

Current Affairs [PDF] - March 16-31, 2023



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**News Headlines****March 16, 2023**

Here are Today's News Headlines by GK Today for March 16, 2023

INDIA

- Over 21% of rural households do not have access to any type of toilet, according to a government survey.
- Bar Council of India (BCI) has opened up law practice in India to foreign lawyers and law firms.
- Govt introduces bill in Lok Sabha to strengthen tri-services commanders' powers.
- Business20 meeting under India's G20 presidency to begin in Gangtok, Sikkim.
- Ministry of Road Transport releases Policy guidelines for utilising eco-friendly materials in construction of National Highways.
- 2.18 Crore pucca houses completed till 11th March under Pradhan Mantri Awaas Yojana-Gramin

ECONOMY & CORPORATE

- India and World Bank signs loan agreement for construction of Green National Highway Corridors Project in 4 States
- India's Exports fall 8.8% and trade deficit shrinks over 7% in February.
- Ex-RBI official Deepak Mohanty has been appointed as PFRDA Chairman

WORLD

- USA: An atmospheric river dumped more torrential rain on California, state of emergency declared.
- With USD 230-billion funds, South Korea to build 'world's largest' chip centre.
- Russia races to retrieve wreckage of a U.S. military drone that crashed over the Black Sea
- Eric Garcetti, former Los Angeles Mayor was announced as the new US ambassador to India

SPORTS

- Indian Shuttler Kidambi Srikanth entered 2nd round of All England Open Badminton Championships.
- American high jumper Dick Fosbury, who revolutionised high jump technique, passed away.

March 17, 2023

Here are Today's News Headlines by GK Today for March 17, 2023

INDIA

- Two-day SCO Tourism Ministers' meeting to begin at Varanasi in Uttar Pradesh.
- Defence acquisition proposals valued at ₹70,500 crores were cleared by Defence Acquisition Council (DAC).
- Union Ministry of Steel will sign MoUs with selected companies under the Production-linked Incentive (PLI) scheme for speciality steel



- 75 trucks were flagged off with TB awareness messages at the Partnership for Action against Tuberculosis (PACT) event in New Delhi.
- Border Roads Organisation (BRO) opened the strategic Zojila Pass in record 68 days.

ECONOMY & CORPORATE

- RBI Governor Shaktikanta Das conferred with 'Governor of the year' Award at Central Banking Awards 2023
- RBI and Central Bank of UAE sign MoU to promote innovation in financial products and services.
- BIS grants 1,097 licences to domestic toy manufacturing units of which over 96 percent licences were granted to MSMEs.
- Sri Lankan economy suffered the worst ever contraction of 7.8% in 2022 as per data released by the Department of Census and Statistics.

WORLD

- U.K. bans Chinese-owned video-sharing app TikTok on government phones over security grounds
- China's Communist Party releases a plan on reforming government institutions.
- Poland to be first NATO member to give MiG-29 fighter jets to Ukraine.
- Japan and South Korea renew ties at Tokyo summit, overcoming a century of difficulties.
- Technology Innovation Institute, Abudhabi, UAE has launched Falcon LLM, a large language model (LLM) with 40 billion parameters

SPORTS

- All England Open Badminton Championships: Indian Women's Doubles pair of Treesa Jolly and Gayatri Gopichand enter quarterfinals
- Boxing: Nikhat Zareen, Sakshi Chaudhary, Preeti and Nupur Sheoran win opening bouts of World Women's Championships.

March 18, 2023

Here are Today's News Headlines by GK Today for March 18, 2023

INDIA

- Yuva Utsav has been organised in Mizoram on theme of 'Panch Pran of Amrit Kaal-India @2047'.
- Rajasthan announces formation of 19 new districts and 3 new divisional headquarters.
- PM Modi with Bangladeshi counterpart Sheikh Hasina to inaugurate first cross-border energy pipeline between two countries.
- Sites in Tamil Nadu, Telangana, Karnataka, Gujarat, Maharashtra, Madhya Pradesh and U.P have been selected to set up new textile parks, under PM Mega Integrated Textile Regions and Apparel (PM MITRA) scheme.
- Indian Army is set to host the second edition of the Africa-India field training exercise (AFINDEX-23).

**ECONOMY & CORPORATE**

- OECD raises India's FY24 growth forecast by 20 basis points to 5.9% in its latest interim outlook released titled "Fragile Recovery".
- As liquidity tightens, RBI injects Rs 1 trillion for largest infusion in 4 years; This is the first time since 2019 that RBI has infused more than Rs 1 trillion.
- India's foreign exchange reserves fall \$2.4 billion to \$560 billion in the week ended March 10.
- Union Cabinet approves listing of IREDA on stock exchange through IPO route.
- Centre sets accounting norm for States, Union territories and the Union government for adjustments to past errors.

WORLD

- Ram Sahaya Prasad Yadav elected as Nepal's third Vice President.
- Covid found in raccoon dogs in China, strengthening the case for the natural origin of the Covid-19 pandemic.
- International Criminal Court (ICC) issues arrest warrant for Vladimir Putin over Ukraine war crimes
- The UK Space Agency (UKSA) said it would back research by Rolls-Royce looking at the use of nuclear power on the moon.

SPORTS

- All England Badminton Championships: Treesa Jolly and Gayatri Gopichand to play women's doubles semi-final.
- Hardik Singh and Savita Punia won the Balbir Singh Sr. Award for the Player of the Year 2022 at the fifth Hockey India annual awards.

March 19, 2023

Here are Today's News Headlines by GK Today for March 19, 2023

INDIA

- Kochi fire: National Green Tribunal directed Kochi Municipal Corporation to pay environmental compensation of Rs 100 crore.
- West Bengal government plans to appoint 600 young 'gajamitras' to protect elephants.
- Uttar Pradesh to include millets in midday meals in schools and public distribution system.
- Karnataka launches Mysuru Cluster Seed Fund (MCSF), Mysuru Global Technology Centre (MGTC) and Karnataka Accelerator Network (KAN) to promote start-ups.
- Parliamentary panel has recommended analysing the feasibility of variable speed limits on national highways in the country.
- Prime Minister Narendra Modi and his Bangladesh counterpart Sheikh Hasina virtually inaugurated the India-Bangladesh Friendship Pipeline.

ECONOMY & CORPORATE

- PM Gati Shakti programme: 156 critical infrastructure-gap projects identified.



- Union Finance Ministry has initiated the process to appoint a new Reserve Bank Deputy Governor in place of MK Jain.
- Government sets up centralised facility for voluntary closure of companies.

WORLD

- UN confirms extension of Black Sea grain deal for exports from Ukraine.
- 400,000 gallons of radioactive water leaked from US nuclear power plant.
- Indian Higher Education Meet 2023 inaugurated in Dhaka.

SPORTS

- Tennis: India's Rohan Bopanna and Matthew Ebden of Australia win Men's Doubles title at Indian Wells Masters in California, US.
- Nikhat Zareen enters pre-quarterfinals in Women's Boxing World Championships.
- Akshdeep Singh wins gold in men's 20km Asian Race-Walking Championship.

March 20, 2023

Here are Today's News Headlines by GK Today for March 20, 2023

INDIA

- Asia's largest Tulip Garden opens for public at Srinagar in Jammu and Kashmir.
- 2-day Labour20 (L20) engagement group's inception meet, as part of India's G20 presidency, began in Amritsar, Punjab.
- The Centre issued revised guidelines for COVID-19 amid a sudden surge in cases.
- 4th Defence Cooperation Dialogue between India and the Maldives was held in Male.

ECONOMY & CORPORATE

- Switzerland's biggest bank UBS agrees to take over troubled Credit Suisse in emergency rescue deal.
- Dubai-based Emaar becomes the first overseas company to invest in Kashmir.
- Japanese Prime Minister Fumio Kishida arrives in India to explore ways to boost bilateral ties in security, trade and high technologies.

WORLD

- India and World Food Programme sign MoU during Global Millets Conference.
- Governments approve a major new UN report on climate change amid conflict.
- March 20 is being celebrated as the International Day of Happiness.
- UK introduces smartphone emergency alert system for its citizens.

SPORTS

- ISSF World Cup Shooting Championship to begin at Bhopal in Madhya Pradesh.
- Cricket: Australia defeats India by 10 wickets, level 3-match ODI series 1-1.

March 21, 2023

Here are Today's News Headlines by GK Today for March 21, 2023

INDIA

- India has been invited for G7 Hiroshima Summit in Japan.



- Forest cover of Delhi, Chennai, Hyderabad, and Mumbai increased over period of 10 years.
- Second G20 Sustainable Finance Working Group meeting to begin in Udaipur.
- Supreme Court seeks Centre's stand on plea over Telangana Governor delaying Bills.
- Estimated reserve of 5.9 million tonnes of lithium ore found in Salal-Haimna areas of Jammu and Kashmir.

ECONOMY & CORPORATE

- Employees' Provident Fund Organisation (EPFO) has added 14.86 lakh net members in January this year.
- Tamil Nadu Budget announced that women heads of eligible households will be given a monthly honorarium of ₹1,000.
- Indian economy to grow at 7%; inflation set to moderate: Finance Ministry

WORLD

- Bangladesh commissions its first submarine base 'BNS Sheikh Hasina'.
- Nepal-India Literature Festival concludes with adoption of 10-point Biratnagar declaration.
- IMF approves Sri Lanka's bailout program under an Extended Fund Facility.

SPORTS

- Top seed Carlos Alcaraz returns to World No. 1 in the rankings, after beating Daniil Medvedev in the Indian Wells final.
- The 2023 Swiss Open badminton tournament will start in Basel, Switzerland.

March 22, 2023

Here are Today's News Headlines by GK Today for March 22, 2023

INDIA

- Supreme Court seeks data on alternative method of executing prisoners other than death by hanging.
- Tamil Nadu government proposes to implement a Tamil Nadu Millet Mission for five years.
- Ugadi or Yugadi is celebrated as the beginning of the New Year in Andhra Pradesh, Telangana and Karnataka.
- Bihar Diwas 2023 will be celebrated from March 22 – 24 and has a theme of "Yuva Shakti Bihar Ki Pragati"
- ISRO to launch OneWeb India-2 mission from Satish Dhawan Space Centre in Sriharikota.

ECONOMY & CORPORATE

- Over Rs 2.41 lakh crore given to over 11 crore farmers in country under PM-KISAN scheme
- India's Inflation Remains High, But Growth Prospects Positive: RBI Bulletin

WORLD

- 6.6 magnitude earthquake centred in Afghanistan rocked many parts of north India, including the NCR.



- France : Both votes fail- the controversial bill to raise the retirement age from 62 to 64 will become law.
- Twenty sixth edition of 'Elevate' held in Dubai; Six Indian startups participated were winners of the National Startup Awards 2022.
- Japan Prime Minister Kishida visits Bucha, a town near Kyiv, in a 'historic' trip to Ukraine

SPORTS

- Nikhat Zareen (50kg), Nitu Ghanghas (48kg), Manisha Moun (57kg) and Jaismine Lamboria (60kg) advance to quarterfinals of the World women's boxing championships.
- Indian hockey player Rani Rampal became the first woman in the sport to have a stadium named after her — in Rae Bareilly.

March 23, 2023

Here are Today's News Headlines by GK Today for March 23, 2023

INDIA

- Bureau of Indian Standards launches first series of Lesson Plans under Learning Science via Standards.
- Vedic Heritage Portal to be inaugurated by Home Minister; hosted by the Indira Gandhi National Centre for the Arts.
- UImagine Chennai 2023, Asia's largest summit on technology and innovation, to be organised in Chennai.
- IAF participate in Exercise Cobra Warrior in U.K along with air forces of U.K., Finland, Sweden, South Africa, Saudi Arabia, the U.S., and Singapore.
- ISRO: Chandrayaan 3 and the first solar mission Aditya L1 likely to be launched in mid-2023.
- Supreme Court agrees to constitute Special Bench to hear Bilkis Bano's petition.

ECONOMY & CORPORATE

- Delhi government presents Rs. 78,800 crore annual budget for 2023-24 ;dedicated for clean, beautiful and modern Delhi.
- Income tax dept launches mobile app AIS for Taxpayers; to view information as available in the Annual Information Statement (AIS) and Taxpayer Information Summary (TIS).
- G20 Research and Innovation Initiative Gathering under India's Presidency to begin in Assam's Dibrugarh.

WORLD

- March 22, is celebrated as World Water Day, to raise awareness of 2 billion people currently living without access to safe water.
- US Federal Reserve hikes interest rate by 25 basis point to curb inflation despite recent bank failures.
- China and Russia unveiled a broad long-term blueprint for their deepening relations.



- U.S.-Argentine scholar Luis Caffarelli wins Abel Prize for mathematics.

SPORTS

- India's Sarabjot Singh clinches gold medal in men's 10m Air Pistol event at ISSF Rifle & Pistol World Cup.
- Boxing: Lovlina Borgohain, Nitu Ghanghas, Nikhat Zareen and Saweety Boora advanced to the semi-finals in the Women's World Boxing Championships.
- PV Sindhu, Kidambi Srikanth and HS Prannoy advance to second round in Swiss Open tournament.

March 24, 2023

Here are Today's News Headlines by GK Today for March 24, 2023

INDIA

- Tamil Nadu Assembly re-adopts Tamil Nadu Prohibition of Online Gambling and Regulation of Online Games Bill.
- One World TB Summit is being organised by the Ministry of Health and Family Welfare (MoHFW) and Stop TB Partnership, on World Tuberculosis Day.
- One tigress each to be released to Kota's Mukundra Hills Tiger Reserve and Bundi's Ramgarh Vishdhari Tiger Reserve in Rajasthan.
- Madhya Pradesh Chief Minister Shivraj Singh Chouhan unveiled the State Youth Policy and a Youth Portal.
- Konkan 2023, a joint maritime exercise, was conducted between the Royal Navy of Britain and the Indian Navy, off the Konkan coast in the Arabian Sea.
- National Institute of Urban Affairs is organising first Urban Climate Film Festival under U20 engagement events.
- The Defence Ministry signed two contracts with Bharat Electronics Limited (BEL), at a total cost of over ₹3,700 crore for 'Arudhra' Medium Power Radars.

ECONOMY & CORPORATE

- Union Finance ministry asks public sector banks to share bond portfolio data.
- FSIB recommends Siddhartha Mohanty for the position of chairperson of Life Insurance Corporation (LIC).
- Amazon's accelerator programme to support 50 Indian D2C (direct-to-consumer) startups.
- Lok Sabha passes Rs 45 trillion Budget for current fiscal without debate.

WORLD

- Protests intensify in France over government's plan to raise pension age.
- Islamic holy month of Ramzan begins across world; Eid-ul-Fitr is celebrated at the culmination of the fasting month of Ramzan.
- UNESCO report: 26 % of world's population does not have safe drinking water.

SPORTS

- Boxing: Nikhat Zareen, Lovlina Borgohain, Saweety Boora and Nitu Ghanghas have entered the finals in the Women's World Boxing Championships.
- India won a silver and a bronze in the International Shooting Sport Federation (ISSF)



World Cup shooting championship.

- India clinches both men's and women's titles of Asian Kho Kho Championship.

March 25, 2023

Here are Today's News Headlines by GK Today for March 25, 2023

INDIA

- Ujjwala Yojana: Union Cabinet extends subsidy of 200 rupees per cylinder for 12 refills annually for beneficiaries for one year.
- Congress leader Rahul Gandhi disqualified from Lok Sabha after conviction in criminal defamation case.
- Project Himshakti: Defence Ministry signed a contract with Bharat Electronics Limited BEL Hyderabad for the procurement of two Integrated Electronic Warfare Systems.
- Tamil Nadu releases the Tamil Nadu State Disaster Management Plan, 2023.
- Andhra Pradesh passes resolution to provide SC status for Dalit Christians.
- ICMR releases ethical guidelines for AI usage in healthcare
- Karnataka scraps reservation of 4% given to Muslims and distributed it to two dominant communities Veerashaiva-Lingayats and Vokkaligas.

ECONOMY & CORPORATE

- Cabinet approves 4 % hike of Dearness Allowance to Central government employees.
- The first meeting of the Trade and Investment Working Group, under India's G20 Presidency, will be held in Mumbai
- The government has scrapped the long-term capital gains treatment (with indexation benefits) for income from debt mutual funds.
- Government raised the Securities Transaction Tax (STT) on futures and options contracts in the stock market by 25%.

WORLD

- Sri Lanka decides to divest stake in seven state-owned enterprises.
- The U.S. military carried out multiple air strikes in Syria against Iran-aligned groups.
- On World Tuberculosis Day, WHO called for intensified actions to eradicate the disease in the South East Asia region.
- Armenian Prime Minister Nikol Pashinyan announced that there will be a peace treaty between Armenia and Azerbaijan based on joint official statements.

SPORTS

- India's Rudranksh Balasaheb Patil wins bronze medal in 10m Air Rifle event of ISSF World Cup Shooting Championship.

March 26, 2023

Here are Today's News Headlines by GK Today for March 26, 2023

INDIA

- Union Environment Minister Bhupender Yadav launches Aravalli Green Wall Project in Gurugram.
- Indian Space Research Organisation (ISRO) launches LVM3-M3/Onweb India-2 Mission in Sriharikota.



- National Science Centre organizes Innovation Festival to promote passion and aptitude for science and technology.
- Border Roads Organisation (BRO) opens Leh-Manali Highway in a record 138 days
- Parliamentary panel urges govt to frame a comprehensive national EV policy, extend FAME-II incentives by 2 years

ECONOMY & CORPORATE

- IMF sets another condition for crisis-hit Pakistan to revive loan
- MGNREGS wages raised by up to 10.4% for FY24; In absolute terms, the daily wages have been raised in the ₹7-26 range.
- India and US ink MoU on semiconductor supply chain, innovation partnership.
- Lok Sabha passes Finance Bill with key amendments without discussion.

WORLD

- Russian President Vladimir Putin announces plan to station tactical nuclear weapons in Belarus.
- Over 26 persons were killed in a tornado in several towns of Mississippi in US.
- World observes annual Earth Hour to raise awareness about climate change.
- Gordon Moore, co-founder of Intel and creator of Moore's Law, dies at 94.
- UAE Food Bank launches initiative to eradicate food waste and distribute 3 million meals during Ramadan.

SPORTS

- Swiss Open: Indian Men's Doubles pair of Satwiksairaj Rankireddy and Chirag Shetty enter into finals.
- In Women's Premier League Cricket, Delhi Capitals will face Mumbai Indians in the summit clash.

March 27, 2023

Here are Today's News Headlines by GK Today for March 27, 2023

INDIA

- Centre reduces disturbed areas under AFSPA from three North-eastern states of Nagaland, Assam and Manipur.
- Four astronauts selected for India's first Human Space Flight Programme, Gaganyaan completed the first semester of crew training.
- Second Environment and Climate Sustainability Working Group meeting to begin at Gandhinagar.
- First Delhi-Dharamshala-Delhi Indigo Flight was flagged off; 2-phase plan for expansion of Dharamshala airport underway.

ECONOMY & CORPORATE

- India's Net direct tax growth for 2022-23 to slow to 15%; including corporate income tax, personal income tax and the securities transaction tax (STT).
- Union government caps the maximum rate of GST compensation cess on pan masala, cigarettes and other forms of tobacco.

**WORLD**

- Israel's PM Benjamin Netanyahu fires Defence Minister Yoav Gallant, after speech to stop proposed judicial overhaul.
- People joined Hong Kong's first authorised protest since the lifting of major COVID norms under strict rules.
- North Korea test-fires 2 more missiles as U.S. sends carrier; the launches were the North's seventh missile event this month.

SPORTS

- Mumbai Indians lift inaugural Women's Premier League trophy beating Delhi Capitals.
- India wins four gold medals in the Women's World Boxing Championships in New Delhi.
- India's men's doubles badminton pair of Satwiksairaj Rankireddy and Chirag Shetty win Swiss Open Super 300 Badminton doubles title in Basel

March 28, 2023

Here are Today's News Headlines by GK Today for March 28, 2023

INDIA

- Supreme Court issues notice to Gujarat government and Centre in Bilkis Bano case
- Second phase of Bihar's caste-based survey set to begin from April 15; training of field enumerators is underway.
- Punjab and Haryana High Court turns to ChatGPT for view on bail in murder case
- G20 Infrastructure Working Group Summit begins in Visakhapatnam; to be co-chaired by Australia and Brazil.

ECONOMY & CORPORATE

- Parliament approves Union Budget for 2023-24 with Lok Sabha clearing Finance Bill as amended by Rajya Sabha.
- Mahila Samman Savings Certificate to have tenure of two years and would offer an interest rate of 7.5%.
- EPFO raises interest rate to 8.15% for FY23 from 8.1% last year.

WORLD

- Israel PM Benjamin Netanyahu announces suspension of judicial reforms after nationwide protests.
- German defence ministry announces that the first shipment of third-generation Leopard-2 tanks has been sent to Ukraine.
- Foundation of SAARC Writers and Literature (FOSWAL) conferred a special literary award on Bangabandhu Sheikh Mujibur Rahman.
- China's Nio opens trial for high-speed electric-vehicle battery swapping stations.
- Law banning caste-based discrimination comes into effect in US city of Seattle.

SPORTS

- Badminton: Madrid Spain Masters tournament to begin; P.V. Sindhu and Saina Nehwal will lead India's challenge at the BWF Super 300 event.

**March 29, 2023**

Here are Today's News Headlines by GK Today for March 29, 2023

INDIA

- Centre sanctions 800 crore rupees under FAME Scheme Phase -2 for setting up 7,432 public fast charging stations.
- Education Ministry selects 9000 schools for flagship Pradhan Mantri Schools for Rising India scheme.
- National Gallery of Modern Art to organise Spring Fiesta 2023 to celebrate 69 years of Museum.
- The first batch of Agniveers from INS Chilika in Odisha is all set to be inducted into the Indian Navy.

ECONOMY & CORPORATE

- India's overall exports cross all time high of 750 billion US dollars.
- Government estimates that over 341 lakh MT wheat will be procured during Rabi Marketing Season 2023-24.
- International conference on cooperation on trade finance among G20 member countries held in Mumbai.
- The last date for linking PAN and Aadhaar has been extended to 30th June, 2023.

WORLD

- Pakistan government tables bill in Parliament to curb powers of Chief Justice.
- World Bank: Transboundary solutions important to curb air pollution in South Asia.
- Scotland's Parliament confirmed Humza Yousaf as the new First Minister; becomes the youngest First Minister and the first Muslim leader of a government in western Europe.
- Myanmar dissolves Aung San Suu Kyi's National League for Democracy Party.

SPORTS

- India outplays Kyrgyzstan 2-0 and lifts the Tri-nation International Football competition title.
- Messi scores 100th international goal for Argentina.

March 30, 2023

Here are Today's News Headlines by GK Today for March 30, 2023

INDIA

- New India Literacy Programme launched to cover target of 5 crore non-literates in age group of 15 years and above.
- Government identifies 1275 railway stations under Amrit Bharat Station scheme for development of Railway stations.
- The first G20 Disaster Risk Reduction Working Group meeting begins at



Gandhinagar.

- IIT Madras develops pocket-friendly device to detect milk adulteration in 30 seconds.
- National Gallery of Modern Art organizes Spring Fiesta 2023 to celebrate 69 years of museum.
- Ministry of Defence (MoD) signs deal to procure Automated Air Defence Control and Reporting System 'Project Akashteer' for Army and Sarang Electronic Support Measure (ESM) system for Navy.

ECONOMY & CORPORATE

- Centre aims to borrow ₹8.88 lakh cr. for the first half of financial year 2023-24, after consultation with RBI.
- SEBI unveils norms to ensure better disclosures and boost transparency.
- National Payments Corporation of India (NPCI) says "No charge on normal UPI payments"

WORLD

- Death toll from landslide in Ecuador reaches eleven and about sixty people were still missing.
- Saudi Arabia agrees to join Shanghai Cooperation Organisation (SCO) as a dialogue partner.
- Australia creates landmark laws that will make its biggest greenhouse gas polluters reduce their emissions or pay for carbon credits.
- East Europe governments urge tech firms to fight disinformation on their social media platforms.

SPORTS

- Nitu Ghanghas clinches Gold in 48 kg category of the IBA Womens World Boxing Championship
- Indian weightlifters Dhanush and Jyoshna win bronze medals in IWF World Youth Championships

March 31, 2023

Here are Today's News Headlines by GK Today for March 31, 2023

INDIA

- Ministry of Defence signs Rs 19,600 crore contracts for acquisition of 11 Next-Gen Offshore Patrol Vessels and six Next-Gen Missile Vessels for Indian Navy.
- National Maritime Week commences as the National Maritime Day is celebrated on April 5.
- Defence Ministry signs over Rs 9100 crore contracts for Akash Weapon System and Weapon locating Radars.
- Second Sherpa Meet under India's G20 Presidency to begin at Kumarakom, Kerala.

ECONOMY & CORPORATE

- Petroleum and Natural Gas Regulatory Board has introduced implementation of Unified Tariff of Rs 73.93 rupees per MBTU.



- All drugs and food imported for treatment of all rare diseases listed are now fully exempted from basic customs duty.
- Agriculture exports register over 6% rise during April 2022 to January 2023.

WORLD

- Spouses of H-1B Visa holders have been allowed to work in United States.
- Donald Trump has been indicted over hush money by a Manhattan grand jury; becomes first ex-President to be charged with crime

SPORTS

- Madrid Spain Masters tournament: PV Sindhu and Kidambi Srikanth enter quarterfinals.

March 16, 2023

Godlewski's Bunting and the Species Boundary: Important Facts

The family Emberizidae consists of seedeaters with conical bills and is widespread throughout the world. Godlewski's bunting is a species in the Emberizidae family that has an extremely large range, including China, Pakistan, India, Kazakhstan, Mongolia, Myanmar, and Siberia. Ornithologists from Lanzhou University have published a recent study that argued that the northern and southern populations of Godlewski's bunting should be treated as two independent species – *Emberiza cia* and *Emberiza godlewskii*.

Previous Debate on Species Boundary

The species boundary between *Emberiza cia* and *Emberiza godlewskii* has been debated due to the interpretation of morphological variation among geographic populations. Previously, the Godlewski's bunting was considered conspecific to the rock bunting, which is distributed from Central Asia and the western Himalayas through southern Europe to northwestern Africa. However, the species boundary between *Emberiza cia* and *Emberiza godlewskii* has been disputed due to the interpretation of morphological variation among geographic populations.

New Research by Lanzhou University Ornithologists

The new research by Lanzhou University ornithologists reconstructed the phylogenetic relationships of all *Emberiza godlewskii* subspecies across their distribution range. By comparing the morphological measurements and plumage color from all subspecies of the *Emberiza godlewskii*/*Emberiza cia* complex, the researchers delimited the species boundary based on integrative evidence.

New Classification of Godlewski's Bunting

The results of the study show that the species *Emberiza cia* is the sister group of a clade composed of the northern populations of *Emberiza godlewskii*. The southern populations of *Emberiza godlewskii*, known as the subspecies *Emberiza godlewskii yunnanensis* (south rock bunting), should be elevated to species status. *Emberiza yunnanensis* is between 15.1 and 16.5 cm in length, and weighs between 16 and 21 grams. It differs from *Emberiza godlewskii* in having a significantly darker colored belly. The body size of the males is slightly larger than that of the females. *Emberiza yunnanensis* occurs on dry and rocky



hilly slopes, karst forests, and wooded ravines in southwestern China.

Implications of the New Classification

The research provides direct evidence of cryptic species in Old World buntings and suggests that species diversity of birds in East Asia may be underestimated. The new classification of Godlewski's bunting has important implications for conservation efforts as the southern populations of *Emberiza godlewskii* have different ecological requirements and may require different conservation measures than the northern populations.

Fact Sheet: Rapunzel Bacteriophage

Bacteriophages are viruses that infect bacteria and are found everywhere that bacteria exist. They are one of the most abundant and diverse groups of organisms on the planet, and they play a significant role in controlling bacterial populations in various environments. Among them, the P74-26 bacteriophage stands out due to its unique structure and features. A new study has found that this bacteriophage has an extremely long tail.

The 'Rapunzel Bacteriophage'

The P74-26 bacteriophage is also known as the 'Rapunzel bacteriophage' because of its long tail, which is about 10 times longer than that of most bacteriophages. The tail is nearly one micrometer long, which is similar in width to some spider's silk. This tail structure is essential for host recognition and attachment, which are crucial for successful infections.

Stable Phage

Not only does the P74-26 bacteriophage have an extremely long tail, but it is also the most stable phage, allowing it to exist in and infect bacteria that live in hot springs. This makes it unique among phages, as most cannot withstand the extreme temperatures and harsh conditions found in these environments.

Building Blocks

The researchers used high-power imaging techniques and computer simulations to study the structure of the P74-26 bacteriophage. They found that the phage's tail is formed from vertically stacked rings of molecules that make a hollow canal. P74-26 uses a 'ball and socket' mechanism to stabilize itself, where the building blocks of the tail lean on each other to maintain stability.

Lego-like Building Blocks

The building blocks of the P74-26 bacteriophage's tail are comparable to Lego bricks. These building blocks can change shape, or conformation, as they come together, and the shape-changing behavior is critical in allowing the building blocks to fit together correctly. The researchers think that some ancient virus fused its building blocks into one protein, which is why P74-26 uses half the number of building blocks to form stacking rings that make up the tail. This unique feature makes the P74-26 bacteriophage even more fascinating to researchers.



IQAir's Fifth World Air Quality Report: Key Findings

The fifth World Air Quality Report by IQAir shows that India is still facing a severe air pollution crisis. The report revealed that 39 Indian cities were among the world's 50 most polluted cities based on PM2.5 levels in the air. This article will discuss the details of the report and its implications for public health and the environment in India.

Delhi: The most polluted metropolitan city

Delhi was ranked fourth on the list of the world's most polluted cities, and it was also the most polluted metropolitan city in the world. The annual average PM2.5 level in Delhi was 92.6, almost 20 times the safe limit. This high level of air pollution can cause severe health issues like lung cancer, heart disease, and stroke. The primary source of air pollution in Delhi is vehicular emissions, industrial pollution, and construction activities.

Bhiwadi: The most polluted city in India

Bhiwadi in Rajasthan was the most polluted city in India and the third most polluted city in the world with an annual average PM2.5 level of 92.7. The high level of air pollution in Bhiwadi is due to the presence of industries and factories that emit harmful pollutants into the air. The residents of Bhiwadi are at risk of developing respiratory diseases, heart diseases, and cancer.

Other polluted cities in India

Apart from Delhi and Bhiwadi, many other Indian cities dominated the list of the world's most polluted cities. These cities included Patna, Muzzaffarnagar, Dharbanga, Noida, Gurgaon, Bulandshahr, Meerut, Charkhi Dadri, Jind, Ghaziabad, Faridabad, and Hisar. The high levels of air pollution in these cities are primarily due to vehicular emissions, industrial pollution, and burning of agricultural waste.

Decline in pollution levels in Delhi's neighboring towns

According to the report, there was a slight decline in pollution levels in Delhi's neighboring towns of Gurugram, Noida, Ghaziabad, and Faridabad. The decline ranged from 34% in Gurugram to 21% in Faridabad. This is an encouraging sign, but more needs to be done to reduce air pollution levels in these areas.

India's ranking among other countries

Out of 131 countries, India ranked eighth with a population-weighted average PM2.5 level of 53.3 $\mu\text{g}/\text{m}^3$ in 2022. India was preceded by Chad, Iraq, Pakistan, Bahrain, Bangladesh, Burkina Faso, and Kuwait. The annual average for the country in 2022 was slightly lower than the 58.1 $\mu\text{g}/\text{m}^3$ recorded in 2021. Although the slight decline is good news, India still has a long way to go to tackle air pollution and improve public health.

India Venture Capital Report 2023: Important Findings

Bain & Company's annual India Venture Capital Report 2023 reveals that venture capital investments in India saw a decrease in deal value of 33% from \$38.5 billion to \$25.7 billion in 2022. The report highlights macroeconomic uncertainty and recessionary fears as the primary drivers of the decrease in deal value.

Late-Stage Large Deals Affected the Most

Late-stage large deals were affected the most by the decrease in deal value. This could be



attributed to the cautious approach adopted by investors in light of the economic uncertainty. As a result, investors focused on preserving their capital and were more selective with their investments.

Early-Stage Deals Continued to See Momentum

In contrast to late-stage large deals, early-stage deals continued to see momentum in India. This resulted in a slight expansion in deal volume. The report suggests that investors are doubling down on early-stage deal making as they believe this is the best way to capture India's growth potential.

India Outpaced China in Terms of New Unicorns

For the second year in a row, India outpaced China in terms of new unicorns created. This is a significant achievement for India, as it demonstrates its growing reputation as a hub for entrepreneurship and innovation.

Shift to More Democratic Funding Geographically

The report highlights a shift to more democratic funding geographically in India. This means that investors are now looking beyond the traditional hubs of Mumbai and Bangalore and are exploring opportunities in other regions of the country.

SaaS and Fintech Continued to See Momentum in Funding

The report suggests that SaaS and Fintech continued to see momentum in funding in 2022. This is not surprising as these sectors have been growing rapidly in recent years and are expected to continue their growth trajectory in the future.

Emergent Sectors Gained Momentum

The report also highlights the emergence of new sectors in India. Sectors such as EV, Agritech, generative AI, space tech, and climate tech gained momentum in 2022. These sectors are expected to play a significant role in India's future growth story.

Resilient Ecosystem to Emerge in 2023

Despite the challenges faced in 2022, the report predicts that a more resilient ecosystem will emerge in 2023. Investors are expected to continue doubling down on early-stage deal making, and a wider investor base is likely to participate in India's growth.

Q+A: Smart Cities Mission

With the deadline approaching for the Smart Cities Mission in June 2023, the Central Government has urged the poorly performing cities to speed up their projects. These projects were supposed to be completed within 5 years of the city's selection.

What is Smart Cities Mission?

The Smart Cities Mission was launched in India in 2015 by the Union Housing and Urban Affairs Ministry to improve the quality of life in urban areas. The initiative aimed to create cities that are sustainable, efficient, and equipped with modern infrastructure. Under this mission, cities were asked to submit proposals for projects to improve municipal services and make their jurisdictions more liveable. After reviewing proposals, the Ministry selected 100 cities for the mission between January 2016 and June 2018.

What kind of projects are implemented under the Smart Cities Mission?

The project proposals submitted by the cities varied widely, ranging from simple tasks like



making roads more accessible and pedestrian-friendly to capital-intensive ones like laying water pipelines and constructing sewage treatment plants. All 100 cities have also constructed Integrated Command and Control Centres to monitor all security, emergency, and civic services. These centres played a crucial role in the fight against the Covid-19 pandemic, with many cities converting them into emergency response units.

What is the current status of the mission?

As of March 3, the 100 cities have issued work orders for 7,799 projects worth Rs 1.80 lakh crore. Out of these, 5,399 projects worth Rs.1.02 lakh crore have been completed, while the rest are ongoing. However, only around 20 cities are likely to meet the June deadline for completion, with the others needing more time to finish their projects. Cities selected in January and June 2018 have achieved 44% of their targets, while those selected in 2016 in the second round are not much farther ahead with 46% completion.

The government's move to push poorly performing cities to complete their projects

With the deadline for completion fast approaching, the Indian government has urged 20 poorly performing cities to speed up their projects. Among the cities are six from the Northeast, five Union Territories, and three state capitals. These cities have completed the fewest projects under the Smart Cities Mission and are lagging behind others. These cities had been instructed and offered guidance to complete the projects within the stipulated time frame.

McMahon Line and the US' Backing: Important Facts

Recently, two United States Senators, one Republican and one Democrat, introduced a bipartisan resolution in Congress, reaffirming the US's recognition of the McMahon Line as the international boundary between China and India in Arunachal Pradesh. The resolution also supports India's position that Arunachal Pradesh is an integral part of India and condemns China's military aggression to change the status quo along the Line of Actual Control.

In this article, we will explore the significance of this resolution and what it means for the US-India strategic partnership and the Free and Open Indo-Pacific initiative.

The McMahon Line: Background and Significance

The McMahon Line was drawn during the Simla Convention of 1914, which attempted to settle the question of Tibet's sovereignty and avoid further territorial disputes in the region. The line was named after Sir Henry McMahon, who was the British Foreign Secretary in India at the time.

The McMahon Line was drawn as a boundary between British India and Tibet, which was then a part of the Chinese empire. However, China did not recognize the McMahon Line and continued to claim Arunachal Pradesh as part of its territory.

Today, Arunachal Pradesh is an Indian state, and China still claims the region as part of its territory. The region has been a contentious issue between India and China for decades, and tensions have escalated in recent years.

The US-India Strategic Partnership and the Free and Open Indo-Pacific Initiative

The resolution introduced by the two US Senators reaffirms the US's recognition of the



McMahon Line as the international boundary between China and India in Arunachal Pradesh. This move is significant as it shows the US's commitment to supporting India's sovereignty and territorial integrity.

Moreover, the resolution aims to enhance the US-India strategic partnership and the Quad in support of the Free and Open Indo-Pacific initiative. The Free and Open Indo-Pacific initiative is a strategic concept that aims to promote a rules-based order in the Indo-Pacific region and enhance economic, diplomatic, and security ties between the US and its partners in the region.

The resolution condemning China's military aggression in the region is also significant. China's aggressive actions along the Line of Actual Control have destabilized the region and threatened peace and security in the Indo-Pacific. By condemning China's actions, the US is sending a strong message that it will not tolerate any attempt to change the status quo through force or coercion.

Inter-services Organisations (Command, Control and Discipline) Bill: Key Features

The Indian government has introduced a new bill titled 'Inter-services Organisations (Command, Control and Discipline) Bill' in Lok Sabha. The legislation seeks to empower the Commander-in-Chief or the Officer-in-Command of the inter-services organizations to exercise control over all personnel serving under their command, including those belonging to different services. This will streamline disciplinary and administrative actions for personnel belonging to different services, ensuring expeditious disposal of cases and greater integration and jointmanship among the Armed Forces.

Empowering Inter-Services Organizations

The proposed bill proposes the empowerment of the the Heads of Inter-services Organizations to exercise effective command, control, and discipline over all personnel of the regular Air Force, Army, and Navy, including those serving in or attached to an Inter-services Organization, without amending the respective Acts.

This means that the Commander-in-Chief or the Officer-in-Command of the Inter-services Organizations will soon be able to exercise control over all personnel serving under their command, irrespective of their service affiliation. Presently, only officers of the respective services are empowered to exercise disciplinary powers over the service personnel under the respective Service Acts.

Constituting Inter-Services Organizations

The bill will also empower the central government to constitute Inter-services Organizations. Such organizations may include a joint services command comprising units or service personnel from the Air Force, Army, and Navy, which may be placed under the command of the Commander-in-Chief or the Officer-in-Command. The power under the bill will also be available to Inter-services Organizations constituted before the commencement of the new law.

Disciplinary and Administrative Actions

The current system of disciplinary and administrative actions for personnel belonging to different services is time-consuming and has financial implications related to the



movement of personnel. When the proceedings arise from the same set of facts and circumstances but involve personnel belonging to different services, multiple sets of proceedings under the respective Service Acts are required to be initiated, which impedes expeditious disposal of cases, thereby affecting the standard of discipline.

However, the proposed bill will solve this problem, enabling the personnel serving in Inter-services Organizations to be governed by the Heads of Inter-services Organizations. The bill also provides that service personnel will continue to be governed by their respective Service Acts for the purposes of disciplinary or administrative action, if any, when serving in or attached to an Inter-services Organization.

Benefits of the Bill

The government says that the bill will pave the way for various tangible benefits such as expeditious disposal of cases, saving of time and public money by avoiding multiple proceedings, and greater integration and jointmanship among Armed Forces personnel. The bill will streamline the command, control, and discipline of Inter-services Organizations like the Andaman and Nicobar Command or Defence Space Agency and joint training establishments like the National Defence Academy or National Defence College.

Q+A: Rules for Registration and Regulation of Foreign Lawyers and Foreign Law Firms in India, 2022

The Bar Council of India (BCI) has announced new rules for foreign lawyers and law firms to practice law in India. The Rules for Registration and Regulation of Foreign Lawyers and Foreign Law Firms in India, 2022 allows foreign lawyers and law firms to practice law in India on a reciprocity basis. They can establish offices in India and practice transactional and corporate work, such as joint ventures, mergers and acquisitions, intellectual property matters, drafting of contracts, and other related matters on a reciprocal basis.

What are the restrictions provided by the new rules?

Foreign lawyers and law firms cannot appear before any courts, tribunals, or other statutory or regulatory authorities. They can only practice in non-litigious matters. The BCI hopes this move will address concerns over Foreign Direct Investment inflow and make India a hub of international commercial arbitration. To be eligible to practice in India, foreign lawyers must be entitled to practice in their home country and register with the BCI.

What are the implications?

This move by the BCI has been a long time coming, as they had previously opposed the idea of foreign lawyers and law firms practicing law in India. However, this change in stance is expected to have significant implications for the Indian legal landscape. Foreign lawyers and law firms will now have the opportunity to offer their services in India, which will create competition and expose Indian law firms to global best practices.

However, some Indian law firms have expressed concerns about whether foreign law firms would indirectly or in a surrogate manner practice Indian laws. This is where stricter oversight by the BCI would be required to ensure that foreign lawyers and law firms



adhere to Indian laws and regulations.

Green National Highway Corridors Project and the World Bank Loan: Important Facts

India and the World Bank have recently signed a loan agreement to construct 781 kilometers of green highways across four states in India. The project aims to build the Green National Highway Corridors Project in 4 Indian states. The loan assistance of 500 million dollars will be used for the construction of the highways.

The Green National Highway Corridors Project will promote the use of green technologies and climate resilience to demonstrate safe and environmentally friendly highways. The project aims to establish a new standard for sustainable infrastructure in India.

The Project

The Green National Highway Corridors Project is a massive undertaking that aims to construct highways with an aggregate length of 781 km across four Indian states: Himachal Pradesh, Rajasthan, Uttar Pradesh, and Andhra Pradesh. The total project cost is estimated at \$1,288.24 million (Rs 7,662.47 crore), and the World Bank has agreed to provide \$500 million in loan assistance.

The Objectives of the Project

The Green National Highway Corridors Project aims to promote sustainable infrastructure in India. It will showcase the use of clean energy technologies and promote climate resilience for highway construction. The project will also promote the use of electric vehicles and bring down greenhouse gas emissions.

Under this project, highways will be constructed in a way that will reduce the carbon footprint and promote a cleaner environment. They will be designed to reduce the impact of construction on the environment.

The project is expected to transform the highway infrastructure in the country. It will also provide a boost to the Indian economy by generating employment and increasing trade and commerce.

Local/Marginal Material

One of the important aspects of the project is the use of local or marginal materials, such as lime, fly ash, waste plastic, and bio-engineering measures for slope protection. These materials will not only reduce the cost of construction but will also minimize the environmental impact of the project. Additionally, hydroseeding, coco/jute fiber, and other measures will be used for slope protection, which will help to prevent soil erosion.

Fact Sheet: IBA Women's World Boxing Championships 2023

India's Youth Affairs and Sports Minister, Anurag Singh Thakur, inaugurated the 13th IBA Women's World Boxing Championships in New Delhi, marking the beginning of a much-awaited event in the world of boxing. The tournament, hosted by the Boxing Federation of India, will take place from March 16 to 26, with a total prize fund of \$2.4 million.

The IBA Women's World Boxing Championships is one of the most prestigious events in the world of boxing, and the fact that India is hosting it is a testament to the growing popularity of the sport in the country.



Indian Boxers Ready for the Challenge

India has fielded a strong contingent for the tournament, with Nikhat Zareen, Lovlina Borgohain, Saweety Boora, and Preeti all set to participate in the event. These boxers have been in impressive form recently and will be looking to make a mark in the competition. They will, however, face stiff competition from some of the world's best boxers, including several Olympic medallists.

The Opening Ceremony

The opening ceremony of the tournament was held on March 15, with the tournament's brand ambassador, MC Mary Kom, and Bollywood star Farhan Akhtar in attendance. The event was a grand affair, with dancers and musicians putting up spectacular performances that kept the audience enthralled.

The Tournament Format

The event will see 324 boxers from 65 countries compete in 12 weight categories. The tournament follows a knockout format, with each bout consisting of three rounds of three minutes each. The winner of each bout will proceed to the next round, with the ultimate aim of reaching the finals and winning the championship.

The Impact of the Event

The IBA Women's World Boxing Championships is not just a major sporting event but also has a significant social impact. The tournament provides a platform for women boxers from across the globe to showcase their talent and inspire young girls to take up the sport. It is also a great opportunity for India to showcase its sporting infrastructure and organizational capabilities to the world.

Cyclone Freddy: Important Facts About the Deadly Tropical Cyclone

In February and March 2023, the world witnessed the remarkable persistence of a tropical cyclone named Freddy. The storm crossed the Indian Ocean over a span of more than five weeks, causing severe damage and destruction in its path. Freddy was classified as the fourth named storm of the 2022-23 Australian region cyclone season and the second very intense tropical cyclone of the 2022-23 South-West Indian Ocean cyclone season. It caused deaths of over hundreds of people. Let's take a closer look at this deadly storm.

Formation and Intensification

Freddy emerged as a disturbance within the monsoon trough in the Australian region cyclone basin. The storm quickly intensified into a Category 4 severe tropical cyclone, causing significant damage and destruction in its path. As Freddy moved into the South-West Indian Ocean basin, it intensified even further, becoming a very intense tropical cyclone. The storm's wind speeds reached 155 mph, equivalent to a Category 5 hurricane on the Saffir-Simpson scale.

Landfalls and Impacts

Freddy made two landfalls in Madagascar and Mozambique, respectively, before eventually dissipating over Mozambique on 15 March. The storm's impacts were severe, causing catastrophic flash floods in Malawi, widespread infrastructure damage in Mozambique, and leaving millions at risk for food insecurity. The death toll from the storm



rose to at least 307 people in Malawi, Mozambique, Madagascar, and Zimbabwe. Freddy is believed to be one of the deadliest storms to hit the continent in the last two decades.

Climate Change and Freddy's Intensity

Meteorologists suggest that climate change contributed to the intensity of Freddy. As the global temperature continues to rise, warmer ocean temperatures fuel the intensity of tropical storms and hurricanes. Warmer oceans mean more energy for storms, making them more intense and more damaging. The increasing intensity of storms due to climate change puts vulnerable communities at greater risk, causing catastrophic damage to infrastructure, homes, and lives.

SCO Summit on 'Collaboration In Sports and Physical Fitness': Key Outcomes

The recently concluded three-day summit on "Collaboration in Sports and Physical Fitness" brought together delegates from eight Shanghai Cooperation Organization (SCO) nations in New Delhi. The summit aimed to explore opportunities for collaboration in the field of sports and physical fitness and to strengthen the common commitment to sports.

Ministerial Meeting

The ministerial meeting, chaired by Youth Affairs and Sports Minister Anurag Singh Thakur, was a crucial part of the summit. The Minister emphasized the importance of collaboration between SCO nations in the field of sports to build a common platform and strengthen a common commitment to sports. He added that using the expertise of each member nation to build a common platform will strengthen the commitment to sports. He also reiterated Prime Minister Narendra Modi's vision of making sports a guiding force behind India and making the country an evolving sporting nation.

Participants

The summit was attended by representatives of six nations, including Kazakhstan, Kyrgyzstan, Russia, Uzbekistan, India, and Pakistan, who participated in the discussions in person. Representatives from China and Tajikistan participated virtually.

Collaboration in Sports and Physical Fitness

The summit was organized to explore opportunities for collaboration in the field of sports and physical fitness. The discussions revolved around a wide array of subjects, including training and development programs, sports science, sports medicine, anti-doping measures, and capacity building.

The delegates discussed ways to encourage sports tourism and promote sports among women and youth. They also exchanged ideas on organizing sports events and competitions and discussed the importance of sports diplomacy in promoting peace and harmony between nations.

Meghalaya International Film Festival: Important Facts

The Meghalaya International Film Festival (Megh IFF) began on March 14 in Shillong, the capital of Meghalaya, India. The five-day event is the first-ever film festival in the state and is being held at the State Central Library.

The inaugural ceremony was graced by the Meghalaya Tourism Minister, Paul Lyngdoh, who inaugurated the festival. Actor Adil Hussain was also present as a special guest.



State-of-the-Art Cinema Halls

During the event, the tourism minister emphasized that the government is committed to setting up state-of-the-art cinema halls, which will further boost the film industry in the state. The government's support for the film industry is expected to provide opportunities for local filmmakers and attract more filmmakers to Meghalaya.

Jointly Organized by MeFilma and the Tourism Department

The Meghalaya International Film Festival is an initiative of the Meghalaya Filmmakers' Association (MeFilma). The MeFilma organized it in collaboration with the tourism department of the northeastern state. The festival aims to create a film culture in Meghalaya, especially among its youth.

Over 5,000 Viewers Expected

Around 40 films will be screened during the event across four venues. The festival is expected to attract over 5,000 viewers from across the country and guest countries. The festival's closing ceremony is scheduled to take place on March 18 at the same venue.

Attracting Visitors to Meghalaya

The Meghalaya International Film Festival is expected to help attract more visitors to the state. With its scenic beauty, unique culture, and potential for adventure tourism, Meghalaya has a lot to offer visitors. The film festival will provide a platform for filmmakers to showcase the beauty of Meghalaya to a wider audience.

What is GPT-4?

OpenAI has made a major announcement that has generated a lot of buzz in the artificial intelligence (AI) community. The company has unveiled its latest creation, GPT-4, a large multimodal model that can process both text and image inputs. This new language model is an upgrade from its predecessor, GPT-3, which was already groundbreaking in its own right.

Greater Accuracy and Human-level Performance

GPT-4 has been designed to solve difficult problems with greater accuracy and demonstrate human-level performance on various professional and academic benchmarks. The language model is so powerful that it can pass a simulated bar exam with a score that places it around the top 10% of test-takers. Additionally, GPT-4 can answer complex tax-related questions, schedule a meeting among three busy people, or even learn a user's creative writing style.

Handling Over 25,000 Words of Text

GPT-4 has an impressive capacity to handle over 25,000 words of text. This is a significant improvement from GPT-3, which could only handle up to 2,048 words of text. This capacity makes it ideal for processing long-form content such as research papers, books, and even legal documents.

Understanding Languages that are Not English

One of the most exciting features of GPT-4 is its ability to understand languages that are not English. This makes it an ideal language model for processing texts in languages such as Chinese, Arabic, and French, among others. This feature is a significant improvement



from GPT-3, which was mainly designed to handle English texts.

Potential Applications of GPT-4

The potential applications of GPT-4 are numerous, and the technology has the potential to transform various industries. For instance, GPT-4 can be used in the legal industry to process legal documents and contracts, which can save time and increase efficiency. Additionally, the language model can be used in the medical field to process medical records and help doctors diagnose diseases accurately.

Fact Sheet: Sea Dragon 23

The Sea Dragon 23 exercise is a biennial coordinated multilateral anti-submarine warfare (ASW) exercise for long-range maritime reconnaissance aircraft. The exercise is hosted by the United States Navy, and it involves the participation of other friendly navies from Japan, Canada, South Korea, and India. The exercise aims to achieve high levels of synergy and coordination between the participating countries based on their shared values and commitment to an open, inclusive Indo-Pacific. It is being held from March 15 to 30 this year. This is the third edition of the Sea Dragon Exercise, which was held for the first time in 2015.

The Objectives of the Exercise

The exercise's primary objective is to improve coordination among participating countries in the multilateral anti-submarine warfare drills. The exercise will include advanced ASW drills and simulated scenarios that will test the participating aircraft's capabilities in detecting and tracking underwater targets. The exercise also aims to foster mutual expertise and knowledge sharing among the participating countries.

About P8I Aircraft

The P8I aircraft is a long-range maritime reconnaissance aircraft equipped with advanced sensors, radars, and anti-submarine warfare capabilities. The aircraft is designed to detect, track, and engage enemy submarines and other maritime threats. It is currently participating in the Sea Dragon 23 exercise. During the multilateral exercise, the P8I aircraft will participate in advanced ASW drills, including tracking simulated and live underwater targets.

Other Participating Aircraft

Aside from the P8I aircraft, other participating aircraft in the Sea Dragon 23 exercise include the P8A of the US Navy, P1 from the Japanese Maritime Self Defence Force, CP 140 from the Royal Canadian Air Force, and P3C from the Republic of Korea Navy. The participation of these aircraft highlights the importance of international cooperation and coordination in addressing common security challenges in the Indo-Pacific region.

Trophies in Memory of Gen. Bipin Rawat: Important Facts

The Indian Navy has recently announced that it will honor the memory of the late General Bipin Rawat, the India's first Chief of Defence Staff, by introducing two awards in his name. The Navy made the announcement on the eve of the late General's 65th birth anniversary. The awards will be presented to deserving individuals who demonstrate outstanding achievements in their respective fields.



The Awards

The first award, the Gen. Bipin Rawat rolling trophy, will be presented to the 'Women Agniveer Trainee standing first in overall order of merit'. This award recognizes the outstanding achievements of women in the military and is a testament to the Navy's commitment to promoting gender equality in the armed forces. The second award is the Gen. Bipin Rawat's rolling trophy for the 'Most Spirited Officer' undergoing the Naval higher command course at the Naval War College in Goa. This award recognizes the outstanding performance of officers undergoing training and is intended to motivate and inspire them to continue striving for excellence.

Gen. Rawat's Legacy

Gen. Rawat was a visionary leader and a military reformer, known for his professionalism, principles, conviction, and decisiveness. His contributions to the Indian military spanned over four decades and were remarkable in all spheres of military and national security affairs. As India's first Chief of Defence Staff, Gen. Rawat was instrumental in introducing path-breaking transformational initiatives and promoting civil-military synergy.

The Navy's Tribute

The Indian Navy's decision to institute two awards in Gen. Rawat's honor reflects the high regard in which he is held by the armed forces and the Indian people. The awards will serve as a fitting tribute to a visionary leader who made significant contributions to India's military and national security affairs. The first trophy for the current year will be presented by Chief of the Naval Staff Admiral R. Hari Kumar during the 'Passing Out Parade' of the first batch of Navy Agniveers on March 28 at the Navy's premier sailors training center INS Chilka.

Q+A: UN's List of Least Developed Countries (LDCs) and Bhutan's Graduation

Bhutan, a landlocked country in South Asia, is set to be removed from the LDC list on December 13, 2023, becoming the seventh country to graduate from the list. Bhutan's graduation was announced by the United Nations General Assembly in 2018, based on its sustainable development efforts, including poverty reduction, education, healthcare, and gender equality. This graduation is a significant milestone for Bhutan, as it represents the country's progress in terms of economic and human development.

What is the LDCs List?

The Least Developed Countries (LDCs) list was established in 1971 by the United Nations with the purpose of identifying and supporting the world's poorest and most vulnerable countries. The list includes 46 countries that are categorized based on their income levels, human development indicators, and economic vulnerability. These countries face significant challenges in terms of economic development, including low levels of infrastructure, limited access to financial markets, and a high incidence of poverty.

What are the benefits of graduating from LDC List?

Bhutan's graduation from the LDC list is expected to have several benefits for the country, including increased access to international financial markets, greater foreign direct investment, and improved trade opportunities. It is also expected to boost Bhutan's



international image and attract more tourists to the country, which is known for its natural beauty and unique culture. The graduation also highlights the importance of sustainable development and good governance in achieving economic growth and reducing poverty.

What are the challenges faced by LDCs?

While Bhutan's graduation from the LDC list is a positive development, it also highlights the challenges faced by other countries on the list. The LDCs account for 13 percent of the global population, but they contribute to just 1.3 percent of the global GDP and less than 1 percent of the global trade and foreign direct investment. This indicates that the LDCs are facing significant economic and development challenges that need to be addressed.

Some of the countries on the LDC list, such as Burkina Faso, Senegal, Rwanda, Haiti, Nepal, and Solomon Islands, are among the poorest in the world, with high levels of poverty, limited access to education and healthcare, and inadequate infrastructure. These countries also face challenges such as political instability, conflict, and climate change, which further exacerbate their economic and social challenges.

Fact Sheet: Bathinda Fort

India is a land of diverse cultural heritage, where the remnants of the past still stand tall and proud, bearing testimony to the country's rich history. One such iconic structure is the Bathinda Fort in Punjab, believed to be the oldest surviving fort in the country. The fort, which dates back to over 1,600 years, is currently undergoing repairs and restoration to preserve its legacy for future generations.

History of Bathinda Fort

The Bathinda Fort has a rich history that dates back to the Kushan era in 100 AD. The fort is believed to have been constructed by Bhatti Rajput rulers during the 6th century. The fort has seen many rulers and empires come and go, including the Guptas, Huns, Mughals, and British, each of whom left their mark on the structure. The fort's walls, made of clay bricks, are 10 to 12 feet thick, with several bastions spread across the complex. The fort covers an area of about 6 acres, and its main entrance is called the Delhi Gate.

Challenges Faced by the Fort

The Bathinda Fort has faced several challenges over the years. Due to its age, several bastions have collapsed in recent years, posing a threat to the overall structure's stability. Additionally, the Covid-19 pandemic halted repair work for two years, causing further damage to the fort's walls and structures.

Restoration Efforts by the Archaeological Survey of India

To preserve the fort's legacy, the Archaeological Survey of India (ASI) has taken up the task of restoring and repairing the structure. A team of 30 to 40 experts is currently working on the project, using traditional building techniques to maintain the fort's original character. The ASI has also ensured that the repair work does not damage the fort's original structure or cause any harm to the environment.

Bathinda Fort: A Popular Tourist Destination

The Bathinda Fort is a popular tourist destination, with more than 4,000 to 5,000 visitors daily. The Gurdwara Qila Mubarak, built in the early 19th century to commemorate the



visit of Guru Gobind Singh, is also located within the fort complex, adding to its religious and cultural importance.

Preserving India's Rich Cultural Heritage

The restoration of the Bathinda Fort is an excellent example of how India is working to preserve its rich cultural heritage for future generations. By investing in the repair and restoration of iconic structures like the Bathinda Fort, India can showcase its rich history and culture to the world. It also ensures that future generations can explore and learn from the past, keeping the country's cultural legacy alive for years to come.

HAL Cheetah: Important Facts

An HAL Cheetah helicopter crashed near Mandala in Arunachal Pradesh, India, with a search operation underway for the two pilots on board. The cause of the crash is currently unknown, but the Indian Army has launched a search operation to locate the pilots and investigate the incident.

Designed for High Altitude and Hot Tropical Conditions

The Cheetah helicopter is a licence-built version of the French Aérospatiale SA 315B Lama and was designed to operate in high altitude and hot tropical conditions. It was primarily used for reconnaissance and surveillance missions by the Indian Army, but also served other roles such as medical evacuation and transportation of personnel and supplies.

Ageing and High-Maintenance Aircraft

Despite its exceptional performance, the Cheetah has become an ageing and high-maintenance aircraft, with its airworthiness repeatedly questioned due to incidents and a lack of spare parts. The Indian Army has been working to keep the Cheetah operational for years, but its age and increasing maintenance costs have made it a difficult aircraft to maintain.

Integral to the Indian Armed Forces

Despite its limitations, the Cheetah remains integral to the Indian armed forces, which have yet to find a better alternative. The Cheetah has been in service with the Indian Army since the 1970s and has served in various conflicts, including the Kargil War in 1999. Its reliability and versatility have made it a valuable asset to the Indian military, but the time has come for a replacement.

Development of a Light Utility Helicopter

HAL, the manufacturer of the Cheetah, is currently developing a Light Utility Helicopter to eventually replace the Cheetah. The Light Utility Helicopter is a 5.5-tonne class helicopter that is expected to enter service in the coming years. It is designed to operate in high altitude and hot tropical conditions and will be capable of performing a variety of roles, including reconnaissance, surveillance, medical evacuation, and transportation of personnel and supplies.

Zojila Pass and its Reopening: Important Facts

The Border Roads Organisation (BRO) has reopened the Himalayan Zojila Pass ahead of the usual schedule. This article provides a comprehensive overview of the reopening of the pass and its importance.



Significance of Zojila Pass

The Zojila Pass is a strategic link between Ladakh and Kashmir. It is the only road link that connects the Ladakh region to the rest of India. The pass is critical for the Indian Armed Forces' operational preparedness in the region. The reopening of the pass will also help ease the transportation of essential supplies and trade between Ladakh and Kashmir.

The Closure of Zojila Pass

The Zojila Pass was closed for the past few months due to heavy snowfall. The closure led to the disruption of trade and supply flow between Ladakh and Kashmir. It also hampered the Indian Armed Forces' operational preparedness in the region.

Snow Clearance Activities

The snow clearance activities were undertaken by Project Beacon and Vijayak, situated in Jammu and Kashmir and Ladakh respectively. The BRO personnel worked tirelessly to clear the snow and debris from the road. They used advanced snow-cutting machines and other equipment to clear the snow.

Comparative Analysis

The Zojila Pass remained closed for just 68 days this year, compared to the last year's 73 days of closure and 160 to 180 days in yesteryears. The BRO's efforts in clearing the snow have helped in reducing the closure period of the pass.

Challenges Faced by BRO

The BRO personnel face several challenges while clearing the snow from the pass. The region experiences heavy snowfall, and the temperature drops to sub-zero levels. The personnel have to work in extreme weather conditions and difficult terrain. The lack of communication facilities and medical facilities in the region also poses a challenge to the BRO personnel.

Golconda Fort: Important Facts and Challenges It Faces

Golconda Fort, located on the outskirts of Hyderabad, Telangana, is a historically significant fortress that dates back to the 11th century. Built by Kakatiya ruler Pratāparudra using mud walls, the fort was later handed over to the Bahmani Kings by Deo Rai, Rajah of Warangal, and subsequently became the capital of the Golconda Sultanate. Because of its proximity to diamond mines, including the Kollur Mine, the city became a center of trade for large diamonds known as Golconda Diamonds. The fort complex is currently in the UNESCO's tentative list to become a World Heritage Site. Despite its historical importance, the fort is currently abandoned and in ruins.

Golf Course Controversy

Recently, the Archaeological Survey of India (ASI) has been in a dispute with the Hyderabad Golf Club (HGC) over the use of the Naya Qila precinct, a protected monument within the Golconda Fort. The HGC has been accused of violating an agreement with the ASI to expand the golf course without altering the contours or using earthmovers. However, the HGC has reportedly violated these terms, prompting increased ASI patrolling of the site. The ASI has also constructed an interpretation center to highlight the importance of the chahar-bagh garden plan during the Qutb Shahi era.



Development Alters Importance of Site

The most recent expansion of the golf course has caused concerns as dumping of debris behind the Bagh-e-Naya Qila garden is destroying the remaining archaeological value of the national monument. This latest development could alter the significance of the site and its potential inclusion on the UNESCO World Heritage Site list.

Venus' Volcanoes: Important Facts

Venus and Earth are often compared as sister planets, having similarities in size, mass, density, and volume. Now, a recent study has shown that Venus might share another feature with Earth – active volcanoes. Using decades-old radar images from the Magellan mission, researchers from the University of Alaska Fairbanks and the Jet Propulsion Laboratory of the California Institute of Technology have found evidence of volcanic activity on Venus.

Volcanic Activity on Venus

The study showed that a 2.2 square kilometre volcanic vent on Venus had changed shape in eight months, indicating volcanic activity. A volcanic vent is a spot through which molten rock erupts. Comparison showed that the vent almost doubled in size to a 4 sq km blob. The vent is located in a region where volcanic activity was thought to be most likely. This region is associated with Maat Mons, Venus' second-highest volcano, situated in the Atla Regio, a vast highland region near Venus' equator. The researchers speculated that Venus is less volcanically active than Jupiter's moon Io, which has over 100 active spots. However, the finding hints at the possibility of volcanic activity on Venus.

Magellan Mission

The Magellan mission was launched by the United States National Aeronautics and Space Administration (NASA) in May 1989 and operated until October 1994. It used radar imaging to take images of Venus' surface from different orbits. A few locations, including those suspected to have volcanic activity, were observed two or three times over two years. Roughly 42 per cent of the global surface area was imaged two or more times, according to the researchers.

Three missions are being planned to Venus, including NASA's VERITAS and DAVINCI and the European Space Agency's EnVision, which are expected to observe our neighbour in the 2030s. The Indian Space Research Organisation is also working on Shukrayaan-1 to study Venus. These missions are expected to provide further insight into the enigmatic world of Venus.

Implications of the Findings

The study's finding suggests that Venus might have active volcanoes, which could have implications for understanding the planet's geological history and characteristics. It could also shed light on the possibility of extraterrestrial life on Venus. Recently, a study showed that Venus might have microbial life in its atmosphere.

Q+A: National Vaccination Day

National Vaccination Day, also known as Immunization Day or Polio Ravivar, is an annual event celebrated in India on March 16th. The day holds significant importance in India's



public health calendar, as it promotes vaccination campaigns and raises awareness about the importance of vaccines in preventing infectious diseases. In this article, we will explore the history and significance of National Vaccination Day and the ongoing efforts to ensure full immunization in India.

When was National Vaccine Day first observed?

The first National Vaccination Day was celebrated in India in 1995 to eradicate polio from the country. At that time, polio was a major public health concern in India, with thousands of children being affected every year. Since then, National Vaccination Day has become an essential event in India's public health calendar.

Why is this day significant?

On this day, the Indian government and various organizations conduct vaccination drives across the country to immunize children and adults against various diseases. The primary focus is on providing vaccines to those who may have missed their scheduled immunizations. National Vaccination Day is also an opportunity to educate people about the benefits of vaccination and dispel any myths or misconceptions about vaccines. Through awareness campaigns, the public is made aware of the importance of timely and complete immunization to prevent the spread of diseases.

What is the purpose of Mission Indradhanush?

The government of India launched Mission Indradhanush in 2014 to ensure full immunization with all available vaccines for children up to two years of age and pregnant women. Mission Indradhanush provides vaccination against diseases such as Diphtheria, Whooping Cough, Tetanus, Polio, Tuberculosis, Hepatitis B, Meningitis and Pneumonia, Haemophilus Influenzae Type B infections, Japanese Encephalitis (JE), Rotavirus, Pneumococcal Conjugate Vaccine (PCV), and Measles-Rubella (MR). India is moving towards the eradication of measles and rubella and has set a target of 2023 for covering children and pregnant women. Measles kills more than 1 lakh children globally, and Rubella causes birth defects. Both can be prevented by Vaccines.

Importance in the COVID-19 pandemic

In recent years, National Vaccination Day has gained even more significance due to the COVID-19 pandemic. The Indian government has been promoting vaccination campaigns to protect the population from the virus and prevent the spread of the disease. Vaccines have been shown to be effective in preventing severe illness and hospitalization due to COVID-19. The Indian government has launched a nationwide COVID-19 vaccination drive and has administered millions of vaccine doses across the country.

What is Ernie Bot?

Baidu, the Chinese search giant, introduced its new chatbot, Ernie Bot, in a pre-recorded video presentation on Thursday. This unveiling came as competition to the Microsoft-backed ChatGPT and other similar chatbots. Ernie Bot, which stands for "Enhanced Representation of Knowledge Integration," is still in development but was presented due to high demand.



Development of Ernie Bot

Baidu CEO Robin Li mentioned that the first version of Ernie Bot was developed in 2019, and it is the result of many years of hard work. The company has invested in artificial intelligence for over a decade and has shifted its focus to AI applications, including autonomous driving technology. Ernie Bot is expected to be used in various applications such as searches, AI cloud, autonomous driving, and smart devices.

Ernie Bot's Functionality

During the demonstration, Ernie Bot was asked questions related to a Chinese science-fiction novel, "The Three-Body Problem," and was requested to create an image based on prompts. According to Li, 650 companies have signed up to use Ernie Bot, and it can be implemented in various applications.

Competition with ChatGPT and other chatbots

The launch of Ernie Bot comes a few months after OpenAI's ChatGPT was introduced. ChatGPT can answer questions and even write essays, demonstrating its AI-chatbot capabilities. Many other Chinese companies are also developing similar chatbots, indicating the competition in the market.

Baidu's Investment in Artificial Intelligence

Baidu spent 23.3 billion yuan (\$3.4 billion) on research and development, equivalent to about a fifth of its revenue, in the 2022 fiscal year. The company is known for its search engine in China, but it has shifted its focus to artificial intelligence, including developing autonomous driving technology and other AI applications.

March 17, 2023

Global Bottled Water Industry: A Review of Impacts and Trends

The global bottled water industry has experienced meteoric growth in the last 50 years, becoming a major economic sector. The United Nations University Institute of Water Environment and Health and McMaster University have released a report titled "Global Bottled Water Industry: A Review of Impacts and Trends: Important Findings." According to the report, the growth of the industry is masking a significant global problem – the failure of public systems to provide reliable drinking water for all.

Impact of the Bottled Water Industry

The expansion of the bottled water industry hinders progress towards achieving the key Sustainable Development Goal of providing reliable drinking water. The report notes that the industry's growth adversely affects investments and the role of the state in developing and improving long-term public water supply infrastructure. Investments that could have gone towards improving public water systems are diverted towards the bottled water industry, resulting in limited progress in providing clean and reliable water to those who need it most. The report suggests that half of what the world spends on bottled water each year could provide clean water to millions of people without it.

Water Depletion

The report also highlights the industry's high consumption of water and the depletion of groundwater sources. The primary source of water bottled globally is groundwater, which



is a precious resource. The report cites examples of the industry extracting groundwater in the United States and France, resulting in depletion of natural recharge. Over two billion people worldwide rely on groundwater as their primary water source. The report notes that in some areas, the amount of groundwater extracted exceeds the amount naturally recharged, leading to groundwater depletion. It further states that fifteen percent of all extracted groundwater is non-renewable. Global groundwater depletion has varied between 56 to 362 cubic kilometers per year over the last three decades.

Bottled Water Industry in Different Regions

The Asia-Pacific region constitutes about half of the global bottled water market, and the Global South countries together make up about 60 percent. The United States, China, and Indonesia combined make up half of the global market, with Germany being the biggest market in Europe, Mexico in the Latin America and the Caribbean region, and South Africa in Africa. Singapore and Australia stand out as the leaders in both annual revenue and volume of bottled water sold per capita, with the USA and China per capita indicators being much smaller.

What is TV-D1?

The first test vehicle demonstration (TV-D1) under the Gaganyaan mission will be conducted on May 2023. It aims to test the abort process mid-air, the parachute system, and the recovery of crew members after splashdown. The demonstration involves using single liquid propellant-based rocket stage to carry the crew module to a sub-orbital level. This success of this demonstration will bring Gaganyaan mission an inch closer to the goal of sending humans to space.

Additional Demonstrations and Crewed Missions

The uncrewed mission will only take place after the success of two such demonstrations. Two more test vehicle demonstrations will follow before the second uncrewed mission, which will carry a pressurized crew module. The first crewed mission has been scheduled for late 2024 or early 2025, but its timeline will depend on the success of these tests.

Gaganyaan Advisory Council's Recommendation

The Gaganyaan Advisory Council has recommended additional testing for the Crew Escape System and deceleration systems through four abort missions using Test Vehicle (TV) and Integrated Air Drop Tests before proceeding with crewed missions. This was in addition to the two uncrewed missions that were originally planned.

Testing Procedures

The TV-D1 is designed to test the processes for aborting the mission mid-air, the parachute system that will bring the crew module down to sea, and the recovery of crew members from the module after splashdown. The demonstration will use a single liquid propellant-based rocket stage to carry the crew module to sub-orbital level.

Importance of TV-D1

The test vehicle demonstration is an essential step in the Gaganyaan mission's progress. The TV-D1 aims to test the safety and reliability of the spacecraft and its systems, including the escape mechanism, at a much higher altitude than before. The TV-D1's success will



pave the way for further testing and the eventual crewed mission.

Fact Sheet: Saudi-Iran Détente

China's recent announcement of the Saudi-Iran détente in West Asia has been viewed as a strategic move aimed at securing long-term economic interests and establishing political influence in the region. This deal is set to rival the traditional role played by the United States in the area and has far-reaching implications for global politics.

Low-risk, high-impact opportunity for China

China sees the Saudi-Iran détente as a "low-risk, high-impact" opportunity to establish its diplomatic and political credentials in West Asia. This is a region where China has high economic stakes, and the normalization of relations between Saudi Arabia and Iran presents a unique chance for China to expand its influence in the area. With this move, China hopes to establish itself as a key mediator in the region and a force to be reckoned with in global politics.

Economic interests at stake

China's interest in the Saudi-Iran détente is largely driven by economic considerations. The region is home to some of the world's largest oil reserves, and China is heavily dependent on these reserves to fuel its growing economy. The peace between Saudi Arabia and Iran has the potential to stabilize the oil market and ensure a steady supply of oil to China. In addition to oil, China also has significant investments in infrastructure projects in the region and is keen to protect these investments.

Establishing political influence

The deal presents an opportunity for China to establish its political influence in the region, something it has been striving for in recent years. By playing a key role in the normalization of relations between Saudi Arabia and Iran, China hopes to establish itself as a mediator in the region and a key player in global politics. This move also allows China to challenge the traditional role played by the United States in the area and assert its dominance in a region that has long been under the influence of Western powers.

Implications for global politics

The Saudi-Iran détente has far-reaching implications for global politics, and China's involvement in the deal is set to further complicate an already complex situation. The normalization of relations between Saudi Arabia and Iran has the potential to reshape the balance of power in the region and impact the ongoing conflicts in Syria, Yemen, and Iraq. With China now involved in the deal, it adds another layer of complexity to an already complicated situation.

MiG-29 Fighter Jet and Its Delivery to Ukraine: Important Facts

Poland recently announced the delivery of four MiG-29 fighter jets to Ukraine, making it the first North Atlantic Treaty Organization (NATO) country to do so. The move is seen as a significant step towards military backing for Ukraine in its ongoing conflict with Russia.

A Brief History of MiG-29 Fighter Jets

The MiG-29 fighter jet is a single-seat twin-engine air-to-air fighter used for conducting ground attacks. It belongs to a family of Soviet military fighter aircraft developed by a



design bureau founded by Artem Mikoyan and Mikhail Gurevich in 1939. The fighter jet was first introduced in 1983.

Poland's Delivery of Fighter Jets to Ukraine

The Polish president, Andrzej Duda, announced the delivery of the MiG-29 fighter jets, which were inherited from East Germany after the fall of the Berlin Wall. The MiGs are coming to the end of their working lives after 30 years but are still in working order. Currently, more Polish MiGs were being serviced and repaired in preparation for being handed to Ukraine. In all, Poland has 28 MiG-29s, which are to be replaced over the next few years by South Korean FA-50s and US F-35s.

Until now, Ukraine's backers in NATO have only provided spare parts for its fleet of Soviet-era warplanes, amid fears that delivering functioning planes to Ukraine would be seen by Moscow as direct participation in the war. A year ago, Poland offered to hand over all its MiGs to the US at its airbase in Ramstein, Germany, so they could be passed on to Ukraine, but Washington rejected the plan.

Other NATO Members' Response

Slovakia, Finland, and the Netherlands have all said they would consider supplying Ukraine with warplanes. The US and UK have so far refused to supply their F-16s and Typhoon combat aircraft respectively, on the grounds that they require too much training, ground support, and long, smooth runways to be of any short-term help to Ukraine. However, the UK has offered to provide air cover for any eastern European country willing to supply Kyiv with Soviet-era jets.

Some European countries have adopted a policy of ambiguity over what they might provide if Russia sustains its war in Ukraine over the long term. The experience of the last 12 months is that what was considered impossible, too dangerous, potentially escalatory, useless in terms of Ukrainian needs, and so on has proven to be absolutely necessary and urgent a few months later.

Ukraine's Counteroffensive

Ukraine is expected to attempt to make a military breakthrough in the spring and summer and is trying to build a well-equipped force with western-trained recruits and western-supplied weapons. But deliveries of Leopard tanks and other equipment have been slower than Kyiv had hoped, and its army has lost many of its experienced soldiers in the battle of attrition under way on the eastern front. The supply of fighter jets would accelerate the liberation of Ukrainian territory.

What is East African Rift?

The East African Rift is a geological feature that stretches for 56 kilometers. It first emerged in Ethiopia's desert in 2005. The Rift is predicted to create a new ocean and divide Africa into two separate parts. Although the emergence of new coastlines may unlock new opportunities for economic growth, there will also be consequences such as the necessary evacuation of people, potential loss of lives, and environmental impacts.

The East African Rift: A Geological Marvel

The East African Rift is a unique geological feature that runs through East Africa from the



Red Sea to Mozambique. The Rift is caused by the divergence of three tectonic plates – the Nubian Plate, the Somali Plate, and the Arabian Plate. These plates are pulling away from each other, creating tension that results in the formation of the Rift. The East African Rift is a fascinating geological marvel that has attracted the attention of scientists and geologists from around the world

A New Ocean and Divided Africa

The emergence of a new ocean is predicted to occur due to the East African Rift. As the plates continue to diverge, the rift valley will deepen, and the surrounding land will sink. Eventually, the valley will fill with water, creating a new ocean that will divide Africa into two separate parts. This will result in landlocked countries like Uganda and Zambia gaining their own coastlines.

Potential Negative Consequences

The rifting process will affect settlements, communities, and the natural environment, including flora and fauna. The displacement of communities and settlements will be one of the most significant challenges. People will need to be evacuated from their homes and relocated to new areas. This process will be disruptive and could potentially result in the loss of lives.

Another potential negative consequence of the rifting process is the environmental impact. The creation of a new ocean will have a significant impact on the surrounding ecosystem. Marine life will move into the new ocean, while terrestrial life will be forced to adapt to the changing landscape. The displacement of flora and fauna will have far-reaching consequences for the ecosystem and could potentially lead to the extinction of certain species.

Unlocking New Economic Opportunities

Despite the potential negative consequences, the emergence of new coastlines may unlock new economic opportunities for the affected countries. Landlocked countries like Uganda and Zambia will finally have their own coastlines, which will provide access to international markets and boost trade. The creation of a new ocean could also lead to the discovery of new natural resources, which could further boost the economy of the affected countries.

Translocation of Asiatic Lions: Important Facts

Gujarat, known for its rich biodiversity and wildlife, is home to the Asiatic lion, one of the rarest and most endangered big cat species in the world. The Asiatic lion population in Gujarat is concentrated in the Gir Forest National Park, which is the only remaining habitat of this species. To ensure the survival and protection of the lion population, the state government is planning to move 40 Asiatic lions to the Barda Wildlife Sanctuary, which is located 100 km from the Gir Forest National Park.

What is the Aim of the Translocation Project?

The aim of this project is to safeguard the lion population from potential extinction due to diseases or environmental threats such as natural disasters or habitat loss. The translocation of the lions will also prepare the sanctuary for future natural dispersal,



which is essential for the long-term survival of the species. In addition, the project will also breed herbivores in the sanctuary, which will increase the availability of prey for the lions and thus, contribute to the growth of the lion population in the area.

The state government of Gujarat has given in-principle approval to the project, which is expected to be completed in a phased manner. The first phase will involve the preparation of the Barda Wildlife Sanctuary, which will include the construction of new enclosures, fencing, and the creation of water sources. Once the sanctuary is ready, the lions will be gradually introduced to the area over a period of time.

What are the Challenges and Concerns?

Although the translocation project is a commendable effort to protect the lion population, it is not without its challenges and concerns. A 2014 report by the Wildlife Institute of India has raised concerns that the Barda sanctuary can only hold 26 lions, which is not enough for the proposed translocation of 40 lions. This raises questions about the feasibility of the project and the potential risks to the lion population in the sanctuary.

Another concern is the potential for conflict between the lions and the local communities living in and around the sanctuary. Human-lion conflict is a major issue in Gujarat, with incidents of lion attacks on humans and livestock being reported frequently. The translocation of the lions to the Barda sanctuary may exacerbate this conflict, unless effective measures are taken to mitigate the risk.

Fact Sheet: *Thiania indica*

A group of researchers led by from Saveetha Institute of Medical and Technical Sciences, Chennai, have discovered a new species of jumping spider, *Thiania indica*. The spider was discovered during an expedition to Kulathupuzha in the Shendurney Wildlife Sanctuary in December 2021.

Thiania indica belongs to the *Thiania* C.L. Koch genus of Salticidae family. The research findings were published in the March 2023 issue of the peer-reviewed journal *Arachnology* by the British Arachnological Society.

Distinct Features of *Thiania indica*

The researchers have described the distinct features of the species' male and female spiders. Both genders of the species have reddish-brown carapace. Males have four patches of white hairs on their grey-yellow abdomen. On the other hand, females have a wide transverse black band anteriorly and posteriorly on their creamy yellow abdomen.

Previous Records

Only one species, *Thiania bhamoensis*, belonging to the *Thiania* C.L. Koch genus has been previously recorded in India. The particular species has been distributed across China, Myanmar, Thailand, Laos, and Indonesia.

Need for Further Exploration

The researchers pointed out that many biodiverse regions of the Western Ghats remain either unexplored or poorly surveyed for arachnids. They called for greater focus in hotspots such as Western Ghats and Indo-Burma regions where more hitherto undiscovered species are expected.



The Western Ghats, a UNESCO World Heritage Site, is a biodiversity hotspot and is home to a large number of plant and animal species, many of which are endemic. The region is also one of the eight “hottest hotspots” of biodiversity in the world.

Indo-Burma region, on the other hand, is a biodiversity hotspot that spans across parts of Bangladesh, Bhutan, China, India, Laos, Myanmar, Nepal, Thailand, and Vietnam. The region is home to a large number of species, many of which are endemic and are facing threats due to human activities such as deforestation, poaching, and hunting.

Japan-South Korea Summit: Key Outcomes

Japan and South Korea are two of the world’s most important economies and play critical roles in ensuring regional peace and stability. However, their relationship has been fraught with tensions and historical grievances that date back to the colonial era. The recent summit between Japanese Prime Minister Fumio Kishida and South Korean President Yoon Suk Yeol is being viewed as a major breakthrough in the efforts to put aside the past and move forward towards a brighter future.

Resuming Regular Visits

During the summit, Prime Minister Kishida and President Yoon agreed to resume regular high-level visits between the two countries, a practice that had been suspended for over three years due to the ongoing dispute over compensation for Korean wartime forced labor. This move is expected to improve communication and trust between the two countries and pave the way for more meaningful discussions on a range of issues, including trade, security, and cultural exchange.

Working towards Resolving Trade Dispute

The leaders also agreed to work towards resolving the ongoing trade dispute that has been a major source of tension between the two countries. Japan had imposed export controls on South Korea, which had led to a boycott of Japanese products by South Korean consumers. However, both countries are now seeking to overcome this dispute and establish a more stable and mutually beneficial economic relationship.

Rebuilding Security and Economic Ties

The resumption of regular visits between leaders and the efforts to resolve the trade dispute are being seen as major steps towards rebuilding security and economic ties between the two countries. This is particularly important given the increasing security challenges in the region, such as North Korea’s nuclear program and China’s growing military power.

Resuming Defense Dialogue and Strategic Talks

The leaders also agreed to resume defense dialogue and strategic talks, which had been suspended due to the tensions between the two countries. This is expected to lead to a better understanding of each other’s security concerns and pave the way for closer cooperation in the areas of defense and security.

Restarting Trilateral Communication with China

In addition to improving ties between Japan and South Korea, the leaders also agreed to restart trilateral communication with China. This move is significant given China’s growing



influence in the region and the need for regional stability and cooperation.

Kodava Hockey Festival

The Kodava hockey festival, an annual inter-family field hockey tournament held in the Kodagu district of Karnataka, is set to return after a four-year hiatus. The festival is organized by a different Kodava family each year and is named after them. This year's festival will be organized by the Appachettolanda family and will take place in Napoklu, a small town 21 km away from district headquarters Madikeri.

Preparations for the festival

The town of Napoklu is getting ready to host the world's largest field hockey tournament, which is expected to attract 30,000 spectators. The town has only three mud grounds, and workers were seen preparing the grounds for the tournament. Temporary bleachers have been set up on all sides of the ground where 30,000 spectators can be accommodated.

Multiple galleries, lighting, speakers, and display boards have been set up on the ground. In all, three grounds will be utilized for the hockey tournament, and they will also be used as a backup in case it rains. An estimated ₹1.5 crore have been spent to organize the event by the family.

No age or gender restrictions

The Kodava hockey festival has no age or gender restrictions, and the only requirement is that all members of a team must be from the same family. This unique aspect of the festival ensures that it remains a family-oriented event, where Kodava players from over 200 families come together to play. From every family, young boys and girls, men, women, professionals, and former hockey players who have represented the state or country will be part of the family team.

The Kodava community conducts this inter-family hockey tournament every year, which has morphed into a major sporting event and festival in the country. The festival has emerged as a platform for the community members to discuss trade and business interests besides scouting for marital alliances.

The history of the festival

The late Pandanda Kuttappa conceived the idea of the Kodava family hockey tournament in 1997, and it was organized by the Pandanda family first. The tournament was conceived in a belief that tapping the inherent love among the Kodavas for hockey could help bring the families and the community together. The first tournament saw nearly 60 teams take part. The format of the tournament was such that every year, one of the Kodava families had to host the event. Starting with the first tournament, the numbers have increased, reaching a high of 281 in 2003, where this event became the world's largest hockey tournament.

The festival also serves as an opportunity for Kodava people living outside the district to return home and take part in the sporting event like a festival. The festival has been held across the district in previous years, and there is no permanent venue. Families apply to the Kodava Hockey Academy expressing interest and are allotted the tournament after evaluation.



Inauguration and cash prizes

The festival will be inaugurated by Chief Minister Basavaraj Bommai on March 18, and it will open with an exhibition match between India Junior XI and Karnataka Men's XI. While the winning team of the festival this year will be given a cash prize of ₹3 lakh, the runners-up will get ₹2 lakh, and the second runner-up will get ₹1 lakh.

INS Dronacharya

The Indian Navy's INS Dronacharya is a prestigious gunnery school located in Kochi, Kerala. The school has been in operation since 1975 and is responsible for training officers and ratings in various fields such as small-arms, naval missiles, artillery, radar, and defensive countermeasures. It recently received President's Colour.

The President's Colour

President's Colour is the highest honor that the President bestows on a unit for exceptional service to the nation. The award is given in recognition of the unit's outstanding performance in operational and training tasks.

Training for Excellence

INS Dronacharya has a state-of-the-art training infrastructure that includes simulators, computer-based training systems, and live firing ranges. The school has a team of highly qualified and experienced instructors who provide hands-on training to the trainees.

The school trains about 820 officers and 2100 ratings per year in different fields. Its curriculum includes theory classes, practical training, and live firing exercises. The training focuses on developing the trainees' proficiency in operating and maintaining different types of weapons and equipment.

Apart from Indian Navy personnel, INS Dronacharya also trains personnel from Coast Guard, paramilitary, and police forces. The school has also trained naval personnel from friendly countries such as Sri Lanka, Maldives, and Mauritius.

Nodal Center for Training Sagar Prahari Bal

INS Dronacharya is also the nodal center for training Sagar Prahari Bal. Sagar Prahari Bal is a special force that was created to provide security to India's offshore assets and the country's exclusive economic zone. The force is responsible for safeguarding India's offshore oil installations, ports, and other critical assets.

The school's role as a nodal center for training Sagar Prahari Bal is a testament to its commitment to excellence. The school provides specialized training to the force, which includes swimming, diving, and other maritime-related skills.

Ganeshia's Dwarf Gecko

A new species of gecko, *Cnemaspis ganeshiahi*, has been discovered in the Male Mahadeshwara Hills (MM Hills) in Chamarajanagar, Karnataka. This gecko species is endemic to this area and has been named after KN Ganeshiaiah, a renowned agricultural scientist and Kannada writer. Researchers from the Ashoka Trust for Research in Ecology and Environment (ATREE) announced the discovery of this new species.

Habitat and Characteristics of *Cnemaspis ganeshiahi*

Cnemaspis ganeshiahi is a diurnal gecko species that resides in dry deciduous and scrub



forests. These geckos are typically found in crevices of walls or boulders. This species has a unique combination of morphological and color patterns, which is not present in other closely related species. According to researchers, the gecko appears to be restricted to MM Hills and surrounding areas of the Eastern Ghats.

Recognition of Ganeshaiah's Contributions

Researchers have named this species after KN Ganeshaiah in recognition of his contributions to ecology, evolutionary biology, and conservation biology. Ganeshaiah has been a professor of plant genetics and breeding at the University of Agricultural Sciences, Bengaluru, for many years. This is the fourth species to be named after him by researchers from various scientific institutions.

Other Species Named After KN Ganeshaiah

Previously, researchers have named a grass species, *Centotheca ganeshaiahiana*, at the Saddle Peak National Park, North Andaman. They also named a small cryptic ant species, *Parasyscia ganeshaiahi*, found in decaying logs or under rocks. Additionally, a cycas species, *Cycas uma-ganeshaiahi*, has been named after Ganeshaiah.

Ganeshaiah's Contributions to Ecology and Evolutionary Biology

KN Ganeshaiah is a renowned agricultural scientist, Kannada writer, and professor of plant genetics and breeding at the University of Agricultural Sciences, Bengaluru. He is known for his contributions to ecology, evolutionary biology, and conservation biology. He has published many research papers and books, including "Biodiversity of the Western Ghats" and "Ecology, Evolution and Conservation of Plants." His contributions to these fields have earned him recognition from the scientific community, and his name is synonymous with biodiversity research.

St. Patrick's Day

St. Patrick's Day is an annual holiday celebrated on March 17th. It is a cultural and religious celebration that marks the death anniversary of Saint Patrick, the patron saint of Ireland. The holiday has become a global celebration of Irish heritage and culture.

The History of St. Patrick's Day

St. Patrick was a Christian missionary who brought Christianity to Ireland in the 5th century. He is known for using the shamrock, a three-leaved plant, to explain the Holy Trinity to the Irish people. Over time, St. Patrick became the patron saint of Ireland and his feast day, March 17th, became a holy day of obligation for Irish Catholics.

St. Patrick's Day Traditions

The wearing of green is a prominent tradition on St. Patrick's Day. It is believed to bring good luck and was originally associated with the Irish independence movement in the late 18th century. Green is also associated with the lush green landscape of Ireland.

Parades are also a popular tradition on St. Patrick's Day. The first St. Patrick's Day parade took place in New York City in 1762 and has since become a worldwide phenomenon. In Ireland, the largest St. Patrick's Day parade takes place in Dublin and attracts hundreds of thousands of visitors every year.

Irish music and dance are an integral part of St. Patrick's Day celebrations. Traditional



Irish instruments such as the fiddle, bodhrán, and tin whistle are often played during parades and festivals. Irish dancing, with its distinctive footwork and costumes, is also a popular feature of St. Patrick's Day events.

Food and Drink

Irish food and drink are an essential part of St. Patrick's Day celebrations. Corned beef and cabbage, a dish made from salt-cured beef and boiled cabbage, is a traditional St. Patrick's Day meal in the United States. In Ireland, however, it is not a traditional St. Patrick's Day dish, and instead, a meal of bacon and cabbage is more common.

Beer is also an important aspect of St. Patrick's Day celebrations. Guinness, the famous Irish stout, is often consumed in large quantities on this day. In Ireland, many pubs offer live music and entertainment, and the celebration often continues late into the night.

March 18, 2023

Mustatils

Saudi Arabia is home to thousands of monumental stone structures known as mustatils. These structures are rectangular, low-walled, and range from 20 to 600 meters in length. Despite their prevalence in the region, a comprehensive study of the structures was not conducted until 2017. In recent excavations in Al Ula, researchers discovered that these structures had a ritualistic purpose. This article will discuss the recent findings about mustatils and their significance in the region.

What are Mustatils?

Mustatils are ancient stone structures that are prevalent throughout Saudi Arabia. They are rectangular in shape and are characterized by low walls. Mustatil is the Arabic word for rectangle, and the plural has been anglicized to mustatils. These structures were built around 7,000 years ago and range in size from 20 to 600 meters.

Discovery of Mustatils

Since the 1970s, thousands of mustatils have been documented across Saudi Arabia. However, it wasn't until 2017 that the first intensive and systematic study of these structures was undertaken by University of Western Australia's Professor David Kennedy. That study was based on remote sensing data and was focused primarily on the Harrat Khaybar and areas to the east.

Purpose of Mustatils

Due to the nature of the data-set, researchers were unable to hypothesize a precise function for these enigmatic structures. However, subsequent studies based on ground survey and preliminary excavation data revealed that the mustatil served a ritual purpose during the Arabian Late Neolithic. Recent excavations in Al Ula have now determined that these structures fulfilled a ritual purpose, with specifically selected elements of both wild and domestic species deposited around a betyl.

Recent Excavations in Al Ula

In 2018, the Royal Commission for Al Ula, in conjunction with Oxford Archaeology, excavated the first mustatil in Al Ula. The excavation revealed offering chambers with in situ ritual faunal deposits. Over the course of the 2019 and 2020 excavation seasons,



researchers excavated another mustatil, which is 140 meters long and is constructed from local sandstone.

Significance of the Recent Findings

The recent excavations in Al Ula revealed that the mustatil served as a destination for pilgrimages and provided evidence of the domestication of cattle in the region. The researchers' analysis included identification of 260 fragments of animal skulls and horns, primarily from domestic cattle, as well as from domestic goats, gazelle, and small ruminants. Nearly all of these remains were clustered around a large upright stone interpreted to be a betyl. Radiocarbon dating suggested that the betyl is one of the oldest identified in the Arabian Peninsula, and the bones provide some of the earliest evidence for domestication of cattle in the northern Arabia.

Assam Tea Industries Special Incentives Scheme

Assam, known for its premium tea production, is one of the leading tea producing states in India. However, the tea industry in Assam has been struggling with a long-drawn financial crisis, which has affected the tea workers' livelihoods. To provide relief to the tea industry, the Assam government has launched the Assam Tea Industries Special Incentives Scheme (ATISIS). This scheme provides financial backing required for the production of orthodox tea or speciality tea, which are mainly for the export purposes and requires high cost of production. During the budget, the state government allocated Rs 100 crore for this scheme.

Components of ATISIS

ATISIS has four main components, which are as follows:

Interest Subvention on Working Capital: This component of ATISIS provides financial backing required for reducing the cost of production of orthodox or specialty tea.

Production Subsidy: The government is currently under the process of increasing the production subsidy for orthodox and specialty tea from Rs 7 to Rs 10 per kg. For the current year of 2023-24 only, an enhanced production subsidy of Rs 12 per kg will be extended to celebrate 200 years of Assam tea.

Fixed Capital Subsidy: This component of ATISIS provides financial assistance for capital expenditure, such as the purchase of machinery, equipment, and other assets required for tea production.

Agricultural Income Tax Holiday: This component provides an exemption from agricultural income tax for a specified period to tea producers and tea gardens.

Assam Government's Assistance For Tea Industry

The Assam government has earmarked nearly Rs 550 crore for the state's tea industry, a welcome move for the industry. The government has also announced that the ATISIS will be strengthened to bring relief to tea workers.

To promote Assam Tea as a brand, road shows will be organized across the country. The government has also emphasized the development of infrastructure in tea garden labor lines, especially the development of roads. As a special relief, all the arrear electricity dues of tea garden worker families living in the lines will be waived off as a one-time measure



by the government. Additionally, 10,000 houses will be constructed in the labor lines. The Tea Association of India (TAI) has welcomed the Assam budget and lauded the extension of the Assam Agri income tax exemption and the incentives declared under the ATISIS.

Mission for Integrated Development of Horticulture - Update (March, 2023)

The horticulture sector is an essential component of the Indian agricultural economy, providing livelihoods to millions of farmers and contributing significantly to the country's GDP. Recognizing the importance of this sector, the Indian government launched the Mission for Integrated Development of Horticulture (MIDH) in 2014. This centrally sponsored scheme aims to promote comprehensive development of horticulture in the country, with the goal of facilitating sustainable and inclusive growth.

Financial Contributions and Objectives of MIDH

The scheme operates with a central government contribution of 60% of the total outlay for developmental programs in all states except those in the North East and Himalayas, where it contributes 90%. The remaining 40% is contributed by state governments. The objectives of the scheme include improving productivity and quality of horticultural crops, promoting sustainable production practices, enhancing post-harvest management, and developing value chains for horticulture products.

Establishment of Centers of Excellence (CoEs)

To achieve these objectives, the government has established Centers of Excellence (CoEs) under the MIDH mission. These CoEs act as training centers for farmers and horticulture professionals to learn about the latest technologies, techniques, and practices in the horticulture sector. As of now, 49 CoEs have been established in various states through bilateral cooperation or research institutes. Recently, the government approved the establishment of three new CoEs – CoEs for Kamlam (Dragon Fruit), Cor for Mango and Vegetables, and CoE for Vegetables and Flowers.

Importance of CoEs

The CoEs play a crucial role in promoting the growth and development of the horticulture sector in India. They act as centers of excellence and serve as hubs for research and development, training and capacity building, and dissemination of knowledge and information. The CoEs also help in the identification and dissemination of best practices and technologies, and in the development of high-quality planting material.

The CoEs are equipped with the latest technologies and infrastructure to provide farmers and horticulture professionals with hands-on training and practical experience in various aspects of horticulture, including crop production, post-harvest management, marketing, and value addition. They also undertake research and development activities in collaboration with research institutes and universities to identify and develop new varieties of crops, improve production practices, and address the challenges faced by the horticulture sector.

'Governor of the Year' Award for 2023

Shaktikanta Das, the Governor of the Reserve Bank of India (RBI), has been named



“Governor of the Year” for 2023 by Central Banking, an international economic research journal. Das’s steady leadership during challenging periods, including the COVID-19 pandemic, the collapse of a significant non-banking company, and inflationary pressures due to Russia’s invasion of Ukraine, earned him this accolade. This recognition highlights the critical role of strong leadership in managing complex economic challenges.

Leadership During Challenging Periods

The COVID-19 pandemic has significantly impacted global economies, and India has been no exception. Das’s leadership at the RBI was critical in implementing essential reforms, innovative payment systems, and growth-oriented measures during the pandemic. Das skillfully navigated political and economic crises, earning honors for his efforts.

Das was also instrumental in managing the collapse of a significant non-banking company, which caused widespread economic disruption. His leadership and swift action helped contain the fallout from this event and prevent it from spreading to other parts of the economy.

Additionally, the inflationary pressures due to Russia’s invasion of Ukraine posed a significant challenge for the Indian economy. However, Das’s leadership and expertise helped manage the impact of this crisis on the Indian economy.

Das’s Role in India’s Economic Growth and Development

Das’s leadership at the RBI played a major role in the successful launch essential reforms and growth-oriented measures. His expertise in macroeconomic management and policy-making has been instrumental in achieving stability and promoting growth in India’s financial markets.

Under his leadership, the RBI has implemented innovative payment systems, such as the Unified Payments Interface (UPI), which has revolutionized the way Indians transact. This system has enabled seamless and secure digital payments, promoting financial inclusion and driving economic growth.

Exercise Al-Mohed-Al Hindi-23

The Indian Navy Forces and Royal Saudi Naval Forces met in Mumbai recently to finalize preparations for the upcoming joint naval exercise, ‘Al-Mohed-Al Hindi-23’, which is set to take place in May 2023 in Jubail, Saudi Arabia. This is the second such exercise between the two countries, following the first in August 2021.

The aim of the exercise is to enhance interoperability between the two naval forces by conducting tactical manoeuvres, search and rescue operations, and an electronic warfare drill. It will provide a platform for the two countries to strengthen their military ties and deepen cooperation between their navies.

India and Saudi Arabia’s Strong Relationship

The decision to hold joint naval exercises was taken during the Riyadh Summit held in 2019, which marked a turning point in India-Saudi Arabia relations. The summit was attended by Indian Prime Minister Narendra Modi and Saudi Crown Prince Mohammed bin Salman, who emphasized the need to deepen cooperation in various sectors. Over the past five years, the relationship between the two countries have been strengthened.



India-Saudi Arabia Economic and Trade Ties

India and Saudi Arabia have been strengthening their economic ties in recent years. The two countries are among the largest economies in the world and have significant potential for collaboration in various sectors.

Saudi Arabia is India's fourth-largest trading partner and a major supplier of oil. India, on the other hand, is one of the fastest-growing markets for Saudi Arabia's exports. In 2021, India and Saudi Arabia signed an agreement to set up a \$15 billion oil refinery and petrochemicals complex in India's Maharashtra state, which is expected to boost economic ties between the two countries.

Chandrayaan-3 Spacecraft

The Indian Space Research Organisation (ISRO) has achieved yet another milestone in its space exploration journey. The space agency announced that the Chandrayaan-3 spacecraft has successfully completed crucial tests that confirm its capability to endure the harsh acoustic and vibration conditions during its launch. This significant accomplishment brings the mission one step closer to its scheduled launch in June 2023.

Purpose of the Chandrayaan-3 mission

Chandrayaan-3 is India's third lunar exploration mission, following the Chandrayaan-1 in 2008 and the Chandrayaan-2 mission in 2019. The primary objective of the Chandrayaan-3 mission is to demonstrate a soft landing on the lunar surface, which was not achieved in the Chandrayaan-2 mission.

The spacecraft will include a lander, rover, and propulsion module that will act as a communication relay satellite. The propulsion module will carry the lander and rover configuration to the 100 km lunar orbit. Once in the lunar orbit, the lander and rover will detach from the propulsion module and make a soft landing on the lunar surface. The lander and rover will then carry out scientific experiments on the lunar surface.

Testing of the Chandrayaan-3 spacecraft

The recent tests were conducted in March 2023 at the UR Rao Satellite Centre in Bengaluru, where the spacecraft was subjected to harsh vibration and acoustic conditions, which are prevalent during the launch. The tests were a crucial part of the spacecraft's qualification and acceptance process, confirming its structural integrity and survivability in the launch environment.

The tests were challenging, given that the Chandrayaan-3 spacecraft is a composite of three modules, namely the propulsion module, lander, and rover. According to ISRO, the tests have provided sufficient confidence in the spacecraft's ability to withstand the launch environment, confirming the spacecraft's readiness for the upcoming launch.

The recent tests are one of many milestones that Chandrayaan-3 has achieved in the past few months. In February 2023, ISRO completed the flight acceptance hot-test of the CE-20 cryogenic engine that will power the cryogenic upper stage of the GSLV-Mk3 or LVM3 launch vehicle for the Chandrayaan-3 mission. The engine's hot test was carried out for a planned duration of 25 seconds, and all propulsion parameters during the test were found satisfactory and closely matched with predictions.



In January 2023, the Chandrayaan-3 lander successfully underwent EMI/EMC (Electro-Magnetic Interference/Electro-Magnetic Compatibility) tests. The tests are conducted to ensure the functionality of the satellite subsystems in the space environment and their compatibility with the expected electromagnetic levels.

Urban Extension Road-2 Project (UER-II)

The National Capital Territory of Delhi is one of the most congested cities in India. The city attracts a huge quantum of traffic not only from within Delhi but also from the surrounding regions of Haryana and Uttar Pradesh. This high level of traffic has led to heavy congestion on the existing ring roads. To address this issue and save Delhi through decongestion, the Delhi Development Authority (DDA) proposed Urban Extension Road-2 (UER-II) as the third ring road of Delhi.

What is UER-II?

The UER-II has been proposed in the Delhi Master Plan as the third Ring Road of Delhi along the Western boundary. The six-lane access-controlled highway is being developed by the National Highways Authority of India (NHAI) as a component of the Delhi Decongestion Plan, at a capital cost of Rs 7716 crore. The UER-II will connect NH-1 to Dwarka and Bahadurgarh and form a Ring Road along the western range.

The alignment of UER-II

The total length of UER-II is 46.5 km, out of which 38.11 km is taken up as part of this project, and a part alignment is being taken up with the alignment of the Dwarka Expressway. The UER-II's alignment takes off from NH 1 (23.8 km) near village Bankoli and terminates near the junction of Sector 24 in Dwarka. The route will connect NH-1 with NH-8 passing through Bawana Industrial Area, Rohini, Mundka Industrial Area, Najafgarh, and Dwarka.

The current status of the project

Tenders for construction were invited by NHAI in December 2019, and construction contracts were awarded in 2021. So far, 57 per cent of work is complete: 55 per cent on Package 1, 40 per cent on Package 2, 90 per cent on Package 3, 68 per cent on Package 4 and 67 per cent on Package 5. While the NHAI had set a deadline of October 2023, Union Minister for Road Transport and Highways Nitin Gadkari has promised to open the key arterial road by December 2023 after inspecting the progress of the Urban Extension Road Project (UER-II) in Delhi.

Why is the UER-II critical to decongesting Delhi?

The UER-II is expected to serve as a key solution for decongesting Delhi, providing an alternative route for non-Delhi destined traffic i.e. traffic to/from North Indian states (Punjab, Northern Haryana, J&K, Himachal Pradesh) to remaining Indian states (Rajasthan, Southern Haryana, Gujarat, Maharashtra) which currently passes through Delhi. The completion of the UER-II will reduce the load on the existing ring roads and help to reduce traffic congestion in Delhi.

The unique features of the UER-II

The UER-II has several unique features that make it stand out. First, the road has been



constructed using almost 20 lakh tonnes of plastic garbage sourced from Ghazipur landfill in Delhi. The waste is processed at micro plants near the construction site in Alipur and Karala. Second, the UER-II has 27 flyovers, 26 minor bridges, 11 underpasses, and 17 pedestrian subways. Lastly, it will also be among the first national highways to be an e-highway. E-highways are an energy-efficient option where the road provides electricity to moving vehicles mostly through overhead power lines.

Global Millets (Shree Anna) Conference

On March 18, 2023, the Prime Minister of India, Narendra Modi, inaugurated the Global Millets Shree Anna Conference 2023 in the national capital. The event marks the beginning of a two-day global conference on millets, where Modi unveiled a customised postal stamp and commemorative currency coin to mark the International Year of Millets, being celebrated in 2023. This event is significant, as it will help to promote millet farming and nutrition across the globe.

International Year of Millets:

The United Nations General Assembly (UNGA) declared 2023 as the International Year of Millets (IYM), accepting India's proposal, on March 5, 2021. The aim of this declaration is to elevate awareness of nutri-cereals (millets) for food security and nutrition, enhance investment in research and development, and inspire stakeholders towards improving production, productivity, and quality of millets.

India's approach to IYM 2023 is to make it a people's movement for the overall benefit of the cultivator, consumer, and climate. The country has taken a multi-stakeholder engagement approach by involving farmers, startups, exporters, retail businesses, hotel associations, and various arms of the government in India and abroad to achieve the objectives of IYM 2023 and position India as the 'Global Hub of Millets'.

Global Millets Shree Anna Conference 2023:

The two-day conference is expected to witness participation from over 100 countries, with several stakeholders attending the event virtually from across the globe. Union Agriculture Minister Narendra Singh Tomar and his counterparts from six countries were present at the event.

The Hyderabad-based Indian Institute of Millets Research (IIMR) was named as the global centre of excellence. A roundtable session of agriculture ministers, as well as bilateral meetings, will be convened later. The conference will also witness wider participation from Farmer Producer Organisations (FPOs)/Farmers Self-Help Groups, schools, Agri-Universities, Krishi Vigyan Kendras (KVKs), Gram Panchayats, Common Service Centres (CSC), Cooperative Institutions, Hotel Management Schools, Indian Embassies and Diaspora, etc.

Events at the Conference:

The conference will see the participation of several dignitaries such as Dr Jaqueline Hughes, Director General, ICRISAT; Jong-Jin Kim, Assistant Director General & Regional Representative for Asia and Pacific, FAO; Kapil Dev, Cricketer; Geeta Phogat, Wrestler, Commonwealth Gold Medallist; Chef Thomas Gugler, President, World Association of



Chefs, etc., alongside an esteemed audience of Padma Awardee farmers.

An Exhibition-cum-Buyer-Seller Meet (BSM) with a focus on millets will also be held, with the participation of more than 50 domestic and international buyers, importers, exporters, and processors for the promotion of millets. The exhibition of more than 100 stalls will showcase millets and millet-based ready-to-cook and ready-to-eat products by millet-based startups, exporters, and live cooking sessions by various international and national chefs.

Matua Maha Mela

The Matua Dharma Maha Mela 2023 is scheduled to begin in West Bengal on March 19 and will run until March 25. Organized by the All India Matua Mahasangha, the event is a highly anticipated holiday for the Matua community, a subset of lower-class AVARNA Hindus belonging to the Namasudra Scheduled Caste group. The holiday is an opportunity for the community members to come together, participate in religious ceremonies, and pay homage to their spiritual leaders.

A Celebration of Matua Community's Traditions and Way of Life

The Matua Dharma Maha Mela is a celebration of the community's traditions and way of life, which were established by Shree Shree Harichand Thakur and developed by Guruchand Thakur and Boro Ma. The holiday is an important time for the community to showcase their cultural heritage and traditions. The celebrations include various cultural programs, such as traditional dance performances, music, and poetry readings. Additionally, attendees can participate in religious ceremonies, including offering prayers to Shri Shri Harichand Thakur Ji and other spiritual leaders.

A Rich History of the Matua Community

The Matua community has a significant presence in West Bengal and Bangladesh. It has a rich history that has shaped its unique traditions and way of life. The community's origins can be traced back to the 19th century when Shree Shree Harichand Thakur founded the Matua sect. The sect's teachings focused on the importance of compassion, equality, and social justice, which resonated with the lower-class AVARNA Hindus, especially those belonging to the Namasudra Scheduled Caste group.

Resilience in the Face of Challenges

Over the years, the Matua community has faced various challenges, including discrimination and marginalization. However, the community has remained resilient, preserving its rich cultural heritage and traditions. The Matua Dharma Maha Mela is a testament to the community's perseverance and serves as a platform to showcase their culture and traditions.

"Geoffrey Bawa: It is Essential To be There" Exhibition

India's External Affairs Minister, S Jaishankar, inaugurated the "Geoffrey Bawa: It is Essential To Be There" exhibition at the National Gallery of Modern Art in New Delhi on Friday. Jointly organized by the National Gallery of Modern Art in New Delhi, the High Commission of Sri Lanka in New Delhi, and the Geoffrey Bawa Trust, the exhibition features the works of Sri Lanka's late iconic architect, Geoffrey Bawa.



Geoffrey Bawa is one of the most significant architects in Sri Lanka and was known for his unique style that combined modernism with traditional elements. He designed many buildings in Sri Lanka, including the Sri Lankan Parliament, which is considered one of his masterpieces. He designed several iconic buildings in India as well. His unique style has had a significant impact on modern architecture in Sri Lanka and beyond, and his works continue to inspire architects and designers worldwide.

First retrospective international exhibition of Bawa's works since 2004

The exhibition marks the 75th anniversary of Indo-Lanka diplomatic relations and is the first retrospective international exhibition of Bawa's works since 2004. Earlier, his work had been exhibited at multiple venues in Sri Lanka, the United Kingdom, North America, Australia, Brazil, Singapore, and Germany.

Over 120 documents from the Bawa archives are on view, including unbuilt works and Bawa's own photographs from his travels. The exhibition explores relationships between ideas, drawings, buildings, and places, and the different ways in which images were used in Bawa's practice.

The exhibition will run until May 7, 2023, and has been organized under the Sri Lanka-India Cultural Exchange Program. It is expected to attract a large number of visitors, including diplomats, senior officials of the Government of India, academics, journalists, art lovers, and professionals.

Presence of notable dignitaries

The ceremonial opening of the exhibition was attended by a large number of invitees, including notable dignitaries such as Sri Lanka's High Commissioner to India Milinda Moragoda, Director of the National Gallery of Modern Art Tamsunaro Tripathi, and Trustee of the Geoffrey Bawa Trust Sanjay Kulatunga. Minister of State for External Affairs and Culture of India, Meenakshi Lekhi, was also present on this occasion.

Non-Lapsable Defence Modernisation Fund

The Ministry of Defence is reportedly considering the creation of a Non-Lapsable Defence Modernisation Fund (DMF) to modernize the defence forces. The fund is expected to supplement the regular yearly budgetary allocations and eliminate any uncertainty in provisioning adequate funds for various defence capability development and infrastructure projects.

The DMF, once operationalised, will ensure that the unspent budgetary allocation to the three services can be retained even after the end of the fiscal year. This initiative has been recommended by various parliamentary panels in the past.

The Need for Non-Lapsable Funds

In India, the defence budget is allocated on a yearly basis. At the end of each fiscal year, any unspent funds are returned to the government's consolidated fund. This means that the defence services lose out on the opportunity to utilise the allocated funds for any unforeseen circumstances or future requirements.

The creation of a Non-Lapsable Defence Modernisation Fund would provide a solution to



this problem. The unutilized funds would be transferred to this fund, ensuring that they are available for use in the future. This would eliminate the need to surrender unutilized funds at the end of the fiscal year, thereby creating a pool of funds that can be used to modernize the defence forces.

The Benefits of Non-Lapsable Funds

Non-Lapsable funds have several advantages over yearly budgetary allocations. Firstly, they provide certainty in the availability of funds for defence modernisation. This eliminates the need for the Ministry of Defence to constantly approach the Ministry of Finance for additional funds. It also ensures that the defence services have adequate funds to carry out their modernisation plans without any interruptions.

Secondly, Non-Lapsable funds provide flexibility in the utilisation of funds. They can be used for any unforeseen requirements or contingencies that may arise during the year. This ensures that the defence services are better equipped to deal with any challenges that may arise.

Thirdly, Non-Lapsable funds help to promote long-term planning. The defence services can plan their modernisation projects over a longer time frame, without the fear of losing out on unutilised funds at the end of the fiscal year. This would also help to ensure that defence modernisation is carried out in a systematic and planned manner, rather than in a haphazard and ad-hoc manner.

Heal in India

Heal in India is an initiative of the Indian Government aimed at promoting medical tourism in the country. This initiative is being led by the Ministry of Health and Family Welfare and the Ministry of Ayush. The Centre for Development of Advanced Computing (CDAC) and Services Export Promotion Council (SEPC) have been working in collaboration with the Ministries to develop a 'One Step' Heal in India portal for the promotion of Medical Value Travel.

MoU between Ministry of Ayush and India Tourism Development Corporation

The Ministry of Ayush signed a Memorandum of Understanding (MoU) with India Tourism Development Corporation (ITDC), Ministry of Tourism to work together for the promotion of Medical Value Travel in Ayurveda and other traditional systems of medicine. This partnership will help in promoting traditional Indian systems of medicine and therapies and position India as a global leader in the field of medical tourism.

Champion Service Sector Scheme for Medical Value Travel

The Ministry of Ayush developed a Central Sector Scheme called the Champion Service Sector Scheme for Medical Value Travel. Under this scheme, financial assistance in the form of Interest Subsidy is provided to private investors for the establishment of Super Specialty Hospitals/ Day Care Centres of the systems recognized under The National Commission for Indian System of Medicine (NCISM) Act, 2020, or The National Commission for Homeopathy (NCH) Act, 2020 in FY 2021-22. This will help in the development of the infrastructure required for the promotion of Medical Value Travel in India.



Chintan Shivir and Global Ayush Investment and Innovation Summit

The Ministry of Health and Family Welfare organized a couple of Chintan Shivirs to promote Heal in India and Heal by India. The Ministry of Ayush also participated in these Chintan Shivirs. Certain action points were identified in this shivir to promote traditional medicine through tourism in India.

A Round Table and Plenary Session on Heal in India- Medical Value Travel were organized during the Global Ayush Investment and Innovation summit at Gandhinagar, Gujarat to promote India as the top destination for Medical Value Travel.

CESTAT

The Customs, Excise and Service Tax Appellate Tribunal (CESTAT) is all set to commemorate its 40th year of successful journey on March 19, 2023. The event will include the release of a souvenir marking the 40 years of CESTAT.

CESTAT's Journey So Far

CESTAT was constituted in the year 1982 on October 11, under article 323 B of the Constitution of India and section 129 of the Customs Act, 1962. The Principal Bench of the Tribunal is in Delhi, and it initially had three Regional Benches in Mumbai, Chennai, and Kolkata. Since then, five more Regional Benches have been constituted in Bangalore, Ahmedabad, Allahabad, Chandigarh, and Hyderabad. The Tribunal has a sanctioned strength of 16 Judicial Members and 16 Technical Members.

Working Sessions of the Commemorative Function

The commemoration function will include two working sessions:

The first session will discuss the 'Use of Technology in Tribunals for Speedy Delivery of Justice.' The session will be presided over by Hon'ble Mr. Justice Sanjeev Sachdeva, Judge, Delhi High Court. This discussion is of utmost importance in today's digital world, where technological advancements have brought a significant change in the functioning of legal systems worldwide.

The second session will be on 'Experiments of Tribunals – Triumphs and Tribulations,' and it will be presided over by Hon'ble Mr. Justice Pankaj Mithal, Judge, Supreme Court of India. This discussion will focus on the experiences of the tribunals and their successes and challenges. It will be an opportunity for the attendees to learn from the experiences of the tribunals.

Improvements in the Working of the Tribunal

Over the past four years, CESTAT has taken numerous steps to improve its working. All orders passed by the Tribunal, whether in the nature of Final Orders or Interim Orders or Daily Orders, are uploaded on the website of the Tribunal without any delay. This has resulted in providing timely information about the proceedings to the parties and avoiding sending individual notices to the parties regarding the next dates fixed by the Tribunal. A dynamic display board is also available in the courtrooms and other prominent places in the Tribunal.

Sagar Parikrama Phase IV

Sagar Parikrama Phase IV journey was launched on March 18. Its purpose is to resolve



issues concerning fishermen and other stakeholders and promote their economic development through various government schemes and initiatives.

Covering the Stretches of Uttar Kannada, Udupi, and Dakshin Kannada

Phase-IV of Sagar Parikrama will cover the stretches of Uttar Kannada, Udupi, and Dakshin Kannada. The two-day journey will be accompanied by government officials, fishermen representatives, fish-farmers, entrepreneurs, stakeholders, professionals, and scientists from across the country. The objective of this phase is to award certificates and sanctions related to the Pradhan Mantri Matsya Sampada scheme, KCC, and State Scheme to progressive fishermen. The program aims to provide support to the fishermen to ensure that they have the necessary resources to continue fishing sustainably.

Launching a Song on Sagar Parikrama in Kannada

As part of Phase-IV, a song on Sagar Parikrama in Kannada will be launched. The song will help popularize the initiative among the local communities and create awareness about the various schemes and programs. The aim is to encourage the local communities to take advantage of the opportunities provided by the initiative and improve their lives.

Popularizing Literature on Different Schemes through Print and Electronic Media

In addition to launching the song, literature on different schemes will be popularized through print and electronic media. The objective is to ensure that the local communities have access to information on the various schemes and programs. This will help them understand the benefits of the initiative and encourage them to participate.

Improving the Lives of Fisher Communities

The main objective of Sagar Parikrama is to improve the lives of fisher communities in India. The initiative aims to ensure that the communities have access to the necessary resources to fish sustainably. This includes upgrading and creating infrastructure, developing fishing villages, and providing support to progressive fishermen. The ecosystem approach ensures that the initiative is sustainable and does not harm the environment.

Foot and Mouth Disease

Foot and Mouth Disease (FMD) is a highly contagious viral disease that affects cloven-hoofed animals such as cattle, buffaloes, sheep, and goats. In India, FMD is a major concern for livestock farmers as it leads to a reduction in milk yield and causes significant economic losses. However, the Indian government has recently made significant progress in its FMD vaccination drive, which aims to control the spread of the disease.

Nearly Universal Coverage Achieved

Under the second round of the FMD vaccination drive, around 24 crore cattle and buffalo in India have been covered out of the targeted population of 25.8 crore cattle. This achievement was made possible due to the relentless efforts of the Department of Animal Husbandry and Dairying (DAHD), Government of India, State/ UT Governments/ administration, and most importantly the support of the livestock owners.

100% Government Funding

The FMD vaccination drive is fully funded by the Central Government, which is centrally



procuring vaccines against FMD and supplying them to the states. The government is also providing for vaccination charges, accessories, awareness creation, cold chain infrastructure, etc., to enable the states/UTs to undertake vaccination in campaign mode.

Livestock Owners Sensitized

Livestock owners are being sensitized and made aware of the importance of getting their animals vaccinated through various information, education, and communication measures. They are being requested to contact the nearest livestock health workers/veterinarians to avail the facility.

Collaboration for Training Animal Health Workers

The DAHD is also collaborating with the Ministry of Rural Development to train more animal health workers/paravets. This will help in the effective implementation of the vaccination drive and in reaching remote areas.

Expected Impact

The goal of the FMD vaccination drive is to control and eventually eradicate Foot & Mouth Disease from the country by 2030. This will lead to increased income for livestock farmers/keepers and in boosting India's trade in livestock products. The program aims to increase domestic production, which will ultimately result in increased exports of livestock products.

VVGNI-ASSOCHAM Strategic Alliance

The V.V. Giri National Labour Institute (VVGNI), an autonomous institute under the Union Labour Ministry, has recently entered into a strategic alliance with the Associated Chambers of Commerce & Industry of India (ASSOCHAM). The alliance is aimed at promoting professional and organizational development in areas related to jobs and labour.

Objectives of the Strategic Alliance

The primary objective of this strategic alliance is to leverage the respective expertise of both VVGNI and ASSOCHAM and collaborate on initiatives related to education, research, training, and other activities that promote fair and transparent implementation of labour reforms led by the government. The partnership aims to emanate the beneficial impact of an increased alignment to India's international commitment to labour laws and welfare in the context of global policy standards and benchmark practices.

Scope of the Alliance

The scope of the alliance covers a broad range of initiatives, including capacity building through joint training programs, seminars, webinars, meetings, and workshops on contemporary labour policy issues. Both organizations will explore the use of massive open online courses (MOOCs) and face-to-face learning to promote professional development. The alliance also involves sharing case studies and national surveys related to labour reforms and employment in India and collaborating on research, knowledge exchange, and joint publications in areas of mutual interest.

Policy Advocacy

The partnership includes policy advocacy, with the organizations working together to



advocate for policies that promote the welfare of stakeholders engaged in labour and employment-related issues.

AuditOnline

The AuditOnline application, developed under the e-panchayat Mission Mode Project (MMP) as part of the Panchayat Enterprise Suite (PES), has been recognized at the WSIS Forum 2023. The Ministry of Panchayati Raj (MoPR) and National Informatics Centre (NIC) received recognition for the software program under Category 7 — Action Line (AL) C7 — ICT Applications: e-Government. The application facilitates the internal and external audit of government departments or Panchayati Raj Institutions.

WSIS Prizes 2023

The application was submitted in the 12th edition of the World Summit on the Information Society (WSIS) Prizes 2023 contest at the International Telecommunication Union (ITU), Geneva. The contest included a five-phase process, and AuditOnline won the WSIS Prizes Award 2023 under the Action Line category ICT Applications: e-Government. The prize distribution ceremony was held at the Centre International de Conférence Genève (CICG), also known as International Conference Centre Geneva in Switzerland, on March 14, 2023. The WSIS is an annual award event coordinated by the ITU, affiliated with the United Nations (UN), in collaboration with UNESCO, UNDP, and UNCTAD to promote ICTs for achieving UN Sustainable Development Goals. This event is intended for ICT development initiatives that support Sustainable Development Goals (SDGs).

Background

Panchayati Raj Institutions (PRIs) play a vital role in delivering various services and basic amenities to citizens residing in vast rural landscapes of the country. It is of utmost importance that the Panchayats are well-equipped with the necessary infrastructure and have adequately trained manpower. Central Finance Commissions mandated Grants are continuously provided by the Central Government to the PRIs, including Traditional Local Bodies (TLBs), across the country. Hence, it becomes necessary that the PRIs/TLBs performances are continuously monitored to ensure transparency in utilization of public money for developmental activities in rural areas and to ensure accountability in their overall functioning.

The Ministry of Panchayati Raj has been continuously leveraging Digital Technology to deliver good governance in rural areas and bring about transparency and accountability in the Panchayat functioning, and to enhance end-to-end experience of delivering public services.

AuditOnline Application

To address the critical institution reform of making available the accounts online, both before and after audit, MoPR launched the AuditOnline application on 15th April 2020. The application carries out online audits of accounts, further strengthening the financial management and transparency of the Panchayats. One of the unique aspects of the application is that it is configurable as per every States' Audit Act / Rules.

The application has been instrumental in facilitating the internal and external audit of



government departments or Panchayati Raj Institutions. The availability of audited accounts of the Panchayats is a matter of concern, and AuditOnline has played a significant role in making the accounts accessible online. The AuditOnline application is a crucial component of the e-panchayat MMP and the PES, providing transparency, accountability, and better governance.

Railway Women's Welfare Central Organisation

The Railway Women's Welfare Central Organisation (RWWCO) is an apex body responsible for the welfare of railwaymen and their families. RWWCO annually honours the services of selected women employees of Group-C & Group-D for their outstanding services. The purpose is to boost the morale of those women who show exemplary dedication, integrity, and courage in the discharge of their duties and who also work quietly in any other social field viz. Hospital, School, Sports, Blood Donation, Family Welfare Programme, Scouts & Guides etc.

34 Outstanding Railway Women Employees Felicitated

This year, 34 outstanding railway women employees have been felicitated in a special function held at National Rail Museum Auditorium, Chanakyapuri, New Delhi today. The event was a celebration of the hard work and dedication of these women who have gone above and beyond in their roles. The awards aim to recognize and honour the contributions of these women, not only to the railways but also to the wider society.

Merit Certificates and Cash Awards Distributed by Smt. Menu Lahoti

Smt. Menu Lahoti, President/RWWCO, was the chief guest at the function and distributed merit certificates and cash awards to the women awardees. The awards were a token of appreciation for their exceptional services to the Indian Railways. The women who received the awards were deeply moved and expressed their gratitude towards RWWCO for recognizing their contributions.

Colourful Cultural Programme Presented by Central Railway Artists

The event was not just an awards ceremony but also a celebration of the rich culture and heritage of India. A colourful cultural programme was presented by artists from Central Railway, which showcased the diversity of India. The performances were a perfect way to end the event on a high note, leaving the audience with a sense of pride and patriotism.

Online Gaming in India: The Taxation Quandary

The online gaming sector in India has seen significant growth in recent years, and has the potential to contribute significantly to the country's goal of becoming a USD 1 trillion digital economy, generating substantial employment, and fostering innovation. However, the industry is also facing a taxation quandary, according to a report titled 'Online Gaming in India: The Taxation Quandary' by Primus Partners.

Regulation of the Online Gaming Industry

The report highlights that the regulation of online gaming in India will not only open up economic opportunities but also address various social issues. With the growing popularity of online gaming, there has been a call for more regulation in the sector. Regulation will ensure that the industry operates in a safe and secure environment, with



fair and transparent practices for players.

Positive Announcements in Union Budget 2023-24

The report notes that the announcements made in Union Budget 2023-24 are positive for the online gaming sector. One of the key announcements was the incorporation of the offset of losses in the calculation of gains from online games for income tax. This has been a persistent ask from the industry, and the inclusion of this in the budget is a positive development.

Tax Deducted at Source (TDS) Mechanism

However, the report also highlights a pertinent issue relating to the implementation mechanism proposed in the Union Budget for TDS (Tax Deducted at Source) on online games. The issue has arisen due to amendments to section 194B under which online gaming is currently covered from April 1, 2023, and the separate provision on online gaming, i.e., section 194BA, coming into force from July 1, 2023, leading to an anomaly.

Streamlining the Applicability of the Amendments

The report recommends that it would be ideal to streamline the applicability of the amendments for “online game” and establish a singular effective date of April 1, 2023. Alternatively, the current tax regime could be continued for the period between April 1, 2023, to June 30, 2023, to eliminate any discrepancies in interpretation. This would ensure that the taxation mechanism is simplified and more efficient, which would benefit the industry as a whole.

Impact on Smaller and Mid-Size Gaming Companies

The report also notes that the recurrent developments in the taxation regime will lead to higher costs for the industry, resulting in unnecessary expenses that will be difficult to bear for several smaller and mid-size gaming companies. This highlights the need for a streamlined and efficient taxation mechanism that takes into account the needs of all players in the industry.

herSTART

Union Minister Dr Jitendra Singh recently highlighted the newly created ‘herSTART’ platform, which aims to support women-led startups and encourage women entrepreneurs. The platform was launched in October 2022 by the Gujarat University Startup and Entrepreneurship Council (GUSEC). The platform aims to provide resources and training modules free of cost to aspiring women entrepreneurs. It also provides a digital community for them, and a digital publication to spread their success stories.

Boosting innovation and start-up efforts of women entrepreneurs

The ‘herSTART’ platform is expected to boost innovation and start-up efforts of women entrepreneurs in India. It will also help them connect with various government and private enterprises. The platform is a part of the Indian government’s commitment to creating an enabling ecosystem for women entrepreneurship through initiatives, schemes, networks, and communities and activating partnerships among diverse stakeholders in the Startup ecosystem.



India's growing startup ecosystem

India's Startup ecosystem has gained significant attention in recent years, making it one of the most coveted global markets. The Indian government has introduced various policy reforms to encourage and support Startups. India has moved from the 81st position to the 40th position in the Global Innovation Index (GII) of 2022 as a result of the startup program started across the country.

Opportunities for Startups to disrupt and innovate

Future trends show opportunities for Startups to disrupt and innovate with technologies like blockchain, the Internet of Things (IoT), artificial intelligence (AI), and machine learning, etc. With the kind of policy reforms that India is headed towards, Startups can play a big role.

Women-led business enterprises playing a noticeable role in society

Women-led business enterprises are playing a noticeable role in society by generating employment opportunities in the country, bringing in demographic shifts and inspiring the next generation of women founders. At least 36 unicorns and potential unicorns in India have at least one woman founder or a co-founder.

Building a strong ecosystem for nurturing innovation

The Startup India Action Plan of the Government is a very important step for strengthening the entrepreneurial ecosystem in the country. The action plan is intended to build a strong ecosystem for nurturing innovation in India as an engine for both economic growth and employment generation.

India's Commitment to Innovation

India is fast becoming a breeding ground for innovations. It is shifting to a knowledge-based economic growth model and commits to reinvent its advantages as a labour-intensive, capital-intensive, and manufacturing nation. Startups played a pivotal role during the pandemic, and India is building on this momentum and aspiring to be among the top countries globally for digital businesses and Startups.

Narayani River

Namami Gange Program is a flagship program launched by the Government of India in 2014 to clean and rejuvenate the River Ganga. The program is aimed at reducing the pollution levels and restoring the ecological balance of the river. Under the Namami Gange Program, the development of river front on Narayani River in the district of Gopalganj, Bihar has been undertaken, and two Ghats have been constructed at a total cost of Rs. 6.62 crore.

Narayani River: A Left Bank Tributary of the Ganges

The Narayani River, also known as Gandaki River, is one of the major rivers in Nepal. It is a left bank tributary of the Ganges in India. The river's total catchment area amounts to 46,300 km² (17,900 sq mi), most of it in Nepal. In the Nepal Himalayas, it is notable for its deep canyon. The basin also contains three mountains over 8,000 m (26,000 ft), namely Dhaulagiri, Manaslu, and Annapurna I. Dhaulagiri is the highest point of the Gandaki



basin.

Course of Narayani River

The Kali Gandaki river source is at the border with Tibet at an elevation of 6,268 meters (20,564 ft) at the Nhubine Himal Glacier in the Mustang region of Nepal. The river then flows southwest through a sheer-sided, deep canyon before widening at the steel footbridge at Chele, where part of its flow funnels through a rock tunnel. In Kagbeni, a major tributary named Johng Khola, Kak Khola, or Krishnaa descends from Muktinath. The river then flows southward through a steep gorge known as the Kali Gandaki Gorge, or Andha Galchi, between the mountains Dhaulagiri and Annapurna I. If one measures the depth of a canyon by the difference between the river height and the heights of the highest peaks on either side, this gorge is the world's deepest.

National Waterway-37: Gandak River

The Gandak River, also known as the Narayani and the Gandak, was declared as National Waterway-37 from Bhaisalotan Barrage to Gandak and Ganga river confluence at Hajipur along with 111 NWs in the country vide National Waterways Act, 2016. Based on the findings of the study reports of Gandak River, the waterway was found feasible for the development of shipping and navigation. However, due to non-availability of potential cargo as well as very low navigational/vertical clearance due to the structure located across NW-37 i.e., Rewa Ghat Bridge, developmental activities initiated on the Gandak River (NW-37) have been kept in abeyance.

PM MITRA Parks

The Indian government recently announced the establishment of seven PM MITRA Parks in Tamil Nadu, Telangana, Karnataka, Maharashtra, Gujarat, Madhya Pradesh, and Uttar Pradesh. These parks are inspired by Prime Minister Narendra Modi's 5F vision, which aims to boost the Indian textile industry from farm to fashion to foreign markets.

The PM MITRA scheme was announced in October 2021, and the parks are expected to be set up by 2026-27, with a total outlay of ₹4,445 crore. The initial allocation in the 2023-24 Budget is only ₹200 crore, but the government expects the parks to attract crores of investment and create lakhs of jobs.

Integrated Value Chain and Job Creation

The PM MITRA Parks will function as centers of opportunity, creating an integrated textiles value chain. They will offer everything from spinning, weaving, processing, dyeing, and printing to garment manufacturing, all at a single location. This integrated approach is expected to enhance the competitiveness of the textiles industry by helping it achieve economies of scale and attracting global players to manufacture in India.

Selection Process

Out of 18 proposals for PM MITRA parks from 13 states, the eligible sites were evaluated using a transparent challenge method based on objective criteria, taking into account factors such as connectivity, existing ecosystem, textile/industry policy, infrastructure, utility services, and more. The PM Gati Shakti- National Master Plan for Multi-modal Connectivity was also used for validation.



Financing and Implementation

The Ministry of Textiles will oversee the execution of these projects. An SPV owned by the Centre and State Government will be set up for each park, which will oversee the implementation of the project. The Ministry of Textiles will provide financial support in the form of Development Capital Support up to ₹500 crore per park to the Park SPV. Competitive Incentive Support up to ₹300 crore per park to the units in PM MITRA Park shall also be provided to incentivize speedy implementation.

State governments will provide contiguous and encumbrance-free land parcel of at least 1000 acres of land and will also facilitate provision of all utilities, Reliable Power Supply and Water availability and Waste Water Disposal system, an effective single window clearance as well as a conducive and stable industrial/textile policy.

The parks will offer an excellent infrastructure, plug-and-play facilities, as well as training and research facilities for the industry.

PM MITRA Parks represent a unique model where the Centre and State Governments will work together to increase investment, promote innovation, create job opportunities, and ultimately make India a global hub for textile manufacturing and exports. Nearly ₹70,000 crore investment and 20 lakhs employment generation is envisaged through these parks.

Startup20 Engagement Group

The second meeting of the Startup20 Engagement Group under India's G20 Presidency will be held on 18-19 March in Gangtok, Sikkim. This meeting will provide a unique opportunity to promote startups in North East India. The event is set to bring delegates from G20 member and invitee countries, representatives from multilateral organizations, and stakeholders from the Indian startup ecosystem.

Objectives of the Startup20 Engagement Group

During the inception meeting held in Hyderabad on 28 & 29 January 2023, the objectives and deliverables of the three taskforces were reworked to incorporate suggestions from all the delegates. The three taskforces are:

Foundation and Alliances Taskforce

The Foundation and Alliances Taskforce will work to harmonize the global startup ecosystem through consensus-based definitions. It will create a global knowledge hub for startups, showcase and share best practices within G20 countries, and create bilateral and multilateral collaborations with governments, policymakers, academic and research institutes, industry associations, and international organizations with startups. Finally, it will create mechanisms for global access to markets and talent for startups operating in G20 nations.

Finance Taskforce

The finance taskforce will aim to increase access to capital for startups by providing financing and investment platforms. It will provide ease of access towards patient capital with timely access through non-equity based financial products and allocate a specific sum of money to prioritized sectors. The taskforce will also harmonize tax and legal regulations to encourage public investment in startup funding and interact with the foreign investor



ecosystem of G20 nations.

Inclusion and Sustainability Taskforce

The inclusion and sustainability taskforce will identify the specific needs of startups/entrepreneurs led by women, PwDs, LGBTQ+, minorities, and other groups. The taskforce will support them through access to market, financial resources, training, and government-led support schemes. Additionally, it will promote startups working towards making the world more inclusive on the back of technologies, such as assistive tech. Finally, it will encourage startups to adopt sustainable business models for their long-term profitability.

Expected Outcomes of Startup20

The expected outcomes of Startup20 are the official Policy Communique, a Startup Handbook with a set of commonly agreed-upon definitions and terminologies, a Global Innovation Centre to foster collaborations across borders, and promotion of Startup20 as a Global Point of Contact for startup ecosystems worldwide.

Batrachochytrium dendrobatidis

Batrachochytrium dendrobatidis (Bd) is a lethal fungus that causes chytridiomycosis – a deadly disease that is wiping out hundreds of amphibian species. The pathogen affects the keratin in the skin of amphibians and is spreading across Africa, killing out or driving to the verge of extinction hundreds of amphibian species.

The Deadly Fungus

Batrachochytrium dendrobatidis was first discovered in Queensland, Australia, in the 1990s after a number of frog species were found dead. The fungus is believed to spread through spores discharged into water from amphibian skin. In Queensland, it has been linked to the extinction of over 200 amphibian species.

Fatal to Frogs

By infecting their skin, chytridiomycosis kills frogs by causing skin shedding and other symptoms including ulcers. Frogs and other amphibians carry out vital ion transfer between their skin layers and take in oxygen through their skin. According to a study published in the journal *Science*, fungal infection is to blame for the global population reduction of 39 per cent of frog species.

The Role of Climate Change

Previous studies have found that climate change may actually be beneficial for the fungus. This is because increased cloud cover brought on by climate change may lead to cooler daytime temperatures and warmer nighttime temperatures, which would be more conducive to the growth of the microscopic fungus. However, climate change could also bring about more hot, arid, and dry conditions, which could be harmful to the fungus as it cannot thrive over 86 degrees Fahrenheit and needs moist settings to spread its spores.

Impact on Humans

Chytridiomycosis is the closest human disease resembling the Black Death outbreak of bubonic plague in the middle of the fourteenth century that killed one-third of Europe's population in five years in terms of magnitude.



Women and Men in India 2022 Report

The Union Ministry of Statistics and Programme Implementation released the Women and Men in India 2022 report on March 16, 2023. The report revealed that India's sex ratio, or the number of females per 1,000 males, is expected to improve from 943 in 2011 to 952 by 2036. However, the report also highlighted the gender disparity in labor force participation rates in the country.

Improvement in Sex Ratio

The report noted that the sex ratio at birth increased by three points to 907 in 2018-20 from 904 in 2017-19. The projected sex ratio improvement to 952 by 2036 is a positive development, but the report also indicates that women in India are still largely excluded from the labor force, restricting their financial independence.

Gender Disparity in Labor Force Participation Rates

The Women and Men in India 2022 report revealed that women are severely lagging behind men in labor force participation rates. The report showed that the Labor Force Participation Rate for those above 15 years of age has been increasing since 2017-2018. However, the rate was 77.2% for males and only 32.8% for females in 2021-22, with no improvement in the disparity over the years.

The low participation rates for women could be due to social factors, educational qualifications, and gender discrimination in terms of wages and opportunities at the workplace.

Gender Disparities in Wages

The report further highlighted the gender disparity in wages, with men in rural areas earning more than women in urban areas. The average wage earned per day by casual laborers in work other than public works only exacerbates this disparity.

Population Trends

The Women and Men in India 2022 report also features India's age and sex structure. The population growth, which has been on a downward trend since 1971, is projected to fall further to 0.58% in 2036. The report notes that the population pyramid will undergo a shift, with the base of the pyramid narrowing down while the middle is broadened.

Access to Healthcare

The report also highlights that gender influences people's access to and experience with healthcare, with women and girls facing more difficulties than men and boys due to restrictions on mobility, lack of access to resources and decision-making power.

Improvement in Age-Specific Fertility Rate

The age-specific fertility rate has improved, with the number of live births in the 20-24 years and 25-29 years age group between 2016 and 2020 reducing from 135.4 and 166.0 to 113.6 and 139.6, respectively. This improvement is likely due to economic independence through proper education and securing a job.

Raccoon Dog

Raccoon Dog, also known as Chinese or Asian raccoon dog is a fox-like canid endemic to



East Asia. Its face has racoon-like markings and is closely related to foxes. It has unique traits when compared with canids (dogs, foxes and others) such as the capacity to climb trees and hibernating during winters. A new study found evidence providing the possibility of SARS-CoV-2 originating from racoon dogs.

The Research

Newly released genetic data collected from the Huanan seafood market in Wuhan has suggested a link between Covid-19 and raccoon dogs, adding weight to the theory that infected animals sold at the market started the coronavirus pandemic. The previous conclusion that the samples contained no animal DNA has been overturned by an international team of scientists who analyzed gene sequences posted by Chinese researchers to the scientific database Gisaïd. They found that some of the Covid-positive samples were rich in DNA from raccoon dogs, while traces of DNA belonging to other mammals, including civets, were also present.

The discovery does not prove that raccoon dogs or other animals infected with Covid triggered the pandemic, but it makes that possibility more likely, according to scientists presenting the work to an expert group at the World Health Organization (WHO). The data was presented to the WHO's scientific advisory group for the origins of novel pathogens by Professor Kristian Andersen, an evolutionary biologist at Scripps Research in La Jolla, California, who attended the meeting and is working on the data.

Raccoon Dogs and the Illegal Wildlife Trade

The latest genetic data does not prove that raccoon dogs or other mammals were infected with Covid and spread it at the market. However, the findings do point to the possibility that the cause was an infected animal and, ultimately, the illegal wildlife trade.

Terminator Zones

Scientists from the University of California, Irvine have conducted a study that suggests the possibility of alien life existing in the "terminator zones" of exoplanets. These zones are areas that are not too hot or too cold, and are therefore more likely to harbor liquid water, a key ingredient for life as we know it.

Tidally Locked Exoplanets and Terminator Zones

Exoplanets are planets that exist outside our solar system, and many of them are tidally locked. This means that one side of the planet always faces the star it orbits, while the other side remains in permanent darkness.

Terminator Zones: The Sweet Spot

The terminator is the dividing line between the day side and night side of the exoplanet. Scientists have found that there is a band around these planets, known as the "terminator zone", which is just the right temperature for liquid water to exist.

According to researchers, the dayside of these exoplanets can be scorching hot, while the night side is freezing cold and potentially covered in ice. Therefore, the sweet spot for life to exist would be in the terminator zone, where the temperature is just right.

Possibility of Liquid Water on Terminator Zones

Liquid water is essential for life as we know it, and the presence of water in the terminator



zone is a promising sign for the possibility of extraterrestrial life. However, it is important to note that just because an exoplanet is in the terminator zone does not necessarily mean it has liquid water. Other factors, such as the composition of the planet's atmosphere and the presence of greenhouse gases, can also affect whether liquid water can exist.

Future Research and the Search for Extraterrestrial Life

The discovery of terminator zones on exoplanets has opened up new possibilities for the search for extraterrestrial life. Researchers are now able to focus their efforts on studying exoplanets that are in the terminator zone, in the hopes of finding signs of liquid water and potentially even life.

March 20, 2023

International SME Convention 2023

The 3rd edition of the International SME Convention 2023 (ISC) is organized from March 19 to 21 this year. The event is focusing on India's major four sunrise sectors, namely Cleantech & Green Energy, Manufacturing, Services Sector, and Agro food Processing & Agri Implements sector. These sectors are crucial for India's economic growth and have immense potential for job creation and sustainable development.

ISC 2023 is a platform that brings together SMEs, policymakers, and industry experts to discuss critical issues and explore opportunities for growth and sustainability. It is jointly organized by the union ministries of MSME and external affairs, and India SME Forum. The Madhya Pradesh Government is the key state partner and the Uttar Pradesh Government is the associate state partner for this event.

Panel Discussions and Recommendations

The convention will host several panel discussions that will aim to provide actionable insights and recommendations for building sustainable ecosystems for MSMEs and plugging SMEs into global value chains. The discussions will cover topics such as building strategic partnerships, leveraging digital platforms, focusing on innovation, complying with standards and regulations, and accessing finance.

Power Business Breakfast and Networking

Apart from the conference sessions, the ISC 2023 will also feature three days of power business breakfast and networking with like-minded, successful entrepreneurs, and business leaders. The sessions will provide a platform for SMEs to network, share ideas, and explore business opportunities.

International Partners and Insurance Partner

The ISC 2023 has partnered with the International Network for SMEs (INSME) and the World Union of Small and Medium Enterprises (WUSME) as international partners. TATA AIA is the insurance partner for the convention, which underscores the importance of risk management for SMEs.

Generative AI

Generative Artificial Intelligence (AI) has been making headlines this year, as major tech



companies like Microsoft and Alphabet race to launch products that utilize the technology. In this article, we will discuss everything you need to know about generative AI, including its definition, uses, concerns, and involvement of industry giants like Google and Microsoft.

What is Generative AI?

Generative AI, like other forms of AI, learns to take actions from past data. However, it goes beyond simply categorizing or identifying data and creates brand new content, such as text, images, and computer code, based on that training. One famous example of generative AI is ChatGPT, a chatbot released by Microsoft-backed OpenAI in 2022. It utilizes a large language model to generate human-like responses based on a text prompt. OpenAI also recently announced GPT-4, a new multimodal model that can perceive text and images, allowing it to generate real websites from hand-drawn mock-ups.

What is Generative AI Good For?

Generative AI has various practical applications, such as creating a first draft of marketing copy, taking notes during virtual meetings, personalizing emails, and generating slide presentations. For example, CarMax Inc has used a version of OpenAI's technology to summarize customer reviews and help shoppers decide which used car to buy.

What are the Concerns About Generative AI?

Although generative AI has many benefits, there are concerns about its potential misuse. School systems worry that students may turn in AI-drafted essays, undermining the value of learning. Cybersecurity researchers fear that bad actors, including governments, could use generative AI to produce more disinformation. Additionally, the technology is prone to making mistakes, such as factual inaccuracies and erratic responses.

Is Generative AI Only for Google and Microsoft?

While Google and Microsoft are at the forefront of research and investment in large language models, other companies are also creating their own competing AI or packaging technology from others. For example, Salesforce Inc and Adept AI Labs are among the companies that have embraced generative AI.

International Criminal Court

On March 17, 2023, the International Criminal Court (ICC) issued arrest warrants against Russian President Vladimir Putin and Russia's Commissioner for Child Rights, Maria Lvova-Belova, for the alleged war crime of unlawfully deporting and transferring children from occupied areas of Ukraine to the Russian Federation. This move has been made under articles 8(2)(a)(vii) and 8(2)(b)(viii) of the Rome Statute, which relate to the direct or indirect transfer of an occupying power's own civilian population into occupied territory or the deportation or transfer of the population of the occupied territory within or outside its territory.

Why Did the ICC Issue Arrest Warrants?

The ICC issued arrest warrants against Putin and Belova because they are allegedly responsible for unlawfully deporting and transferring children from Russian-occupied



areas of Ukraine to the Russian Federation. The ICC believes that Putin bears individual criminal responsibility for these crimes and has reasonable grounds to believe that he committed the acts directly, jointly with others, and/or through others under article 25(3)(a) of the Rome Statute. The ICC has also accused Putin of failing to exercise control properly over civilian and military subordinates under his effective authority, committing or allowing the commission of such acts under article 28(b) of the Rome Statute.

What is the ICC?

The ICC is headquartered in The Hague, Netherlands, and was established under the 1998 treaty called the "Rome Statute." It investigates and, where warranted, tries individuals charged with the gravest crimes of concern to the international community, including genocide, war crimes, crimes against humanity, and the crime of aggression. Presently, 123 countries are party to the Rome Statute, including Britain, Japan, Afghanistan, and Germany. However, the USA, India, and China have not ratified the treaty. The ICC's jurisdiction is limited to offences occurring after it came into effect on July 1, 2002. Additionally, the offenses should be committed either in a country that ratified the agreement or by a national of a ratifying country.

Does the ICC Have the Power to Prosecute Russia?

Kremlin spokesman Dmitry Peskov has called the ICC's decision "outrageous and unacceptable" and said that Russia found the court's decision "null and void" because Russia is not an ICC member. However, this decision puts Putin at risk of arrest every time he travels to a state party to the ICC. This is the first time that the ICC has issued an arrest warrant against one of the five permanent members of the UN Security Council.

Does Ukraine Recognize the ICC's Jurisdiction?

Although Ukraine is not a State Party to the Rome Statute, it has twice exercised its options to accept the ICC's jurisdiction over alleged crimes under the Rome Statute, occurring on its territory, under Article 12(3) of the Statute. The alleged crimes, including the deportation of children, were detailed in a report by the "Independent International Commission of Inquiry on Ukraine," a UN-mandated investigative body that said some acts may amount to crimes against humanity.

What is the Independent International Commission of Inquiry Report on Ukraine?

The Independent International Commission of Inquiry on Ukraine's report outlines the body of evidence that points to Russian authorities committing a "wide range of violations of international human rights law and international humanitarian law in many regions of Ukraine and the Russian Federation."

SCO Tourism Ministers' Conference

The Shanghai Cooperation Organisation (SCO) held a tourism ministers' conference recently in Varanasi, where India mooted an action plan to mark 2023 as the year of tourism development in the region. The conference aimed at improving tourism and developing cooperation in the tourism sector amongst member states.

SCO – A brief overview

The SCO is an intergovernmental organisation founded on June 15, 2001, in Shanghai,



China. It comprises eight "Member States" and four "Observer States," including India, China, Kazakhstan, Kyrgyzstan, Pakistan, Russia, Tajikistan, and Uzbekistan.

SCO's primary aim is to address security-related concerns, with addressing regional terrorism, ethnic separatism, and religious extremism top on its list of priorities. Apart from security, it also promotes cooperation in the fields of economics and culture.

What does the Action Plan for 'Year of Tourism Development in the SCO Space in 2023'?

The Action Plan for 'Year of Tourism Development in the SCO Space in 2023' was adopted at the recently held tourism ministers' meeting. The plan identifies a list of activities and events to promote and showcase tourism products of SCO member states. Notably, Varanasi has been declared as the first tourism and cultural capital of SCO.

The joint action plan finalised and approved at the tourism ministers' conference aims to promote the SCO tourism brand, share information and digital technologies in tourism, and promote mutual cooperation in medical and health tourism. The member countries will also undertake various activities jointly, such as SCO tourism exhibitions, SCO Food Festivals, webinars and seminars on tourism, conferences and expert sessions on promoting tourism in the region.

Rajasthan Advocates Protection Bill, 2023

The Rajasthan Advocates Protection Bill, 2023, was tabled by the Rajasthan government in the state legislative assembly on March 16. The Bill aims to prevent offenses against advocates, such as assault, grievous hurt, criminal force, and criminal intimidation, along with damage or loss to their property. The Bill was introduced in response to the increasing violence and false implications against advocates, which resulted in a deterioration of law and order and delay in the justice system.

Background

The proposal for the Bill followed the stabbing of Jugraj Chauhan, a Jodhpur-based lawyer, by two men in broad daylight on February 18. Following the incident, advocates from several courts in the state called for a strike and an indefinite boycott of judicial work. They demanded a law for the protection of advocates and their families. On February 28, the Rajasthan High Court took suo-moto cognizance of the lawyers' strike and reiterated that any attempt made to obstruct any lawyer or litigant from entering the court and appearing in the court to argue the matter would be viewed strictly.

Objective of the Bill

The objective of the Bill is to enact an effective law that prohibits increasing violence and false implications against advocates in the state. It aims to make offenses against advocates cognizable in the territory of Rajasthan, providing police protection to advocates. The Bill defines an advocate as someone who is entered on any role under the provisions of the Advocates Act, 1961.

Penalties

The Bill provides for a maximum of two years imprisonment, along with a fine of up to Rs 25,000 for assault or criminal force against an advocate under Section 5(1). For voluntarily



causing grievous hurt to an advocate, Section 5(2) provides for a maximum of seven years imprisonment and a fine of up to Rs 50,000. Meanwhile, Section 5(3) punishes the voluntary commission of the offense of criminal intimidation against an advocate with a maximum of two years imprisonment and a fine of up to Rs 10,000.

Compensation and Damages

Section 8 of the Bill provides for compensation to advocates when a court imposes a sentence of fine or any other sentence of which fine forms a part. Section 10 states that in addition to the punishment specified in Section 5, the offender shall also be liable to pay for the loss or damage caused to an advocate's property, as may be determined by the court. The offender will also be liable to reimburse the medical expenses incurred by an advocate.

Prosecution of Advocates

Under Section 9 of the Bill, advocates themselves can be prosecuted if a report of cognizable offense is received from their client or opposing client against an act done by the advocate during the discharge of their professional duties. The complaint may be registered only after an inquiry has been conducted by a police officer not below the rank of Deputy Superintendent of Police within seven days.

AxEMU

For the upcoming Artemis missions, NASA's first attempt at landing astronauts on the moon since 1972, the spacesuit used will see a significant upgrade. The new spacesuit, called the AxEMU (Axiom Extravehicular Mobility Unit), will be more nimble, comfortable, and designed to fit a broader array of body types. In a recent demonstration, the suit's chief engineer showcased not just the increased mobility provided by the suit but also other interesting features. Let's explore more about the spacesuit and its advancements in this article.

The Importance of Spacesuits in Space Exploration

Spacesuits play a crucial role in space exploration as they protect astronauts from harsh conditions in outer space, provide a constant supply of air and optimum air pressure, and shield them from space radiation, micrometeorites, and other particles. The suits also protect astronauts from lunar dust, which is considered the "number one environmental problem on the moon" by NASA experts. By allowing astronauts to survive in the harshest conditions of space, spacesuits enable them to perform tasks, carry out experiments, and fulfill the objectives of their mission.

The Limitations of Older Spacesuits

While the Apollo spacesuits worn in the previous moon missions were revolutionary for their time, little has changed in the fundamentals of spacesuits used in spacewalking for the International Space Station. These suits are rigid and uncomfortable to be in, making it difficult for astronauts to move around freely. Even holding things is difficult due to the gloves worn. The suits also balloon when exposed to the vacuum of space, making it difficult for astronauts to move freely.



The Advancements in the New Spacesuit

The AxEMU is designed to address the limitations of older spacesuits. It provides increased mobility, and its design accommodates a broader range of body types, making it more comfortable for astronauts. The large clear bubble around the head provides a wider range of visibility and lighting, which will be essential for studying water ice in shadowed craters near the lunar south pole. The suit's headpiece also has a mount for a high-definition camera.

The new spacesuit's increased mobility has not come at the cost of protection. It has been specifically designed to better deal with lunar dust, which is a major problem on the moon's surface. Additionally, the AxEMU still uses diapers, which is an effective solution for the astronauts' waste management during their missions.

Oxford Union

The Oxford Union Society, commonly known as the Oxford Union, is a prestigious debating society in Oxford, England, that boasts a rich tradition of hosting some of the world's most prominent personalities across politics, academia, and popular culture. Founded in 1823, the Union remains one of Britain's oldest university unions and is distinct from the Oxford University Student Union.

The recent invitation to BJP MP Varun Gandhi to participate in a debate on the performance of the Narendra Modi-led government was turned down, citing that such issues should be raised within India. The Union's debates are hosted every Thursday evening during term time, and speakers argue in favor of or against a pre-determined motion.

Origins and Prestige

In the early nineteenth century, student members of the University of Oxford were restricted in the matters they could discuss. In opposition to these rules, 25 young men established a set of rules that would govern a new society, and the United Debating Society was born in March 1823. The Union is one of the earliest examples of debates being allowed on a formal stage at a university. Given the prestige associated with Oxford, the debate began to see the participation of renowned personalities from across political ideologies, and a range of fields – sciences, arts, politics, and more.

Notable Speakers

The Union has welcomed renowned personalities like US Presidents Ronald Reagan, Jimmy Carter, and Bill Clinton, civil rights leader Malcolm X, the Nobel Peace Laureates the Dalai Lama and Mother Teresa, and scientists Albert Einstein and Stephen Hawking. The speeches of these speakers have gone viral worldwide, with Shashi Tharoor's speech in 2015 arguing for the motion on why Britain owes reparations to India going viral in India.

Format and Controversy

The Union's debates typically involve three to four speakers on each side, who alternate to present their case. The debate's result is determined by the number of individuals who depart the chamber by walking through the doors marked 'Ayes' or 'Noes.' Members can challenge a speaker at any time during the debate by raising a "point of information."



However, it remains at the discretion of the individual speaker whether to accept it.

In 2007, the Union invited Holocaust denier David Irving, leading to protests and sit-ins. Nonetheless, the Union continues to maintain its reputation as one of the world's most prestigious debating societies.

Free Speech

The Union describes itself as the "most prestigious debating society in the world" on its website, emphasizing its tradition of free speech. In the early days, a lack of mechanisms for debates meant interruptions and questionable quality of debate topics. However, the Union's tradition of free speech has sustained it over the years, with women being admitted in 1963 and a debate consisting of only women speakers held in 2022.

XBB1.16

A total of 76 samples of COVID-19's XBB.1.16 variant have been found in India, which might be the reason behind the recent surge in cases in the country, according to data from the Indian SARS-CoV-2 Genomics Consortium (INSACOG). The variant has been detected across eight states and union territories, including Karnataka, Maharashtra, Puducherry, Delhi, Telangana, Gujarat, Himachal Pradesh, and Odisha.

XBB 1.16 Variant First Detected in January

The XBB 1.16 variant was first discovered in January 2023 when two samples tested positive for the variant. In February, a total of 59 samples were found, and in March, until now, 15 samples of the XBB 1.16 variant have been detected.

Experts Attribute the Rise in Cases to the Variant

Some experts have attributed the recent surge in COVID-19 cases in India to the XBB 1.16 variant. Dr Randeep Guleria, former AIIMS director and leader of the national Covid task force, said that the rise in Covid cases seems to be driven by the XBB 1.16 variant, while the increase in influenza cases is because of H3N2. However, he also emphasized that most of the cases are not severe, and following Covid-appropriate behaviour can help contain the spread of the infection.

XBB.1.16 Variant Detected in 12 Countries

According to experts, the new XBB.1.16 variant has now been detected in at least 12 countries, with the highest number of cases in India, followed by the US, Brunei, Singapore, and the UK. India has seen a 281% increase in cases and a 17% increase in deaths over the past 14 days.

India's Single-Day Tally of COVID-19 Cases Crosses 800 after 126 Days

India's single-day tally of COVID-19 cases had recently crossed 800 after 126 days, while the number of active cases climbed to 5,389. The rise in cases has led to concerns among health experts, who are urging people to follow Covid-appropriate behaviour and get vaccinated to help contain the spread of the virus.

Foreign Exchange Reserve

Foreign exchange reserves are the assets that a country's central bank or monetary authority holds to ensure a balance of payments in the country, maintain stability in the financial market, and influence the foreign exchange rates of the currency. These reserves



are made up of foreign currency assets, gold, special drawing rights (SDRs), and reserves with the International Monetary Fund (IMF).

India's Foreign Exchange Reserve Falls to 3-Month Low

According to the Reserve Bank of India's (RBI) statistical supplement, India's foreign exchange reserves have declined to a three-month low as of March 10 this year. The reserves stood at \$560 billion, which is their lowest since early December. In the week to March 3, the reserves were at \$562.40 billion.

Reasons for the Decline in Foreign Exchange Reserves

The RBI has said in the past that changes in reserves also stem from valuation gains or losses. The central bank intervenes in the spot and forwards market to prevent runaway moves in the rupee's exchange rate against the dollar. The decrease in India's foreign exchange reserves may also be attributed to the banking crisis in the United States, which caused the rupee to fall 0.1% against the dollar last week. The currency traded in a range of 81.6150 to 82.2975 and ended at 82.5525 on Friday.

Impacts of the Decrease in Foreign Exchange Reserves

India's foreign exchange reserves are critical to ensuring stability in the country's economy. They provide a cushion to the domestic currency against volatility caused by external economic factors, such as changes in global oil prices, international trade policies, and geopolitical tensions. A decrease in foreign exchange reserves can cause investors to lose confidence in the economy, leading to capital outflows and a further depreciation of the currency.

However, the RBI has assured that India's foreign exchange reserves remain adequate to cover the country's import bill and external debt payments. The central bank has also implemented measures to ensure stability in the financial market and maintain the value of the rupee.

Perumal Murugan

Perumal Murugan's novel 'Pookkuzhi', also known as 'Pyre' in English, has been nominated for the International Booker Prize 2023 longlist. The book has made history by becoming the first Tamil novel to receive this recognition. The novel is set in rural Tamil Nadu during the 1980s and explores caste-based violence through the elopement of a young inter-caste couple.

Exploring Caste-Based Violence in Rural Tamil Nadu

Murugan, the author of 'Pookkuzhi', is a well-known novelist and professor of Tamil literature. He has written extensively on the everyday lives of Tamil rural folk, their traditions and social hierarchies. Through his works, Murugan has critiqued the caste system and how it operates through oppression and violence.

In 'Pookkuzhi', Murugan explores the theme of caste-based violence that still exists in many parts of rural India. The story follows a young couple from different castes who elope to escape the wrath of their families. However, their attempts to find a peaceful life together are met with violence and brutality from those who cannot accept the idea of inter-caste marriage.



Backlash from Conservative Sections of Society

Murugan's work has often invited backlash from conservative sections of society. His novel 'Mathorubhagan' faced severe protests from right-wing groups like the RSS. The protests were so intense that Murugan even posted on Facebook, "Author Perumal Murugan is dead."

Despite the protests, the Madras High Court dismissed all criminal cases filed against Murugan by caste groups. In 2017, 'One Part Woman', another one of Murugan's novels, won the Sahitya Akademi's Translation prize.

NZIA and CRMA

The European Union (EU) has recently announced two major pieces of legislation that are part of its Green Deal Industrial Plan – the Net Zero Industry Act (NZIA) and Critical Raw Materials Act (CRMA). The aim of these measures is to promote green manufacturing and reduce the EU's reliance on imports. In this article, we will take a closer look at these acts and their potential impact on the global manufacturing landscape.

The Net Zero Industry Act

The Net Zero Industry Act (NZIA) is a key component of the EU's Green Deal Industrial Plan. It seeks to promote the production of green technologies within the EU by achieving at least 40% of the EU's green technology needs through domestic manufacturing by 2030. This would reduce the EU's reliance on imports, create jobs, and promote sustainable economic growth.

The NZIA will support the development of a range of green technologies, including renewable energy, energy-efficient buildings, and electric vehicles. It will also provide funding for research and development in the green manufacturing sector and create incentives for companies to adopt more sustainable practices.

The Critical Raw Materials Act

The Critical Raw Materials Act (CRMA) is another key component of the EU's Green Deal Industrial Plan. It aims to reduce the EU's reliance on imports of critical raw materials by setting goals for their extraction, processing, and recycling within the EU. Critical raw materials are those that are essential for the production of high-tech products such as batteries, electric vehicles, and wind turbines.

By reducing the EU's reliance on imports of critical raw materials, the CRMA aims to boost the EU's competitiveness in the global manufacturing sector. It will also help to ensure the security of supply of critical raw materials, which are often subject to geopolitical tensions.

Implications for Emerging Economies

The EU's focus on green manufacturing and reducing reliance on imports could have implications for emerging economies that depend on their manufacturing sectors. For example, countries that export raw materials to the EU could see a reduction in demand, which could have a negative impact on their economies.

However, the EU has stated that it is committed to working with partner countries to promote sustainable and fair trade. It has also pledged to support the development of green technologies in partner countries, which could create new opportunities for



cooperation and trade.

Criticism from Civil Society Groups

The EU's preference for industrial policy over carbon pricing has led to criticism from civil society groups. Some groups argue that the NZIA and CRMA do not go far enough in addressing the root causes of climate change and that carbon pricing would be a more effective tool for reducing emissions.

However, the EU argues that a combination of industrial policy and carbon pricing is necessary to achieve the goals of the Green Deal. It has also stated that it is committed to ensuring that the costs of the transition to a green economy are distributed fairly.

Spiranthes hachijoensis

Researchers in Japan have made an exciting discovery in the field of botany. A new species of orchid has been identified growing in parks, gardens, and even on balconies throughout the country. The delicate pink-and-white blooms of this orchid are reminiscent of the common *Spiranthes* orchid, but it lacks the typical hairy stems and flowers a month earlier. This new species has been named "*Spiranthes hachijoensis*" after its discovery near Hachijo Island in Tokyo.

The Importance of Persistent Exploration

This discovery underscores the importance of persistent exploration, even in seemingly ordinary settings. Researchers have traditionally focused on exotic and remote locations, assuming that new species were unlikely to be found in more urban areas. However, the discovery of *Spiranthes hachijoensis* shows that there is still much to be learned about the natural world, even in our own backyards.

The Need for Taxonomic and Genetic Research

The discovery of *Spiranthes hachijoensis* also highlights the need for taxonomic and genetic research to accurately assess species diversity. Taxonomy is the science of identifying and classifying organisms, and it is a crucial tool for understanding the biodiversity of our planet. Genetic research can provide further insight into the evolutionary history and relationships of different species.

According to the lead author of the study, Professor Kenji Suetsugu, the finding of a new species in common locales emphasizes the ongoing need for exploration and research. He believes that there are likely many more undiscovered species out there, waiting to be identified and studied.

Implications for Conservation

The discovery of *Spiranthes hachijoensis* has important implications for conservation efforts. As more and more species are identified, it becomes increasingly clear that we are losing biodiversity at an alarming rate. By understanding the diversity of life on our planet, we can better appreciate its value and work to protect it.

In addition, the discovery of a new species in such a heavily populated and developed area highlights the need for conservation efforts in urban areas. Green spaces such as parks and gardens provide important habitats for a wide range of species, and it is essential that we work to preserve them.



Trichrysis poseidonia

Researchers from the Shadpada Entomology Research Lab at Christ College, Irinjalakuda, have made an exciting discovery in southern India – a new species of cuckoo wasp. The species has been named *Trichrysis poseidonia* after the Greek God of the Sea, Poseidon, due to apical abdominal teeth's striking resemblance to his trident.

Cuckoo Wasps:

Cuckoo wasps, also known as jewel wasps, are a group of insects belonging to the family Chrysididae. They are known for their striking metallic colors and their kleptoparasitic behavior. These wasps do not build their own nests or collect their own food, but instead lay their eggs in the nests of other wasps or bees. Once the cuckoo wasp's egg hatches, the larva feeds on the food intended for the host's offspring.

Discovery of *Trichrysis poseidonia*:

The researchers from the Shadpada Entomology Research Lab discovered *Trichrysis poseidonia* during their surveys of the insect fauna in the Western Ghats, a mountain range in southern India. The wasp's unique characteristics, such as the three sharp apical abdominal teeth that resemble Poseidon's trident, immediately caught their attention.

The researchers carefully studied the new species and compared it to other cuckoo wasp species. They determined that it was a distinct species that had not been previously described.

Importance of the Discovery:

Discovering new species is an important aspect of biodiversity research. It not only helps us understand the complex relationships between species but also highlights the importance of conservation efforts. *Trichrysis poseidonia* is a unique species that may play a significant role in the ecosystem of the Western Ghats.

Additionally, the discovery of *Trichrysis poseidonia* provides an opportunity for further research into the behavior and biology of cuckoo wasps. As kleptoparasites, cuckoo wasps can have a significant impact on the populations of the host species. Studying *Trichrysis poseidonia* and its interactions with other wasp and bee species can provide valuable insights into the functioning of this ecosystem.

Cyrtopodion Vindhya

A team of wildlife researchers has discovered a new species of naked-toed gecko, named *Cyrtopodion Vindhya*, in the Dahod and Panchmahals districts of Gujarat. This recent discovery brings the number of endemic reptile species described in Gujarat to five in the last 15 years. The study highlights the significance of the region's rich and unique fauna.

The Discovery of *Cyrtopodion Vindhya*

The species was first observed the nocturnal species in 2017 in the hilly regions of Dahod, Panchmahal, and Chhota Udepur districts. The new species prefers the crevices and cracks in granite boulders as its habitat and tends to retreat at the slightest disturbance. It has unique rupicolous habits, which means they live among rocks, but can also be found on the ground.

The first samples of the new species were found from the Vindhya hill ranges in the



westernmost part of Gujarat. Hence, they named the species *Cyrtopodion Vindhya*, which is the 24th known species of the genus *Cyrtopodion*.

The Significance of the Discovery

Gujarat is known for its rich and diverse fauna. However, the reptilian diversity of the region is not as well-documented as that of other regions in India. The discovery of the new species contributes to a better understanding of the reptilian diversity of the region.

Moreover, India has emerged as a hotspot of gecko diversity. Since 1996, the number of geckos reported/described from India has grown from about 61 to 136 by the end of 2019. Gujarat alone is home to more than half of the gecko species reported in the country in the last three decades.

The Implications of the Study

The discovery of *Cyrtopodion Vindhya* highlights the importance of studying lesser-known regions for understanding the biodiversity of a region. The researchers emphasized the need for more studies to be conducted in the Vindhya ranges and other lesser-known regions of Gujarat.

Additionally, the study emphasizes the importance of conserving the habitat of the new species. Since the species prefers the crevices and cracks in granite boulders as its habitat, conservation efforts should focus on the preservation of the rocky outcrops.

Civil-20 India 2023 Inception Conference

The Civil-20 India 2023 Inception Conference kicked off its first plenary session in Nagpur, Maharashtra, with the theme of "Balancing Development with Environment". The session covered four working groups of C20 India 2023, including Integrated Holistic Health, Sustainable and Resilient Communities, LiFE, and Revival of Rivers and Water Management. The session was chaired by former Chief Information Commissioner Satyananda Mishra and included speakers from various fields who addressed the pressing need for a sustainable and environment-centric approach to development.

Interdependence of Humans and Nature

The speakers highlighted the interdependence of humans on their surroundings and nature, emphasizing that we are not separate from nature but a part of it. They discussed how climate change and other environmental challenges have far-reaching impacts on human health and well-being, particularly for vulnerable communities. To address these challenges, they emphasized the need for an integrated and holistic approach to health that includes mental, physical, and environmental health.

Sustainable and Resilient Communities

The working group on Sustainable and Resilient Communities addressed the urgent need for sustainable development that balances economic growth with environmental protection. They discussed the importance of community-driven solutions that take into account local knowledge and practices, as well as the need for partnerships between government, civil society, and the private sector.

**LiFE: Livelihoods, Forests, and Environment**

The LiFE working group emphasized the need to protect forests and biodiversity, which are critical for sustaining livelihoods and ensuring food security. They discussed the importance of integrating environmental considerations into policies and programs related to agriculture, forestry, and other sectors.

Revival of Rivers and Water Management

The working group on Revival of Rivers and Water Management discussed the need for an integrated approach to water management that takes into account the needs of all stakeholders, including farmers, urban residents, and industries. They emphasized the importance of sustainable water use, conservation, and management practices to ensure water security for all.

Call to Focus on Environment-Centric Lifestyle

The session concluded with a call to focus on an environment-centric lifestyle that prioritizes conservation and sustainable use of natural resources. The speakers urged the need for individual and collective action to address the challenges of climate change, pollution, and environmental degradation. They emphasized that a sustainable and resilient future is only possible if the priority is given to the environmental considerations in all aspects of development.

YUVIKA

The Indian Space Research Organisation (ISRO) has initiated the Yuva Vigyani Karyakram (YUVIKA) program to encourage students to pursue careers in Science, Technology, Engineering, and Mathematics (STEM) and develop a passion for space science. Through this program, ISRO aims to identify and nurture talented students who have a keen interest in science and technology and inspire them to become future space scientists. Applications have been opened for this programme recently.

The YUVIKA Program's Aim

The YUVIKA program is open to students in the 9th standard (or equivalent) from all over India. The program selects three students from each state/union territory, and they are invited to participate in a two-week residential training program at various ISRO centers across the country. The program aims to provide an opportunity for young children to explore the wonders of space science, space applications, and space technology.

The Curriculum of YUVIKA Program

The YUVIKA program offers a comprehensive curriculum that covers a wide range of topics related to space science, space applications, and space technology. The program includes lectures, interactive sessions, and hands-on training on various aspects of space science. The curriculum is designed to enhance the knowledge and skills of students and inspire them to pursue careers in the space sector.

Creating Awareness Among Students

One of the key objectives of the YUVIKA program is to create awareness among young children about the emerging trends in space science and technology. The program provides a platform for students to interact with experts in the field of space science and



technology and gain insights into the latest developments and advancements in the field. This helps students to stay updated with the latest trends in the space sector and prepare for the future challenges.

Developing Problem-Solving Skills

The YUVIKA program is designed to help students develop a sense of curiosity, critical thinking, and problem-solving skills. The program encourages students to think out of the box and come up with innovative solutions to real-world problems. This approach not only enhances their scientific temperament but also prepares them for the challenges of the future.

Global Conference on Digital Health - 'Taking Universal Health Coverage to the Last Citizen'

India's Union Ministry of Health and Family Welfare, in partnership with the World Health Organization South-East Asia Regional Office, is organizing a Global Conference on Digital Health in New Delhi on March 20 and 21, 2023. With the theme "Taking Universal Health Coverage to the Last Citizen," the conference focused on exploring the potential of digital health solutions to improve healthcare delivery and achieve universal health coverage targets.

In his virtual address to the conference, Dr. Mansukh Mandaviya, India's Union Minister for Health and Family Welfare, emphasized the critical role of digital health in revolutionizing healthcare systems. The conference was attended by global health experts, policymakers, and leaders from the public and private sectors.

Building Consensus on Digital Public Goods

India aims to launch a global initiative on digital health as an institutional framework to build consensus on the promotion of digital public goods as a key enabler in achieving universal health coverage targets. The initiative will focus on leveraging digital technologies to strengthen health systems, increase access to quality health services, and reduce health inequities.

Digital health solutions, such as telemedicine, health information systems, and mHealth, have the potential to bridge gaps in healthcare delivery and improve health outcomes. By leveraging these technologies, healthcare providers can reach more patients, even in remote and underserved areas, and provide them with timely and cost-effective care.

Improving Healthcare Access and Quality

Digital health solutions can also improve healthcare access and quality by enabling remote consultations and monitoring. Patients can consult with healthcare providers from the comfort of their homes, reducing the need for travel and minimizing the risk of exposure to infectious diseases.

Remote monitoring technologies, such as wearables and sensors, can provide healthcare providers with real-time data on patients' health status, enabling early detection and intervention for chronic conditions. This can lead to better health outcomes and reduced healthcare costs.

Strengthening Health Systems

Digital health solutions can also strengthen health systems by improving data collection



and analysis. Digital health information systems can capture patient data in real-time, enabling healthcare providers to make informed decisions and track progress towards health targets.

Moreover, digital solutions can enable the sharing of health data across different healthcare providers and systems, improving care coordination and continuity of care. This can be particularly beneficial for patients with complex health needs who require care from multiple providers.

March 21, 2023

Background Radiation

Background radiation refers to the radiation emitted from natural sources such as rocks or mountains. A recent study conducted by scientists at the Bhabha Atomic Research Centre (BARC) found that certain areas in Kerala are experiencing nearly three times more background radiation than previously assumed. The study is significant, as it sheds light on the natural radiation levels in India, which has important implications for the country's nuclear energy plans.

Monazite sands and high levels of thorium

The higher radiation levels in Kollam, a district in Kerala, are attributed to the presence of monazite sands that are high in thorium, a natural radioactive element. Thorium is a common radioactive element that is found in small amounts in soil, rocks, and water. Monazite sands are one of the most important sources of thorium, and India has been using these sands as a source of nuclear fuel for many years. Southern India, which is home to granite and basaltic volcanic rock, has higher levels of radiation from uranium deposits.

Study findings

The study conducted by BARC scientists measured radiation levels from nearly 100,000 locations across India. The study found that the average natural background levels of gamma radiation in India were 94 nGy/hr. However, in Kollam district, the levels were found to be 9,562 nGy/hr, which is about three times more than the assumed levels. The 1986 survey conducted previously had mapped only 214 locations.

No elevated health risk

Although the higher radiation levels in Kollam district might seem concerning, the study's authors note that there is no elevated health risk associated with these higher radiation levels. The human body is accustomed to higher doses of radiation, and there is no evidence to suggest that the higher levels of radiation in Kollam district are causing any adverse health effects.

IAEA safety standards

The International Atomic Energy Agency (IAEA) specifies maximum radiation exposure levels, which have also been adopted by India's atomic energy establishment. The IAEA recommends that public exposure to radiation should not exceed 1 milli-Sievert every year, and those who work in nuclear plants or are exposed to radiation by virtue of their occupation should not be exposed to over 30 milli-Sievert every year.



2023 SAFF Championship

The All India Football Federation (AIFF) has announced that the 2023 edition of the SAFF Championship, South Asia's most prestigious international football tournament, will be held in Bengaluru from June 21 to July 3. This marks India's fourth time hosting the tournament, and the first time since the 2015 edition held in Thiruvananthapuram.

Participating Teams and Tournament Format

The tournament will feature all member associations of the South Asian Football Federation (SAFF), with the 13th edition of the competition being divided into two groups. Teams will play round-robin league matches in the group stage, with the top two teams from each group advancing to the semi-finals. The date for the draw will be announced later.

India's SAFF Championship Record

India has won the tournament eight times out of the 12 previous editions, making them the most successful team in SAFF Championship history. The Indian national football team will be looking to defend their title, having emerged victorious in the 2021 edition after defeating Nepal in the final.

Bengaluru's Rich Football History

Karnataka, the state where Bengaluru is located, has produced some of the greatest players in Indian football history, and they are also the latest winners of the National Football Championships. The timing of the SAFF Championship being hosted in Bengaluru is, therefore, apt.

Copilot

On 16 March, Microsoft unveiled its latest artificial intelligence (AI) integration with Microsoft 365 Copilot. Designed to boost workplace productivity, the Copilot combines the "power of large language models with business data and the Microsoft 365 apps to unleash creativity, unlock productivity and uplevel skills," according to a press statement.

How does Copilot work?

Copilot works like an assistant and has been integrated with popular everyday apps such as Word, Excel, PowerPoint, Outlook, and Teams, so users can easily access it. Additionally, Microsoft has launched Business Chat to work alongside your Microsoft 365 apps and data such as calendar emails, chats, documents, meetings, and contacts to enhance the experience and make it easier and faster.

With Copilot, users can use prompts such as "tell your team how you updated a product strategy," and it will generate an update based on the morning's meetings, emails, and chat threads. According to Microsoft, this will "fundamentally transform the way we work" and will turn your words into the "most powerful productivity tool on the planet."

How can Copilot enhance productivity?

Copilot has been built to free up space and help people focus better on the tasks at hand. In Microsoft Word, it writes, summarises, and creates along with the user. It can give you a draft to edit or use as a starting point. Although Microsoft acknowledges Copilot might not always be right, it will help you save sourcing, writing, and editing time.



In PowerPoint, users can create vivid presentations with a single prompt and then add relevant content. In Excel, Copilot will help create data visualizations in a matter of seconds and identify trends. Additionally, clearing your inbox won't leave you drained, as Copilot can do that for you in minutes and help you manage it so that you can focus on the communication part. With the Copilot in Power Platform, you can automate repetitive tasks, create chatbots, and turn an idea into a working app in minutes.

What are the benefits of Copilot?

Copilot will give people more agency and make technology more accessible through the most universal interface: natural language.

Copilot is currently being tested with select commercial customers. While it is still in its testing phase, the potential for the integration is enormous, with the ability to fundamentally transform the way we work and boost productivity in the workplace. It has the potential to save users countless hours, allowing them to focus on what's important while still getting the job done quickly and efficiently. With Copilot, Microsoft is taking a significant step towards revolutionizing the way we work with technology.

Utility Bidder's Deforestation Report

The Deforestation Report by Utility Bidder has revealed that India has seen the highest surge in deforestation in the past 30 years. The country lost 384,000 hectares (ha) of forests between 1990 and 2000, but the figure rose to 668,400 ha between 2015 and 2020. This trend makes India the second-largest country with deforestation after Brazil. The report analyzed the deforestation trends of 98 countries using data aggregator Our World In Data's figures from 1990 to 2000 and 2015 to 2020. Here are some key points from the report.

Cattle Rearing and Oil Seed Cultivation Responsible for Most Deforestation

The report highlights that cattle rearing and oil seed cultivation are the leading causes of global deforestation. Cattle rearing alone causes an annual loss of 2,105,753 ha of forests, followed by the cultivation of oil seeds causing a loss of 950,609 ha.

Palm Oil Cultivation Leads to Deforestation in Indonesia

Indonesia witnessed a significant loss of forests due to palm oil cultivation, leading to the destruction of 650,000 ha of forests. It ranks third globally in terms of deforestation.

Soybean Cultivation is Another Driver of Deforestation

While palm oil has been a big driver of deforestation for many years, soybean cultivation is also responsible for significant deforestation globally. The report states that many ha of grassland and forests have been destroyed to make room for soybean cultivation.

Logging is the Third Highest Factor Responsible for Deforestation

Logging is the third highest factor responsible for deforestation, causing around 678,744 ha of annual deforestation globally.

India Compensates for Increase in Population at the Cost of Deforestation

The report suggests that India has had to compensate for the increase in residents due to its status as the country with the second-largest population in the world. This has come at the cost of deforestation, making it the country with the largest increase in deforestation



from 1990 to 2020, with a difference of 284,400 ha in forestry loss.

Brazil Loses Forests Due to Climate Change

Brazil ranks first globally in terms of deforestation, having lost 1,695,700 ha of forests between 2015 and 2020. However, this is much lower than the 4,254,800 ha it lost between 1990 and 2000. Most of the forests were lost due to climate change.

World Sparrow Day - Update (March, 2023)

On March 20, 2023, the world once again came together to celebrate World Sparrow Day. This special day is dedicated to raising awareness about the conservation and protection of sparrows and other common birds whose populations have been declining globally. With the theme "I Love Sparrows," the goal of World Sparrow Day 2023 is to encourage more people to appreciate the relationship between humans and sparrows.

History of World Sparrow Day

The idea for World Sparrow Day was born out of a casual conversation over tea at the Nature Forever Society's office. The first commemoration of the day occurred in 2010, and it has been celebrated annually since then. The founder of The Nature Forever Society, Mohammed Dilawar, was named a conservation hero by TIME Magazine for his efforts to raise awareness about sparrows.

The goal of World Sparrow Day is to promote conservation efforts for the house sparrow and other common birds, as well as to commemorate the beauty of common biodiversity that we often take for granted.

Significance of World Sparrow Day

Sparrows are known to be an indicator of a region's environmental health, and their declining populations are a cause for concern. The day is celebrated in a variety of ways around the world, including bird-watching, building birdhouses, and educational programs.

World Sparrow Day is a celebration of the human-sparrow relationship and a call to action to protect these beloved birds and their habitats. Sparrows have been human companions for thousands of years, but their populations have been rapidly declining in recent years. The goal of the day is to raise awareness of their plight and inspire people and organizations around the world to take action to protect them.

ICMR's Ethical Guidelines for AI in Healthcare and Biomedical Research

Artificial intelligence (AI) has revolutionized many sectors, including healthcare. With the recognition of this potential, the Indian Council of Medical Research (ICMR) has recently released ethical guidelines for AI in healthcare and biomedical research. These guidelines aim to guide the effective and safe development, deployment, and adoption of AI-based technologies in healthcare.

Applications of AI in Healthcare

ICMR recognizes several applications of AI in healthcare, such as diagnosis and screening, therapeutics, preventive treatments, clinical decision-making, public health surveillance, complex data analysis, predicting disease outcomes, behavioural and mental healthcare, and health management systems. However, since AI cannot be held accountable for its



decisions, an ethically sound policy framework is essential to guide the development and application of AI technologies in healthcare.

Patient-Centric Ethical Principles

ICMR has outlined ten key patient-centric ethical principles for AI application in the health sector. These principles are accountability and liability, autonomy, data privacy, collaboration, risk minimization and safety, accessibility and equity, optimization of data quality, non-discrimination and fairness, validity and trustworthiness.

The autonomy principle ensures human oversight of the functioning and performance of the AI system. Before initiating any process, it is critical to obtain consent from the patient and inform them of the physical, psychological, and social risks involved. The safety and risk minimization principle aims to prevent unintended or deliberate misuse, anonymized data delinked from global technology to avoid cyber attacks, and a favorable benefit-risk assessment by an ethical committee, among other areas.

Stakeholders Involved

ICMR's guidelines also outline a brief for relevant stakeholders, including researchers, clinicians/hospitals/public health systems, patients, ethics committee, government regulators, and the industry. Developing AI tools for the health sector is a multi-step process involving all these stakeholders. Each of these steps must follow standard practices to make the AI-based solutions technically sound, ethically justified, and applicable to a large number of individuals with equity and fairness. All stakeholders must adhere to these guiding principles to make the technology more useful and acceptable to the users and beneficiaries of the technology.

Ethical Review Process

The ethical review process for AI in health falls under the domain of the ethics committee, which assesses factors such as data source, quality, safety, anonymization, and/or data piracy, data selection biases, participant protection, payment of compensation, possibility of stigmatization, among others. The committee is responsible for assessing both the scientific rigor and ethical aspects of all health research and ensuring that the proposal is scientifically sound and weighs all potential risks and benefits for the population where the research is being carried out.

Informed Consent and Governance

Informed consent and governance of AI tools in the health sector are other critical areas highlighted in the guidelines. Governance of AI tools is still in preliminary stages, even in developed countries. India has a host of frameworks that combine technological advances with healthcare, such as the Digital Health Authority for leveraging digital health technologies under the National Health Policy (2017), the Digital Information Security in Healthcare Act (DISHA) 2018, and the Medical Device Rules, 2017.

Burundi: First Polio Outbreak in 30 Years

Burundi, a landlocked east-African country, has declared its first polio outbreak in 30 years. The outbreak was confirmed after a four-year-old child in the Isale district of western Burundi, along with two other children he was in contact with, were diagnosed



with vaccine-linked polio. Additionally, poliovirus type 2 was detected in five samples from environmental surveillance of wastewater from the region.

Poliovirus type 2: a weakened strain of the virus contained in the oral polio vaccine

Poliovirus type 2 is a weakened strain of the virus contained in the oral polio vaccine. The virus can circulate among under-immunised populations for a long time, leading to vaccine-linked infections. The WHO has noted that the type 2 infection can cause acute flaccid paralysis in children, which is characterized by the acute onset of weakness or paralysis with reduced muscle tone.

Low immunity and prevalence of poliovirus type 2 in Africa

Burundi's last vaccination drive against polio was in 2016, and the country's immunity against the virus is considered to be very low. The WHO has also reported that circulating poliovirus type 2 is the most prevalent form of polio in Africa, with more than 400 cases reported in 14 countries in 2022.

Burundian government's response

The Burundian government is planning a polio vaccine campaign in the coming weeks for children up to 7 years of age, and is also collecting more samples and considering the idea of opening more environmental surveillance sites for stronger monitoring.

Safety and efficacy concerns of the oral polio vaccine

While the four-dose vaccine is the best protection against polio, the oral vaccine can cause the disease in about two to four children per 2 million doses. In recent years, the oral polio vaccine has caused more cases of polio than the wild polio virus, leading to concerns about the safety and efficacy of the vaccine.

The need for timely action in protecting children

There is no treatment for polio, which mostly affects children under the age of five. The WHO has lauded the Burundian government for its effective disease surveillance, and stressed that timely action is critical in protecting children through effective vaccination.

Vaccine-derived polio outbreak in Democratic Republic of Congo

In addition to Burundi, the vaccine-linked polio virus has also been found in six children in the Democratic Republic of Congo's eastern Tanganyika and South Kivu provinces. The global spread of vaccine-derived polio is still considered a high risk by the WHO, and the organization has emphasized the need for continued efforts to eradicate the disease.

UBS

UBS, Switzerland's biggest bank, recently agreed to purchase Credit Suisse in a move that aims to contain the panic that ensued after two American banks collapsed earlier this month. This unique acquisition has sent shockwaves throughout the banking industry and has garnered attention from investors and analysts worldwide. In this article, we delve into the history of UBS and analyze the impact of this deal on the global banking sector.

History of UBS Bank

UBS was established in 1998 when the Swiss Bank Corporation and the Union Bank of Switzerland merged together. The Swiss Bank Corporation was founded in 1854 as the Basel Bank Corporation by six private bankers in Basel, Switzerland. It merged with the



Zürich Bank Corporation and entered the commercial banking sector. In 1897, the bank changed its name to Swiss Bank Corporation and acquired several other banks in Switzerland and abroad. The Union Bank of Switzerland opened in 1912 after the merger of Bank in Winterthur and Toggenburger Bank. Like the Swiss Bank Corporation, it also acquired several banks in Switzerland and became one of the country's biggest banks.

UBS Today

UBS is now one of the largest banks in the world, with a market capitalization of \$63 billion as per a 2022 report. It has around 200 branches and 4,600 client advisors in Switzerland alone, and provides its services in 50 other countries, including India. UBS is known for providing private banking, wealth management, asset management, and investment banking services for private, corporate, and institutional clients.

Impact of the Acquisition

The acquisition of Credit Suisse by UBS created a major impact in the banking industry. The Swiss government and regulators brokered the deal, with UBS paying around \$3.2 billion to Credit Suisse and the Swiss central bank providing \$108 billion in liquidity assistance to both banks. The Swiss government also agreed to provide more than \$9 billion to backstop some losses that UBS may incur by taking over Credit Suisse. While this deal aims to contain the global financial market panic, the impact of this acquisition on the global banking sector is yet to be seen.

Adani's Mundra Petrochem project

The Adani Group's Mundra Petrochemicals project has been suspended as part of the Group's "comeback strategy" to regain investor confidence amidst allegations of accounting fraud and corporate governance lapses. The project aimed to set up a greenfield coal-to-PVC plant at Adani Ports and Special Economic Zone (APSEZ) in Gujarat, with a poly-vinyl-chloride (PVC) production capacity of 2,000 KTPA requiring 3.1 MTPA of imported coal. PVC is widely used in various applications, including flooring, sewage pipes, insulation on electrical wires, plastic bottles, and more.

What is the Mundra Petrochemicals project?

Mundra Petrochemicals Ltd was incorporated in 2021 as a wholly owned subsidiary of Adani Enterprises Ltd (AEL) to set up a greenfield coal-to-PVC plant in Kutch district, Gujarat. The project aimed to bridge the gap between domestic production and demand for PVC in India, turning India into a net exporter of PVC.

Why has the project been suspended?

The project's suspension comes in the wake of allegations of accounting fraud, stock manipulations, and other corporate governance lapses made in the damaging Hindenburg report. The Adani Group has denied all allegations, but roughly USD 140 billion has been wiped out from Gautam Adani's empire's market value. To address investor concerns, the Group has planned a "comeback strategy".

What is the Adani Group's "comeback strategy"?

The Adani Group's "comeback strategy" is based on addressing investor concerns around debt, consolidating operations, and fighting off allegations. The Group has cancelled a Rs



7,000 crore coal plant purchase, shelved plans to bid for a stake in power trader PTC, repaid some debt, and pre-paid some finances raised by pledging promoter stake in group companies. The Mundra Petrochemicals project's suspension is part of the Group's plan to evaluate the status of growth projects in the primary industry vertical in the coming months.

"Groundwater: A Valuable but Diminishing Resource" Report

"Groundwater: A Valuable but Diminishing Resource" Report was released by the Standing Committee on Water Resources. It recommended that the Indian government must take measures to reduce groundwater overexploitation, primarily driven by the wide cultivation of water-intensive crops like paddy and sugarcane. The committee urged the Department of Water Resources, River Development and Ganga Rejuvenation, along with the Power Ministry and Department of Agriculture and Farmers Welfare, to discourage the use of electric pumps by introducing measures such as pre-paid cards for power supply and restricting power supply to a few hours a day.

Curtailling Free Power Supply

The report highlights that states like Punjab, Haryana, Telangana, and Tamil Nadu offer free power to farmers, which contributes to excessive groundwater exploitation. The committee recommends that free electricity to farmers be restricted to reduce the misuse of groundwater. However, both the Department of Water Resources, River Development and Ganga Rejuvenation, and the Department of Agriculture and Farmers Welfare are reportedly unable to persuade states to reduce or stop subsidies for power given to agriculture.

Integrated Measures to Reduce Dependence on Groundwater

The committee also asks the government to devise integrated measures to reduce dependence on groundwater in agriculture, given that over-extraction of groundwater is prevalent in northern states, such as Punjab, Haryana, and Rajasthan, and in other states such as Karnataka, Tamil Nadu, and Uttar Pradesh. The main reason for overexploitation of groundwater is the wide cultivation of water-intensive paddy and sugarcane crops, heavily incentivized through highly subsidized pricing of water, power, and fertilizers.

Shift in Focus to Water Productivity

The committee recommends a shift in focus from 'land productivity' to 'water productivity' and the formulation of appropriate policy decisions relating to crop production in the country. In addition to land productivity, water productivity, i.e., production per cubic meter of water, should be a major criterion in decisions related to crop production.

Lakkhi Mela

Rajasthan's Karauli district is known for its vibrant culture and festivals, and one such festival is the Lakkhi Mela, also known as Kaila Devi Chaitra Mela. This festival is celebrated with great enthusiasm and devotion by people of different communities who come together to pay their respects to Goddess Kaila Devi.



Dates and Attendance

The festival starts on the 12th day of Chaitra Badi and lasts for two weeks. This year, the festival began on 20th March and will continue until 4th April. More than 50 lakh devotees are expected to attend the fair, making it one of the largest religious gatherings in Rajasthan.

Elaborate Arrangements

The district administration and the temple trust have made elaborate arrangements for the safety and security of the devotees. Measures have been taken to ensure that the devotees can pay their respects to the goddess without any hassle. The entire area is under CCTV surveillance, and medical facilities have been set up to provide immediate assistance to those in need.

Craftsmanship and Cultural Performances

The Lakkhi Mela is not just a religious gathering; it is also a platform for showcasing the craftsmanship of numerous people. Handcrafted wood, lacquer and metal products, tribal headgear, silver jewellery, mirror work, hand woven and embroidered textiles and much more are displayed during the fair. Cultural performances and wrestling displays by great pahalwans are also featured.

Significance of Kaila Devi

The goddess Kaila Devi is believed to be an incarnation of the warrior goddess Durga. The temple is considered to be one of the most sacred shrines in Rajasthan and is a significant pilgrimage destination for Hindus. The legend has it that the goddess Kaila Devi appeared to the people of the region during the 14th century and blessed them with prosperity and protection.

“Pathways to Atmanirbhar Bharat” Report

The study titled “Pathways to Atmanirbhar Bharat” was released recently by Lawrence Berkeley National Laboratory and The India Energy and Climate Center (IECC). According to this report, India has an opportunity to achieve energy independence by 2047 through investments in clean energy technologies.

Investing in Renewable Energy and EVs

The report highlighted Prime Minister Narendra Modi’s Atmanirbhar Bharat push, which includes a target to install 500 GW of renewable energy capacity by 2030 and grow EV sales in India to capture a significant portion of the market. Additionally, the government aims to produce 5 million tonnes of green hydrogen by 2030.

Decarbonizing Indian Industry

Investment in renewables, electric vehicles, and green hydrogen will help move away from coal-based generation while reducing carbon emissions. Zero-carbon hydrogen will decarbonize Indian industry, cutting emissions and lowering dependence on imported fuel.

Heavy industrial production will shift primarily to green hydrogen and electrification, with 90 per cent of iron and steel, 90 per cent of cement, and 100 per cent of fertilizers produced by 2047. The transition to electric vehicles could save crude oil imports by over



90 per cent (or USD 240 billion) by 2047, while green hydrogen-based and electrified industrial production would reduce industrial coal imports by 95 per cent.

Clean Energy Deployment

A rapid expansion of clean energy infrastructure will be needed to support transport, industrial electrification, and green hydrogen production. Electricity demand could increase nearly five-fold – from 1,300 TWh/year to over 6,600 TWh/year by 2050. This would require a massive scale-up of renewable energy deployment to 40 GW a year through 2030, ramping up to about 100 GW a year between 2030 and 2050.

Policy Support for Clean Energy Transition

Achieving energy independence could offer environmental and public health benefits without compromising economic growth. With an aggressive clean energy transition, over 4 million air pollution-related premature deaths could be avoided between 2023-2047. The report suggests that the policy ecosystem needs five pillars: deployment mandates for commercial/cost-effective clean technologies that provide economies of scale, financial support for emerging technologies, long-term infrastructure planning, accelerating/scaling domestic manufacturing, and planning for a just transition.

Economically Advantageous Energy Independence

The report highlights that clean energy will reduce and inflation-proof India's energy expenditure as renewables, EV batteries, and hydrogen infrastructure are capital assets with rapidly falling costs. A shift to electric transportation will create USD 2.5 trillion in net consumer savings by 2047.

Babesiosis

While Babesiosis has been a concern in some states in the US for many years, recent research has shown a significant increase in the number of cases in the northeastern states. In this article, we will explore what babesiosis is, what the latest research has found, and what preventive measures can be taken to avoid the spread of the disease.

What is Babesiosis?

Babesiosis is a deadly disease that occurs due to the parasitic infection of red blood cells. It is primarily transmitted to humans through the bite of infected ticks, particularly the black-legged or deer tick. While many infected individuals may not experience any symptoms, some can become severely ill. Common symptoms include fever, chills, sweats, headache, body aches, loss of appetite, nausea, and fatigue. In severe cases, it can be life-threatening, especially in people with weakened immune systems or other serious health conditions.

The Rising Cases of Babesiosis in the US

According to a recent report by the Centers for Disease Control and Prevention (CDC), the number of babesiosis cases has significantly increased in the northeastern states of Maine, New Hampshire, and Vermont. Until now, the disease was considered endemic only in Connecticut, Massachusetts, New Jersey, New York, Rhode Island, and Wisconsin. The CDC reported that from 2011 to 2019, 16,456 cases of babesiosis were reported in 37 states, with the largest number of cases reported in New York and Massachusetts.

**Preventing and Treating Babesiosis**

The most common way to treat babesiosis is through a course of antibiotics, but not all antibiotics work for everyone. According to experts, the combination of atovaquone and azithromycin is the mainstay of the treatment, although clindamycin plus quinine can also be used.

Prevention is the best approach when it comes to babesiosis. Experts advise using tick repellent, wearing long sleeves and pants, and doing a regular tick check after spending time outdoors. Additionally, it's essential to check pets for ticks and remove them immediately to prevent them from carrying the disease into your home.

LVM3

The Indian space agency, ISRO, has announced that it will launch its largest rocket, LVM3, on March 26th for its second commercial mission. This is the shortest duration in which ISRO has carried out two missions of the LVM3 rocket, as it aims to meet the timelines of the customer whose satellites are being launched. This is the 6th mission to be carried out with the rocket.

OneWeb's Satellites and Launch Services

OneWeb, a UK-based firm backed by India's Bharti Group, aims to offer high-speed, low-latency internet connectivity from space via its constellation of satellites in Low Earth Orbit. OneWeb has already flown 17 times, utilising launch services from SpaceX, Arianespace and ISRO to place all its 1st generation constellation satellites in orbit. ISRO will be carrying the 18th set of satellites for OneWeb.

Dedicated Commercial Mission

The upcoming mission will be carried out through ISRO's commercial arm NSIL (NewSpace India Limited). It will carry 36 OneWeb Gen-1 satellites with a total mass of 5,805 kg, into a 450 km circular Low Earth Orbit with an inclination of 87.4°.

LVM3 Rocket Design

LVM3 is a three-stage vehicle. It has two S200 solid motors as the first stage, L110 twin liquid engines as the second stage and a final C25 cryogenic upper stage. This 43.5 m tall vehicle has a lift-off mass of 643 tonnes. Its cryogenic stage is uniquely designed to orient and re-orient in orthogonal direction to meet the customer requirements of injecting satellites precisely and with a gap to avoid a collision.

Revenue for ISRO

OneWeb had inked an agreement with NSIL and ISRO for placing a total of 72 satellites in orbit (in batches of 36). This deal has brought in more than Rs.1000 crore in revenue for ISRO. It also provides an opportunity for the Indian space agency to showcase its largest rocket's capability and reliability. The vehicle has performed successful launches in all its missions to date.

International Day for the Elimination of Racial Discrimination - Update (March, 2023)

March 21 is marked as International Day for the Elimination of Racial Discrimination. This day holds great significance as it marks the tragedy that took place in Sharpeville, South Africa, on March 21, 1960. During a peaceful protest against apartheid "pass laws," police



opened fire and killed 69 people. The United Nations General Assembly proclaimed the Day in 1966, urging the international community to work towards eradicating all forms of racial discrimination.

Call to End All Forms of Racial Discrimination

The International Day for the Elimination of Racial Discrimination is a call to action for individuals, organizations, and all levels of government to actively work towards ending all forms of racial discrimination, injustice, systemic racism, and hatred. The day serves as a reminder of the need for ongoing efforts to combat the alarming rise of xenophobia, racism, and intolerance worldwide.

#FightRacism Campaign

To support the fight against racism, the United Nations Human Rights Office has launched the #FightRacism campaign. This campaign aims to foster a global culture of tolerance, equality, and anti-discrimination. This year's observance of March 21 will spotlight global figures who are combating discrimination in sports and will partner with the EuroLeague Basketball to promote a message of unity.

The International Decade for People of African Descent

The International Day for the Elimination of Racial Discrimination is also an opportunity to draw attention to the International Decade for People of African Descent. This group includes some of the world's poorest and most marginalized people. The International Decade for People of African Descent was launched by the United Nations General Assembly and aims to promote respect, protection, and fulfilment of human rights and fundamental freedoms for people of African descent worldwide.

March 22, 2023

Thanthai Periyar Wildlife Sanctuary

The Tamil Nadu Government has announced the notification of Thanthai Periyar Wildlife Sanctuary, making it the 18th wildlife sanctuary in the state. Spread across 80,567 hectares in the forest areas of Anthiyur and Gobichettipalayam taluks in Erode district, the sanctuary will include reserve forest areas in Anthiyur, Bargur, Thattakarai and Chennampatti. The announcement was made during the state budget recently.

Wildlife and Species Found in Thanthai Periyar Wildlife Sanctuary

Thanthai Periyar Wildlife Sanctuary is situated at close proximity with the Malai Mahadeshwara wildlife sanctuary, BRT Wildlife Sanctuary, Cauvery wildlife sanctuary in Karnataka. It acts as the connecting point between Nilgiris Biosphere Reserve and Cauvery South Wildlife Sanctuary. The sanctuary is home to 21 species of mammals, 136 species of birds and 118 species of butterflies. It hosts fauna like elephants, leopards, wild boars, gaurs and deer.

No Restrictions on Tribal People

The notification of the new wildlife sanctuary will not hinder the works of tribal communities in the region. The tribals living in these protected areas are not expected to lose their rights given under the Forest Rights Act since tribal people living in six settlements have already got titles.



Boost for Asian Elephant Conservation

The notification of the Thanthai Periyar Wildlife Sanctuary will be a big boost for Asian elephant conservation. With this new addition, the state government hopes to further its ongoing conservation efforts and provide a better ecosystem for wildlife. The notification will also ensure the protection of flora and fauna and help mitigate human-wildlife conflict in the Bargur hills area. The funds allotted will aid in the appointment of more anti-poaching watchers, strengthening wildlife protection measures and removing invasive species from the area.

Japan's Plan for Free & Open Indo-Pacific

Japanese Prime Minister Fumio Kishida recently introduced a new plan to promote a free and open Indo-Pacific region during his visit to India. The plan is aimed at forging stronger ties with countries in South and Southeast Asia to counter China's growing assertiveness in the region, particularly over the disputed Senkaku/Diaoyu islands in the East China Sea. This article will delve deeper into Japan's new Indo-Pacific plan.

The Four Pillars of Japan's Plan

Kishida outlined four "pillars" to Japan's new Indo-Pacific plan, which includes maintaining peace, dealing with new global issues in cooperation with Indo-Pacific countries, achieving global connectivity through various platforms, and ensuring the safety of the open seas and skies. The plan also includes a pledge of \$75 billion to the region by 2030 through private investment and yen loans and by ramping up aid through official governmental assistance and grants.

Increasing Connectivity and Promoting Freedom of Navigation

Kishida emphasized on boosting connectivity among countries and promoting freedom of navigation. He also highlighted the importance of increasing maritime defense and security among like-minded countries. The new plan covers joint maritime exercises with India and the United States, in addition to goodwill exercises with ASEAN and the Pacific Islands.

Quad Grouping and India-Japan Partnership

The defence and strategic ties between India and Japan deepened over the years in the face of a dominant China. As a consequence, QUAD alliance came to fruition. Japan, India, Australia, and the United States are members of the Quad grouping, which was created to balance China's growing dominance. The QUAD members will take part in the annual naval wargaming exercise Malabar, that will be held in Australia this year.

Global South Solidarity and Stance on Ukraine Conflict

Kishida called on the "Global South" to "show solidarity" to end Russia's invasion of Ukraine, referring to countries in Africa, Asia, Oceania, and Latin America. However, India has not imposed sanctions on Russia and has ramped up its buying of Russian oil. Kishida emphasized that stopping the invasion by Russia is essential, and it's important for the international community to show solidarity.

CapCut: A Video Editing Application Gaining Popularity in the US

Video editing has become an integral part of our daily lives, especially with the rise of



social media platforms like TikTok, Facebook, Instagram, and YouTube. Among these platforms, TikTok has always been in the limelight for its huge craze among US communities. However, a new video editing tool, owned by ByteDance Ltd, is now gaining eyeballs in the country. It is fast becoming a major player in the world of video-editing tools in the United States. It is TikTok's lesser-known sibling, CapCut.

Professional Video Editing with CapCut

CapCut is an application that allows users to edit videos and make them look more professional. Several editing features are available in the video editing tool, such as various templates, filters, visual effects, and background music. The application was launched in 2020 and has grown tremendously in recent times. A study by Shanghai-based data tracker Diandian revealed that the video editing tool has over 200 million monthly active users.

Safe Storage of Data

The app stores the data in the US and Singapore, same as TikTok, ensuring the safety of user data. The videos edited by CapCut can be used not just for TikTok, Facebook, and Instagram but also for YouTube, owing to the way it edits the video in a professional fashion.

CapCut vs. TikTok

While TikTok is facing allegations of spying and is banned in several countries amid security concerns. CapCut, on the other hand, is not facing the same fate so far.

Privacy Concerns

The CapCut's privacy policy allows the video editing app collects photos, videos, user's location, gender, and date of birth. These are some of the common things that video-editing apps use. The company needs to address the privacy concerns of users and ensure that the data collected is used only for enhancing the user experience.

Charging for Premium Options

The app, till last year, did not come with any chargeable fees, but it started charging users for cloud storage service and some of its premium options. The company is also recruiting people for designing templates. CapCut along with several other Chinese apps are banned in India.

Growing Popularity

As per Sensor Tower, CapCut's global downloads increased to 43 percent to over 400 million last year. About 7 percent of its global downloads since last year came just from the United States. The application was topping the app-stores charts in terms of number of downloads in the US, standing tall alongside other popular apps like TikTok and online fashion store Shein.

Spring Equinox 2023

After the long winter blues, it's time to welcome the Spring Equinox 2023, which marks the first day of spring in the Northern Hemisphere. This year, the equinox falls on March 20 and brings with it a perfect balance of day and night, marking the beginning of longer days and warmer weather.



Understanding Spring Equinox

The Spring Equinox happens due to the Earth's tilt at an angle of 23.5 degrees on its axis. This angle results in the uneven distribution of sunlight between the Northern and Southern Hemispheres during different seasons. During the spring equinox, the sun passes directly over the equator, resulting in equal daylight and darkness in most parts of the world. However, the length of day and night may vary slightly depending on your location.

Cultural Celebrations of Equinox

The Spring Equinox has cultural significance in many parts of the world. In Persian culture, the Spring Equinox marks the beginning of the New Year, known as Nowruz. The festival is celebrated with new clothes, cleaning of homes, and preparing a special dish called "sabzi polo mahi." In China, the Spring Equinox is celebrated with the "trying to stand egg upright" game, where people try to balance an egg on its end. In Japan, the equinox is a public holiday celebrated through family gatherings and visiting the graves of family members.

Chaitra Navratri - the Nine-Day Festival

The auspicious festival of Navratri is one of the most important and joyous festivals celebrated in India. This nine-day festival is celebrated twice a year and is dedicated to the worship of the nine forms of Goddess Durga. The upcoming Chaitra Navratri, which falls between April 13 to April 22, will be celebrated with great enthusiasm and devotion across the country.

The Celebration of Chaitra Navratri

The festival of Chaitra Navratri is celebrated during the months of March and April, marking the beginning of the Hindu New Year. It is a time for people to rejoice, fast, and worship the nine forms of Goddess Durga.

The Nine Forms of Goddess Durga

During Chaitra Navratri, people worship the nine forms of Goddess Durga – Shailputri, Brahmacharini, Chandraghanta, Kushmanda, Skandmata, Katyayani, Kaalratri, Mahagauri, and Siddhidatri. Each form of the Goddess represents a different aspect of nature and symbolizes different virtues. The nine-day festival is observed with great devotion and respect for the Goddess.

History and Significance of Chaitra Navratri

According to Hindu mythology, Chaitra Navratri symbolizes the creation of the universe and the beginning of the world and beings. Since Goddess Durga is tasked with creating the world, this festival is also considered to be the beginning of the Hindu year by many. According to the religious beliefs, during this time, Goddess Durga killed, Mahishasura, an evil demon, as a symbol of good over evil.

The festival of Chaitra Navratri holds immense importance in the hearts of people. It is celebrated to attain inner peace, good health, and strength to fight evil. People fast and perform pujas to please the Goddess and seek her blessings. It is believed that by observing the nine-day fast, one can attain the grace of Goddess Durga and receive her



blessings.

Nepal-India Literature Festival

The Nepal-India Literature Festival was a three-day literary extravaganza organized by Biratnagar Metropolitan City and Krantidhara Literature Academy of Meerut, India. The festival witnessed the participation of over 350 literary writers from all seven provinces of Nepal and a majority of the states of India. The event concluded with the adoption of a 10-point Biratnagar declaration aimed at promoting literature between Nepal and India.

10-Point Biratnagar Declaration

The Biratnagar declaration highlighted the need for mutual promotion of literature between Nepal and India. The declaration included the following points:

1. Translation of Nepali literature into Hindi and Hindi into Nepali for mutual promotion.
2. Further research on connecting Mahabharat-era King Birat's palace with the Mahabharat Circuit in coordination with the Department of Archaeology and historians.
3. Encouraging young literary writers to explore the archaeological artefacts further.
4. Creating an online platform for literary writers of Nepal and India to share their work.
5. Establishing literary exchange programs for students of Nepal and India.
6. Encouraging literary writers to promote tourism in both Nepal and India through their work.
7. Recognizing the contribution of literary writers in promoting cultural ties between Nepal and India.
8. Creating a database of literary works of Nepal and India for research purposes.
9. Encouraging literary writers to address social issues in their work.
10. Organizing the Nepal-India Literature Festival annually.

The adoption of the Biratnagar declaration is a significant step towards promoting literature between the two neighboring countries. The declaration recognizes the importance of literature in promoting cultural ties and encourages the exchange of ideas and knowledge through literature.

Literary Creations on the Occasion

Over 200 litterateurs cited their literary creations on the occasion, which included poetry, short stories, and novels. The festival provided a platform for literary writers of Nepal and India to showcase their work and exchange ideas.

The participation of young literary writers was particularly encouraging. The festival provided them with an opportunity to interact with established writers and gain valuable insights into the craft of writing.

Nehru Memorial Museum and Library's Digitization Project

The Nehru Memorial Museum and Library (NMML) is embarking on a significant project to digitize its research materials. The project aims to convert the entire India House Collection, including books, reports, periodicals, archival documents, microfilms, and



microfiches, into digital form. This article discusses the significance of the project and its expected outcomes.

Preserving the history of the Indian independence movement

The NMML is a museum and library dedicated to preserving the history of the Indian independence movement. It is home to a vast collection of resources, including the bulk of Mahatma Gandhi's writings, private papers of prominent Indian leaders, and publications on modern and contemporary Indian history. The NMML has been a valuable resource for scholars and historians for many years, and the digitization project aims to make these resources more accessible to a wider audience.

Implementing the project

The project will be implemented with the help of three outsourced agencies who will work on digitizing the India House Collection, archival papers, and microfilms and microfiches. The project staff is working in collaboration with these agencies to ensure the safety and authentication of scanned images. The NMML staff will also develop necessary skills for digitization, allowing for future in-house work. The cost of the project is approximately 7 crore rupees, and it is expected to be completed in around 12 months.

Accessing digitized materials through the Open Digital Library and Archives

Once the project is complete, all the digitized materials will be accessible through the Open Digital Library and Archives (ODLA), a state-of-the-art digital platform. The ODLA will allow researchers on modern and contemporary India to search for documents relevant to their research, preview them, and download them after paying service charges. The platform will be developed by Tata Consultancy Services in collaboration with NMML and is expected to become operational within the next six months.

Facilitating academic research and knowledge dissemination

The digitization of the NMML's resources will greatly facilitate academic research and the dissemination of knowledge about modern and contemporary India. It will mainly assist scholars who depend on archival sources, newspapers, and journals, of which the NMML is the largest repository in India. The project will also ensure the preservation of these important resources for future generations.

Navroz - the Persian New Year

Nowruz is an ancient festival that celebrates the first day of spring in the Northern Hemisphere. It is observed by more than 300 million people in different regions worldwide, including the Balkans, the Black Sea Basin, the Caucasus, Central Asia, and the Middle East. Here is what you need to know about this festivity.

What is Nowruz?

Nowruz is a festival that marks beginning of the new year. It is celebrated on the day of the astronomical vernal equinox, which usually falls on March 21. The celebrations last for 13 days and provide an opportunity for reflection on the past and setting intentions for the future.

Rooted in Zoroastrianism, a religion practised in ancient Persia predating Christianity and Islam, Nowruz is a celebration of the return of spring, representing the triumph of good



over evil and joy over sorrow.

Who Celebrates Nowruz?

Given its origins, Nowruz is widely celebrated in countries with significant Persian cultural influence, including Afghanistan, Azerbaijan, India, Kyrgyzstan, Kazakhstan, Pakistan, Turkey, Tajikistan, Turkmenistan, and Uzbekistan.

How do people celebrate Nowruz?

Nowruz celebrations vary from country to country, but they share some common traditions. One of the most important is the preparation of the Haft-Seen table, which is a family activity. It involves placing seven items that start with the Persian letter "S" on a table, which represent different wishes and hopes for the new year.

The seven items, also known as the seven "S"s, include Sirkeh (vinegar), Sikkeh (coin), Seer (garlic), Seeb (apples), Sabzeh (wheat), Samanu (wheat pudding), and Sumac (berries). The table may also include a mirror, painted eggs, a goldfish, and candles.

During Nowruz, people also engage in symbolic preparations with fire and water and perform ritual dances, some of which involve jumping over fires, symbolically purging bad experiences from the previous year. Before the arrival of the new year, families gather to exchange wishes, and the eldest member distributes sweets while young children receive coins and presents.

Gudhi Padwa – The Marathi New Year

Gudhi Padwa is a festival celebrated with great enthusiasm and joy by Marathi and Konkani Hindus. It marks the start of the month of Chaitra as per the Hindu lunisolar calendar, which usually falls between March and April as per the Gregorian calendar.

Origins and Significance of Gudhi Padwa

The word 'Gudhi' means flag or banner, and 'Padwa' refers to the first day of the lunar fortnight. According to legend, Lord Brahma created the universe on this day, and it is believed that he hoisted a flag or 'Gudhi' to signify his victory over evil. Thus, the festival of Gudhi Padwa commemorates this victory of good over evil and marks the beginning of a new era of prosperity, happiness, and success.

Rituals and Traditions of Gudhi Padwa

On the day of Gudhi Padwa, people clean and decorate their houses with colourful rangolis and flowers. The main highlight of the festival is the hoisting of the Gudhi flag, which is made by tying a colourful silk scarf to a bamboo stick along with flowers, mango, and neem leaves. The Gudhi flag symbolizes Lord Brahma's victory and is hoisted outside the house as a symbol of good luck and prosperity.

Another important ritual of Gudhi Padwa is the preparation of Saakhar gaathi, a sugar candy garland that is offered to the gods as a symbol of sweetness and happiness. Families also prepare special delicacies like Puran Poli, Shrikhand, and Aamras to share with their loved ones.

The festival is also celebrated with street processions, music, and dance performances. People dress up in traditional attire and participate in the festivities with great enthusiasm and joy.



Gudhi Padwa Celebrations Across India

While Gudhi Padwa is primarily celebrated in Maharashtra and Goa, the festival is also celebrated in other parts of India with different names and traditions. In Andhra Pradesh and Telangana, the festival is known as Ugadi, while in Karnataka, it is called Yugadi. In Sindhi, the festival is known as Cheti Chand and is celebrated as the emergence day of Lord Jhulelal.

Chetri Chand – the Sindhi New Year

Chetri Chandra, also known as the Moon of Chaitra, is a festival celebrated by Sindhi Hindus to mark the beginning of the Lunar Hindu New Year. This year, it falls on 23 March 2023. In this article, we'll take a closer look at the origins and traditions of this important celebration.

Origins and Significance

Chetri Chandra falls on the first day of the Sindhi month of Chet (Chaitra) and is based on the lunar cycle of the lunisolar Hindu calendar. The festival is celebrated in late March or early April in the Gregorian calendar, around the same time as Gudi Padwa in Maharashtra and Ugadi in other parts of India.

The festival has both agricultural and religious significance. It marks the arrival of spring and the start of the harvest season. But for the Sindhi community, it also commemorates the birth of Uderolal, who is believed to have been born in 1007 after the community prayed to the Hindu god Varun Dev to save them from persecution by the Muslim ruler Mirkhshah.

According to legend, Varun Dev appeared to the Sindhis in the form of a warrior and an old man, who later became known as Jhulelal. He preached and reprimanded Mirkhshah, stating that Muslims and Hindus deserve the same religious freedoms. Jhulelal became the champion of the people in Sindh, from both religions. The Hindu Sindhis celebrate the new year as Uderolal's birthday, while among his Sufi Muslim followers, Jhulelal is known as "Khwaja Khizir" or "Zindapir."

Traditions and Celebrations

The tradition of Chetri Chandra likely started with Daryapanthis. During the British colonial era, major annual fairs (melas) used to be organized in Uderolal and Zindapir (near Hyderabad, Pakistan). In contemporary times, the Sindhi community celebrates the festival with major fairs, feast parties, processions with jhankis (glimpse stage) of Jhulelal (an avatar of Varun dev), other Hindu deities, and social dancing.

On this day, many Sindhis carry the Baharana Sahib, a representation of Jhulelal, to a close by river or lake. Baharana Sahib consists of an oil lamp, crystal sugar, cardamom, fruits, and akha. Behind it is a water jar and a coconut in it, covered with cloth, flowers, and leaves. There is also a statue of Puja Jhulelal Devta.

Cheti Chand is a major festival of Sindhi Hindus in India and Pakistan, and it is also celebrated by the Hindu Sindhi diaspora around the world.

Sajibu Nongma Panba

Sajibu Nongma Panba is a lunar new year celebrated by the followers of Sanamahism in



Manipur. This year, it falls on March 22. In this article, we will discuss the origin and observance of this auspicious festival.

The Origin of Sajibu Nongma Panba

According to the followers of Sanamahism, Sajibu Nongma Panba started during the reign of King Maliya Fambalcha (1359 BC-1329 BC), also known as Koi-Koi. King Koi-Koi ascended the throne at the age of 25 and introduced the dating of Meitei calendar, known as Mari-Fam. The festival is also known as Meetei Cheiraoba or Sajibu Cheiraoba. It is celebrated on the first day of the month of Sajibu, which usually falls during the month of April according to the Meitei lunar calendar.

Observance of the Festival

The Meitei people celebrate the festival with great enthusiasm and rituals. The day starts with the ritual offerings of fruits, vegetables, rice, and other uncooked food items to the Meitei deity Lainingthou Sanamahi during the early morning. After getting blessings from Lainingthou Sanamahi, odd numbers of dishes are prepared using the offerings. Traditionally, the males of the house make the dishes, with the females helping in chopping and washing the ingredients.

The prepared dishes are offered at two different traditional locations around the house. These locations are specially cleansed and sanctified before the offering. The eldest son of the house makes the offering to three deities – Kumsana Kumliklai (Lord of the golden year), Lamsenba Tusenba (Guardian of the Land), and Lammaba Tumaba (Lord of the land) at this sanctified area. The offering includes an odd number of dishes surrounding a small mound of steamed rice, a token currency, fruits, flowers, a candle, and an incense stick, all of them placed upon a plantain leaf. This ritual is performed in the late morning. After this ritual, the dishes prepared for the feast are exchanged with relatives or neighbours, and this custom is called “Mathel Laanba,” after which the feast begins. It is believed that anything that happens on the day of the new year will happen for the rest of the year.

Hillock Climbing: Ching Kāba

After the feast, it is tradition that family members climb a small hillock specially prepared by the community near the locality to pay homage to the hill deity, signifying the elevation of the spirit to reach the divine. The “Chin-nga” at Singjamei and “Cheirao Ching” at Chingmeirong are such hillocks that are specially prepared for these hillock climbing rituals.

World Down Syndrome Day - Update (March, 2023)

Every year on March 21st, World Down Syndrome Day (WDSD) is observed to raise awareness about Down syndrome, advocate for the rights of people with Down syndrome, and promote their inclusion and well-being. This day is significant because it marks the uniqueness of individuals with Down syndrome and highlights the need for society to embrace diversity.

What is Down Syndrome?

Down syndrome is a genetic condition that occurs when there is an extra copy of the 21st



chromosome, resulting in physical and intellectual disabilities. People with Down syndrome may have a distinct facial appearance and are prone to several health complications, including heart defects, hearing and vision problems, and thyroid conditions. However, with proper care and support, people with Down syndrome can lead happy and fulfilling lives.

History of World Down Syndrome Day

WDS was first observed on March 21, 2006, and later recognized by the United Nations General Assembly in 2011. This day is dedicated to raising awareness about Down syndrome and promoting well-being of people with this condition.

Significance of World Down Syndrome Day

WDS provides the opportunity to highlight the importance of providing people with Down syndrome the right to education, employment, healthcare, and social inclusion, and emphasis on their valuable contributions to the society. It's a celebration of diversity and an opportunity to break down barriers and stigmas associated with Down syndrome.

Healthcare for Down Syndrome

People with Down syndrome require a different healthcare approach, given the potential for physical and mental health conditions that may arise. Regular medical check-ups are critical for managing these conditions and preventing further complications. Occupational therapy, speech therapy, and counseling can also be beneficial in addressing the unique needs of people with Down syndrome.

Theme for World Down Syndrome Day 2023

The theme for WDS 2023 is "With Us Not For Us." This theme highlights the importance of involving people with Down syndrome in decision-making and planning processes that affect their lives. It encourages individuals with Down syndrome to speak up, be heard, and take an active role in shaping their future.

Anti-Submarine Craft INS Androth

India recently launched the INS Androth, as part of an eight-ship series of Anti-Submarine Warfare Shallow Water Craft (ASW SWC). The ASW SWC was built by Garden Reach Shipbuilders and Engineers (GRSE) in Kolkata and is designed to conduct anti-submarine operations in coastal waters, low intensity maritime operations and mine laying operations.

Specifications of the INS Androth

The INS Androth is approximately 77.6 meters long, 10.5 meters wide, and requires a draught of only 2.7 meters. It is propelled by three diesel-driven water jets, enabling it to attain a maximum speed of 25 knots. The ship is equipped with hull mounted sonar and a low frequency variable depth sonar, lightweight torpedoes, ASW rockets and mines, a close-in weapon system (with a 30 mm gun) and 16.7 mm stabilised remote-controlled guns.

Coastal Surveillance and ASW Operations

The ASW SWC is capable of carrying out a full-scale sub-surface surveillance of coastal



waters and various surface platforms. It can effortlessly coordinate with aircraft in ASW operations. Despite its small size, the ship is expected to pack a lethal punch. The INS Androth and its fellow craft will play a vital role in securing India's coastal waters and combating any potential threats to the nation's maritime security.

Combat-Ready and Future Proof Force

The development of specialized vessels helps create a combat ready and future proof force that can tackle the current and emerging challenges in the maritime domain. INS Androth's launch indicates India's commitment to strengthening its naval capabilities and ensuring the nation's maritime security.

International Day of Forests - Update (March, 2023)

Every year on March 21st, World Forestry Day or International Day of Forests is celebrated to increase global awareness about the crucial role of forests in sustaining life on Earth. The day is recognised as an effort to educate people about the numerous benefits of forests, including providing food, purifying air, resources, and life-saving medicines. Moreover, they play a significant role in combating climate change, poverty alleviation, maintaining ecological balance, and more.

Protecting the Forests: Need of the Hour

Forests are vital for the well-being of current and future generations. However, the increasing rate of deforestation, forest fires, droughts, pests, and other factors is posing a significant threat to their survival. To conserve forests and protect their existence, people are encouraged to contribute on local, national, and international levels. One of the easiest and most effective ways to preserve forests is by afforestation or planting of trees.

Theme of World Forestry Day 2023

Each year, World Forestry Day is recognised under a specific theme. In 2023, the theme of World Forestry Day is "Forests and Health." The aim of this year's theme is to raise awareness about the critical link between healthy forests and healthy people.

History and Significance of World Forestry Day

In 2012, the UN General Assembly (UNGA) proclaimed March 21st as World Forestry Day to create awareness about the conservation and protection of all types of forests to maintain ecological balance. The Collaborative Partnership on Forests (CPF) selects the theme of International Day of Forests annually. According to the UNGA, the United Nations Forum on Forests and the Food and Agriculture Organization of the United Nations (FAO) are responsible for organizing events and campaigns related to the World Forestry Day.

INS Sujata's Visit to Mozambique

INS Sujata, a Sukanya class patrol vessel of the Indian Navy, based at the Southern Naval Command in Kochi, recently visited Port Maputo, Mozambique as a part of its Overseas Deployment from 19 to 21 March 2023. The purpose of the visit is to improve the bilateral relations and mutual cooperation between the two navies.



High-Level Meetings and Visits

During its visit, the Commanding Officer of INS Sujata called on several military and civilian dignitaries, including Rear Admiral Eugenio Dias Da Silva Muatuca, the Commander of Mozambican Navy, and Mr. Eneas Da Conceicao Comiche, Mayor of Maputo. The High Commissioner of India and other officials were also present during these meetings.

Cross-Deck Training and Other Activities

As part of the visit, approximately 40 personnel of the Mozambican Navy visited INS Sujata to attend the Cross deck training. This training module covered walkarounds of training facilities, briefing on diving operations, training on VBSS and light weapons, visual communication, and maintenance of machinery and hygiene onboard. Furthermore, various other activities, including a combined morning yoga session and soccer match, were organized between the personnel of both Navies. A reception was also hosted onboard INS Sujata, which was attended by several Indian and Mozambican dignitaries and diplomats.

Enhancing Mutual Cooperation and Bilateral Ties

The visit of INS Sujata to Port Maputo, Mozambique, further enhanced the mutual cooperation and bilateral ties between the two Navies. Such visits not only provide opportunities for the exchange of knowledge, skills, and expertise but also help in strengthening diplomatic ties and building a strong relationship between the two countries. The visit by INS Sujata highlights India's commitment to maintaining peace and security in the region while also fostering friendship and cooperation with other countries.

World Water Day - Update (March, 2023)

Every year, March 22 is observed as World Water Day to raise awareness about the global water crisis and the importance of water. The day aims to inspire people to sustainably manage freshwater resources, address water-related issues and support the achievement of Sustainable Development Goal 6: Water and Sanitation for All by 2030.

History of World Water Day

In 1992, the United Nations General Assembly adopted a resolution to observe World Water Day on March 22 every year. The first World Water Day was observed in 1993, and since then, the day has been celebrated globally to highlight the importance of water.

Significance of World Water Day

Water is the elixir of life, and everyone needs it to sustain their lives. However, according to the United Nations, around two billion people worldwide lack safe drinking water. Additionally, diseases related to poor water, sanitation, and hygiene shorten the lives of 74 million people each year, and 1.4 million people die annually due to a lack of access to clean water. This highlights the importance of conserving water and addressing water-related issues.

Theme of World Water Day 2023

The theme for World Water Day 2023 is "Accelerating the change to solve the water and sanitation crisis." It highlights the urgent need to take action to address the global water



crisis and the necessity to go beyond business as usual. The United Nations aims to unite the world around water and kickstart the UN 2023 Water Conference from March 22 to 24 in New York, United States.

Celebration of World Water Day

World Water Day is celebrated by organisations, NGOs, and individuals to conserve water and address issues associated with water resources. On this day, seminars, webinars, and events are organised worldwide to raise awareness about the importance of water and the need to address water-related challenges.

March 23, 2023

IMF's \$3 Billion Bailout Programme for Sri Lanka

On March 20, the International Monetary Fund (IMF) cleared a \$3 billion-Extended Fund Facility (EFF) for Sri Lanka, aimed at restoring macroeconomic stability, safeguarding financial stability, and unlocking the nation's growth potential. Sri Lanka defaulted on its foreign debt in 2020, and this nearly-\$3 billion facility comes after six months of the government's staff-level agreement. President Ranil Wickremesinghe stated that the IMF program would "serve as an assurance to the international community that Sri Lanka has the capacity to service its debt."

India, Japan, and China, Sri Lanka's top three bilateral creditors, played a crucial role in unlocking the IMF assistance to the island by providing financing assurances to the Fund. In an open letter to bilateral creditors, Mr. Wickremesinghe promised that Sri Lanka would be transparent in the debt restructuring process and ensure comparable treatment of all external creditors.

Assessment of Sri Lanka's Governance and Anti-Corruption Framework

Identifying corruption as a key issue, the IMF has started assessing Sri Lanka's governance and anti-corruption framework in its first such exercise in Asia. The IMF "governance diagnostic mission" aims to help the country achieve debt sustainability, increase transparency, and promote inclusive growth. The assessment will also evaluate the effectiveness of Sri Lanka's legal and institutional framework, as well as its anti-money laundering and combating the financing of terrorism (AML/CFT) regime.

Sri Lanka's Fundamental Fiscal Challenges Remain

While the IMF package enables Sri Lanka to access up to \$7 billion in funding from IMF and International Financial Institutions (IFIs), Sri Lankan economists have cautioned that securing nearly \$3 billion over four years hardly guarantees swift economic recovery. The country has a long way to go before actual recovery, as its fundamental fiscal challenges of a huge debt burden, a persisting trade deficit, and a balance of payments problem remain. Sri Lanka's total outstanding public debt increased to \$84 billion in December 2022, and the government must service multilateral debt totaling over \$2 billion during the first half of this year.

Protests Amidst Economic Hardships

In anticipation of the Fund's assistance, Sri Lanka implemented a slew of policy measures over the last year. These measures include drastically increasing banking interest rates,



floating the rupee, raising taxes, and increasing energy tariffs three-fold. The high costs of living and soaring electricity bills have added to the burden of workers across sectors, leading to protests against economic hardships.

Padma Awards for 2023

President Droupadi Murmu conferred the prestigious Padma Awards at a Civil Investiture Ceremony that was held at Rashtrapati Bhavan recently. The Padma Awards are one of the highest civilian awards of the country, and this year, 106 individuals were recognized for their exceptional and distinguished service in various fields.

Padma Awards Categories

The Padma Awards are conferred in three categories, namely, Padma Vibhushan, Padma Bhushan, and Padma Shri. These awards recognize excellence in various disciplines and fields of activities such as art, social work, public affairs, science and engineering, trade and industry, medicine, literature and education, sports, civil service, among others.

Padma Vibhushan – Exceptional and Distinguished Service

The Padma Vibhushan, instituted on 2 January 1954, is the second-highest civilian award of the Republic of India, after the Bharat Ratna. The award is given for exceptional and distinguished service in any field, without distinction of race, occupation, position or sex. All individuals, except government servants including those working with PSUs, are eligible for these awards.

Padma Bhushan – Distinguished Service of a High Order

The Padma Bhushan, instituted on 2 January 1954, is the third-highest civilian award in the Republic of India, preceded by the Bharat Ratna and the Padma Vibhushan and followed by the Padma Shri. The award is given for distinguished service of a high order, without distinction of race, occupation, position or sex. The award criteria include service in any field, including service rendered by government servants, doctors, and scientists. However, those working with public sector undertakings are not eligible for this award.

Padma Shri – Distinguished Contribution in Various Spheres

The Padma Shri, instituted on 2 January 1954, is the fourth-highest civilian award of the Republic of India, after the Bharat Ratna, the Padma Vibhushan, and the Padma Bhushan. The award recognizes distinguished contribution in various spheres of activity, including the arts, education, industry, literature, science, acting, medicine, social service, and public affairs.

Padma Award Recipients 2023

This year, among the 106 Padma Award recipients, six were conferred with the Padma Vibhushan, nine with the Padma Bhushan, and 91 with the Padma Shri. The awardees included prominent personalities such as Mulayam Singh Yadav, former Chief Minister of Uttar Pradesh; Zakir Hussain, tabla maestro; KM Birla, industrialist; and Sudha Murty, social worker and author.

Additional Tier 1 Bonds and Credit Suisse's Write-Down

The recent purchase of Credit Suisse, a Swiss bank, by its rival UBS, has left investors struggling to understand the deal. One outcome that is causing significant distress is the



decision to write down around SFr16bn (\$17bn) in Additional-Tier 1 (AT1) bonds issued by Credit Suisse, which could even spell the end of the asset class. In this article, we will explore what AT1 bonds are, their purpose, and the impact of Credit Suisse's write-down on the market.

What are AT1 Bonds?

AT1 securities are a type of "contingent-convertible" bonds developed after the global financial crisis of 2007-09 to prevent the need for government-funded bailouts of struggling banks. These instruments, also known as "cocos," are a blend of bank equity and debt. In good times, they behave like relatively high-yield bonds. When things go bad, and certain trigger points are reached, such as a bank's capital falling below certain levels relative to assets, the bonds convert to equity, reducing the bank's debt and absorbing losses.

Impact of Credit Suisse's Write-Down

The market for AT1s is worth around \$275bn, and private banks in Asia have historically been eager buyers. However, Credit Suisse's decision to write down AT1 bonds has infuriated investors and caused significant damage to the market. The write-down was the largest in history, more than ten times larger than when Banco Popular failed in 2017, taking \$1.4bn of AT1 bonds with it. The real damage to the market was that it upended the expected pecking order, placing stockholders above AT1 bondholders. This was confirmed on March 19th, and it has already affected the price of AT1 bonds issued by other banks.

The Future of the Asset Class

The revelation that stockholders may be left with something and coco holders with nothing is contrary to the understanding many buyers had about what they were purchasing. The idea that coco buyers may feel burned could spell doom for the asset class. The future of AT1 bonds is uncertain, and commentary about the future of the asset class ranges from bleak to apocalyptic. Goldman Sachs has warned that it has become difficult to assess the spread between yields on AT1 bonds and different forms of high-yield credit due to a lack of clarity on future resolutions.

Euoplos dignitas: A New Species of Trapdoor Spider from Queensland

Researchers in central Queensland's Brigalow Belt have discovered a new species of trapdoor spider called *Euoplos dignitas*. This nocturnal species lives underground and is larger and stockier than its male counterpart. The discovery of this new spider species is an exciting development, but it also raises concerns about its future, given the impact of land clearing in the region.

Appearance and Habits

The female *Euoplos dignitas* spiders are almost five centimetres in body length, while the males are more brightly coloured. The males spend several years underground before venturing out to find female burrows. The females, which are larger and stockier, spend their entire lives underground. The spiders have venom apparatus in their fangs, but they are not known to be dangerously venomous.



Threats to the Species

There are concerns that the species may be endangered due to land clearing in the region. The spiders are found in burrows about the diameter of a 50-cent piece in the black soil around Eidsvold and Monto, west of Bundaberg. The Brigalow Belt has been heavily cleared for agriculture and other land uses, reducing natural woodland remnants that the spiders are suited to. These spiders are not good at getting around the landscape and dispersing compared to flying insects.

Future Research

More surveys need to be done in the general area where the spiders were found to determine the size of the population and the extent of the species' range. The protection of the natural woodland remnants where the spiders are likely to thrive is critical for the species' survival. More research is needed to understand the spider's biology and ecology to develop conservation measures that ensure its survival.

National Security Act, 1980

The National Security Act, 1980 has been invoked in the case of Amritpal Singh, the self-styled Sikh preacher and leader of Waris Punjab De who is currently on the run. This was confirmed by Punjab Advocate General Vinod Ghai during a hearing at the Punjab and Haryana High Court on a habeas corpus petition filed by the legal advisor of Waris Punjab De. Here's what you need to know about the NSA and the protections available under it.

What is the National Security Act, 1980?

The National Security Act, passed by the Indian Parliament in 1980, has been amended several times since then. The Act allows the state to detain a person without a formal charge and without trial to prevent them from acting in any manner prejudicial to the security of the state or for the maintenance of public order. It is an administrative order passed by the Divisional Commissioner or the District Magistrate, and not detention ordered by police based on specific allegations or for a specific violation of the law.

Grounds for detention

The NSA can be invoked to prevent a person from acting in any manner prejudicial to the defence of India, relations of India with foreign powers or the security of India. Among others, it can also be applied to prevent a person from acting in any manner prejudicial to the maintenance of supply and services essential to the community. An individual can be detained without a charge for a maximum period of 12 months. The detained person can be held for 10 to 12 days in special circumstances without being told the charges against them.

Protection available under the Act

The Indian Constitution allows both preventive detention and the right of protection against arrest and detention in certain cases, enshrined under Article 22 of the Constitution. However, Article 22(3) provides that the rights available to an arrested person will not be applicable in case of preventive detention. One crucial procedural safeguard under the NSA is granted under Article 22(5), where all the detained persons have the right to make an effective representation before an independent advisory board,



which consists of three members, chaired by a member who is, or has been, a judge of a high court.

Criticism against NSA

The Act has been criticised by human rights groups who argue that it vitiates Article 22 of the Constitution and various provisions under the CrPC that safeguard the interest of an arrested person, namely that the arrested person should be informed regarding the ground of arrest and their right to consult a legal practitioner. Some human rights groups argue that the Act is often misused by authorities to silence political opponents or those who are critical of the government. However, there is an opposing view that the Act protects the larger interest of the state.

What the top court says

The Supreme Court has previously held that the law of preventive detention has to be strictly construed to prevent misuse of this potentially dangerous power, and meticulous compliance with the procedural safeguards has to be ensured.

Dimethyltryptamine

DMT, or dimethyltryptamine, is a potent hallucinogenic drug that is found in the Amazonian drink Ayahuasca. It is made using the flowering shrub of the *Psychotria viridis* plant. Scientists have been studying the effects of DMT on the human brain for years, and a recent study has revealed previously unreported effects of this compound.

The Study

The study was conducted by Chris Timmermann, head of the DMT research group at Imperial College London. Twenty volunteers were recruited, and each received a 20mg injection of DMT and a placebo on separate visits to the lab. The scientists recorded the brain activity of the participants before, during, and after the drug took hold of their bodies.

The Results

The results of the study were published in the journal *Proceedings of the National Academy of Sciences*. They provide the most advanced picture yet of the human brain on psychedelics. The recordings showed how the brain's normal hierarchical organization breaks down, electrical activity becomes anarchic, and connectivity between regions soars, particularly those handling "higher level" functions such as imagination.

The recordings reveal a profound impact across the brain, particularly in areas that are highly evolved in humans and instrumental in planning, language, memory, complex decision-making, and imagination. The researchers believe that DMT breaks down the basic networks of the brain, causing them to become less distinct from each other.

The participants in the study described leaving this world and breaking through into another that is incredibly immersive and richly complex, sometimes being populated by other beings that they feel might hold special power over them, like gods.

UN 2023 Water Conference

The UN 2023 Water Conference is being held from March 22 to 24 in New York, marking the first summit on water in 50 years. The conference will be a watershed moment to



mobilize member states, the UN system, and stakeholders alike to take action and bring successful solutions to a global scale.

The Paris Moment for Water

The conference could be a 'Paris moment' for water, as described by the special envoys for water from the co-hosting countries, Tajikistan and the Netherlands. The conference seeks to bring greater focus on water, which is a critical foundation for many of the 17 Sustainable Development Goals, including health, food, gender equity, education, livelihoods, industry, climate, and the environment.

The Global Water Crisis

According to the World Meteorological Organization, around 3.6 billion people struggle to get enough water to meet their needs for at least one month every year. Despite safe water and sanitation being a human right, billions of people lack access to these essentials for life, as stated by the United Nations.

The Importance of the UN 2023 Water Conference

The UN 2023 Water Conference could be a crucial step to ensure the sustainable management of water and sanitation for all, as per UN Sustainable Development Goal 6. It also marks the halfway point through the International Decade for Action "Water for Sustainable Development" to raise awareness of the global water crisis and decide on action to achieve internationally agreed water-related goals.

The Water Action Agenda

The conference is expected to adopt the Water Action Agenda, which represents voluntary commitments of countries and stakeholders to meet global water-related goals and targets. The Water Action Agenda aligns with the five themes that support the SDG 6 Global Acceleration Framework, including water for health, water for sustainable development, water for climate, resilience, and environment, water for cooperation, and the Water Action Decade.

The Growing Demand for Water

The world's growing population, coupled with economic development and changing consumption patterns, means that the demands on water resources are far greater than 50 years ago. The gap between water demand and supply is estimated to be 40% by 2030, with a dramatic and unequal increase in demand between countries, as stated in the World Economic Forum's Global Risks Report 2023.

Indian Government's 14 Guidelines to Address Human-Wildlife Conflict (HWC)

Human-wildlife conflict (HWC) is a critical issue in India, where the coexistence of humans and wild animals is necessary. HWC is defined as the negative impact of the interaction between humans and wildlife on either or both parties. To address this issue, the Union Minister for Environment, Forest and Climate Change, Shri Bhupender Yadav released 14 guidelines to facilitate a common understanding among key stakeholders on what constitutes effective and efficient mitigation of HWC in India.

Species-specific guidelines

Ten species-specific guidelines for mitigating conflict with elephants, gaur, leopard, snake,



crocodile, rhesus macaque, wild pig, bear, blue bull, and blackbuck were released. These guidelines will help develop site-specific HWC mitigation measures.

Cross-cutting issue guidelines

In addition, there are four guidelines on cross-cutting issues, including cooperation between the forest and media sector, occupational health and safety, crowd management, and addressing health emergencies.

Harmonious-coexistence approach

The guidelines aim to ensure the harmonious coexistence of humans and wild animals. They take into consideration the existing guidelines and advisories issued by various agencies and state forest departments, as well as good practices and experiences from the field.

Holistic approach

The guidelines provide a framework to take a holistic approach to address HWC. This includes addressing the drivers and pressures that lead to HWC, establishing and managing prevention methods, and reducing the impact of conflict on both humans and wild animals.

Participatory and inclusive approach

The development of the guidelines followed a participatory, inclusive, and integrated approach involving key relevant stakeholders and sectors, including agriculture, veterinary, disaster management, district administration, rural development and Panchayati Raj Institutions, NGOs, and media. Over 1600 participants were involved in 105 events, workshops, consultations, meetings, and field missions.

Living document

The set of guidelines is not static but rather a living document that will be reviewed every five years from 2023 onwards. Feedback from field practitioners and other wildlife experts will be analyzed to assess specific elements and sections that need to undergo changes.

United Nations World Water Development Report 2023

According to the United Nations World Water Development Report 2023, India is expected to be the most severely affected nation by water scarcity by 2050. This is a worrying trend, given that water scarcity is already a significant issue in India, with millions of people facing severe water shortages.

Asia: The Region Most Affected by Water Stress

The report highlights that approximately 80% of people living under water stress are in Asia, specifically northeast China, India, and Pakistan. The projected global urban population facing water scarcity is expected to increase from 933 million in 2016 to between 1.7-2.4 billion people by 2050, with India being projected to be the most severely affected.

Global Water Crisis: The Main Drivers

The report also highlighted that globally, two billion people do not have safe drinking water, and 3.6 billion lack access to safely managed sanitation. The increasing demand for water due to overconsumption and overdevelopment, unsustainable water use, pollution,



and unchecked global warming are identified as the main drivers of this crisis.

Partnerships and Cooperation: Essential to Integrated Approaches to Water Management

Partnerships and cooperation are identified as essential to integrated approaches to water management, given that water is a cross-cutting issue. The report stresses the importance of addressing the water-energy-food nexus in a transboundary context. One example of such cooperation highlighted in the report is the transboundary water cooperation arrangement established by the Mahakali Treaty between India and Nepal.

The Pancheshwar Multipurpose Project: A Delayed but Beneficial Project

The report noted that although the Pancheshwar Multipurpose Project is long delayed, several beneficial impacts have been highlighted in terms of irrigation and flood control and lessening energy shortages. The project has the potential to address some of the water scarcity issues facing India and Nepal, provided that it is implemented in a sustainable and equitable manner.

World Meteorological Day - Update (March, 2023)

World Meteorological Day is a significant day for meteorologists, weather enthusiasts, and anyone interested in climate and weather patterns. The day aims to raise awareness about the importance of meteorology and weather forecasting and the role of the World Meteorological Organisation in promoting international cooperation in these fields. Here is a brief overview of the history, theme, and significance of World Meteorological Day.

History of World Meteorological Day

World Meteorological Day commemorates the establishment of the World Meteorological Organisation (WMO) on March 23, 1950. The WMO is a specialised agency of the United Nations responsible for promoting international cooperation in the fields of meteorology, climatology, hydrology, and related geophysical sciences.

Theme of World Meteorological Day 2023

Each year, the WMO chooses a theme for World Meteorological Day that reflects current weather and climate issues. The theme for World Meteorological Day 2023 is "The future of weather, climate, and water across generations." This theme aims to highlight the impact of changing weather patterns on the environment and future generations.

Significance of World Meteorological Day

World Meteorological Day is a crucial day for raising awareness about the role of meteorology and weather forecasting in protecting lives, property, and the environment. This day serves as a platform to promote international cooperation in the development of weather forecasting, climate services, and related fields.

Additionally, the day provides an opportunity to highlight the impact of climate change and its effects on our daily lives. The WMO and its member countries collaborate to raise awareness and find solutions to address the challenges posed by climate change.

TRAI's Recommendations on 'Issues related to Community Radio Stations'

The Telecom Regulatory Authority of India (TRAI) recently released its recommendations on issues related to community radio stations (CRS). The recommendations were made to



the Information and Broadcasting (I&B) Ministry, which had requested TRAI's views on various issues related to CRS. The recommendations aim to improve the operations and sustainability of CRS in India. Here are some of the key recommendations made by TRAI:

Extended Permission Period for CRS

TRAI has recommended that the initial permission period for CRS should be increased from the current five years to ten years. This change will provide more stability to CRS operators, allowing them to plan and execute long-term programs.

Increased Advertisement Duration

The regulator has also recommended increasing the duration of advertisements per hour of broadcast on CRS from the current eight minutes to 12 minutes. This change will help CRS generate more revenue and improve their financial sustainability.

Restriction on Number of CRS by One Organization

TRAI has recommended that no organization should be permitted to set up more than six CRS throughout the country. This recommendation aims to promote diversity in the ownership of CRS and prevent the concentration of CRS ownership in the hands of a few organizations.

Not-for-Profit Companies

TRAI has clarified that not-for-profit companies established under Section 8 of the Companies Act 2013 are already covered in the eligibility criteria for CRS. The regulator also reiterated that religious bodies should not be allowed to own broadcasting channels, including CRS.

Single Window System for Approval

TRAI has recommended a single window system for approval of CRS, where all processes for granting permission should be made online. The regulator has suggested that the SACFA clearance should be granted within one month of application, and the grant of WOL license should have a prescribed period, preferably within one month of application.

Support from Central and State Governments

TRAI has suggested that the I&B Ministry may actively pursue with central and state governments to sponsor more programs on CRS to support their sustainable operations. It has also recommended that all universities of central and state governments be provided with budgetary support to establish and operate CRS.

'Sam No Varunah' Coastal Car Rally

India, surrounded by three seas, has a vast coastline of around 7500 Kms, making the maritime trade a significant contributor to the nation's economy. On the 59th Maritime Day on 5th April 2022, Prime Minister Shri Narendra Modi emphasized the importance of maritime trade and the Indian Navy's role in protecting it.

To awaken the nation's maritime consciousness and showcase the Navy's contribution to protecting the country's maritime trade, the Indian Navy in association with the Navy Welfare and Wellness Association (NWWA) is undertaking a unique initiative, "SAM NO VARUNAH," a maritime awareness coastal motor car expedition that will cover the entire



Indian coastline in March 2023.

Objectives of the Expedition:

The expedition has several objectives, including celebrating Azadi ka Amrit Mahotsav, conducting awareness drives about the Navy's career opportunities, showcasing women's power in the Navy, instilling a sense of adventure and motivating the youth to join the Navy, interacting with Naval Veterans/ Veer Naaris, and spreading awareness about India's rich maritime heritage.

Route and Activities Planned:

The expedition is planned to commence from INS Netaji Subhas in Kolkata on 26th March 2023 and terminate at Lakhpur Gujarat on 19th April 2023, covering a distance of approximately 7500 Kms. The rally will arrive at INS Chilka on the historic occasion of Passing Out of the first batch of Agniveers of the Indian Navy on 28th March 2023.

During the expedition, awareness campaigns will be conducted at various cities and villages en route to provide information about employment opportunities in the Navy, including the Agnipath Scheme. The Navy Welfare and Wellness Association will also conduct outreach activities at various old age homes, orphanages, and schools for special children, focusing on community development and empowerment.

Coastal cleaning will be undertaken at beaches en route to spread environmental awareness. The expedition will also visit forts, lighthouses, and other places of maritime importance along the rally route, highlighting India's rich maritime heritage.

Partnerships:

The expedition is partnered with M/s Mahindra, who will provide a fleet of 12 vehicles, along with Mastercard India and Indian Oil Corporation Ltd as fuel partners.

'AIS for Taxpayer' Mobile App

The Income Tax Department has launched a mobile app named 'AIS for Taxpayer' to help taxpayers get a comprehensive view of their Annual Information Statement (AIS) on their mobile phones. This move is in line with the government's Digital India campaign, aimed at providing citizens with access to various services through their smartphones.

What is AIS?

The Central Board of Direct Taxes (CBDT) launched the Annual Information Statement a few years ago to provide taxpayers with all available data related to the tax deducted or collected at source, interest, dividends, and share transactions. It aims to offer all the necessary information to taxpayers at the time of filing their returns.

About the App

The app offers taxpayers an easy way to access all information related to their AIS on their smartphones. It is aimed at providing a comprehensive view of the AIS/TIS to the taxpayer, displaying information collected from various sources pertaining to the taxpayer.

How to Access the App?

The app is currently available for Android users only. To access this mobile app, taxpayers need to register on the app by providing their PAN number, authenticate with the OTP



sent to their mobile number and email registered on the e-filing portal. They can then set a 4-digit PIN to access the mobile app.

Benefits of the App

The app is expected to simplify the process of accessing taxpayer information by providing all available data related to the tax deducted or collected at source, interest, dividends, and share transactions on a single platform. The app also offers taxpayers the option to provide feedback in case of discrepancies in the data that the tax authorities receive from banks or registration offices.

International Liquid Mirror Telescope

Recently, India inaugurated the largest International Liquid Mirror Telescope (ILMT) in Devasthal, Uttarakhand. This four-meter telescope is designed exclusively for astronomical observations and is the first optical survey telescope in India. The observatory will explore the deep celestial sky, classifying objects from asteroids to supernovae, and space debris.

What is the International Liquid Mirror Telescope (ILMT)?

The ILMT has a 4-meter-diameter rotating mirror made up of a thin layer of liquid mercury, which is highly reflective and designed to survey the strip of the sky passing overhead each night. The telescope has three components: a bowl containing reflecting liquid mercury metal, an air bearing (or motor) on which the liquid mirror sits, and a drive system. The mercury is protected from the wind by a scientific-grade thin transparent film of mylar. The reflected light passes through a sophisticated multi-lens optical corrector that produces sharp images over a wide field of view. A 4k × 4k CCD camera, located above the mirror at the focus, records 22 arcminute wide strips of the sky.

Why is this a big moment for astronomy in India?

The Devasthal observatory is equipped with the largest aperture telescope available in India that will use Big Data and Artificial Intelligence/Machine Learning (AI/ML) algorithms to classify objects in the sky. The data gathered by the telescope will be analyzed quickly using AI and machine learning to catalog the objects in the sky, including variable and transient stellar sources.

ILMT is designed to detect transient or variable celestial objects such as supernovae, gravitational lenses, space debris, and asteroids. The data collected from the ILMT, over an operational time of five years, will be ideally suited to perform a deep photometric and astrometric variability survey.

What is CBuD App?

Indian Prime Minister Narendra Modi recently launched the 'Call Before u Dig' (CBuD) app, an initiative of the Department of Telecommunications, Ministry of Communications. The app aims to prevent losses of about Rs 3,000 crore (\$400 million) every year due to damage to underlying assets like optical fibre cables. In this article, we explore the need for the app and how it works.



Why is the app needed?

Uncoordinated digging and excavation can cause severe damage to underground utilities, resulting in potential business loss and discomfort to citizens. It can also lead to disruption in essential services, causing inconvenience to the public. The app aims to facilitate coordination between excavation agencies and underground utility owners, thus reducing such losses.

Moreover, unplanned digging can also result in accidents that may harm workers and damage infrastructure. The CBuD app aims to mitigate such risks by ensuring that excavation work is carried out in a planned and coordinated manner.

How does the app work?

The CBuD app connects excavators and asset owners through SMS/Email notifications and click-to-call. Excavating companies can inquire about existing subsurface utilities before starting excavation work, and utility owners can also find out about impending work at a location. The app will provide real-time information about the location and depth of underground utilities, enabling excavators to carry out their work without damaging them.

The app's interface is user-friendly and provides easy access to essential features like the map, the call center, and the notification system. Excavating companies can log in to the app and submit their excavation requests, which will then be forwarded to the relevant utility owners for approval. Utility owners can review these requests and provide their consent or suggest alternative solutions.

India's 6G Vision Document

On March 23, 2023, Prime Minister Narendra Modi unveiled the Bharat 6G Vision Document, which outlines India's plan to launch 6G communication services by 2030. The document was developed by the Technology Innovation Group on 6G, a group of experts from various ministries, research institutions, standardization bodies, telecom service providers, and industry.

The 6G test bed was also launched, providing a platform for industry, academic institutions, and others to test and validate emerging technologies. The government said that the Bharat 6G vision document and 6G test bed would create an enabling environment for innovation, capacity building, and faster technology adoption in the country.

India's Progress in Telecommunication

In August 2022, while addressing the Smart India Hackathon, PM Modi announced that the government would launch 6G by the end of this decade, demonstrating India's confidence in its progress in the telecommunication industry. He also urged youths and innovators to take advantage of the opportunity and come up with innovative solutions.

In October 2022, telecom service providers in India began providing high-speed 5G services, and the Department of Telecom received bids worth Rs 1.50 lakh crore for the 5G spectrum auction. PM Modi stated that initiatives around 6G within six months of the 5G rollout demonstrate India's confidence in becoming a significant exporter of



telecommunication technology.

6G Technology

The vision document highlights that 6G will provide ultra-low latency with speeds up to 1 terabit per second, which is 1,000 times faster than the top speed of 5G. While 5G technology promises a speed of 40-1,100 Mbps with the potential to hit maximum speeds of 10,000 Mbps, 6G will offer faster and more efficient communication services.

The TIG-6G group's members will develop a roadmap and action plans for 6G in India, providing a clear direction for the development and adoption of 6G technologies in the country. India's plan to launch 6G communication services by 2030 demonstrates its commitment to adopting new technologies and remaining at the forefront of the telecommunication industry.

March 24, 2023

Mukhyamantri Vriksh Sampada Yojana

On the occasion of World Forestry Day, Chhattisgarh Chief Minister Bhupesh Baghel launched the Mukhyamantri Vriksh Sampada Yojana, also known as the Chief Minister Tree Wealth Scheme. The scheme aims to promote tree plantation across the state by providing financial assistance to farmers and landowners.

The Need for Tree Plantation in Chhattisgarh

Chhattisgarh is known for its dense forest cover and rich biodiversity. However, the state has been facing a massive loss of forest cover due to industrialization and other human activities. The government has recognized the need for urgent action to counter the effects of deforestation and promote tree plantation to conserve the environment.

The Chief Minister Tree Wealth Scheme

Under the Mukhyamantri Vriksh Sampada Yojana, the Chhattisgarh government will provide full subsidy for tree plantation on up to 5 acres of land. For those who wish to plant trees on more than 5 acres of land, the government will provide a 50 percent financial subsidy. The scheme is expected to contribute towards increasing green cover in the state.

Benefits of the Scheme

The Mukhyamantri Vriksh Sampada Yojana has several benefits for the people of Chhattisgarh. It will not only help to increase the state's green cover but also provide employment opportunities for people in rural areas. The scheme will also help to conserve soil and water resources, reduce the effects of climate change and air pollution, and improve the overall quality of life for people in the state.

Implementation of the Scheme

The Chief Minister Tree Wealth Scheme will be implemented by the Chhattisgarh Forest Department, which will coordinate with various stakeholders, including farmers, landowners, and NGOs. The department will provide technical assistance and training to ensure that the trees are planted in a systematic and sustainable manner. The scheme will be implemented in phases, and the government has set a target of planting 6 crore trees across the state in the next three years.



Albatross Amphibious Aircraft and HDS-AAI Deal

Hawking Defence Services, an Indian defence firm, has entered into a procurement cum partnership agreement with Amphibian Aerospace Industries (AAI), an Australia-based aircraft manufacturer, to manufacture the Albatross Amphibious Aircraft.

Features of the Albatross Amphibious Aircraft

The Albatross Amphibious Aircraft is designed to operate in a wide range of conditions, making it an ideal aircraft for military and civilian applications. It is a 28-seater aircraft that can land and take off from land, snow, and water, making it an incredibly versatile aircraft. The aircraft has a range of up to 1,000 nautical miles and can travel at a maximum speed of 300 knots. The aircraft has a payload capacity of 3,000 kg. The Albatross also has a spacious cabin with large windows, providing passengers with a comfortable and scenic flight experience.

Partnership between Hawking Defence Services and Amphibian Aerospace Industries

The partnership between Hawking Defence Services and AAI is a significant step forward in the development of the Albatross Amphibious Aircraft. Under the agreement, Hawking Defence Services will manufacture the aircraft in India, using AAI's technology and expertise. The partnership will enable the Indian defence firm to gain access to AAI's advanced technology and manufacturing capabilities, while also providing AAI with access to India's skilled workforce and growing aviation market.

Benefits of the Albatross Amphibious Aircraft

The Albatross Amphibious Aircraft has several benefits for military and civilian applications. The aircraft's ability to land and take off from land, snow, and water makes it an ideal aircraft for search and rescue missions, emergency response, and disaster relief operations. The aircraft can also be used for transportation of personnel and cargo to remote locations, and for tourism and commercial purposes, such as aerial sightseeing and transportation to island destinations.

Future of the Albatross Amphibious Aircraft

The partnership between Hawking Defence Services and AAI is expected to boost the production and adoption of the Albatross Amphibious Aircraft in India and other countries. The aircraft's versatility and capabilities make it an attractive option for a wide range of applications, and the partnership is expected to contribute to the growth of the aviation industry in India and Australia.

Asteroid Ryugu and the Theory of Panspermia

A team of researchers has made a groundbreaking discovery that could lend further support to the theory of panspermia, which suggests that life on Earth may have originated from outer space. The researchers have found building blocks of RNA in just 10 milligrams of materials from the asteroid Ryugu.

Ryugu is a C-type asteroid, meaning it contains a high amount of carbon. This makes it a prime candidate for research into the origins of life, as carbon is a fundamental building block of life as we know it. The asteroid was visited by the Japanese spacecraft Hayabusa2,



which collected samples from the asteroid's surface and returned them to Earth for analysis.

RNA Building Blocks Found in Ryugu Samples

The team of researchers analyzed the Ryugu samples using state-of-the-art analytical techniques. They found that the samples contained adenine and guanine, which are two of the four building blocks of RNA. RNA, or ribonucleic acid, is a molecule that plays a crucial role in the transfer of genetic information within cells.

The discovery of adenine and guanine in the Ryugu samples is significant, as it suggests that these building blocks of RNA may have been delivered to Earth by asteroids or comets. This could support the theory of panspermia, which suggests that life on Earth may have originated from microorganisms or other forms of life that were carried to our planet on asteroids or comets.

Implications for the Origins of Life on Earth

The discovery of RNA building blocks in the Ryugu samples could have profound implications for our understanding of the origins of life on Earth. It supports the idea that life may have originated in space and then been delivered to Earth on asteroids or comets, rather than arising spontaneously on our planet.

This is not the first time that scientists have found evidence to support the theory of panspermia. In recent years, researchers have discovered microorganisms that can survive in space, as well as amino acids and other organic molecules in meteorites and comets. However, the discovery of RNA building blocks in the Ryugu samples is particularly significant, as RNA is a key molecule in the transfer of genetic information.

Siniyah Island and the Discovery of the Oldest Pearl Town

A team of archaeologists has made an incredible discovery on the Siniyah Island, situated in the Persian Gulf. They have found what is believed to be the oldest pearling town in the region. The discovery was made on the island located in the emirate of Umm al-Quwain, which is situated about 50 km northeast of Dubai.

Pearling Towns of the Persian Gulf

Pearling was a vital industry in the Persian Gulf region for centuries. The pearls harvested from the sea were highly prized and were used as currency, jewelry, and other valuable items. The pearling industry was the main source of income for many of the coastal communities in the region. The towns that grew up around the pearling industry were centers of trade, culture, and architecture.

The Oldest Pearling Town in the Persian Gulf

The newly discovered pearling town on the Siniyah Island is believed to date back to the 7th century AD. This makes it the oldest known pearling town in the Persian Gulf region. The town is thought to have been a bustling center of trade, culture, and commerce during the time it was in operation.

The archaeological team that discovered the pearling town found evidence of houses, shops, and other structures. They also found a large number of pearls, indicating that the town was an important center for the pearling industry.



The Importance of the Discovery

The discovery of the oldest pearling town in the Persian Gulf is significant for several reasons. Firstly, it sheds new light on the pearling industry and the way of life in the region during the 7th century AD. Secondly, it highlights the importance of the region as a center of trade and commerce during this time. Finally, the discovery is important for the preservation of the region's cultural heritage.

Preserving the Pearling Town

The discovery of the pearling town on the Siniyah Island has raised concerns about the preservation of the site. The archaeological team is working to ensure that the site is protected and preserved for future generations. This includes working with local authorities to develop plans for the site's protection and management.

What is Nemateleotris lavandula?

Scientists from the Australian Museum Research Institute, the University of Sydney, and the Museum and Art Gallery of the Northern Territory have identified a new species of the genus *Nemateleotris*. The lavender-blushed dartfish, or *Nemateleotris lavandula*, was discovered in the western and central Pacific Ocean.

What are Dartfish?

Nemateleotris belongs to the bony fish family Gobiidae, which includes dartfish. Dartfish are small, brightly colored, elongated, and moderately compressed fishes. They are known for their elongated pennant-like first dorsal fin, which they repeatedly flick back and forth, often in sync with their pelvic fins.

Dartfish are typically found near or in coral reefs, hovering close to the substrate in areas that have sand channels and loose coral rubble. They usually measure no more than 7 cm (2.8 inches) in length and feed primarily on plankton and other small invertebrates that they pick out of the water column.

Meet Nemateleotris Lavandula

Nemateleotris currently includes five recognized species native to the Indian and Pacific oceans. The lavender-blushed dartfish, *Nemateleotris lavandula*, is the newest addition to this genus. The species was previously mistaken for the Helfrich's dartfish, *Nemateleotris helfrichi*. The molecular analysis revealed a difference of 1% in sequence data between both species, in addition to differences in morphometric measurements, live, and preserved coloration details.

Nemateleotris lavandula is small in size, measuring only 5 cm (2 inches) in length. The species has a lavender to lilac body that becomes increasingly pale toward the caudal peduncle. It is widespread across much of the western and central Pacific Ocean, including Yakushima Island in southern Japan, the Caroline Islands, the Marshall Islands, and the Mariana Islands, among others.

The lavender-blushed dartfish is usually found in seaward sand channels and rubble pans adjacent to coral reefs at depths between 25-100 m (82-328 feet). It is most commonly observed as single or paired individuals, with juveniles sometimes in small groups, often mixed with other plankton feeders.



G20 RIIG Conference

The G20 RIIG (Resource Efficiency and Circular Economy Innovation Group) Conference will take place on March 23, bringing together experts, policymakers, and industry leaders from around the world. The conference will focus on the theme of building a sustainable and circular bio-economy, and discussions will cover various topics related to this critical issue.

What is a Sustainable and Circular Bio-economy?

A bio-economy is an economic system that uses renewable biological resources, such as crops, forests, and fisheries, to produce food, energy, and materials. A sustainable and circular bio-economy is one that ensures the long-term sustainability of these resources by minimizing waste and maximizing their value through efficient use and reuse. It involves transitioning away from fossil fuels and non-renewable resources and towards a more sustainable and regenerative economic model.

The Importance of a Sustainable and Circular Bio-economy

A sustainable and circular bio-economy is essential for meeting the global challenges of climate change, food security, and resource depletion. It offers a path towards a more sustainable and resilient future, reducing greenhouse gas emissions and increasing the efficiency of resource use. Moreover, it creates new opportunities for economic growth, job creation, and innovation.

Discussions at the G20 RIIG Conference

The G20 RIIG Conference provided a platform for experts, policymakers, and industry leaders to discuss various aspects of a sustainable and circular bio-economy. Topics covered will include:

1. **Innovation and Technology:** Exploring the latest technological developments and innovations that can support a sustainable and circular bio-economy.
2. **Sustainable Production and Consumption:** Discussing ways to promote sustainable and circular production and consumption patterns.
3. **Sustainable Agriculture and Forestry:** Examining the role of sustainable agriculture and forestry in a circular bio-economy, including the use of agroforestry and sustainable land management practices.
4. **Waste Management and Recycling:** Exploring the role of waste management and recycling in a circular bio-economy and ways to promote more efficient and effective waste management practices.
5. **Circular Business Models:** Discussing the development of circular business models that can drive sustainable and regenerative economic growth.

Argentine-American Mathematician Luis Caffarelli Wins 2023 Abel Prize

The Abel Prize, named after Norwegian mathematician Niels Henrik Abel, is considered one of the highest honors in mathematics. The prize is conferred every year by the King of Norway and is awarded to one or more outstanding mathematicians. This year, the Abel Prize was awarded to Argentine-American mathematician Luis Caffarelli for his groundbreaking contributions to several areas of mathematics.



Who is Luis Caffarelli?

Luis Caffarelli is a distinguished mathematician who was born in Buenos Aires, Argentina, in 1948. He obtained his undergraduate degree from the University of Buenos Aires in 1971 and his PhD from the University of Chicago in 1974. After completing his PhD, Caffarelli went on to hold academic positions at several universities, including the University of Texas at Austin, the University of Chicago, and the University of Minnesota. Since 2010, he has been a professor of mathematics at the University of Texas at Austin.

Caffarelli's Contributions to Mathematics

Caffarelli's work has had a significant impact on several areas of mathematics, including partial differential equations, calculus of variations, and free boundary problems. He is best known for his work on the regularity of solutions to partial differential equations. His research has helped to establish fundamental results on the regularity of solutions to nonlinear elliptic and parabolic equations.

Caffarelli has also made important contributions to the study of free boundary problems. Free boundary problems arise in a variety of contexts, including fluid mechanics, materials science, and finance. Caffarelli's work has led to new insights into the behavior of free boundaries and has helped to develop new techniques for studying these problems.

The Importance of the Abel Prize

The Abel Prize is one of the most prestigious awards in mathematics and is widely regarded as the equivalent of the Nobel Prize in mathematics. The prize is awarded to individuals who have made outstanding contributions to the field of mathematics and whose work has had a significant impact on the discipline.

The award of the Abel Prize not only recognizes the achievements of the recipient but also serves to promote the importance of mathematics to a wider audience. The Abel Prize is awarded by the Norwegian Academy of Science and Letters, and the award ceremony is held annually in Oslo, Norway.

450 MW Seti River-6 Hydropower Project

The Investment Board Nepal has granted permission to NHPC Limited, an Indian company, to conduct a feasibility study of the proposed 450 MW Seti River-6 Hydropower Project. The project will be built in the Doti and Achham districts of Nepal and aims to provide the country with much-needed electricity.

NHPC's involvement in Nepal's Hydropower Projects

NHPC Limited is no stranger to hydropower projects in Nepal. The company was previously tasked with carrying out the Detailed Project Report (DPR) of the 750 MW West Seti Hydroelectric Project. The estimated cost of both projects is around 300 billion Nepalese rupees, with NHPC committing to invest Rs. 288 billion.

Benefits of the Seti River-6 Hydropower Project

The Seti River-6 Hydropower Project is a crucial development in Nepal's efforts to increase its power generation capacity and provide electricity to its people. The project will create jobs and spur economic growth in the region, as well as reduce Nepal's reliance on imported electricity. Additionally, Nepal will receive 21.9% of the West Seti Hydropower



Project's energy for free as per the agreement.

Entrusting NHPC with the Hydropower Projects

Following the cancellation of the agreement with a Chinese company, the Investment Board Nepal has decided to entrust the construction of the West Seti Hydroelectric Project with an indicative connected capacity of 750 MW and the Seti River-6 Hydroelectric Project with an indicative connected capacity of 450 MW to NHPC Limited.

Environmental and Social Impacts

It is essential to assess the potential environmental and social impacts of the hydropower projects carefully. The feasibility study will evaluate the technical, economic, and environmental aspects of the projects, including an assessment of the site's geology, hydrology, and topography. The study will also determine any negative environmental impacts and the potential mitigation measures.

Exercise Cobra Warrior

Indian Air Force (IAF) Mirage-2000 aircraft have been participating in Exercise Cobra Warrior in the United Kingdom over the past three weeks. This joint training exercise has been taking place alongside six other Air Forces, including those from the United Kingdom, Finland, Sweden, South Africa, Saudi Arabia, the United States, and Singapore. This exercise involves high-intensity, large force, and tactical air war fighting operations. The Mirage-2000s were drawn from all three existing squadrons, including those that took part in the Balakot air strike in February 2019.

Challenges and Lessons Learned

Gp. Capt. Pranav Raj, CO of 7 Mirage squadron 'Battle Axes' based at Gwalior, and the IAF's Exercise Director, stated that the team has faced several challenges, including the weather, which is quite different from that in Gwalior or Central India. More than 80% of the team has seen snowfall for the first time. Despite these challenges, the maintenance team has done an excellent job of keeping all five aircraft available for missions. The exercise has been a great learning experience, as the IAF has flown with F-18s and F-16s and participated in the entire spectrum of air operations, including offensive and defensive counter missions.

Participating Countries

Finland, India, and Saudi Arabia joined Exercise Cobra Warrior for the first time. The initial plan was to bring in indigenous Light Combat Aircraft (LCA) Tejas, but they were busy with another exercise, so the Mirage-2000s were deployed. The Saudi Arabian Air Force flew six Eurofighter Typhoons from RAF Coningsby base, while the Indian team, Finnish team, and Belgian Air Force flew six F/A-18 Super Hornets and six F-16s, respectively, from Waddington airbase.

Exercise Cobra Warrior

Exercise Cobra Warrior is held twice a year and is the largest air exercise hosted by the Royal Air Force. This edition saw around 70 aircraft take part and was directed by staff at RAF Waddington airbase. The exercise invites participating nations to operate with each other and with the United Kingdom. The fighter jets in the exercise were supported by RAF



Voyager mid-air refuelling aircraft flying from RAF Brize Norton, and the RAF's Air Mobility Force also participated in the exercise.

Vaikom Satyagraha and its Centenary Celebrations

Vaikom Satyagraha was a nonviolent protest that took place from 30 March 1924 to 23 November 1925 in the Kingdom of Travancore, now part of Kerala, India. The protest was against the rigid and oppressive caste system prevalent in the region, which forbade lower castes, or untouchables, from entering not just the Vaikom Temple but also from walking on the surrounding roads. Led by Congress leaders T. K. Madhavan, K. Kelappan, and K. P. Kesava Menon, the protest was notable for the active support and participation offered by different communities and a variety of activists.

The Agitation and Mahatma Gandhi's Intervention

The Vaikom Satyagraha was conceived by T. K. Madhavan, an Ezhava Congress leader and a follower of Sri Narayana Guru. The protest demanded the right of the Ezhavas and 'untouchables' to use roads around the Vaikom Temple. Mahatma Gandhi himself visited Vaikom in March 1925, and the Travancore government eventually constructed new roads near the temple for the use of lower castes. However, the roads kept the lower castes adequately away from the near environs of the Vaikom Temple, and the temple remained closed to them.

The Compromise and Criticism

After the intervention of Mahatma Gandhi, the agitation was given up, and a compromise was reached with Regent Sethu Lakshmi Bayi. She released all those arrested and opened the north, south, and west public roads leading to Vaikom Mahadeva Temple to all castes. However, she refused to open the eastern road. The compromise was criticized by E. V. Ramasamy "Periyar" and some others. Only in 1936, after the Temple Entry Proclamation, was access to the eastern road and entry into the temple allowed to the lower castes. Vaikom Satyagraha markedly brought the method of nonviolent public protest to Kerala.

Centenary Celebrations of Vaikom Satyagraha

The 603-day-long Vaikom Satyagraha played a crucial role in announcing modernism in the state and as a testing ground for non-violent protests in Kerala. On April 1, 2023, the centenary celebrations of Vaikom Satyagraha will begin, and Kerala Chief Minister Pinarayi Vijayan and Tamil Nadu Chief Minister MK Stalin will inaugurate the event in Kottayam. The Father of the Dravidian Movement, Periyar, participated in the Vaikom Satyagraha and was at the forefront of the struggle in all its phases till its very end. Acknowledging his contributions, he also came to be known as 'Vaikom Veerar,' the hero of Vaikom.

National Centre for Sustainable Coastal Management

The National Centre for Sustainable Coastal Management (NCSCM) was established in 2011 as a research institute to support the conservation, protection, restoration, and management of Indian coasts. Its vision is to promote sustainable coasts through increased partnerships, conservation practices, scientific research, and knowledge management for the benefit and well-being of current and future generations. Recently, the first General Body Meeting of NCSCM was held to review its progress and plan for the



future.

NCSCM's Mission and Objectives

NCSCM's mission is to provide integrated coastal zone management solutions to address the challenges faced by coastal ecosystems, habitats, and communities. The NCSCM collaborates with national and international organizations to develop and implement research-based solutions that promote sustainable coastal management practices.

One of the primary objectives of NCSCM is to develop and implement a national framework for sustainable coastal management. This framework will guide the development of policies, strategies, and programs that promote sustainable coastal management practices. It will also provide a basis for monitoring and evaluating the effectiveness of these practices.

NCSCM's Role in Coastal Ecosystem Management

Coastal ecosystems are vital for the health and well-being of people and the environment. They provide essential services, such as food, water, and climate regulation. However, they are under threat from a variety of human activities, including coastal development, pollution, and overfishing. NCSCM plays a crucial role in the management of coastal ecosystems through its research, monitoring, and assessment activities. It works with government agencies, non-governmental organizations, and local communities to develop and implement management strategies that promote the sustainable use of coastal resources.

NCSCM's Role in Mangrove Conservation

Mangroves are an essential coastal ecosystem that provides a range of ecosystem services, such as carbon sequestration, erosion control, and habitat for a variety of species. However, mangroves are under threat from a variety of human activities, such as coastal development, overexploitation, and climate change. NCSCM plays a crucial role in mangrove conservation through its research, monitoring, and assessment activities. It works with government agencies, non-governmental organizations, and local communities to develop and implement management strategies that promote the sustainable use of mangrove resources.

World Tuberculosis Day 2023

World Tuberculosis Day is observed every year on March 24 to raise awareness about the global epidemic of tuberculosis (TB) and the efforts made to eliminate it. It provides recognition to health professionals, researchers, policymakers, and advocates in the fight against TB. In this article, we will discuss the history and significance of World Tuberculosis Day, the theme for 2023, and India's contribution to the global fight against TB.

History and Significance of World Tuberculosis Day

World Tuberculosis Day commemorates the day when Dr. Robert Koch discovered the tuberculosis-causing bacteria in 1882. The CDC estimates that TB has been in existence for over three million years, and it has had several names throughout history depending on where it was found. The theme for World TB Day 2023 is "Yes! We can end TB!" and aims



to highlight the importance of increased funding, quick action, multisectoral cooperation, rapid adoption of new WHO guidelines, and innovative adoption in eradicating TB.

One World TB Summit

During the 'One World TB Summit', which was held during the World TB Day 2023, the Prime Minister Narendra Modi highlighted India's ideology of "Vasudhaiva Kutumbkam," which means one world, one family, and how this philosophy is providing the world with comprehensive solutions. India has chosen the theme of 'One Family, One World, One Future' during its G20 presidency, based on these beliefs.

Modi also mentioned India's resolution to eliminate TB by 2025, five years before the global target of 2030. He highlighted India's efforts towards public participation, special campaigns for nutrition, new treatment strategies, intensive use of technology, and promoting good health through campaigns like Khelo India and Yoga. Modi further mentioned the 'Ni-kshay Mitra' campaign, which urges people to join the campaign of TB-free India, and more than 10 lakh TB patients have been adopted by citizens. Indian children as young as 10-12 years old are also taking the fight against TB forward by becoming Ni-kshay Mitra. Since 2018, approximately Rs 2,000 crore has been sent directly to the bank accounts of tuberculosis patients, and about 75 lakh patients have benefited from it.

Guillotine Parliamentary Procedure

With the ongoing verbal battle and sloganeering between the ruling party and the opposition in the Indian Parliament, the Budget session is facing a potential washout. As a result, the Speaker is expected to use the guillotine procedure to ensure the passage of financial bills. In this article, we will explore the Guillotine Parliamentary Procedure and its significance in the Indian Parliament.

What is the Guillotine Parliamentary Procedure?

The Guillotine Parliamentary Procedure is a process used in Parliament or state assemblies to group together and expedite the passage of financial business. During the Budget session, the procedure is used to save time when all the clauses of a measure cannot be discussed in the allotted time.

How does the procedure work?

Each Bill is allotted a specific amount of time for consideration in Parliament. A Bill is usually composed of several clauses. Once the allotted time to discuss the clauses of the Bill is over, the Speaker of the House rolls out guillotine closure. The undiscussed clauses of a bill or resolution are placed for vote alongside the discussed portions.

What happens after the guillotine closure?

Once the Speaker of the House applies the guillotine, all the outstanding demands for grants, whether discussed or not, are put to vote at once. The Appropriations Bill is formally introduced by the government, which gives them permission to seek funds out of the Consolidated Fund of India. After being enacted, this Bill becomes the Appropriation Act. The Finance Bill is then brought up for discussion following the vote on the Appropriations Bill. The sections and changes of the Finance Bill are only discussed in



relation to the tax measures. The Finance Act becomes part of the law after this bill is passed, and the final budget is approved.

What are the implications of voting against a money bill?

Voting on these bills is viewed as a vote of no confidence in the government if the outcome is negative. Hence, if a money bill is voted against, a government may possibly fall.

The current state of the Indian Parliament

The ongoing deadlock between the ruling party and the opposition has been a major hindrance to the functioning of the Parliament. The opposition is demanding a Joint Parliamentary Committee (JPC) probe into the Adani issue, while the government is demanding an apology from Rahul Gandhi for his alleged anti-India remarks.

The stalemate has led to adjournments and a significant loss of valuable time. In light of this, the Speaker is expected to use the guillotine procedure to ensure the passage of crucial financial bills.

Exercise Vayu Prahar - A Multi-Domain Exercise at LAC

In the midst of the ongoing stand-off between India and China at the Line of Actual Control (LAC), the Indian Army and Air Force have conducted a 96-hour multi-domain air and land exercise, called 'Vayu Prahar', in the eastern sector. The exercise was conducted in the second week of March with the main objective of formulating plans that can lead to synergy in multi-domain operations.

What are Multi-Domain Operations?

Multi-domain operations are used to coordinate activities across different branches of the military to achieve converging results. Essentially, it is a mechanism to ensure that all branches of the armed forces work together seamlessly to achieve a common goal.

Vayu Prahar Exercise

The main aim of the Vayu Prahar exercise was to enable coordination and rehearsal among various agencies for quick mobilisation, transportation and deployment of forces within a theatre, which can be executed across theatres. The scope of the joint exercise included the rapid mobilisation of a rapid reaction force from the hinterland, which was then tasked with air-land operations in a nominated advance landing ground (ALG).

Advance Landing Ground (ALG)

An ALG is usually a single landing strip for an aircraft, which in India is predominantly operated by the military forces. After landing at the ALG, the rapid action force was responsible for carrying out "contingency tasks" in challenging high-altitude terrain.

Location of the Exercise

Though exact location of the exercise and the ALG is unknown, there are seven to eight ALGs in the state of Arunachal Pradesh, which lies in the eastern sector of the Line of Actual Control (LAC) with China. In December 2022, over 200 soldiers of China's People's Liberation Army clashed with Indian soldiers in the Yangtse area of Arunachal's Tawang district. The clash came amid rising reports of Chinese incursions and construction activity over the past few years near the eastern sector.



India-China Stand-Off

The stand-off between India and China in the western sector of the LAC in eastern Ladakh is now in its third year. After 17 rounds of talks at the corps commander-level, the stalemate over Depsang Plains continues. Further talks are awaited for later this month.

Chhattisgarh Mediapersons Protection Bill 2023

The Chhattisgarh legislative Assembly has passed a Bill for the protection of mediapersons and to prevent violence against them. The Chief Minister, Bhupesh Baghel, tabled the Chhattisgarh Mediapersons Protection Bill 2023 in the House for discussion and was pleased with its passage, calling it a historic day. The opposition BJP MLAs demanded that the Bill be sent to the Select Committee of the Assembly for examination, but the request was rejected by Speaker Charandas Mahant.

Registration of All Mediapersons

The Bill asks for the registration of all mediapersons, including journalists, media institutions, and mass media such as news gatherers, freelancers, trainees, and interns. The aim is to create a broad classification of mediapersons and to offer them better protection.

Committee for Dealing with Complaints

A committee will be constituted to deal with complaints from the media. The chairperson will be a retired administrative or police officer not below the rank of secretary, and three mediapersons with over 10 years of experience, including at least one woman, and two senior government officials will be the members of the committee. The committee will have the same powers throughout the state as are vested with the civil court while trial of a suit under the Code of Civil Procedure, 1908.

Emergency Protection Measures

The committee will have the power to recommend emergency protection measures and protection plans to the Superintendent of Police (SP) of the district concerned, who will take appropriate decisions as per law. In cases where there are allegations or trial or inquiry/investigation against a mediaperson, the committee will have powers to direct the SP of the district concerned to supervise the investigation and submit a report within 15 days.

False Complaints

The committee can also act against mediapersons for giving false complaints. For the first false complaint, the registration will be cancelled and for a second time, a fine may go up to Rs 10,000. A website will be created where information about the registered mediapersons, complaints received, and action taken will be available.

Authority for Dealing with Appeals

An authority will be prescribed to deal with appeals against actions of the committee. This will ensure that mediapersons have an avenue to appeal any actions that may be taken against them.

Triple Threat Report

A new report released by UNICEF on March 19, 2023, highlights a major factor driving



water insecurity in the world's worst-impacted countries. The report, titled "Triple Threat," reveals that a lack of monitoring of water, sanitation, and hygiene (WASH) related programs, projects, and policies in a third of the developing nations is causing the problem. This lack of monitoring makes mitigation more challenging, and it's affecting 10 African countries where children are most affected by the convergence of three water-related threats: inadequate water, sanitation and hygiene, related diseases, and climate hazards.

Triple Threat Analysis: Inadequate WASH, Related Diseases and Climate Hazards

The 10 African countries facing the triple burden of inadequate WASH, related diseases, and climate hazards are Benin, Burkina Faso, Cameroon, Chad, Côte d'Ivoire, Guinea, Mali, Niger, Nigeria, and Somalia. According to the Children's Climate Risk Index 2021 by UNICEF, these countries have a combined population of 190 million children and are the world's most water-insecure and climate-impacted countries. They are within the top 25% of the developing countries in terms of exposure to climate and environmental hazards, shocks, and stresses.

Inadequate Access to WASH Facilities in Developing Countries

Globally, the percentage of households with access to at least basic drinking water rose to 90% in 2020 from 82% in 2000. Access to households with at least basic sanitation rose to 78% in 2020 from 56% in 2000 based on estimates of the World Health Organization (WHO) / UNICEF Joint Monitoring Programme. Despite these global improvements, approximately four million children under the age of five die every year due to unsafe water, sanitation, and hygiene practices globally. Chad, in particular, has the lowest percentage of access to basic WASH facilities and has the world's highest burden of deaths of children under five years due to unsafe WASH.

Slow Progress in Achieving Sustainable Development Goals (SDG)

Considering the 2030 targets, the progress made in the last decade (until 2020) is slow, as 600 million children globally still face health issues from access to unsafe water and sanitation or no access at all. The United Nations General Assembly and the Human Rights Council recognized the human right to safe drinking water and sanitation as part of the binding international law in 2010. However, the report notes that countries most affected by poor WASH, related disease, and climate threats are not on track to meet the UN-mandated sustainable development goals (SDG) target of universal access to basic WASH services by 2030.

Insufficient WASH Funding in Developing Countries

In 2022, the UN-Water Global Analysis and Assessment of Sanitation and Drinking Water found that 75% of countries had insufficient WASH funding. There is a need to scale up investment in the sector rapidly, including from global climate financing, which is currently estimated at \$114 billion per year in developing countries. If these 10 African countries are not on track, then the Global South will not meet SDG 6 of water and sanitation, resulting in a huge investment in health costs.

**March 25, 2023****Technology and Innovation Report 2023**

The United Nations Conference on Trade and Development (UNCTAD) has warned that green technologies, such as artificial intelligence, Internet of Things, and electric vehicles, may deepen global economic inequality. According to the Technology and Innovation Report 2023 published on March 16, 2023, developed countries benefit the most from these technologies, while developing countries may miss out on economic opportunities if decisive actions are not taken.

The Potential Market of Green Technologies

UNCTAD estimated that green technologies could create a market worth \$9.5 trillion by 2030, up from \$1.5 trillion in 2020. These technologies can be used to produce goods and deliver services with smaller carbon footprints. The market value of green frontier technologies, such as electric vehicles, solar and wind energy, and green hydrogen, is expected to reach \$2.1 trillion in 2030, four times greater than their value today. The market revenues for electric vehicles could rise five times, reaching \$824 billion by 2030, from today's value of \$163 billion.

The Disparities Between Developed and Developing Countries

The report found that the total exports of green technologies from developed countries jumped to over \$156 billion in 2021 from about \$60 billion in 2018. In contrast, exports from developing countries rose to only about \$75 billion from \$57 billion. Only a few developing countries have the capacity needed to take advantage of frontier technologies such as blockchain, drones, and solar power, according to the 'frontier technology readiness index' included in the report. This index ranks 166 countries based on information and communication technology (ICT) skills, research and development, industrial capacity, and finance indicators. High-income economies such as the United States, Sweden, Singapore, Switzerland, and the Netherlands are currently leading the index.

The Readiness of Developing Countries

Several economies in Asia, such as India, the Philippines, and Vietnam, have made important policy changes that have enabled them to perform better than expected, according to their gross domestic product per capita. India remains the greatest performer, ranking 67 positions better than expected, followed by the Philippines (54 positions better) and Vietnam (44 positions better). In contrast, countries in Latin America, the Caribbean, and sub-Saharan Africa are the least ready to harness frontier technologies and are at risk of missing current technological opportunities.

The Importance of Global Cooperation

UNCTAD calls on governments in developing countries to align environmental, science, technology, innovation, and industrial policies. It urges them to prioritize investment in greener and more complex sectors, provide incentives to shift consumer demand towards greener goods, and boost investment in research and development. However, the UN body highlighted that developing countries cannot take advantage of green technologies



on their own. Much of the success of their domestic policies will depend on global cooperation through international trade, which would require reforms to existing trade rules to ensure consistency with the Paris Agreement to tackle climate change.

Providing Assistance to Developing Countries

The report urged developed countries to provide a helping hand to their less well-off counterparts and ensure all nations can participate and take full economic advantage of the green tech revolution. International trade rules should permit developing countries to protect emerging green industries through tariffs, subsidies, and public procurement, so that they not only meet local demand but also reach the economies of scale that make exports more competitive.

Uganda's Anti-Homosexuality Bill 2023

The Ugandan parliament has recently passed the Anti-Homosexuality Bill 2023, which proposes stringent penalties for anyone engaging in sex with a person of the same gender. The punishments range from imprisonment to capital punishment, and even entities like media groups, journalists, and publishers can be convicted of promoting homosexuality. The Bill has been met with widespread condemnation and calls for its veto.

Penalties and Definitions in the Bill

Under the new Bill, anyone who "tries" to have same-sex relations will face seven years of imprisonment. Even touching another person with the intention of committing homosexual acts is prohibited. People found guilty of the "offense of homosexuality" can face up to ten years of imprisonment. The crime of "aggravated homosexuality" is defined as homosexual acts committed by an HIV-infected person, involving children or disabled persons, or against anyone in an inebriated state who is incapable of giving informed consent. "Aggravated homosexuality" is punishable with the death penalty.

The Bill also punishes minors convicted of engaging in same-sex acts with up to three years' imprisonment and a period of "rehabilitation". Besides this, it punishes individuals convicted of trafficking children or grooming them to engage in same-sex acts with life imprisonment.

Entities like media groups, journalists, and publishers can be convicted of promoting homosexuality, and they will have to face up to five years imprisonment and/ or pay a fine of up to 1 billion Ugandan shillings. The Bill outlaws providing accommodation that facilitates the "offense of homosexuality." Therefore, even a property owner whose premises are used as a "brothel for homosexual acts" or any other LGBTQ rights activities can face the risk of getting arrested. If anyone conducts or officiates a same-sex marriage ceremony, they can be imprisoned for ten years.

Objective and Status of the Bill

The Speaker of Uganda's Parliament, Anita Annet Among, has stated that the House will continue passing laws to "recognise, protect and safeguard" the morals and culture of their country. The Bill's objective is to establish comprehensive and enhanced legislation to protect traditional family values, diverse culture, and faiths by prohibiting any form of sexual relations between people of the same sex & promoting it.



The Bill has now been sent to Uganda's President Yoweri Museveni, who has a history of anti-gay remarks. He can either use his veto power over the law or sign it into law within 30 days. While the Bill hasn't officially been published, a majority of its elements were discussed in Parliament.

Reactions to the Bill

The Bill has faced severe criticism and condemnation from various quarters. Amnesty International has called the law "appalling," "ambiguous" and "vaguely worded" and urged President Museveni to urgently veto it. UK Africa Minister Andrew Mitchell and the US Secretary of State Antony Blinken have also condemned the Bill. The White House press secretary Karine Jean-Pierre has warned Uganda of possible sanctions, restricting lawmakers responsible for passing the anti-LGBTQ Bill from doing business with the US.

The bill's mandatory reporting provision has also been criticized as it makes it illegal to identify as LGBTQ. This provision requires friends, family, and community members of those engaging in same-sex relationships to report them to the authorities. This mandatory reporting provision calls for a fine or six months imprisonment.

Previous Anti-Homosexuality Bill

This Bill is a "revised and more egregious version of the 2014 Anti-Homosexuality Act" that Uganda tried to introduce in 2014. The 2014 Act reinforced existing prison sentences under the Penal Code for same-sex conduct and outlawed the "promotion of homosexuality."

Lake Natron - An Alkaline Lake in Tanzania

Lake Natron is a fascinating natural wonder located in the Arusha Region of Tanzania. The crimson waters of this alkaline lake look surreal and are indeed mesmerizing, but not enticing enough to force people to take a dip in it. The lake has become a centre of attraction for experts and analysts due to its unique features and mysterious history. In this article, we will delve deeper into the mysteries surrounding Lake Natron and explore some interesting facts about this unusual body of water.

What Makes Lake Natron So Unique?

Lake Natron is unique due to its hostile conditions that make it difficult for most animals to survive. The lake contains salt, soda, and magnesite deposits, which contribute to its alkaline nature. The deposits of sodium carbonate found in the surrounding hills make the water extremely caustic, with a pH of over 10.5. This hostile environment is due to the active volcano, Ol Doinyo Lengai, which emits rare natrocarbonatites – a carbonatite lava found only in this volcano.

The Myth of "Stoned" Animals

One of the most intriguing aspects of Lake Natron is the myth that the lake turns animals that touch it into "stone." While several media reports suggest this, there is no scientific proof to support this claim. In fact, the same water supports a thriving ecosystem of salt marshes, freshwater wetlands, and flamingos. The flamingoes, in particular, thrive in this hostile environment, making it their breeding ground.



Nick Brandt's Images

In 2013, English photographer Nick Brandt published a book titled "Across the Ravaged Land," which documented the disappearing animals of Eastern Africa. In the book, Brandt published a series of haunting images of Lake Natron and its surroundings, showing dead animals washed up on its shoreline. While the book does not provide a definitive answer to the myth of "stoned" animals, it raises some important questions about the lake's role in the ecosystem.

Claude Lorius - a Pioneer in Climate Science

Claude Lorius, a pioneering glaciologist, passed away on Tuesday morning at the age of 91. He was best known for his research into climate change, specifically his work in Antarctica which helped prove that humans were responsible for global warming.

Early Life and Career

Lorius was born in Besançon, France, in 1932. He was a curious and adventurous child, and his love for exploration would eventually lead him to become a renowned scientist. In 1956, just out of university, Lorius joined an expedition to Antarctica. This trip sparked his fascination with the continent and its mysteries.

The Discovery

It was during a 1965 expedition to Antarctica that Lorius made his most significant discovery. One evening, after drilling into the ice, he and his team enjoyed a glass of whiskey with ice cubes made from the ice samples they had just collected. As they watched the bubbles of air sparkling in their glasses, Lorius realized that the air bubbles were samples of the atmosphere trapped in the ice. This revelation led him to study ice cores, which act as frozen time capsules.

Research and Impact

Lorius's research into air bubbles trapped in the ice was published in 1987. It showed that for long periods, levels of carbon dioxide varied slightly, but after the Industrial Revolution, concentrations of the greenhouse gas had skyrocketed as temperatures rose. His research brought him international renown and allowed scientists to look back over 160,000 years' worth of glacial records. The French National Centre for Scientific Research (CNRS) said it left "no room for doubt" that global warming was due to man-made pollution.

Campaigner and Legacy

From then on, Lorius became a campaigner for climate action. In 1988, he was the inaugural expert of the United Nations Intergovernmental Panel on Climate Change. In 2002, he was awarded the CNRS gold medal, along with his colleague Jean Jouzel.

Lorius's impact on climate science cannot be overstated. His research into ice cores provided essential evidence of human-induced climate change, and his advocacy work helped raise awareness of the urgent need for action. He was a pioneer in his field and inspired countless scientists to continue the fight against climate change.

World Happiness Report 2023

The annual World Happiness Report, published by the United Nations Sustainable



Development Solutions Network, has just been released, and it reveals that Finland remains the happiest country in the world for the sixth consecutive year. The report is based on data from the main life evaluation question in the Gallup World Poll, which measures how happy citizens perceive themselves to be.

Top 10 Countries in the World Happiness Report

The report ranked the top 10 happiest countries, with Finland in the lead followed by Denmark, Iceland, Israel, and the Netherlands. Other European countries such as Sweden, Norway, Switzerland, and Luxembourg also made the top 10. New Zealand was the only non-European country to make it to the top 10. The rankings are based on a range of factors such as social support, life expectancy, freedom to make life choices, generosity, and perceptions of corruption.

India's Position in the World Happiness Report

India's position in the World Happiness Report has improved from 136 to 126, although it is still behind its neighboring countries such as Nepal, China, and Bangladesh. Despite having the world's fastest-growing economy, India's ranking in the report has consistently been low, leading some to question how it can be ranked lower than countries in turmoil.

Russia and Ukraine in the World Happiness Report

Despite the ongoing conflict between Russia and Ukraine, both countries rank higher than India in the World Happiness Report, with Russia ranked 70th and Ukraine ranked 92nd. The report indicates that both countries experienced increased levels of kindness in 2020 and 2021, but in 2022, Ukraine saw a sharp rise in benevolence while it declined in Russia.

The World's Least Happy Countries

The World Happiness Report also highlights the least happy countries, with Afghanistan ranking as the unhappiest country out of the 137 nations surveyed. The report also highlighted other nations such as Lebanon, Zimbabwe, and the Democratic Republic of Congo as being among the unhappiest countries, largely due to factors such as high levels of corruption and low life expectancy.

About the World Happiness Report

The World Happiness Report is a comprehensive analysis of happiness levels across the world based on various criteria, including both domestic and global factors. The report gauges happiness based on feedback from a nationally representative sample of individuals regarding their current life satisfaction levels. The first report was published in 2012 and has been released annually since then, typically in March.

Marburg Virus: Tanzania Reports its First-Ever Outbreak

Tanzania has recently confirmed its first-ever outbreak of Marburg virus, a highly contagious and deadly virus that causes viral hemorrhagic fever. The World Health Organization (WHO) has reported that the confirmation by Tanzania's national public laboratory followed the death of five people in the northwest Kagera region who developed symptoms, which include fever, vomiting, bleeding, and renal failure. Here's what you need to know about the Marburg virus outbreak in Tanzania.



What is Marburg virus?

Marburg virus is an Ebola-like virus that causes viral hemorrhagic fever. The virus is the causative agent of Marburg virus disease (MVD), a disease with a case fatality ratio of up to 88%, but can be much lower with good patient care. Both Marburg and Ebola viruses are members of the Filoviridae family (filovirus), and the two diseases are clinically similar.

Transmission

Human MVD infection results from prolonged exposure to mines or caves inhabited by Rousettus bat colonies. Marburg spreads through human-to-human transmission via direct contact (through broken skin or mucous membranes) with the blood, secretions, organs or other bodily fluids of infected people, and with surfaces and materials (e.g. bedding, clothing) contaminated with these fluids. Health-care workers have frequently been infected while treating patients with suspected or confirmed MVD.

Symptoms of Marburg virus disease

The incubation period (interval from infection to onset of symptoms) varies from 2 to 21 days. Illness caused by Marburg virus begins abruptly, with high fever, severe headache, and severe malaise. Muscle aches and pains are a common feature. Severe watery diarrhea, abdominal pain and cramping, nausea, and vomiting can begin on the third day. Many patients develop severe hemorrhagic manifestations between 5 and 7 days, and fatal cases usually have some form of bleeding, often from multiple areas. In fatal cases, death occurs most often between 8 and 9 days after symptom onset, usually preceded by severe blood loss and shock.

Outbreak history

Marburg virus disease was initially detected in 1967 after simultaneous outbreaks in Marburg and Frankfurt in Germany; and in Belgrade, Serbia. Two large outbreaks that occurred simultaneously in Marburg and Frankfurt in Germany, and in Belgrade, Serbia, led to the initial recognition of the disease. Subsequently, outbreaks and sporadic cases have been reported in Angola, the Democratic Republic of the Congo, Kenya, South Africa, and Uganda. In 2008, two independent cases were reported in travelers who had visited a cave inhabited by Rousettus bat colonies in Uganda.

Marburg virus outbreak in Tanzania

Tanzania has confirmed eight cases of MVD in its first-ever outbreak. The three who survived were getting treatment, with 161 contacts being monitored.

Prevention and control measures

Prevention and control measures for Marburg virus disease include standard infection control practices, such as wearing gloves and other protective equipment when caring for patients with suspected or confirmed MVD, and proper sterilization of medical equipment. Health-care workers should be trained on proper infection control procedures to prevent transmission. Burial ceremonies that involve direct contact with the body of the deceased can also contribute to the transmission of Marburg.

March 27, 2023



188th Raising Day of Assam Rifles

The Assam Rifles (AR) is a central paramilitary force responsible for border security, counter-insurgency, and maintaining law and order in Northeast India. It is also responsible for guarding the Indo-Myanmar border. The AR is the oldest paramilitary force in India, originally raised in 1835 as Cachar Levy, a militia to protect tea gardens and fertile plains of Assam against unruly tribes. Its scope increased with the expansion of British Raj in Northeast India, and were used against insurgency in the region. The force was redesigned as Assam Frontier Police in 1883, Assam Military Police in 1891, and East Bengal and Assam Military Police in 1913. It got its present name in 1917.

Recruitment, perks, promotions, and retirement policies of AR are governed by CAPF rules. Around 80 percent of its officers are deputed from the Indian Army, and the remaining from AR cadre. The AR is commanded by the Director General of the Assam Rifles (DG AR) who is appointed by the Ministry of Home Affairs.

Celebrating the 188th Raising Day

On March 24, 2023, the Assam Rifles celebrated its 188th raising day in Shillong. The AR battalions in Manipur also celebrated the occasion with various welfare activities for school children, orphans, and others as a part of its service to the nation. The Tamenglong Battalion under the aegis of Jwalamukhi Sector organized a visit to nearby orphanages and schools at Tamenglong, Kahulong, Awangkhum, Tamei, and Dikuiram and carried out celebrations with the children.

Wreath Laying Ceremony and Sainik Sammelan

The Sehlon Battalion under the aegis of Headquarter Inspector General Assam Rifles (South) conducted a wreath-laying ceremony for all Martyrs of Assam Rifles, special Sainik Sammelan for Troops, screening of a short movie on unit history, and barakhana. The occasion was celebrated with full zeal and enthusiasm.

Commitment to Serving the Nation

The Assam Rifles remain committed to service to the nation. The tales of sacrifice, courage, and friendship of Assam Rifles wherein they beat all odds of harsh terrain and weather of North East have always been an inspiration for people all over the nation. The force has been serving the nation for the last 187 years, earning many laurels at all levels.

Doubling of the Gooty-Pendekallu Line

The Ministry of Railways has recently given the nod to the doubling of the railway line between Gooty and Pendekallu stations in Andhra Pradesh. Let's take a look at what this means and how it will impact train travel between Hyderabad and Bengaluru.

Doubling of Railway Line: Cost and Distance

The railway line between Gooty and Pendekallu stations covers a distance of 29.2 km and will cost an estimated Rs 352 crore for doubling.

Critical Role of Gooty-Pendekallu Section

This section falls under the South Central Railway (SCR) zone and handles busy train traffic between Hyderabad and Bengaluru. It plays an important role in connecting cities and beyond as most of the trains pass through this section.



Increased Passenger and Freight Traffic

Over the years, there has been a steady increase in both passenger and freight trains, leading to the saturation of the section. This has made the doubling of the railway line necessary.

Ease of Train Movement and Improved Efficiency

Doubling of the railway line between Gooty and Pendekallu stations will ease train movement and improve operational efficiency. It will also provide the opportunity to introduce more trains on this section.

Focus on Doubling Critical and Saturated Sections

The Ministry of Railways is focusing on doubling critical and saturated sections for incorporating agility in the mobility of trains. In addition to the Gooty-Pendekallu section, the Pendekallu and Guntur sections have already been sanctioned for doubling as part of the Guntakal-Guntur doubling project.

Seamless Bidirectional Movement of Trains

Another key section, Gooty-Dharmavaram, has also been converted into a double line section recently. Now, the Gooty-Pendekallu doubling will enable seamless bidirectional movement of trains along double lines between Hyderabad and Bengaluru and beyond.

Impact on Socio-economic Development

Doubling of railway lines will not only ease the movement of trains and reduce congestion but also give a shot in the arm of socio-economic development in these regions with faster moving passenger and freight trains.

Connecting Hyderabad and Bengaluru

The Gooty-Pendekallu section is critical for train travel between Hyderabad and Bengaluru. Doubling of the railway line will enable seamless bidirectional movement of trains along double lines between these two cities and beyond.

DigiClaim Module Under PMFBY

On March 24, 2023, Union Minister of Agriculture Narendra Singh Tomar launched the National Crop Insurance Portal's digitized claim settlement module 'DigiClaim' in New Delhi, India. The module falls under the ambit of Pradhan Mantri Fasal Bima Yojana (PMFBY), and will disburse claims electronically, benefitting farmers from six states. The launch marks a revolutionary step towards ensuring that farmers can receive claim amounts digitally in a time-bound and automated manner, making them self-reliant and empowered.

The Launch and Benefits of DigiClaim Module

At the launch, Union Minister Tomar informed that with the DigiClaim Module, insurance claims totaling Rs 1260.35 crore have been disbursed on March 23, 2023, to insured farmers in Rajasthan, Uttar Pradesh, Himachal Pradesh, Chhattisgarh, Uttarakhand, and Haryana with the click of a button. The process will continue as and when the claims are released. With this launch, the automated claim settlement process will be an ongoing activity to ease all insured farmers' lives and provide them with a sustainable financial flow and support.



One of the significant advantages of the DigiClaim Module is that farmers' claims will be processed directly to their respective bank accounts in a transparent and accountable manner. The technology has been enabled through the integration of the National Crop Insurance Portal (NCIP) and Public Finance Management System (PFMS). This would directly impact the claim reversal ratio, which is expected to go down with DigiClaim. Another noteworthy feature of this digital advancement is that farmers would be able to track the claim settlement process on their mobile phones in real-time and avail the scheme's benefits.

Rejoining PMFBY: A Shining Example of Cooperative Federalism

Currently, the Central Government is closely working with all exited states from the scheme and has had discussions with their senior officials. Andhra Pradesh and Punjab are making a comeback to the scheme, which shows a shining example of cooperative federalism. Governments of Telangana, Gujarat, Bihar, West Bengal, and Jharkhand have also been approached to rejoin PMFBY, and several discussions have been underway. Out of these states, Telangana and Jharkhand have indicated their willingness to come back under PMFBY.

What is Sagar Manthan?

The Ministry of Ports, Shipping and Waterways (MoPSW) launched a Real-time Performance Monitoring Dashboard called 'Sagar Manthan' virtually. Union Minister for Ports, Shipping and Waterways and Ayush, Shri Sarbananda Sonowal inaugurated the dashboard. Here are the details about 'Sagar Manthan'.

More about 'Sagar Manthan'

The digital platform is designed to have all integrated data related to the ministry and other subsidiaries. The platform was developed in-house by the union ministry. It was completed efficiently in less than 1.5 months.

Significance of 'Sagar Manthan'

The newly launched dashboard is expected to enhance the functioning of different departments by providing well-coordinated and up-to-date information in real-time. The MoPSW has demonstrated its commitment to promoting the growth of India's maritime transport sector by launching the 'Sagar Manthan' Dashboard. It represents a step towards digitalization and transparency in the sector.

Key Features of 'Sagar Manthan' Dashboard

The 'Sagar Manthan' dashboard has five key features:

1. **Data visualization:** The dashboard allows the user to see the data in a visual form that is easy to understand. The user can see the data in the form of graphs, charts, and tables.
2. **Real-time monitoring:** The dashboard provides real-time updates on the performance of different departments. The user can see the performance of different departments in real-time.
3. **Improved communication:** The dashboard provides a platform for improved communication between different departments. The user can communicate with



different departments through the dashboard.

4. **Data-driven decision making:** The dashboard provides data that can be used for decision making. The user can use the data to make informed decisions.
5. **Increased accountability:** The dashboard ensures that all the entities under the Ministry of Ports, Shipping and Waterways are accountable and transparent.

Exercise Konkan 2023

The Indian Navy and the Royal Navy conducted their annual bilateral maritime exercise called Konkan 2023 off the Konkan coast in the Arabian Sea from March 20 to 22, 2023. This exercise involved INS Trishul, a guided missile frigate, and HMS Lancaster, a Type 23 guided missile frigate, and aimed to improve cooperation and learn best practices through various maritime drills.

Exercise Drills

These drills covered air, surface, and sub-surface operations, such as gunnery shoots on an inflatable surface target called 'Killer Tomato,' helicopter operations, anti-aircraft, and anti-submarine warfare exercises, Visit Board Search and Seizure (VBSS), ship manoeuvres, and personnel exchange.

Benefits

The maritime exercise proved to be highly beneficial for the personnel of both navies, as it displayed a remarkable level of professionalism and enthusiasm throughout its execution. The personnel were focused on operational readiness, improving cooperation, and the ability to conduct joint operations.

Improving Cooperation

The exercise aimed to improve cooperation between the Indian and Royal Navy. Such efforts will significantly contribute to strengthening the Indian Navy and Royal Navy's combined efforts in enhancing maritime security and maintaining a rules-based order in the region.

Learning Best Practices

The Konkan 2023 exercise was a great opportunity for the Indian and Royal Navy to learn best practices from each other. Both navies learned from each other's experiences and demonstrated their operational capabilities to each other.

Surface and Sub-Surface Operations

The exercise included surface and sub-surface operations. The personnel of both navies conducted anti-aircraft and anti-submarine warfare exercises, which would be beneficial in any future operations.

Gunnery Shoots

One of the highlights of the exercise was gunnery shoots on an inflatable surface target called 'Killer Tomato.' This drill tested the accuracy and precision of the personnel's gunnery skills.

Helicopter Operations

The exercise included helicopter operations, which were focused on enhancing the skills of the personnel in operating helicopters in a maritime environment.



Visit Board Search and Seizure (VBSS)

The exercise included a Visit Board Search and Seizure (VBSS) operation, which is an essential aspect of maritime security. The VBSS operation tested the personnel's ability to conduct search and seizure operations on suspect vessels.

Ship Manoeuvres

The exercise included ship manoeuvres, which tested the personnel's ability to manoeuvre ships in various scenarios.

Personnel Exchange

The exercise also included personnel exchange between the Indian and Royal Navy. This exchange helped personnel of both navies to understand each other's culture and working styles.

What is Haeil Drone?

North Korea has recently unveiled its new nuclear underwater drone, which has caused concerns in the international community. The drone, dubbed "Haeil" or Tsunami, is designed to create massive radioactive waves through submarine explosions. North Korean state news agency KCNA claims that the drone can be deployed at any coast and port or towed by a surface ship for operation. The country's leader, Kim Jong-un, was reportedly "greatly satisfied" after the drone was successfully tested.

Test-Firing and Capabilities of the Drone

The nuclear tsunami drone was launched earlier this week off the coast of Riwon County in South Hamgyong Province. It reportedly cruised underwater for 59 hours at a depth of 80 to 150 metres before detonating at the target location. North Korea also launched four strategic cruise missiles affixed with mock nuclear warheads.

Concerns and Criticism from Experts

North Korea's claims regarding the capabilities of its advanced tsunami drones have been met with skepticism and criticism from experts. It is not confirmed whether North Korea has developed miniature versions of nuclear warheads that can be fitted on smaller weapons like drones. Additionally, there is no indication that the drones are deployment-ready. Despite these uncertainties, experts have warned against downplaying the rising nuclear threat emanating from Pyongyang.

Joint Military Drills and North Korea's Reaction

The joint military drills between South Korea and the United States have greatly riled the North Korean dictator Kim Jong-un. The drills have caused tensions between the two Koreas, and North Korea's recent display of its nuclear capabilities is seen as a response to the drills. Pyongyang claims that its new nuclear drones will not only destroy enemy ports but also disrupt the naval operations in the target area.

New US-Canada Border Deal

A new US-Canada border deal has recently taken effect with the aim to halt the flow of asylum seekers at unofficial border crossings. The agreement has closed a loophole that previously allowed migrants to claim asylum at such unofficial ports of entry. Under the



new accord, migrants caught crossing anywhere along the 3,145-mile (5,060-km) border can now be sent back. This comes at a time when there has been a rise in migrant crossings into Canada from the US side.

The new deal extends the Safe Third Country Act (STCA) along the entire border, including internal waterways. The original 2004 agreement required migrants to make an asylum claim in the first “safe” country they reach, whether it is the US or Canada. The STCA allowed either nation to turn migrants away at official points of entry, but not at unofficial crossing points like Roxham Road.

Record Numbers of Migrants

A record number of migrants, around 40,000, crossed into Canada last year, with the majority of them entering through Roxham Road. The new deal is part of efforts to limit an influx of migrants at Roxham Road, an unofficial crossing between New York state and the province of Quebec.

Criticism and Concerns

The new deal has been criticized by refugee advocates as being ineffective at ending the irregular crossing of migrants into Canada. There are concerns that it could incentivize human smuggling.

Biden's Visit to Canada

While in Canada, President Joe Biden spoke of the importance of the deep economic ties and the defense alliances between the two nations, as well as their joint support for Ukraine. The two leaders pledged to stand together against authoritarian regimes. They also discussed reducing dependence on China for semiconductors and the critical minerals needed to make batteries and electric cars.

The ongoing instability in Haiti was also discussed, where the economy is in crisis and gang violence and kidnappings have risen sharply. The US has pushed Canada to lead an international force to support security forces in the Caribbean country.

Global Coalition on the Opioid Crisis

The two countries announced that they will lead a new “global coalition” on the opioid crisis. It will look to tackle the issue of drug trafficking not only in North America but across the world.

Gaj Utsav 2023 - Celebrating 30 Years of Project Elephant

The Indian Government is set to celebrate the 30th anniversary of Project Elephant with the Gaj Utsav 2023. This two-day event aims to promote elephant conservation, protect their habitat and corridors, and prevent human-elephant conflicts. It will also ensure the welfare of captive elephants in India.

Inauguration and Venue

The Gaj Utsav 2023 will be inaugurated by President Droupadi Murmu on April 9 at Kaziranga National Park in Assam. This event is significant as Kaziranga is a UNESCO World Heritage site and home to the highest density of tigers in the world.

Project Elephant: Its Significance

Project Elephant is a centrally-sponsored scheme launched in 1991-92 to protect elephants



and their habitats in India. With an estimated population of 30,000-40,000 elephants, India accounts for more than 60 per cent of the global wild elephant population. Elephants are considered a national heritage animal protected under Schedule I of the Wild Life Protection Act, 1972.

Celebrating Project Tiger's 50th Anniversary

In addition to the Gaj Utsav, India is also celebrating the 50th anniversary of Project Tiger in Mysuru, Karnataka. Starting on April 7, this event aims to showcase India's tiger conservation success globally, release the latest tiger census data, and present the government's vision for tiger conservation.

India's Tiger Conservation Success

Project Tiger, launched in 1973, promotes tiger conservation in India. Approximately 2.4 per cent of India's geographical area is covered by tiger reserves, which serve as repositories for biodiversity conservation, ensure regional water security and carbon sequestration, and contribute to accomplishing India's climate change mitigation targets. India has a current tiger population of about 3,000, accounting for more than 70 per cent of the global wild tiger population. The tiger population in India is increasing at six per cent per annum, which is significant in the context of global tiger conservation.

Chenab Bridge - World's Highest Rail Bridge

The Indian Railways is constructing the world's highest railway bridge in the challenging terrain of the Himalayas, which is expected to be completed in the coming months. The Chenab Bridge, an engineering marvel, is a part of the strategically important Udhampur-Srinagar-Baramullah (USBRL) railway link that will connect Jammu & Kashmir to the rest of India.

Impressive Statistics of the Chenab Bridge

The Chenab Bridge is 35 meters taller than the Eiffel Tower in Paris, making it the world's highest rail bridge. The 1.3 km long bridge has a design speed of 100 kmph for trains and a lifespan of 120 years.

Completion and Use of the Bridge

The USBRL project is expected to be completed by December 2023 or January 2024. The Vande Bharat Express train will run over the Chenab bridge, and a maintenance facility for Vande Bharat trains will be established in Badgam. The new Vande Metro, developed for short-distance inter-city travel, will also run between Jammu and Srinagar.

The Significance of the Bridge

The 111 km stretch from Katra to Banihal is essential, and the 1.3 km long Chenab Bridge is a crucial part of this stretch. Once completed, the entire USBRL Railway project will provide all-weather connectivity and join Jammu and Kashmir to the rest of India.

Expertise and Cost of the Project

Several international agencies and premier Indian institutes, such as IIT Roorkee, IIT Delhi, DRDO, and Geological Survey of India, are providing their expertise in planning and implementing the bridge project. The ambitious project is being executed by Konkan Railway Corporation Ltd. at an estimated cost of Rs. 1486 crore.



G20 Chief Science Advisers' Roundtable

The G20 Chief Science Advisers' Roundtable (CSAR) is a critical government-to-government initiative of the G20 Presidency that will deliberate on free and universal access to scientific journals that are behind paywalls. India assumed the G20 presidency on December 1, 2022, and the G20 summit will be held in New Delhi from September 9-10, 2023.

CSAR's Meetings and Objectives

In the run-up to the G20 summit, CSAR will be organising two high-level meetings in Ramnagar, Uttarakhand and Bengaluru. The participating G20 nations will discuss access to scientific journals that are free, immediate, and universal. Additionally, they will talk about high subscription and article processing charges levied by journals, interoperable inter-linking of national repositories with international repositories and archives, and an open access mandate to make knowledge outputs of public-funded scientific research widely available.

Furthermore, on CSAR's agenda is promoting One Health for disease control and preparedness, improving diversity, equity, inclusion and accessibility in science and technology (S&T) and setting up an institutional mechanism for inclusive, continuous and action-oriented global S&T policy dialogue.

Free Access to Scientific Journals

Most scientific papers charge high subscription rates from readers. In 2019, the University of California dropped its nearly \$11 million annual subscription to Elsevier, the world's largest publisher of academic journals. Although open-access journals are free for readers, they charge fees from scientists who wish to publish papers in them. Open access papers have drastically fewer lead authors from low-income regions than paywalled articles.

The One Health Agenda

Participating G20 nations will discuss a pandemic preparedness plan for flexible, adaptive, and timely responses to pandemics as well as integrated disease surveillance mechanisms for humans, livestock, and wildlife, as part of the One Health agenda. They will also talk about developing a roadmap for diseases and investing in analytics capacity (such as disease modelling, artificial intelligence, and machine learning tools) and data standards.

Other Government-to-Government Initiatives

Besides CSAR, other government-to-government initiatives are a part of the G20. These include Science-20 (S20) and G20 Research Innovation Initiative Gathering (RIIG). The S20 Engagement Group will comprise the national science academies of the G20 countries. RIIG aims to address the challenges of achieving socioeconomic equity through research and innovation.

The State of School Feeding Worldwide 2022

A new report by the World Food Programme (WFP) has found that the reach of school meals in low-income countries remains four percent below pre-pandemic levels. The State of School Feeding Worldwide 2022 report also revealed that Africa had the biggest



declines in school meal coverage.

Moderate Increases in High and Middle-Income Countries

In contrast, high-income, upper middle-income, and lower middle-income countries showed a consistent, modest increase of four percent, four percent, and 12 percent, respectively. This data shows that while school meal programs in low-income countries are struggling, those in higher-income countries are improving.

Targeted Support Needed for Low-Income Countries

The report emphasizes the need for external development partners to particularly target support at low-income countries, where school meal programs are critical safety nets for vulnerable children and households. Despite increased domestic funding for school meals, low-income countries are still struggling due to decreased contributions from donors, which have fallen from 69 percent to 55 percent.

Increase in Number of Children Fed, But Disparities Remain

Approximately 420 million children around the world receive school meals, an increase of 30 million or seven percent from the 388 million children reported in 2020. Of the 30 million increases in the number of children receiving school meals between 2020 and 2022, the five countries that accounted for 19 million of the increase in the number of children fed were Brazil, Russia, India, China, and South Africa.

Impact of School Meal Programs

The report also highlights the significant impact of school meal programs on education, health, and nutrition, as well as social protection. According to the WFP, school feeding programs can increase enrollment rates by nine percent and attendance by eight percent. Additionally, research shows that for every \$1 invested in school feeding programs, there is a return of \$9.

Job Creation through School Meal Programs

School meal programs are also an important contributor to job creation, with the potential to create 1,000-2,000 jobs for every 100,000 children receiving school meals. While the vast majority of these jobs are cooks and food preparers, there are also opportunities for other roles.

Exostoma Dhritiae - New Species of Catfish from Arunachal Pradesh

A team of scientists from the Zoological Survey of India (ZSI) recently discovered a new catfish species in Arunachal Pradesh. The discovery was announced in a statement by the ZSI. The new catfish species has been christened 'Exostoma Dhritiae'.

Discovery and Naming of Exostoma Dhritiae

The new species was found in Siking stream, a tributary of Siang river in Upper Siang district of Arunachal Pradesh. The discovery of this new catfish species adds to the biodiversity of India. The scientists of the ZSI named the new species 'Exostoma Dhritiae' after Dhriti Banerjee, the first woman director of the ZSI, as a mark of honour for her contributions to research on the fauna of the country.

Size and Local Name of Exostoma Dhritiae

The new species is a small fish found in streams in these hills and is called 'Ngorang' by



local tribals. Its discovery is a significant feat as the finding of new, smaller species can be much more difficult than larger ones. The new species adds to the diversity of life in the region and can help scientists better understand the ecology of the area.

Location of Arunachal Pradesh

Arunachal Pradesh is a state in northeastern India, bordering the states of Assam and Nagaland to the south and sharing international borders with Bhutan to the west, Myanmar to the east, and China to the north. The location of Arunachal Pradesh makes it a hotspot for biodiversity as it is home to a variety of ecosystems, including rainforests, grasslands, and high altitude mountain ranges.

Role of ZSI in Research

The ZSI is a premier organization in the field of zoological research and is responsible for carrying out surveys, studies, and research on various aspects of animal taxonomy and ecology. The discovery of *Exostoma Dhritiae* is just one example of the important work being done by the ZSI.

March 28, 2023

Vedic Heritage Portal

The Indira Gandhi National Centre for the Arts (IGNCA) has recently launched the Vedic Heritage Portal, a digital repository of vedic knowledge and traditions from across the country. This portal is the result of a seven-year effort and an estimated cost of Rs 5 crore. The Vedic Heritage Portal is a one-stop solution for researchers and others who seek information about the Vedic heritage of India. It was launched by Union Home Minister Amit Shah and Union Culture Minister G Kishan Reddy during the IGNCA's 36th Foundation Day celebrations.

Mapping the Vedic Heritage of the Country

The Vedic Heritage Portal is an effort to map the Vedic heritage of India. The portal offers detailed information about oral traditions, textual tradition in the form of published books/manuscripts, or implements (yajna-related objects). The aim of the portal is to collate information for making Vedas accessible to people and provide a forum for further dialogue. It is a digital platform that preserves and promotes the 'Vedas', which are an intangible heritage of humanity as per the United Nations Educational, Scientific and Cultural Organization (UNESCO).

Content on the Vedic Heritage Portal

Over 550 hours of audio-visual content related to more than 18,000 Vedic mantras have been uploaded on the website, prepared in conjunction with people who know Vedas, Vedic research institutes, Vedapathi families, and experts from all over the world. The Vedic Heritage Portal is available in a mix of English and Hindi, besides audio content in Sanskrit. The portal also includes research articles and lectures on scientific subjects explaining the relevance of 'Vedic knowledge' in the perspective of modern science.

IGNCA's Future Plans

Apart from the Vedic Heritage Portal, the IGNCA is planning to create a museum dedicated to the Vedic implements, or vessels used in yajna. The museum will showcase over 250



vessels from the vedic traditions of Karnataka, Kerala, Tamil Nadu, and Andhra Pradesh. IGNCA is also working on a project called Vrihattar Bharat, which will explore cultural linkages of India with 40 other countries, including South East Asian Nations such as Cambodia, Vietnam, Laos, and Mongolia.

Who was Basavanna?

Basava, also known as Basavanna, was a 12th-century CE Indian statesman, philosopher, poet, Lingayat social reformer, and Hindu Shaivite social reformer. He was born in a small village called Basavana Bagewadi in modern-day Karnataka. Basava is known for his social awareness campaigns through his poetry, popularly known as Vachanaas, which were written in Kannada.

Rejecting Discrimination and Superstitions

Basava was a vocal opponent of gender and social discrimination, superstitions, and rituals that were prevalent during his time. He believed that everyone, regardless of their birth or caste, should be treated equally. Basava introduced the Ishtalinga necklace, which was worn by every person, with an image of the Shiva Linga, to symbolize the equality of all individuals.

Condemning Sacrifices and Promoting Ahimsa

Basava was also a vehement opponent of human and animal sacrifices. He believed that the practice was barbaric and went against the principles of non-violence, or Ahimsa, which he promoted. Basava's teachings and beliefs are still followed by the Lingayat community, which he is considered to have founded according to traditional legends.

Introducing New Public Institutions

Basava introduced several new public institutions during his time, one of which was the Anubhava Mantapa, also known as the "hall of spiritual experience." The Anubhava Mantapa was a platform for people of all backgrounds to come together and share their experiences and ideas.

Literary Works and Legends

Basava's literary works, including his Vachana Sahitya, are still widely read and celebrated in Karnataka. His ideas and teachings have also been passed down through traditional legends, such as the Basavarajadevara Ragale, which was written by the Kannada poet Harihara.

Basava's life and ideas have been chronicled in several texts, including the sacred Telugu text, the Basava Purana, written by Palkuriki Somanatha. Basava is known by many names, including Bhaktibhandari, which means "the treasurer of devotion."

Unveiling of Statues

Recently, Union Home Minister Amit Shah unveiled statues of both Basavanna and Nadaprabhu Kempegowda in Bangalore. Nadaprabhu Kempegowda was a feudal ruler who founded the city of Bangalore in the early 16th century. He was also known for his contributions to building temples, tanks, and other infrastructure in and around Bangalore.



Who was Sir M Visvesvaraya?

Sir M Visvesvaraya was an Indian civil engineer, administrator, and statesman. Born on September 15, 1861, in Muddenahalli village in the erstwhile Kingdom of Mysore, Sir M Visvesvaraya played a pivotal role in the development of the state of Mysore and India as a whole. His contributions to the fields of engineering, education, and public service have made him a revered figure in Indian history.

Diwan of Mysore

Sir M Visvesvaraya served as the 19th Diwan of Mysore from 1912 to 1918. During his tenure, he implemented various reforms that led to the overall development of the state. He introduced a system of revenue collection that ensured fairness and transparency, built numerous schools and colleges, and established a public works department that oversaw the construction of roads, bridges, and other infrastructure projects.

Engineers' Day

In honor of Sir M Visvesvaraya's contributions to the field of engineering, Engineers' Day is celebrated in India, Sri Lanka, and Tanzania on his birthday, September 15. The day is a tribute to his legacy as a civil engineer and an inspiration to aspiring engineers.

Maker of Modern Mysore

Sir M Visvesvaraya is widely regarded as one of the foremost civil engineers in India and the maker of modern Mysore. He designed and constructed various dams in the country, including the Krishna Raja Sagara dam near Mandya, which is still operational today. He was also responsible for founding numerous institutions, including the Mysore Soap Factory, Parasitoid Laboratory, Mysore Iron & Steel Works in Bhadravathi, Bangalore Polytechnic, Bangalore Agricultural University, State Bank of Mysore, among various other institutions.

Bharat Ratna

In recognition of his services to the Kingdom of Mysore and the Republic of India, Sir M Visvesvaraya was awarded the Bharat Ratna, India's highest civilian award, in 1955. The award is a testament to his contributions to the country's development and his status as a national hero.

Tribute from Prime Minister Modi

Recently, Prime Minister Narendra Modi paid tribute to Sir M Visvesvaraya at his birthplace, Muddenahalli in Chikkaballapura district in Karnataka. He also visited the museum dedicated to him, which houses various artifacts related to his life and work.

Indian Navy's First Training Squadron and its Visit to Madagascar

The First Training Squadron (1TS) of Indian Navy, based in Kochi, is responsible for providing basic and advanced training to the officer and sailor trainees of the Indian Navy. Recently, two ships, INS Tir and ICGS Sarathi, from the squadron visited Port Antsiranana in Madagascar, from March 20 to 23, 2023, as part of their training activities. Let us delve deeper into this visit and its significance.

Welcome at Port Antsiranana

Officers from the Malagasy Navy and representatives from the Indian Embassy at



Madagascar received the ships of the First Training Squadron (1TS) at Port Antsiranana. Sri Bandaru Wilsonbabu, the Ambassador of India at Madagascar, also met the squadron members during their visit.

Meetings with the Governor and Naval Commandant

During their visit, the senior officers of the squadron called upon Mr Rakotomanga Taciano, the Governor of the region, and Captain Raorasata Dibiharivony Gislain, the Commandant of the Naval base at Antsiranana. These meetings were aimed at promoting friendly relations between the two nations.

Training Activities Undertaken

The ships of the First Training Squadron (1TS) conducted various training activities with the Malagasy Navy during their stay at Antsiranana. These activities included Nuclear Biological Chemical Defence (NBCD), Fire Fighting, Weapon Handling, and Visit Board Search and Seizure (VBSS). Such training activities are crucial for strengthening the operational capability and preparedness of both the Indian and Malagasy Navies.

Other Activities Conducted

Apart from the training activities, the ships of the First Training Squadron (1TS) also conducted a yoga session for personnel from both navies. This activity highlighted the importance of holistic development and the benefits of yoga for physical and mental health. Friendly Volleyball and Basketball matches were also played between the Indian and Malagasy teams, promoting camaraderie and goodwill.

About Antsiranana

Antsiranana is a port city in the far northern part of Madagascar Island. It has a population of around 115,000 and covers a total area of 42 km² (16 mi²). The original name of the city was Diego Suarez, and it was coveted by France during the 1880s.

President's Standard

On March 25, 2023, the Indian Army's Armoured Regiments were awarded the prestigious President's Standard at an event held at the Suratgarh military station in Rajasthan's Sriganganagar district. The presentation was made by Army chief General Manoj Pande, who commended the four regiments for their exemplary services.

What is the President's Standard?

The President's Standard is the highest honor bestowed by the Supreme Commander to a military unit in recognition of their service rendered to the nation. It is the same honor as the President's Colours, which are awarded to a relatively smaller military formation or unit.

The Award Presentation

At the presentation event, four Armoured Regiments of the Indian Army received the President's Standard. These were the 49 Armoured Regiment, 51 Armoured Regiment, 53 Armoured Regiment and 54 Armoured Regiment. The presentation ceremony was attended by dignitaries and senior military officials. The regiments were also part of a mounted parade, which showcased their strength and skill. The Chief of the Army Staff reviewed the parade and appreciated the rich legacy of valour, sacrifice and traditions



displayed by the Armoured Corps in war and in peace.

The Significance of the President's Standard

The President's Standard is the highest honor a military unit can receive, and it recognizes their exceptional service to the nation. The Supreme Commander, who is the President of India, confers this honor to a military unit in recognition of their service to India. This award is a significant achievement for the four Armoured Regiments of the Indian Army, and it demonstrates their commitment to serving the nation with distinction.

The Armoured Corps

The Armoured Corps is one of the premier combat arms of the Indian Army. It is responsible for providing support to the infantry by providing armored vehicles, tanks, and other combat support vehicles. The Armoured Corps has a rich history and has been involved in many operations, both in India and abroad. The regiments awarded the President's Standard have made significant contributions to the Armoured Corps and the Indian Army as a whole.

March 29, 2023

Aravalli Green Wall Project

On March 25th, 2023, the Union Minister for Environment, Forest and Climate Change, Shri Bhupender Yadav, inaugurated the Aravalli Green Wall Project. The project aims to green the 5 km buffer area around the Aravalli Hill Range in four states – Haryana, Rajasthan, Gujarat, and Delhi. The project was launched on the International Day of Forests and is a part of the National Action Plan to Combat Desertification and Land Degradation Through Forestry Interventions.

The Objective of the Aravalli Green Wall Project

The Aravalli Green Wall Project aims to improve the ecological health of the Aravalli range, prevent land degradation, combat desertification, improve biodiversity, mitigate climate change, and promote sustainable development. The initial phase of the project focuses on the rejuvenation of 75 water bodies in the Aravalli landscape, starting with five water bodies in each district of the Aravalli landscape. The project aims to develop a synergy between restoration, socio-economic factors, and development activities to ensure that both conservation and development can be achieved.

The Role of Society for Geoinformatics and Sustainable Development and IMGurgaon

To mobilize people for Shramdaan for the revival of water bodies, the project has engaged the Society for Geoinformatics and Sustainable Development and NGO, IMGurgaon. Shramdaan is a voluntary contribution of labor or effort. The Society for Geoinformatics and Sustainable Development is responsible for mobilizing people for Shramdaan for the revival of water bodies at Bandhwadi, and IMGurgaon for the revival of water bodies at Ghata Bundh.

What is BARC B1201?

India's Bhabha Atomic Research Centre (BARC) and National Aluminium Company Limited (NALCO) jointly developed BARC B1201, India's first Bauxite Certified Reference Material (CRM). The launch of this CRM is a significant achievement, especially since it is the first of



its kind in India and only the fifth in the world.

What is a CRM?

A CRM is a sample of a material that has been analyzed and certified for its composition, purity, and other important characteristics. It is used as a standard to compare other samples of the same material, ensuring that the results obtained from different laboratories are comparable.

Who is NALCO?

NALCO, also known as National Aluminium Company Limited, is a government-owned company that specializes in integrated and diversified operations in mining, metal, and power. Its main products are alumina and aluminium, and it is the leading manufacturer and exporter of these materials in India.

NALCO comes under the aegis of the Union Ministry of Mines. The Indian government owns 51.5% of the equity in NALCO.

What is BARC?

BARC, short for Bhabha Atomic Research Centre, is India's premier nuclear research facility. It was founded by Homi Jehangir Bhabha in January 1954 and is headquartered in Trombay, Mumbai, Maharashtra, India.

The purpose of BARC is to conduct a multidisciplinary research program essential for India's nuclear program. It is also involved in other areas such as chemistry, physics, engineering, and biosciences.

Launching of BARC B1201

Shri M.P. Mishra, Director (P&T), NALCO, and Dr. A. C. Sahayam, Head of Division, National Centre for Compositional Characterisation of Materials, formally launched BARC B1201. The launch took place at NALCO Research & Technology Centre, Bhubaneswar, on 24th March 2023.

Water and Heritage Shield and Sípàapu

Arizona's Black Mesa Trust (BMT) has been awarded the prestigious 'Water and Heritage Shield' by the International Committee On Monuments and Sites International Science Committee (ICOMOS ISC) on March 25, 2023. The award recognizes BMT's work to raise public awareness of the significance of water and indigenous sacred sites worldwide, including the Hopi's Sípàapu.

Location of Sípàapu

The Sípàapu, a rocky dome made of limestone and a spring located on the Little Colorado river, holds immense importance for the Hopi, Navajo, and Zuni tribes. The Hopi, in particular, hold a unique reverence for the environment and believe that living in a high desert environment would force them to attune their perceptions, leading to spiritual growth.

Importance of Sípàapu

For the Hopi, the Sípàapu is the place from where their ancestors emerged from another world into this one. However, the Sípàapu, along with many other sacred sites, faces



significant threats from mining and dams. Peabody Energy, a coal mining company, began mining coal in the Black Mesa Plateau and developed a coal slurry pipeline to transport the coal to the Mohave Generating Station in neighboring Nevada, further endangering the Sípàapu and the surrounding environment.

BMT's role

BMT has played an essential role in raising public awareness of the significance of the Sípàapu and the need to protect it. The 'Water and Heritage Shield' award recognizes BMT's efforts to protect indigenous sacred sites, cultural and historical memory, and the right to access water.

ICOMOS ISC

The ICOMOS ISC is a non-governmental international organization dedicated to the conservation of the world's monuments and sites. The organization aims to promote the conservation of heritage sites and encourage research and education in this field. The 'Water and Heritage Shield' award is just one of the ways in which the ICOMOS ISC recognizes organizations' efforts in protecting heritage sites worldwide.

Depleted Uranium Munition

As the tensions between Ukraine and Russia escalate, the use of depleted uranium munitions has once again come into the spotlight. The use of these weapons is a cause for concern not only due to their devastating impact but also because of the risk they pose to human health and the environment.

Armour-Piercing Rounds Containing Depleted Uranium

The British government recently announced its plan to provide Ukraine with armour-piercing rounds containing depleted uranium. These weapons are made from a byproduct of the process of creating enriched uranium used in nuclear reactors and weapons. Due to its high density, depleted uranium is widely used in weapons as it can easily penetrate armour plating.

Depleted Uranium Munitions and their Risks

Apart from the US, several countries, including Britain, Russia, China, France, and Pakistan, produce depleted uranium munitions. However, the use of these weapons poses several risks. They emit low levels of radiation and can cause severe diseases if ingested or inhaled. Additionally, if these weapons miss their target, they can poison groundwater and soil.

Previous Use of Depleted Uranium Munitions

Depleted uranium munitions were first used in the 1991 Gulf War. The Royal Society estimated that about 340 tons of depleted uranium were used in munitions during the war. Since then, these weapons have been used in several conflicts, including the 1999 NATO bombing of Yugoslavia and the 2003 invasion of Iraq.

Depleted Uranium Weapons and International Law

Despite the risks associated with the use of depleted uranium munitions, they are not classified as nuclear weapons by the International Coalition to Ban Uranium Weapons. This is because depleted uranium weapons do not have an explosive yield and are instead



classified as conventional weapons.

The M829A4 Armour-Piercing Round

The US military is currently developing the M829A4 armour-piercing round for the M1A2 Abrams main battle tank. This is a depleted uranium munition that is expected to provide significant advantages due to its high density and momentum, making it an effective weapon against armoured targets.

Expert Opinion on Depleted Uranium Munitions

According to experts, depleted uranium is so dense and has so much momentum that it can easily penetrate armour plating. However, the use of these weapons must be carefully considered due to the potential risks they pose.

"Indo + Caribbean: The creation of a culture" Exhibition

The Museum of London Docklands was founded in 2003, with the main focus of highlighting the history of the River Thames, the growth of the Port of London, and the docks' historical ties to the Atlantic slave trade. The museum features exhibitions and events that explore the rich history and cultural diversity of the area. The upcoming exhibition, Indo + Caribbean: The creation of a culture, is set to be unveiled in May 2023. In this article, we will explore the purpose of this exhibition and what visitors can expect.

The Purpose of Indo + Caribbean: The creation of a culture

The purpose of the Indo + Caribbean: The creation of a culture exhibition is to explore the underrepresented history of Indian indentured laborers in the British Caribbean and to shed light on the Indo-Caribbean culture that exists in London today. The exhibition is a significant milestone as it is the first time that the history of the Indo-Caribbean community has been explored in a major exhibition in a British museum.

The History of Indian Indentured Laborers

The shortage of cheap labor in the Caribbean islands in the 1800s was caused by the abolition of the slave trade in 1807 and the Slavery Abolition Act of 1833. This resulted in the recruitment of Indian indentured laborers, with around 450,000 Indians taken to the Caribbean islands between 1838-1917. In return for working in the Caribbean for three to five years, they received transport, a minimum wage, and some basic provisions. Indentured servitude was officially banned in British India in 1917, following pressure from freedom fighters such as Mahatma Gandhi.

Exploring the Exhibition

The display explores the transition from enslaved African labor to Indian indenture, including letters petitioning the government from planter Sir John Gladstone. It also delves into the journey from India to the Caribbean, with the poor conditions on board and the strong bonds forged between migrants as they crossed the Kala Pani or 'dark waters.' Life in the Caribbean for indentured laborers was difficult, and the impact of their arrival is explored in detail.

The exhibition also highlights the stories and memories of Indo-Caribbean Londoners today, exploring migration to the United Kingdom and drawing on personal stories from London's Indo-Caribbean community. The display features photos, jewelry, film, and



artwork from London's Indo-Caribbean community, providing a unique and personal perspective on the Indo-Caribbean culture that exists in London today.

Tactical Nuclear Weapons

Russian President Vladimir Putin's announcement that he would station tactical nuclear weapons (TNWs) in Belarus has raised concerns about increased risks of nuclear conflict. As Belarus is a neighbor to NATO member countries, stationing nuclear weapons there has the potential to escalate tensions between Russia and the West. Here are some key questions and answers to understand the situation:

What Are Tactical Nuclear Weapons?

Tactical nuclear weapons are defined as nuclear weapons used for specific tactical gains on the battlefield. They can be delivered via a variety of missiles, torpedoes, and gravity bombs from naval, air, or ground forces. Russia is believed to have around 2,000 working TNWs, while the United States has approximately 200.

What Concerns Have Been Raised About the Deployment of Tactical Nuclear Weapons?

The deployment of TNWs in Belarus has raised concerns about their potential use in battle and the increased risk of nuclear conflict. The deployment of nuclear weapons could also violate non-proliferation agreements, but Putin has claimed that it does not.

What Is Kaliningrad and Why Is It Important?

Kaliningrad is a Russian enclave between NATO and EU members Poland and Lithuania, where Russia has deployed advanced nuclear-capable missiles that could reach large parts of Western Europe. This makes the deployment of TNWs in Belarus an even more significant concern for NATO.

How Can Preparations for a Nuclear Strike Be Detected?

Monitoring the whereabouts of nuclear warheads and heightened activity around the depots where they are stored can help detect preparations for a nuclear strike.

Who is the Ultimate Decision Maker When It Comes to Using Russian Nuclear Weapons?

According to Russia's nuclear doctrine, the President is the ultimate decision maker when it comes to using Russian nuclear weapons.

What Is the Potential Impact of a TNW Strike Order?

If Putin were to give a TNW strike order, Russia's entire nuclear posture would change. Submarines would go to sea, missile forces would be put on full alert, and strategic bombers would be visible at bases, ready for immediate takeoff.

Daylight Savings Time

Daylight Saving Time (DST) is a practice of setting the clocks forward one hour from the standard time during the summer and back again in the autumn. Although it was initially intended to make better use of natural daylight and save energy, today, it remains a subject of controversy. This article examines the legacy of DST, focusing on its history, advantages, disadvantages, and controversies.

The Origins of DST

The practice of DST began in Canada in 1908 when the residents of Port Arthur, Ontario—today's Thunder Bay—turned their clocks forward by one hour to start the



world's first DST period. Other locations in Canada soon followed suit. DST caught on globally after Germany and Austria introduced it on April 30, 1916, to minimize the use of artificial lighting and save fuel during World War I. Today, approximately 70 countries around the world observe DST.

Advantages of DST

One of the primary benefits of DST is that it maximizes the amount of natural light available during the longer days of summer. This practice can reduce energy consumption and greenhouse gas emissions, as people rely less on artificial light and air conditioning. Furthermore, DST can reduce traffic accidents and fatalities, as there is more daylight during peak driving hours.

Disadvantages of DST

Despite the benefits of DST, it is not without its drawbacks. Many people argue that the disruption of the body clock due to the time change has adverse health effects. A study conducted by the American Academy of Sleep Medicine showed that the incidence of heart attacks increased by 24% on the Monday following the spring DST transition. Another study found that DST could cause a higher rate of workplace injuries, due to decreased alertness and concentration. Moreover, many people find the time change disruptive to their daily routines and sleep patterns.

Controversies Surrounding DST

The recent confusion surrounding DST in Lebanon highlights some of the controversies surrounding this practice. In Lebanon, the government delayed the start of DST by a month, causing confusion among institutions and individuals. While no reason was given initially, a leaked video showed Parliament Speaker Nabih Berri urging Prime Minister Najib Mikati to postpone DST to allow Muslims to break their Ramzan fast an hour earlier. As a result, airlines, cellphone operators, schools, and workplaces are no longer following the same time.

Another controversy surrounding DST is that it is no longer relevant in modern times. With most appliances consuming energy running at all hours of the day, DST has lost its energy-saving potential. Furthermore, many countries have either abandoned DST or are considering doing so. For example, the European Union proposed abolishing DST in 2021, but the proposal was postponed until 2022.

What is Mission Arikomban?

A wild elephant by the name of Arikomban has been causing chaos in the higher ranges of Idukki district. Arikomban is a rogue tusker, infamous for its habit of raiding rice shops and causing destruction in its path. Over the past few years, Arikomban has trampled at least 10 people to death and destroyed around 60 houses and shops. The forest department has come up with a plan to capture Arikomban and train it to be a 'kumki', a captive elephant used for operations against rogue elephants.

The Petition and Impleading Forum

People for Animals – Thiruvananthapuram filed a petition challenging the forest department's decision to capture Arikomban. The petitioner's plea was to radio-collar and



release the wild elephant in another location of the forest. Walking Eye for Animal Advocacy also impleaded in the matter related to capturing the rogue tusker. However, the division bench of Kerala High Court stayed the forest department's decision to capture Arikomban till March 29.

Mission Arikomban

The forest department has initiated 'Mission Arikomban', an operation to capture the rogue tusker. The plan is to capture it with tranquilizer shots and later shift it to an elephant training center. The operation was originally slated to begin on March 25. For this mission, the forest department has built a rapid response team of 71 members. Chief forest veterinary surgeon Arun Zackariah is heading the 11 groups of the rapid response team for the mission.

Arikomban's Habits and Diet

Arikomban's name is derived from its habit of raiding rice shops. The wild elephant prefers to eat rice, atta, and wheat. The forest department's plan to train Arikomban to be a 'kumki' is aimed at using it for operations against other rogue elephants.

Operation Interflex

On June 27, 2022, Operation Interflex began, which involves the United Kingdom (U.K.) and several other countries training nearly 2,000 Ukraine military recruits for five weeks. This initiative is part of the U.K.'s £2.3 billion commitment towards military aid and support to Ukraine, and is a collaborative effort between Canada, New Zealand, Australia, Norway, Denmark, Finland, Sweden, Lithuania, and the Netherlands.

Areas of Focus in the Training

The training provided to the recruits under Operation Interflex focuses on several areas, including weapon handling, range activity, marksmanship, fieldcraft basics, field tactics, battle casualty drills, counter explosives, the laws of armed conflict, first aid, and cyber security awareness. The aim is to give them the key skills and experiences to operate once they go back to Ukraine.

The Training Team

The Canadian-U.K. training wing for Operation Interflex is headed by Major Jürgen Miranda. The training is being delivered by more than 200 personnel, including 60 from Canada and 150 from the U.K.

Equipment Given to Trainees

Each trainee is provided with personal protective equipment, including helmets, body armor, eye, ear, and pelvic protectors, individual first-aid kits, field uniforms and boots, cold and wet weather clothing, bergens, day sacks, and webbing and additional equipment required for field conditions, including ponchos, sleeping bags, and entrenching tools.

High-Tech Military Equipment Supplied by the U.K.

Apart from providing training, the U.K. has also supplied high-tech military equipment to Ukraine, including 14 Challenger 2 tanks, AS90 and 28 M109 155mm self-propelled guns, hundreds of armored and protected vehicles, more than 10,000 anti-tank missiles



(including NLAW, Javelin, Brimstone, and other anti-tank weapons), and multiple launch rocket systems.

Expected Number of Recruits Trained by Year-End

Around 20,000 recruits are expected to be trained by year-end under Operation Interflex. The training is aimed at building the necessary skills and knowledge base in the recruits to enhance Ukraine's defence against Russia.

Tamil Nadu Brown Moray

A team of researchers have discovered a new species of Moray eel off the coast of Cuddalore, which is located in the southern Indian state of Tamil Nadu. The new species has been named *Gymnothorax tamilnaduensis*, with its common name being the Tamil Nadu brown moray. This discovery has been published in the international peer-reviewed journal *Zoosystematics and Evolution*.

Discovery and Description of the New Species

The new species was discovered at the Mudasalodai fish landing centre off the coast of Cuddalore. P. Kodeswaran and G. Kantharajan were the two researchers who discovered the species during an exploration survey conducted along the coastal waters of Cuddalore district. The species was notably different from its known Indian water congeners, with series of lines of small dark spots present on the head and a single line of black spots on the mid-line of the body.

The researchers conducted an extensive morphological analysis, skeleton radiography, and advanced molecular markers, along with species delimitation computational techniques to conclude that this Moray eel specimen collected from Mudasalodai is distinct from other species of the genus *Gymnothorax*. Four specimens ranging from 272-487 mm in total length were collected at a depth of about 25-30 metres from the fishing landing centre at Mudasalodai.

The researchers sent a few species to the Zoological Survey of India for confirmation. According to T.T. Ajith Kumar, the principal scientist of the Indian Council of Agricultural Research-National Bureau of Fish Genetic Resources (NBFGR), the present description is also the first new species of the genus *Gymnothorax* from the south-eastern coast of the Bay of Bengal.

Significance of the Discovery

India has documented 28 species of *Gymnothorax* so far. The discovery of the new species off the Cuddalore coast represents India and increases the total amount of species of *Gymnothorax* to 29. The holotype of this new species has been deposited at the National Fish Museum and repository of ICAR-NBFGR, Lucknow. The name of the species has been registered in ZooBank, the online registration system for the International Commission on Zoological Nomenclature (ICZN).

NBFGR's Purpose for Conducting Explorations

The institute NBFGR has been continually conducting explorations in the unexplored regions of the country to document the hidden biodiversity of the nation, which will help to enrich the biodiversity catalogue of the country. This new discovery is an example of



how exploring uncharted territories can lead to new findings and enrich our understanding of the world around us.

LVM3 M3/OneWeb India - 2 Mission

On March 25, 2023, the Indian Space Research Organisation (ISRO) and NewSpace India Limited (NSIL) successfully launched the OneWeb India-2 mission, a significant achievement in space connectivity. The mission's primary objective was to deploy 36 satellites into a 450 km circular orbit with an inclination of 87.4 degrees, which was accomplished using the LVM3 rocket. In this article, we will delve into the details of this mission and OneWeb's ultimate goal.

LVM3 and Payload Details

The OneWeb India-2 mission utilized the LVM3 (Launch Vehicle Mark 3) rocket, which is India's largest rocket to date. The total weight of the payload carried by LVM3 was 5,805 kg, which included the 36 OneWeb satellites. The satellites were designed to provide high-speed, low-latency broadband connectivity to governments, businesses, and communities worldwide.

OneWeb's Mission and Milestones

OneWeb's mission is to provide connectivity for everyone, everywhere, through a global communication network powered from space. The company aims to bridge the digital divide by providing affordable, reliable, and high-speed internet access to remote and underserved regions. The OneWeb India-2 mission was a crucial milestone in achieving this goal, as it brought the total number of satellites in OneWeb's constellation to 618. This number enables global service, making it the first low Earth orbit (LEO) operator to reach this milestone.

Satellite Dispensing and Phases

The OneWeb India-2 mission involved the dispensing of satellites in nine phases. The satellites were released into their intended orbits over several hours, with each phase comprising four satellites. This approach ensures that the satellites are placed in their proper positions, preventing collisions and minimizing the risk of debris.

OneWeb's Previous Mission and Launches

The OneWeb India-2 mission followed the successful launch of the OneWeb India-1 mission, which deployed 36 satellites into orbit in February 2022. The OneWeb India-2 mission marked the 18th launch conducted by OneWeb. Each launch brings the company closer to achieving its mission of providing connectivity for everyone, everywhere.

First Urban Climate Film Festival

The National Institute of Urban Affairs (NIUA), a Central Autonomous Body under the Ministry of Housing & Urban Affairs, is organising the Urban Climate Film Festival under the CITIIS program. The festival aims to create wider awareness of the impact of climate change on life in cities and engage the public in the dialogue on sustainable urban development.

Supporting International Organizations and Selected Films

The French Development Agency (AFD) and the European Union provided support for the



festival, which has received films from over 20 countries. A jury shortlisted 27 films, and 11 were selected for showcasing in the festival.

Screening in Five Cities

The selected films will be screened in five cities, allowing a wider audience to engage with the message of the festival. The festival will not only raise awareness about climate change and sustainable urban development but also inspire people to take action.

CITIIS Program and Sustainable Urban Infrastructure Projects

The CITIIS program aims to assist 12 Smart Cities in India implement innovation-driven and sustainable urban infrastructure projects. By organising the Urban Climate Film Festival under the CITIIS program, NIUA is promoting the program's approach to urban infrastructure projects.

National Institute of Urban Affairs

The National Institute of Urban Affairs is a Central Autonomous Body under the Ministry of Housing & Urban Affairs that undertakes multi-disciplinary research, policy planning, and advocacy in the domain of urban development. NIUA's work is vital in promoting sustainable urban development in India.

U20 and Urban Engagement Group of G20

The U20 is the urban engagement group of G20. It brings together mayors from the world's largest cities to develop policies and solutions to global issues such as climate change, urban infrastructure, and social inclusion. The Urban Climate Film Festival organised by NIUA aligns with the U20's objective of enabling a sustainable urban development.

Maharashtra Cow Service Commission Bill

The Maharashtra Cow Service Commission Bill was recently tabled in the State Assembly, aimed at promoting and protecting indigenous cattle breeds. Let's take a closer look at this legislation and its key points.

Introduction of the Bill

The Maharashtra Cow Service Commission Bill was introduced by the Maharashtra's Revenue Minister Radhakrishna Vikhe Patil in the state assembly. It was announced by Deputy Chief Minister Devendra Fadnavis in the state budget.

Composition of the Commission

The Maharashtra Cow Service Commission will be a 25-member body comprising members from the Animal Husbandry and other governmental departments. It will also have members from various universities and NGOs.

Responsibilities of the Commission

The commission will be responsible for safeguarding indigenous cows, bulls, bullocks, and calves. It will promote rearing and breeding of indigenous cows and will also handle the registrations and overall supervision of cow shelters. It will also suggest measures to strengthen financial institutions working in this sector and undertake the development of pastures and good quality fodder for livestock.



Penalty for Violating the Norms

Under this bill, an individual found violating the norms set by the commission will be liable for a penalty of Rs.10,000.

Role of the Commission

The Maharashtra Cow Service Commission Bill aims to promote the breeding and rearing of indigenous cows in the state. The commission will help in the development of pastures and good quality fodder for livestock. Additionally, it will help in registering and supervising cow shelters in the state.

Support from Universities and NGOs

The commission will have members from various universities and NGOs. This will help in ensuring that the commission's initiatives are well-informed and inclusive.

Release of Tigresses into Tiger Reserves in Rajasthan

In a recent meeting attended by Environment Minister Bhupendra Yadav and Loksabha speaker Om Birla in New Delhi, a decision was taken to release one tigress each to Kota's Mukundra Hills Tiger Reserve and Bundi's Ramgarh Vishdhari Tiger Reserve in the state of Rajasthan. The decision was taken to increase the tiger population in the region and to improve the ecological balance of the area. Along with the tigresses, some other wild animals like Gaurs and wild dogs will also be released into the reserve area. Let's delve into more details about the decision and its implications.

The Two Tiger Reserves

The Mukundra Hills Tiger Reserve is located in Rajasthan's Kota district and has an area of 759.99 km². It was established in 2004 and comprises three wildlife sanctuaries: Darrah Wildlife Sanctuary, National Chambal Sanctuary, and Jawahar Sagar Wildlife Sanctuary. The reserve is located in the Khathiar-Gir dry deciduous forests and has a rugged and hilly terrain dominated by Dhok (*Anogeissus pendula*) trees. It is an important ecological zone for wildlife, including tigers, leopards, chinkaras, and crocodiles.

The Ramgarh Vishdhari Tiger Reserve is situated in the southeastern part of the state in Bundi district. It represents both Vindhyan and Aaravalli elements and is in continuation with the buffer area of Ranthambore tiger reserve in the northeastern side and Mukundara Hills tiger reserve in the southern side. The Mez, a tributary of the Chambal river, passes through the tiger reserve. The terrain is mostly rugged and hilly, and it is part of the 'Semi-arid' Zone of India. The habitat is dominated by Dhok (*Anogeissus pendula*) trees.

Other Wild Animals to be Released

Gaurs and wild dogs will also be released in the reserve area besides the two tigresses. Gaurs are the largest wild cattle species and are found in India, Bhutan, and Nepal. They are herbivorous and feed on grass and leaves. They are an important prey species for tigers and leopards. Wild dogs, also known as Dholes, are a social species that lives in packs. They hunt cooperatively and feed on small to medium-sized prey.

Development and Security-related Works

The Union Forest and Environment Ministry is set to provide Rs 8 crore in funding for the



security and developmental activities in both the tiger reserves. The funds will be used to improve the infrastructure of the reserves, including the construction of roads and watchtowers, and the purchase of vehicles and equipment for patrolling and monitoring. They will also be used for the conservation and protection of the wildlife in the reserves.

Proposal for River Cruise

Apart from the decision to release tigresses and wild animals, the proposal for starting a river cruise in Chambal from Kota Barrage to Jawahar Sagar was also discussed in the meeting. The river cruise will offer tourists a chance to experience the unique landscape of the Chambal river and its wildlife. However, the proposal needs approval from the Centre, as the river is home to a Gharial Sanctuary.

Delhi-Dehradun Expressway

The Delhi-Dehradun Expressway is a much-awaited infrastructure project that will connect the bustling city of Delhi with the scenic hills of Dehradun. The project is expected to provide a boost to tourism and trade, and also reduce travel time and distance. In this article, we will explore the Delhi-Dehradun Expressway and the various aspects related to it.

Overview of the Project

The Delhi-Dehradun Expressway is an under-construction 210 km long, six- to twelve-lane access-controlled expressway, which will connect Delhi with Dehradun. The project is being built at a cost of around ₹13,000 crore and will pass through the states of Delhi, Uttar Pradesh, and Uttarakhand. The expressway will have six lanes, extendable to eight lanes, and is expected to be completed by January 2024.

Benefits of the Delhi-Dehradun Expressway

The project is expected to reduce the distance between Delhi and Dehradun from 235 km to 210 km, thereby reducing the travel time from 5-6 hours to only 2.5 hours. This will be a huge relief to the people who have to undertake this journey frequently. The expressway will also give impetus to the development of tourism, as it will make it easier for people to travel to the scenic hill stations of Uttarakhand. The project is expected to create employment opportunities and give a boost to the economy of the region.

Wildlife Protection Corridor and Daat Kali Tunnel

The Delhi-Dehradun Expressway project includes the construction of a 12 km long wildlife protection corridor in the Rajaji National Park. The corridor will help reduce the impact on wildlife and avoid animal-vehicle collisions. It will also help in the conservation of the wildlife habitat and preserve the biodiversity of the region. The project also includes the construction of the Daat Kali tunnel in the Ganeshpur-Dehradun section. The tunnel will provide a safe passage for the wildlife and reduce their stress levels.

Connection to Haridwar

The Saharanpur-Roorkee-Haridwar Expressway, which is under construction, will connect Haridwar to the Delhi-Dehradun Expressway. This will provide an alternate route for people traveling to Haridwar from Delhi and will also provide a boost to tourism in the region.

**10 Facts**

1. The Delhi-Dehradun Expressway is an infrastructure project that will connect Delhi with Dehradun.
2. The project is being built at a cost of around ₹13,000 crore.
3. The expressway will be 210 km long and have six lanes, extendable to eight lanes.
4. The project is expected to be completed by January 2024.
5. The travel time between Delhi and Dehradun is expected to reduce from 5-6 hours to only 2.5 hours.
6. The project will create employment opportunities and give a boost to the economy of the region.
7. The project includes the construction of a 12 km long wildlife protection corridor in the Rajaji National Park.
8. The wildlife protection corridor will help in the conservation of the wildlife habitat and preserve the biodiversity of the region.
9. The project includes the construction of the Daat Kali tunnel in the Ganeshpur-Dehradun section.
10. The Saharanpur-Roorkee-Haridwar Expressway, which is under construction, will connect Haridwar to the Delhi-Dehradun Expressway.

1st G20 Trade and Investment Working Group (TIWG) Meeting

India's G20 Presidency is conducting the first Trade and Investment Working Group (TIWG) Meeting in Mumbai from March 28th – 30th, 2023. The TIWG Meeting is an important forum for over 100 delegates from G20 member countries, invitee countries, regional groupings, and international organizations to engage in discussions about accelerating global trade and investments.

Trade Finance and Digitalisation

On the first day of the TIWG Meeting, an International Conference on 'Trade Finance' was held, where the role of banks, financial institutions, development finance institutions, and export credit agencies in closing the trade finance gap was discussed. The conference also focused on how digitalisation and fintech solutions can improve access to trade finance. Eminent speakers from India and abroad have been invited to provide concrete solutions for mitigating the growing trade finance gap.

Experience Zones and Exhibitions

At the conference venue, a wide range of experience zones on spices, millet, tea, and coffee was set up. Additionally, an exhibition on textiles was also on display during the TIWG Meeting. The G20 delegates visited the Bharat Diamond Bourse on the first day of the meeting.

Making Trade Work for Growth and Prosperity

The focus of the TIWG Meeting on March 29th will be on making trade work for growth and prosperity, and building resilient Global Value Chains (GVCs). The highlight will be on realizing shared outcomes for making growth inclusive and resilient, increasing the participation of developing countries and the Global South in GVCs, and building resilient



GVCs to withstand future shocks.

Inauguration and Closed-Door Sessions

Across four technical closed-door sessions on March 29th and 30th, the priorities related to global trade and investment, which the Indian Presidency is pursuing, will be discussed.

Integrating MSMEs in Global Trade and Building Efficient Logistics

On March 30th, the two working sessions will focus on integrating MSMEs in Global Trade and building efficient logistics for trade. The Indian Presidency seeks to carry forward the efforts of past G20 Presidencies to ensure the integration of MSMEs into global trade, given their important role in sustaining livelihoods in both developed and developing countries. The discussions will also be held on developing robust logistics infrastructure that could bring down transaction costs both across borders and in the hinterlands.

Building a Shared Understanding

The aim under India's G20 Presidency is to build a shared understanding of the challenges being faced in accelerating global trade and investment. The TIWG Meeting provides an opportunity for delegates to deliberate on existing opportunities that can be harnessed to formulate human-centric concrete outcomes and deliverables.

March 30, 2023

"How is India Adapting to Heatwaves?" Report

A report released on March 27, 2023, titled "How Is India Adapting To Heatwaves? An Assessment Of Heat Action Plans With Insights For Transformative Climate Action" provides insights into the efficacy of heat action plans (HAPs) in India. With the increase in heatwaves due to climate change, HAPs have become India's primary policy response to contain and adapt to the impact of extreme heat. The report assessed 37 HAPs across Indian states, districts, and cities to determine their effectiveness. In this article, we will explore the key findings of the report and its recommendations for better HAPs in India.

Inadequate HAPs

The report found that the majority of HAPs in India are not built for the local context, leading to inadequate identification and targeting of vulnerable groups. The plans also have weak legal foundations, making it challenging to implement disaster responses across state, district, and city government departments. Furthermore, only 11 of the 37 HAPs discuss funding sources, indicating that most plans are underfunded.

Insufficient Temperature Thresholds

The India Meteorological Department (IMD) declares a heatwave when the maximum temperature is above 40 degrees Celsius for two consecutive days in the plains, above 37 degrees Celsius in coastal areas and above 30 degrees Celsius in the hills and mountains. However, the report found that only ten out of 37 HAPs considered locally defined temperature thresholds. Among these ten HAPs, it is not sure whether factors such as humidity, hot nights, and duration of continuous heat were taken into account.

Lack of Vulnerability Assessments

Only two of the 37 HAPs carried out vulnerability assessments in the context of heatwaves. The report highlights the importance of conducting vulnerability assessments to identify



the groups most at risk from heatwaves, such as the elderly, children, and those with pre-existing medical conditions.

Recommendations for Improved HAPs

To improve HAPs in India, the report recommends that the plans should localise the heat hazard definitions, incorporate vulnerability assessments, and be linked to the disaster management legal structure and environmental governance. The report argues that HAPs should be implemented as part of an overall climate adaptation plan, ensuring that climate adaptation efforts are integrated across government departments and are not siloed.

What is SWAMIH Fund?

In India, affordable housing remains a critical issue, with many projects remaining incomplete and stalled. This is where the SWAMIH Investment Fund comes into play. It is a social impact fund that was launched in 2019 by the Ministry of Finance, Government of India. The fund provides financial backing for stalled and stressed mid-income and affordable housing projects across the country. In this article, we'll delve deeper into what the SWAMIH Investment Fund is, how it operates, and its impact on affordable housing projects across India.

What is the SWAMIH Investment Fund?

The SWAMIH Investment Fund is a social impact fund that aims to provide funding for affordable and mid-income housing projects that are stalled, stressed, or delayed. The fund was launched in 2019 and is sponsored by the Ministry of Finance, Government of India. SBICAP Ventures Ltd., a State Bank Group company, manages the fund.

Types of Projects Funded by SWAMIH

SWAMIH Investment Fund provides funding for brownfield, RERA-registered, and stressed residential projects that fall under the affordable and mid-income housing category. The fund considers projects by first-time developers, established developers with troubled projects, developers with a poor track record of stalled projects, customer complaints, NPA accounts, and even projects with litigation issues.

SWAMIH Investment Fund: The Lender of Last Resort

The SWAMIH Investment Fund is considered the lender of last resort for distressed housing projects. It accelerates the performance of the delayed housing projects by enabling better collections and sales. The Finance Ministry claims that the SWAMIH Investment Fund has one of the largest domestic real estate private equity teams focused only on funding and monitoring the completion of stressed housing projects.

Impact of SWAMIH Investment Fund

Since its launch, the SWAMIH Investment Fund has been successful in completing stalled housing projects and providing debt financing to developers. The government has released over Rs.2,646 crore to the SWAMIH fund till the 17th of this month. The fund has delivered over 22,500 homes to date, providing much-needed relief to homebuyers who have been waiting for years for their homes.



Challenger 2 Tank: An Overview

Recently, the UK announced that it would be sending a squadron of Challenger 2 tanks to Ukraine to aid in the country's fight against Russian aggression. This move comes at a time when Ukraine faces increasing hostility from Russia, and the UK is keen to support its ally in the region.

About the Challenger 2 Tank

The Challenger 2 tank is the UK's primary battle tank, designed to destroy other tanks, and has been used in conflict areas worldwide. It was introduced into the British Army in 1994 to replace its predecessor, the Challenger 1. The tank's main purpose is to take out other tanks, and its ability to place extreme pressure on the enemy has helped it become a preferred choice for various operations.

Specifications of the Challenger 2 Tank

The Challenger 2 tank weighs a massive 62.5 tonnes, with a combat-ready weight of 75.0 tonnes when equipped with add-on armor modules. It is manned by a crew of four, comprising a commander, gunner, loader/operator, and driver. The tank is armed with an L30A1 120 mm rifled gun, which can fire up to 47 rounds, and a coaxial 7.62 mm L94A1 chain gun EX-34 (chain gun) and a 7.62 mm L37A2 Operator/Loader's hatch machine gun. The tank is powered by a Perkins CV12-6A V12 diesel engine, which generates 1,200 bhp (890 kW). The Challenger 2 tank has a hydro-pneumatic suspension, and its fuel capacity is 1,592 liters. It has an operational range of 550 km (340 mi) on the road and 250 km (160 mi) off-road on internal fuel, with a maximum speed of 59 km/h (37 mph) on the road and 40 km/h (25 mph) off-road.

Training of Ukrainian Crews

Recently, Ukrainian crews completed training in the UK on how to operate and fight with the Challenger 2 tanks. This training was essential, given that Ukraine was not previously equipped with this type of tank, and the country faces increasing aggression from Russia. The UK military officials spent several weeks instructing the Ukrainian personnel, and they are expected to be in position for a spring counteroffensive against Russia.

10th Khalkha Jetsun Dhampa Rinpoche

The Dalai Lama recently recognized an eight-year-old Mongolian boy as the reincarnation of the 10th Khalkha Jetsun Dhampa Rinpoche, one of the most important spiritual leaders in Tibetan Buddhism. The boy's recognition has generated celebrations among Buddhists in Mongolia, but also negative reactions from secular nationalists and concern among those worried about potential reactions from neighboring China.

Family Background of the Mongolian Boy

According to media reports, the Mongolian boy comes from a family with academic and corporate backgrounds. His father, Altannar Chinchuluun, is a university mathematics professor, while his mother, Monkhnasan Narmandakh, is a national resources conglomerate executive. The boy's grandmother, Garamjav Tseden, is a former member of the Mongolian Parliament.



Unveiling Ceremony and Attendees

The unveiling ceremony of the Mongolian boy was held on March 8 in Dharamshala, Himachal Pradesh, and was attended by nearly 600 followers. During the ceremony, the Dalai Lama announced that they had found the reincarnation of Khalkha Jetsun Dhampa Rinpoche of Mongolia. This is a major event in Tibetan Buddhism given the Dalai Lama and Khalkha Jetsun Dhampa Rinpoche are believed to be among the most important spiritual leaders in the tradition.

Significance of the Recognition in Tibetan Buddhism

The recognition of the Mongolian boy as the reincarnation of Khalkha Jetsun Dhampa Rinpoche is a significant event in Tibetan Buddhism. The Dalai Lama himself is recognized as the 10th Khalkha Jetsun Dhampa Rinpoche, and his recognition of the boy as the reincarnation of one of his predecessors carries significant weight within the religion.

Tensions with China

Recognitions related to Tibetan Buddhism have often been a point of tension between Tibet and China. This is because Beijing claims sovereignty over Tibet and seeks to take control the recognition of reincarnated leaders. This has caused concerns about China's reaction to the recognition of the new Khalkha Jetsun Dhampa Rinpoche.

Anji Khad Bridge

Anji Khad Bridge is a significant infrastructure project in Jammu and Kashmir that connects the Katra-Reasi section of the Udhampur-Srinagar-Baramulla railway line. The bridge is situated over the Anji river and is ranked as the second most important bridge on the Udhampur-Srinagar-Baramulla Rail Project after Chenab Bridge.

The Reasi yard station, which is a part of the project, has been built on high, rectangular, tapered hollow piers that are 105m in height, with the bridge spanning about 490m. The bridge is made using 7,000 reinforcement steel and 6,700 million tonnes of structural steel. Anji Bridge is considered to be an engineering marvel and a milestone achievement on the USBRL project.

Udhampur-Srinagar-Baramulla Railway Line: A Game-Changer for Jammu and Kashmir

The Udhampur-Srinagar-Baramulla railway line is an ambitious infrastructure project that will have a significant impact on the Union Territory of Jammu and Kashmir. The project has been under development for a few years now, and over 80% of the work has been completed. The entire project is expected to be completed by the end of 2023.

The Udhampur-Srinagar-Baramulla railway line is expected to be a game-changer for Jammu and Kashmir. It will provide a reliable and safe transportation system for the people of the region and will help in boosting the economic growth of the region.

What is Dama celiae?

A team of researchers from the Museo Nacional de Ciencias Naturales in Madrid, Spain, has described a new species of deer, *Dama celiae*, from fossils found in the Manzanares valley. This discovery provides valuable insight into the diversity of cervids during the Pleistocene epoch, which lasted from 2.6 million to 11,700 years ago.



The Fossils and Other Species

The fossils were found alongside other species in the valley, including *Anas platyrhynchos*, *Equus ferus*, *Elephas antiquus*, *Mauremys leprosa*, *Bison* sp., *Bos primigenius*, and *Stephanorhinus hemitoechus*. The valley is known for its rich deposits of fossils and artifacts, including a vast collection of Acheulean stone tools found in sand quarries.

Characteristics of *Dama celiae*

The antlers of *Dama celiae* are characterized by two points and a bifurcation between the brow tine and main beam, with a blunt angle and a low position above the burr. Its lineage can be traced back to *Dama farnetensis*, followed by *Dama vallonnetensis*, *Dama roberti*, and finally *Dama celiae*.

Neanderthals and the Acheulean Culture

Dama celiae lived during the same time as the Neanderthals and the Acheulean culture. Cut marks on the rib of one of the fossils suggest that it was consumed by Neanderthals and likely hunted. The researchers speculate that spears like those found at the Schöningen site in Germany or lithic spear points similar to those in other regions with Mousterian points or convergent scrapers may have been used to hunt *Dama celiae*.

The Significance of the Discovery

The discovery of *Dama celiae* adds to our understanding of cervid diversity during the Pleistocene epoch. The detailed microwear studies of the tools and bones could allow for further interpretation of hunting strategies and behavior. The description of this new species of deer also provides insight into the life and environment of this time period.

India's First Cloned Desi Gir Female Calf

The National Dairy Research Institute (NDRI) in Karnal, Haryana, has produced the country's first cloned female calf of the desi breed Gir, named 'Ganga.' The NDRI had initiated a project to clone indigenous cow breeds such as Gir and Sahiwal to increase milk production.

Gir, Sahiwal, Tharparkar, and Red-Sindhi are indigenous cattle breeds in India that play a pivotal role in milk production and the growth of the Indian dairy industry. Among these, Gir is well-known for its tolerance to conditions of stress and resistance to various tropical diseases.

More than 15 liters of milk per day can be produced by the cloned Gir female calf, which has the potential to significantly contribute to milk production.

Collaboration with Uttarakhand Livestock Development Board

The National Dairy Research Institute collaborated with Uttarakhand Livestock Development Board (ULDB), Dehradun, to work on cloning high-yield desi breeds such as Gir, Red Sindhi, and Sahiwal breeds.

A team of scientists comprising Dr. Naresh Selokar, Manoj Kumar Singh, Ajay Aswal, SS Lathwal, Subhash Kumar, Ranjeet Verma, Kartikey Patel, and MS Chauhan have been working for over two years to develop an indigenous method to produce cloned cattle.

Indigenous Method to Produce Cloned Cattle

The Gir was cloned by isolating the oocytes from live animals using ultrasound-guided



needles. Oocytes were then matured for 24 hours under control conditions. The somatic cells of elite cows are used as donor genomes, which are fused with OPU-derived enucleated oocytes. After the chemical activation and in-vitro culture, the developed blastocysts are transferred into recipient mothers to deliver the Gir calf.

Dr. Manmohan Singh Chauhan, the Vice Chancellor of GB Pant Agriculture University, was the head of NDRI when it started work on cloning high-yield desi breeds like Gir, Red Sindhi, and Sahiwal breeds at the NDRI in 2021.

Export of Gir Cattle

Dr. Dheer Aibgh, the Chief of NDRI, stated that Gir cattle are very hardy and have been exported to Brazil, the United States, Mexico, and Venezuela for the development of zebu cows. The export of Gir cattle can help to increase the popularity of the breed worldwide and strengthen India's position in the dairy industry.

QS World University Rankings 2023

The QS World University Rankings by Subject 2023, released on March 29th, 2023, has ranked over 1,600 universities from around the world, evaluating their performance across 51 subjects. Indian universities have made significant progress this year, with 44 courses from Indian universities ranked among the global top 100.

Ranking Universities by Subject Categories

The QS World University Rankings by Subject aims to provide students, parents, educators, and policymakers with a tool for assessing the performance of universities in specific subject areas. The rankings are based on four indicators: academic reputation, employer reputation, citations per paper, and H-index.

Indian Universities' Performance in QS World University Rankings by Subject

According to the QS World University Rankings by Subject 2023, Indian universities have performed well in several fields. Indian universities have excelled in Computer Science, Chemistry, Biological Sciences, Business Studies, and Physics. In the dentistry program, the Saveetha Institute of Medical and Technical Sciences had the best performance globally, achieving a perfect score in citations per paper and H-index.

IIT Delhi's Electrical Engineering program broke into the top 50 categories globally in the QS World University Rankings by Subject 2023. Jawaharlal Nehru University's Sociology program took 68th place, showing a rise of 33 places.

Research Output and Citations

India is the fourth-largest producer of research globally, according to the QS. Between the years 2017 and 2022, research output in India grew by 54%. However, only 15% of India's publications were cited in top journals from 2017 to 2021, a lower percentage than the United Kingdom and Germany, which have top journal citation percentages more than double that of India.

India's Overall Performance and Progress

India's overall performance improved by 17.2% year on year in the QS World University Rankings by Subject 2023. This progress is noteworthy, considering the challenges posed by the COVID-19 pandemic. However, among countries having over 10 universities



featured in the rankings, Mainland China improved the most in the QS World University Rankings by Subject 2023.

Centre for Processing Accelerated Corporate Exit

C-PACE or Centre for Processing Accelerated Corporate Exit is a newly established body that aims to process and dispose of applications for the removal of company names from the records under the Companies Act, 2013. This article delves into the significance of C-PACE, its purpose, and how it can benefit companies.

Establishment of C-PACE

C-PACE is established in Manesar, Haryana, as a one-stop solution for companies looking to close their business and remove their names from the Register of Companies. The Minister of State for Corporate Affairs, Rao Inderjit Singh, announced the establishment of C-PACE in March 2023, with the notification issued on March 17. It will come into force on April 1, 2023.

Purpose of C-PACE

The primary purpose of C-PACE is to facilitate the process of closing businesses and removing company names from the Register of Companies. Companies looking to file applications for the removal of names from the Register of Companies under Section 248 of the Companies Act, 2013, can benefit from C-PACE.

Companies Act, 2013

The Companies Act, 2013, provides for the removal of a company's name from the Register of Companies if it is not carrying on any business or operation for a period of two immediately preceding financial years, as per Section 248 of the Act. C-PACE will process and dispose of applications for removal of names of private limited companies and other companies from the Register of Companies.

Chapter XVIII

The Companies Act's Chapter XVIII deals with the removal of companies' names from the Register of Companies. C-PACE aims to facilitate the closure of businesses in accordance with the provisions of Chapter XVIII.

Financial Years

Two immediately preceding financial years of non-operation of business are required for the removal of the name of the company from the Register of Companies under Section 248 of the Companies Act, 2013. C-PACE will expedite the process of filing and disposing of applications for the removal of names.

Dormant Companies

A dormant company is a company that has not been carrying on any business or operation for a period of two immediately preceding financial years and has not made any significant accounting transaction during that period. Such companies cannot apply for the removal of their name from the Register of Companies.

Significance of C-PACE

C-PACE is a significant step towards providing ease to companies for closing their business and getting their names removed from the Register of Companies. It helps make



the process of removal of names more streamlined and efficient, saving time and effort for companies.

What is chow-chow?

Chow-chow, also known as chayote, is a vegetable that belongs to the gourd family, Cucurbitaceae. It is not easily available in markets but is a popular ingredient in the cuisine of certain Indian states. In this article, we will explore the origins, consumption, and potential of chow-chow.

Origins of Chow-Chow

Chow-chow originated in Mexico and was introduced to India in the late 1800s by Welsh missionaries. Over time, it has become a popular ingredient in the cuisines of northeastern and southern states of India. The vegetable is known by different names in different parts of the country, such as iskut in Mizoram, piskot in Meghalaya, and lonku in Himachal Pradesh.

Consumption of Chow-Chow

Chow-chow is a versatile vegetable as almost every part of the plant can be consumed. The fruits, tender shoots, young heart-shaped leaves, and even roots are edible. The fruits and tender leaves are usually available from June to December, while the tuberous roots are available between January and March after the vines dry up.

Chow-Chow in Indian Cuisine

Chow-chow is an important part of the cuisine in northeastern states, particularly Mizoram, and southern India. It is used in a variety of dishes such as curries, stews, and salads. The vegetable has a mild taste and can absorb flavors easily, making it a versatile ingredient in dishes.

Therapeutic Properties of Chow-Chow

Apart from being a delicious ingredient in cuisine, chow-chow also has several therapeutic properties. It has anti-cardiovascular, antidiabetic, antiobesity, antiulcer, and anticancer properties, making it a valuable ingredient for pharmaceutical, cosmetic, and food industries.

Potential of Chow-Chow for Farmers

Despite its potential, few farmers grow chow-chow on a commercial level due to a shortage of good quality planting material and not much work being done on developing its commercial varieties. However, it can be a lucrative choice for farmers. The government has taken steps to promote chow-chow cultivation among farmers in Mizoram by setting up the Iskut Growers Association and providing subsidies in the form of price support in the 1990s. In 2018, the state's horticulture department applied for a GI tag for Mizo chow-chow. More than 70 landraces of chow-chow have been found in the northeastern region, indicating the potential for further research and development.

Mahim Fort: History and Restoration

The Mahim Fort is a historic fort located in Mahim, Mumbai, Maharashtra, India. Built by the descendants of King Bimbdev between 1140 and 1241, the fort has a rich history and has witnessed frequent contests over the years. Let's take a closer look at this ancient



structure, its current state, and the efforts underway to restore it to its former glory.

History of the Mahim Fort

The Mahim Fort was built by the descendants of King Bimbdev, who established his kingdom of Mahikawati in the north Konkan belt of Maharashtra. The fort is strategically located in Mahim Bay, and from its vantage point, one can see Worli to the south, Bandra to the north, and Mahim to the east. The fort was frequently contested due to its strategic location, and its origins remain unclear.

Current State of the Mahim Fort

The Mahim Fort is currently in a state of disrepair, suffering from administrative neglect, encroachment of slums, and exposure to tidal erosion. Squatters had encroached on the fort's land on the west coast of the city for decades, and it was declared as a state-protected monument under the Maharashtra Ancient Monument and Archaeological Sites and Remains Acts, 1960. However, the excise department did away with security at the site, leaving the fort vulnerable to neglect and vandalism.

Restoration Efforts

The Brihanmumbai Municipal Corporation (BMC) has taken steps to restore the Mahim Fort to its former glory. The civic body appointed famous architect and archaeological consultant Vikas Dilawari as a consultant for the restoration of the fort. The BMC also conducted a survey for the restoration project, and people residing in more than 260 hutments inside the fort were qualified for alternate accommodation. Nearly 3,000 people were living inside the fort, and they have been rehabilitated at alternative accommodations at Malad, Malvani, and other areas.

In January 2022, the BMC began the demolition of over 200 hutments inside the 800-year-old Mahim fort. Some residents had not vacated their huts even after rehabilitation and were forcefully removed with the help of the local police who registered complaints against them before the demolition.

New Guinea Singing Dog

The New Guinea singing dog is also known as the New Guinea Highland dog. It is a dog species found in the New Guinea Highlands on the island of New Guinea. This breed is one of the few considered "barkless" and known for its unusual "yodel"-like style of vocalizing, hence its common name of "singing dog."

Origins and Characteristics

Considered an ancient lineage of dog, the New Guinea singing dog was once thought to be a separate species in its own right, under the name *Canis hallstromi*. However, this species is closely related to the Australian dingo. Living wild in the remote mountains of New Guinea, this breed has adapted to its environment over 20,000 years, free from contact with people.

Unique Vocalizations

The New Guinea singing dog is unique among canines for its vocalizations. Their howls are similar to both the song of the humpback whale and a yodel. These howls are an important part of their communication with their pack members, and they are able to



create a wide range of vocalizations, from soft whimpers to high-pitched yelps.

UK's Last New Guinea Singing Dog

The last member of an ancient sub-species of dog in the UK, named Kota, recently died in mid-March at Exmoor Zoological Park. Kota was 15 years old when he died. He had been in palliative care for two months after losing his partner Belle four weeks earlier.

Ancestry and Conservation Efforts

New Guinea singing dogs are believed to be the original ancestors of all domestic dogs in the Asian region. As a result, the Singing Dog Conservation Society in the United States has been working to preserve the breed. However, there are currently only six breeding females in the society, with no litters expected until the summer.

1st International Quantum Communication Conclave

With the vision that India should lead in the development of telecom technologies and standards, the Department of Telecom organized the 'First International Quantum Communication Conclave' on 27-28 March 2023 at Vigyan Bhawan, New Delhi.

The Inaugural of the 'First International Quantum Communication Conclave'

The inaugural of the conclave was inaugurated by Minister of Communications, Electronics & Information Technology and Railways, Shri Ashwini Vaishnaw, and Minister of State for Communications Shri Devusinh Chauhan on 27th March. The conclave was organized in association with CDOT, Telecommunications Standards Development Society India (TSDSI), and IEEE Communications Society – Delhi Chapter.

The Objective of the 'First International Quantum Communication Conclave'

The objective of the conclave was to provide an excellent opportunity to learn about the latest advancements in quantum communication technologies. Experts from industries, academia, R&D centers, and government deliberated possible applications of Quantum Technologies in building a secure communication infrastructure.

The Standards Released During the Inaugural

During the event, the standards on the 'Test Guide of Quantum Key Distribution (QKD) System' and 'Quantum-Safe and Classical Cryptography System' were released. These standards seek to provide a framework for the development of secure communication systems.

CDOT's Role in Developing Solutions in Quantum Communications

The C-DOT is actively involved in providing solutions in Quantum Communications. It is currently in the path to become a hub for Quantum Communication-related activities under NMQTA. It developed the Quantum Key Distribution (QKD) and Post Quantum Cryptography (PQC) security solutions, which have been demonstrated in the live network.

The Quantum Hackathon 2023

The Quantum Hackathon 2023 was launched during the event to find vulnerabilities in QKD and PQC solutions. Its purpose is to further strengthen India's Quantum Ecosystem. Learning from this Hackathon will be shared with the overall Indian ecosystem. This will strengthen the security of solutions that are developed by the Indian industry. Successful Hackathon applicants will receive prize of Rs.10 Lakh for each break into the QKD or PQC



systems. An opportunity will also be provided for them to further collaborate with C-DOT in the area of Quantum Security at mutually agreeable terms and conditions.

The Pandit Deendayal Upadhyaya Telecom Skill Excellence Awards

The Pandit Deendayal Upadhyaya Telecom Skill Excellence Awards – 2022 were presented to various winners during the inaugural on 27th March 2023. These awards have been instituted by the Telecom Department to recognize outstanding contributions in the areas of telecom skilling, services, manufacturing, and applications.

Spring Fiesta 2023

The National Gallery of Modern Art (NGMA) in New Delhi, India, is celebrating its 69th anniversary with its first-ever “Spring Fiesta” event in 2023. This event aims to showcase and promote locally made, handcrafted, and curated products while providing an interactive experience for visitors to connect with the museum.

Inauguration and Celebrating 69 Years

The NGMA was inaugurated by Vice President Dr. S Radhakrishnan on March 29, 1954, and has since become an important cultural institution in India.

Over 50 Stalls to be Set Up

At the “Spring Fiesta” event, more than 50 stalls will be set up on the museum lawns, featuring individuals from various backgrounds who specialize in areas such as handicrafts, ceramics, indigenous art, fashion, and more. This event will offer an opportunity for these enthusiastic participants to display and sell their creative products at nominal prices.

Creative Products for Purchase

The “Spring Fiesta” event promises to captivate its audience with a wide range of creative products available for purchase. Visitors can explore and buy locally made products that are unique to the Indian culture, including handicrafts, ceramics, and indigenous art.

Interactive Session for Visitors

In addition to the stalls, NGMA has also planned a sketching and painting session to engage visitors and provide them with an opportunity to display their artistic skills on canvas. This interactive session is perfect for art enthusiasts, artists, and children who love art.

3-D Mapping Projection

A 3-D mapping projection on the art treasures will be displayed before the end of the event. This will be a unique experience for visitors to see art in a new dimension.

Musical and Performance Acts

Another highlight of the event will be the musical and performance acts by traditional and contemporary artists. This will add to the festive atmosphere and provide visitors with an opportunity to experience different forms of art and culture.

The Education and Research Department

The education and research department of NGMA is constantly brainstorming ideas and working on projects to provide visitors with an interactive experience. This department aims to connect more with the museum’s visitors, create more lasting memories, and



generate interest in locally made, handcrafted, and curated products.

Significance of Spring Fiesta

Through the “Spring Fiesta” event, individuals from various backgrounds will have a platform to showcase their work, increase exposure, and generate interest in their creative products. This event will not only promote the culture of India but also provide an opportunity for visitors to connect with the museum and its rich history.

INS Sumedha and the Visit to Port Algiers

INS Sumedha is an indigenously-built stealth offshore patrol vessel that is equipped with state-of-the-art weapons and sensors. Recently, it reached Port Algiers, Algeria for an operational turn around. Let's take a closer look at this vessel and its recent visit.

State-of-the-Art Weapons and Sensors

INS Sumedha is fitted with a state-of-the-art weapon and sensor package, making it a valuable asset to the Indian Navy. The vessel is routinely deployed for fleet support operations such as anti-piracy patrol, SAR, HADR, surveillance, and escort missions. Additionally, it is also capable of carrying an Advanced Light Combat Helicopter onboard.

Port Algiers Visit

On March 26, 2023, INS Sumedha entered Algiers, Algeria for an operational turn around. The patrol vessel was received at Port Algiers by officers of the Algerian Navy and officials from the Embassy of India, Algiers. The purpose of this visit is to strengthen bilateral relations and boost maritime cooperation and interoperability between the two countries' navies. It also showcases the Indian Navy's outreach to friendly maritime nations.

Sharing Best Practices

During the visit, the Indian Navy and the Algerian Navy shared best practices and experiences through cross deck visits, professional interactions, sports fixtures, and cultural visits. This will help to improve maritime cooperation and interoperability between the two countries, creating stronger relationships.

Construction and Design

INS Sumedha is the third Saryu class patrol vessel of the Indian Navy. It was designed and built indigenously by the Goa Shipyard Limited. The Naval Offshore Patrol Vessel was launched at Goa Shipyard on May 21, 2011. It became part of the Indian Navy on March 11, 2014. It is capable of undertaking fleet support operations, coastal and offshore patrolling, ocean surveillance and monitoring of sea lines of communications and offshore assets, and escort duties.

Universal Acceptance Day

The internet has become a fundamental part of modern society, connecting people from different parts of the world. With approximately five billion users worldwide, the internet has revolutionized communication and commerce, and it has become a critical platform for social and economic activities. However, not all users experience the full potential of the internet, especially those who do not speak English or use non-Latin scripts. To address this issue, the Internet Corporation for Assigned Names and Numbers (ICANN) and the Universal Acceptance Steering Group (UASG) have introduced Universal



Acceptance (UA) Day.

What is UA Day?

UA Day is celebrated every March 28th to promote UA awareness and encourage UA adoption among key stakeholders. Its objective is to create an inclusive internet that supports a wide range of languages and scripts. The inaugural edition of UA Day was celebrated in 2023.

What is Universal Acceptance?

Universal Acceptance is a technical requirement that ensures all valid domain names and email addresses, regardless of script, language, or character length, can be equally used by all internet-enabled applications, devices, and systems. UA is crucial for non-English speaking countries as it ensures that everybody has the ability to experience the full social and economic power of the internet using their chosen domain name and email address that best aligns with their interests, business, culture, language, and script.

Expanding the Domain Name System

The Domain Name System (DNS) is a system that translates domain names to IP addresses. In recent years, DNS has expanded with the addition of new generic top-level domains (e.g., .photography, .technology), Internationalized Domain Names (e.g., एमईआईटीवाई.सरकार.भारत, ১১১.১১১,) and country code top-level domains (e.g., .भारत). However, many software applications used to validate domain names and email addresses remain outdated, which hinders UA adoption.

The Significance of UA for India

The current digital divide can be removed with the creation of multilingual internet user interface. The National Internet Exchange of India (NIXI), a not-for-profit company under the aegis of the Ministry of Electronics and Information Technology (MeitY), recognizes the importance of UA adoption in India. Through UA, India aims to bring additional 500 million broadband users. This will help add value to the digital economy, promote startup ecosystems, and generate employment opportunities in the country. India has been chosen as the flag bearer this year to promote UA for digital inclusion.

March 31, 2023

International Day of Zero Wastes

Every year on March 30, people around the world celebrate the International Day of Zero Waste, a day designated by the United Nations General Assembly to promote reducing waste and sustainable consumption and production patterns. This day promotes the creation of a more sustainable and waste-free world.

History of the International Day of Zero Waste

The United Nations General Assembly passed a resolution on December 14, 2022, designating March 30 as the International Day of Zero Waste. The proposal was co-sponsored by Turkey and 105 other countries and is part of a series of resolutions dealing with waste. It aims to achieve all the objectives and targets in the 2030 Agenda for Sustainable Development by promoting zero-waste initiatives.



Theme of the International Day of Zero Waste 2023

The theme of the International Day of Zero Waste in 2023 is “Achieving sustainable and environmentally sound practices of minimizing and managing waste.” This theme emphasizes the importance of promoting sustainable consumption and production patterns to reduce the negative impact of waste on the environment.

Impact of Waste on the Environment

According to the UN data, around 2.24 billion tons of municipal solid waste are produced each year. Only 55% of them is being disposed of in managed facilities. Also, an estimated 931 million tons of food are either lost or wasted every year, and approximately 14 million tons of plastic waste enters aquatic ecosystems each year. These numbers highlight the adverse consequences of waste on the environment, including landfills, pollution, and resource depletion.

Promoting Sustainable Consumption and Production Patterns

The International Day of Zero Waste seeks to promote sustainable consumption and production patterns by encouraging individuals, communities, and organizations to adopt practices that minimize waste, reuse and recycle materials, and reduce the amount of waste generated. Initiatives like clean-up campaigns, recycling drives, educational programs, and advocacy campaigns are being conducted on this occasion to enable community mobilization towards a more sustainable and waste-free world.

Sustainable Development Goals Promoted by the International Day of Zero Waste

The International Day of Zero Waste promotes SDGs 11 and 12, which aim to make cities and communities more sustainable and promote responsible consumption and production. These goals align with the broader agenda of the United Nations to promote sustainable development and address the challenges posed by climate change, environmental degradation, and poverty.

Observance of the International Day of Zero Waste

International Day of Zero Waste is jointly overseen by the UN-Habitat and the UNEP. Member countries, UN organizations, civil societies, private entities, academia, youth and other stakeholders are encouraged to participate in activities that create awareness of national, subnational, regional, and local zero-waste initiatives and their role in enabling a sustainable development.

Captive Employment Initiative

The Captive Employment initiative was launched under the Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY) recently to provide skill development and job opportunities for underprivileged rural youth.

What is Captive Employment Initiative?

Captive Employment is a first-of-its-kind initiative in India with the objective of providing skill training and employment opportunities to rural poor youth. The initiative is designed to create a dynamic and demand-based skilling ecosystem that caters to the needs of industry partners, ensuring long-term employment for underprivileged rural youth. Captive Employers are the industries or companies that provide skill training for youths



and employ them in one of their establishments, sister concerns, or subsidiaries.

Aim of the Captive Employment Initiative

The Captive Employment initiative aims to provide sustainable placements for rural poor youth. The initiative provides long-term livelihood for underprivileged rural youth while catering to the human resources needs of the industries. The Union Rural Development Ministry inked an MoU with 19 Captive Employers recently to implement this initiative.

DDU-GKY Scheme

The Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY) is a government scheme that aims to provide skill training and employment opportunities to rural youth. The objective of the scheme is to enable rural poor youth to acquire skills and knowledge to make them employable and help them secure a sustainable livelihood. The scheme focuses on improving the employability of rural youth through skill training and placement support.

RTD Model

The RTD (Recruit, Train, and Deploy) model is promoted by the Captive Employment Guidelines. The objective of the RTD model is to create a demand-driven ecosystem where skill training and employment opportunities are based on the needs of the industry.

Minimum Duration and Salary for Captive Employment

Captive Employers must provide captive (in-house) placement to all the trained candidates. They must provide captive employment to a minimum of 70% of trained candidates for six months. A minimum salary of Rs.10,000 (for less than a 6-month course) and Rs.12,000 (for more than a 6-month course) is provided under this initiative.

Deen Dayal Upadhyaya

Deen Dayal Upadhyaya was an Indian philosopher, economist, and politician. He was a leader of the Bharatiya Jana Sangh, the forerunner of the Bharatiya Janata Party (BJP). Upadhyaya was a firm believer in the idea of 'integral humanism,' which aimed to create a society that valued both individual freedom and social responsibility.

Anchitheriomys buceei - Ancient Beaver Species

Researchers from the Jackson School of Geosciences at the University of Texas at Austin have discovered a new species of ancient beaver in the fossil collections of the university. The species has been named Anchitheriomys buceei after a popular Texas travel center chain.

The Discovery of Anchitheriomys buceei

The new species of ancient beaver was discovered in the fossil collections of the University of Texas at Austin. It is believed to have lived in Texas around 15 million years ago. Anchitheriomys buceei was approximately 30% larger than modern beavers.

Why Anchitheriomys buceei is Named After Buc-ee's

Anchitheriomys buceei is named after the famous Texas travel center chain, Buc-ee's. The name honors the beaver's Texas connection and the popular roadside chain that has become an iconic part of Texas culture. The researchers were inspired to name the new species of beaver after Buc-ee's due to a chance encounter with a Buc-ee's billboard. The



founders of Buc-ee's were thrilled to have a prehistoric beaver named after their company and stated that they are proud to be part of Texas history.

The Significance of the Partial Skull Fossil from Burkeville, Texas

The partial skull fossil from Burkeville, Texas, is significant because it is a fusion of bone and brain cast. This was created when sediment naturally seeped into the beaver's brain cavity, creating a rock replica of the brain. The fossil provides insight into the size and shape of the brain of *Anchitheriomys buceei*.

Technology Used to Obtain High-Resolution X-Ray Images of the Skull

High-resolution X-ray images of the skull were obtained using Computed Tomography (CT) scanning. This technology allowed researchers to study the internal structure of the skull without damaging the fossil.

The Original Collectors of the Skull and the Intended Name of the New Species

A team of Texas paleontologists in 1941, including Curtis Hesse, originally collected the skull and intended to name it a new species. Unfortunately, Hesse died in 1945 before he could complete his study and publish his findings. The skull remained in the university's collection until it was rediscovered and studied by the team from the Jackson School of Geosciences.

The Value of Discoveries Made in Existing Museum Collections

Discoveries made in existing museum collections can be just as valuable as new discoveries in the field. The rediscovery and study of the partial skull fossil from Burkeville, Texas, is an example of the importance of collections in museums and universities.

Buc-ee's: A Brief History

Buc-ee's was founded in 1982 by Arch "Beaver" Aplin III. The first store was located in Lake Jackson, Texas. Today, Buc-ee's has over 38 locations across Texas, with plans for expansion to other states. The company is known for its clean restrooms, affordable fuel prices, and a wide range of snacks and souvenirs.

P-270 Moskit Missile

The Russian Navy, on March 28, test-fired supersonic anti-ship missiles at a mock target in the Sea of Japan. The missiles, identified as Moskit cruise missiles, were fired at a target located approximately 100 kilometers away from the missile ships of the Pacific Fleet. The target was hit successfully with a direct hit from two Moskit cruise missiles, according to a statement from the Russian defence ministry.

The P-270 Moskit Missile

The Moskit cruise missile is a medium-range supersonic missile that was developed during the Soviet era. It is known for its speed and can destroy a ship within a range of up to 120 km. The NATO reporting name of the P-270 Moskit missile is SS-N-22 Sunburn.

Strategic Bomber Planes

The missile test came a week after two Russian strategic bomber planes flew over the Sea of Japan for more than seven hours in what Moscow said was a "planned flight". This flight raised concerns among the Japanese, who are already on edge due to the increasing military activities of Russia in the region.



Missile Test Location

The missile test occurred at Peter the Great Bay in the Sea of Japan. This bay is located on the coast of Russia, though it faces the water between the two countries. The location of the missile test has raised concerns among the Japanese, who are worried about Moscow's increasing military activities around their coasts.

India-Africa Army Chiefs' Conclave and AFINDEX-2023

The India-Africa Army Chiefs' Conclave was held in Pune with the aim of strengthening defence relations and creating an institutionalised framework for better military-to-military cooperation between India and African nations. The central theme of the conclave was AMRUT (Africa-India Militaries for Regional Unity), which emphasizes regional cooperation and integration among the militaries of India and African countries. It was conducted at the sidelines of the AFINDEX-2023.

Joint Military Exercise AFINDEX-2023

The joint military exercise between India and African countries is known as the Africa-India Field Training Exercise (AFINDEX). The focus of the AFINDEX joint exercises is on humanitarian mine action and peacekeeping operations. AFINDEX-2023 saw the participation of 25 nations, including India and 24 African countries. This exercise is a major landmark in defence relations between India and African nations.

The Significance of the India-Africa Army Chiefs' Conclave

The India-Africa Army Chiefs' Conclave seeks to boost the synergy between militaries of India and African nations as part of a regional cooperation mechanism. The conclave saw the participation of senior army officers, civilian and defence officials, defence minister Rajnath Singh, and chief of the army staff general Manoj Pande among others. The purpose of the joint training and defence cooperation among the nations is to evolve an institutionalised framework in order to enhance collaboration in the fields of joint military training, peacekeeping operations and Indian defence industries.

India's Training Programmes for African Nations

India's training programmes for the Armed Forces of African nations cover areas such as counter-insurgency operations, peacekeeping, maritime security, and specialised training in new domains such as cyber warfare and drone operations. India also trains civilians in areas such as disaster management, humanitarian aid, and medical assistance. The training programmes aim to build positive military relations, imbibe each other's best practices, and promote the ability to operate together while undertaking execution of Humanitarian Mine Action and Peace Keeping Operations under the UN mandate.

Equipment Display: Make in India

On the sidelines of the AFINDEX joint exercises, an 'Equipment Display' showcased 75 indigenous products from 32 industries manufactured under the 'Make in India' initiative. This display showcased India's capability to produce world-class defence equipment and technologies.



H3N8 and its Presence in China

Bird flu, also known as avian influenza, is a viral disease that affects birds but can also be transmitted to humans and other animals, including horses and dogs. There are several subtypes of the Influenza A virus that can cause bird flu, with H3N8 being one of them. In this article, we will explore the history of H3N8 and its current cases in China.

What is H3N8 and how is it transmitted?

H3N8 is a subtype of the Influenza A virus that is commonly found in birds and horses. It is also known as the Equine influenza virus and is one of the two viruses that can cause dog flu. It was not recorded in humans until 2022. However, some researchers believe that it might have caused the 1889 pandemic, also known as the "Russian flu" or "Asiatic flu."

Bird flu is primarily transmitted through contact with infected birds or their feces, saliva, and respiratory secretions. People who handle infected birds or come into close contact with them are at the highest risk of contracting the virus. However, in rare cases, bird flu can also be transmitted from person to person through close contact.

History of H3N8 cases in China

In China, the first case of H3N8 infection in human was detected back in April 2022, when a 4-year-old boy in central China became seriously ill. The boy's pets, a dog and a cat, were also infected. The second case was reported in May 2022 when a 5-year-old boy from Hunan province fell ill. Fortunately, he recovered quickly after experiencing only mild symptoms. The country recently recorded a H3N8 case in Zhongshan City.

What are IMF Bailouts?

The International Monetary Fund (IMF) is an international organization that provides financial assistance to member countries facing economic crises. The organization works towards maintaining international monetary cooperation, promoting exchange rate stability, and facilitating international trade. IMF lending comes with strict conditions, and countries must adhere to these conditions to receive financial assistance. In this article, we will discuss the process and conditions laid down by the IMF for countries seeking financial assistance.

The Bailout Plan for Sri Lanka

Recently, the IMF approved a bailout plan for Sri Lanka worth nearly \$3 billion. The plan includes immediate disbursement of \$333 million to alleviate the humanitarian crisis in the country. This bailout comes as Sri Lanka struggles with economic challenges caused by the COVID-19 pandemic.

Negotiations with Pakistan

The International Monetary Fund is negotiating with Pakistan to resume 1.1 billion USD funding held since November since early February. To receive a bailout, Pakistan is required to fulfill commitments from friendly countries on external financing.

Factors Leading to Economic Crises

According to the IMF website, economic crises occur due to inappropriate fiscal and monetary policies, exchange rates fixed at an inappropriate level, a weak financial system, political instability, and weak institutions.



Types of IMF Programs

The IMF has various lending programs designed to meet different needs. These programs include standby arrangements, standby credit facilities, extended fund facilities, extended credit facilities, rapid financing instruments, rapid credit facilities, flexible credit lines, short-term liquidity lines, precaution and liquidity lines, resilience and sustainability facilities, staff-monitored programs, policy support instruments, and policy coordination instruments.

The Process of Requesting Financial Assistance

A member country requiring financial aid makes a request to the IMF. The country's government and IMF staff then discuss the economic and financial situation and financing needs.

Policy Conditionality

IMF lending comes with strict policy conditions that a country must fulfill to receive financial assistance. These policy actions are an integral part of IMF lending and may include structural reforms such as fiscal transparency, tax reforms, and reforms in state-owned enterprises.

IMF's Role after the Loan Approval

The IMF monitors how members implement the policy actions underpinning the loan. It ensures that countries fulfill the policy conditions set out in the loan agreement.

IMF's Main Source of Financing and Lending Capacity

Member quotas are the IMF's main source of financing. Currently, the IMF's total resources are SDR 977 billion, and its lending capacity is SDR 713 billion (around US\$1 trillion).

Downsides of IMF Conditions

While IMF financial assistance can help countries facing economic crises, the conditions laid down for financial assistance can also have negative consequences. Reduced government spending and higher taxes are measures that have been historically unpopular with the people and have often resulted in public unrest.

New Rules for Cattle Dehorning

Animal welfare has always been a topic of concern for various animal rights organizations and animal lovers around the world. In India, the Prevention of Cruelty to Animals Act was implemented in 1960 to prevent the mistreatment of animals. Recently, the Central Government announced new rules on March 27, 2023, to prevent cruelty to animals during specific procedures, including dehorning of cattle and castration, branding or nose-roping of any animal. In this article, we will discuss the new rules and their implications.

Prevention of Cruelty to Animals Act

The Prevention of Cruelty to Animals Act is the law in India that aims to prevent the mistreatment of animals. Section 11 of the Act defines the acts that amount to treating animals with cruelty. Subsection 3 of Section 11 of the Act allows for exceptions for animal husbandry procedures. However, it also requires that these procedures be performed by a registered veterinary practitioner.



New Rules on Animal Welfare

The Central Government's new rules specify the procedures for dehorning of cattle and castration, branding, or nose-roping of any animal. The rules also require the use of pain-reducing methods during these procedures. Additionally, the law suggests that tagging, branding, and radio-telemetry devices should be placed on dead tissues.

The rules demand that the breeding of naturally hornless cattle should be preferred over dehorning. Furthermore, the rules prescribe a methodology for euthanasia for ill animals to avoid a painful death.

Implications of the New Rules

Animal rights non-profit organizations, such as Prevention of Cruelty Against Animals (PETA) India, have welcomed the new rules. They believe that these rules will help prevent the mistreatment of animals during these procedures. However, there are concerns regarding the effective implementation of these rules.

New India Literacy Programme - Update (March, 2023)

Education is the foundation of a progressive society, and India has recognized the need to improve its literacy rates for economic and social development. The Indian Government has launched a new scheme, the New India Literacy Programme (NILP), to address the issue of adult illiteracy in the country. The scheme is a significant step towards empowering non-literates and enabling them to become self-sufficient. Let's take a closer look at the scheme and its components.

Financial Outlay and Target Group

The financial outlay of NILP for the five-year implementation period is Rs.1037.90 crore, with Rs.700.00 crore as the Central share and Rs.337.90 crore as the State share. The scheme seeks to educate around 5 crore non-literates in the age group of 15 years and above.

Components of the Scheme

The NILP scheme has 5 components i.e., Foundational Literacy and Numeracy, Critical Life Skills, Vocational Skills Development, Basic Education, and Continuing Education. The Foundational Literacy and Numeracy component focus on the basics of reading, writing, and numeracy. The Critical Life Skills component focuses on functional literacy, including digital literacy and financial literacy. The Vocational Skills Development component focuses on imparting job-oriented skills to the beneficiaries. The Basic Education component aims to provide basic education to adults who have missed out on formal education. The Continuing Education component focuses on providing education to those who have completed the basic education component.

Identification of Beneficiaries and Mode of Implementation

Door-to-door surveys are conducted on a mobile app in the States/UTs to identify the beneficiaries of this scheme. The primary mode of implementation for the NILP scheme is the online mode, making it accessible to beneficiaries across the country.

Teaching and Learning Resources

The National Council of Educational Research and Training has developed a curriculum for



adult learners that they can master within 200 hours of teaching. The curriculum consists of four books, which cover topics such as reading, writing, arithmetic, and critical life skills. The teaching and learning resources are provided through the DIKSHA platform of NCERT.

Volunteer-Driven Scheme

The NILP scheme is a volunteer-driven scheme that aims to mobilize volunteers across the country to teach non-literates. The scheme aims to train 10 lakh teachers to teach one crore adults.

**120 MCQs**

These questions are sourced from GKToday's Current Affairs 2023 **Daily 20 MCQ Series** in [GKToday Academy Android Application](#).

1. Li Qiang has been named as the next Premier of which country?

- [A] China
- [B] Japan
- [C] South Korea
- [D] North Korea

Answer: China

China named Li Qiang as the country's next premier. Li, the close confidant of top leader Xi Jinping, was nominated by Xi and appointed to the position at the session of National People's Congress, China's ceremonial parliament. The appointment came a day after Xi Jinping secured a norms-breaking third five-year term as state leader.

2. Silicon Valley Bank, which was shut down recently, is based in which country?

- [A] Russia
- [B] Ukraine
- [C] USA
- [D] UK

Answer: USA

The US regulators have shut down Silicon Valley Bank (SVB) and taken control of its customer deposits in the largest failure of a US bank since 2008. The firm, which was a key tech lender, was scrambling to raise money to plug a loss from the sale of assets affected by higher interest rates. Silicon Valley Bank faced inadequate liquidity and insolvency.

3. Who is the first woman in India to receive the International Union of Pure and Applied Chemistry (IUPAC) award?

- [A] Jyotirmayee Mohanty
- [B] Ritu Karidhal
- [C] Tessy Thomas
- [D] Minal Rohit

Answer: Jyotirmayee Mohanty

The International Union of Pure and Applied Chemistry (IUPAC) is a global federation consisting of National Adhering Organizations. Jyotirmayee Mohanty, a scientist at the Bhabha Atomic Research Centre, Mumbai, is the first woman in India to receive the IUPAC award. She received the IUPAC 2023 Distinguished Women in Chemistry or Chemical Engineering in recognition of her works in the field of chemistry.

4. National Film Heritage Mission was created by which Union Ministry?

- [A] Ministry of Information and Broadcasting
- [B] Ministry of Communication
- [C] Ministry of Commerce and Industry
- [D] Ministry of Culture

Answer: Ministry of Information and Broadcasting

The National Film Heritage Mission (NFHM) was created by the Indian Government's Ministry of Information and Broadcasting to save and protect films and related materials in India. The mission aims to preserve and digitize Indian films for the next hundred years. As part of this mission, three major projects are ongoing: digitization, conservation, and restoration of films. So far, over 1,200 films have been digitized in high quality, and over 1,400 celluloid reels were conserved.



5. Dusky tetraka, which was seen in the news, is a?

- [A] Robot
- [B] Bird
- [C] Satellite
- [D] Malware

Answer: Bird

The dusky tetraka is a rare bird that lives in the forests of Madagascar. It was last seen in 1999, and it is one of the top 10 most wanted species by the Search for Lost Birds. The species was discovered recently in two remote locations. It has a dark olive-green plumage with a pale yellowish throat and a ring around the eye. It is endemic to Madagascar's subtropical and tropical moist lowland forests. It is threatened due to the destruction of its natural habitat.

6. As per the recent MoSPI data, what is India's retail inflation recorded in February 2023?

- [A] 7.44 %
- [B] 6.44 %
- [C] 5.44 %
- [D] 4.44 %

Answer: 6.44 %

India's retail inflation has been recorded at 6.44% in February 2023 from January's three-month high of 6.52 per cent. This was according to the data released by the Ministry of Statistics and Programme Implementation (MoSPI). However, the inflation print stayed above the Reserve Bank of India's (RBI) upper tolerance level of 6 per cent for second straight month.

7. Which company was awarded the 'Bengaluru-Mysuru expressway' project?

- [A] Dilip Buildcon
- [B] Larsen and Toubro
- [C] Shapoorji Pallonji Group
- [D] GMR Group

Answer: Dilip Buildcon

The Bengaluru-Mysuru expressway project aims to reduce travel time between the two cities by constructing a six-lane road that is 10 metres wide. Prime Minister Modi recently inaugurated the Bengaluru-Mysuru expressway. It was developed at the cost of Rs 8,480 crore by the Union Ministry of Road Transport and Highway. The project was awarded to Dilip Buildcon. The 119 km-long expressway is expected to boost economic activity in the region.

8. India recently held a Business Forum 'Cooperation for Development and Growth' with which country?

- [A] Russia
- [B] USA
- [C] UK
- [D] Germany

Answer: Russia

The India-Russia Business Forum 'Cooperation for Development and Growth' will take place in New Delhi, as part of the St. Petersburg International Economic Forum's foreign events segment. The aim is to explore new areas of economic cooperation, such as IT, construction, and mechanical engineering. The forum seeks to create high-tech alliances in various fields, such as cybersecurity, manufacturing, smart cities, transport, logistics, and healthcare.

9. Which state government has tabled the 'Right to Healthcare Bill'?

- [A] Tamil Nadu
- [B] Kerala



[C] Gujarat

[D] Rajasthan

Answer: Rajasthan

The Rajasthan state government has tabled the Right to Healthcare Bill recently. The purpose of this legislation is to provide free and affordable medical services in public and private hospitals, clinics and laboratories. The bill also requires the government to strengthen the public healthcare system and establish grievance redressal mechanisms. The bill provides 20 rights to state residents, including the right to informed consent and to seek medical information.

10. Siler niser, which was seen in the news, belongs which species?

[A] Turtle

[B] Spider

[C] Snake

[D] Gecko

Answer: Spider

A new species of spider, named Siler Niser, has been found on the National Institute of Science Education and Research (NISER) Bhubaneswar campus. Siler Niser was found during a monitoring project aimed at studying the spider diversity on the campus. This discovery highlights the importance of grasslands as habitats for different organisms and emphasizes the significance of studying open habitats.

11. Which state/UT is the host of 'International Day of Yoga' main event in India?

[A] New Delhi

[B] Gujarat

[C] Uttar Pradesh

[D] Assam

Answer: New Delhi

Yoga Mahotsav 2023 marks the start of the 100-day countdown of the 9th International Yoga Day. It is a three-day event that will be organized in New Delhi. The International Day of Yoga was first proposed by Prime Minister Narendra Modi in 2014 and was later adopted by the United Nations General Assembly in 2015. The day is celebrated globally to raise awareness about the benefits of yoga and to promote its practice as a means of improving physical and mental well-being.

12. Which institution launched 'ATL Sarthi', a comprehensive self-monitoring framework?

[A] RBI

[B] SEBI

[C] NITI Aayog

[D] BSE

Answer: NITI Aayog

Atal Innovation Mission (AIM) – NITI Aayog launched ATL Sarthi, a comprehensive self-monitoring framework to strengthen the ecosystem of Atal Tinkering Labs (ATL). As of date, AIM has funded 10,000 schools to establish Atal Tinkering Labs (ATLs). The initiative has four pillars ensuring the performance enhancement of ATLs through regular process improvements like a self-reporting dashboard known as 'MyATL Dashboard'.

13. What is the Wholesale Price Index (WPI)-based inflation in India in February 2023?

[A] 7.85 %

[B] 6.85 %

[C] 5.85 %

[D] 3.85 %

Answer: 3.85 %



The Wholesale Price Index (WPI)-based inflation declined to a 25-month low of 3.85 per cent in February 2023. This is the ninth straight month of decline in WPI-based inflation. As per the government data, the decline is due to the easing prices of manufactured items and fuel and power. The Reserve Bank of India (RBI) had hiked key interest rate by 25 basis points to 6.50 per cent, saying core inflation still remains sticky.

14. The pilot trial of MD15 buses and Prototype launch of M100 (100% Methanol) was launched in which city?

- [A] Chennai
- [B] Bengaluru
- [C] Hyderabad
- [D] Pune

Answer: Bengaluru

Nitin Gadkari, Minister of Road Transport and Highways, Government of India, unveiled the pilot trial of MD15 buses and Prototype launch of M100 (100% Methanol). MD15 stands for diesel with 15 percent methanol buses. The project was carried out in partnership with BMTC, NITI Aayog, Indian Oil Corporation (IOC) and Ashok Leyland.

15. As per Census 2011, the percentage share of population in which state in the age-group of 15 to 59 is 64% in comparison to 60.3% at all India level?

- [A] Kerala
- [B] Punjab
- [C] Sikkim
- [D] Telangana

Answer: Punjab

In 2022, emigration clearances were issued to 3,73,434 Indians, of which 10,654 were from Punjab, as per the recent data provided to the Lok Sabha. The percentage share of population in Punjab in the age-group of 15 to 59 is 64% in comparison to 60.3% at all India level as per census 2011.

16. Which state moved the Supreme Court against Governor for refusing to act on several Bills passed by the State legislature?

- [A] Tamil Nadu
- [B] Telangana
- [C] Kerala
- [D] Punjab

Answer: Telangana

A petition was filed by Telangana Government against Governor Tamilisai Soundararajan for creating a "constitutional impasse" by refusing to act on several Bills passed by the State legislature. The Chief Justice of India D Y Chandrachud agreed to urgently hear the petition. Telangana urged the court to "declare that the inaction, omission and failure to comply with the constitutional mandate qua the assent of the Bills by the Governor is highly irregular, illegal".

17. Which country has unveiled plans to buy up to five U.S. nuclear-powered submarines?

- [A] France
- [B] India
- [C] Australia
- [D] Ukraine

Answer: Australia

Australia has unveiled plans to buy up to five U.S. nuclear-powered submarines, then build a new model with U.S. and British technology under an ambitious plan. The announcement came at an event at California naval base where U.S. President Joe Biden hosted Australian Prime Minister Anthony



Albanese and British Prime Minister Rishi Sunak. Albanese called it the biggest single investment in Australia's defence capability in all its history.

18. The United States recognises the McMahon Line as the international boundary between China and which state/UT?

- [A] Sikkim
- [B] Arunachal Pradesh
- [C] Assam
- [D] West Bengal

Answer: Arunachal Pradesh

The United States recognises the McMahon Line as the international boundary between China and Arunachal Pradesh, according to a bipartisan Senate resolution which sees Arunachal Pradesh as an integral part of India. The bipartisan Senators' resolution condemns additional China's provocations, including the People's Republic of China's use of military force to change the status quo along the Line of Actual Control.

19. Which country unveiled its first portable attack drone 'Kamikaze'?

- [A] Israel
- [B] Ukraine
- [C] Taiwan
- [D] Australia

Answer: Taiwan

Taiwan unveiled its first portable attack drone, an unmanned aerial vehicle named 'Kamikaze'. This is like a U.S. model used in Ukraine's fight against Russia. Taiwan's 23.5 million people live under constant threat of an invasion by China, which claims the self-ruled democracy as part of its territory. Beijing launched major military exercises in response to a visit by then-U.S. House Speaker Nancy Pelosi to Taipei.

20. Which country announced a new 'Semiconductor mega cluster' with \$230 billion in investment from Samsung Electronics?

- [A] India
- [B] China
- [C] South Korea
- [D] Bangladesh

Answer: South Korea

South Korea says it will build an enormous facility to make computer chips in the greater Seoul area, with about \$230 billion in investment from memory chip giant Samsung Electronics. The plans were announced by President Yoon Suk Yeol and confirmed by the electronics giant. The world's largest new 'high-tech system semiconductor cluster' will be built in the Seoul Metropolitan area and the total investment would be completed in about 20 years.

21. India signed a loan agreement with which institution for construction of Green National Highway Corridors Project?

- [A] ADB
- [B] AIIB
- [C] World Bank
- [D] WEF

Answer: World Bank

India and the World Bank have signed a loan agreement for the construction of the Green National Highway Corridors Project in four States. These States are Himachal Pradesh, Rajasthan, Uttar Pradesh and Andhra Pradesh. The agreement has been signed for the construction of 781 kilometers in these



States, with loan assistance of 500 million dollars.

22. Who was appointed as the chairman of Pension Fund Regulatory and Development Authority (PFRDA)?

- [A] Deepak Mohanty
- [B] Sarad Kumar Hota
- [C] M K Jain
- [D] Urjit Patel

Answer: Deepak Mohanty

The government has appointed Deepak Mohanty as chairman of Pension Fund Regulatory and Development Authority (PFRDA). He replaced Supratim Bandyopadhyay, whose term ended in January. Prior to this, Mohanty, a former executive director of the Reserve Bank of India (RBI), served as a member of PFRDA.

23. Which country has appointed Eric Garcetti as its ambassador to India?

- [A] Russia
- [B] Ukraine
- [C] USA
- [D] UK

Answer: USA

The US government has appointed former Los Angeles mayor Eric Garcetti as the new ambassador to India, two years after his name was first announced for the role. Mr Garcetti, who is a close ally of Joe Biden, was nominated for the post by the US president in 2021. But his appointment was held up after allegations that he had overlooked accusations of sexual harassment against an aide when he was Mayor.

24. Which Union Ministry released Policy guidelines for utilising eco-friendly materials in construction of roads?

- [A] Ministry of New and Renewable Energy
- [B] Ministry of Road Transport and Highways
- [C] Ministry of Power
- [D] Ministry of Mines

Answer: Ministry of Road Transport and Highways

Ministry for Road Transport and Highways has released Policy guidelines or standards for utilising eco-friendly materials in construction of National Highways. Eco-friendly materials such as fly ash, iron and steel slag, construction and demolition waste, recycled asphalt pavement, geo-synthetics, waste plastic, emulsion based cold mix and warm mix asphalt are being used in construction of National Highways.

25. Exercise 'Al-Mohed-Al Hindi-23' is held between India and which country?

- [A] UAE
- [B] Saudi Arabia
- [C] Israel
- [D] Oman

Answer: Saudi Arabia

Exercise Al-Mohed-Al Hindi-23 is a bilateral exercise between the naval forces of India and Saudi Arabia. It is planned for May this year, to be held in Saudi Arabia's Jubail. This will be the second such Naval Exercise, while the first one was held in August 2021.

26. Which country brokered the 'Saudi-Iran Détente' peace deal?

- [A] USA
- [B] China
- [C] India



[D] Russia

Answer: China

The 'Saudi-Iran Détente' is a peace deal between Iran and Saudi Arabia which was recently brokered by China. It is seen as Beijing's step towards gaining a major influence in West Asia, where it has economic and political interests and rivalry with the US and the western powers.

27. Barda Wildlife Sanctuary, which was seen in the news, is located in which state/UT?

[A] Gujarat

[B] West Bengal

[C] Andhra Pradesh

[D] Karnataka

Answer: Gujarat

Gujarat, the only home of Asiatic lions in India, is set to move 40 lions from Gir National Park to the Barda Wildlife Sanctuary. The Barda Wildlife Sanctuary is expected to house 40 adult and sub-adult Asiatic lions. It is located some 100 km from the Gir National Park.

28. Which state/UT hosted the 'Kodava Hockey Festival'?

[A] Andhra Pradesh

[B] Odisha

[C] Karnataka

[D] West Bengal

Answer: Karnataka

Kodava Hockey Festival is set to be organized in Napoklu town of Karnataka after a gap of 4 years. The annual event is the world's largest field-hockey tournament. The Kodava community in the hilly district conducts the inter-family hockey tournament every year where players from over 200 families participate. The only rule of forming a team is that all members must be from the same family.

29. 'TV-D1' is the first test vehicle demonstration of which mission of India?

[A] Gaganyaan

[B] Samudrayaan

[C] Aditya

[D] Venus Mission

Answer: Gaganyaan

The first test vehicle demonstration (TV-D1) under the Gaganyaan mission will be conducted on May 2023. It aims to test the abort process mid-air, the parachute system, and the recovery of crew members after splashdown.

30. Which is the first NATO country to deliver fighter jet to the warring country?

[A] India

[B] Pakistan

[C] Poland

[D] Finland

Answer: Poland

Poland announced that it would give Ukraine around a dozen MiG-29s, starting with the first four to be delivered in the coming days. This makes it the first NATO country to deliver fighter jet to the warring country. Both Poland and Slovakia later announced it would send 13 MiG-29 fighter jets to Ukraine in the coming weeks.

31. A recent research predicted that a new ocean would be created as which region splits into two separate parts?

[A] Oceania

[B] Europe



[C] Africa

[D] Asia

Answer: Africa

Scientists, in 2020, predicted a new ocean would be created as Africa gradually splits into two separate parts. The East African Rift (EAR) is an active continental rift zone situated in the eastern part of the continent. EAR is a crack that stretches over 56 kilometres and appeared in the desert of Ethiopia in 2005, triggering the formation of a new sea.

32. Thiania indica, which was discovered recently, belongs to which species?

[A] Snake

[B] Spider

[C] Turtle

[D] Gecko

Answer: Spider

Thiania indica is a newly discovered species of jumping spider from the Western Ghats. Thiania indica belongs to the Thiania C.L. Koch genus of jumping spider (that constitute the family Salticidae). It was discovered during an expedition in the Shendurney Wildlife Sanctuary in December 2021.

33. INS Dronacharya, which recently received President's Colour, is based in which state?

[A] Kerala

[B] Goa

[C] Visakhapatnam

[D] Andhra Pradesh

Answer: Kerala

INS Dronacharya is the Indian Navy's gunnery school situated in Kerala. It recently received President's Colour. It is responsible for training 820 officers and 2100 ratings per year in small-arms, naval missiles, artillery, radar and defensive countermeasures.

34. Which recently discovered species has been named after KN Ganeshaiah - a famous agricultural scientist and a Kannada writer?

[A] Butterfly

[B] Gecko

[C] Spider

[D] Turtle

Answer: Gecko

Ganeshaiah's dwarf gecko (Cnemaspis ganeshaiahi) is a newly discovered species of gecko endemic to the Male Mahadeshwara Hills (MM Hills). It is named after KN Ganeshaiah - a famous agricultural scientist and a Kannada writer.

35. St. Patrick's Day commemorates Saint Patrick and the arrival of Christianity in which country?

[A] India

[B] Ireland

[C] Australia

[D] Mexico

Answer: Ireland

Saint Patrick's Day is celebrated every year on March 17. It marks traditional death date of Saint Patrick - the patron saint of Ireland. The day commemorates Saint Patrick and the arrival of Christianity in Ireland, and also celebrates the heritage and culture of the Irish in general.

36. Mustatils are stone structures that have been recorded in which country?

[A] UK

[B] Saudi Arabia



[C] China

[D] Japan

Answer: Saudi Arabia

Mustatils are monumental stone structures made of sandstone walls that have been recorded in Saudi Arabia since the 1970s. Recent excavations at the town of Al Ula revealed that these prehistoric structures were used for ritualistic purposes.

37. Which Indian American was recently appointed as the Assistant Secretary of Defense for the Air Force?

[A] Ravi Chaudhary

[B] Raja Chari

[C] Radha Iyengar Plumb

[D] Matthias Maurer

Answer: Ravi Chaudhary

Indian American Ravi Chaudhary was recently appointed as the Assistant Secretary of Defense for the Air Force. It is one of the key civilian leadership positions in the US Pentagon. He previously served as a Senior Executive at the US Department of Transportation where he was Director of Advanced Programs and Innovation, Office of Commercial Space at the Federal Aviation Administration (FAA).

38. The Reserve Bank of India (RBI) signed MoU with which country's central bank to promote innovation in financial products?

[A] UAE

[B] France

[C] Sri Lanka

[D] Bangladesh

Answer: UAE

The Reserve Bank of India (RBI) and the Central Bank of the United Arab Emirates (CBUAE) signed a MoU, to enhance cooperation and jointly enable innovation in financial products and services. Under the MoU, the two central banks will collaborate on various emerging areas of FinTech, especially Central Bank Digital Currencies (CBDCs) and explore interoperability between the CBDCs of CBUAE and RBI.

39. Which Union Ministry implements the 'PM MITRA' scheme?

[A] Ministry of Education

[B] Ministry of Textiles

[C] Ministry of Steel

[D] Ministry of External Affairs

Answer: Ministry of Textiles

The Indian government announced 7 PM MITRA (Pradhan Mantri Mega Integrated Textile Region and Apparel) Parks recently. The scheme is implemented by the Union Ministry of Textiles. PM MITRA Parks will come up in Tamil Nadu, Telangana, Gujarat, Karnataka, Madhya Pradesh, Uttar Pradesh Maharashtra.

40. CESTAT is an Appellate Tribunal set up under which Act?

[A] IT Act 2000

[B] Customs Act, 1962

[C] Finance Act, 1994

[D] Digital India Act 2023

Answer: Customs Act, 1962

Customs, Excise and Service Tax Appellate Tribunal (CESTAT) is commemorating its 40 years of operations. It was set up under Customs Act, 1962 in the year 1982. CESTAT is mandated to hear appeals against orders passed by the Commissioners or Commissioners (Appeals) under Section 129A



of the Customs Act, 1962. As 80,000 cases are pending before CESTAT, the Government to set up committee to suggest steps to reduce litigation.

41. Who are the beneficiaries of the 'Sagar Parikrama' programme?

- [A] Defence personnel
- [B] Fishermen
- [C] Non-Resident Indians
- [D] Exporters

Answer: Fishermen

Sagar Parikrama Phase IV was launched recently. The main objective of 'Sagar Parikrama' is to facilitate interaction with fishermen, coastal communities and stakeholders to disseminate information of various fisheries related schemes and programs. It also aims to promote responsible fisheries and protection of marine ecosystem.

42. 'AuditOnline', which was recognised at the WSIS Forum 2023, is an open-source application developed by which Union Ministry?

- [A] Ministry of Panchayati Raj
- [B] Ministry of Rural Development and Entrepreneurship
- [C] Ministry of Finance
- [D] Ministry of Corporate Affairs

Answer: Ministry of Panchayati Raj

AuditOnline is an open-source application developed under the e-panchayat Mission Mode Project (MMP) as part of the Panchayat Enterprise Suite (PES). It aims to facilitate the internal and external audit of government departments or Panchayati Raj Institutions. It was recently given recognition at the WSIS Forum 2023.

43. Panchayati Raj Ministry's Project of Panchayat Clusters aims to create how many Model Gram Panchayat Clusters across India?

- [A] 100
- [B] 250
- [C] 500
- [D] 1000

Answer: 250

The progress of the "Project for Creating 250 Model Gram Panchayat Clusters across India" was reviewed recently by Union Rural Development and Panchayati Raj Minister Giriraj Singh. Its purpose is to set up 250 model gram panchayat clusters across the country. The Minister also mentioned the importance of Gram Panchayat Development Plans (GPDPs) and encouraged the YFs to formulate an effective holistic plan using relevant parameters for all-round development of the Panchayats.

44. Which country launched Falcon LLM, a large language model (LLM) with 40 billion parameters?

- [A] UAE
- [B] Israel
- [C] Japan
- [D] China

Answer: UAE

Technology Innovation Institute, Abudhabi, UAE has launched Falcon LLM, a large language model (LLM) with 40 billion parameters. The model outperforms GPT-3 and requires only 75% of its training compute, as well as lower percentages of other large language models' training compute. The UAE is aligned with the UAE's National AI Strategy, which aims to make the country a leader in the knowledge economy, driving progress and prosperity.

45. 'Heal in India' is an initiative of which Union Ministry?



- [A] Ministry of Health and Family Welfare
- [B] Ministry of External Affairs
- [C] Ministry of Tourism
- [D] Ministry of Culture

Answer: Ministry of Health and Family Welfare

The Ministry of Health and Family Welfare (MoHFW) launched the "Heal in India" initiative, a pan-India initiative catering to citizens of world. It was launched to promote medical tourism. Under this initiative, the Union Ministries of Ayush and Health and family welfare are collaborating with the C-DAC and SEPC to develop a "One Step" Heal in India Portal to provide a medical value travel.

46. Treasa Jolly and Gayatri Gopichand, who were in the news recently, play which sports?

- [A] Tennis
- [B] Squash
- [C] Badminton
- [D] Table-Tennis

Answer: Badminton

Indian women's doubles pair of Treasa Jolly and Gayatri Gopichand advanced to the semi-finals of the All-England Badminton Championships in Birmingham. The Indian team defeated their Chinese opponents, Li Wen Mei and Liu Xuan Xuan.

47. Which organisation opened the strategic Zojila Pass located on the Greater Himalayan Range?

- [A] Indian Army
- [B] Border Roads Organisation
- [C] Indo-Tibetan Border Police Force
- [D] Indian Air Force

Answer: Border Roads Organisation

The Border Roads Organisation (BRO) opened the strategic Zojila Pass located on the Greater Himalayan Range at an altitude of 11,650 feet which acts as a gateway between Union Territories of Ladakh, and Jammu & Kashmir. It remained closed for only 68 days this year as compared to 73 days last year and 160-180 days in the past.

48. Which state is the key state partner of the International SME Convention 2023 (ISC)?

- [A] Uttar Pradesh
- [B] Madhya Pradesh
- [C] Assam
- [D] Odisha

Answer: Madhya Pradesh

The 3rd edition of the International SME Convention 2023 (ISC) has been recently organised. It is jointly held by the union ministries of MSME, External Affairs and India SME Forum. Madhya Pradesh Government is the key state partner and the Uttar Pradesh government as the Associate State Partner.

49. Which state has tabled the Advocates Protection Bill, 2023?

- [A] Gujarat
- [B] Tamil Nadu
- [C] Rajasthan
- [D] Karnataka

Answer: Rajasthan

The Rajasthan Advocates Protection Bill, 2023 was tabled recently by the state government to provide for the prevention of offenses against advocates like grievous hurt, criminal force, criminal intimidation, and assault. It aims to prevent the rising cases of violence and false implications against advocates in the state.



50. XBB1.16, which was seen in the news, is related to which disease?

- [A] Diabetes
- [B] Cancer
- [C] Covid-19
- [D] Influenza

Answer: Covid-19

XBB1.16 is a new COVID-19 variant. INSACOG data has recently found a total of 76 samples of this variant in India. The XBB 1.16 variant was first found in January when two samples tested positive for the variant while in February a total of 59 samples were found.

51. Which bloc recently announced two initiatives – the Net Zero Industry Act (NZIA) and the Critical Raw Materials Act (CRMA)?

- [A] G-20
- [B] G-7
- [C] European Union
- [D] ASEAN

Answer: European Union

The European Union recently announced two initiatives – the Net Zero Industry Act (NZIA) and the Critical Raw Materials Act (CRMA) – under the Green Deal Industrial Plan. These initiatives aim to boost domestic green manufacturing. CRMA establishes the policy framework to onshore mineral and metal processing and scale clean energy and battery technology supply chains within the EU.

52. Trichrysis poseidonia, which was seen in the news, belongs to which species?

- [A] Wasp
- [B] Gecko
- [C] Turtle
- [D] Spider

Answer: Wasp

Trichrysis poseidonia is a newly discovered species of cuckoo wasp. Its specific name is derived from Poseidon – the Greek God of the Sea. Cuckoo wasps or emerald wasps, are a very large cosmopolitan group of parasitoid or kleptoparasitic wasps. They are often sculptured with brilliant metallic colors created by structural coloration.

53. Which city is the host of 'Civil20 India 2023 Inception Conference'?

- [A] Nagpur
- [B] Ahmedabad
- [C] Chennai
- [D] Pune

Answer: Nagpur

The three-day Civil20 India 2023 Inception Conference is set to be organized in Nagpur, Maharashtra. C20 India provides a platform for civil society organizations from across the world to highlight the aspiration of people to world leaders.

54. Yuva Vigyani Karyakram (YUVIKA) is a young scientist programme organized by which institution?

- [A] NITI Aayog
- [B] ISRO
- [C] DRDO
- [D] BARC

Answer: ISRO

Yuva Vigyani Karyakram (YUVIKA) is a young scientist programme organized by the Indian Space



Research Organisation (ISRO). It will encourage students to STEM-based research and careers. It aims to impart basic knowledge on Space Technology, Space Science and Space Applications to the younger students in emerging trends in space science and technology amongst the youngsters.

55. Copilot is the AI-powered digital assistant developed by which company?

- [A] Microsoft
- [B] Google
- [C] Amazon
- [D] Walmart

Answer: Microsoft

Copilot is the AI-powered digital assistant developed by Microsoft. It will improve the productivity of the user by integrating data from the user's Microsoft Graph and Microsoft 365 apps with large language models (LLMs). The AI assistant combines natural language processing, based on OpenAI's ChatGPT technology.

56. Which state organised the 'Yuva Utsav' programme?

- [A] Tamil Nadu
- [B] Mizoram
- [C] West Bengal
- [D] Gujarat

Answer: Mizoram

The first of its kind Yuva Utsav on the theme of 'Panch Pran of Amrit Kaal – India @2047' was organised in Siaha district of Mizoram. The festival, which is being organised by the Nehru Yuva Kendra (NYK) across the country, was participated by students and youth of the district.

57. When is the 'International Day for the Elimination of Racial Discrimination' observed?

- [A] March 18
- [B] March 21
- [C] March 23
- [D] March 24

Answer: March 21

The International Day for the Elimination of Racial Discrimination is being observed annually on March 21. On that day, in 1960, police opened fire at a peaceful demonstration in South Africa, against the apartheid pass laws. Its aim is to eliminate all forms of racial discrimination across the world.

58. As per the report released by Standing Committee on Water Resources, Over exploitation of groundwater for irrigation is a challenge in which states?

- [A] Uttar Pradesh and Uttarakhand
- [B] Punjab and Haryana
- [C] Gujarat and Rajasthan
- [D] Goa and Karnataka

Answer: Punjab and Haryana

"Groundwater: A Valuable but Diminishing Resource" Report was released by the Standing Committee on Water Resources. The report noted that wide cultivation of water guzzler paddy and sugarcane crops were the main reason for the excessive exploitation of groundwater. Over exploitation of groundwater for irrigation has become a major challenge in Punjab and Haryana.

59. Lakkhi Mela is organised in which state/UT?

- [A] Gujarat
- [B] Assam
- [C] Rajasthan
- [D] Arunachal Pradesh



Answer: Rajasthan

The Lakkhi Mela, also known as Kaila Devi Chaitra Mela, is organized in Rajasthan's Karauli district. It starts on the 12th day of Chaitra Badi. Khatu Shyam Temple in Rajasthan is a famous pilgrimage site for worshipping the deity Krishna.

60. Which country based laboratory released the study titled "Pathways to Atmanirbhar Bharat"?

- [A] UK
- [B] USA
- [C] Australia
- [D] France

Answer: USA

The study titled "Pathways to Atmanirbhar Bharat" was released recently by the US Department of Energy's Lawrence Berkeley National Laboratory. The study noted that India can achieve energy independence by 2047.

61. LVM3 is the largest rocket of which country?

- [A] India
- [B] Bangladesh
- [C] Israel
- [D] Ukraine

Answer: India

The Launch Vehicle Mark-3 (LVM3), previously referred as the Geosynchronous Satellite Launch Vehicle Mark III (GSLV Mk3), is a three-stage medium-lift launch vehicle developed by the Indian Space Research Organisation (ISRO). The Indian space agency has announced that its largest rocket LVM3 will be launched on March 26 from the Satish Dhawan Space Centre in Sriharikota.

62. Babesiosis, a tickborne disease, is on the rise in which country?

- [A] USA
- [B] UK
- [C] Australia
- [D] Egypt

Answer: USA

Babesiosis is a deadly disease caused by microscopic parasites that infect red blood cells. It has recently been reported that this disease is becoming common in the US. Tickborne disease has been on the rise in the U.S., with the number of cases growing 25% from 2011 to 2019.

63. Which country has unveiled the 'Plan for Free & Open Indo-Pacific'?

- [A] China
- [B] Japan
- [C] India
- [D] Australia

Answer: Japan

Japan's Plan for Free & Open Indo-Pacific was unveiled during Japanese Prime Minister Fumio Kishida's visit to India. The comes amid the rising diplomatic tensions between China and Japan over the disputed Senkaku/ Diaoyu islands in East China Sea.

64. India adopted the 'Biratnagar declaration' along with which country?

- [A] Bangladesh
- [B] Nepal
- [C] France
- [D] Japan

Answer: Nepal



The Nepal-India Literature Festival was jointly organized by the Biratnagar Metropolitan City and Krantidhara Literature Academy of Meerut, India. It concluded with the adoption of a 10-point Biratnagar declaration, highlighting the mutual promotion of literature between Nepal and India.

65. Asia's largest Tulip Garden opens for public in which state/UT?

- [A] Sikkim
- [B] Uttarakhand
- [C] Jammu and Kashmir
- [D] Assam

Answer: Jammu and Kashmir

Asia's largest tulip garden, the Indira Gandhi Memorial Tulip Garden, is now open for the public. The Lieutenant Governor of Jammu and Kashmir Manoj Sinha opened the Tulip Garden in Srinagar. About 68 varieties of tulips will bloom in the garden this year. At present, there are 15 lakh tulips of numerous varieties and colours in the garden.

66. Emaar, the first overseas company to invest in Kashmir, is based in which country?

- [A] UAE
- [B] Saudi Arabia
- [C] Russia
- [D] USA

Answer: UAE

Dubai-based Emaar becomes the first overseas company to invest in Kashmir. This is the first significant foreign direct investment in Jammu and Kashmir. Emaar will invest a total of ₹500 crore, including ₹250 crore for the mega-mall, and more to help set up IT towers in Jammu and Srinagar.

67. India signed a MoU with which institution during Global Millets Conference?

- [A] World Food Programme
- [B] World Bank
- [C] World Economic Forum
- [D] Asian Development Bank

Answer: World Food Programme

The Agriculture and Farmers Welfare Ministry signed a Memorandum of Understanding (MoU) with the World Food Programme (WFP) of the United Nations during the Global Millets Conference. MoU between WFP and the Government of India for cooperation between 2023-2027 was signed.

68. 'Accelerating the change to solve the water and sanitation crisis' is the theme of which day?

- [A] World Forest Day
- [B] World Water Day
- [C] World Earth Day
- [D] World Sanitation Day

Answer: World Water Day

World Water Day is observed on March 22. Its 2023 theme is "Accelerating the change to solve the water and sanitation crisis". It highlights the importance of fresh water. The day is used to advocate for the sustainable management of freshwater resources.

69. Persian New Year that is celebrated based on the Iranian Solar Hijri calendar is also called as?

- [A] Gudhi Padwa
- [B] Nowruz
- [C] Chettri Chandra
- [D] Shab-e Yalda

Answer: Nowruz

Nowruz is the Persian New Year that is celebrated based on the Iranian Solar Hijri calendar. It marks the



beginning of spring in the Southern Hemisphere. Gudhi Padwa is a spring-time festival celebrated by Marathi and Konkani Hindus. It marks the start of the traditional new year. Chetri Chandra is a festival that is celebrated by Sindhi Hindus to mark the beginning of the Lunar Hindu New Year.

70. What is the theme of 'World Happiness Day 2023'?

- [A] Happiness is the Key
- [B] Be Mindful. Be Grateful. Be Kind
- [C] Hello Happiness
- [D] Give and Get

Answer: Be Mindful. Be Grateful. Be Kind

On 20th March every year, the world celebrates World Happiness Day led by the United Nations. The UN Sustainable Development Solutions Network releases an annual report named World Happiness Report. According to the report, 'life evaluations have continued to be remarkably resilient'. The theme of this year's International Day of Happiness is 'Be Mindful. Be Grateful. Be Kind'.

71. What is the rank of India in the 'World Happiness Index 2023'?

- [A] 142
- [B] 137
- [C] 126
- [D] 121

Answer: 126

The United Nations has released its annual report ranking the happiest countries in the world. For six consecutive years, Finland has been declared the happiest country in the world. The Nordic region dominates the top three spots in the report, with Denmark and Iceland placing second and third respectively. India's rank has improved from 136 to 126 in this year.

72. Which country has introduced a new emergency alert service for its citizens?

- [A] China
- [B] UK
- [C] USA
- [D] New Zealand

Answer: UK

The British government has introduced a new emergency alert service for its citizens. The government has announced that a siren-like alert will be sent to mobile phone users across the UK next month. The service will be a part to test a new public warning system over life-threatening events such as severe weather events.

73. 'Euoplos dignitas', which was seen in the news, belongs to which species?

- [A] Spider
- [B] Turtle
- [C] Snake
- [D] Gecko

Answer: Spider

Euoplos dignitas is a new species of giant trapdoor spider. It was found by researchers in Queensland, Australia. The tarantula-like creature is a type of golden trapdoor spider belonging to the genus Euoplos.

74. Who is the founder of 'Arya Samaj' in India?

- [A] Annie Besant
- [B] Dayanand Saraswati
- [C] Aurobindo Ghosh
- [D] Sri Ramakrishna

Answer: Dayanand Saraswati



Maharishi Dayanand Saraswati is the founder of Arya Samaj. The Indian Government has decided to mark his 200th birth anniversary. Speaking at the 148th Foundation Day of Arya Samaj, Home Minister Amit Shah said that Maharshi Dayanand Saraswati fearlessly propagated "swadharma, swabhasha and swaraj" in the pre-independence era.

75. The Gorsam Kora festival is popularly known as the friendship festival between India and which country?

- [A] Nepal
- [B] Bangladesh
- [C] Myanmar
- [D] Bhutan

Answer: Bhutan

The Gorsam Kora festival is popularly known as the friendship festival between India and Bhutan. It was celebrated recently at the Gorsam Chorten Stupa in Zemithang – a village in Arunachal Pradesh.

76. Which state launched the 'Mukhyamantri Vriksh Sampada Yojana'?

- [A] Odisha
- [B] Chhattisgarh
- [C] West Bengal
- [D] Gujarat

Answer: Chhattisgarh

Chhattisgarh Chief Minister recently launched the Mukhyamantri Vriksh Sampada Yojana (Chief Minister Tree Wealth Scheme) on the occasion of World Forestry Day. Under this scheme, the state government will provide full subsidy for tree plantation on up to 5 acres of land and 50 percent financial subsidy on more than 5 acres.

77. Siniyah Island, which was seen in the news, is situated in which country?

- [A] Russia
- [B] China
- [C] UAE
- [D] Israel

Answer: UAE

Archaeologists have discovered the oldest pearl town in the Persian Gulf on the Siniyah Island of the United Arab Emirates. This island is situated in Umm al-Quwain, an emirate situated some 50 km northeast of Dubai. The discovery finds hundreds of homes dating as far as the region's pre-Islamic history in the late 6th century.

78. Abel Prize is conferred to recognise outstanding contributors of which field?

- [A] Architecture
- [B] Mathematics
- [C] Journalism
- [D] Sports

Answer: Mathematics

The Abel Prize is conferred every year by the King of Norway to recognize one or more outstanding mathematicians. The Abel Prize for mathematics was awarded to Argentine-American Luis Caffarelli, an expert in "partial differential equations" which can explain phenomena ranging from how water flows to population growth.

79. Which Indian armed force is organising the maritime awareness coastal motor car expedition "Sam No Varunah"?

- [A] Indian Air Force
- [B] Indian Army



- [C] Indian Navy
[D] Indian Coast Guard

Answer: Indian Navy

'Sam No Varunah' Coastal Car Rally will be organized by the Indian Navy and the Navy Welfare and Wellness Association (NWWA). The maritime awareness coastal motor car expedition "Sam No Varunah", planned over 25 days, will cover around 7,500 Km, passing through all coastal states. Mahindra Auto will be providing a fleet of 12 vehicles for the rally, with Indian Oil Corporation Ltd as fuel partner, and Mastercard India as a sponsor.

80. Which department launched the 'AIS for Taxpayer' Mobile App?

- [A] Income Tax Department
[B] Department of Expenditure
[C] Department of Revenue
[D] Department of Economic Affairs

Answer: Income Tax Department

'AIS for Taxpayer' Mobile App was launched recently by the Income Tax Department. This application allows taxpayers to view the information as available in the Annual Information Statement or Taxpayer Information Summary (TIS).

81. Asia's largest 4-meter International Liquid Mirror Telescope was launched in which state?

- [A] Uttarakhand
[B] Arunachal Pradesh
[C] Assam
[D] Sikkim

Answer: Uttarakhand

Asia's largest 4-meter International Liquid Mirror Telescope (ILMT) was launched recently at Devasthal in Uttarakhand. The ILMT was inaugurated recently in Aryabhata Research Institute of Observational Sciences. ILMT is the first liquid mirror telescope designed exclusively for astronomical observations and is the first optical survey telescope in India.

82. As per a recent study, which Poly-herbal Ayurvedic drug that was repurposed during the COVID-19, is found safe to use?

- [A] Ayush-4
[B] Ayush-8
[C] Ayush-16
[D] Ayush-64

Answer: Ayush-64

Poly-herbal Ayurvedic drug Ayush-64, which was repurposed during the COVID-19 pandemic, is used for treating illnesses such as influenza. A new study has recently found that the drug is efficacious, well-tolerated, and safe. The drug in combination with the standard of care, hastened recovery, reduced hospitalisation, and improved health among Covid-19 cases.

83. Researchers have found building blocks of RNA in materials from which asteroid?

- [A] Asteroid Bennu
[B] Asteroid Chariklo
[C] Asteroid Eros
[D] Asteroid Ryugu

Answer: Asteroid Ryugu

Researchers have found building blocks of RNA in just 10 milligrams of materials from asteroid Ryugu. This discovery confirms the hypothesis of life on Earth originating from outer space. Ryugu is a near-Earth object and a potentially hazardous asteroid of the Apollo group.



84. Nemateleotris Lavandula, which was discovered recently, belongs to which species?

- [A] Snake
- [B] Fish
- [C] Spider
- [D] Gecko

Answer: Fish

Nemateleotris lavandula is a new species of colourful dartfish found in the Pacific Ocean. It is similar to the Helfrich's dartfish. Nemateleotris is a small genus of dartfishes in the bony fish family Gobiidae. Members of the genus are small (less than 7 cm), brightly colored, elongate and moderately compressed fishes.

85. Seti River Hydropower Project is to be constructed in which country?

- [A] India
- [B] Nepal
- [C] Bangladesh
- [D] Sri Lanka

Answer: Nepal

450 MW Seti River-6 Hydropower Project is a proposed project that will be constructed in Doti and Achham districts of Nepal. Recently, NHPC Limited, India, has been permitted by Investment Board Nepal to study this project.

86. When is the 'World Meteorological Day' observed?

- [A] March 21
- [B] March 23
- [C] March 25
- [D] March 27

Answer: March 23

World Meteorological Day is observed on March 23. It marks the day when the Convention establishing the World Meteorological Organization came into force in 1950. The theme of the 'World Meteorological Day 2023' is 'the Future of Weather, Climate and Water across Generations'.

87. Which country conducts the multi-domain air-land exercise named 'Exercise Vayu Prahar'?

- [A] India
- [B] Sri Lanka
- [C] Bangladesh
- [D] Nepal

Answer: India

Exercise Vayu Prahar is a multi-domain air-land exercise conducted by the Indian Army and the IAF close to the Line of Actual Control. This exercise is part of the efforts taken to institutionalize the tactical-level jointness between the Indian defence forces.

88. Which state/UT passed the 'Mediapersons Protection Bill 2023'?

- [A] Gujarat
- [B] Chhattisgarh
- [C] Uttar Pradesh
- [D] West Bengal

Answer: Chhattisgarh

The Chhattisgarh Mediapersons Protection Bill 2023 was passed by the state assembly. Its aim is to give protection for media persons and prevent violence against them. The opposition MLAs demanded that the Bill be sent to the Select Committee of the Assembly for examination, which was rejected by Speaker Charandas Mahant.



89. Which institution released the 'Triple Threat Report'?

- [A] World Economic Forum
- [B] UNICEF
- [C] IMF
- [D] UNESCO

Answer: UNICEF

The 'Triple Threat Report' was released recently by the UNICEF. According to this report, the absence of monitoring of the WASH-related programmes, projects and policies are the main drivers of the water insecurities in the world's worst-impact countries.

90. Which procedure is used to fast-track financial business by grouping together undiscussed clauses of a bill for voting?

- [A] Guillotine Parliamentary Procedure
- [B] Georgian Parliamentary Procedure
- [C] Whip Parliamentary Procedure
- [D] Granted Parliamentary Procedure

Answer: Guillotine Parliamentary Procedure

Guillotine is a parliamentary procedure used to fast-track financial business by grouping together undiscussed clauses of a bill or resolution for voting. Several MPs have raised concerns recently that the government may guillotine the demands for grants and pass the Finance Bill without any discussions in the Lok Sabha.

91. Claude Lorius, who passed away recently, was associated with which field?

- [A] Economics
- [B] Climate science
- [C] Politics
- [D] Art

Answer: Climate science

Claude Lorius, the pioneer of the climate science, has recently passed away at the age of 91. His discoveries in Antarctica in the 1980s helped prove the role of anthropogenic activities in the global warming.

92. Which Union Ministry provides financial assistance for 'Workshed Scheme for Khadi Artisans'?

- [A] Ministry of Culture
- [B] Ministry of MSME
- [C] Ministry of Commerce and Industry
- [D] Ministry of Labour and Employment

Answer: Ministry of MSME

The 'Workshed Scheme for Khadi Artisans' provides a better working environment for Khadi artisans. It aims to provide storage space for raw material, implements, accessories, semi-finished, finished goods, etc. Ministry of MSME, through Khadi and Village Industries Commission (KVIC), provides financial assistance to artisans to construct workshed under 'Workshed Scheme for Khadi Artisans'.

93. Exercise Konkan 2023 is a bilateral maritime exercise between India and which country?

- [A] France
- [B] UK
- [C] Singapore
- [D] Iran

Answer: UK

Exercise Konkan 2023 is a bilateral maritime exercise between the UK's Royal Navy and the Indian Navy. It is held in March this year off the Konkan coast in the Arabian Sea. INS Trishul, a guided missile frigate



of the Indian Navy, and HMS Lancaster, a Type 23 guided missile frigate of the Royal Navy, participated in this edition of the exercise.

94. 'Gooty-Pendekallu Line' which was seen in the news, is a part of which railway link?

- [A] Hyderabad-Bengaluru railway link
- [B] Mumbai-Bengaluru railway link
- [C] Mumbai-Chennai railway link
- [D] Delhi-Jaipur railway link

Answer: Hyderabad-Bengaluru railway link

The Indian government has sanctioned a project for doubling of Gooty-Pendekallu section of the Hyderabad-Bengaluru railway link. This section is a major link for trains operating between the northern and southern parts of India. The estimated cost of the project is Rs 352 crore. The Gooty-Pendekallu section is essential in the Guntakal Division, which has frequent train traffic from Bengaluru to Hyderabad.

95. Which Union Ministry launched the 'DigiClaim' digitized claim settlement module?

- [A] Ministry of Personnel
- [B] Ministry of Agriculture and Farmers Welfare
- [C] Ministry of Home Affairs
- [D] Ministry of Corporate Affairs

Answer: Ministry of Agriculture and Farmers Welfare

Union Minister of Agriculture and Farmers Welfare recently launched the DigiClaim, the National Crop Insurance Portal's digitized claim settlement module, under the PMFBY. The newly launched module will benefit the farmers in 6 states by supporting the electronic disbursement of claims.

96. Which day is celebrated as 'Shaheed Diwas', to commemorate the anniversary of the execution of Sukhdev Thapar, Bhagat Singh and Shivaram Rajguru?

- [A] March 1
- [B] March 10
- [C] March 23
- [D] March 31

Answer: March 23

Shaheed Diwas, also known as Martyrs' Day, is observed on March 23 in India to pay homage to the martyrs who gave their lives for India's freedom. The day commemorates the anniversary of the execution of Sukhdev Thapar, Bhagat Singh and Shivaram Rajguru in 1931.

97. Which Article of the Indian constitution deals with the disqualification of MPs from Lok Sabha or Rajya Sabha?

- [A] Article 10
- [B] Article 20
- [C] Article 32
- [D] Article 102

Answer: Article 102

Article 102 deals with the disqualification of MPs from Lok Sabha or Rajya Sabha. It provides the list reasons behind the MP's disqualification. The notice issued by Lok Sabha Secretariat disqualifying Rahul Gandhi from M.P position mentions Article 102(1)(e) of the Indian Constitution and the Representation of People Act, 1951.

98. Which country launched the 'Agriculture Innovation Mission for Climate (AIM4C)' along with the US?

- [A] India
- [B] UAE



[C] Israel

[D] Sri Lanka

Answer: UAE

Agriculture Innovation Mission for Climate (AIM for Climate-AIM4C) was launched by the UAE and the US at Conference of Parties-26. India recently joined this grouping in 2023. AIM4C is a global partnership that aims to accelerate investment and support for climate-smart agriculture & food systems innovation.

99. Which city is the host of the 'Regional Conference on 'Drug Trafficking and National Security'?

[A] Chennai

[B] Pune

[C] Bengaluru

[D] Amritsar

Answer: Bengaluru

Regional Conference on 'Drug Trafficking and National Security' was recently held in Bengaluru. It was chaired by Union Home Minister Amit Shah. A Memorandum of Understanding was also signed between the Rashtriya Raksha University and the Government of Karnataka to open a new campus of the University at Shivamogga.

100. 'Gaj Utsav 2023' will be organized by the Indian Government to mark 30-year celebration of which project?

[A] Project Tiger

[B] Project Elephant

[C] Project Lion

[D] Project Great Indian Bustard

Answer: Project Elephant

Gaj Utsav 2023 will be organized by the Indian Government to mark 30-year celebration of Project Elephant. It will be inaugurated by President of India on April 7. Gaj Utsav 2023 will be held at Kaziranga National Park by the Union Ministry of Environment and Forest.

101. Which city is the host of 'G20 Chief Science Advisers' Roundtable'?

[A] Mumbai

[B] New Delhi

[C] Gandhi Nagar

[D] Bengaluru

Answer: New Delhi

G20 Chief Science Advisers' Roundtable (CSAR) is a government-to-government level initiative of the G20 Presidency that will be held in New Delhi in September this year. It will focus on the important topic of free and universal access to scientific journals.

102. Exostoma Dhritiae, a new species of catfish, has been discovered in which state/UT?

[A] Sikkim

[B] West Bengal

[C] Arunachal Pradesh

[D] Uttarakhand

Answer: Arunachal Pradesh

Exostoma Dhritiae is a newly discovered species of catfish. It was found by scientists of the Zoological Survey of India (ZSI) in Arunachal Pradesh. The new species has been named after Dhriti Banerjee, the first woman director of the ZSI, as a mark of honour for her contributions to research on the fauna of the country.

103. Which state/UT released the 'Tamil Nadu State Disaster Management Plan, 2023'?

[A] Kerala



- [B] Uttarakhand
[C] Gujarat
[D] Tamil Nadu

Answer: Tamil Nadu

Tamil Nadu Chief Minister M.K. Stalin released the Tamil Nadu State Disaster Management Plan, 2023. It lists out actions plans in case of various natural and human-made disasters – earthquake, cyclone, Tsunami, flood, urban flood, industrial and chemical disasters, biological and public health emergency, nuclear and radiological disasters and fire.

104. Which state passed a resolution to provide SC status for Dalit Christians?

- [A] Karnataka
[B] Andhra Pradesh
[C] Kerala
[D] Telangana

Answer: Andhra Pradesh

Andhra Pradesh passes resolution to provide Scheduled Caste (SC) status for Dalit Christians. Earlier, the Telangana Assembly passed a resolution on including the Boya or the Valmiki community in the Scheduled Tribes (ST) list.

105. What is the Securities Transaction Tax (STT) on futures and options contracts in the stock market?

- [A] 5 %
[B] 10 %
[C] 20 %
[D] 25 %

Answer: 25 %

The Government raised the Securities Transaction Tax (STT) on futures and options contracts in the stock market by 25%. The tax is raised with effect from April 1, 2023. This move may push some traders to offshore markets and dent trading volumes on the stock markets.

106. Hopi which was seen in the news, is an ethnic group of people living in which country?

- [A] Russia
[B] USA
[C] Italy
[D] Turkey

Answer: USA

Hopi are a Native American ethnic group who primarily live on the Hopi Reservation in north-eastern Arizona, United States. The Water and Heritage Shield was conferred recently by the International Committee On Monuments and Sites International Science Committee to Black Mesa Trust (BMT) – a Hopi grassroots organization.

107. Russia has planned to station its tactical nuclear weapons in which country?

- [A] Belarus
[B] Ukraine
[C] China
[D] Ecuador

Answer: Belarus

The tactical or non-strategic nuclear weapons are small explosives that are used to achieve specific tactical gains on the battlefield, instead of destroying large cities and causing widespread devastation. Russia is planning to station its tactical nuclear weapons in Belarus.

108. Which state/UT hosted the 'First Urban Climate Film Festival' in India?



- [A] New Delhi
- [B] Chennai
- [C] Pune
- [D] Mysuru

Answer: New Delhi

First Urban Climate Film Festival was organized by the National Institute of Urban Affairs in New Delhi. The event showcased 11 films from nine countries to showcase the consequences of climate change in urban life.

109. Which state/UT passed the 'Cow Service Commission Bill'?

- [A] Maharashtra
- [B] Madhya Pradesh
- [C] Gujarat
- [D] Assam

Answer: Maharashtra

The Maharashtra Cow Service Commission Bill was tabled at the State Assembly. Under this legislation, a 25-member commission will be set up to promote indigenous cows, bulls, bullocks and calves. According to the proposed bill, anyone found violating the norms set by the commission will be liable for a penalty of ten thousand rupees.

110. Mukundra Hills Tiger Reserve is located in which state/UT?

- [A] Rajasthan
- [B] Uttar Pradesh
- [C] Madhya Pradesh
- [D] Gujarat

Answer: Rajasthan

Mukundra Hills Tiger Reserve is situated in Rajasthan. One tigress will be introduced into this protected land. After Ranthambhore and Sariska, Mukundara Hills Tiger Reserve was declared as the 3rd sanctuary of the state.

111. Rudranksh Balasaheb Patil, who was seen in the news, is associated with which sports?

- [A] Cricket
- [B] Tennis
- [C] Shooting
- [D] Badminton

Answer: Shooting

India's Rudranksh Patil won a bronze medal in the 10m Air Rifle event in the 8th ISSF World Cup Shooting Championship at Bhopal. This is Rudraksh's second medal in this World Cup. He won a bronze medal in the mixed event, with his partner Narmada Raju.

112. The 'Earth Hour' event is a global annual initiative of which institution?

- [A] UNEP
- [B] World Wide Fund
- [C] UNICEF
- [D] IEA

Answer: World Wide Fund

Millions of people around the world observed the annual Earth Hour to raise awareness about climate change. The 'Earth Hour' event encourages individuals to turn off all lights and electrical appliances at their homes and offices for an hour to promote awareness about energy conservation. It is a global annual initiative of the World-Wide Fund for Nature.

113. Which city is the host of the 'First G20 Trade and Investment Working Group (TIWG) Meeting'?



- [A] New Delhi
- [B] Mumbai
- [C] Gandhi Nagar
- [D] Mysore

Answer: Mumbai

The First G20 Trade and Investment Working Group (TIWG) Meeting is set to be held in Mumbai from March 28 to 30 this year. The three-day event will witness the attendance of over 100 delegates from G20 member states, invitee countries regional groupings and international organizations.

114. Which country has provided 'Challenger 2 tanks' to Ukraine recently?

- [A] UK
- [B] USA
- [C] India
- [D] Israel

Answer: UK

UK has supplied Challenger 2 main battle tanks have arrived in Ukraine and will begin combat missions. The UK promised 14 of the vehicles to Ukraine, a move which helped persuade other Western nations to supply their own tanks. These tanks are capable of using depleted uranium shells as ammunition.

115. Which Union Ministry implements the 'MSE- Cluster Development Programme'?

- [A] Ministry of MSME
- [B] Ministry of Housing and Urban Affairs
- [C] Ministry of Rural Development
- [D] Ministry of Tourism

Answer: Ministry of MSME

The Micro and Small Enterprises – Cluster Development Programme (MSE-CDP) is being implemented by the Union MSME Ministry across India. Its objective is to improve the productivity and competitiveness of the MSEs and ensure their holistic development via financial aid for establishing Common Facility Centres (CFCs) and for establishing new or up-gradation of existing Industrial Areas or Estates among others.

116. Which institution released the "How is India Adapting to Heatwaves?" report?

- [A] NITI Aayog
- [B] Centre for Policy Research
- [C] IEA
- [D] UNEP

Answer: Centre for Policy Research

The Centre for Policy Research (CPR) released a report analysing all 37 heat action plans (HAPs) across 18 states to evaluate how policy action is keeping up with the warming weather in India. It finds that heat action plans in India are not only poorly funded but have a weak legal framework.

117. Mahim Fort, which was seen in the news, is located in which state/UT?

- [A] Maharashtra
- [B] New Delhi
- [C] Gujarat
- [D] Karnataka

Answer: Maharashtra

Mahim Fort is situated in the Mahim Bay in Mumbai, Maharashtra. This 800-year-old fort is currently being developed by the Brihanmumbai Municipal Corporation (BMC) as a tourist destination. As per BMC, the descendants of King Bimbdev, who established his kingdom Mahikawati in 'Aparant' or north Konkan belt of Maharashtra, built the fort between 1140 and 1241.



118. Kota was the last New Guinea singing dog of which country?

- [A] UK
- [B] India
- [C] USA
- [D] Australia

Answer: UK

New Guinea singing dog is a species found in New Guinea Highlands. UK's last New Guinea singing dog, named Kota, recently died in Exmoor Zoological Park. The singing dog has died at the age of 15. The dogs get their name from their unique howl, which has been compared to both the song of the humpback whale and a yodel.

119. Which team won the inaugural Women's Premier League trophy in 2023?

- [A] Delhi Capitals
- [B] Mumbai Indians
- [C] UP Warriorz
- [D] Gujarat Giants

Answer: Mumbai Indians

Mumbai Indians have won the inaugural Women's Premier League. They defeated Delhi Capitals by seven wickets in the Summit Clash in Mumbai. Chasing a target of 132 runs, Mumbai Indians surpassed the score, posting 134 for 3 in 19.3 overs. For Mumbai, Nat Sciver-Brunt was the highest scorer who remained not out at 60.

120. Which Union Ministry implements the 'National Plan for Conservation of Aquatic Eco-systems' (NPCA)?

- [A] Ministry of Environment, Forest & Climate Change
- [B] Ministry of Home Affairs
- [C] Ministry of Power
- [D] Ministry of Tourism

Answer: Ministry of Environment, Forest & Climate Change

Ministry of Environment, Forest & Climate Change (MoEF&CC) provided financial assistance to the States/Union Territories under National Wetlands Conservation Programme (NWCP) and National Lake Conservation Plan (NLCP). NWCP and NLCP have been merged into a centrally sponsored scheme namely 'National Plan for Conservation of Aquatic Eco-systems' (NPCA) in 2013.

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