high demand as envisaged by the central government and

developed by Ministry of Human Resource Development (MHRD) and All India Council for Technical Education (AICTE).

Accordingly, the Study Webs of Active-Learning for Young Aspiring Minds (SWAYAM) platform was launched with 350 online courses. The SWAYAM is an indigenous platform of the government which hosts open online courses for providing education through distance mode for unlimited number of students worldwide by collaborating with the best institutes in the world.

The Rashtriya Sanskrit Vidyapeetha (RSVP) organised an interactive programme here on Friday, to have a better knowledge on the MOOCs. Joint Secretary (UGC) Archana Thakur has participated and enlightened the participants on the features of the innovative programme.

In SWAYAM, a learner can choose from hundreds of courses which are taught at the university, college and school-level and these shall be offered by best of the teachers in India and elsewhere.

It is an online platform where students and teachers come together and form an online pool of resources which are readily available to utilise. It is capable of hosting 2,000 courses and 8,000 hours of learning covering topics from school to postgraduate level.

 However, MOOCs cannot replace the traditional approach of classroom learning but it can be used as an alternative method to bridge the gap between various schools of learning. RSVP Vice-Chancellor Prof V Muralidhara Sharma and other officials were present.

July 28

Which Indian IIT Tops the Rank on the QS World University Rankings?

http://www.news18.com/news/india/which-indian-iit-tops-the-rank-on-the-qs-world-university-rankings-1475303.html

India has been a part of QS rankings for quite a while now; however for the first time in 14 Years, three Indian Universities have made it to the Top 200 in the QS World University Rankings – 2018.

QS World University Rankings is a yearly publication of university and college rankings by Quacquarelli Symonds (QS). The QS framework involves the worldwide general and subject rankings closed by five autonomous local tables viz Asia, Latin America, Emerging Europe and Central Asia, the Arab Region, and BRICS. It is the main global positioning to have gotten International Ranking Expert Group (IREG) approval, and is seen as a standout amongst the most broadly read of its kind, alongside Academic Ranking of World Universities and Times Higher Education World University Rankings.

However, designating undue weight to subjective pointers and having exceptionally fluctuating outcomes are its significant reactions.

India has been a part of QS rankings for quite a while now; however for the first time in 14 Years,

three Indian Universities have made it to the Top 200 in the QS World University Rankings – 2018. And it is none other than IIT Delhi which tops the chart for Indian Varsities followed closely by IIT Bombay and IIT Bangalore.

Let us take you through the List of Indian Universities based on the Merit from QS World University Rankings - 2018.

Rank	University/ College
#172	IIT Delhi
#179	IIT Bombay
#190	IIT Bangalore
#264	IIT Madras
#293	IIT Kanpur
#308	IIT Kharagpur
#431	IIT Roorkee
#481	Delhi University

Talking about International Universities, MIT's position remains status quo like in the past five years. Similarly, Harvard and Stanford Universities too have hardly fallen from their previous year ranks.

Ranking of Indian Universities on the basis of the field or subjects that they offer-

Arts and Humanities

Rank	University/College
#210	Delhi University
#247	Jawahar Lal University

Engineering and Technology

Rank	University/ College
#71	IIT Delhi
#78	IIT Bombay
#107	IIT Bangalore
#110	IIT Madras
#129	IIT Kanpur
#150	IIT Kharagpur
#231	IIT Roorkee
#332	IIT Guwahati

Life Sciences and Medicines
Delhi University is ranked at #451
Social Sciences
Delhi University ranked at #295

The results above show that there's a long way for the Indian Universities to make a global feat however these rankings are helpful in deciding which University to opt as 'Where You Study' helps you to accomplish 'What You Want to Achieve' in life.

IIT Delhi Wants To Solve the Irrigation Problem for Indian Farmers

http://www.igyaan.in/135551/iit-delhi-solar-pumps/

IIT Delhi Wants To Solve the Irrigation Problem For Indian Farmers

India being an agrarian economy, is largely dependent on farmers, the seasonal monsoon and a reliable irrigation system. In a country where power cuts are in abundance and money is scarce, being able to get a proper irrigation system going is a real challenge. Taking the present scenario in account, the farmers face multiple challenges to simply irrigate the fields. Apart from the endless

power cuts and the cost of fuel, other factors like the safety, sustainability and durability of the irrigation system are extremely questionable.

Farmers currently resort to a device called "Jugaad pump" for irrigating the fields.This irrigation system is powered by a functional motor bike and is used for extracting water from open channels and ponds to deliver water for irrigation. While this "Juggad" works for some time, the bike run pump is not the ultimate and long term solution. A team of researchers from IIT Delhi has decided to build a solution which is sustainable and durable.

IIT Delhi researchers are designing solar pumps and invertors that are cost effective and energy saving. The project which is in partnership with industry partner Shakti Pumps Limited, will boost the productivity of the farmers and has received a massive funding of Rs 1.12 crore. The IIT Delhi research team includes Prof. Bhim Singh (Principal Investigator) and research scholars Utkarsh Sharma, Aryadip Sen, Md Kashif, Rashmi Rai, Hina Parveen, Yalavarthi Amarnath.

The research is carried out as a part of the project titled – Design and Development of Solar PV Based Super Efficient Agricultural Pumps and Hybrid Multidimensional Inverters- and falls under the Uchhatar Avishkar Yojana of the Ministry of Human Resource Development (MHRD).

The project is based on decreasing the irrigation cost, or the cost of the energy (electricity or diesel) to drive the water pumps in remote areas where electricity is not yet available. The current irrigation

cost in remote areas is upto 30% of the total input cost incurred by a farmer. This cost can be drastically reduced by solar powered water pumps.

The solar pumps will incur one time installation cost and expected battery maintenance cost approximately every two years. The pump will convert solar energy into electricity and employ Direct Current (DC) as opposed to the Alternating Current (AC) which is being currently used by most farmers. A DC powered battery is more efficient and durable and will keep the solar powered pump working for a longer period.

Project investigator Prof Bhim Singh says, "Besides development of super-efficient pumps we aim to design solar water pump with suitable motor considerations and variable frequency operation. We will subsequently be designing and developing the on grid/off grid hybrid inverter,"

Professor further states that the project is aimed at design and development of the industrial products under three verticals. The team will also develop cost efficient inverters running on solar power which can be used to light up the household and feed the electrical grid. The final deliverables would include new technology in electrical drives fed from solar power, novel motor and pump design along with the hybrid inverter design.

This project can help improve the lives of millions by making solar powered technology available at an affordable cost. But the maintenance cost after approximately every two years may make the farmers stick to their traditional method. A one time installation of the solar pump is expected to be expensive as well which may dissuade farmers not willing to incur the installation and the additional maintenance cost.

IIT Bombay favourite among aspirants; 201 of 500 top JEE rankers select Mumbai institute, 137 Delhi

http://www.hindustantimes.com/education/iit-bombay-favourite-among-aspirants-201-of-500-top-jee-rankers-select-mumbai-institute-137-delhi/story-eXxXrb9QfuxEc6X2I0Ro6N.html

The Indian Institute of Technology Bombay (IIT-B) remains the favourite among the toppers of the Joint Entrance Examination (Advanced).

The Indian Institute of Technology Bombay (IIT-B) remains the favourite among the toppers of the Joint Entrance Examination (Advanced), the entrance test for admission to IITs and other important technology institutes.

Data revealed by Joint Seat Allocation Authority (JoSAA) shows among the top 500 rankers, 201 chose IIT-B while 137 opted for IIT-Delhi. Among the top 100 rankers, 65 chose IIT-B and 31 preferred IIT-Delhi.

Last year as well, 65 of the top 100 rankers chose IIT-B over other IITs.

Admissions to IITs as well as other government funded technical institutes across the country concluded last week and this year, JoSAA conducted seven rounds of admission. After the first round, IIT-B said 53 of the top 100 rankers made it to the institute. Most of them chose computer science and engineering course, which remains the most popular course year after year, followed by mechanical and chemical engineering.

"Thirty-six of top 50 ranks and 53 of top 100 ranks had chosen IIT-B by the end of round one of admission itself. Among the top 36, we also have three girls who have joined the Computer Science and Engineering department," said the press statement released by the institute.

By the end of seven rounds of admission, over 400 seats are still vacant across 23 IITs (including 5 in IIT-B) and more top rankers seem to have opted for the popular institutes, including IIT-B, IIT-Delhi followed by IIT-Madras and IIT-Kanpur.

"Computer science has been a popular course for years now, and students flock to IIT-B especially because we have a brilliant set of faculty in this department. Students choose faculty over the brand," said Devang Khakkar, director, IIT-B.

Surprisingly, older IITs including IIT-Kharagpur have not got a single student from the top 100 ranks.

Researchers from IIT Mumbai develop a technique to predict the fury of the rains

https://researchmatters.in/article/researchers-iit-mumbai-develop-technique-predict-fury-rains

It is like asphyxia when you suddenly find yourself drowning. This is what happened to Mumbaikars on 26th July 2005. Mumbai, the city that neither sleeps nor stops, was forced to a standstill due to incessant rains. The heavy downpour made one forget the usual beauty of rains, and the city was left with only cries for help as more than a thousand people lost their lives. While this incident made Mumbai devastated, it also raised a thought about how we could prevent such tragedies in future. Thanks to researchers like Prof. Subimal Ghosh and his team at the Indian Institute of Technology – Bombay, who have been continuously working on forecasting models that can predict such heavy downpours in the hope of saving lives.

Prof. Ghosh and his Ph.D student Ms. Hiteshri Shastri, in collaboration with Prof. Subhankar Karmakar, from the Centre of Environmental Science and Engineering, IIT-B, have developed a technique that can forecast extreme rainfall events at a regional scale. They have published their new model in the Journal of Geophysical Research: Atmospheres. This model, the researchers say, is highly accurate and takes in to consideration of regional factors that influence the downpour.

"Spatio-temporal complexities of precipitation events breed uncertainties which can effectively be tackled by quantifying the predictive assessments of extreme rainfall. The technique developed by us does this using quantile regression method. Thus, it succeeds in overcoming the limitation of global models in forecasting extreme rainfall at regional scales", says Prof. Ghosh, talking about the novelty of the newly proposed model.

But what makes predicting extreme precipitation events so complex? It is their dependence on various atmospheric processes, which occurs at different scales, say the researchers. For instance, it is a difficult task to predict extreme events when atmospheric processes associated with monsoon interact with land process associated with urban canopy. In addition, trends of extreme rainfall events are not uniform due to the influence of regional processes such as urbanization and land use change. Hence, it becomes necessary to include the most optimal set of predictor variables in the forecasting system to represent various dimensions of precipitation events, which are selected based on the conditions such as data availability.

In this model, the researchers have considered parameters like geopotential height, relative humidity, air temperature, eastward wind field, and northward wind field at pressure levels of 1000hPa and 500hPa. The model consists of two modules – the first module focuses on training and calibration of the regression model using observed/reanalyzed data and the second module applied the calculated values to the synoptic scale forecasts.

The researchers have tested the proposed model with data of Mumbai's weather conditions to predict extreme precipitation events and found that it overcame many limitations of global models in predicting precipitation over Mumbai. The hitherto used global models forecasted precipitation events over Mumbai with a very low probability and high false alarm ratio. For comparison, the new model could forecast 17 extreme events out of 29, while the global model such as Global Ensemble Forecast System could predict only 6 events out of 29.

When asked about the applicability of this model to other regions of the country, Prof. Ghosh says, "The model can definitely be employed to forecast extreme precipitation events in other regions of India". How about adding newer parameters to this model? "As far as possibility of including new variables is concerned to upgrade the model, it can be done according to the requirement. But, for now, the best possible set of predictors have been considered based on scientific understanding", he adds.

Over the years, we have increasingly realized that science and technology can be a wonderful tool to serve the human society. With advances in computation and development of techniques to predict nature's fury, there is a long way to go before man beats nature perhaps! Of course, there is so much to be done in finding such scientific solutions to serve the society. And therefore, when Prof. Ghosh says, "we are reviewing literature and working to extend our work in this direction", it is not a surprise for sure.

IIT Madras to train 300 Micro and Marginal Women Entrepreneurs in Tamil Nadu

https://indiaeducationdiary.in/iit-madras-train-300-micro-marginal-women-entrepreneurs-tamil-nadu/

Chennai: Indian Institute of Technology Madras launched a new initiative on Friday, 28th July 2017, to train 300 micro and marginal women entrepreneurs in Tamil Nadu. The Institute has joined hands with CAMS Group, which is providing a funding support of about Rs. 45 lakh, and Hand-in-Hand India, a charitable trust, for this three-year project.

The program aims to provide high impact training to the women entrepreneurs by providing key inputs in different areas of business and management. This will help participants to improve their growth rates and profitability.

In order to be effective and meet the needs of the participants, the program will be conducted in Tamil language. The beneficiaries will be identified by Hand-in-Hand India and finalized by IIT Madras and the training will be conducted in entrepreneurs' localities.

Speaking during the launch of the initiative, Prof. Nagarajan, Dean, Industry and Alumni Relations, IIT-Madras, said, "IIT Madras has established itself as a leader among academic institutions in promoting entrepreneurship among its faculty and students, with alumni being a solid pillar of support. In particular, social entrepreneurship is a key imperative of the Institute, and corporate support in the form of CSR has come as a tremendous boost in this respect."

Speaking about this program, Prof. Thillai Rajan, Department of Management Studies, IIT-Madras, and one of the Program Directors, said, "This initiative is a result of the spectacular success of an earlier pilot program done in January 2016. About half of the participants in that pilot program successfully obtained bank loans within six months of completing the program."

Participants began to organize and run their business in a more systematic manner after the program, which provided comfort to banks in their lending decisions.

The program is specifically designed for the needs for women entrepreneurs and will provide insights on various areas such as finance, marketing, information technology, banking, and soft skills. The program would be delivered by faculty members from the Department of Management Studies, IIT Madras and experienced practitioners from the industry.

Each year 100 people would be trained for three years. Each program would be for a week, which would be followed by a reflective session after six months to understand how the program has impacted the participants.

Speaking about this project, N K Prasad, President and Chief Executive officer, CAMS, said, "CAMS as part of its CSR activities has been carrying out various projects in the fields of education, vocational training, healthcare and other social Welfare activities. In the current financial year, CAMS is delighted to be associated with IIT-Madras in supporting the training focused at small scale Entrepreneurs. We are sure that the proposed training which include workshops, mentoring and monitoring sessions to be carried out by eminent faculties associated with IIT Madras would go a long way in the entrepreneurs scaling up their operations."

A key feature of the program is the mentoring support to the participants after the completion of the program. The mentors would guide the participants in developing a business plan, and Hand in hand would facilitate in the process of obtaining financial support for entrepreneurs developing the best business plans.

Prof. Thillai Rajan, said, "A major thrust of this program is to enable the participants assume the mind-set of an entrepreneur rather than the mind-set of being self-employed. An important problem faced by a majority of micro and marginal entrepreneurs who start and run micro enterprises is the lack of formal training in running a business. The problem is even more acute for women entrepreneurs. While most of them have some degree of domain experience in the areas in which they operate, business skills and knowledge are mostly self-learnt. Through this program, it is our desire to make modern management insights and knowledge easily accessible to these marginal entrepreneurs."

Dr. Kalpana Sankar, Chairperson and Managing Trustee, Hand in Hand, said, "The training will help SHG women to manage the enterprises with profit and grow the business." Dr. Jeyaseelan, Group CEO, Hand in Hand added that, "This training will enable the SHG women to move their enterprises from informal to formal sector."

The program directors, Prof. Thillai Rajan, Prof. G. Arun Kumar, and Prof. Saji Mathew, faculty members from Department of Management Studies, IIT Madras, took part in the launch function held at IIT-Madras on Friday, 28th July 2017, along with G. Manikandan, Company Secretary.

Experienced and social minded entrepreneurs have been invited to volunteer for being honorary mentors to the participants in the program. Those who are interested to participate in this satisfying role can contact Prof. Thillai Rajan at thillair@iitm.ac.in.

Think global, but dress local

http://www.thehindu.com/news/national/nirmala-sitharaman-advocates-dress-that-reflects-indian-culture/article19380694.ece

Commerce Minister Nirmala Sitharaman at the convocation of the institute on Friday.

Nirmala Sitharaman asks Indian Institute of Foreign Trade to choose a dress code that is not an import

Consider junking "foreign-influenced" convocation attire of gown and cap, and opt for a dress that reflects Indian culture.

That was Commerce Minister Nirmala Sitharaman's advice on Friday to the Indian Institute of Foreign Trade (IIFT), at its convocation. The premier institute on foreign trade management should do internal brainstorming, she added, and even take help from the National Institute of Fashion Technology.

Ms. Sitharaman's pitch echoes similar demands made in BJP-ruled Madhya Pradesh, Uttar Pradesh and Uttarakhand. Dressed in a blue sari and blouse, she said she "somehow never felt comfortable in a gown and cap [the square academic cap], though this is not because I disrespect it." "I think we need to review this, like we review the Foreign Trade Policy and other policies," she said. Ms. Sitharaman wore the gown and cap at the IIFT convocation last year.

In Uttar Pradesh, IIT-Kanpur has adopted salwar suits with churidars for women, and cream kurtas and Aligarhi white pajamas for men. Even the business-focussed Institute of Company Secretaries of India (ICSI) has dwelt on 'Indian attire'. On July 24, the ICSI quoted its president, Shyam Agrawal, as saying that "the ICSI has adopted traditional attire as its Convocation Dress Code and has decided to do away with the Western attire of gowns and caps..."

The dress code for the ICSI event is now kurta pajama for boys and sari/suit for girls, it said. The Institute also introduced an *angavastra* or stole/uttariya made of khadi for students.

'Colonial relics'

The question of shedding colonial tradition has engaged Congress leader Jairam Ramesh too. At the Indian Institute of Forest Management convocation in 2010, he reportedly said he was unable to understand why even 60 years after Independence "we stick to these barbaric colonial relics... why can't we have the convocation in a simple dress instead being dressed up as medieval vicars and popes?"

July 27

IIT Delhi hosting a hackathon on AI

http://economictimes.indiatimes.com/jobs/iit-delhi-hosting-a-hackathon-on-ai/articleshow/59793571.cms

NEW DELHI: Indian Institute of Technology (IIT) Delhi is hosting a week long hackathon on artificial intelligence starting Friday (July 28 – August 4). The main objective of the hackathon is to bring together young talent in the AI space.

This hackathon is being led by Anshul Bhagi, an MIT/Harvard alumnus who is also the co-director of OpenEd.ai, a non-profit organisation committed to developing and promoting open-source AI for education.

Among other partners for the event are Niti Aayog, Omidyar Network (venture capital firm), IBM, Amazon Web Services, Google Developer Groups, Bhagi shared.

"The grand prize is of $6000 sponsored by Omidyar. These organizations are offering a total of $17,000 as prize money for participants," Bhagi said.
Professors from Harvard and MIT are on board as advisors and judges.

This initiative already has over 600 participants from around the world, specialists in solving problems in education with the help of AI, machine learning, NLP, and data science.

Third IIT in region

http://timesofindia.indiatimes.com/city/chandigarh/third-iit-in-region/articleshow/59762546.cms

CHANDIGARH: Despite the fact that there are two IITs in the region, the third IIT which has been proposed in Chandigarh will increase competition among all existing institutions.

At present in the north region, there are two IITs — IIT-Ropar and IIT-Mandi.

Experts say if the proposal of IIT-Chandigarh will get the green signal, not only students, but quality staff will prefer to come to the city due to its location in the region. Chandigarh is well connected with other cities and the capital. Whenever the matter of upgrading PEC into an IIT has come up, it brings along with it the challenge that there already exist three IITs in the region and that IIT-Delhi and IIT-Roorkee are also within 300km, making the competition tough for Chandigarh.

Experts believe that this tag of IIT will come with its own set of challenges. Recently, Union human resource development minister Prakash Javadekar said the country's premier Indian Institutes of Technologies (IITs) wil have to become self-sustainable in funding by 2030.