

My Notes....

NATIONAL

NATIONAL SUICIDE PREVENTION STRATEGY

The **Ministry of Health and Family Welfare** on 21 November 2022 unveiled the **National Suicide Prevention Strategy** — the **first-of-its-kind policy** formulated by the government to **prevent suicides as a public health priority**.

What is India's National Suicide Prevention Strategy?

1. According to the ministry, the policy will **set the stage for promotion of mental health and prevention of suicides in the coming decade**.
2. The **goal of the strategy** is to **reduce suicide mortality in the country by 10 per cent by 2023**.
3. The strategy provides a **framework for multiple stakeholders** to implement activities for **prevention of suicides in the country**.

Objectives of National Suicide Prevention Strategy

There are **three main objectives of the strategy**.

1. **First**, it seeks to **establish effective surveillance mechanisms** for suicide within the **next three years**.
2. **Second**, it seeks to establish **psychiatric outpatient departments** that will provide **suicide prevention services** through the **District Mental Health Programme** in all districts within the **next five years**.
3. **Third**, it aims to **integrate a mental well-being curriculum** in all **educational institutions** within the **next eight years**.
4. The **fourth objective** of the National Suicide Prevention Strategy is to **strengthen surveillance of suicide** and further generation of evidence **through evaluation** that will ensure improvement in the programme quality.

Implementation mechanism

1. **Reinforcing leadership, partnerships and institutional capacity** in the country
2. **Enhancing the capacity of health services** to provide **suicide prevention services**
3. **Developing community resilience and societal support for suicide prevention and reduce stigma** associated with suicidal behaviours.

INDIA'S SCORES IN ICAO AIR SAFETY AUDIT

India's scores in the **ICAO's air safety oversight audit** will **improve substantially** as the international watchdog's just-concluded **validation mission** was highly successful as per the initial reports, regulator DGCA said on 16 November 2022. **ICAO** is the **International Civil Aviation Organisation**.

What is the USOAP?

1. Under its **Universal Safety Oversight Audit Programme (USOAP) Continuous Monitoring Approach**, an **ICAO Coordinated Validation Mission (ICVM)** was undertaken from 9 November to 16 November 2022.
2. The **audit was conducted** in the areas of legislation, organisation, personal licensing, operations, airworthiness and aerodromes.
3. As per the initial reports, the **mission was highly successful**. India has done extremely well and our scores will see a substantial improvement putting us in the company of nations with best safety standards and oversight systems.

4. **India is one of the fastest growing civil aviation markets globally and the sector is slowly recovering after being hit by the coronavirus pandemic.**
5. The audit result showed that the **country's score declined to 57.44 per cent from 65.82 per cent earlier.**
6. During the November 2017 visit, the ICAO team assessed **five areas -- Personnel Licensing and Training, Aircraft Operations, Airworthiness of Aircraft, Primary Aviation Legislation and Civil Aviation Regulations, and Civil Aviation Organisation.**

Flashback

1. **USOAP monitors eight audit areas. They are Primary Aviation Legislation and Civil Aviation Regulations, Civil Aviation Organization, Personnel Licensing and Training, Aircraft Operations and Airworthiness of Aircraft.**
2. Other areas are **Aircraft Accident and Incident Investigation, Air Navigation Services, and Aerodromes and Ground Aids.**
3. In November 2017, ICAO carried out the **Universal Safety Oversight Audit Programme** for India and another team of the watchdog came in February 2018.

UN CLIMATE SUMMIT ADOPTS 'LOSS AND DAMAGE' FUND

The **UN's COP27 climate summit** approved on 20 November 2022 the **creation of a special fund** to cover the damages **suffered by vulnerable nations** battered by the impacts of **global warming**. The two-week talks have whiplashed between **fears the process could collapse**, to hopes of a major breakthrough on a fund for climate **"loss and damage"**.

More about the fund

1. The plenary, however, still has to approve a **range of decisions** and the **final COP27** statement covering a host of other contentious issues, including a call for a **"rapid" reduction in emissions** in order to meet the aspirational goal of limiting global warming to **1.5 degrees Celsius** from **pre-industrial levels**. The session took a break as **Switzerland** requested more time to review the text.
2. An informal coalition of **"high ambition" countries** called for **strong language** on cutting emissions, moving away from **planet-heating fossil fuels** and to reaffirm the **1.5C goal**.
3. The latest draft calls for **"accelerating efforts towards the phasedown of unabated coal power and phase-out of inefficient fossil fuel subsidies"**.
4. **'Historic' deal** - Conversely the deal on loss and damage -- which barely made it onto the negotiation agenda -- gathered critical momentum during the talks.

Flashback

1. The fund will be geared towards developing nations **"that are particularly vulnerable to the adverse effects of climate change"** -- language that had been requested by the EU.
2. The EU demanded the wording with the aim of ensuring that wealthier developing countries such as China, which has grown into the **world's second biggest economy**, are not beneficiaries of the fund.
3. The Europeans had also wanted a **broad funder base to cough up cash** -- code for China and other better-off emerging countries.
4. Scientists say **limiting warming to 1.5C** is a far safer guardrail against catastrophic climate impacts, with the world currently far off track and **heading for around 2.5C** under current commitments and plans.

5. Developing nations relentlessly pushed for the fund during the summit, finally succeeding in getting the backing of wealthy polluters long fearful of **open-ended liability**.
6. With around **1.2C of warming so far**, the world has seen a cascade of climate-driven extremes in recent months, shining a spotlight on the **plight of developing countries** faced with escalating disasters, as well as an energy and food price crisis and ballooning debt.
7. The World Bank estimated that **devastating floods in Pakistan this year** caused \$30 billion in damage and economic loss.

BOWLIS IN QUTUB SHAHI TOMBS BAG UNESCO 'AWARD OF DISTINCTION'

Stepwells in Qutub Shahi necropolis bagged an award of distinction on 26 November 2022 at the **2022 UNESCO Asia-Pacific Awards for Cultural Heritage Conservation** at Bangkok. In another cheer for Telangana, the **Domakonda Fort**, 115km off Hyderabad in Kamareddy district, also won an award of merit from 50 entries **across 11 countries in the Asia-Pacific region**.

What

1. The **UNESCO award** stated that conservation released an ambitious, **long-term vision** to renew the extensive complex of architectural and social spaces within the 16th century necropolis.
2. The **Aga Khan Trust for Culture (AKTC)** is spearheading the conservation of the Qutub Shahi necropolis in conjunction with Telangana government's department of culture and heritage.
3. The **UNESCO award** demonstrates that heritage conservation can fulfil several government objectives, including employment creation, rainwater harvesting and generating tourism.
4. Another feather in the cap for Telangana was the **Award Of Merit to Domakonda Fort**, which houses a palatial building — Addala Meda or the glass house.
5. Spread over 30 acres, the fort also known as **khila or gadi**, was constructed on a circular plan with two entrances – one on the east and another on the west and carries the hallmark of Kakatiya architectural splendour.
6. The oldest surviving structure in the fort is the **Shivalaya or Mahadev temple**, which dates back to the Kakatiyan period.
7. This **800-year-old temple was restored in 2006** by the department of archaeology, Telangana government.

INDIA'S LOW-CARBON GROWTH

With a **seven-point agenda**, the Indian government for the **first time** has submitted its **Long-Term Low Emission Development Strategy (LT-LDES)** at the Conference of Parties (COP27) in Egypt. The agenda focuses on **low-carbon electricity and transport systems, energy-efficient urban infrastructure**, low-emission industrial systems, **carbon mitigation technologies**, enhanced forest cover, and economic and financial aspects of low-carbon development.

India's 7 Strategies

1. **Low-carbon electricity systems** consistent with development
2. Integrated, efficient and inclusive **low-carbon transport systems**
3. **Energy & material-efficiency in buildings**

4. **Decoupling growth from emissions**, and developing an efficient, low-emission industrial system
5. **CO2 removal** and related engineering solutions
6. **Enhancing forest cover consistent** with **socioeconomic** and **ecological considerations**
7. **Increasing climate resilience** in poverty eradication and employment creation

NCPCR LAUNCHES 'GHAR'

The **National Commission for Protection of Child Rights** launched a **web portal** on 20 November 2022 for **digital tracking and monitoring of children** who are in need of protection and have to be repatriated to another country, state or district. The portal - **"GHAR - Go Home and Re-Unite"** will be a platform for information on children from every district to smoothen the process of their repatriation and restoration.

More about GHAR

1. The launch of the portal, on **"World Children's Day"** also saw the release of a detailed protocol for **"restoration and repatriation of children"** and training modules for the **child welfare committees (CWCs)**. The portal will enable digital transfer of cases of children to the authorities concerned.
2. In a video message, **women and child development minister Smriti Irani** asserted on the significant role of CWCs in ensuring child protection and appealed to all CWCs and district child protection officers to do their best to implement the **Juvenile Justice Act and Rules, 2021 and 2022**.

Why a protocol and portal is required

1. The **WCD highlighted** that it had been seen that many children, who were brought before the **juvenile justice boards** and the CCW, were found to be belonging to some other place but it was difficult to repatriate them because of the absence of information on their native place with the authorities.
2. The **protocol and the portal** are being cited as a step to address the challenges in repatriation which arose primarily due to lack of convergence and **information-sharing between authorities**.
3. The **NCPCR** sees the protocol as a **step to significantly reduce the number of children languishing in child care Institutions (CCIs)**.
4. The **GHAR portal and the protocols** will ensure the rights of children related to restoration and repatriation are realised.
5. The protocol lays down that when a child expresses his or her **unwillingness to be restored to the family**, the CWC will interact with the child to find out the reasons and record them. **No child will be coerced to go back to the family**.

THE ASSAM-MEGHALAYA BORDER DISPUTE

Both **Meghalaya** and **Assam** on 23 November 2022 said they would **seek a probe from a central agency** into the **Assam Police firing** that killed six people on 22 November 2022 along the states' border. The incident comes ahead of the **second phase of talks scheduled** for this month-end between the two states **to resolve their boundary dispute**, and there are concerns its shadow will loom large over the negotiations.

What is the border dispute?

1. **Assam and Meghalaya** have a **longstanding dispute in 12 stretches** of their **884-km shared border**.
2. The **two states had signed a pact** in March resolving the dispute in six out of 12 areas.

3. In August, they decided to form regional committees. The second round of discussions for the remaining six phases was to commence by the end of this month.
4. The **Assam-Meghalaya pact** was seen as a major achievement, as **Assam's border disputes** with other states in the Northeast have remained unresolved despite multiple rounds of talks. Now, the firing threatens to derail the upcoming talks.
5. During the British rule, **undivided Assam** included present-day **Nagaland, Arunachal Pradesh, Meghalaya and Mizoram**.
6. Meghalaya was carved out in 1972; its boundaries demarcated as per the **Assam Reorganisation (Meghalaya) Act of 1969**, but have held a different interpretation of the border since.
7. In 2011, the **Meghalaya government** had **identified 12 areas** of difference with Assam, spread over approximately 2,700 sq km.
8. Some of these disputes stem from recommendations made by a **1951 committee** headed by then Assam chief minister Gopinath Bordoloi.

INTERNATIONAL

INDIA WINS VICE PRESIDENCY OF IEC

India has won the **International Electrotechnical Commission (IEC) vice presidency** and **Strategic Management Board (SMB) chair** for the 2023-25, the Ministry of Consumer Affairs, Food & Public Distribution said on 25 November 2022.

More about IEC

1. **IEC** is an **international standard setting body** that publishes **international standards for all electrical, electronic and related technologies**.
2. **SMB** is an **apex governance body of IEC** responsible for technical policy matters.
3. **India secured over 90% of the votes cast** by full members of the IEC during its general meeting held recently in **San Francisco, US**. **Vimal Mahendru** will be the IEC Vice President representing India.
4. By **securing over 90% of the votes cast** by full members of **International Electrotechnical Commission (IEC)** during its General Meeting held in **San Francisco, USA**.
5. India's representative, a member of the Indian National Committee of the **International Electrotechnical Commission (IEC)** and various technical committees of **Bureau of Indian Standards (BIS-India)**, was elected.
6. The representation of **BIS (India)** in policy and governance bodies of **International Organization for Standardization (ISO)** and IEC ensures that Indian viewpoints on the important **strategic and policy matters are put forth** and it also provides opportunities to align the national standardization priorities with International best practices.

Flashback

1. **BIS is continually expanding its international footprints** by working on the growth mantra provided by the Union Minister of Commerce and Industry, Consumers Affairs, Food & Public Distribution and Textiles, Piyush Goyal.
2. Currently, **BIS (India) is represented in various policy and governance bodies of International Organization for Standardization (ISO) and IEC** such as ISO Council, **ISO Technical Management Board (TMB)**, IEC SMB, IEC Market Strategy Board (MSB), **IEC Business Advisory Committee (BAC)**, etc.

ECTA IS A LANDMARK IN BILATERAL RELATIONS

The ratification of the **India-Australia Economic Cooperation and Trade Agreement (ECTA)** by the **Australian parliament, demonstrates India's skill** in trade negotiations. The deal sailed smoothly through the Australian parliament, despite the fact that it was negotiated when the Liberal Party was in power in April 2022 and labour party came in May 2022.

Salient features of the deal:

1. **India manages to get exclusions** for the most **sensitive sectors**, and **dairy and agriculture**. These provide employment in rural areas to about 50-55 per cent of its population with small landholdings and 1-2 cattle per farmer. This is in **sharp contrast to Australian agriculture** and dairying. This bone of contention had stood in the way of a free trade deal.
2. **India and Australia both are Commonwealth countries** and **parliamentary democracies** with similar legal systems.
3. Besides, India and Australia also are members of the **Quad**, a **trilateral Supply Chain Resilience Initiative (SCRI)** and the **Indo-Pacific Economic Framework (IPEF)**.
4. The **Ind-Aus ECTA will lead to duty elimination on 100 per cent tariff lines** with no restrictions and benefit India's labour-intensive exports such as textiles and apparel, agriculture and fish products, leather, footwear and furniture, several engineering products, jewellery, select pharmaceutical and medical devices, furniture and sports goods. These now fetch 4-5 per cent import duty in the Australian market.

Significance of the deal:

1. **Most free trade deals New Delhi has negotiated** and entered into have been mostly with **South Asian countries** and **hardly served India's trade interests**. Rather, **they became counterproductive**.
2. Both the Indian and Australian government need to be **complemented for striking the first trade deal with a developed country in a decade**.
3. It provides an **opportunity for Australian exporters** to tap the vast Indian market of 1.4 billion consumers; **on the other hand, it provides an opportunity for Indian exporters** to market their value-added products.

AUSTRA HIND BEGINS IN RAJASTHAN

The inaugural edition of the bilateral military exercise **Austra Hind** between the Indian Army and the Australian Army began at the **Mahajan Field Firing Ranges in Rajasthan** on 28 November 2022. The exercise will comprise **joint training operations** in semi-deserts terrains under the **United Nations (UN) peace enforcement mandate** and will conclude on 11 December 2022.

More about Austra Hind

1. This is the **first exercise in the series of Austra Hind** with the participation of all arms and services contingents from both armies.
2. The Australian Army contingent comprising soldiers from the **13th Brigade of the 2nd Division** has arrived at the exercise location. The Indian Army is represented by troops from the **Dogra Regiment**.
3. **Exercise Austra Hind** will be a yearly event that will be conducted alternatively in India and Australia.
4. This **joint exercise** will enable the two armies to share best practices in tactics, techniques and procedures for conducting tactical operations at company and platoon levels for neutralising hostile threats.

- The joint exercise includes the use of **new-generation equipment and specialised weapons** including snipers and deployment of surveillance and communication equipment to achieve a high degree of situational awareness apart from casualty management and evacuation and planning logistics at the battalion and company levels.
- During the exercise, participating contingents will engage in a variety of tasks ranging from **joint planning, joint tactical drills, sharing basics of special arms skills** and raiding a hostile target.

'HARIMAU SHAKTI-2022' BEGINS

A **joint military exercise involving** troops of **India and Malaysia** began with an **aim to enhance** inter-operability in the planning and execution of various operations in the jungle terrain, the defence ministry said. The India-Malaysia joint military exercise, **'Harimau Shakti-2022', commenced at Pulai, Kluang, Malaysia.**

More about the news:

- The **exercise is an annual training event** between the Indian Army and the Malaysian Army being **held since 2012.**
- This year Combat-experienced troops** of the Garhwal Rifles Regiment of the Indian Army and the Royal Malay Regiment of the Malaysian Army **are participating in the exercise to share experiences gained during operations in order to enhance inter-operability in planning and execution** of various operations in jungle terrain.
- The **scope of this exercise** involves command planning at the battalion level and company-level field training on sub-conventional operations in jungle terrain.
- The **joint exercise schedule includes** the establishment of a joint command post, joint surveillance centre, and sharing expertise in the employment of aerial assets, technical demonstrations, casualty management, and casualty evacuation apart from planning logistics at the battalion level.
- It **will culminate with a two-day validation exercise** where a special emphasis will be on enhancing tactical skills and enhancing inter-operability between the forces and promoting army-to-army relations.
- The **exercise will enhance the level of defence cooperation between the Indian Army and the Malaysian Army**, which in turn will further foster the bilateral relations between the two nations.
- Also, **exercise GarudaShakti 2022 Troops from Indian Army 'SpecialForces' and Indonesian Kostrad** undergoing 96 hours validation exercise in jungle terrain during the on-going joint exercise.

ECONOMY

LOAN WRITE-OFF BY BANKS

Banks wrote off more than Rs 10 lakh crore in loans over the last five years, according to **RBI data** under the **Right to Information (RTI) Act**. While **public sector banks** reported the lion's share of write-offs at Rs 734,738 crore, **private sector banks were not far behind in bringing down their non-performing assets (NPAs).**

What is a loan write-off?

- Writing off a loan** essentially means **it will no longer be counted as an asset.**
- By writing off loans, a **bank can reduce the level of non-performing assets (NPAs)** on its books.
- An additional benefit is that the amount so written off **reduces the bank's tax liability.**

Why do banks resort to write-offs?

1. The **bank writes off a loan after the borrower has defaulted on the loan repayment** and there is a very low chance of recovery.
2. The lender then moves the defaulted loan, **or NPA**, out of the assets side and reports the amount as a loss.
3. After the write-off, **banks are supposed to continue their efforts to recover the loan** using various options. They have to make provisioning as well.
4. The **tax liability** will also come down as the written-off amount is reduced from the profit.
5. However, the **chances of recovery from written-off loans are very low** — as the RTI reply shows — which raises questions about **the assets or collateral** against which the banks lent funds to these defaulters.

SCIENCE AND TECHNOLOGY

INDIA'S FIRST PRIVATE ROCKET LAUNCHED

History was made in **India's space programme** on 18 November 2022 with the successful launch of the **country's first-ever private rocket—Vikram-S—suborbital Flight** (Prarambh mission) from **Sounding Rocket Complex in Sriharikota**, Andhra Pradesh.

What

1. In a **text book launch**, the Hyderabad-based space start-up **Skyroot Aerospace's rocket Vikram-S** with **three small satellites blasted off** the small launcher at the Satish Dhawan Space Research Centre, Sriharikota.
2. **Weighing 545-kg and 6-metre tall**, the rocket left the launcher to reach the **apogee of 89.5 km** (and 115.8 km from the shore) at 139.93 seconds. It took a turn and had a **splashdown in the Bay of Bengal**.
3. The flight was launched **to prove avionics systems in Vikram series** like **telemetry, tracking, inertial measurement, GPS, on-board camera**, data acquisition and power systems.
4. The **'Prarambh' mission** carried **three customer payloads of two Indian and one foreign customer** equipped with sensors for the **measurement of acceleration and pressure**.
5. The mission's aim was to launch **Vikram-S (VKS)**, a **single-stage solid fuelled sub-orbital rocket** into space. The launch vehicle has been named **'Vikram-S'** as a tribute to the father of the Indian space programme, the late Vikram Sarabhai.
6. It took nearly two years for Skyroot to build the rocket using **carbon composite structures** and **3D-printed components**.
7. Founded by **Pawan Kumar Chandana** and **Naga Bharath Daka** in 2018, and is the **largest private space start-up in India**.

LONGEST MISSION OF ISRO LAUNCHED

Indian Space Research Organisation's (ISRO) **PSLV-C54** carrying an **earth observation satellite** and **eight nano-satellites** successfully lifted off from the first launch pad of the Satish Dhawan Space Centre (SDSC) in Sriharikota. The PSLV rocket, which blasted off from the launch pad, **placed all the nine satellites** into their **intended orbits** in two hours, making it the **longest mission of the ISRO**.

More about this mission

1. This is the **56th flight of the Polar Satellite Launch Vehicle**, known as ISRO's warhorse and **"most reliable" rocket**, and **24th flight of the extended PSLV-XL version**.

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2. The **primary satellite (EOS-06)** was separated in **Orbit-1**, two **Orbit Change Thrusters (OCTs)** introduced in the **propulsion bay ring of the rocket** subsequently changed the orbit after which the remaining eight were placed in different orbits in **Orbit-2**.
3. The **PSLV-C54 mission** is declared successful with **all nine satellites being placed precisely into their intended orbits**.
4. Of the eight satellites, **ISRO Nano Satellite-2 for Bhutan (INS-2B)** is a joint collaboration of **India and Bhutan**
5. Other customer payloads are **Anand, four satellites of Astrocast, and two satellites of Thybolt**.

Objectives of the satellites

1. **EOS-06**, which is the **third generation satellite in the Oceansat series**, is aimed at providing **continuity in services of Oceansat-2 spacecraft** with enhanced payload specifications as well as application areas.
2. The **other objectives of the primary satellite** is to ensure the **data continuity of ocean colour and wind vector data** to sustain the operational applications, and to develop and improve related algorithms and data products to serve in well- established application areas and to enhance the mission utility.
3. The satellite will also improve applications, **some additional datasets** such as **sea surface temperature** and more bands in the **optical region for fluorescence** and in the infrared region for atmospheric corrections are accommodated.
4. The **Anand Nano satellite** will demonstrate the capabilities and **commercial applications of miniaturized earth-observation cameras** for earth observation using a microsatellite in Low Earth Orbit.
5. **Astrocast, a 3U spacecraft**, is a technology demonstrator satellite for the **Internet of Things (IoT)** as the payload. There are 4 nos. of Astrocast Satellites in this mission.

INDIA'S FIRST PRIVATELY BUILT LAUNCH PAD

Space-tech start-up Agnikul on 28 November 2022 said it has established **India's first launchpad designed and operated by a private player**. The facility, situated at Sriharikota, was inaugurated by Isro chairman S Somanath. The facility which was designed by **Agnikul** and executed with support from **Isro and Indian National Space Promotion and Authorization Center (IN-SPACe)** has two sections to it — the **Agnikul launchpad (ALP)** and the **Agnikul mission control centre (AMCC)**.

More about the launchpad

1. Critical systems connecting these two sections, which are 4km away from each other, are redundant to ensure **100% operationality during countdown**.
2. The launchpad is specifically built keeping in mind the ability to support **liquid stage controlled launches**, while also addressing the need for Isro's range operations team to monitor key flight safety parameters during launches.
3. Additionally, it has the ability to, as necessary, **share data and other critical information** with Isro's mission control centre.
4. **Agnikul's first launch**, which will be a **controlled-and-guided mission**, having a **vertical launch**, using its patented engine will happen from this launchpad.
5. The mission would be a **technology demonstrator** that will mirror **Agnikul's orbital launch** but at a reduced scale.
6. **Agnibaan is a highly customizable, 2-stage launch vehicle**, capable of taking up to **100kg payload to orbits** around 700km high (low Earth orbits) and enables plug-and-play configuration.

7. **Agnilet is the world's first single-piece 3D-printed engine** fully designed and manufactured in India and was successfully test-fired in early 2021 & became the **first company in the country to test its engines at Isro.**

NARCO TEST AND POLYGRAPH TEST

A court in Saket, New Delhi, has allowed Delhi Police to conduct a **narco test** on Aaftab Poonawalla, the 28-year-old man accused of killing his 27-year-old live-in partner Shraddha Walkar in May this year. After police moved court seeking permission for the test, **Poonawalla consented**, telling the judge he was aware of the consequences.

What is a narco test?

1. In a '**narco**' or **narcoanalysis test**, a drug called **sodium pentothal** is injected into the body of the accused, which **transports them to a hypnotic or sedated state**, in which **their imagination is neutralised**.
2. In this **hypnotic state**, the accused is understood as being incapable of lying, and is expected to divulge information that is true.
3. **Sodium pentothal** or **sodium thiopental** is a fast-acting, **short duration anaesthetic**, which is used in larger doses to sedate patients during surgery.
4. It belongs to the **barbiturate class of drugs** that act on the **central nervous system** as depressants.
5. Because the drug is believed **to weaken the subject's resolve to lie**, it is sometimes referred to as a "**truth serum**", and is said to have been used by intelligence operatives during **World War II**.

Is this the same as a polygraph test?

1. **No.** A **polygraph test** is based on the assumption that **physiological responses that are triggered** when a person is lying are different from what they would be otherwise.
2. A **polygraph test does not involved injecting drugs into the body**; rather instruments like **cardio-cuffs or sensitive electrodes** are attached to the suspect, and variables such as **blood pressure, pulse rate, respiration, change in sweat gland activity, blood flow**, etc., are measured as questions are put to them.
3. A **numerical value is assigned to each response** to conclude whether the person is telling the truth, is deceiving, or is uncertain.
4. A test such as this is said to have been **first done in the 19th century** by the Italian criminologist **Cesare Lombroso**, who used a machine to measure changes in the blood pressure of criminal suspects during interrogation.
5. Similar devices were subsequently created by the **American psychologist William Marston in 1914** and by the **California police officer John Larson in 1921**.

DRAFT OF NEW DATA PROTECTION BILL RELEASED

India released the **draft of a new comprehensive data protection bill** on 18 November 2022, three months after withdrawing a previous bill that had alarmed big technology companies. The measure, aimed at **protecting digital personal data**, seeks **to allow transfer of data outside India**, and **provides for penalties** regarding **data breaches**.

More about the bill

- The government plans to set up a panel **to ensure compliance with the law.**
- Titled "**The Digital Personal Data Protection Bill, 2022**", the bill says, "The purpose of this Act is to provide for the processing of **digital personal data** in a manner that recognises both the right of individuals to protect their personal data and the need to process personal data for lawful purposes, and for matters connected therewith or incidental thereto."

- According to the bill, the provisions of the Act will apply to **processing of digital personal data** within the **territory of India** where:
 1. **Such personal data is collected from Data Principals online;** and
 2. **Such personal data collected offline, is digitised.**
- The provisions of the Act will also apply to "**processing of digital personal data outside the territory of India**, if such processing is in connection with **any profiling of**, or activity of offering goods or services to Data Principals within the territory of India."
- **On transfer of personal data outside India**, the bill says, "The Central government may, after an assessment of such factors as it may consider necessary, notify such countries or territories outside India to which a **Data Fiduciary** may transfer personal data, in accordance with such terms and conditions as may be specified."

Flashpoint of the bill

1. The privacy law to be renamed as **The Digital Personal Data Protection Bill, 2022**
2. The bill may allow government to appoint **Data Protection Board of India** to decide on non-compliance and penalty
3. Provisions over **consent and purpose limitation for data collection tightened**
4. **Section 43A of the IT Act** to be omitted
5. The revised draft released for public consultations

INDIA'S SARAS RADIO TELESCOPE GIVES CLUES TO UNIVERSE'S 1ST STARS

Raman Research Institute (RRI) in Bengaluru on 28 November 2022 said that in a **first-of-its-kind work**, using data from an **Indian telescope**, scientists have determined **properties of radio luminous galaxies** formed just **200 million years after the Big Bang**, a period known as the **Cosmic Dawn**.

What

1. Pointing out that a number of telescopes, both **ground and space-based**, peering into the sky are **aiming to capture the faint signals** arising from the depths of the cosmos to better the understanding of our Universe, RRI said they used the **Shaped Antenna measurement of the background Radio Spectrum-3 (SARAS-3) telescope**.
2. For the study, **SARAS-3, indigenously designed and built at RRI**, was deployed over **Dandiganahalli Lake and Sharavathi backwaters**, located in Karnataka, in early 2020.
3. Researchers **Saurabh Singh (RRI)**, **Ravi Subrahmanyam from the Commonwealth Scientific and Industrial Research Organisation (CSIRO)** in Australia, along with collaborators at the University of Cambridge and the University of Tel-Aviv, used data from SARAS-3 to throw light on the energy output, luminosity, and masses of the **first generation of galaxies** that are bright in **radio wavelengths**.
4. Scientists study properties of **very early galaxies** by observing radiation from **hydrogen atoms** in and around galaxies, emitted at a frequency of approximately 1420 MHz.
5. The radiation is stretched by the **expansion of the universe**, as it travels to us across space and time, and arrives at Earth in **lower frequency radio bands 50-200 MHz**, also used by FM and TV transmissions.
6. The **cosmic signal is extremely faint**, buried in orders of **magnitude brighter radiation from our own Galaxy** and man-made terrestrial interference.
7. Therefore, it added, detecting the signal, even using the **most powerful existing radio telescopes**, has remained a challenge for astronomers.

8. The results from the **SARAS-3 telescope** are the first time that radio observations of the averaged 21-cm line have been able to provide an insight to the properties of the earliest radio loud galaxies that are usually powered by **supermassive black holes**.

MISCELLANEOUS

SUPREME COURT FLOATS IDEA OF 'PROJECT GIB'

To **protect the endangered bird Great Indian Bustard (GIB)**, the Supreme Court asked if a **'Project GIB', on the lines of 'Project Tiger'**, could be launched. **Project Tiger' is touted** by the government as one of the most successful **conservation programmes** for a single species in the world.

What is the Great Indian Bustard (GIB)

1. This is a **large bird, found** mainly in **Rajasthan and Gujarat**, has been categorised as **critically endangered** by the International Union for Conservation of Nature (IUCN).
2. These are **among the heaviest birds** with flight; **they prefer grasslands** as their habitats.
3. **Its historic range included** much of the Indian sub-continent, it has now shrunk to just **10 per cent** of that.
4. **The terrestrial birds** spend most of their time on the ground, feeding on insects, lizards, grass seeds, etc.
5. They are **considered the flagship bird species** of **grassland** and hence barometers of the health of grassland ecosystems.

Why endangered status

1. The **biggest threats to the GIBs** are overhead power transmission lines. Due to their poor frontal vision, the birds can't spot the power lines from a distance, and are too heavy to change course when close. Thus, they collide with the cables and die.
2. According to the **Wildlife Institute of India (WII), in Rajasthan**, 18 GIBs die every year after colliding with overhead power lines.

Conservation efforts

1. The **Supreme Court in April 2021** ordered that all **overhead power transmission lines** in core and potential GIB habitats in Rajasthan and Gujarat should be **made underground**.
2. The **court sought reports from the chief secretaries** of Rajasthan and Gujarat on installation of bird diverters (reflector-like structures strung on power cables) in priority areas.
3. It also asked to **assess the total length of transmission lines** that need to go underground in the two states.
4. In **2015, the Centre had launched the GIB species recovery programme**. Under this, the WII and Rajasthan forest department jointly set up breeding centres where GIB eggs harvested from the wild were incubated artificially.

Project Tiger and its significance

1. **It launched in April 1973**, that **aims at ensuring a viable population of the Bengal tiger** in its natural habitats, protecting it from extinction, and preserving areas of **biological importance as a natural heritage** that represent the **diversity of ecosystems** across the tiger's range in the country.
2. The **project's task force visualised these tiger reserves** as breeding nuclei, from which surplus animals would migrate to adjacent forests.

PRATHAM RECEIVES THE INDIRA GANDHI PRIZE FOR ITS EDUCATIONAL EFFORTS

The **2021 Indira Gandhi Prize for Peace, Disarmament, and Development** was handed to Pratham, an NGO working in the field of education, by former vice president Hamid Ansari. The honour is given in appreciation of Pratham's efforts to provide the nation's children with high-quality education, notably during the epidemic.

More about the Prize

1. According to Mr. Ansari, Pratham's efforts have been praised all around the world. He claimed that **Pratham also provided education using digital technology so that students may continue their study while schools were closed due to the epidemic.**
2. **Pratham CEO Rukmini Banerji** remarked during her acceptance speech that the organisation supported community and family involvement in a child's development. Many of the lessons we have gained have come from the local community and youngsters, the woman stated.
3. **Sonia Gandhi, the Chairperson of the Indira Gandhi Memorial Trust**, stated during her speech that Indira Gandhi had left an irreparable mark on the nation. Even her detractors concur that Ms. Gandhi had a core personality trait that remained constant and characterised who she was and what she did.
4. She continued to praise Pratham, saying, "**It has done a lot to make school instruction more powerful and meaningful...** It has sparked new ideas in teaching as well as monitoring and evaluating as a tool to enhance learning results.

About Pratham

1. One of **India's biggest non-governmental organisations** is called **Pratham**. Madhav Chavan and Farida Lambay jointly founded it.
2. It works to give impoverished children in India access to **high-quality education**. In order to give pre-school education to children living in slums, Pratham was founded in Mumbai in 1994.
3. As of now, its interventions are spread across **23 Indian states and union territories**, and it has supporting chapters in the US, the UK, Germany, Sweden, and Australia.

UN'S HIGHEST ENVIRONMENTAL AWARD

Indian wildlife biologist **Dr Purnima Devi Barman** was awarded with **Champions of the Earth award** in the **Entrepreneurial vision category**, UN's highest environmental honour. She is the **founder of the Hargila Army** and senior project manager of the Avifauna Research and Conservation Division, Aaranyak.

Who is Purnima Devi Barman?

1. **Barman** is an **Indian wildlife biologist working in Assam** to protect storks. Her **love for birds** was born when was sent to live with her grandparents on the banks of the **Brahmaputra River in Assam** at the age of five.
2. Barman's grandmother, a farmer, started taking her to nearby paddy fields and wetlands to teach her about the birds there, which cultivated her passion.
3. After gaining a **Master's degree in Zoology**, Barman started a PhD on the greater adjutant stork.
4. She decided to delay **her thesis** after seeing that many of the birds in the region were nearing extinction and decided to focus on keeping the species alive.
5. She began campaigning **to protect the stork in 2007**, focusing on the villages in **Assam's Kamrup district**, where the birds were most concentrated.

How is Barman saving the storks?

1. **Barman had to change perceptions of the bird** as a bad omen, bad luck or a disease carrier among people in Assam.
2. She **assembled a group of village women** to help her and named the group as the '**Hargila Army**' after the stork, known as '**hargila**' in Assamese (meaning 'bone swallower').
3. In 2017, Barman began building **tall bamboo nesting platforms** for the **endangered birds** to hatch their eggs and a couple of years later the first greater adjutant stork chicks were born.
4. The **Hargila Army has helped communities plant 45,000 saplings** near stork-nesting trees and **wetland areas** to support future stork populations and they are planning to plant **60,000 saplings next year**.
5. **Hargila Army** also works to reduce pollution in rivers by organising cleaning drives on the banks of rivers and in wetlands.

WHO CONFIRMS RENAMING MONKEYPOX TO 'MPOX'

The **World Health Organization** announced on 28 November 2022 that **monkeypox will be renamed MPOX in English** to avoid stigma associated with the current name. The virus that **causes monkeypox** was **first discovered in 1958** in Danish research monkeys, hence the name "monkeypox," but the illness can affect a variety of animals, with rodents being the most commonly affected.

What

1. Following a series of consultations with global experts, WHO will begin using a **new preferred term 'MPOX'** as a synonym for monkeypox.
2. **Both names will be used simultaneously for one year** while 'monkeypox' is phased out, the UN health agency said.
3. WHO will **adopt the term MPOX in its communications**, and encourages others to follow these recommendations, to minimise any ongoing **negative impact of the current name** and from adoption of the new name.
4. The disease was **first identified in humans in 1970 in the Democratic Republic of the Congo**, and since then, human transmission has mainly been confined to a small number of endemic West and Central African nations.
5. However, in May, cases of the illness, which causes **fever, aches in the muscles**, and **large skin lesions** that resemble boils, started to spread quickly throughout the world, mostly among men who have sex with other men.
6. This year, **110 countries have reported 81,107 cases** and **55 fatalities** to the WHO.

EGYPT'S PRESIDENT GUEST AT REPUBLIC DAY PARADE IN 2023

To strengthen the **India-Egypt bilateral relations**, after a gap of two years, there will be a **chief guest for Republic Day celebrations in 2023**. At the invitation of Prime Minister Narendra Modi **Egypt's President Abdel Fattah el-Sisi** is coming as the chief guest for the Republic Day celebrations on 26 January 2023. **No foreign dignitary was invited as the Chief Guest in 2021 and 2022** due to the Covid-19 global pandemic. This is the **first time that the President of the Arab Republic of Egypt** will be the Chief Guest.

FACT TO REMEMBER:

1. NATIONAL SUICIDE PREVENTION STRATEGY
2. UN CLIMATE SUMMIT ADOPTS 'LOSS AND DAMAGE' FUND
3. INDIA'S LOW-CARBON GROWTH
4. NCPDR LAUNCHES 'GHAR'

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5. INDIA WINS VICE PRESIDENCY OF IEC
6. LOAN WRITE-OFF BY BANKS
7. INDIA'S FIRST PRIVATE ROCKET LAUNCHED
8. LONGEST MISSION OF ISRO LAUNCHED
9. NARCO TEST AND POLYGRAPH TEST
10. SUPREME COURT FLOATS IDEA OF 'PROJECT GIB'

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Previous Year Questions 2022

- Q. With reference to the Indian economy, consider the following statement:
1. An increase in Nominal Effective Exchange Rate (NEER) indicates the appreciation of rupee.
 2. An increase in the Real Effective Exchange Rate (REER) indicates an improvement in trade competitiveness.
 3. An increasing trend in domestic inflation relative to inflation in other countries is likely to cause an increasing divergence between NEER and REER.
- Which of the above statements are correct?
- (a) 1 and 2 only
 - (b) 2 and 3 only
 - (c) 1 and 3 only
 - (d) 1, 2 and 3

Source: My Notes, 1-15 April 2022, Page no. 10