

Reservation in Promotion to SCs/STs

❖ Context

- Recently, The Supreme Court said that **states are obliged to collect quantifiable data on the inadequacy of representation for SCs and STs employees** in government jobs before implementing reservations for them in the promotion.

Key Highlights

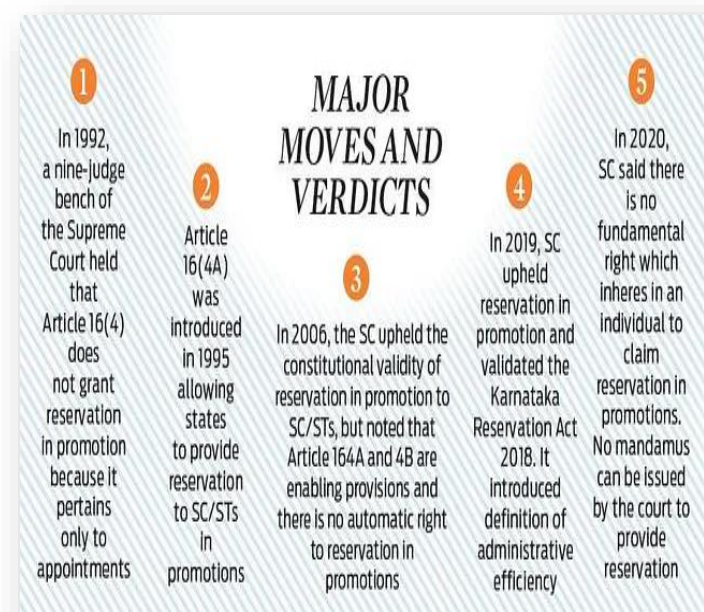
- The **SC** observed that
 - it **cannot lay down any yardstick** to determine the inadequacy of representation of SCs/STs and it is for the states to do so.
 - The **data on reservations must be collected on the basis of cadre-based vacancies**.
 - States must **conduct a review for the purpose of providing reservation**.
- The Center had earlier told the bench that it is a fact of life that even after around 75 years of independence, those belonging to **SCs and STs have not been brought to the same level of merit as the forward classes**.

❖ Constitutional Provisions for Promotion in Reservation

- **Article 16 (4)**: Provides that the State can make any provision for the **reservation of appointments or posts in favor of any backward class** of citizens who, in the opinion of the state, are not adequately represented in the services under the State.
- **Article 16 (4A)**: Provides that the **State can make any provision for reservation in matters of promotion in favour of the SCs and STs** if they are not adequately represented in the services under the State.
 - **Inserted by the 77th Constitutional Amendment Act, 1995.**
- **Article 335**: It says that **special measures** need to be adopted for considering the claims of SCs and STs to services and posts, **in order to bring them at par**.

❖ Supreme Court Observations

- **M. Nagaraj Case (2006)**: State is not bound to make reservations for SC/ST in the matter of promotions. This case put down **three conditions for promotion** of SCs and STs in public employment:-
 - **Collect quantifiable data** showing backwardness and inadequacy of representation in public employment.
 - **Maintain overall administrative efficiency** in compliance with Article 335.
 - State needs to ensure that its **reservation provision does not lead to excessiveness**- breaching the ceiling-limit of 50%, or destroying the creamy layer principle.
- **Jarnail Singh v L.N. Gupta (2018) case**
 - SC held that **states need not be required to collect quantifiable data** on the backwardness of the SCs and STs.



Bad Bank

❖ Context

- Recently, a key proposal announced in this year's (2021) Budget, a **bad bank to deal with stressed assets** in the loss-laden banking system, has **received all regulatory approvals**.
- Finance Minister Nirmala Sitharaman had in her **February 1, 2021, Budget speech proposed a new structure** for the **resolution of stressed assets**.

❖ Key Highlights

- The bad bank — **National Asset Reconstruction Company Limited (NARCL)** — is ready to commence operations with 15 cases worth Rs 50,335 crore to be transferred by March 31.
- **NARCL will acquire and aggregate the identified NPA accounts from banks.**
 - **Public Sector Banks** have taken majority stakes in NARCL
- **Indian Debt Resolution Co. Ltd. (IDRCL)**, under an exclusive arrangement, will handle the debt resolution process.
 - **Private Sector Banks** have taken majority stakes in in IDRCL
- The NARCL will purchase these bad loans through a **15:85 structure**.
 NARCL will pay 15 per cent of the sale consideration in cash and issue security receipts (SRs) for the remaining 85 per cent.
 - The **SRs will be guaranteed by the government**. (valid for five years)



About Bad Banks

- A bad bank is a **corporate entity** that **alienates illiquid and risky assets held by banks and financial institutions or a group of banks.**
- It is **created to help banks clean their balance sheets** by transferring their bad loans so that the banks can focus on their core business of taking deposits and lending money.
 - Better realization of NPAs**

About NPAs

- NPAs are loans or advances made by a financial institution, on which both principal or interest is unpaid for a specified period of time.
- Thus, NPAs are those loans that have **ceased to generate income for the bank.**
- Categories-
 - Sub-standard:** When the NPAs have aged ≤ 12 months.
 - Doubtful:** When the NPAs have aged > 12 months.
 - Loss assets:** When the bank or its auditors have identified the loss, but it has not been written off.

Bomb Cyclone

❖ Context

- Storm over the eastern coast of US develops into a "Bomb Cyclone"

❖ Key Highlights

❖ What is Bomb Cyclone?

- A bomb cyclone is a **large, intense midlatitude storm** that has **low pressure** at its **center**, weather fronts and an array of associated weather, from blizzards to severe thunderstorms to heavy precipitation.
- It becomes a bomb when its **central pressure decreases very quickly**—by at least **24 millibars in 24 hours**.
- Those winds could reach hurricane-strength speeds of about **75 miles an hour**.
- Two famed meteorologists, **Fred Sanders** and **John Gyakum**, gave this pattern its name in a 1980 study.

❖ Bombogenesis

- A cyclone develops into a bomb under optimal conditions - **high amount of heat, moisture and rising air**
- Storms in the midlatitudes draw their energy from **large temperature contrasts**.
- Along the U.S. East Coast during winter, there's a naturally potent thermal contrast between the **cool land and the warm Gulf Stream current**.
- Over the **warmer ocean, heat and moisture are abundant**. But as cool continental air moves overhead and creates a large difference in temperature, the **lower atmosphere becomes unstable** and buoyant. **Air rises, cools and condenses, forming clouds and precipitation.**

- Intense cyclones also require favorable conditions above the surface. Particularly **strong upper-level winds**, also known as "**jet streaks**," and **high-amplitude waves** embedded within storm tracks can help force air to rise.
- When a strong jet streak overlies a developing low-pressure system, it creates a **feedback pattern** that makes warm air rise at an increasing rate.
- This allows the pressure to drop rapidly at the center of the system. As the pressure drops, winds strengthen around the storm. **Essentially, the atmosphere is trying to even out pressure differences** between the center of the system and the area around it.
- ❖ **Jet Stream & Jet Streaks**
 - Jet streams are **fast flowing, narrow, meandering air currents in the atmospheres**
 - They are located **near the altitude of the tropopause** and are westerly winds (flowing west to east).
 - A "jet streak" refers to a **portion of the overall jet stream where winds along the jet core flow are stronger** than in other areas along the jet stream.



Face to Face Centres

InDEA 2.0

❖ Context

- Government has released draft InDEA 2.0 documents to seek comments

❖ Key Highlights

❖ Background

- Under the overarching vision of **Digital India Programme**, Government aims to make all **Government services digitally accessible** in an **integrated manner** to citizens through **multiple channels** like web, mobile and common service delivery outlets.
- Also, **users** have become **tech-savvy** and now demand **faster delivery** of services which match with those of private sector and other eGovernance delivering Nations across the world.
- The **United Nations eGovernance survey** emphasized a **whole-of-government approach**, policy integration and use of Big Data Analytics to provide better governance to citizens.
- These trends require **breaking of sectoral barriers and silos** & re-architecting the Government as a single enterprise.

❖ InDEA 1.0

- India Enterprise Architecture or IndEA 1.0 was notified as a standard framework of enterprise architecture by the Ministry of Electronics and IT (MeitY), Government of India in **2018**.
- It is a **set of business and architectural principles (based on The Open Group Architecture Framework -TOGAF)** and 8 reference models that encapsulate these principles
- Since the uptake of InDEA 1.0 has not been significant, government has decided to modify & the update the same

❖ InDEA 2.0

- The boundaries between functions, jurisdictions and public-private organizations are getting blurred due to **increasing interdependencies** and the need for **citizen-centric approaches** to designing digital services, as opposed to organization-centric approaches.
- Thus, it addresses the **architectural needs of an ecosystem** rather than of an enterprise which was the focus of its predecessor.
- Under the framework, MeitY has proposed creation of a **new model of “Federated Digital Id” - an umbrella digital ID** under which citizen’s multiple IDs - PAN, Aadhar, DL- can be interlinked, stored and accessed via unique Id.

News in Between the Lines

Duqm Port



❖ Context

- India has secured access to the Omani port for military use and logistical support

❖ Key Highlights

- India is trying to reinvigorate its ties with Oman to counter Chinese influence in the region
- Omani’s top defence official will visit India to co-chair 10th Joint Military Cooperation Committee (JMMC) with Indian counterpart - Secretary, Defence
- It is the highest forum of engagement between the two countries in the field of defence that provides guidance to the overall framework of defence exchanges
- The 9th JMCC was held in Oman in 2018
- **Oman is the only country in the Gulf region with which all three services of Indian Armed Forces conduct regular bilateral exercises and staff talks**
- It provide critical operational support to Indian naval deployments in the Arabian Sea for anti-piracy missions

Formosa Bonds



❖ Context

- SBI has recently raised \$300 MN through issuing Formosa Bonds

❖ Key Highlights

- It is a **bond issued in Taiwan**
- **SBI is the first Indian entity** to raise money through Formosa Bond
- Being able to raise money from those markets which have remained untapped for several years, it is a step further in the direction of globalization
- It reflects India’s acceptability with all international investors.



Brain Fingerprinting



❖ Context

- It is used by various law enforcement agencies to investigate individuals

❖ Key Highlights

- **Brain Electrical Oscillation Signature Profiling (BEOSP or BEOS)** is an **EEG technique** by which a suspect's participation in a crime is detected by eliciting electrophysiological impulses.
- It is a **non-invasive, scientific technique** with a degree of sensitivity and a **neuro-psychological method of interrogation** which is also referred to as 'brain fingerprinting'.
- The human **brain receives millions of arrays of signals** in different modalities, all through the waking periods.
- These signals are **classified and stored** in terms of their relationship perceived as function of **experience**
- The process of **encoding** happens **primarily** when the **individual directly participates** in an activity or experiences it. Primary encoding is **deep-seated**
- It is considered **secondary**, when the **information is obtained** from a secondary source viz. books, conversations etc
- It is found that **when the brain of an individual is activated** by a piece of information of an event in which he/she has taken part, the **brain** of the individual **will respond differently** from that of a person who has received the same information from secondary sources (non-experiential)
- BEOSP is based on this principle, thereby intending to demonstrate that the suspect who have primary encoded information of those who have participated in the suspected events will show responses indicating firsthand (personally acquired) knowledge of the event.

Septemeranthus



❖ Context

- Recently, a **new genus of a parasitic flowering plant** has been discovered from the **Nicobar group of islands**.

❖ Key Highlights

- The genus **Septemeranthus** **grows on the plant species Horsfieldia glabra(Blume) Warb.**
- The parasitic flowering plants have a **modified root structure spread** on the stem of the tree and are **anchored inside the bark of the host tree**.
- The genus **Septemeranthus** has a **distinct vegetative morphology, inflorescence architecture and floral characters**.
- Plants which are **hemi-parasites are partially dependent on their host plants for nutrition**. For instance, the newly discovered plant that derives nutrients from its hosts has green leaves capable of photosynthesis.
- The **plant was found on the periphery of the tropical forest** in one of the biodiversity hotspots referred to as the Nicobar group of islands separated from the Andaman group of Islands by a wide gap of 160 km with heavy tidal flows.

Brahmos Missile



❖ Context

- Recently, **Philippines has signed a \$374.96-million deal with BrahMos Aerospace Private Ltd.** for the supply of shore-based anti-ship variants of the BrahMos supersonic cruise missile.
- This is the **first export order** for the missile.

❖ About Brahmos Missile

- The name BrahMos is a portmanteau formed from the **names of two rivers**, the **Brahmaputra of India and the Moskva of Russia** (A joint collaboration between India and Russia)
- It is capable of being **launched from land, sea, sub-sea and air against surface- and sea-based targets**.
- The missile flies at a **speed of 2.8 Mach** or almost three times the speed of sound.

Face to Face Centres





- It can **carry both conventional and nuclear warheads** of 300 kilograms.
- The range of the missile was originally capped at **290 km** as per obligations of the Missile Technology Control Regime (MTCR).
- Following India's entry into the club in June 2016, the range would be extended to **450 km and to 600 km at a later stage**. An extended range missile had been tested earlier.

Bone Death



❖ Context

- AIIMS has proposed to conduct a pan India study consequent upon detecting **AVN** among 50 Covid-19 recovered patients commonly known as Bone death

❖ Key Highlights

- AVN, **Avascular Necrosis**, or Osteonecrosis, is a common cause of painful hips in youngsters.
- It occurs due to the **restricted blood supply to the bone**, resulting in **loss of its density and weight-bearing capacity**.
- As the bone **breaks into small pieces**, the patient suffers unbearable pain and loses mobility completely. **Hip bones are more prone** to this.
- A patient with AVN develops pain around the hip, joints and the movements get restricted.
- Not a new ailment. Before COVID, found due to smoking, alcoholism and steroid use linked to other conditions

Artificial snow



❖ Context

- For the Beijing Winter Games, **290 snow making machines** from an Italian company called TechnoAlpin have been brought in. Since November 2021, these machines have been **pumping out artificial snow**.

❖ Key Highlights

- These machines produce this snow by **pumping out ice particles at the same time as a thin mist of water vapour**. Both these particles are launched **upto 60 meters in the air** where they combine to become snow and then fall to the ground.
- It is **injected with water** to harden it and then **treated with chemicals to keep the hardened snow in place**
- The survival of the Winter Games is based on the production of artificial snow.
- **As per a study by 2050, only 10 of the 20 venues that have hosted the Winter Olympics since 1924** will be able to produce an amount of snow that is capable of holding an international-level competition like the Winter Olympics.
- For the **2014 Sochi Olympics, Russia used 80% of artificial snow** for competitions. That figure rose to **90% for the Pyongyang Winter Games**.
- However, high volumes of water and energy are required to create slopes of artificial snow that are competition-ready. Beijing Games are estimated to require around **49 million gallons of water** to be converted into snow, the amount of water that would fill **74 Olympic-sized pools**.
- The region of Beijing is **notoriously low on water** due to an over-reliance on groundwater coupled with the ice glaciers around the area steadily melting. **According to a study in 2018, China's glaciers had melted by 82% and one-fifth of the ice cover had been lost since the 1950s.**

