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WEEKLY 8th to 14th March 2023 ffairs urrent/

UPSC / RPSC

and AU Other Competitive EXAMS



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MRSAM The PTO Shaft Technology





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Current Affairs 08-03-2023 to 14-03-2023

lithium:

Lithium is a highly reactive and flammable soft, silvery-white metal belonging to the alkali metal group of elements. It has a variety of industrial and medicinal applications, making it a highly valuable element.

uses of lithium

Lithium is commonly used in rechargeable batteries for electronic devices and electric vehicles (EVs). It is preferred over other metals because of its high energy density, low self-discharge and long cycle life. Lithium batteries are also lightweight, making them ideal for portable electronic devices.

Besides its use in batteries, lithium also has medicinal applications. It is used in the treatment of bipolar disorder and other mental illnesses. Lithium helps to stabilize mood swings and prevent manic episodes in people with bipolar disorder. In addition, it has been found to have neuroprotective effects and is being studied for its potential in treating neurodegenerative diseases such as Alzheimer's.

Lithium also has many industrial applications. It is used in the production of ceramics, glass and lubricants. It is also used in air conditioning systems, as it has a high heat transfer coefficient and can help improve energy efficiency.

lithium deposits

The largest reserves of lithium are in Bolivia, Argentina, Chile, Australia and China. Recently, Iran has claimed to have discovered lithium deposits in the western province of Hamedan. About 8.5 million metric tons of lithium ore is found in it. In India, potential 5.9 million tonnes of lithium reserves were recently reported in the Reasi district of Jammu and Kashmir.

Where is the Rijksmuseum?

The Rijksmuseum is the national museum of the Netherlands. It is dedicated to Dutch art and history. It is located in Museum Square, adjacent to the Van Gogh Museum in Amsterdam. It was founded on November 19, 1798 in The Hague. It was moved to Amsterdam in 1808.

Rijksmuseum Why in the news?

The Night Watch in the Rijksmuseum is a famous painting by Rembrandt - a Dutch Golden Age painter. Members affiliated with climate activist group Extinction Rebellion protest close to the famous painting in Amsterdam to protest the Rijksmuseum's partnership with airline KLM and bank ING.

Another notable development is the recent exhibition on slavery. The event includes exhibits such as the 'tronco' (a wooden plank brace used to restrain slaves) from the Netherlands, collars, etc.

What's so special about the Rijksmuseum?

The museum is famous for its masterpieces such as The Milkmaid, Self Portrait of Van Gogh, Rembrandt's Night Watch, The Merry Family etc. It means State Museum in English. The museum was established in 1798. The museum displays over 8,000 artifacts. It houses a collection of over 1 million objects belonging to the centuries 1200–2000.

The Rijksmuseum was inspired by the French museum, the Louvre. Rijksmuseum and Creative Commons Universal License. The museum made 125,000 images available for download. The number is increasing every year. The museum is increasing its numbers every year. The goal of one million images has been set! These images are available for download under a Creative Commons 1.0 Universe license. What does this mean? Anyone can use the images with this license. If any author has the patent right of his painting, you cannot download or use that painting as wallpaper also. However, images with a Creative Commons 1.0 Universal License can be downloaded and used for personal purposes.

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World Obesity Atlas 2023

The World Obesity Federation has released a report "World Obesity Atlas 2023". This report predicted a significant increase in obesity rates among children and adults in Africa, with a rise of 14% from 5% in child obesity rates and 31% from 18% in adult women by 2035. The report also warned that over half the world's population could be overweight or obese by 2035, with childhood obesity predicted to more than double.

What is the report saying?

The highest increases in obesity rates were found in low- and lower-middle-income countries in Africa and Asia. The report called for urgent and coordinated action to prevent and treat obesity and support those affected.

World Obesity Day

World Obesity Day is observed every year on March 4th. This year, the awareness-creating event was organized on the theme of "Changing Perspectives: Let's Talk About Obesity."

Obesity in India

According to the National Family Health Survey – 4, obesity in the country doubled within ten years.

Who are obese?

According to the Ministry of Health and Family Welfare, people with a Body Mass Index of 25 kg more than 25 kg per square metre are obese. Around 30% of the population in the state of AP, Andaman, and Sikkim are obese. In the states of Bihar, Meghalaya, MP, West Bengal, and Tripura, obesity has been doubling.

What is Structural Transformation?

Structural transformation in economics is the shift in labour force from agriculture to high-productivity sectors like manufacturing and modern services. It is a compositional shift caused by the transfer of surplus labour from the farms to better-paying sectors. It is expected to result in increased productivity and higher incomes.

Why is Structural Transformation in News?

The recently released annual Periodic Labour Force Survey (PLFS) report for 2021-22 shows that the farm sector still employs a significant proportion of the labour force in India, at 45.5%. Although this figure has decreased slightly from 46.5% in 2020-21, it is still higher than the 2018-19 low of 42.5%. This indicates that the economic disruptions caused by the pandemic, which led to a migration back to the farms, have not yet been fully resolved. Notably, the structural transformation has been slowing down since 2011-12.

What is the Structural Transformation that occurred in India in 1991?

Liberalization, Privatization, and Globalization. This structural transformation was brought in under the New Economic Policy that was launched in 1991. Mr PV Narasimha Rao was the then PM and Dr Manmohan Singh was the then Finance Minister. The main aim of this structural transformation was to make India more market-oriented, reduce the inflation rate, increase the growth rate of the economy, increase the flow of economic goods in the country, etc.

Advanced Towed Artillery Gun System

The Indian Army has proposed the acquisition of an indigenous Advanced Towed Artillery Gun System (ATAGS) to fill critical capability gaps in high-altitude regions. The proposal is expected to be approved by the Ministry of Defence, after which orders can be placed for 310 towed guns.

Who developed the Advanced Towed Artillery Gun System?

The ATAGS has been designed by the Defense Research and Development Organization (DRDO) to replace the current 155 mm artillery system in service, the Bofors towed guns. This howitzer (i.e. artillery weapon that fires shells over relatively shorter distances) has undergone extensive testing by the army in various terrains and has been declared fit for

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induction. It's manufactured by Bharat Forge and Tata Defence and Aerospace. Its acquisition could significantly enhance the Indian Army's capabilities.

What is Advanced Towed Artillery Gun System?

The ATAGS is a Towed Howitzer. The towed howitzer falls between cannon and a mortar. It weighs 18 tonnes. It can be elevated to 75 degrees. It can fire five rounds in 60 seconds. The firing range of ATAGS is 48.074 km. The ATAGS was first displayed at the 2017 republic day celebrations.

Integrated Teacher Education Programme (ITEP)

The National Council for Teacher Education (NCTE) has launched the Integrated Teacher Education Programme (ITEP) in 57 Teacher Education Institutions (TEIs) throughout India. This flagship initiative is launched under NEP 2020. It was notified in 2021. It offers a 4-year dual-major undergraduate degree program, preparing teachers for the 4 stages of the new school structure i.e. the 5+3+3+4 structure of foundational, preparatory, middle and secondary schooling.

What is ITEP?

The ITEP aims to provide cutting-edge pedagogy, foundational literacy and numeracy, early childhood care and education, inclusive education, and an understanding of India's values, ethos, art, and traditions, among other things. Prospective teachers passing out of this course will be equipped with 21st-century global standards to shape the future of New India. The course will save students one year by completing it in 4 years instead of 5.

Benefits of ITEP

It will provide cutting-edge pedagogy. This means it will provide the latest technologies used in teaching methods and teaching practices. Also, it will establish foundational literacy and aid in Early Childhood Care and Education. (ECCE)

Nasha Mukt Bharat Abhiyaan

The Ministry of Social Justice & Empowerment's flagship program, Nasha Mukt Bharat Abhiyaan (NMBA), aims to raise awareness about substance abuse among youth in India, with a particular focus on higher education institutes, university campuses, schools, and community engagement. Recently, the Department of Social Justice and Empowerment and Brahma Kumaris inked a Memorandum of Understanding to make NMBA more effective and widespread.

What is Nasha Mukt Bharat Abhiyan?

The program, started in 2020 by the Ministry of Social Justice and Empowerment, was started with a target of 272 of the most vulnerable districts. It has now reached over 9.50 crore people, including 3.10 crore young individuals, in 372 districts across the country, and over 3 lakh educational institutions. The NMBA has conducted various activities emphasizing the dangers of drug addiction. The program also prioritizes community involvement to promote a sense of responsibility in tackling substance abuse and promote a healthy, productive society.

What is Bahu Balli?

A major feat has been achieved towards India's Aatmanirbhar Bharat initiative with the installation of the world's first 200-meter-long Bamboo Crash Barrier, named "Bahu Balli," on the Vani-Warora Highway in Vidarbha, Maharashtra. It has also been accredited by the Indian Road Congress and provides an eco-friendly alternative to steel barriers with higher recycling value. With this, India becomes the 1st country to develop an environmentally friendly crash barrier.

How was Bahu Balli created?

The bamboo species used to build Bahu Balli is Bambusa Balcoa. The bamboo was treated with creosote oil and coated with recycled High-Density Poly Ethylene (HDPE). The barrier underwent rigorous testing at various government-run

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institutions and was rated Class 1 during the Fire Rating Test conducted at the Central Building Research Institute (CBRI) in Roorkee.

What is BrahMos Missile?

The BrahMos missile is a type of supersonic cruise missile that can be launched from various platforms like submarines, ships, aeroplanes, or land. It is currently the fastest supersonic missile in the world and was developed by a partnership between India's Defence Research and Development Organisation (DRDO) and Russia's NPO Mashinostroyeniya, forming BrahMos Aerospace. The missile is named after two rivers, the Brahmaputra in India and the Moskva in Russia.

Why is the Brahmos missile in News?

Recently, the Indian Navy successfully test-fired the ship-launched version of the BrahMos missile. The missile test was conducted using an indigenous seeker and booster in the Arabian Sea. Notably, its anti-ship version was jointly test-fired by the Andaman and Nicobar Command and the Navy in April 2022.

Cruise missiles are guided missiles. This means the path of the missile can be changed during its flight. Based on speed the missiles are categorised as supersonic, hypersonic, and subsonic. Supersonic missiles are those missiles that fly at 2-3 Mach speed. Hypersonic missiles fly at 5 Mach speed and subsonic missiles fly at 0.8 Mach speed.

What is Millets Giveaway?

The Small Farmers' Agri-Business Consortium, a society promoted by the Ministry of Agriculture and Farmers Welfare of the Indian government, has launched a special marketing campaign called Millets Giveaway. The campaign is aimed at promoting direct purchases from small and marginal farmer producer organisations (FPOs) to support their livelihoods.

What is Millets Giveaway?

The Millets Giveaway campaign encourages citizens to purchase millets directly from FPOs through ONDC's My Store, a marketplace built for Indian sellers. Millets are the primary focus of the campaign, motivating more people to adopt these grains in their diet. This is a part of the nationwide and also the worldwide drive to promote these nutri-cereals in the International Year of Millets 2023.

IMPORTANT POINTS:

- India to send 20,000 MT of wheat to Afghanistan via Chabahar: Ministry of External Affairs
- Dr Manik Saha to be sworn-in as the Chief Minister of Tripura.
- Second Meeting of Global Partnership for Financial Inclusion concludes in Hyderabad.
- Final day of Jan Aushadhi Diwas celebrated as Aao Jan Aushadhi Mitra Banein.
- Union Minister Hardeep Singh Puri launches Swachhotsav under Swachh Bharat Mission Urban 2.0'.
- Nagaland's first woman Minister Salhoutuonuo Kruse assumes office on Women's Day eve.
- BSE & UN Women India launches a new programme 'FinEMPOWER', at Bombay Stock Exchange
- Adani Power has amalgamated its six subsidiaries with itself after receiving NCLT nod.
- Power Grid Corporation of India has approved two transmission projects worth ₹4,070.98 crore.
- UN: Damage from catastrophic earthquake that struck Türkiye and Syria has been estimated at over 100 billion
- International Women's Day is being celebrated on the theme of "DigitALL: Innovation and technology for gender equality".
- India and Ethiopia are set to finalize stalled agreements on visa waiver and sister-city projects.
- Hockey India (HI) announced a new programme to unearth talent and improve the bench strength.

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- India's Ankita Raina-Prarthana Thombare enter doubles quarter-finals in ITF Women's Open.
- Novak Djokovic withdraws from Indian Wells amid US visa row.

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Where is Yellowstone National Park?

Yellowstone National Park in the US, which celebrated its 151st anniversary recently, is considered the first national park in the world. The park, spanning over 9,000 sq km across Wyoming, Montana, and Idaho, was established by the US Congress in 1872 with the Yellowstone National Park Protection Act.

Yellowstone National Park is famed for its scenic beauty and diverse wildlife, including grizzly bears, wolves, and endangered bison and elk. The Old Faithful geyser is one of its most notable geothermal features. However, this national park was established after the displacement of Native American communities who had been hunting and gathering in the area for over 11,000 years before the government took over.

Physical Features of Yellowstone National Park

The Yellow Stone National Park region was created due to tectonic activities like earthquakes and volcanoes. It also has erosional actions like ice and water. The park has fossil forests, obsidian mountains, lava flows, and odd unique erosion forms. Obsidian are igneous rocks that are formed due to the rapid cooling of the lava from volcanoes.

What is Nexletol?

New research has shown that Nexletol, a different type of cholesterol-lowering drug, may be a viable option for people who are unable to take statins due to side effects. Nexletol, also known as bempedoic acid, was previously prescribed to be used alongside statins. The study is the first to show that Nexletol alone can reduce the risk of cholesterol-caused health problems.

How does Nexletol work?

Nexletol prevents the accumulation of cholesterol in the liver. Statin does the same. However, the difference is that statins cause muscle side effects while Nexletol doesn't. The patients treated with Nexletol had a 13% lower risk of cardiac problems.

What does Nexletol do?

Nexletol reduces the risk of heart attacks. Bad cholesterol leads to heart attacks blocking the arteries. The drug does this by blocking an enzyme called Adenosine triphosphate citrate lyase in the liver. This enzyme is the key to producing cholesterol.

About Nexletol

The scientific name of Nexletol is Bempedoic acid. It was first approved in the US in 2020. It is a first-in-class medication.

Nexletol is a first-in-class medication

The drugs that use a "New and Unique Mechanism of action" are categorised as first-in-class drugs. It is not a regulatory category. The list of these drugs is created and maintained by FDA.

Women, Business and the Law Index

According to the recently released Women, Business and the Law Index by the World Bank, although most countries have implemented laws to ensure gender equality, there is still a significant gap between men and women in terms of legal rights and provisions. The report revealed that the global pace of reforms towards gender equality has fallen to a 20-year low.

What is Women, Business and the Law Index?

The Women, Business and the Law Index rates laws and regulations related to women in 190 countries. The assessment encompasses 8 areas concerning women's economic participation. These are mobility, workplace, pay, marriage, parenthood, entrepreneurship, assets and pensions.

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India scored 74.4 out of a total possible 100. Unfortunately, India's score was less than that of other countries such as Ghana, Zimbabwe, Nepal, and Congo. While this is higher than the South Asian region's average of 63.7, it is lower than Nepal's 80.6. The index covered a total of 190 economies. Of these only 14 scored 100. They were Sweden, Spain, Luxembourg, Latvia, Canada, Belgium, France, Denmark, Germany, Iceland, Greece, Ireland, Netherlands, Portugal, etc. As you can see they are all European countries except for Canada.

Highest Growth

Good growth was witnessed in MENA countries. MENA countries are the Middle East and North African countries. The MENA countries that witnessed good growth were Congo, Nepal, Zimbabwe, and Ghana.

Report on the current status of women

Only 77% of the women in the world enjoy legal rights. Around 2.4 billion women in the world are living in countries that do not grant equal legal rights as that men.

Report on India

According to the report, India is lagging behind in terms of gender equality due to the laws on pay, inheritance, and property rights. India's score was higher that the South Asian region's average, which was 63.7. India's score was lower than Nepal which scored 80.6.

What is Plasticosis?

Scientists from Australia and the UK have discovered a new fibrotic disease called "Plasticosis" in birds. This disease is caused by the consumption of plastics, which leads to long-term inflammation and the formation of scar tissue in the digestive system of birds. The study noted that the birds had consumed some 12.5% of their body weight in plastics.

The study found that plastic consumption can cause serious damage to the digestive system of birds, making them more vulnerable to infections and parasites, and affecting their ability to digest food and absorb some vitamins. Plasticosis can lead to the gradual breakdown of important glands in the proventriculus, which can have severe consequences for the health of birds.

When birds consume plastics, tiny shards get lodged in the digestive tracts of the birds. Slowly, the connective tissue replaces the parenchymal tissue. The rate of replacement proliferates rapidly. This leads to tissue remodelling. Eventually permanent scaring occurs in the tissue. According to the researchers, the number of plastics ingested by birds and animals is higher than those ingested by humans.

Plastiscosis may lead to the breakdown of the tubular glands. Eventually, the birds will lose their immunity to fight against the parasites.

Why the name Plasticosis?

The disease is similar to the other fibrotic diseases like silicosis and asbestosis. Silicosis occurs in the lungs due to the long-term inhaling of silica dust. Asbestosis is also a lung disease that is caused due to the breathing of asbestos particles. While plasticosis was reported in birds, silicosis and asbestosis were reported in humans.

What is Chernobyl Exclusion Zone?

The Chernobyl Exclusion Zone is a designated area around the site of the Chernobyl nuclear reactor disaster. It was established by the Soviet Armed Forces after the 1986 disaster and was initially a 30 km radius area. The zone's borders have been expanded since then, covering a larger area of Ukraine, and it shares a border with the Polesie State Radioecological Reserve in Belarus. Over the years, the site has turned into a safe haven for wildlife, such as wolves, wild horses and bison.

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Why is Chernobyl Exclusion Zone in News?

Scientists studying stray dogs living near the Chernobyl exclusion zone have found that radiation exposure may have altered their genetic makeup. The genetic composition of canine populations exposed to various levels of radiation was also found to differ from each other. These dogs are believed to have descended from pets abandoned after the nuclear disaster in 1986. Such studies into the effect of radiation on the genetic makeup of large mammals would help rehabitation planning.

Setup of the Chernobyl Exclusion Zone

The zone was split into three zones. They were the black zone, the red zone, and the blue zone. The black zone is the part where evacuees would not return. Red Zone is the part where the evacuees may return after the radiation levels are normalised. The blue zone is the part where the pregnant women can return. Later, in 1989, the safe living concept was adopted with the assistance received from the International Atomic Energy Agency.

Chernobyl Exclusive Zone at Ukraine War

The zone was captured by the Russian forces during the Ukraine invasion in 2022. According to Ukraine, the radiation levels increased after the invasion. The International Energy Agency is currently unable to get access to the plant.

What is Chernobyl Nuclear reactor disaster?

It occurred in 1986. This nuclear reactor disaster is one of the two nuclear accidents that are rated at 7. The other one is the Fukushima Nuclear Disaster in Japan. The rating is provided by the International Nuclear Event Scale of the International Atomic Energy Agency. The highest level of the nuclear accident is rated 7 and the lowest is rated 0.

What is SWAMIH Investment Fund?

The SWAMIH Investment Fund is a social impact fund designed to provide debt financing for completing stalled, brownfield, and RERA-registered residential projects. Managed by SBICAP Ventures Ltd., a State Bank Group company, the Fund is sponsored by the Union Ministry of Finance. It was launched in 2019.

SWAMIH is regarded as the lender of last resort for distressed projects, including those with litigation issues or troubled histories. The Fund has provided final approval to nearly 130 projects worth around Rs 12,000 crore and has raised Rs 15,530 crore to date. It has completed 20,557 homes and aims to complete over 81,000 homes in the next three years across 30 tier 1 and 2 cities. One of the biggest projects completed using SWAMIH is the Rivali Park residential project in Mumbai. The Fund has contributed to the growth of ancillary industries in the real estate and infrastructure sectors by unlocking liquidity of over Rs. 35,000 crores.

What is SWAMIH Investment Fund?

The established developers with stalled projects and non-performing assets are identified. The fund provides financial support to these projects. This includes projects that are facing litigation issues and also those projects that are facing customer complaints.

How does the SWAMIH Investment Fun work?

It provides capital for the completion of a project. The financial assistance is provided in the form of non-convertible debentures. Non-convertible debentures are instruments with which corporates and other private entities may raise funds. The main criterion is that the fund shall be used only by projects that are RERA registered.

IMPORTANT POINTS:

- Election Commission will host the 3rd International Conference on the theme 'Inclusive Elections and Elections Integrity'.
- India pavilion at 'Middle east energy 2023' showcases electrical equipment and other power devices.

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- Ministry of Information and Broadcasting inaugurated a multimedia exhibition on the theme of 'Women Empowerment' on the occasion of Women's Day.
- Governor R.N. Ravi returns Tamil Nadu Prohibition of Online Gambling and Regulation of Online Games Bill, that bans online gambling.
- Indian Navy's major Operational level exercise TROPEX 2023, conducted across the expanse of IOR culminated in the Arabian Sea.
- Government says that Prevention of Money Laundering Act, 2002 will apply to trade in cryptocurrencies or virtual
- Centre directs NAFED, NCCF for immediate intervention in market for purchase of red onion.
- Maharashtra economic survey reveals 6.8% growth in State; highest growth of 10.2 percent was projected in agricultural and allied sector.
- SEBI: Investors must link PAN to Aadhaar by March 31
- Colombia has opened military service to women for the first time in 25 years.
- Arun Subramanian becomes first Indian-American to be Judge of Manhattan Federal District Court in New York
- At least 18 people killed and over 100 people were injured in an explosion in Bangladesh capital Dhaka
- Australian Prime Minister Anthony Albanese arrived on a two-day visit to Gujarat.
- UN: Afghanistan is world's most repressive country for women.
- BWF German Open: India's Lakshya Sen, Tasnim Mir lose in first round

What is Compensatory Afforestation?

Compensatory afforestation is a program implemented in India to ensure that forest land diversion for non-forest purposes, such as industrial or infrastructure development, is accompanied by afforestation on an equal area of land. Under this program, project developers are required to fund afforestation activities on new lands, and also pay for the Net Present Value (NPV) of the forests being cleared. The newly afforested land may not immediately provide the range of goods and services that the diverted forests were providing. However, this program ensures that newer parcels of land are earmarked for development as forests, contributing to the country's forest cover.

Why is Compensation Afforestation in News?

According to the Compensatory Afforestation Fund Management and Planning Authority (CAMPA), 45 per cent of funds allocated by the Central Government for compulsory afforestation between 2017 and 2022 have not been utilized by Kerala. The state government's target for each year's plantation has also not been met. Also recently, the Environment Ministry decided to promote ACA or accredited compensatory afforestation which is a proactive afforestation system. In this system, afforestation of non-forest land in advance can be used to get prior approval under Section 2 of the 1980 Forest Conservation Act.

Compensation Afforestation at the global level

According to Global Forest Watch, compensatory afforestation increased by 5.4% between 2001 and 2018. Unfortunately, the increase was due to deforestation. The concept was initiated in China in 1999. It exists in USA, Australia, and UK as well.

India was the first country to adopt Compensation Afforestation. The concept of compensation afforestation in the world started in India. India launched the concept through its Forest conservation act of 1980. The Supreme Court of the country was unsatisfied with the provisions of the act. For this reason, CAMPA was created in 2002.

What is One Nation, One Challan Initiative?

The One Nation, One Challan initiative aims to integrate all related agencies such as traffic police and Regional Transport Offices (RTO) on a single platform for the seamless collection of traffic fines and data transfer.

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Why is the One Nation One Challan initiative in news?

Recently, the state government of Gujarat told the HC during a PIL hearing that was seeking the setting up of virtual traffic courts and that it is already in the process of establishing these courts under the 'One Nation One Challan' initiative.

What is the One Nation One Challan initiative?

The One Nation, One Challan initiative, launched by the Ministry of Road Transport and Highways, seeks to create a system that can detect traffic violations through the CCTV network and generate e-challans with relevant penalty amounts, which are sent to the mobile number linked with the erring vehicle. It is to integrate data from apps like VAHAN and SARATHI. It also seeks to create virtual traffic courts that eliminate the presence of litigants in court.

Role of VAHAN and SARATHI Apps in the initiative

The Ministry of Road Transport is planning on bringing all the agencies such as RTO and traffic police under one platform. This will help in easy collection of challans. The integrated system will use applications like VAHAN and SARATHI to retrieve information.

The Vahan App was created under the National Transport Project to aid RTO in vehicle registration, taxation, permit, and enforcement. SARATHI app was created under Digital India. This app helps people to complete the work related to licenses digitally.

What is Whiskey Fungus?

Whiskey fungus, also known as Baudoinia compniacensis, is a black, sooty fungus that grows in the vicinity of bakeries and distilleries around the globe. This fungus thrives on the alcoholic vapours that evaporate from whiskey casks during maturation. Usually, a small portion (up to 2%/ year) of the spirit evaporates into the atmosphere and this is called the 'angel's share'. It is on this angel's share that these fungi thrive. It tends to cover outdoor surfaces, including cars, homes, and trees, which can adversely affect the value of properties. Although research has not shown any health risks from exposure to the fungus, it can damage trees and properties. Cleaning the fungus from affected surfaces can be a difficult and costly task as they form thick coatings.

It is black in colour. The fungus is common in tree barks and leaves. It does not harm plants and usually develops on new leaves. It is common in distilleries and spirit maturation facilities. The fungus is a sac fungus. The sac is the reproductive feature of the fungus.

What is the connection between Whiskey Fungus and alcohol?

The fungus gains its carbon nutrition from ethanol. The ethanol accelerates the growth of the fungus. Also, it stimulates its spore germination. The ethanol also helps the fungus to stay protected from high heat. The fungus creates a thick wall using ethanol vapour. The wall protects the fungus from extreme heat.

Why is Whiskey Fungus in news?

A local court in Lincoln County in Tennessee stopped the construction of a new barrel warehouse for Jack Daniel's – the biggest-selling brand of American whiskey in the world. This order came after a resident sued the company due to the uncontrollable spread of the whiskey fungus. Lincoln county is located in the North Carolina of US.

What is Mission Har Payment Digital?

The Reserve Bank of India (RBI) has launched a new mission called "Har Payment Digital" as part of its efforts to make every Indian a user of digital payments. The initiative was launched during Digital Payments Awareness Week and aims to reinforce the ease and convenience of digital payments, while also onboarding new users. Also, the central bank has started an initiative to adopt 75 villages and transform them into digital payment-enabled villages. These villages are to be adopted by payment system operators.

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Who are the promoters of Mission Har Payment Digital?

Banks and payment system operators will promote the Har Payment Digital campaign and highlight the various payment channels available. The RBI's Regional Offices will also promote the acceptance and use of digital payments through the Jan Bhagidari activities as part of this initiative.

When was Mission Har Payment Digital launched?

During "Digital Payments Awareness Week". The week was celebrated by RBI between March 6, 2023, and March 12, 2023. The main objective of the celebration is to make every citizen in the country a user of digital payment. The theme of 2023 Digital Payment Awareness Week was "Adopt Digital Payment and also teach others".

What are Great Indian Bustards?

The Great Indian Bustard is one of the heaviest flying birds in the world. It is native to the Indian subcontinent. The species is critically endangered due to habitat loss, hunting, and other human activities. Conservation efforts are underway to protect the bird and prevent it from becoming extinct. These include habitat restoration, captive breeding, and education campaigns to raise awareness.

Why are Great Indian Bustards in News?

The Draft Central Electricity Authority (Construction of Electric Lines in Great Indian Bustard Area) Regulations, 2023 was issued recently by the Central Electricity Authority to bring all-electric lines of 33 kV and below passing via the Great Indian Bustard Area underground while those above 33 kV will be overhead lines with bird flight diverts. However, petitioners are claiming that these regulations are in direct violation of the Supreme Court's order regarding this endangered species. The Court had directed that all electricity lines passing through the species' habitat must be underground.

How are the Great Indian Bustards affected by the Electric lines?

The Great Indian Bustards are the heaviest flying birds. They weigh around 15 kg and grow to a height of 1.2 metres. Their body size makes it difficult to notice the electric lines. They have frontal vision and therefore are dying due to collisions with these electric lines. Only 150 birds are left.

Where are Great Indian Bustards in India?

Today the last remaining 150 Great Indian Bustards are in the Thar desert and the Kutch desert. Centre is planning to develop solar projects of 39,000 MW in these regions. The overhead lines are for this purpose. But due to the concerns raised by the environmentalists, the SC ordered low-voltage power lines in the priority zones where the birds are living.

What is Worm Moon?

The final full moon of the winter season, called the Worm Moon, was visible on March 6 and 7. Each year, the timing varies between late February to late March. The name of this full moon is derived from the time it appears in the year when winter subsides in the Northern hemisphere, leading to the earthworms emerging from the ground as the soil softens.

Association of Worm moon with weather events

Tribes named each full moon after the weather events occurring during that time. March's full moon is also referred to as the Sap Moon since it is when the sap of sugar maples starts flowing, and as the crow, crust, and sugar moon.

Is Worm moon a supermoon?

No. Supermoons occur when the moon is the closest to the earth. In 2023, there will be four supermoons. And they will occur during the months of July, August, and September. The August Super moon will be a blue moon. When the moon appears bluish due to the dust particles in the atmosphere, it is called a blue moon. Blue moons are rare and occur once

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in two to three years. The last blue moon occurred in 2021 and was due to volcanic eruptions. In 1950-51, a blue moon occurred due to forest fires.

Festivals associated with worm moon

In India, Holi is celebrated during the worm moon. Jews celebrate the Purim festival during the worm moon period. The festival is celebrated to mark the salvation of the Jews who escaped the plot of killing in Persia. In Europe, the fasting period before easter begins on worm moon and they call it the LENTEN MOON. Buddhists in Laos, Thailand, Cambodia, and Thailand celebrate Magha Puja on worm moons. It is celebrated to mark a gathering of Lord Buddha and his disciples.

What is International Big Cat Alliance?

India has proposed the creation of a new global alliance called the International Big Cat Alliance (IBCA) to protect seven major big cats, namely- tiger, lion, leopard, snow leopard, puma, jaguar and cheetah. The IBCA will be open to 97 countries and organizations interested in protecting these animals.

What is India's plan for International Big Cat Alliance?

India has committed to providing funding of 100 million USD over 5 years to support the IBCA. After five years, the alliance will be supported by membership fees and money from other organizations. The IBCA will share information about protecting these animals. Its governance structure includes a General Assembly and a council. The IBCA Secretary-General will be appointed by the General Assembly based on the recommendation of the Council.

What are the main activities of the International Big Cat Alliance?

The alliance will create knowledge e-portal, laws, and partnerships, and will work to improve eco-tourism and financial capacity. The main objective of the alliance is to rehabilitate the big cats.

Why is India launching the International Big Cat Alliance?

India is the only country in the world to possess leopards, lions, tigers, snow leopards, and chives in the wild. In other countries, they have become extinct in the wild. While in some other countries, only a few, say one or two are found in the wild. So India should take the lead. India should only bring jaguars and pumas to unite all the big cats.

National Pharmacy Education Day 2023

National Pharmacy Education Day was celebrated on March 6th, in honour of the birth anniversary of Professor Mahadeva Lal Schroff, who established pharmacy education in India. The day was designated by the Pharmacy Council of India (PCI) – a statutory body under the Ministry of Health, regulating pharmacy education and practice in India.

National Pharmacy Education Day 2023

On this occasion, Union Minister of State (HFW) Dr Bharati Pravin Pawar inaugurated a platform named Pharma Anveshan 2023, where academic research and the industry can exchange their findings for the benefit of society. He also launched the digital job portal called the 'One Stop-Non Stop'. An MoU was also signed between the PCI and several pharma bodies to bridge the gap between industry and academia, boost training (of both faculty and students), promote entrepreneurship and boost infrastructure development.

Purposes of the initiatives launched on National Pharmacy Education Day

Pharma Anveshan 2023: It was launched to promote research, and innovation, and also to enhance industry and academia

One Stop – Non-Stop Digital Portal: To help the students coming from towns and villages. The portal will mainly provide information about job opportunities in the country

Who was Mahadeva Lal Schroff?

Mahadeva Lal Schroof is the Father of Indian Pharmacy Education. He was born in Darbhanga in Bihar in 1902. He was a graduate of the Engineering College at Banaras Hindu University. After completing his engineering he went to China, Japan

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and USA. He then earned his UG degree in chemistry and PG in microbiology and chemistry from MIT in the USA.In 1935, he founded the United Provinces of Pharma Association. He was the editor of the Indian Journal of Pharmacy. He founded Bhaishaj Patrika, Bheshjayan, and the Indian Pharmaceutical Congress. He was the president of the State Pharmacist Association and also the President of the Pharmacy Council of India.To honour him, the IPA established the "Father of Pharmacy Award".

Global Greenhouse Gas Monitoring Infrastructure

The World Meteorological Organization (WMO) has introduced the Global Greenhouse Gas Monitoring Infrastructure, which aims to provide standardized and real-time tracking of greenhouse gases. The new platform integrates space-based and surface-based observing systems to improve the measurement of planet-warming pollution and inform policy decisions. The data provided by this platform will be faster and sharper.

What is Global Greenhouse Gas Monitoring Infrastructure?

The Global Greenhouse Gas Monitoring Infrastructure seeks to clarify uncertainties about where greenhouse gas emissions end up and offer faster and more precise data on changes in the planet's atmosphere. The infrastructure is expected to provide essential information and support for implementing the Paris Agreement on climate change.

Carbon Dioxide, Nitrous Oxide, and Methane account for 66% of global warming. With the increasing emissions and failing targets, the world governments have to adopt new plans and policies. For instance, the 1.5 degrees Paris Agreement targets may not be achieved by countries. Therefore, governments have to bring upon new targets and policies and act more quickly. The Global Greenhouse Gas Monitoring Infrastructure will help them achieve this.

What is INS Vikrant?

The INS Vikrant is an aircraft carrier currently in use by the Indian Navy. It is the first carrier to be built indigenously, having been constructed by the Cochin Shipyard Limited in Kerala. The vessel is named after India's inaugural aircraft carrier, the INS Vikrant (1961), and its name derives from the Sanskrit word for "courageous." The motto of the ship is also in Sanskrit, which roughly translates to "I defeat those who fight against me."

Why is INS Vikrant in News?

The inaugural edition of the Naval Commanders' Conference-2023 is being organized aboard INS Vikrant. It provides a platform for the officers to discuss key security concerns at the military-strategic levels and interact with senior government functionaries.

The Indian Navy is racing to have the 2 aircraft carriers, INS Vikrant and INS Vikramaditya, battle-ready post-monsoon, in view of the increasing tensions in the Indo-Pacific region.

What is INS Vikrant?

The INS Vikrant is an aircraft carrier powered by four general electric engines and two gas turbine engines. It was commissioned in 2022. It can carry 26 MIG-29K or 26 Rafale fighter jets. In addition, the carrier can take 2 Dhruv helicopters or 4 MH-60R helicopters.

Yuva Utsav India @2047

The Youth Affairs Ministry has organized an event called 'Yuva Utsav India @2047' in all districts of India. The event will be held from March to June 2023, and it will have three levels.

Benefits of Yuva Utsav India

What are the three different levels of the Yuva Utsav India festival?

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The first level of the 'Yuva Utsav India @2047 will be a one-day district-level programme. It will take place in 150 districts from the 4th to 31st of March 2023. The aim of this event is to celebrate the power of youth in India and encourage young people to actively participate in the development of the country.

Where is Yuva Utsav India conducted?

The pan-India event is being organized in several places- Pratapgarh in UP, Dhar and Hoshangabad in MP, Hanumangarh in Rajasthan, Saraikela in Jharkhand, Jalgaon in Maharashtra, Karimnagar in Telangana and Palakkad in Kerala. It is organized in a 3-tier format. The 1st phase is organized by schools and colleges.

Who is conducting the Yuva Utsav India festival?

Nehru Yuva Kendra Sangathan. It operates under the Ministry of Youth Affairs and Sports. It was established in 1972. The main objective of NYKS is to involve the youth in the process of nation-building. It pulls in the youths in the rural regions towards development processes.

With the crime rate increasing in the country, it is essential to divert the youths into fruitful developmental activities. According to NCRB, the youth crime rate has increased by 4.7% though the overall crime rate reduced in the country. The Yuva Utsav festival will help India in reducing crime rates by diverting the youth population towards developmental activities.

5th ASEAN-India Business summit

The 5th Asean-India Business Summit was held at the Berjaya Times Square Hotel in Kuala Lumpur on March 6 this year. The summit, part of the Asean-India Year of Friendship (an observation commemorating the 30-year-long engagement between the 10-member bloc and India), is an essential forum for charting the future roadmap for the business and economic engagement between the two parties. It was organized with assistance from the Indian Government, through the External Affairs Ministry's Economic Diplomacy Division and Malaysian Government's International Trade and Industry Ministry.

Achievements of India highlighted at the 5th ASEAN – India Business Summit

India-Malaysia at the 5th ASEAN-India Business Summit

A special session focusing on India-Malaysia bilateral trade and investment engagement was held during the summit. The session focused on improving trade ties and expanding business engagement in digital technology partnerships and fintech, among other sectors.

What were the key highlights of the 5th ASEAN – India Business Summit?

The digital technology sectors were the key focus. IT companies are to be focused in the coming days. The countries decided that real-time payment linkages between India and the ASEAN countries will be increased in the future.

Background

India has been focusing on digital infrastructure, start-up ecosystems, tech advancement and open technologies in the ASEAN region so far.

The 5th ASEAN – India Business Summit was held under the theme "Strengthening and Moving Forward ASEAN – India Economic Relations for the strategic business partnership"

Achievements of India highlighted at the 5th ASEAN – India Business Summit

India has been making several investments in Digital Public Infrastructure in ASEAN countries. The Unified Payment Interface of India has transformed the lives of 260 million users. More than 8 million digital transactions are being made every day due to the country's efforts in developing the digital world of ASEAN. India Stack played a key role in streamlining the digital infrastructure in the ASEAN world.

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What is NISAR Mission?

NISAR (NASA-ISRO Synthetic Aperture Radar) Mission is a collaborative project between NASA and ISRO aimed at building and launching an Earth observation satellite equipped with a dual-frequency synthetic aperture radar. Notably, the satellite carries the most advanced radar system ever to be launched in a NASA Mission. It also has the largest radar antenna of its type. The satellite will be the first of its kind and will be used to remotely sense natural phenomena on Earth, such as the Antarctic cryosphere. NISAR is expected to be the most expensive Earth-imaging satellite, with a total cost of around 1.5 billion USD.

What is the objective of the NISAR Mission?

The mission will map the elevations on the earth's surface. It will mainly focus on the ice masses. The mapping is to be done four to six times a month. The resolution of the mapping is to be in the range of 5m to 10m. With this, the mission will provide details about ice sheet collapses, landslides, etc.

Operators and Manufacturers of NISAR Mission

The manufacturer is ISRO and Operator is NASA. The mission duration is 3 years. It will be launched from Satish Dhawan Space Center by ISRO. The mission uses the principle of radar imaging. The Imaging radars used in the NISAR mission are mesh type and are huge. Please note the size of the mesh radar in the image.

What is the radar imaging used in NISAR Mission?

Radar imaging works just like a flash camera. It creates its own light. Based on the reflection from the object, it creates an image of the object. The flash camera sends out light. Radars will send out radio waves.

What is L-band SAR in NISAR Mission?

There are two radars in the satellite. They are the L-band SAR and the S-band SAR. The L-band SAR is to be produced by NASA. And the S-band SAR will be produced by ISRO.

The L-band SAR will create 2-dimensional images based on the motion of the radar antenna. For this reason, the images are of better resolution.

Why is NISAR Mission in News?

The US Air Force recently handed over the NISAR satellite to the Indian Space Research Organization (ISRO). The satellite is expected to be launched from Satish Dhawan Space Centre in Andhra Pradesh in 2024.

What is an Atmospheric River?

An atmospheric river is a narrow and elongated region in the atmosphere that carries a substantial amount of water vapour outside the tropics. Researchers first coined the term 'atmospheric river' in the 1990s. It is also known as a tropical plume, tropical connection, moisture plume, water vapour surge, and cloud band.

Why in News?

Atmospheric rivers can be thousands of kilometres long and transport water vapour equivalent to the average flow of water at the mouth of the Mississippi River. The Pineapple Express is an example. It carries moisture from the Pacific region to USA and Canada. California is currently bracing for the arrival of atmospheric rivers, which are expected to bring heavy rain, flooding, and heavy snowfall.

How do scientists identify atmospheric rivers?

Scientists look for corridors that are 2,000 km long. Corridors mean the atmosphere in this region is almost uniform in terms of colour, temperature, moisture content, and other aspects. The ocean wind speeds right below the atmospheric rivers are different. So are the sea ice cover and precipitation intensity.

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What are the impacts of Climate change on Atmospheric rivers?

The capacity of the atmosphere to hold more and more moisture is increasing. This is because of the increasing global temperature. As temperature increases, the air can hold more water. So the atmospheric rivers are becoming more intense (or violent). They are growing longer and wider.

Why are atmospheric rivers a problem?

During dry conditions, the atmospheric rivers quench the wildfire and save forests. But during winters and rainy seasons, they add to the rainfall causing floods and landslides. More than 40 atmospheric rivers have hit the Pacific coast. They did not cause many losses so far. But! In recent times, the atmospheric rivers hitting the Australian coasts have been causing severe damage.

NOTE: Atmospheric rivers do not occur in the tropics. They occur beyond the tropics

Moon Time Zone has been proposed for establishing a universal timekeeping system that will simplify communication and coordination among different lunar missions. The proposal has come in response to the increasing number of lunar missions being planned and launched by different countries and entities- with some of the upcoming missions including Japan's M1 lunar lander and the Nova-C lander of Houston-based Intuitive Machines. Its creation will help in future space explorations, including the possibility of establishing a Martian time zone.

Why is Moon Time Zone in News?

The European Space Agency (ESA) has recently proposed the need for a lunar time zone. It has called for international coordination and consensus to establish it. One of the questions that need to be settled is whether lunar time should be set on the moon or synchronized with Earth.

What is Moon's Time Zone?

Like the GMT of the earth which has 24 different time zones, a moon time zone is the need of the moment. The earth time zone is divided into 24. The difference between the consecutive zones of the earth is one hour and each time zone is 15 degrees wide. The zero time zone starts at Greenwich Meridian. Similarly, based on the rotations and revolutions of the moon, a time zone should be created for the moon. This is referred to as Moon Time Zone.

How to establish Moon Time Zone?

The European Space Agency that initiated the Moon Time zone concept says that the moon time zone shall be established in two ways. One is to set the time based only on the rotations of the moon. The second way is to synchronize its timings with the earth. For instance, if the time in London is 12 AM, then it is 5:30 AM in India. Because India is ahead of London by five and a half hours. Similarly, if the time on the earth is X, then what will be the time on the moon? Ahead or Behind?

What is Influenza Sub-type H3N2?

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Influenza sub-type H3N2, commonly called Hong Kong Flu, is causing a surge in hospitalizations due to respiratory illness across India. H3N2 is responsible for at least 92 per cent of all severe acute respiratory infections (SARI) and outpatient influenza-like illnesses. It is causing more hospitalizations than other influenza subtypes. Recently, it caused 2 deaths- 1 in Karnataka and another in Haryana.

What is India doing against Influenza Sub-Type H3N2?

India sees the virus as "Seasonal Influenza". The Union Health Ministry recently included the virus in the IDSP network to monitor and track its status. ICMR issued advisories on precautions to be taken against preventing influenza. The Gol is expecting the cases to decline by March.

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Also, guidelines have been provided to categorise patients. Health Ministry has advised the state governments to vaccinate the health care workers who are working with H1N1 cases.

Why is Influenza Sub-Type H3N2 called seasonal influenza?

Every year, India witnesses influenza peaks in the months of January to March due to cold weather. As the temperature in the atmosphere reduces, the human body will not get enough heat for its normal functioning. The digestion process slows down and eventually, immunity levels fall down. Due to reduced immunity, the common cold and fever viruses like Influenza can easily attack. As the Influenza Sub-type H3N2 virus is spreading due to this reason of reduced immunity, Gol categorises it as seasonal influenza.

What are the symptoms of Influenza Sub-type H3N2?

The symptoms of H3N2 include fever, cough, breathlessness, wheezing, and clinical signs of pneumonia. This virus was responsible for causing the 1968 pandemic that resulted in the deaths of over a million people. This flu pandemic is known as called Hong Kong flu pandemic of 1968. It originated in China in July of that year.

Current Scenario

10% of the H3N2 patients needed oxygen. 7% needed ICU care. 92% complained of fever. 27% complained of breathlessness. If the treatment was started early, the disease can be easily cured. No hospitalisation is required if diagnosed early.

What is Yaoshang Festival?

Celebrated over five days during the full moon day of the Lamda month (February-March), Yaosang is one of the key festivals in Manipur. The festival is part of the indigenous traditions of the Meitei people. It begins just after sunset in every village with the Yaosang Mei thaba (burning of the straw hut).

What is Yaoshang or Yaosang festival?

The Manipuris celebrate Holi as the Yaoshang festival. The festival is celebrated for five days. It is celebrated to mark the beginning of spring. Worshippers sing hymns and kirtans on this day.

Yaoshang Mei Thaba

It is a ritual performed during the festival. Chaitanya Mahaprabhu was a 15th-century saint. He is believed to be the avatar of Lord Krishna and Goddess Radha. During the Yaoshang festival, an idol of Lord Chaitanya is placed in a hut-like structure made of hay and worshipped for six to seven days. On the night before the festival, the idol is removed and the hut is burnt to ashes. The burning ceremony is called "YAOSHANG MEI THABA". The ashes are believed to be highly auspicious. These ashes are sprayed over the head and in front of the houses in the locality.

Music and Dance of Yaoshang festival

The celebrations of the Yaosang festival were kicked off recently. They include a wide range of activities such as the Thabal Chongba, a traditional Manipuri dance, sports competitions like Mukna Kangjei (a combination of hockey and wrestling), and Pana Sankirtana, a form of traditional music.

Who celebrates the Yaoshang festival?

Meiti tribes. The modern-day Manipuris are the Meitei tribes. They speak the Meitei language. The Meiti is one of the 22 official languages of Manipur. Meitis are spread over Myanmar and Bangladesh. In India, they live in Assam, Mizoram, Nagaland, Tripura, Meghalaya, and Nagaland. 53% of the Manipur population consists of Meiti tribes.

What is MRSAM?

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On March 7 this year, the Indian Navy conducted a successful test-firing of a Medium Range Surface-to-Air Missile (MRSAM) from INS Visakhapatnam, a frontline warship. The successful test-firing validated the capability to use the weapon as an anti-ship missile, demonstrating the Navy's preparedness to safeguard its assets from attacks by adversary forces.

The MRSAM was developed by the Defence Research and Development Organisation (DRDO). The missile was produced at Bharat Dynamics Limited (BDL). The MRSAM technology is an important milestone for India's indigenous defence industry and is expected to enhance India's self-reliance in defence technology. The Army and Air Force use different variants of missiles.

What is MRSAM?

The missile can be used against any kind of airborne threat. This includes helicopters, combat jets, cruise missiles, aircraft, etc. It was jointly developed by India and Israel. It is a medium-range missile. Meaning, the range of the missile is between 1000 km and 3000 km. Most of the medium-range missiles developed by India including the MRSAM are theatre ballistic missiles. Agni, Prithvi, and Shaurya are all theatre ballistic missiles. Theatre ballistic missiles are those missiles that use projectile motion to hit a target and their range is less than 3,500 km.

BARAK-8 is the land-based configuration of MRSAM.

Technical details of MRSAM

It is a high-response and vertically launched missile. It was mainly developed for aerial targets. The weight of the missile is 275 kg. It uses a proximity fuse. The proximity fuse is a type of fuse that detonates an explosive device when the target is close by. It emits radio waves towards the target and detonates based on the waves reflected from the target. It can be controlled through radar and also through direct commands. Meaning, it can be operated remotely from a faraway distance and also from a ship at a close distance.

What is VLT Survey Telescope?

The VLT Survey Telescope (VST) is located at the Paranal Observatory in the Atacama Desert of northern Chile and is adjacent to the four Very Large Telescope (VLT) Unit Telescopes. It is located atop the Cerro Paranal mountain. The VST is unique as it is the world's largest telescope specifically designed to survey the sky in visible light. The program is a collaboration between Italy's OAC and the European Southern Observatory (ESO).

Why is VLT Survey Telescope in News?

The VLT Survey Telescope has recently captured a detailed image of IC 4701, an emission nebula found in the Sagittarius constellation. This nebula, also known as LBN 55 or NRL 18, was discovered by astronomer Edward Emerson Barnard in August 1905.

Who built VLT Survey Telescope?

It is a cooperation between Italy and 16 other European countries. These 16 countries formed the ESO – Earth Southern Observatory that signed the agreement with Italy to build the VLT Survey Telescope. ESO is a research facility.

Is VLT Survey Telescope and VLT Telescope the same?

No. The VLT Survey telescope supports the VLT Telescope. The VLT Telescope is operated by the European Southern Observatory. But VLT Survey Telescope is operated by Italy and ESO.

Both telescopes are located in the Atacama desert. The VLT survey telescope creates maps of the night sky. It scans and takes pictures of different parts of the sky. This data provided by the VLT survey telescope is used by the VLT telescope team to continue the research further.

What are the functions of the VLT Survey Telescope?

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It conducts multi-colour imaging surveys and searches for rare objects in the sky. It is a part of the Public Surveys Project. The surveys conducted under this project take five or more years to complete and are extensive. Surveys are done on the sky.

The telescope studies solar system bodies, galactic planes, interactions happening in Milky Way, intra-cluster planetary nebulae, and other micro-lensing events.

What are High Seas?

After almost a decade of negotiations, countries have reached an agreement on a treaty to protect and sustainably use marine biodiversity beyond national boundaries on the high seas. This breakthrough comes after 2 weeks of talks at the Intergovernmental Conference (IGC) on Marine Biodiversity of Areas Beyond National Jurisdiction in New York. The high seas are areas situated beyond 200 nautical miles from coastal countries' exclusive economic zones.

What are high seas?

The United Nations define high seas as "The parts of the sea that do not include the internal water of a state". Internal waters are territorial waters. In other words, these waters are used by a country. The country may use it for any purpose like fishing, oil drilling, etc.

What is included in high seas?

The high seas are also called transboundary waters or international waters. It includes marine ecosystems, estuaries, rivers, regional seas, groundwater systems, wetlands, etc. No country shall profess sovereignty over the high seas.

What is Convention on the High Seas?

63 countries have signed this treaty. It draws boundaries at sea. It established the United Nations Convention on the Law of the Sea, that is, UNCLOS. The UNCLOS creates a legal framework for maritime activities.

Current Major issues over high seas

Arctic Ocean: The Northwest passage is claimed by Canada. EU and USA say the passage is an international strait

Southern Ocean: Australia claims a part of Antarctic territories. Only four countries support this. The rest of the world is against this

Okinotorishima: Japan claims this islet. Other neighbouring countries oppose this

South China Sea: China claims the WHOLE of it. Neighbouring countries consider it a high sea

What is the need for a treaty on the high seas?

High seas are facing various threats such as overfishing, illegal fishing, mining, pollution, habitat loss, and climate change. The new international treaty aims to increase the percentage of protected areas on the high seas, where only 1.44% is currently protected. It will enter into force when at least 60 countries ratify it, but concerns remain as this process could take some time.

Madhya Pradesh Governor Mangubhai Patel inaugurates 3rd Divya Kala Mela at Bhopal.

Oscars 2023: 'Naatu Naatu' wins Best Original Song; RRR is the first Indian film to win an Oscar for best original song.

Supreme Audit Institutions-20 (SAI-20) Engagement Group delegates' meet begins, chaired by CAG Girish Chandra Murmu.

Navy's guided missile frigate INS Sahyadri joined two warships of France for a Maritime partnership exercise.

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India and Australia convene the India-Australia Joint Ministerial Commission for early conclusion of pact on market access.

U.S. takes emergency measures to protect all deposits at Silicon Valley Bank

A high-level delegation from the Saudi Space Commission holds discussions with ISRO.

North Korea tests submarine-launched cruise missile.

Iran has finalised a deal to buy Sukhoi Su-35 fighter jets from Russia.

Oscars 2023: Actor Brendan Fraser won the Best Actor in a Leading Role award for his performance in The Whale.

UK, USA and Australia to meet in San Diego to finalise AUKUS deal.

Gokulam Kerala defeated Sreenidi Deccan and finished third in the I-League, behind champion RoundGlass Punjab FC and Sreenidi.

Cricket: Virat Kohli on Sunday registered his highest Test score of 186 against Australia.

Swadesh Darshan 2.0 programme

The tourism industry in India has always been a major contributor to the country's economy. It not only generates employment opportunities but also promotes cultural exchange and supports local businesses. However, the rapid growth of tourism has also led to its negative impacts, including environmental degradation, overcrowding, and exploitation of local communities.

To address these challenges and promote sustainable tourism, the Union Ministry of Tourism launched the Swadesh Darshan Scheme (SDS) in 2014. The SDS aimed to develop theme-based tourist circuits across India, such as spiritual, heritage, and eco-tourism circuits. However, the scheme was criticized for its lack of sustainability and community involvement.

Revamped Swadesh Darshan 2.0 Programme

In response to the criticism, the Ministry of Tourism has launched the Swadesh Darshan 2.0 (SD2.0) programme, which seeks to develop sustainable and responsible tourist destinations. The SD2.0 aims to address the negative impacts of tourism and promote responsible tourism practices while also increasing private sector investments in the industry.

Under the SD2.0 programme, the Central Government has shortlisted 30 cities from across 15 states to be developed as sustainable and responsible destinations. The selected cities include Dwarka and Dholavira in Gujarat, Colva and Porvorim in Goa, and Nalanda and Gaya in Bihar.

Shift towards Destination Management

The SD2.0 programme marks a shift away from the theme-based tourist circuits towards destination management. Destination management involves a comprehensive approach to tourism development that considers the environmental, social, and economic impacts of tourism.

The SD2.0 programme aims to promote sustainable tourism practices by involving local communities in the tourism development process. It also seeks to develop tourism infrastructure that is sensitive to the local environment and culture.

Expected Benefits of SD2.0 Programme

The SD2.0 programme is expected to bring several benefits to the tourism industry in India. Firstly, it will promote sustainable tourism practices, which will reduce the negative impacts of tourism on the environment and local

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communities. Secondly, it will create new employment opportunities and support local businesses. Thirdly, it will attract private sector investments in the tourism industry, which will contribute to the economic growth of the country.

Who is Colonel Geeta Rana?

The Indian Army has made history by appointing a woman officer, Colonel Geeta Rana, to lead an independent field workshop in a sensitive location in eastern Ladakh, near the China border. This marks a significant milestone in the Indian Army's efforts to bring about gender parity and offer women officers command assignments in select branches. In this article, we will explore the significance of this appointment and its implications for women's empowerment in the Indian Army.

Breaking Barriers in the Indian Army

Colonel Geeta Rana's Background and Achievements

Implications for Women's Empowerment in the Indian Army

Breaking Barriers in the Indian Army

Colonel Geeta Rana's appointment is the first of its kind, as no woman officer had previously been assigned to a command role outside of the medical stream. This development comes after the Indian Army decided in February-end to assign women officers to command roles, following the opening of command roles to women after the army began granting them permanent commission (PC) in 2020.

The decision to appoint women officers to command roles outside of the medical stream is a welcome step towards gender parity in the Indian Army. It will pave the way for more women to take up leadership roles in the armed forces, thereby breaking down traditional gender barriers in a male-dominated field.

Colonel Geeta Rana's Background and Achievements

Colonel Geeta Rana hails from Pauri, Uttarakhand, which is also the hometown of General Bipin Rawat, India's first Chief of Defence Staff. She is a member of the Corps of Electronics and Mechanical Engineers (EME) and has previously served in various capacities, including as a military attaché in Moscow, Russia.

Her appointment as the commander of an independent field workshop in eastern Ladakh is a testament to her skills, experience, and leadership qualities. It is a proud moment for women in the Indian Army, as Colonel Geeta Rana has shattered the glass ceiling and opened doors for more women to take up command roles in the future.

Implications for Women's Empowerment in the Indian Army

Colonel Geeta Rana's appointment as the commander of an independent field workshop in eastern Ladakh is a significant step towards women's empowerment in the Indian Army. It sends a strong message that women are capable of taking up leadership roles in the armed forces and contributing to the country's defence and security.

This appointment will also serve as a source of inspiration for young women who aspire to join the Indian Army and make a difference. It will encourage more women to take up careers in the armed forces and pursue their dreams, despite the challenges and obstacles they may face.

Who is Kenzaburō Ōe?

Kenzaburō Ōe, the Nobel Prize-winning Japanese author, passed away on March 10, 2023, at the age of 88. His death marks the end of an era in Japanese literature, as Ōe was widely regarded as one of the most important and influential writers of the post-World War II era. His works explored complex themes of identity, memory, trauma, and the human condition, often through the lens of Japan's traumatic history.

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Kenzaburō Ōe was born in 1935 in Ose, a small village on the west coast of Japan's Shikoku Island. He grew up in a rural environment, surrounded by nature and steeped in the myths and traditions of his native region. His father was a teacher, and his mother came from a family of doctors. From an early age, Ōe showed a passion for literature and began writing poetry and stories while still in high school.

After graduating from Tokyo University, Ōe began his career as a writer, publishing his debut novel, "Nip the Buds, Shoot the Kids," in 1958. The book, which tells the story of a group of boys who are abandoned by their village during World War II, was a critical and commercial success and established Ōe as a rising star in Japanese literature.

What are Ōe's themes and style?

Throughout his career, Ōe's works explored the themes of personal and political identity, memory and trauma, and the human condition in the aftermath of war. His novels, short stories, and essays often delved into the myths and traditions of Japan's regions, particularly Okinawa, which was under US military occupation after World War II.

Ōe's style was characterized by its complexity and depth, with many of his works using non-linear narratives and stream-of-consciousness techniques. He was also known for his use of symbolism and imagery, often drawing on traditional Japanese culture and mythology to explore his themes.

What the contributions of Ōe to the literature field?

Kenzaburō Ōe's contributions to Japanese literature have been widely recognized both in Japan and internationally. In addition to his Nobel Prize, he received numerous other accolades throughout his career, including the Tanizaki Prize and the Akutagawa Prize, two of Japan's most prestigious literary awards.

Ōe's works have been translated into many languages and continue to be read and studied around the world. His exploration of Japan's complex history and his nuanced and complex portrayal of the human condition have earned him a place as one of the most important and influential writers of the 20th century.

Q+A: India's Ban on Blood Donations by Gay and Transgender

In India, gay and transgender individuals face discrimination in many forms. One such discrimination is the ban on them donating blood. After a petition was filed to challenge this ban, the Indian government defended the exclusion by citing scientific evidence that categorized the transgender and gay community in the "at-risk" group for HIV, Hepatitis B, and C infections.

The ban on gay and transgender people donating blood was introduced in the 1980s when information on detecting and transmitting HIV/AIDS was less advanced. At that time, people were not fully aware of the modes of transmission of the virus, and there was no reliable test to detect HIV in blood donations. The fear of HIV transmission led to the exclusion of gay and transgender people from donating blood in many countries, including India.

The Indian government justifies the ban on scientific grounds, stating that the community is at a higher risk of HIV, Hepatitis B, and C infections. However, activists argue that the ban is discriminatory and violates the fundamental right to equality. They argue that the government's stand is based on outdated stereotypes and is not in line with the current medical knowledge of HIV transmission and prevention.

What is the current policy in India?

In India, the fitness of blood donors is determined by medical officers who must ensure that they are free from diseases that are transmissible by blood transfusion and not at risk of HIV, Hepatitis B, or C infections. The medical officers screen potential donors for their medical history, sexual behavior, and other risk factors before accepting them as donors. However, they exclude gay and transgender people from donating blood, regardless of their individual risk factors.

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Activists have been challenging this ban for years, arguing that it is discriminatory and based on outdated notions of HIV transmission. In 2018, the Indian government told the Delhi High Court that it was considering lifting the ban, but no concrete action has been taken since then. In 2020, the National Blood Transfusion Council (NBTC) set up a committee to review the policy on blood donation by transgender individuals. However, the committee's report is still awaited.

Do other countries allow blood donations by gay and transgender people?

While many countries still have restrictions on blood donation by gay and transgender individuals, some have proposed guidelines for easing these restrictions. For instance, the United States lifted its lifetime ban on blood donation by gay and bisexual men in 2015 and replaced it with a one-year deferral period for men who have had sex with other men. Similarly, the United Kingdom has a three-month deferral period for gay and bisexual men.

However, these guidelines have been criticized by activists for being discriminatory and based on stereotypes. They argue that the deferral periods are not based on individual risk factors but on sexual orientation, which is not a reliable indicator of HIV transmission.

Who was Komaram Bheem?

Komram Bheem was born in the Gond tribal community at Sankepally village in Komarambheem District. He fought against the British and Nizams. He killed a jagirdar, who was an informer of the Nizam, who occupied his family's land. Bheem spread the message of "Jal, Jangal, Zameen" (water, forest land) among tribal people, which has become a clarion call for indigenous people's rights to natural resources. He died at the hands of the Nizam's army in the Jodeghat forest.

Cultural Influence

Raju and Bheem have long been folk heroes in the region. In 1986, the Indian Postal Department issued a stamp in honour of Raju and his contribution to India's struggle for Independence. The 1974 Telugu film 'Alluri Seetarama Raju' and the 1990 Telugu film 'Komaram Bheem' were both popular. In May 2022, Prime Minister Narendra Modi unveiled a 30-foot-tall bronze statue of Alluri Sitarama Raju at Bhimavaram in Andhra Pradesh as the year-long celebrations of the freedom fighter's 125th birth anniversary began.

IPCC Meet in Switzerland and Synthesis Report

The Intergovernmental Panel on Climate Change (IPCC) is set to organize meeting in Switzerland to finalize the Synthesis Report, which will summarize the findings of the IPCC's previous five reports and address policy-relevant scientific questions related to climate change. The report will emphasize meeting the 1.5-degree Celsius target as the main global goal. The Synthesis Report is expected to provide a non-technical summary of the previous reports, which were released during the sixth assessment cycle since 2018.

The Synthesis Report is aimed at policymakers around the world, and its release on March 20 this year will be followed by a ministerial-level meeting in Copenhagen to discuss ways to implement the decisions taken at last year's climate meeting in Sharm el-Sheikh. The report will also be discussed at the UN 2023 Water Conference, with climate change as one of the most important agendas. This is aimed at building the atmosphere for more ambitious agreements at this year's climate conference in Dubai, scheduled towards the end of the year.

Climate Change and its Impact

Climate science is well-established, and its impacts are already visible, with extreme weather events becoming the norm. It is predicted to be among the warmest years ever, with February in India this year being the hottest ever, and unusually hot weather continuing in many parts of the country. Climate impacts have already begun to hurt population groups in several other parts of the world.

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Countries' Action on Climate Change

Despite repeated predictions of an impending catastrophe, countries have taken little to no steps to counter climate crisis. The current level of actions is not even commensurate with the effort required to meet the 2-degree Celsius target. There is disagreement even on something as basic as a commitment to phase out fossil fuels, one of the main contributors to global warming.

Dick Fosbury Passes Away at the Age of 76

Dick Fosbury, the legendary American high jumper, who changed the game of high jump forever with his unconventional technique, passed away at the age of 76. Fosbury was a gold medalist in high jump at the 1968 Mexico City Olympics, where he stunned the world with his revolutionary style, known as the Fosbury Flop.

The Fosbury Flop was not an overnight success; it was the result of years of experimentation and practice. Fosbury started his athletic career using the traditional straddle technique, but he soon realized that it wasn't effective enough to get him the results he wanted. During a high school meet in 1963, Fosbury decided to ditch the straddle and try the scissor technique, which was not very popular at that time. The scissor technique involved jumping over the bar with one leg leading and the other following.

However, Fosbury didn't stop at the scissor technique; he added his own unique twist to it. Instead of going forward over the bar, he leaned back and jumped backwards over the bar, head first. It was a move that had never been seen before, and the crowd was stunned. Fosbury scored two personal bests that day, and the Fosbury Flop was born.

The Dominance of the Fosbury Flop

It took some time for the Fosbury Flop to gain acceptance in the world of high jump. Coaches and athletes were skeptical of the new technique, and many thought it was dangerous. But Fosbury kept at it, and by the time he reached college, he had perfected the technique. In 1968, Fosbury was selected for the US Olympic team and headed to Mexico City.

The Olympics was the perfect stage for Fosbury to showcase his technique to the world. He was up against some of the best high jumpers of the time, but he was confident that his technique would give him an edge. Fosbury's opponents tried to imitate his style, but they failed miserably. Fosbury won the gold medal with a jump of 2.24 meters, which was a new Olympic record.

The Legacy of Dick Fosbury

After the Olympics, the Fosbury Flop became the most widely used technique across the world. It was adopted by high jumpers of all ages and skill levels, and it remains the dominant technique to this day. Fosbury's innovation changed the game of high jump forever, and it earned him a place in the Olympic Hall of Fame.

Fosbury's legacy extends beyond the world of athletics. His innovative thinking and willingness to take risks are an inspiration to people in all walks of life. He proved that sometimes the unconventional path is the one that leads to success.

13th Exercise Bold Kurukshetra: Important Facts

The 13th edition of Exercise Bold Kurukshetra, a bilateral armour exercise between the armies of India and Singapore, was conducted from March 6 to 13, 2023, at Jodhpur Military Station, India. This joint exercise aimed to enhance cooperation, build a common understanding of mechanised warfare, combat emerging threats and adapt to evolving technologies. It also provided an opportunity for both armies to exchange ideas and best practices in a modern combat zone.

Participation of Both Armies in a Command Post Exercise

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The 2023 edition of the Exercise Bold Kurukshetra marked the first time that both armies participated in a command post exercise. It involved Battalion and Brigade level planning elements and computer wargaming. Soldiers from the 42nd Battalion, Singapore Armoured Regiment, and an Armoured Brigade of the Indian Army took part in the exercise. The joint training focused on developing interoperability through a computer simulation-based Wargame using joint operational and tactical procedures controlled through a joint command post.

Objectives of Exercise Bold Kurukshetra

The exercise aimed to foster a common understanding of mechanised warfare in emerging threats and evolving technologies. It provided both contingents with an opportunity to learn about each other's operating drills and procedures, as well as exchange ideas and best practices being followed in a modern combat zone.

Exercise Bold Kurukshetra was conducted under the ambit of the bilateral arrangement for joint Army training and exercises between the Singapore Army and the Indian Army. It underscores the strong and long-standing bilateral defence relationship between Singapore and India and enhances cooperation between the two armies.

Importance of Bilateral Defence Relationship

The exercise highlights the importance of the bilateral defence relationship between Singapore and India. Both countries interact regularly through high-level visits, policy dialogues, courses, and other professional exchanges. The defence establishments of both countries have been working together to enhance their mutual cooperation in defence, security, and counter-terrorism.

DRDO's PTO Shaft:

On March 14, 2023, the Combat Vehicles Research & Development Establishment (CVRDE) in Chennai, which is a part of the Defence Research and Development Organisation (DRDO), conducted a successful flight-test of the Power Take off (PTO) Shaft on the Light Combat Aircraft (LCA Tejas) Limited Series Production (LSP) - 3 aircraft in Bengaluru. This critical component is indigenously designed and developed by the CVRDE and is expected to support the requirements of future fighter aircraft and their variants. The PTO shaft offers a competitive cost and reduced time of availability, and its innovative patented 'Frequency Spanning Technique' enables it to negotiate different operating engine speeds. The successful realization of the complex high-speed rotor technology in the PTO shaft is a major achievement for the DRDO, and it is a step forward towards achieving 'Aatmanirbhar Bharat' or self-reliant India.

The PTO Shaft Technology

The PTO shaft is an important component in the aircraft as it connects the engine gearbox to the Aircraft Mounted Accessory Gear Box. The PTO shaft technology was designed with a unique innovative patented 'Frequency Spanning Technique,' which enables it to negotiate different operating engine speeds. The technology allows the lightweight highspeed PTO shaft to transmit higher power while accommodating misalignments that arise in the drive line. This design offers a competitive cost and reduced time of availability.

Successful Realisation of Complex High-Speed Rotor Technology

With the successful test of the PTO shaft, the DRDO has achieved a greater technological feat by realising complex highspeed rotor technology, which only a few countries have accomplished. The technology's success showcases the country's research capabilities. It will actively support the test aircraft programmes.

Collaboration and Future Prospects

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The success of the PTO shaft test was a collaborative effort of the Aeronautical Development Agency, Centre for Military Airworthiness and Certification, Directorate General of Aeronautical Quality Assurance, and Hindustan Aeronautics Limited. The technology has already been transferred to Godrej & Boyce, Mumbai, and Lakshmi Technology and Engineering, Coimbatore.

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Rwanda's First mRNA Vaccine Production Facility:

Rwanda has taken a significant step forward in its fight against infectious diseases by becoming the first African country to house a facility for manufacturing messenger RNA (mRNA) vaccines. The facility, spanning across 800 square meters of space, is capable of conducting trials of new therapeutics to combat diseases like TB, HIV and others.

Biontainers Mobile mRNA Factories

The mRNA vaccine facility in Rwanda is made up of six mobile factories called Biontainers. They were developed by the German pharmaceutical company BioNTech. The facility is capable of producing a maximum of 50 million doses of vaccines per annum. The modular system of the Biontainers consists of two modules, each made up of six containers. In the first module, mRNA is produced and purified. In the second, it is made into a vaccine.

mRNA Vaccines and their Significance

mRNA is a type of RNA that is necessary for protein production. mRNA vaccines work by introducing a piece that corresponds to a viral protein. The mRNA instructs cells to produce that protein, which triggers an immune response. The body then produces antibodies to fight off the virus if it encounters it in the future.

The significance of the mRNA vaccines is that they can be developed more quickly than traditional vaccines. mRNA vaccines have shown high efficacy against COVID-19 and are being widely used across the world.

Trials on Infectious Diseases

Apart from producing COVID-19 vaccines, the facility in Rwanda will also help conduct trials on new therapeutics for infectious diseases such as malaria, tuberculosis, HIV and cancers. This will be a significant milestone not only for Rwanda but also for Africa, which contributes only 2 per cent of clinical trial research output, according to the health ministry. The mRNA vaccine facility will also help to increase Africa's contribution to global science and pandemic preparedness.

Improved Vaccine Access

The arrival of the Biontainers in Rwanda will improve vaccine access not only in Rwanda but also in other African Union countries. The facility will help address the vaccine scarcity that Africa has been experiencing.

Fact Sheet: Sika Deer

The Sika deer, also known as the Japanese deer or Northern spotted deer, is a species of deer native to much of East Asia, including Japan, Taiwan, and eastern parts of China. The species has also been introduced to various other parts of the world. It is known for having small head and short legs. Depending on their habitat, species can be small or medium-sized. Males have antlers with three to four points, with more dominant ones having additional points. On the other hand, females have two black bumps on their heads. Their coats range from yellow-brown to reddish-brown, with a dark dorsal stripe surrounded by white spots in summer. During winter, their color changes to dark gray or black, without spots or with very faint ones.

Sika Deer in Japan

The Sika deer is an important part of Japanese culture and is a frequent subject of art, literature, and folklore. In Japan, the Sika deer is also considered a national treasure and is a protected species. Their populations in Japan are estimated to be around 1 million, making them a common sight in the country. The deer are often found in parks and shrines and have become accustomed to humans, sometimes approaching them for food. This has led to concerns about overpopulation and damage to forests and crops.

Genetic Uniqueness of Sika Deer near the Kasuga Taisha Shrine

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A recent study conducted in Japan by Fukushima University researchers has discovered that the Sika deer residing near the Kasuga Taisha Shrine and the Todaiji Buddhist Temple in Nara city on the Honshu Island are genetically unique. The researchers collected samples from 294 Sika deer living across 30 sites on the Kii Peninsula between 2000 and 2016. Through the analysis of mitochondrial DNA, the team identified three distinct genetic groups, one of which had a unique haplotype, suggesting a restricted flow of genes across its maternal lineage. This isolated group included the Sika deer surrounding the Kasuga Taisha Shrine and is believed to have split off from the rest of the Kii Peninsula around 1,400 years ago when the shrine was established.

1. TROPEX 2023' is a major Operational level exercise conducted by which country?

[A] India [B] Australia [C] UK [D] USA

Correct Answer: A [India]

Notes:

Indian Navy's major Operational level exercise TROPEX 2023 was recently conducted across the Indian Ocean Region culminated in the Arabian Sea.

The exercise recently culminated this week in the Arabian Sea. The overall exercise construct included Coastal Defence exercise Sea Vigil and the Amphibious Exercise AMPHEX. These exercises also witnessed significant participation from the Indian Army, the Indian Air Force, and the Coast Guard.

2.Centre has recently directed NAFED, NCCF for immediate intervention in market for purchase of which product?

[A] Potato [B] Red onion [C] Cotton [D] Jute

Correct Answer: B [Red onion]

Notes:

The Centre directs NAFED and National Consumers Cooperative Federation of India Limited (NCCF) to immediately intervene in the market for the purchase of Red Onion (Kharif).

The Price Stabilization Fund has been set up for the procurement and storage of onion as a buffer to keep the supply chain smooth during the lean seasons.

3. Which country has opened military service to women for the first time in 25 years?

[A] Sri Lanka [B] Colombia [C] UK [D] Japan

Correct Answer: B [Colombia]

Notes:

Colombia has opened military service to women for the first time in 25 years. A cohort of 1,296 women have been enlisted in Colombia's Army in the month of February.

Colombia has long had compulsory military service for men ages 18 to 24. The army relies heavily on the young recruits to staff bases, protect infrastructure, and carry out administrative tasks, while its professional soldiers confront drug trafficking gangs and rebel groups.

4. Which country introduced the 'Illegal Migration Bill'?

[A] USA [B] UK [C] China [D] Greece

Correct Answer: B [UK]

Notes:

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The UK's Illegal Migration Bill, introduced by Prime Minister Rishi Sunak, aims to tackle the issue of illegal immigration by preventing thousands of migrants from crossing the English Channel on small boats.

The bill empowers the UK government to detain and deport anyone who arrives in the country illegally, with few exceptions. It allows the British Parliament to set a quota on the number of immigrants allowed in the country.

5. Mimeusemia ceylonica, rare moth species, has been spotted for the first time in India, in which state?

[A] Kerala [B] Tamil Nadu
[C] Karnataka [D] Odisha

Correct Answer: B [Tamil Nadu]

Notes:

Researchers spotted a Mimeusemia ceylonica, rare moth species for the first time in India in Kalakkad–Mundanthurai Tiger Reserve in Tamil Nadu after 127 years.

It was last recorded in Sri Lanka 127 years ago and the findings are based on moth surveys conducted twice a month since 2018. This is the first time this moth species is being recorded in India.



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