

THE PULSE OF HBTU

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PEACE PIECE



NASA'S OSIRIS REX



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WORLD FOOD DAY GROW, NOURISH & SUSTAIN TOGETHER.



World Food Day is an international day celebrated every year worldwide on 16th October to commemorate the date of the founding of the United Nations Food and Agriculture Organization in 1945. The day is celebrated widely by many other organizations concerned with hunger and food security, including the World Food Programme and the International Fund for Agricultural Development. WFP received the Nobel Prize in Peace for 2020 for their efforts to combat hunger, contribute to peace in conflict areas, and for playing a leading role in stopping the use of hunger in the form of a weapon for war and conflict.

The World Food Day theme for 2014 was Family Farming: "Feeding the world, caring for the earth", in 2015 it was Social Protection and Agriculture: "Breaking the Cycle of Rural Poverty" in 2016 it is Climate Change: "Climate is changing. Food and agriculture must too", which echoes the theme of 2008, and of 2002 and 1989 before that. The theme of 2020 is "Grow, nourish, sustain. Together. Our actions are our future".

World Food Day (WFD) was established by FAO's Member Countries at the Organization's 20th General Conference in November 1979. The Hungarian Delegation, led by the former Hungarian Minister of Agriculture and Food Dr. Pál Romány, played an active role at the 20th Session of the FAO Conference and suggested the idea of celebrating the WFD worldwide. It has since been observed every year in more than 150 countries, raising awareness of the issues behind poverty and hunger.

Since 1981, World Food Day has adopted a different theme each year in order to highlight areas needed for action and provide a common focus. Most of the themes revolve around agriculture because only investment in agriculture – together with support for education and health – will turn this situation around. The bulk of that investment will have to come from the private sector, with public investment playing a crucial role, especially in view of its facilitating and stimulating effect on private investment.

In spite of the importance of agriculture as the driving force in the economies of many developing countries, this vital sector is frequently starved of investment. In particular, foreign aid to agriculture has shown marked declines over the past 20 years.

MALAYSIA'S KING REJECTS PM YASSIN'S PROPOSAL TO DECLARE EMERGENCY.



Muhyiddin Yassin's move has sparked national outrage, with critics slamming the move as an undemocratic means for him to hang on to power amid challenges to his leadership.

The plan by Muhyiddin, which involves suspending Parliament, has sparked national outrage, with critics slamming the move as an undemocratic means for him to hang on to power amid challenges to his leadership. The palace said in a statement that Sultan Abdullah Sultan Ahmad Shah is of the opinion that there is currently no need for His Majesty to declare a state of emergency in this country or any part of Malaysia."

Mr. Muhyiddin met with the monarch on Friday to seek royal assent but hasn't made any public comment. The palace's statement came after the king conferred with other royal households earlier Sunday to discuss the prime minister's proposal. Sultan Abdullah said the government has handled the pandemic well and believes that Mr. Muhyiddin is capable of implementing measures to cope with the crisis. But the monarch called for a halt to all politicking that could disrupt the governments stability. The king can declare a state of emergency that allows the country to be governed through ordinances that cannot be challenged in court. Mr. Muhyiddin took power in March after instigating the cause of the former reformist alliance, but his government is shaky, with only a two-seat majority in Parliament. Opposition leader Anwar Ibrahim has alleged that he has the support of a majority of law-makers to topple Muhyiddin, but hasn't managed to secure the monarch's support.

SINGAPORE TEMPORARILY HALTS USE OF TWO FLU VACCINES AFTER SOUTH KOREA DEATHS



No deaths associated with influenza vaccination have been reported in Singapore to date. Singapore has temporarily halted the use of two influenza vaccines as a precaution after some people who received them in South Korea died, becoming among the first countries to publicly announce a halt of the vaccines' usage. South Korea reported that 48 have died as of Saturday after getting flu shots, but said it would carry on with the state-run vaccination programme as they found no direct link between the deaths and the shots. No deaths associated with influenza vaccination have been reported in Singapore to date, but the decision to halt the use of SKYCellflu Quadrivalent and VaxigripTetra was precautionary, the health ministry and the Health Sciences Authority (HAS) said in a statement late on Sunday. The HSA is in touch with the South Korean authorities for further information as they investigate to determine if the deaths are related to influenza vaccinations.

SKYCellflu Quadrivalent is manufactured by South Korea's SK Bioscience and locally distributed by AJ Biologics, while VaxigripTetra is manufactured by Sanofi and locally distributed by Sanofi Aventis. Two other influenza vaccines that have been brought into Singapore for the Northern Hemisphere 2020/21 influenza season may continue to be used, Singapore health authorities said.

STUBBLE BURNING SHARE IN DELHI'S

POLLUTION RISE TO 36%

The share of stubble burning in Delhi's PM2.5 pollution rose to 36 per cent on Thursday, the maximum so far this season, according to a central government air quality monitoring agency. The number of farm fires in neighbouring states was 2,912 on Wednesday, the highest so far this season, according to the Ministry of Earth Sciences' air quality monitor SAFAR. "Stubble burning share in Delhi PM2.5 concentration was 36 per cent on Thursday," it said. It was 18 per cent on Wednesday, 23 per cent on Tuesday, 16 per cent on Monday, 19 per cent on Sunday and nine per cent on Saturday, all stats been gathered in the closing week of the month. Delhi's air quality entered the "severe" category-for the first time since January -- as calm winds and low temperature allowed accumulation of pollutants amid a spike in farm fires. "Extremely calm surface and boundary layer winds along with the low night time boundary layer height resulted in low ventilation...practically stagnant, no dispersion condition has resulted in the current situation," SAFAR said.

PM MODI LAUNCHES PROPERTY CARD SCHEME TO AID RURAL HOUSEHOLDS



Prime Minister Narendra Modi launched a property card scheme that he vowed would provide clarity of property rights in villages and enable farmers to use their property as collateral for loans from financial institutions. Two-thirds of India's population lives in rural areas, where few possess proper land records and property disputes are common. "This is a historic effort towards rural transformation," PM Modi said in a webcast speech while launching the physical distribution of property cards under the 'SVAMITVA' (ownership) scheme.The government plans to use drone technology to map land parcels in rural areas and cover some 620,000 villages over the next four years, he said.

"Despite owning houses, people were facing multiple problems while borrowing from banks. These people can now borrow very easily from banks after showing property cards issued under ownership scheme," the Prime Minister said. An initial batch of 100,000 people from over 750 villages across six states will begin to receive the digitised property cards this month. Each card will have a unique identity number similar to the Aadhaar card - the world's biggest biometric identity project, covering more than a billion people in India. On the occasion, Modi also interacted with several beneficiaries of the Survey of Villages and Mapping with Improvised Technology in Village Areas (SVAMITVA) scheme and said it is big step for the country towards becoming 'aatmanirbhar' (self-reliant). "Experts across the world have stressed that property ownership rights play a big role in a country's development," he said to highlight the significance of the measure.

GLOBAL HUNGER INDEX 2020 India ranks 94 out of 107 countries, slight improvement since 2019.



The Global Hunger Index 2020 report released recently has ranked India at 94 among 107 countries. India was ranked 102 out of 117 countries in the Global Hunger Index 2019 that was published jointly by Concern Worldwide

In 2018, India had ranked 103 among 119 countries on the Global Hunger Index. The peer-reviewed annual report aims to measure and track hunger at the global, regional and country levels. In its latest report, GHI puts worldwide hunger at a "moderate" level while warning that nearly 690 million people across the world are undernourished. With a score of 27.2 out of 50, the 2020 Global Hunger Index report terms the level of hunger in India as "serious". While a score of less than 9.9 signifies "low" hunger, that of 10-19.9 represents "moderate" levels of hunger, 20-34.9 points to "serious" hunger, 35-39.9 signifies "alarming" and over 50 "extremely alarming" levels of hunger.

It is important to note that India's score on the GHI index in 2020 (27.2) is an improvement as compared to 38.9 in 2000, 37.5 in 2006, and 29.3 in 2012. India had ranked 102 among 117 countries in 2019. The latest GHI report, however, points to the high child stunting rate in South Asia which it says has also improved since 2000. "Data from 1991 through 2014 for Bangladesh, India, Nepal, and Pakistan showed that stunting is concentrated among children from households facing multiple forms of deprivation, including poor dietary diversity, low levels of maternal education, and household poverty," the report has said. It goes on to say that India experienced a decline in under-five mortality between 2000 and 2018, "driven largely by decreases in deaths from birth asphyxia or trauma, neonatal infections, pneumonia, and diarrhoea" .At present, India lags behind Nepal, Pakistan, Bangladesh, and Indonesia among others on the Global Hunger Index. Only 13 out of 107 countries, including Rwanda, Afghanistan, Liberia, and Chad among others have fared worse than India. "Taken as a whole, the world has a moderate level of hunger, but in 31 countries hunger is still serious, and an additional 9 countries are provisionally categorized as serious," the report said.

PLACEMENT 2020 - JIO

Here are few insights from placements in JIO for the year 2020. Candidates from the CS & ET branches were eligible for the recruitment process. Primarily, the package offered by JIO was around 5.8 LPA. The placement process involved an online test which was followed by a virtual interview. Finally, 11 candidates were selected.



Following students were placed :-

- Akash Maurya (Final CSE)
- Mohd Afjal(Final CSE)
- Nikita Singh(Final CSE)
- Priya Singh (Final CSE)
- Priyadarshini Gautam (Final CSE)
 - Shaivya Dixit (Final CSE)
- Vishal Singh (Final CSE)
- Yogendra Pal Singh (Final CSE)
- Anshika Pathak (Final ET)
- Nancy Singh (Final ET)
 - Navya Saxena(Final ET)

PLACEMENT 2020-TCS DIGITAL

Here are a few insights from placements for TCS digital for the year 2020. Candidates from the mentioned branches are eligible for TCS digital recruitment- CS, IT & ET. Primarily, package offered by TCS digital was around 7 LPA. Placement process involved an Online test & virtual interview later. Finally, 11 candidates were selected.



TCS Digital placement candidates' list:

- Shubham Shukla(final CSE)
- Shubhra Bhadauria (final CSE)
- Yashveer Talan (final CSE)
- Ashish Singh (final CSE)
- Animesh Shukla (final IT)
- Arpit Gupta (final IT)
- Faizal Khan (final IT)
- Sarthak Gautam(final IT)
 Shivansh Tiwari (final IT)
- Shivansh Hwari (final II)
- Yatharth Maheshwari (final IT)
- Aviral Bajpai (Final ET)
 Atul Kr Mishra (final ET)

HULT PRIZE ON-CAMPUS PROGRAMME



HBTU introduced the Hult Prize. The Hult Prize is an annual, year-long movement that crowd-sources ideas from MBA and college students after challenging them to solve a pressing social issue around topics such as food security, water access, energy, and education. It was founded by Ahmad Ashkar and is funded by Bertil Hult, the latter of whom, along with his family - founders of EF Education First - donates US\$1 million in seed capital to help the winning team launch a social enterprise. The Prize is a partnership between Hult International Business School and the United Nations Foundation. In a webinar held at the University, the speaker Mr. Mustafa Tarwalla (Community builder, Hult prize India), in his own words, "I> had a really great time interacting with the wonderful students of HBTU Kanpur, imparting them knowledge about our beloved Hult Prize, and how it works, on Campus, regionally and globally and how impactful participation is, even at the campus level.

ASSOCIATION OF FOOD TECHNOLOGISTS CELEBRATES WORLD FOOD DAY



This year marked 16th October as 75th World Food Day. In order to pave out the innovative ideas and to talk about the recent achievements in the Food Industry, a webinar was organised by the faculty of Food Department, HBTU Kanpur, with one of the alumni as the guest speaker, Mr. Amit Mishra. Mr. Amit Mishra pursued chemical engineering from the college and is 2011 batch graduated fellow, worked as design engineer at Linde engineering for 2 Years and meanwhile secured 51 rank in GATE 2011. Currently he's working as production engineer at ONGC.

Notable members of the department who participated in the webinar were:

- 1. Dr. Alak Kumar Singh (Head of Department, Department of Food Technology).
- 2. Dr. Vivek Kumar (Assistant Professor, Department of Food Technology).

2ND PRESIDENTIAL DEBATE: ANOTHER MESS.





With the Presidential Election in the US fast ap proaching, it was time for the 3rd and final presidential debate. This time in the ground is the current President and republican candidate New ork's property developer Donald Trump and Former Vice President from the office of President Barack Obama, Mr. Joe Biden. A major part of the Presidential election is the Presidential debate that happens every Presidential election is the Presi dential debate. The first debate took place on September 29, 2020. The second presidential debate which was scheduled to take place on 15th October, 2020 was cancelled after the President and the first lady tested positive for COVID-19. The final debate took place on Thursday, October 22, 2020, from 9:00 p.m. to 10:30 p.m. EDT, at the Curb Event Center at Belmont University in Nashville, Tennessee, with Kristen Welker of NBC moderating. This would have been the third debate, but became only the second, following the cancellation of the October 15 debate. In response to the interruptions that occurred during the first debate. the Commission on Presidential Debates announced on October 19 that each candidate's microphone would be muted during the other's initial two-minute response to each question. The announcement also stated that after each candidate gave his two-minute response, the microphones would not be muted. The muting was performed by production staff instead of the moderator. The debate was divided into six segments: "fighting COVID-19, American families, race in America, climate change, national security, and leadership." On national security, the candidates were asked about the recently released Director of National Intelligence report about interference in the ongoing election by Russia and Iran. Biden described foreign electoral interference as an interference with American sovereignty, specifically referencing Russia, China, and Iran, and said that any country that interfered in U.S. elections would "pay a price."[138] Biden also expressed concerns over Russian misinformation sent to Rudy Giuliani, whom he called a "Russian pawn".[139] Dodging the question, Trump responded by falsely claiming that Biden had received money from Russia.

What once was slated to be a foreign policy debate veered there briefly when moderator Kristen Welker of NBC News asked both about how they would disarm North Korea. Mr Trump talked about his meetings and relationship with the country's leader, Kim Jong-un, and called the young dictator "a different kind of guy." The former vice president compared Mr Kim to Adolf Hitler: "It's like saying we had a good relationship with Hitler before he invaded Europe." The president had more than a few stumbles, including when he said migrant children who are separated from their families are "so well taken care of." Mr Biden replied: "We have 525 [migrant] children who don't know where their parents are."

After Biden brought up newly reported information about Trump's tax returns, as well as Trump's secret bank account in China, Trump claimed that he prepaid millions in taxes and complained that the IRS had treated him "very unfairly." Biden replied, "Release your tax returns, or stop talking about corruption."

-Aditya Singh Editor,PSMSC

PEACE-PIECE- MENTAL HEALTH



The world has sailed so far from where it actually began; Evolution, Civilization, Colonization, Revolution and at last Freedom have been the key insights of the ground covered so far. Since then, the new bits of glory who got penned down along with these insights primarily involved World peace, Apollo mission, scandals(be it political or be it fraudsters' deeds), Tragic deaths of all times, "Climate Crisis", some of the Hierarchical clashes and Dictatorial elements too, who casted their shades upon the world once but now have become thing of the past. Amidst all these head to head tussles and . Technological advances in past few decades , Healthcare and "Population' s well being" too have topped the charts. But this concept of heath and well being just limits to bringing out vaccines and coping with the lowest death rate and the topic of "Mental well being" has remained off the charts. According to the World Health Organization (WHO), mental health includes "subjective well-being, perceived self-efficacy, autonomy, competence, intergenerational dependence, and self-actualization of one's intellectual and emotional potential, among others. The WHO further states that the well-being of an individual is encompassed in the realization of their abilities, coping with normal stresses of life, productive work, and contribution to their community. The COVID-19 crisis is certainly going to be remembered as one of the worst challenges to human civilization in the coming years. The world has to par-ticularly prepare themselves to be able to handle an imminent mental health crisis. Homeless population with Mental illness, women though vulnerable to the most difficult risks, remain last in the queue, in the times of crisis. The access to essential supplies, transit accommodation and food supplies though opens a paradigm for survival but if the situation is really unfolded with paranormal lens, the crisis has forced the people with special needs into an unanticipated mental health crisis. However, the quality of life was strongly associated with unmet needs in the area of mental and physical health and rehabilitation and not related to satisfaction with the services. Food insecurity predicts psychological distress in poverty. Án portant factor for those who can't buy food or avail middle-class resources during disasters. Psychologists have said that the availability of public healthcare, medical resources, social support, and self-control are strong protective factors against declining mental health emerging from pandemic lockdowns and quarantines. B e it even the professionals engaged in WFH too have reached the Saturation point of distress. Meanwhile, Students giving up all their time on blue screens are no where less in coping with this abruptly- straining pandemic they have experienced ever or will ever in the upcoming times." Mental health is often missing from public health debates even though it's critical to well being". There belong a humon-gous number of people in India who actually deny the fact that they are coping with the symptoms of ill-mental health, acknowledging the stereotype that they may get regarded as "Retarded ones"

> -Vaishnavi Editor,PSMSC

FEMINISM



The word feminism might be considered for the title of the most used word of the decade only if the emphasis was laid more on the actual meaning of the word the scenario would have been entirely different today. And being probably the word of the decade, it also has been misused and overused to such a degree that it lost the impact it could have had on the society till now.

Unlike the feminist movements in the 60' s and 70' s, the feminist movements currently are not for the political equality or the institu tional equality, it is rather for the Social equality. The modern feminist movements are against the people' s unconscious biases as well as centuries-worth of cultural and social norms that disadvantage women. It is no longer the time when we are dealing with the vernment or some institutions, it is the people's mentality and perceptions we are han-dling and to force people to unlearn the century long myths and traditions and mindsets embedded into them from their ancestors consciously or unconsciously. We can never accurately predict what a person is actually thinking we can only assume. If a old man sits on the seats reserved for women in a metro some of the modern day feminists assume that the old man is exercising his gender or taking advantage of the patriarchy in the country, but that might not be the case as is it just an assumption, such aassumption's and misinterpretation have led a certain section of the society to perceive that the feminists movement is not about equality but superiority to the women. That is the reason the netizens have given such sections of the feminists le of "pseudo-feminists" or "femina-. Most of the people who feel this way are nor against women having equal rights but are against feminists are misusing the feminist's movement.

What does these new terms mean, A person that claims to be a feminist yet ignores the main point of feminism, equality. Furthermore, feminists who have been found abusing what the feminists have been fighting for to gain certain advantages which shouldn't exits have been nicknamed Feminazis by the Netizens.

They' ve started becoming what they originally stood against.Oppression is not the answer for oppression, it might sound cool but it isn' t.Also, we see men bringing in Issues like men being oppressed and men getting raped is very appreciable but why does these issues come front clothed in response to women talking about women being oppressed, abused. Speak up for your problems not as response to women facing problems but as an issue on its own.We don' t have to be hermaphrodites to understand the problems faced by the genders.Feminism has one meaning i.e. "The belief that women must have same rights and opportunities as men". Do not let anything confuse you with this. EQUALITY NOT SUPERIORITY. Support feminism and not Feminazism.

-Praduumn Yadav Editor,PSMSC

THESE TWO BIRD-SIZED DINOSAURS EVOLVED BAT-LIKE WINGS, BUT STRUG-GLED TO FLY



Despite having bat-like wings, two small dinosaurs, Yi and Ambopteryx, struggled to fly, only managing to glide clumsily between the trees where they lived, researchers report today (October 22, 2020) in the journal iScience. Unable to compete with other tree-dwelling dinosaurs and early birds, they went extinct after just a few million years. The findings support that dinosaurs evolved flight in several different ways before modern birds evolved.

Yi and Ambopteryx were small animals from Late Jurassic China, living about 160 million years ago. Weighing in at less than two pounds, they are unusual examples of theropod dinosaurs, the group that gave rise to birds. Most theropods were ground-loving carnivores, but Yi and Ambopteryx were at home in the trees and lived on a diet of insects, seeds, and other plants.

Curious about how these animals fly, Dececchi and his collaborators scanned fossils using laser-stimulated fluorescence (LSF), a technique that uses laser light to pick up soft-tissue details that can't be seen with standard white light. Later, the team used mathematical models to predict how they might have flown, testing many different variables like weight, wingspan, and muscle placement. "They really can' t do powered flight. You have to give them extremely generous assumptions in how they can flap their wings. You basically have to model them as the biggest bat, make them the lightest weight, make them flap as fast as a really fast bird, and give them muscles higher than they were likely to have had to cross that threshold," says Dececchi. "They could glide, but even their gliding wasn' t great." While gliding is not an efficient form of flight, since it can only be done if the animal has already climbed to a high point, it did help Yi and Ambopteryx stay out of danger while they were still alive. The researchers are now looking at the muscles that powered Yi and Ambopteryx to construct an accurate image of these bizarre little creatures. "I' m used to working with the earliest birds, and we sort of have an idea of what they looked like already," Dececchi says. "To work where we' re just trying to figure out the possibilities for a weird creature is kind of fun."

NASA'S OSIRIS-REX TAG ASTEROID BENNU - OVER 200 MILLION MILES AWAY FROM EARTH

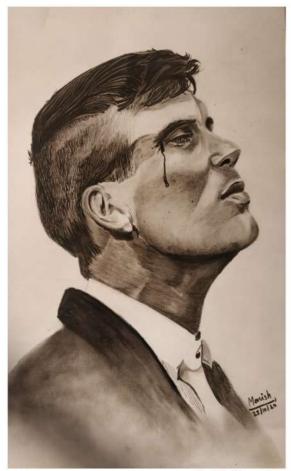
October 20, 2020, during the OSI-RIS-REx mission'
Touch-And-Go
(TAG) sample
Collection event, this image shows the SamCam ager's field of view as the NASA spacecraft.



Captured on the targeted location. The spacecraft's sampling arm - called the Touch-And-Go Sample Acquisition Mechanism (TAGSAM) - is visible in the lower part of the frame. The round head at the end of TAGSAM is the only part of OSIRIS-REx that contacted the surface during the sample collection event. In the middle of the image sequence, the sampling head positions itself to contact the asteroid's surface head-on. Shortly after, the sampling head impacts site Nightingale and penetrates Bennu's regolith. Upon initial contact, the TAGSAM head appears to crush some of the porous rocks underneath it. The TAGSAM is designed to catch the agitated surface material, and the mission team will assess the amount of material collected through various spacecraft activities. After touchdown, the spacecraft fired its thrusters to back away from Bennu. Preliminary telemetry shows the spacecraft remains in good health. The spacecraft was traveling at 0.2 mph (10 cm/sec) when it contacted sample site Nightingale and then backed away at 0.9 mph (40 cm/sec). These images were captured over approximately a five-minute period. The imaging sequence begins at about 82 feet (25 meters) above the surface, and runs through the back-away maneuver, with the last image in the sequence taken at approximately 43 feet (13 meters) in altitude - about 35 seconds after backing away. The sequence was created using 82 SamCam images, with 1.25 seconds between frames. For context, the images are oriented with Bennu's west at the top.

TIME CRYSTALS MAY BE THE NEXT MAJOR LEAP IN QUANTUM NETWORK RE-SEARCH

Time crystals sound like something out of science fiction, but they may be the next major leap in quantum network research. A team based in Japan has proposed a method to use time crystals to simulate massive networks with very little computing power. They published their results on October 16, 2020, Science Advances. First theorized in 2012 and observed in 2017, time crystals are arrangements of matter that repeats in time. Normal crystals, such as diamonds or salt, repeat their atomic self-organization in space, but do not show any regularity in time.ganize and repeat their patterns in time, meaning their structure changes periodically as time progresses.



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