

THE PULSE OF HBTU

Fortnightly Newsletter

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The Indian Farmers Protest: Inception and Developments

Sparked by the passing of three Farm Bills, namely the Farmer's Produce Trade and Commerce, the Farmer Agreement of Price Assurance and Farm Services Bill and the Essential Commodities Bill in both the houses of the Parliament. The Farmers Protest has been an imperative matter in India to deal with. Its main objectives include the revocation of the three farm bills, legal assurance of Minimum Support Price, and revoke the Commission of Air Quality in NCR and adjoining areas which has caused the arrest of many farmers under pretext of stubble burning.



The Protest which had gained momentum with the movement of 'DilliChalo' has now been actively going on since early November. Earlier known to have support of 200 trade and farmer organization, eventually has been a huge trade body including the representative of 500 farmer unions. Interestingly, the protests have garnered the support of national parties as well as many international governments and the United Nations itself.



The government's take on the protest has been unsubstantiated. There has been a meeting between the representatives of the Farmers Union and Union Agricultural Minister and the Minister of Food and Public Distribution which ended without any significant developments from both the sides. The farmers are keenly bent on their demands being satisfied and so is the government, unwilling to provide any changes in the already passed bills. The government keeps on asserting that the reforms were important and much needed. On the other hand, Farmers are worried that the Minimum Support Price would be rendered only as an 'Insignificant Tag'.

NATIONAL - INTERNATIONAL

First Look of New Parliament Building is Out .Here's What it Will Cost

Prime Minister Narendra Modi laid the foundation stone for the brand-new Parliament building on December 10. The new structure, part of the Central Vista redevelopment project, will be spread across 64,500 sq. metres, replacing the existing 93 years old Parliament house.

In September this year, the Tata Projects Ltd won a contract worth Rs 861.90 crore for the construction of the new building on a bid of Rs 865 crore. The estimated cost of the proposed Parliament is expected to be about Rs 971 crore.

Notably, the new Parliament building is a part of Prime Minister Narendra Modi's plan to rebuild the central Vista in New Delhi that houses iconic buildings including the Parliament, Rashtrapati Bhavan, the Prime Minister's official residence, and the India Gate.

The new building will come up at plot number 118 of the Parliament House Estate. It will be designed as ground plus two-storey triangular structure at an estimated cost of Rs 940 crore. The first look of the Parliament confirms reports that the national emblem of India will sit atop on the roof of the new building. An adjacent building, which will come up on the site where Shram Shakti Bhavan sits currently, will be connected via an underpass and have rooms for all MPs. The existing Parliament building will be conserved as an archaeological asset of the nation.



IITs, NITs to deliver courses in regional languages from 2021

From the next academic session, the top engineering institutes including IITs and NITs will offer engineering courses in their respective regional language as well. Till now, the mode of delivering lectures is officially English in almost all top-ranking Indian engineering institutes.

The decision to teach in regional language was taken at a high-level meeting chaired by Union Minister of Education Ramesh Pokhriyal Nishank on Thursday. This is in line with the new National Education Policy (NEP) 2020 which promotes regional language as a mode of delivering education. "A seminal decision was made to start technical education, especially engineering courses imparting education in mother tongue will be opened from next academic year. A few IIT and NIT are being shortlisted for the same," an official statement by the ministry stated.

"Last Wish Fulfilled": Pakistan Refugees on Voting First Time

Tears well up in the eyes of 87-year-old Lal Chand and his 82-year-old wife Trivita as they hold up their inked fingers after casting their votes in the third phase of District Development Council (DDC) elections at a polling station in Jammu.

"Today, our wish to vote once in our lifetime was fulfilled," said the couple in unison.

Mr. Chand and his wife are West Pakistan refugees who fled to India during the Partition in 1947. They, along with nearly 1.50 lakh others became eligible to vote in Jammu and Kashmir's local elections after the Centre abrogated Article 370 of the Constitution on August 5 last year, paving the way for granting them domicile status.



Formula 2 2020: Jehan Daruvala creates history by becoming first Indian to win an F2 race

Promising Indian driver Jehan Daruvala created history when he became the first Indian to win a Formula 2 race during the Sakhir Grand Prix. A thrilling battle against F2 champion Mick Schumacher and Daniel Ticktum saw the 22-year-old Indian emerge on top in the support race of the season-ending

Formula 1 Grand Prix. Jehan, driving for Rayo Racing, had a good launch from second on the grid and was up alongside pole sitter Daniel Ticktum.Ticktum squeezed Jehan on the inside which allowed Schumacher to go around the outside of both of them. His Japanese teammate Yuki Tsunoda was second, over 3.5 seconds behind Jehan, while Ticktum was third.

Republic Day Parade 2021 India invites UK PM Boris Johnson as chief quest

UK Prime Minister Boris Johnson is expected to be the chief guest of India's Republic Day parade in January 2021, news reports suggest. Prime Minister Narendra Modi formally invited Johnson for the annual event during their telephonic conversation on November 27.The report further suggests that Johnson in turn extended an invitation to PM Modi for the 2021 G7 Summit that will be hosted by the UK in 2021 even though India is not a member of the 'Group of Seven' organisation.The government has not confirmed this development yet.



However, Johnson's possible participation in the January 26 event would come at a time when the UK faces a hard Brexit. The event would happen less than a week after Joe Biden takes over as the 46th United States president — a transition that Johnson's government has been wary of because of their close association with the Trump administration.Brazilian President Jair Bolsonaro was the Republic Day parade chief guest in 2020. The process of selecting the chief guest is long and begins around six months ahead of Republic Day.

After the Ministry of External Affairs (MEA) carefully scrutinizes India's relations with the concerned country, the government sends an invite to their Head of State. The chief guest is also decided on the basis of the other country's interest and availability of the dignitary. The natural corollary is that the guest should be treated with utmost honour and they should be satisfied with their visit.

UK, Russia announce mass Covid-19 vaccinations starting next week

Shortly after UK's announcement, Russia's Putin also said that Sputnik V vaccine shots will be available from late next week onward. Paving the way for mass vaccinations from as early as next week, UK on Wednesday became the first country to approve the Pfizer/BioNTech vaccine against COVID-19, which has killed 1,487,701 people across the globe and has infected over 64 million. The announcement was followed by Russian President Vladimir Putin ordering "large-scale" vaccinations in the country with the Sputnik V. The vaccine has been touted in Russia as the world's "first registered COVID-19 vaccine" after it received regulatory approval in early August. However, the move drew considerable criticism from experts, because at the time the shots had only been tested on several dozen people.

Pfizer/BioNTech vaccine

In Britain, public health officials plan to offer the vaccine first to those who are most at risk of dying from the disease and those whose jobs put them at risk of contracting the virus and spreading it to others. The vaccination program will be expanded to others as supplies become available. The UK is expected to receive a total of 40 million doses by the end of 2021, enough to vaccinate up to a third of the population, with the majority of doses anticipated in the first half of next year. Putin announced the registration of Sputnik V in August as the world's first vaccination against Covid-19, and a second inoculation was approved in October, even as Phase 3 trials to establish safety and efficary are still taking place. Since then, officials have said "mass" vaccination would start soon even as some manufacturers expressed concerns about production constraints.

Russia's Sputnik V

Putin has said more than 2 million doses of Russia's Sputnik V vaccine will be ready for use within the next few days. The Sputnik V vaccine candidate has demonstrated "high efficacy" in interim data, reducing by 92 per cent the possibility that those inoculated would be clinically diagnosed with symptomatic Covid-19, Russian authorities have said.

Sputnik V is a human adenovirus vaccine that uses two weakened and genetically modified common cold viruses to carry the code for the cells in the human body to build the Covid-19 spike protein (the spiky outer layer of the SARS-COV-2 virus). The body's immune system is expected to recognise this spike protein as a threat and develop an immune response to attack it, so that the real Covid-19 virus would not be able to cause harm when it tries to attack.





PLACEMENT 2020 HERO MOTOCORP

Here are few insights from placements in HERO MOTOCORP for the year 2020.In covid 19 pandemic depressed situation hbtu is doing its best .Hero MotoCorp has offered a decent package of 7.25 lpa Following students have been selected



Rishabh	ME
Harshita Rajpoot	ME
Saloni Maurya	PL
Deeksha Diwivedi	PT
Astha Gaura	PT

PLACEMENT 2020 EXXON

Here are few insights from placements in EXXON for the year 2020. In covid 19 pandemic depressed situation hbtu is doing its best.

Exxon has offered a decent package of 10.81 lpa Following students have been selected



Pranav Tyagi CHE
Anushka Agarwal CHE
Rishabh Pandey CHE
Rikki Chauhan CHE
Aditya Prajapati PL
Vidit Karan Bhargava ME

OIL TECHNOLOGY DEPARTMENT ORGANISES EXPERT LECTURES



Speaker Prof. R. P. Singh

1. Topic: Opportunities and Challenges for an Oil Technologists in Corporate World

Speaker: Prof. R. P. Singh Date 11.12.2020 Time. 1-2 pm

4. Topic: Current Scenario of Edible Oil Refineries in India Speaker Prof R. P. Singh Date 15.12.2020 Time 1-2 pm 2. Topic: Enhancement of Problem Solving Skills in Oil and Allied Industies Speaker: Mr. Ajay Kumar Date 12.12.2020 Time 1-2 pm

3. Topic Statistical Analysis of Operating Parameter in Oil and Allied Industies Speaker: Mr. Ajay Kumar Date 14.12.2020 Time 11-12



Speaker Mr. Ajay Kumar

The lectures were online and shared by Mr. Vinay (Department of Oil Technology)

Best wishes

The Demand of Job-Ready Interns

We are on the verge of "Bending the Curve" and trying to get out of our safety bubble. Nevertheless, the upcoming graduates have to fight yet another fight- finding an Internship. Though finding an Internship has never been an easy task, involving applications to tens if not hundreds of companies and start-ups, separate time allocation for the work allotted and getting used to the idea of working and studying at the very same time, it has become especially difficult provided the prevailing times. The slump is not only limited to technology roles but also to the core engineering ones as the focus has now shifted from work on-site to work from home.

There goes a new favourite line of recruiters, "The graduates lack the required skill-set", whereas the very same recruiters would not hesitate asking for some tangible mid-industry level project from an individual for the role of Intern. One of random fresher internship position in Data Science on Internshala, even asked for two years of experience. This condition is grave. Employers say students may have textbook knowledge but don't have the ability to take that knowledge to think critically, innovate, solve complex problems and work well in a team. They want students to come to the workplace with skills that people used to develop on the job. But they fail to understand that while universities can certainly focus more on the so-called soft skills employers seek, the job is still the best teacher for critical thinking and interpersonal skills.



A possible solution to this problem might seem to be making radical changes in the curricula, but given the context of Indian Universities, the idea seems to be a little far-fetched. Most students are left with only one option i.e., resorting to find their own curricular and communication potholes and start working on them. This includes communicating with recruiters (through platforms like Jobipedia, LinkedIn, etc.) to know what they are looking for in freshmen application, market branding of themselves, involving themselves in Group Discussion and Debates in order to know and analyze their immediate environment and getting aware of the latest trends, newest technology in their fields. Taking up projects that are basic and then building up on them might also save the students from some hard labour, they have to undergo once they are part of an organisation, for this is what internships are for.

Shashwat Gupta Editor, PSMSC



Social DECEPTIVE Media

Analysing all the threats that have already been 'scanned' and came to see the daylight lately, Climate change seems to be the greatest existential threat for the human civilisation. Thinking of all the carbon emission embossing numbers increasing exponentially by every second makes nations cry over.

Ozone depletion, deteriorating AQIs are a few more ping pongs needed to be decelerated on major. But recent face off with a few technologists ended up pointing to some much bigger threat that hasn't been brought to attention; up until now. Another major reason to worry about this threat is, that we carry this with us and it's a part of our lives now, no wait; this has actually become our life on whole, 'Social life' or to be more accurate, Social Media-Deceptive life, which most of the millennials actually think it is but though find it tempting to be lived in at this point of time.

As we try to get some more insights about such an 'existential threat', mostly we see technologists squirming in their seats, unsure of where to begin. Eventually, though, they start talking. Livelihood in this 'Techno-verse' has actually made us realise about the state of preoccupancy of every second or maybe the first individual whom you come across and busy in some android or IOS in this deception. According to the technologists, the problems are thus: We spend too much time on social media. We do this because, in essence, we have no choice. The people who work at tech companies have invested infinite money, time, and engineering power to design systems that keep us hooked, and which predict our every move. It is how they make money: We are not the user, we are the product.

But things do not end up here only. Talking with more of some renowned faces or maybe with the ones who actually worked behind the scenes once to make us web around these social media apps can make us realise the severity of the thing. . When asked about the "new agenda for tech" for the times to come, Tristan Harris, a former Googler, spoke of something which could we opposite of what is expected a techno. "Many of us are sympathetic to the cause, calling to mind the devils we knew: misinformation, manipulation, virality, addiction, filter bubbling, FOMO". But Harris cranked up the concern even further. Telling further he said, "We are being controlled, like voodoo dolls in the palms of Big Tech. We are being chopped up and sold, like factory farmed meat. This wasn't just a battle for our attention, Harris said. If we didn't do something now, it would be the end of humanity as we knew it"

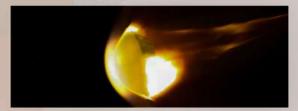
The humanity-crushing effects of social media aren't much prominent and severe at this point of time but have actually started taking shape in the recent times in the form of massive corporate failures. The Facebook–Cambridge Analytica data scandal was an incident where millions of Facebook users' personal data was acquired without the individuals' consent by Cambridge Analytica, predominantly to be used for political advertising. It was claimed to be the "largest known leak in Facebook history" at the time. Facebook was fined by the UK Information Commissioner's Office for exposing the data of its users to a "serious risk of harm", although the official investigation recognised that no significant breaches actually took place. Non-encrypted and failed login setups and blackouts are only a few incidences that have been an eye-opener that made us think rationally about the security setups of the social platforms and about their liability too.

How much safe we actually are, how many data safes we'd actually be needing are a few answerable or unanswerable (as they seem for now) queries needed to be given attention in the era where the start and the end of one's day are so predominantly occupied by these 'Healthy scrolling habits'.

Deceptive? Maybe yes. Maybe not.

Vaishnavi Tripathi Editor.Psmsc

Asteroid sample arrives in Japan after six-year



Samples of an asteroid 300 million km from Earth arrived in Japan on Tuesday to applause and smiles, the climax of a six-year odyssey by a space probe pursuing the origins of life. Named for the peregrine falcon, the Hayabusa2 blasted off for the asteroid Ryugu in December 2014, overcoming an unexpectedly rough landing surface to collect samples of asteroid dust in a capsule. That capsule plunged to earth in Australia on Sunday and was flown to Japan. The final stage of its journey was by truck to the Japan Aerospace Exploration Agency (JAXA) research centre outside Tokyo, where it was greeted by a crowd of excited researchers. Asteroids are believed to have formed at the dawn of the solar system, and scientists say the sample may contain organic matter that could have contributed to life on Earth. The Hayabasa2 orbited above Ryugu for a few months before landing, then used small explosives to blast a crater and collected the resulting debris, with the expectation that some 100 milligrams may have been gathered. After dropping off the capsule, it changed course, heading back into space. Travel and landing restrictions posed by the coronavirus pandemic were another hurdle with researchers at one point considering whether to postpone the capsule's return.

Smartphones based COVID test might be possible, claims scientist

Scientists have developed a novel technology for a CRISPR-based Covid-19 diagnostic test that uses a smartphone camera to provide accurate results in under 30 minutes. According to the research published in the journal Cell, the new diagnostic test can not only generate a positive or negative result, it also measures the viral load -- the concentration of virus --in a given sample. All CRISPR diagnostics to date have required that the viral RNA be converted to DNA and amplified before it can be detected, adding time and complexity, the researchers said. In contrast, the new approach skips all the conversion and amplification steps, using CRISPR to directly detect the viral RNA, they said "One reason we are excited about CRISPR-based diagnostics is the potential for quick, accurate results at the point of need," said Jennifer Doudna, a senior investigator at Gladstone Institutes in the US.

Satellite internet might soon be available in rural areas

The FCC has just published the results of its Rural Digital Opportunity Fund Phase I auction, which sounds rather stiff but involves distributing billions to broadband



providers that bring solid internet connections to under-served rural areas "on the wrong side of the digital divide." Included is \$885 million earmarked for SpaceX, whose Starlink satellite service could be a game-changer for places where laying fiber isn't an option.

Chinese scientists make world's first lightbased quantum computer

Jiuzhang, the quantum computer, can reliably demonstrate "quantum computational advantage", a milestone in computing, state-run China Daily quoted a study published in the journal Science

Chinese scientists claim to have created the world's first light-based quantum computer which can solve problems far faster than a classical supercomputer, an advance hailed by experts as a "major achievement" that provides a fundamentally different approach to designing such powerful machines, the official media reported on Saturday.

India's manned space mission to be delayed due to COVID



India's first human space flight mission, Gaganyaan, is likely to be delayed by a year owing to the coronavirus disease (Covid-19) pandemic. "That (Ganganyaan mission) will br delayed because of Covid," ISRO chairperson K Sivan told

The pandemic has also delayed other big-ticket missions that ISRO had planned for the year, including India's first solar mission — Aditya L1 — scheduled for mid-2020. The space agency is reviewing all its future missions, including the Venus mission that had been planned for June 2023. If missed, the next launch window would be after 19 months when the planet is closest to the Earth.

हाँ मैंने पानी को भी रंग बदलते देखा है जो बना रहे थे भारत उनको सड़को पर चलते देखा है

वो थकती है रुकती है माँ है तो साँस लेती है बस थोड़ी दूर बाक़ी है कहकर बच्चों को आस देती है भूखे बच्चे हैं लेकिन बस ये आस पलती है कि अब तो घर आ गए सोच कर फिर वो चलती है

भूखे बच्चे लेकर माँ को बढ़ते देखा है जो बना रहे थे भारत उनको सड़कों पर चलते देखा है

वो पिता जो लेकर सबको चल दिया केवल निरंतर रख लिया फिर बोझ कंधे पर पढ़ के परिवार मंतर बस केवल भविष्य को सोच लेता है आँख में आँसू आते हैं परंतु पोछ लेता है

हिम्मत सब बाँधे है बस आँखों को पिघलते देखा है जो बना रहे थे भारत उनको सड़कों पर चलते देखा है

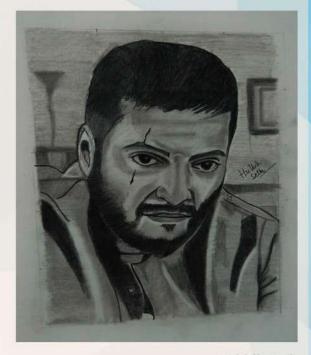
दुखि रहा अब साफ़ साफ़ किसको किसकी परवाह रही साथ मिला उनको जिनको रहने की देश में चाह नहीं चल दिए वो चल दिए फिर उनकी चिता कौन पाने घर गए या मर गए किसको मतलब और कौन जाने

राशन कार्ड के ऊपर पासपोर्ट को पलते देखा है जो बना रहे थे भारत उनको सड़को पर चलते देखा है

> Shobhit Dixit 2nd Btech Plastic Technology



Ishita Srivastava 2nd Btech Chemical Engineering



Hrithik Seth 2nd Btech Chemical Engineering



Sneha Agarwal 1st Btech Chemical Engineering