

Current Affairs 2nd January 2024 by Saurabh Pandey

Psychoanalysis

- The Delhi Police said the six individuals accused in the Parliament breach incident underwent psychoanalysis at a government institute in the city in order to ascertain their motives.
- The term 'psychoanalysis' is usually restricted to the medical literature on mental health when it isn't provoking suspicious questions
- Psychoanalysis is a type of treatment based on the theory that our present is shaped by our past.
- The unacknowledged meaning of personal experiences can influence our mood and behaviour, and contribute to problems with relationships, work, and self-esteem
- We are often unaware of how experiences can affect us.
- Painful feelings can remain in the unconscious mind influence our current mood and behavior and contribute to problems with self-esteem, personality, relationships, and work.
- Psychoanalysis helps a person take control of these influences by tracing them back to their

origins and understanding how they have developed over time.

The unconscious mind

According to psychoanalysis, the unconscious mind gives hints of the unacknowledged meaning of experiences in different ways. Such hints may include:

- Repetitive behavior
- topics that the person finds difficult to talk about dreams daydreams, the nature of the patient-therapist relationship.
- The Hindu

India in 2023

- Developing countries, including India, asked rich nations to vacate carbon space by achieving negative carbon emissions, and not merely reaching net zero by 2050.
- India also submitted its third national communication to the U.N. Framework Convention on Climate Change on December 9.
- According to it, the country reduced GDP emission intensity by 33% between 2005 and 2019, achieving the target 11 years in advance.

Current Affairs 2nd January 2024 by Saurabh Pandey

- On the wildlife front: an estimation exercise found the number of tigers has gone up in the Shivalik Hills Gangetic Plains landscape, central India and the Sundarbans, but dwindled in the Western Ghats and the Northeast Brahmaputra Plains due to habitat loss, fragmentation, and poaching.
- The cheetah conservation project drew sharp criticism over the deaths of six of the 20 adults imported from Namibia and South Africa.
- India also launched the International Big Cat Alliance, to conserve the world's seven principal big cats: tigers, lions, snow leopards, leopards, jaguars, pumas, and cheetahs. The Alliance is open to 97 countries and organisations.
- The government also amended forest conservation and biodiversity laws, inviting sharp criticism from several state governments, policy experts, and conservationists.
- The Forest (Conservation) Amendment Act applies to land recorded as 'forest' in government records, exempting certain categories of land from its purview.
- Conservationists argue that limiting the applicability of the FCA would invalidate the Supreme Court's 1996 judgment in the T.N. Godavarman Thirumulpad case, which said the Act was applicable to land covered under the "dictionary meaning of forests" or "deemed forests" (forests not officially recorded as forests).
- The amended Act exempts forest land up to 10 ha for constructing security related infrastructure and the area falling within 100 km of international borders, Line of Control and Line of Actual Control for "strategic and security related projects of national importance".
- The government also introduced changes to the Biological Diversity Act to help protect plants and resources in India.
- The goal was to encourage growing medicinal plants instead of taking them from the wild, support traditional Indian medicine, make it easier for research and patents, and involve more foreign investments.
- The Hindu

Current Affairs 2nd January 2024 by Saurabh Pandey

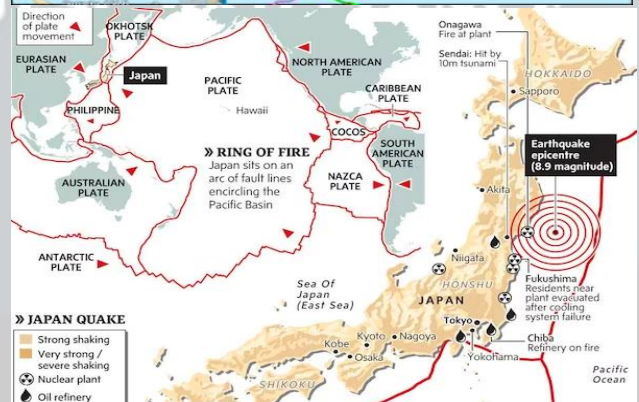
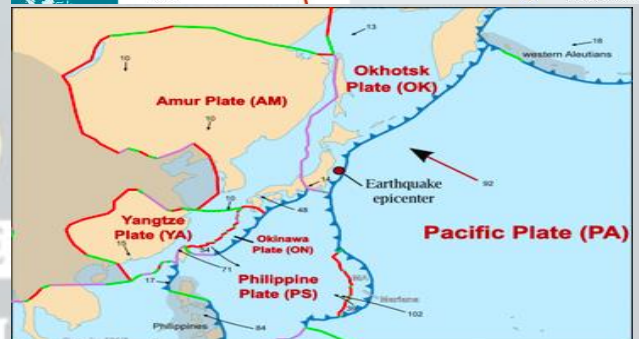
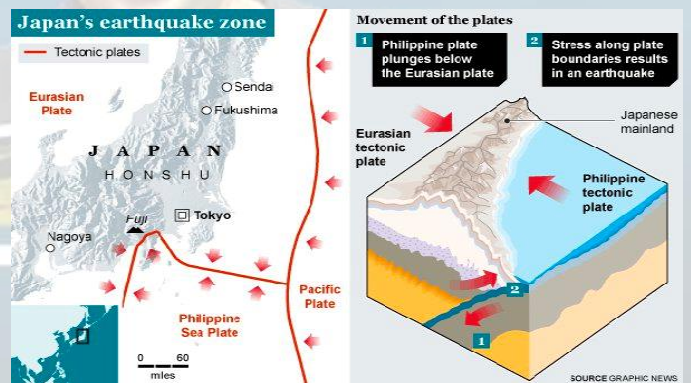
MOHAMMED Yunus

- Nobel peace laureate Muhammad Yunus was convicted on of violating Bangladesh's labour laws in a case decried by his supporters as politically motivated.
- Mr. Yunus, 83, is credited with lifting millions out of poverty with his pioneering microfinance bank but has earned the enmity of longtime Prime Minister Sheikh Hasina, who has accused him of "sucking blood" from the
- "banker to the poorest of the poor", was awarded the Peace Prize in 2006 for his work loaning small cash sums to rural women, allowing them to invest in farm tools or business equipment and boost their earnings.
- Grameen Bank, the microfinance lender he founded, was lauded for helping unleash breakneck economic growth in Bangladesh, and its work has since been copied by scores of developing countries.
- The Hindu

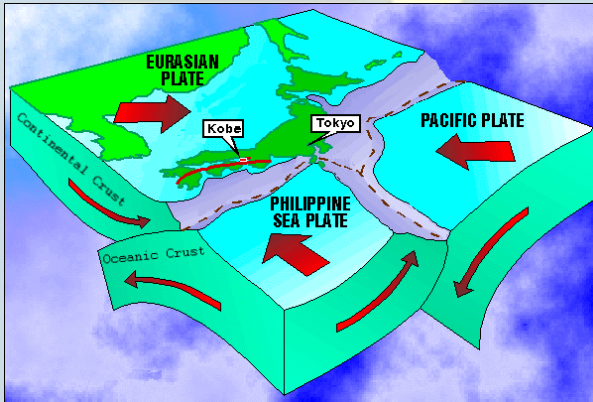
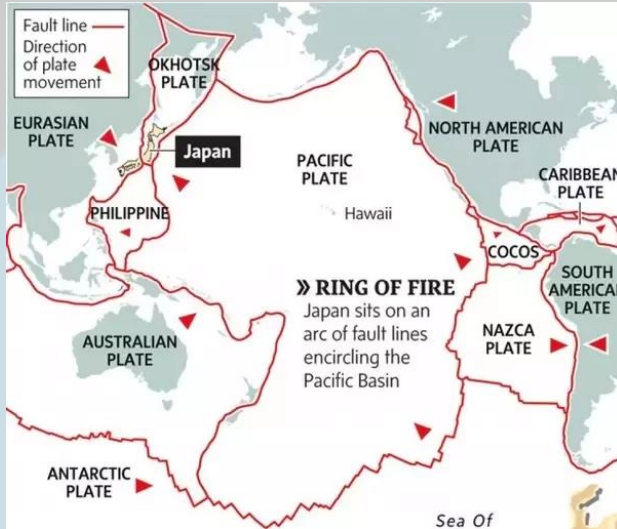
Why earthquake in japan?

- Earthquakes are common in Japan, one of the world's most seismically active areas.

- The island nation sits on the so-called Pacific "Ring of Fire"-- a term coined to refer to the Circum-Pacific Belt.
- Simply put-- it is a path along the Pacific Ocean characterised by active volcanoes and frequent earthquakes. According to scientists, the majority of Earth's volcanoes and earthquakes take place along the "Ring of Fire".



Current Affairs 2nd January 2024 by Saurabh Pandey



- An earthquake occurs due to the stresses caused by the movements of tectonic plates that comprise the earth.
- Japan and earthquakes go hand in hand due to the country's position along the "Pacific Ring of Fire," where it lies across three tectonic plates, including the Pacific Plate under the Pacific Ocean and the Philippine Sea Plate.

What is Tsunami

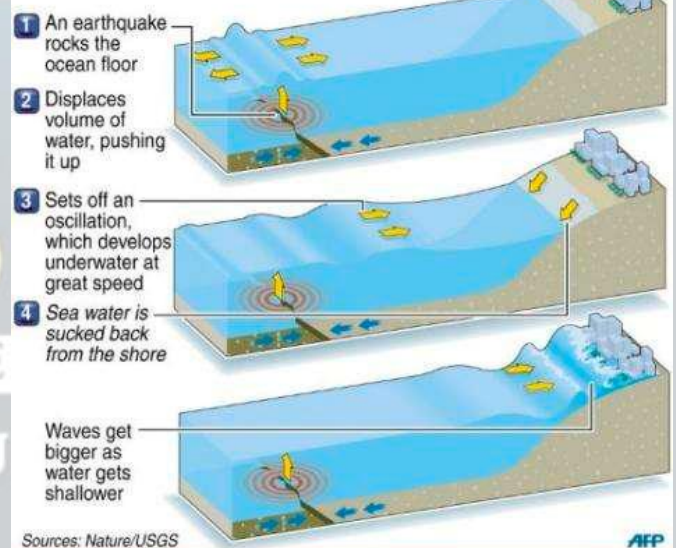
- According to the National Ocean Service, tsunamis are giant

waves caused by earthquakes or volcanic eruptions under the sea.

Out in the depths of the ocean, tsunami waves do not dramatically increase in height.

- But as the waves travel inland, they build up to higher and higher heights as the depth of the ocean decreases.
- The speed of tsunami waves depends on ocean depth rather than the distance from the source of the wave.

How a tsunami occurs

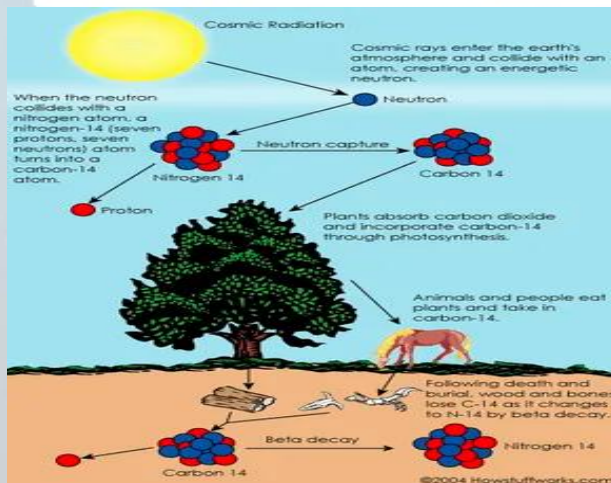
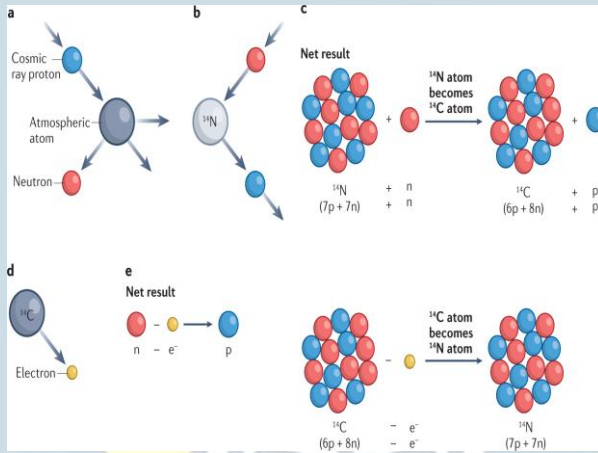


- Tsunami waves may travel as fast as jet planes over deep waters, only slowing down when reaching shallow waters.
- While tsunamis are often referred to as tidal waves, this

name is discouraged by oceanographers because tides have little to do with these giant waves.

The Hindu

Carbon dating



The carbon dating story

radioactive carbon-14 (6 protons, 8 neutrons) eventually decays into nitrogen-14 (7 protons, 7 neutrons) + beta particle

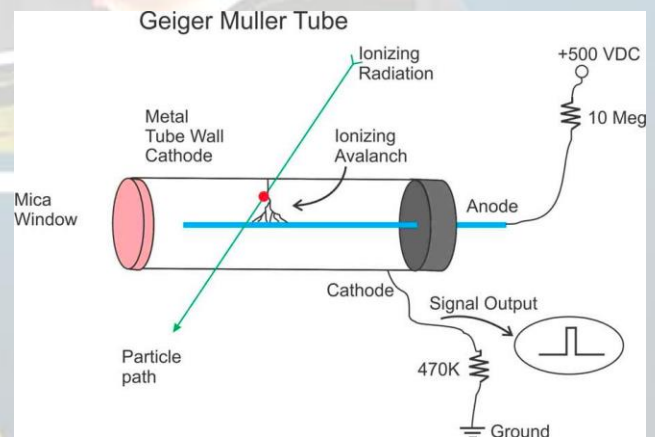
All carbon-14 decays into nitrogen, but the level of carbon-14 on Earth is relatively constant because cosmic rays constantly produce new radioactive carbon from nitrogen in the upper atmosphere.

The level of carbon-14 in living things is the same as the atmospheric level, because plants and animals constantly absorb new carbon sources by photosynthesising or by eating. Dead animals and plants don't absorb new carbon, so the longer they are dead, the less carbon-14 they contain. The ratio of carbon-14 to regular carbon-12 in dead material is the basis for carbon dating.

- In the early 1940s, the American chemists Martin Kamen and Sam Ruben found a way to synthesise carbon 14 in the lab as well as that its half life – the time taken to decay to half its original mass – was around 5,000 years, and not a few hours as expected.
- In 1939, the Finnish American Physicist Serge Korff found that it's possible to produce carbon 14 by bombarding nitrogen 14 with neutrons – as cosmic rays do.
- Inspired by these findings, the American physical chemist Willard Libby is credited with conceiving the idea of using carbon 14 to date organic materials

Current Affairs 2nd January 2024 by Saurabh Pandey

- Libby's idea made two assumptions that weren't exactly known to be true at the time.
- First, the concentration of carbon-14 in the earth's atmosphere doesn't change across thousands of years. If it did, radiocarbon dating which dates organic materials by measuring the amount of carbon-14 they contain wouldn't work.
- Second, carbon-14, in the form of carbon dioxide and other carbon compounds, would have to be able to diffuse into the earth's various ecosystems such that the concentration of carbon-14 in the atmosphere was comparable to the concentration of carbon-14 in the planet's other biospheres.
- A high voltage is maintained between the tube's inner surface and the rod.
- The gas is insulating, so no current can pass between the two.
- But when energetic particles (including gamma radiation), such as those emitted during radioactive decay, pass through the gas, they can energise electrons in the gas's atoms and produce an electric discharge.



- What are the tools of radiocarbon dating?
- The instrument of choice in Libby's time to study radioactive decay was the Geiger counter.
- It consists of a Geiger Muller tube connected to some electronics that interpret and display signals.
- The Geiger Muller tube contains a noble gas, such as helium or neon, and a rod passing through the centre.
- The modern radiocarbon dating setup is more sophisticated, of course.
- For example, one of the most sensitive dating setups uses accelerator mass spectrometry (AMS), which can work with organic samples as little as 50 mg.

The Hindu

Current Affairs 2nd January 2024 by Saurabh Pandey

S. Venkitaramanan

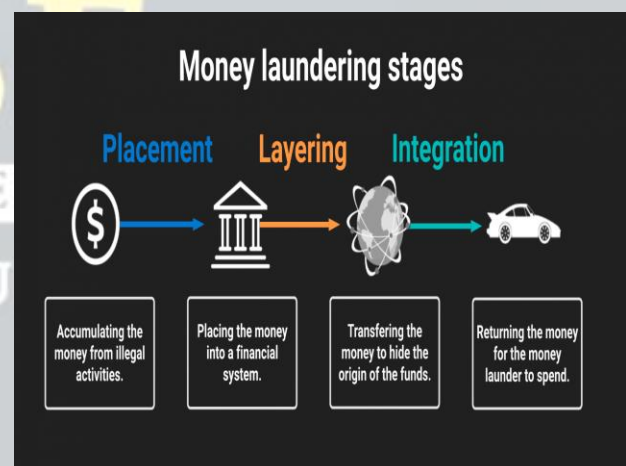
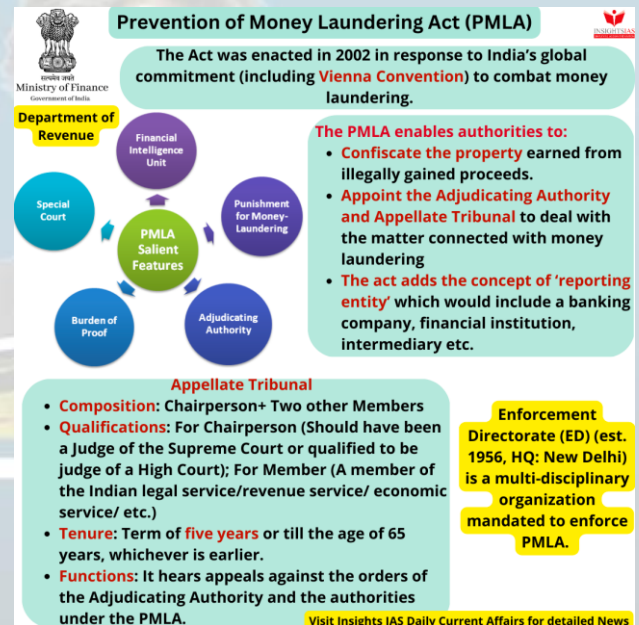
- **S. Venkitaramanan** led RBI's efforts during India's severe balance of payments stress in 1990-91, including initiatives to raise international loans and pledging India's gold reserves, which salvaged the country's financial reputation and prevented a potential default.
- Under his leadership, RBI implemented import compression measures by raising cash margins on imports.
- This stringent strategy significantly reduced the current account deficit, stabilising the balance of payments.
- He also displayed openness by inviting diverse opinions and experts, including critical voices, to discuss critical economic matters, demonstrating an inclusive and non-hierarchical approach to decision making.

Financial Intelligence Unit India (FIU IND)

- the Financial Intelligence Unit India (FIU IND) issued show cause notices to nine offshore virtual digital asset service providers (VDA SPs), including Binance, Kucoin, Huobi, Bitfinex

and MEXC Global, among others.

- This was for “operating illegally” without complying with the provisions of the Prevention of Money Laundering Act, 2002 (PMLA)



What considerations emerge when looking to regulate VDAs?

- The Bureau for International Settlements (BIS), which is the

Current Affairs 2nd January 2024 by Saurabh Pandey

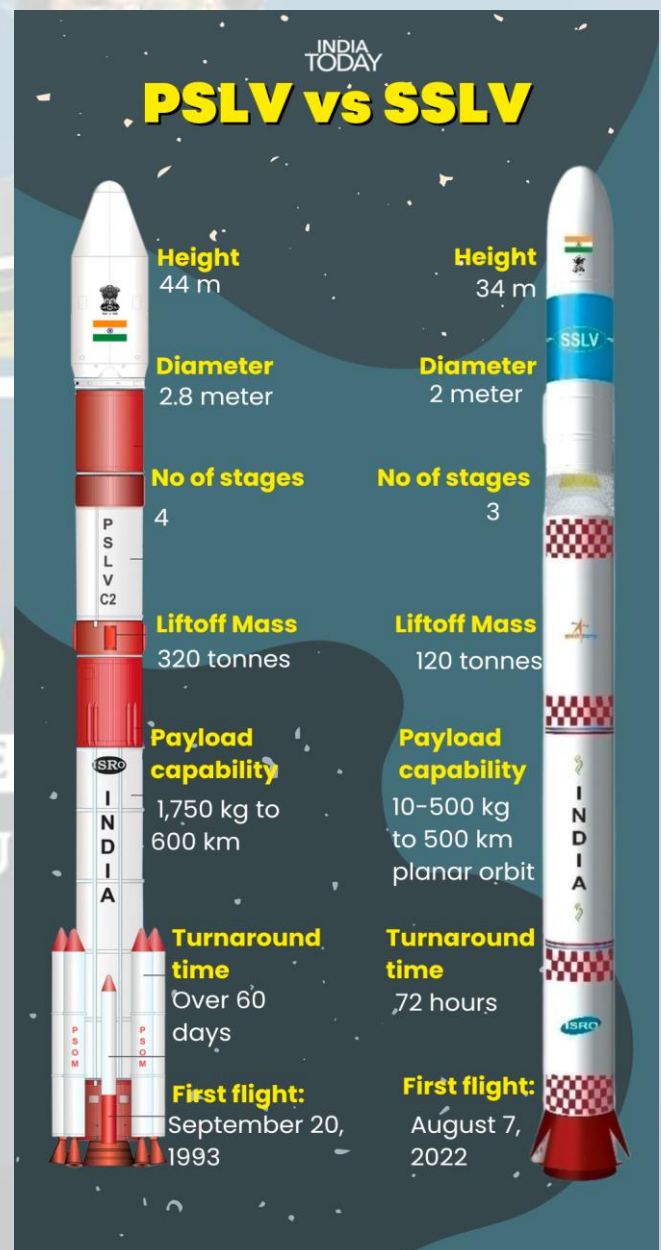
global forum for cooperation among central banks, in a report about financial stability from crypto assets in emerging economies (August 2023) observed three high level policy options under consideration.

- These include an outright ban, containment and regulation. BIS observed that an outright ban may not prove enforceable.
- This is because of the pseudo anonymous nature of crypto markets.
- There could be a possibility that regulators lose all sight of the market, further shrinking their transparency and making them less predictable.
- Containment would imply controlling the flows between crypto markets and traditional financial systems
- About regulation, motivation to regulate the asset varies across jurisdictions.
- The report holds that it must be ensured that the benefits of regulating and supervising are greater than the costs involved.
- Furthermore, for emerging market economies three issues are of importance, that is: defining the (regulatory) authority or entity and their

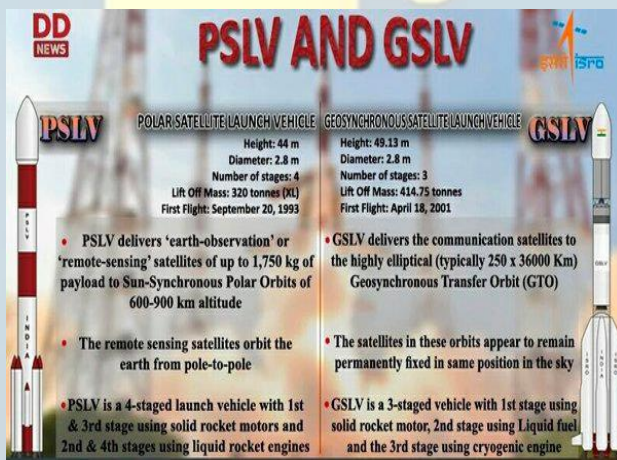
scope, then the scope of regulation in terms of either activity or entity, and lastly, filling in the data gaps to understand the technology and interconnections

The Hindu

PSLV



Current Affairs 2nd January 2024 by Saurabh Pandey



The Hindu

INDIA KOREA

- A challenge that persists is the absence of a shared vision for a new comprehensive defence Framework, one that can provide a robust structure under which both nations can operate and align their policies to construct a novel and sustainable emerging regional order.

- The imperative for India and Korea is to transcend the confines of bilateral cooperation, and embrace a paradigm shift that cultivates a more profound understanding of their roles in the swiftly evolving global scenario.
- It is incumbent upon Korea to comprehend that India is not merely the largest consumer of defence products.
- Rather, it stands as a regional power capable of substantial contributions to peace and stability in the Indo Pacific.
- A departure from Cold War mentalities, where the Korean government perceived India as standing in the opposite Soviet bloc, is imperative for Korea to forge a deeper, more meaningful partnership with India.

- This paradigm shift in Korean government strategic thinking is indispensable for any meaningful engagement between the two nations.
- The unwavering focus of the Korean defence establishment on profit driven weapons sales to India,
- The emerging coalition of North Korea, China, and Russia poses a new serious challenge to

Current Affairs 2nd January 2024 by Saurabh Pandey

collaborative efforts between the two nations. Divergent stances may arise, necessitating a nuanced appraisal of each party's strategic imperatives

- Leveraging their technological capabilities, India and South Korea are aiming to collaborate in developing advanced defence systems and equipment.
- In an era where defence against space warfare, information warfare, and cybersecurity is paramount, both nations can further explore opportunities for cooperation
- Strengthening coordinated efforts to counter terrorism aligns seamlessly with the shared concerns of India and South Korea.
- There is potential for collaboration in maritime security, including joint patrolling and information sharing, given the significant maritime interests both countries have in the Indian Ocean.
- India and South Korea can leverage their United Nations peacekeeping expertise for collaborative efforts.
- Sharing insights and resources in peacekeeping operations can

enhance regional and global stability, underscoring their joint commitment to peace and security.

- Additionally, joint exercises and the exchange of best practices in Humanitarian Assistance and Disaster Relief (HADR) demonstrate the shared responsibility of both nations in addressing vulnerabilities to natural disasters.
- Lastly, mutual growth is found in enhancing joint army exercises, fostering interoperability, and strengthening the capabilities of both armies for effective collaboration in diverse scenarios.

The Hindu