



WEEKLY CURRENT AFFAIRS

JANUARY, 2022

Week-4

22-31 Jan, 2022

★★ Useful for ★★

**CSE, ESE, PSUs, State Services Exams,
SSC and Banking Exams**

22nd JANUARY 2022

Central Deputation for IAS and IPS

- The Union government is planning to change rules regarding powers to transfer IAS and IPS officers through Central deputation.

Proposed amendments:

- It proposed to insert an additional condition in Rule 6(1) which provided that each State Government shall make available for deputation to the Central Government, such a number of eligible officers of various levels to the extent of the Central Deputation Reserve prescribed under Regulations referred to in Rule 4(1).
- The actual number of officers to be deputed to the Central Government shall be decided by the Central Government in consultation with the State Government concerned.
- According to existing norms, States have to depute the All-India Services (AIS) officers, including the Indian Police Service (IPS) officers, to the Central government offices and at any point it cannot be more than 40% of the total cadre strength.
- Time clause:** To the existing condition in case of any disagreement the State Government or State Governments concerned shall give effect to the decision of the Central Government.

About the current rule on deputation

- The Department of Personnel & Training is the cadre controlling authority of IAS officers.
- The Center asks every year for an "offer list" of officers of the All-India Services (IAS, IPS and Indian Forest Service) willing to go on central deputation, from which it selects officers.
- Central deputation in the Indian Administrative Service is covered under Rule-6 (1) of the IAS (Cadre) Rules-1954, inserted in 1969.
- Provided that in case of any disagreement:** the matter shall be decided by the Central Government and the

State Government or State Governments concerned shall give effect to the decision of the Central Government.

OBC quota in NEET Admissions

- The Supreme Court upheld the constitutional validity of quota for Other Backward Classes candidates in National Eligibility cum Entrance Test's (NEET).

Key Highlights:

- The order pertained to a petition challenging reservation for OBC and EWS:** introduced by the central government in the All-India Quota (AIQ) seats in state government medical institutions.
- Power of the government to provide reservations under Article 15 (4) and (5) of the Constitution:** is not an "exception" to Article 15 (1), which enshrines the mandate that "the State shall not discriminate against any citizen on grounds only of religion, race, caste, sex, place of birth or any of them".
- The court held that the power of the government to craft reservation for the OBC amplified the principle of "substantive equality" manifested through Article 15 (1).
- The Parliament had backed the cause by enacting the Central Educational Institutions (Reservation in Admission) Act 2006: to enable 15% reservation for Scheduled Castes, 7.5% for the Scheduled Tribes, and 27% for the OBC category.

NOTE:

The All India Quota (AIQ) scheme was introduced in 1986 to provide domicile free admission to students from across the country. Until 2007, there was no reservation in the AIQ.

Human Space Programme: Gaganyaan

- The Indian Space & Research Organization (ISRO) successfully conducted a 25-second qualification test for its liquid propellant-based Vikas engine to be used under the Gaganyaan mission.

- The test was conducted to check the robustness of the engine by operating beyond its nominal operating conditions.
- The engine met the test objectives and the engine parameters were closely matched with the predictions during the entire duration of the test.

About Gaganyaan Mission

- Gaganyaan Mission envisages undertaking the demonstration of human spaceflight to Low Earth Orbit (LEO) in the short term and will lay the foundation for a sustained Indian human space exploration programme in the long run.
- Its objective is to demonstrate the indigenous capability to undertake human space flight missions to LEO. As part of this programme, two unmanned missions and one manned mission are approved by the Government of India (GoI).
- This manned mission will be the first of ISRO's human spaceflight missions. The US, Russia and China are the only three countries to have conducted human spaceflights yet.
- ISRO's Geosynchronous Satellite Launch Vehicle GSLV Mk III (3 stages heavy-lift vehicle)

NOTE:

Low-Earth orbit (LEO) encompasses Earth-centered orbits with an altitude of 2,000 km (1,200 mi) or less.

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Havana Syndrome

- The US Federal Bureau of Investigation (FBI) has said that dealing with the issue of Havana Syndrome is a top priority and that it will keep investigating the cause and how to protect staff.

Key Points:

- In late 2016, USA diplomats and other employees stationed in Havana (capital of Cuba) reported feeling

ill after hearing strange sounds and experiencing odd physical sensations.

- The symptoms included nausea, severe headaches, fatigue, dizziness, sleep problems, and hearing loss, which have since come to be known as the Havana Syndrome.
- The more chronic problems suffered by Havana personnel included mainly vestibular processing and cognitive problems as well as insomnia and headache.
- A different medical assessment conducted in 2018 noted that exposure to microwaves is the main cause.

About Microwave Weapons

- Microwave weapons" are supposed to be a type of direct energy weapons, which aim for highly focused energy in the form of sonic, laser, or microwaves, at a target.
- These weapons are based on the principle that microwave radiation of a certain kind can cause a buzzing sensation in the head, due to a phenomenon known as the thermoelastic effect.

Extended range of BrahMos

- India successfully tested a new variant of the BrahMos supersonic cruise missile from the integrated test range at Chandipur off the coast of Odisha.
- The launch was conducted by BrahMos Aerospace and the Defence Research and Development Organisation (DRDO).
- The missile was equipped with advanced indigenous technologies and followed a modified optimal trajectory for enhanced efficiency and improved performance.

About BrahMos missiles

- BrahMos missiles are designed and developed by BrahMos Aerospace, a joint venture company set up by the Defence Research and Development Organization (DRDO) and Mashinostroyeniya of Russia. Named after the Brahmaputra river of India and Moskva river of Russia.

- Originally introduced in 2001, variations of these supersonic missiles can be launched from submarines, ships, aircraft, and land platforms.
- **The range of the missile:** it was originally capped at 290 km as per obligations of the Missile Technology Control Regime (MTCR). Following India's entry into the club in 2016, the range would be extended to 450 km and 600 km at a later stage.

24th JANUARY 2022

National War Memorial

- The Amar Jawan Jyoti flame at the India Gate in the national capital will be merged with the flame at the National War Memorial in a ceremony.
- The National War Memorial was inaugurated in February 2019 by the Prime Minister of India and built over a 40-acre area close to India Gate. It is a national monument built to honor and remember soldiers of the Indian military who fought in armed conflicts of independent India.
- The names of armed forces personnel killed during the armed conflicts with Pakistan and China as well as the 1961 War in Goa, Operation Pawan and other operations such as Operation Rakshak are inscribed on the memorial walls in golden letters.

Amar Jawan Jyoti:

- The flame of Amar Jawan Jyoti was established to pay tributes to the soldiers who had died in the 1971 war.
- It was inaugurated by Prime Minister Indira Gandhi on Republic Day 1972.
- It commemorates the dead and unknown soldiers who lost their lives in the conflict that resulted in the creation of independent Bangladesh. The burning flame is considered immortal.

Puma

- Pumas play a critical role in holding ecosystems together throughout the Western Hemisphere, according to a new study.

Key points:

- Puma is also known as cougars, mountain lions, panthers, and catamounts.
- It spans 28 countries in the Americas, but the species is considered to be declining overall.
- Pumas inhabit every forest type across their range: as well as montane deserts and open steppe grasslands. The puma has the largest geographic range of any native terrestrial mammal in the Western Hemisphere, from southern Alaska down to the southern tip of Chile.
- The puma is listed as a species of "Least Concern": by the International Union for the Conservation of Nature (IUCN) Red List of Threatened Species.

Statue of Netaji Subhas Chandra Bose

- Recently, the government decided to install a grand statue of Netaji Subhas Chandra Bose at India Gate.
- The move aims to commemorate the 125th birth anniversary of the great freedom fighter Netaji Subhas Chandra Bose.
- The statue, made of granite, shall be a fitting tribute to the immense contribution of Netaji in our freedom struggle and would be a symbol of the country's indebtedness to him.

About Netaji Subhas Chandra Bose

- He was born on January 23, 1897, in Cuttack, Orissa.
- His father Janaki Nath Bose was a famous lawyer and his mother Prabhavati Devi was a pious and religious lady.
- He worked as the editor for Das's newspaper, Forward, and later started his newspaper, Swaraj.
- In 1923, he became the President of the All India Youth Congress and also the Secretary of Bengal State Congress.
- He recommended the use of force against the British which then combated against Mahatma Gandhi and his views.
- In 1939, he was re-elected as President of INC in Tripuri.

- In 1942, he traveled to Japan and took leadership of the Indian Independence Movement in East Asia. With Japanese aid and influence, he took the leadership of a trained army of about 40,000 troops in Japanese-occupied Southeast Asia known as the Indian National Army (Azad Hind Fauj).
- He earned the title 'Netaji', in Germany by the Indian soldiers of the Azad Hind Fauj.
- He is said to have died in 1945 when his plane crashed in Taiwan. However, there are still many conspiracy theories regarding his death.

25TH JANUARY 2022

Revised Rural Area Development Plan Formulation and Implementation (RADPFI)

- Recently, the Ministry of Panchayati Raj released revised Rural Area Development Plan Formulation and Implementation (RADPFI) Guidelines.
- It aims to have planned spatial development for overall integrated development of villages.
- Revised RADPFI Guidelines focused on typology of villages to prepare the spatial development plan (population, agro-climatic zones, Hill areas, disaster occurrence, urban-peri-urban areas and villages, Near to NH/SH, and Resilience strategies as suggested by BIS). One shoe does not fit all.
- **Objectives:**
 - Suggest a methodological framework for preparing Gram Panchayat level Development Plan.
 - Arrive at a spatial standard for Gram Panchayat development, especially for abadi areas.
 - Prescribe norms and standards for providing infrastructure facilities and amenities at the village level and its integration with spatial district plan.
 - Examine the provision of existing statutory framework and suggest suitable amendments so as to ensure preparation of Rural/Village level Development Plan.

- Recommend institutional framework for operationalising the guidelines and provide a road map for planned development of Gram Panchayat.
- It includes Village Planning Scheme (VPS) on the lines of Town Planning Schemes in urban areas.

Ranking of states on faster green nods

- The Ministry of Environment, Forests and Climate Change (MoEF&CC) has decided to "incentivise states" by ranking them through a star-rating system based on "efficiency and timelines in the grant of environmental clearances".
- MoEF&CC issued an office memorandum defining criteria for a rating of State Environment Impact Assessment Authorities (SEIAA).

Key Points:

- The evaluation of the efficiency of respective SEIAA is premised on the number of days it takes to appraise a project for environmental clearance the faster the project appraisal, the higher the SEIAA score.

The order lists the parameters for the rating system:

- An SEIAA will get 2 marks if it takes less than 80 days on average for grant clearance
 - 1 for less than 105 days
 - 0.5 for 105-120 days
 - 0 for over 120 days.
- The state authorities will also be rated on the percentage of disposal of fresh Terms of Reference (TOR) or TOR amendment proposals pending for over 30 days.
- The ministry has allotted 1 mark for SEIAAs which clear over 90 percent of TORs, 0.5 for 80-90 per cent and 0 for less than 80 percent clearance.
- Similarly, for disposal of fresh environmental clearances as well as environmental amendment proposals pending for over 100 days, SEIAAs will get 1 mark for over 90 per cent clearance
 - 0.5 for 80-90 percent clearance; and 0 for less than 80 per cent.

State Environment Impact Assessment Authority (SEIAA)

- SEIAA is a state agency that reviews specific projects enlisted in Category B of the Environmental Impact Assessment (EIA) Notification, 2006.
- These projects are considered to have a comparatively low spatial extent and potential impact on human health as well as natural and man-made resources.

UNESCO tag for root bridges

- For the living root bridges of Meghalaya to be designated as a UNESCO World Heritage Site, the Zoological Survey of India (ZSI) has outlined some green guidelines.
- For Meghalaya's living root bridges to be designated as UNESCO World Heritage Sites, they would need to have a diverse fauna and prepare health cards.
- A living root bridge is like a suspension bridge formed by guiding the pliable roots of the rubber fig tree (*Ficus elastica*) across a stream or river and allowing the roots to grow and strengthen over time.

Key Points:

- Living root bridges (also known as Jing Kieng Jri) are the aerial bridges that are built by weaving and manipulating the roots of the Indian rubber tree.
- A root bridge uses traditional tribal knowledge to train the roots of the Indian rubber tree (found in abundance in the area) to grow laterally across a stream bed resulting in a living bridge of roots. It spans between 15 and 250 feet and is built over centuries.
- They have been serving as connectors for generations in the Indian state of Meghalaya.
- The bridges are primarily a means to cross streams and rivers. They have also become world-famous tourist attractions. The two most popular tourist spots are- Riwai Root Bridge and Umshiang Double Decker Bridge.

Indian Renewable Energy Development Agency (IREDA)

- The Cabinet Committee on Economic Affairs (CCEA) cleared a proposal for an equity infusion in the state-owned Indian Renewable Energy Development Agency (IREDA).
- The move will enhance the lending capacity of the non-banking financial company (NBFC) in the renewable energy (RE) sector.

Key Points:

- Indian Renewable Energy Development Agency Limited (IREDA) is a Mini Ratna (Category – I) Government of India Enterprise under the administrative control of the Ministry of New and Renewable Energy (MNRE).
- IREDA is a Public Limited Government Company established as a Non-Banking Financial Institution in 1987 engaged in promoting, developing and extending financial assistance for setting up projects relating to new and renewable sources of energy and energy efficiency/conservation
- **The motto:** "ENERGY FOR EVER"

Objectives of IREDA:

- To give financial support to specific projects and schemes for generating electricity and/or energy through new and renewable sources and conserving energy through energy efficiency.
- To maintain its position as a leading organization to provide efficient and effective financing in renewable energy and energy efficiency/conservation projects.
- To increase IREDA's share in the renewable energy sector by way of innovative financing.
- Improvement in the efficiency of services provided to customers through continual improvement of systems, processes and resources.
- To strive to be a competitive institution through customer satisfaction.

National Commission for Safai Karamcharis

- Recently, The Union Cabinet, chaired by the Prime Minister of India approved the extension of the tenure of the National Commission for Safai Karamcharis (NCSK) for three years beyond 31.3.2022.
- The major beneficiaries would be the Safai Karamcharis and identified manual scavengers in the country from the NCSK for 3 more years beyond 31.3.2022.

Key Points:

- The National Commission for Safai Karamcharis (NCSK) was constituted on 12th August 1994 as a statutory body by an Act of Parliament viz. 'National Commission for Safai Karamcharis Act, 1993', for three years.
- The tenure is extended from time to time through Government Resolutions.
- It is acting as a non-Statutory body of the Ministry of Social Justice and Empowerment.
- It has been giving its recommendations to the Government regarding specific programmes for the welfare of Safai Karamcharis, studying and evaluating the existing welfare programmes for Safai Karamcharis, investigating cases of specific grievances etc.

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All-India Environment Service proposed

- Recently, the Supreme Court issued notice to the Center on a plea seeking the establishment of 'Indian Environment Service'.
- The creation of India Environment Service (IES) was recommended by a committee headed by former Cabinet Secretary TSR Subramanian in 2014.
- Currently, matters of environmental regulation rest on scientists recruited into the Ministry of Environment

and Forests as well as bureaucrats from the Indian Administrative Services (IAS).

- The apex court expressed reluctance at getting into administrative matters of the Government but asked the Centre if it expects to go about constituting such a mechanism.
- The constant environmental degradation, ecological imbalance, climate change, water scarcity, etc. are a great concern for India.
- There is a lack of effective coordination amongst Ministries and Intuitions on the issues of environmental concern and also a dearth of trained personnel in administration, policy formulation and policy implementation.
- The creation of the All India Service "Indian Environment Service" is the need of the hour which will act as an expert group to man positions in this field in the public and quasi-governmental sectors over the next decades.

TSR Subramanian committee

- The TSR Subramanian committee was constituted in August 2014, under the chairmanship of Subramanian.
- It was constituted by the ministry of environment, forests and climate change for reviewing environmental laws in India as well as for bringing them in line with the current requirements.
- Committee had submitted a report on November 18, 2014. Committee recorded that India had a strong environmental policy and legislative framework however, it has been weakly implemented.

About All India Services:

- **The All India Services (AIS) comprises three civil services:** the Indian Administrative Service, the Indian Police Service and the Indian Forest Service.
- A unique feature of the AIS is that the members of these services are recruited by the center (Union government in federal polity), but their services are placed under various State cadres.

- They have the liability to serve both under the State and under the center.
- Officers of these three services comply with the All India Services Rules relating to pay, conduct, leave, various allowances etc.
- The All India Services Act, 1951, provides for the creation of two more All India Services, namely, the Indian Engineering Service and the Indian Medical Service.
- The foundation stone of the Sela Tunnel Project was laid by Prime Minister Narendra Modi in 2019.
- It is located in the West Kameng District of Arunachal Pradesh.
- The project comprises Tunnel 1, which is a 980 m long single tube tunnel and Tunnel 2, which is a 1555 m long twin-tube tunnel. Tunnel 2 has one bi-lane tube for traffic and one escape tube for emergencies.
- It is being excavated below the 4,200 metres Sela Pass on NH 13 section of Trans-Arunachal Highway system.

Pradhan Mantri Rashtriya Bal Puraskar

- Recently, Prime Minister Narendra Modi interacted and conferred digital certificates to Pradhan Mantri Rashtriya Bal Puraskar (PMRBP) awardees for 2021-22.
- Digital certificates conferred on PMRBP awardees for the years 2022 and 2021 using Blockchain Technology. This technology is being used for the first time for giving certificates to awardees.
- Blockchain technology is a new data structure that is secure, cryptography-based, and distributed across a network. The technology supports cryptocurrencies such as Bitcoin, and the transfer of any data or digital asset.
- It is being built to provide all-weather connectivity between Guwahati in Assam and Tawang in Arunachal Pradesh.

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Corruption Perceptions Index (CPI) 2021

- Transparency International recently released the Corruption Perception Index report 2021. In this report India ranked at 85 among 180 countries.

Key Findings

- Overall, two-thirds of the 168 countries on the 2015 index scored below 50, on a scale from 0 (perceived to be highly corrupt) to 100 (perceived to be very clean).
- Denmark took the top spot for the 2nd year running.
- North Korea and Somalia turned out to be the worst performers, scoring just 8 points each.
- Among those with weak scores are some of the world's most populous countries such as China (45), India (40), Indonesia (38), Pakistan (28), and Bangladesh (26). In 2021, India ranked 86th with the same CPI score of 40. This year, it has improved one position, 85th.

Key Points:

- Pradhan Mantri Rashtriya Bal Puraskar (PMRBP) is given as recognition to children residing in India, above the age of 5 years and not exceeding 18 years (as on 31st August of respective year) with exceptional abilities and outstanding achievement in 6 fields of Innovation, Scholastic achievements, Sports, Arts & Culture, Social Service and Bravery, which deserve recognition.
- Each awardee is given a medal, a cash prize of Rs. 1,00,000/- and a certificate.

Sela Tunnel Project

- Recently, the Border Roads Organization (BRO) conducted the final blast for the 980-meter long Sela Tunnel (Tunnel 1) under Project Vartak.

About Corruption Perception Index (CPI)

- Corruption Perception Index (CPI) is prepared by Transparency International.

- The index covered perceptions of public sector corruption in 168 countries.
- It ranks 180 countries and territories by their perceived levels of public sector corruption according to experts and business people, using a scale of 0 to 100, where 0 is highly corrupt and 100 is very clean.
- It is a composite index that draws from 12 surveys to rank nations around the globe.

Drone Certification Scheme

- The Ministry of Civil Aviation (MoCA) notified the Drone Certification Scheme to make certification of drones simpler, faster and transparent.

Key Points:

- The drone certification scheme notified under Rule 7 of the liberalized Drone Rules, 2021.
- The certification criteria mentioned in the drone certification scheme (DCS) will be applicable to indigenous drone manufacturers, assemblers as well as importers.
- A multi-stakeholder steering committee (MSC) will oversee the scheme, along with a QCI (Quality Control of India) secretariat. This MSC will also be supported by a technical committee (TC) and a certification committee (CC) that will be constituted by the QCI.
- Its objective is to provide the minimum requirements for airworthiness -- safety and security requirements -- for drones and enable their evaluation for certification.

NOTE:

Unmanned aerial vehicles (UAVs), also known as drones, are aircraft either controlled by 'pilots' from the ground or increasingly, autonomously following a pre-programmed mission.

Small Satellite Launch Vehicle (SSLV)

- Recently, the Chairman of Indian Space Research Organisation's (ISRO) announced that indigenous Small Satellite Launch Vehicle (SSLV) will have its maiden development flight in April 2022.

Key points:

- NewSpace India Limited (NSIL) under Department of Space will be the sole nodal agency responsible for providing end to end SSLV launch services for the customer satellite .
- SSLV has been designed to meet "Launch on Demand" requirements in a cost-effective manner..
- It is a 3 stage all solid vehicle and it is the smallest vehicle at 110-ton mass at ISRO.
- It can carry satellites weighing up to 500 kg to a low earth orbit while the tried and tested PSLV can launch satellites weighing in the range of 1000 kg.
- It will take only 72 hours to integrate, unlike the 70 days taken now for a launch vehicle. Only six people will be required to do the job, instead of 60 people.
- The entire job will be done in a very short time and the cost will be only around Rs 30 crore. It will be an on-demand vehicle.
- SSLV is perfectly suited for launching multiple microsatellites at a time and supports multiple orbital drop-offs.

About Polar Satellite Launch Vehicle

- It is the third generation launch vehicle of India.
- It is the first Indian launch vehicle to be equipped with liquid stages.
- After its first successful launch in October 1994, PSLV emerged as the reliable and versatile workhorse launch vehicle of India with 39 consecutively successful missions by June 2017.

Padma Awards 2022

- Recently, the President approved the conferment of 128 Padma Awards including 2 duo cases (in a duo case, the award is counted as one).
- The list comprises 4 Padma Vibhushan, 17 Padma Bhushan and 107 Padma Shri Awards.
- 34 of the awardees are women and the list also includes 10 persons from the category of Foreigners/ NRI/PIO/OCI and 13 Posthumous awardees.

About Padma Awards:

- They are one of the highest civilian honors of India announced annually on the eve of Republic Day.
- The award seeks to recognize achievements in all fields of activities or disciplines where an element of public service is involved.
- The Government of India instituted two civilian awards-Bharat Ratna & Padma Vibhushan in 1954.
- **The Awards are given in three categories:**
 - Padma Vibhushan (for exceptional and distinguished service)
 - Padma Bhushan (distinguished service of higher-order)
 - Padma Shri (distinguished service).

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Suspension of Maharashtra BJP MLAs

- Recently, the Supreme Court quashed a one-year suspension of 12 Maharashtra BJP MLAs.
- They were suspended after the government accused them of “misbehaving” with the presiding officer for a year for, as called, “grossly disorderly conduct” in the House.
- The Supreme Court is expected to rule on the question of whether the judiciary can intervene in the proceedings of the House.

Rules for Suspension

- Rules 373, 374, and 374A of the Rules of Procedure and Conduct of Business in Lok Sabha provide for the withdrawal of a member whose conduct is “grossly disorderly”, and suspension of one who abuses the rules of the House or willfully obstructs its business.
- **Maximum suspension:** The maximum suspension as per these Rules is “for five consecutive sittings or the remainder of the session, whichever is less”. The maximum suspension for Rajya Sabha under Rules 255 and 256 also does not exceed the remainder of the session.

India's Bad Bank gets RBI nod

- 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.

Key Points:

- The K V Kamath Committee helped the RBI with designing a one-time restructuring scheme. The committee observed that the companies in sectors such as retail trade, wholesale trade, roads and textiles are facing stress.
- National Asset Reconstruction Company Limited (NARCL) has already been incorporated under the Companies Act. It will acquire stressed assets worth about Rs 2 lakh crore from various commercial banks in different phases.
- India Debt Resolution Company Ltd (IDRCL), which has also been set up, will then try to sell the stressed assets in the market.

About Bad Bank:

- The bad bank is an Asset Reconstruction Company (ARC) or an Asset Management Company (AMC) that takes over the bad loans of commercial banks, manages them and finally recovers the money over a period of time.
- The bad bank is not involved in lending and taking deposits, but helps commercial banks clean up their balance sheets and resolve bad loans.
- The takeover of bad loans is normally below the book value of the loan and the bad bank tries to recover as much as possible subsequently.

Fly Ash Management and Utilization Mission

- The National Green Tribunal (NGT) directed the constitution of a 'Fly Ash Management and Utilization Mission' in its recent order.

Key Points:

- The order by the NGT takes note of the 'unscientific handling and storage' of the fly ash by coal thermal power stations. For example, the draining of industrial effluents and fly ash in the Rihand Reservoir.
- The Mission's primary goal will be to 'coordinate and monitor issues relating to the handling and disposal of fly ash and associated issues.'
- The Mission is to be jointly headed by the secretaries of the Union Ministry of Environment, Forest & Climate Change (MoEF&CC), Union Ministry of Coal and Power and the chief secretaries of Uttar Pradesh and Madhya Pradesh.
- The secretary of MoEF&CC will be the nodal agency for coordination and compliance.
- The Mission may also monitor scientific management and utilization of fly ash by power projects outside Singrauli and Sonbhadra, in coordination with chief secretaries of concerned states.

Fly Ash

- Fly ash is an unwanted unburnt residue of coal combustion in a coal thermal power plant.
- During combustion, mineral impurities in the coal (clay, feldspar, quartz, and shale) fuse in suspension and float out of the combustion chamber with the exhaust gases. As the fused material rises, it cools and solidifies into spherical glassy particles called fly ash.
- It is emitted along with flue gases during the burning of coal in a furnace and collected using electrostatic precipitators.

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Decentralized Applications (dApps)

- dApps are applications that run on a blockchain or a peer-to-peer network instead of running on a single database controlled by a central authority.
- Decentralized applications are programmes that allow people to interact with one another without the need for third parties.

- Financial transactions or legal communication are examples of interactions that traditionally rely on third parties to complete the work.
- In this regard, dApps are advantageous because, rather than relying on the competence and trustworthiness of third parties, they enforce contracts and agreements using solid code and a layer of computers.
- They give you the personal freedom to interact with a peer without being held accountable for it. These programmes, too, do not require any personal information to function.

Key features:

- They exist and run on a blockchain network powered by smart contracts. These smart contracts are open-source pieces of code created by a decentralized authority, and no individual authority controls them.
- dApps are powered by individual tokens based on the blockchain. Users who interact efficiently with the ecosystem get rewarded using the native tokens of the dApp. Most dApps are built on the Ethereum blockchain, thus they use ETH for transactions.

Pandit Jasraj

- Recently, the Prime Minister of India paid tribute to Pandit Jasraj on the occasion of the Jayanti of the doyen of Indian Classical Music.

About Pandit Jasraj:

- He was born on January 28, 1930, in the Hisar district of Haryana.
- His initial years were spent in Hyderabad where his father was to be appointed the court musician of Nawab Mir Osman Ali Khan, the last Nizam of Hyderabad.
- He started as a tabla player and was known as an able accompanist in the classical circuit in Kolkata before turning to classical singing. His association with his spiritual guru Maharana Jaywant Singh of the erstwhile princely state of Sanand in Gujarat made him believe in the miracles of bhakti.

- He was the foremost exponent of the Mewati Gharana moved away from Dhrupad and brought an element of devotional singing to Khayal by employing harkats and murkis that were associated with light classical music. Khayal is a musical form based on the elaboration of a Raga with a lyrical composition consisting of two stanzas.
- He was a recipient of several prestigious awards including Padma Shri, Padma Bhushan as well as Padma Vibhushan. Minor Planet named 'Panditjasraj'- In 2019, the International Astronomical Union had named a minor planet after Pandit Jasraj.

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Biligiri Ranganathaswamy Temple (BRT) Tiger Reserve

- Tiger enumeration (estimation) is underway at Biligiri Ranganathaswamy Temple (BRT) Tiger Reserve in Karnataka's Chamarajanagar district.

Key points:

- Biligiri Rangaswamy Temple (BRT) Tiger Reserve derives its name BILIGIRI from the white rocky cliff on the top of which is a temple of Lord VISHNU locally known as Rangaswamy.
- It is also believed that the hill range gets its name by white mist and silver clouds that cover these lofty hills for a greater part of the year. In Kannada, Biligiri means white hills - hence the name.
- It is situated in the middle of the bridge between the Western Ghats and the Eastern Ghats in South India. It was constituted as a Wildlife Sanctuary in 1974.
- The forests of BRT Tiger Reserve are principally of dry deciduous type and are interspersed with moist deciduous, semi-evergreen, evergreen and shola patches occurring at varying altitudes.

NeoCov Coronavirus

- Recently, the scientists clarified that NeoCov is related to the Middle East respiratory syndrome or MERS-coronavirus.

Key Points:

- NeoCoV is a bat coronavirus that was first identified in 2011.
- It was found in a population of bats in South Africa and to date has spread exclusively among these animals.
- It was identified in a species of bats known as Neoromicia, which is where the name NeoCoV was derived from. Commonly known as aloe bats, this species is distributed in the Afro-Malagasy region.
- It shares an 85% similarity to MERS-CoV in the genome sequence, making it the closest known relative of MERS-CoV.
- **Chances of Human infection:** inherently, NeoCoV cannot interact with human receptors, implying that in its current form the virus cannot infect humans.
- Infection with NeoCov could not be cross-neutralised by antibodies targeting SARS-CoV-2 or MERS-CoV.

NOTE:

MERS-CoV virus was discovered in 2012. The first case was detected in Saudi Arabia. It is a zoonotic virus, which means it is transmitted between animals and people. It is similar to SARS-CoV-2 in terms of symptoms like fever, cough and shortness of breath.

31st JANUARY 2022

America COMPETES Act

- Recently, the United States House of Representatives unveiled the ambitious America Creating Opportunities for Manufacturing, Pre-Eminence in Technology, and Economic Strength Act of 2022 (America COMPETES Act).
- It proposes to open up new vistas for talented individuals from across the world with a new start-up visa.
- It provides \$52 billion to encourage more semiconductor production in the US and \$45 billion for grants and loans to improve supply chain resilience and manufacturing, among other programmes.

Other Provisions

- The Act amends the Immigration and Nationality Act to create a new classification of “W” non-immigrants for entrepreneurs with an ownership interest in a start-up entity, essential employees of a start-up entity, and their spouses and children.
- It will direct the Secretary of Homeland Security to establish procedures for foreign nationals with an ownership interest in a start-up entity to self-petition for lawful permanent resident status as an immigrant entrepreneur if the entity demonstrates a proven track record of success through job creation and significant revenue generation or receipt of investment capital.
- It also provides for a limited number of W-2 visas for personnel who are essential to the growth and success of the start-up entity if the start-up serves as the basis for the W-1 status of a founder.
- It exempts from the numerical limits on immigrant visas certain foreign nationals (and the spouses and children of such aliens) who have earned a doctoral degree in science, technology, engineering, or mathematics (STEM) from a qualified US research institution or a foreign institution if the degree is the equivalent to a doctoral degree issued by a qualified US research institution.

Great Nicobar Draft Environment Impact Assessment Report

- The recently released draft Environment Impact Assessment (EIA) report for the mega-development project in the Great Nicobar Island has raised serious questions related to submission of incorrect or incomplete information, scientific inaccuracy and failure to follow the appropriate procedure.
- The NITI Aayog-piloted 72,000-crore integrated project in Great Nicobar that includes the construction of a mega port, an airport complex, a township spread over 130 sq. km of pristine forest and a solar and gas-based power plant.

- Andaman and Nicobar Islands Integrated Development Corporation Ltd. (ANIIDCO) is the project proponent.

About Environmental Impact Assessment (EIA)

- EIA is a process of evaluating the likely environmental impacts of a proposed project or development, taking into account inter-related socio-economic, cultural and human-health impacts, both beneficial and adverse.
- UNEP defines Environmental Impact Assessment (EIA) as a tool used to identify the environmental, social and economic impacts of a project prior to decision-making.
- It aims to predict environmental impacts at an early stage in project planning and design, find ways and means to reduce adverse impacts, shape projects to suit the local environment and present the predictions and options to decision-makers.

Nordic 'Clinker Boats' On Heritage List

- Recently, UNESCO added the Nordic “clinker boats” to its Heritage List. Denmark, Finland, Iceland, Norway and Sweden jointly sought the UNESCO designation.
- The designation will safeguard and preserve the boat-building techniques that drove the Viking era for future generations.

Key points:

- Nordic clinker boats are small, open, wooden boats between five and ten meters long. The term “clinker” is thought to refer to the way the boat’s wooden boards were fastened together.
- They are characterized by the use of overlapping longitudinal wooden hull planks that are sewn or riveted together. Builders strengthen the boats internally by additional wooden components, mainly tall oak trees, which constitute the ribs of the vessel.
- They were traditionally used for fishing and to transport materials and people.