

CURRENT AFFAIRS : MAY 2023

NATIONAL CAPITAL TERRITORY OF DELHI (AMENDMENT) ORDINANCE, 2023

Recently, Central government issued the **Government of National Capital Territory of Delhi i.e., GNCTD (Amendment) Ordinance, 2023** which seeks to amend GNCTD Act, 1991.

- Ordinance nullifies the effect of the recent Supreme Court's decision that gave the Delhi government powers over administrative services (excluding public order, police and land) in the national capital.

Key highlights of Ordinance

- **Powers to legislate over services:** Ordinance specifies that the Delhi Legislative Assembly will not have the power to legislate on the subject of 'services', which comes under the State List.
 - o Services include matters related to appointments and transfers of employees of the Delhi government, and vigilance.
- **National Capital Civil Services Authority (NCCSA):** It creates a new statutory authority NCCSA – to make recommendations to LG regarding transfer posting, vigilance and other incidental matters.
 - o NCCSA will consist of Chief Minister (CM) of Delhi who shall be the Chairperson of the Authority, Chief Secretary and Principal Secretary of Home department.
 - o All matters required to be decided by NCCSA shall be decided by majority of votes of the members present and voting.
 - o Central government will appoint both the Principal Secretary and Chief Secretary.
- **Powers of the Lieutenant Governor:** LG will act in his sole discretion. It expands the discretionary role of the LG by giving him powers to approve the recommendations of the Authority, or return them for reconsideration.
 - o The LG's decision will be final in the case of a difference of opinion between him and the Authority.

Ordinance making power of President and Governor

- Word “Ordinance” is defined as a law promulgated by the State or Central Government without the approval of the Legislature.
 - o Power to promulgate the Ordinance is vested in the Indian Councils Act, 1861, Government of India (GoI) Act, 1909, and GoI Act, 1935.
- Ordinance is listed under **Article 123** (Power of President to promulgate Ordinances during recess of Parliament) and **Article 213** (Power of Governor to promulgate Ordinances during recess of Legislature).
 - o These promulgated ordinances have the same force and effect as an Act of the Legislature but these acts are likely in temporary nature.
 - o Ordinance is valid for 6 weeks from the date when the next session starts. If the two Houses start their sessions on different dates, the later of the dates will be considered.
 - o The ordinance may lapse earlier if the President/Governor withdraws it or if both Houses pass resolutions disapproving it.
 - o Ordinances can only be issued on matters on which Parliament or Legislature can make laws and are subject to the same limitation as Parliament/Legislature to make laws.
- However, Governor of a State cannot make an ordinance without the reference of the President in the following cases:
 - o Bills that have similar provisions require the prior approval of President to introduce the Bill in Assembly.
 - o If Governor would have deemed it necessary to reserve a bill containing similar provisions for consideration of the President.
 - o If an act of state legislature containing same provisions would have been invalid without receiving President’s assent.

MODEL PRISONS ACT 2023

Ministry of Home Affairs (MHA) has prepared the 'Model Prisons Act 2023' that will replace the Prisons Act of 1894.

About Prisons Act 1894

- The first legislation that governed the management and administration of prisons in India was the Prisons Act, of 1894.
- The Act had its origins in the recommendations of the "Prison Discipline Committee" appointed in 1836 by Lord Macaulay.
- It defined a "prison" as "any jail or place used permanently or temporarily for the detention of prisoners", excluding police custody and subsidiary jails.
- It also laid down provisions for the prisoners' employment, health, and visits.
- MHA found various shortcomings in the Act and noticed a significant lack of emphasis on corrective measures.

Issues faced by prisons

- **High undertrials:** Prison Statistics of India 2021 show that more than 77 per cent of jail inmates are undertrials. The same data set also records 25 per cent of this prisoner population as being illiterate.
- **High occupancy rate of prisons:** As per NCRB's 2021 statistics, there were a total of 5,54,034 people in prisons across India, as against a capacity of 4,25,609. Prisons in Delhi had occupancy rate of 183%.
- **Difficulty in obtaining bail:** Delay in the adjudication process, lack of support for filing of bail applications, or inability to comply with bail conditions in the bail system further leads to prolonged incarceration.

o In this context, Supreme Court directed the Union government to consider introducing a separate bail act to streamline the process of granting bail.

- **Vacancies in prison officials:** In Uttarakhand, Chhattisgarh, Bihar and Jharkhand over 60% of officer positions were vacant. This increases burden on officers and also leads to poor management of prisons including crimes within prisons.
- **Unnatural deaths in prisons:** According to Prison statistic of India 2021, there were 185 un-natural deaths of inmates in 2021, with 150 inmates committing suicide.

WHIP

- Constitution Bench in Shiv Sena case ruled that power to appoint a whip and a leader rest with the "political party" and not the "legislature party," as stated in the **Tenth Schedule** of the Constitution.
- Key Observations of SC
 - o **Appointment of whip:** Speaker must recognise the whip and leader authorised by the political party, based on the party constitution, after conducting an inquiry.
 - ✓ Allowing the legislative wing to act independently from the political party contradicts the constitutional system of governance.
 - o **Speaker to decide disqualification:** Disqualification ought to be decided as per established procedures in law and the Speaker is the appropriate authority for this under the Tenth Schedule of the Constitution, which lays down the anti-defection law.
 - ✓ Emphasised that the Speaker should decide on pending disqualification petitions in a reasonable timeframe.
 - ✓ MLAs have the right to participate in proceedings of the House regardless of pendency of any petitions for disqualification.
 - o **Floor test:** A floor test is to be conducted by the Governor only on obtaining objective material to show that the incumbent government had lost the confidence of the House.

ARTICLE 142

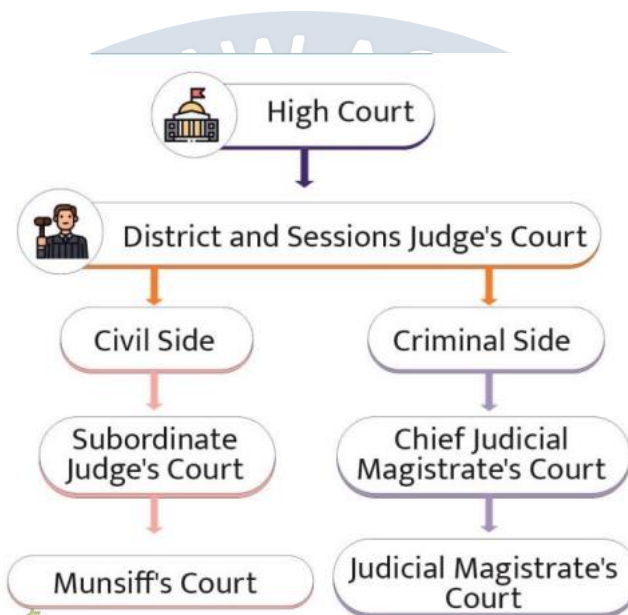
- Supreme Court (SC) rules it can directly grant divorce to couples under Article 142.

- SC held that it could directly grant divorce, in cases where marriage has irretrievably broken down, dispensing with period prescribed under Hindu Marriage Act (HMA), 1955.
- o As per Section 13-B of HMA, after filing first motion seeking divorce through mutual consent, parties have to wait for a minimum of six and a maximum of 18 months before moving the second motion.
- However, SC clearly stated that grant of divorce on ground of irretrievable breakdown of marriage is not a matter of right, but a discretion.
- Article 142 provides SC power, to do “complete justice” between parties, where, at times, law or statute may not provide a remedy.

DISTRICT JUDICIARY

- Supreme Court (SC) stated that District judiciary’s independence is part of basic structure.
- SC, while pronouncing judgement in All India Judges Association v. Union of India case, highlighted certain principles concerning judiciary including:
 - o Independence of District Judiciary equally a part of basic structure of Constitution as it performs an important role in upholding rule of law.
 - Judicial independence and access to justice ensures implementation of part III of Constitution.
 - o Integration in terms of pay, pension and other service conditions between District Judiciary, High Courts and SC.
 - o Separation of Power: officers of judiciary be treated separately from staff of legislative and executive wings.
 - o Uniformity in designations and service conditions: A unified judiciary entails that service conditions of judges of one state are equivalent to similar posts of judges of other states.
- As per court record, on a single day, district judiciary handled nearly 11 lakh cases.
 - o District judge is the highest judicial authority in district.

- o Organisational structure, jurisdiction and nomenclature of subordinate judiciary are laid down by states. Hence, they differ slightly from state to state (Broadly three tiers below high court)
- o Appointment, posting and promotion of district judges are made by governor of the state in consultation with High Court.



E-GOVERNED STATE

- Kerala has become the first full 'e-governed state' in India.
- It has digitized a range of government services, ensuring prompt and transparent delivery to its citizens.
- E-governance, meaning 'electronic governance' is using ICTs such as Wide Area Networks, the Internet, and mobile computing for the purpose of enhancing governance.
- Initiatives of Kerala:
 - o **Kerala Fibre Optic Network (KFON) project**, which has made internet access a citizen's right.
 - o **e-Sevanam**, a single portal for 900 public services to taluk-level offices.

WORLD PRESS FREEDOM INDEX 2023

- India was ranked 161 out of 180 countries. Norway, Ireland and Denmark occupied the top three positions.
- It is released by Paris based Reporters Without Borders (RSF), one of the world's leading NGOs in defense and promotion of freedom of information.
 - It is published on World Press Freedom Day (3 May).
- Evaluation is done using five contextual indicators: political context, legal framework, economic context, sociocultural context and safety.

INTERNET SHUTDOWNS

- Supreme Court (SC) has issued notice seeking the compliance of the Government with respect to its judgement in Anuradha Bhasin's case.
 - In Anuradha Bhasin's Case (2020), the suspension of mobile, landline and internet services in the state of Jammu and Kashmir at the time of the revocation of Article 370 along with restrictions on movement in certain areas was challenged.
- Key Guidelines Proposed in **Anuradha Bhasin's Case**
 - An order suspending internet services indefinitely is impermissible under the Temporary Suspension of Telecom Services (Public Emergency or Public Service) Rules, 2017.
 - Suspension can be utilised for temporary duration only.
 - Any order suspending the internet issued under the Suspension Rules, must adhere to the principle of proportionality and must not extend beyond necessary duration.

Internet shutdowns related provisions in India

- Currently, **suspension of telecom services (including internet shutdowns)** is governed by **Temporary Suspension of Telecom Services (Public Emergency & Public Safety) Rules, 2017**, notified under Indian Telegraph Act, 1885.
- 2017 Rules provide for **temporary shutdown of telecom services in a region on grounds of public emergency** (up to 15 days at once).

NARCO ANALYSIS TEST

- Recently, wrestler protestors at Delhi have asked for undergoing Narco tests provided it is monitored by Supreme Court.
- As part of a narco-test, **sodium pentothal**, also called 'truth serum', is injected into a person.
 - o Doing this lowers a person's self-consciousness, thereby allowing them to speak without inhibition.
 - o This test is performed under the guidance and supervision of a psychologist, an investigating officer, or a forensic expert.
- The Supreme Court in *Selvi & Ors vs State of Karnataka & Anr* (2010) ruled that narco analysis, brain mapping and polygraph tests cannot be conducted on any person without his or her consent.
 - o The judgement was given taking view of the fundamental rights:
 - ✓ **Article 20(3)** (Right against self-incrimination) enumerated in the Constitution states that no person accused of an offence shall be compelled to be a witness against himself/herself.
 - ✓ **Article 21** (Right to life and personal liberty) has been judicially expanded to include a 'right against cruel, inhuman or degrading treatment'.
 - o Those who volunteer must have access to a lawyer and have the physical, emotional, and legal implications of the test explained to them by the police and the lawyer.
- Narco analysis report is not admissible as primary evidence in the court.
 - o However, any information or material that is subsequently discovered with the help of voluntary administered test results can be admitted, in accordance with Section 27 of the Evidence Act, 1872.

Polygraph test

- A polygraph test is another form of physiological examination, but in this test, **no substances are injected into the person's body.**
 - Instead, instruments to **measure blood pressure, pulse rate, breathing, sweat glands and blood flow is attached to the person.** After this, he/she would have to answer some questions.

Brain mapping test

- The P-300 test, or the brain mapping test involves the **mapping of brain activity rather than physiological behaviour.**
 - It is done in the same manner as the polygraph test. Brain mapping may **cover aspects of the field of neuroimaging** as it produces images of the brain that have been enhanced by the result of additional (imaging or non-imaging) data processing or analysis.

25 YEARS TO POKHRAN NUCLEAR TESTS

On May 11, 2023, India celebrated 25 years of Pokhran-II nuclear tests.

- India declared itself a nuclear weapon state after it carried out a series of three nuclear detonations on May 11, 1998.
 - These included thermonuclear device, along with a fission device.
 - A second test followed two days later and having attained the requisite degree of techno-strategic capability, India announced a self-imposed moratorium on further testing.
- The operation was code-named 'Operation Shakti'. It was second nuclear test by India.
- India conducted its first nuclear tests on May 18, 1974, in Pokhran.
 - Its code name- Operation Smiling Buddha came from the test's date being on the same day as Buddha Jayanti.
- India's rationale and intentions regarding the development of nuclear weapon were outlined in the Official nuclear doctrine.

India's nuclear doctrine

- A nuclear doctrine states how a nuclear weapon state would employ its nuclear weapons both during peace and war.
- India first released Draft Nuclear Doctrine (DND) in August 1999. In January 2003, India released its official nuclear doctrine.

WORLD BANK PRESIDENT

- Recently, first-ever Indian-American Ajay Banga was appointed the World bank President.
- President is ex officio chair of Board of Executive Directors of International Bank for Reconstruction and Development (IBRD) and International Development Association (IDA).

GROUP OF SEVEN (G-7)

49th Summit of G-7 group was recently held in Hiroshima, Japan.

- India along with countries like Australia, Brazil etc. was invited to the summit.
- India gave 10-point action plan to address food, health, and development-related problems currently facing the world.

G7

About



An informal forum of leading industrialised nations, which dominate global trade and the international financial system.

Purpose



It meets annually to discuss issues such as global economic governance, international security and energy policy, besides a host of other issues topical to the prevailing situation.

Members

G20

G8

G7



Canada



France



Germany



Italy



Russia



Japan



UK



US



Argentina



Australia



Brazil



China



European Union



India



Indonesia



Mexico



Saudi Arabia



South Africa



South Korea



Turkey



Russia joined G7 in 1998, creating the G8, but was excluded in 2014 for its takeover of Crimea.



The EU is not a member of the G7 but attends the annual summit.

INTERNATIONAL ORGANISATION FOR MIGRATION (IOM)

- Amy Pope of USA set to become the first woman to head IOM.
- About IOM:
 - o It was established in 1951, it is leading intergovernmental organization in the field of migration.
 - o IOM is part of the United Nations system, as a related organization.
 - o It has 175 member states (India is a member).

'SILKWORM EATING' STRATEGY

- Recently, the Chinese idea called 'silkworm eating' has been witnessed with regular incursions in Taiwan.
- Silkworm eating is a colloquial for gradual encroachments by a country by successfully making inroads in another territory.
- It is Chinese equivalent to the Western notion of '**salami-slicing**' tactic.
 - o "Salami-slicing" is a divide-and-conquer tactic used to dominate opposition territory piece by piece.
 - o Such military operations are too small to result in a war.
 - o The term was coined by Hungarian communist politician Matyas Rakosi. He used the term to justify the actions of the Hungarian Communist Party to grab complete power in Hungary.

COMPETITION (AMENDMENT) ACT 2023

The Centre notified several provisions of the Competition (Amendment) Act (CAA) 2023, which amended the Competition Act (CA), 2002. Amended definitions in the Act

- **Definition of Combination:** The CAA expands the definition of combinations (mergers, acquisitions, or amalgamation of enterprises) to include transactions with a value above Rs 2,000 crore.
- **Reduction in the time limit for approval of combinations:** From 210 days to 150 days.
 - o The CCI is now required to form a prima facie opinion on a combination within 30 days, otherwise, the combination shall be deemed to have been approved.
- **Definition of control for classification of combinations:** CAA modifies the definition of control as the ability to exercise material influence over management, affairs, or strategic commercial decisions.
- **Expansion of Scope of Cartels to Include "Hub and Spoke Arrangements":** Companies which are not engaged in identical or similar business activities can also be held liable for an

anti-competitive horizontal agreement (cartelization), where they participate or intend to participate in facilitating such an agreement.

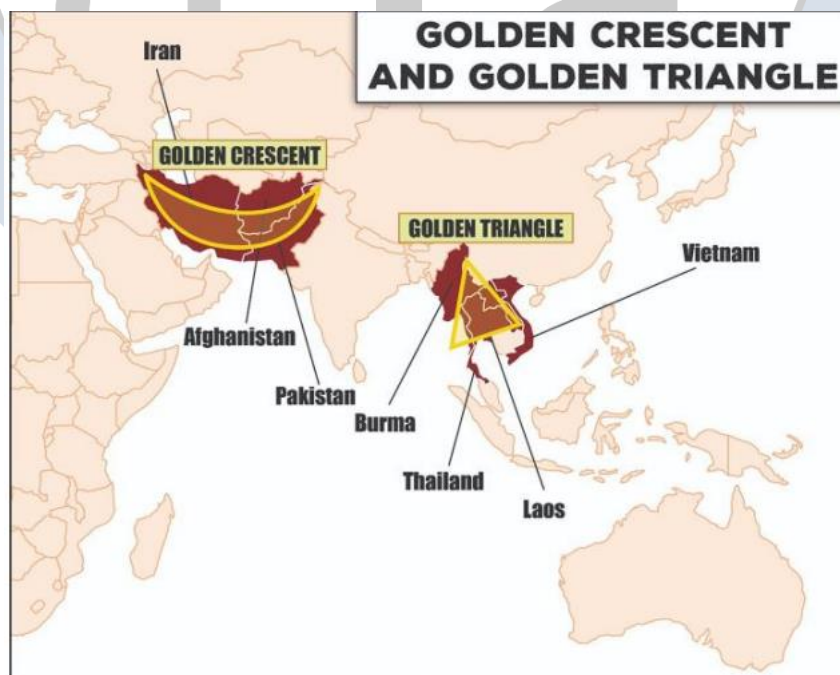
DRUG MENACE IN INDIA

Recently, at least 2,500 kg drugs, suspected to be methamphetamine was seized near the Kerala coast in a joint operation by the Narcotics Control Bureau (NCB) and Indian Navy.

- NCB termed it the largest seizure of methamphetamine in the country.
- The seizure was done as part of Operation Samduragupta.

Reasons for drug menace in India

- Geographical location of India: Traditionally India has been seen as sandwiched between the Golden Crescent and Golden Triangle. Nearly 90 per cent of the world's demand for these drugs is being met from these two regions.
- Sea routes being used: Drug trafficking through the Arabian Sea and the Bay of Bengal, estimated to account for around 70% of the total illegal drugs smuggled into India, poses a major challenge for law enforcement agencies.



- Use of couriers, postal services, to smuggle drugs has gone up significantly in recent years – 300% in 2020 and 200% in 2021 compared to 2019.

- Narco-terror angle: Terror organizations in Pakistan along with ISI are actively pushing drugs through the land and sea border.

- o Also organised gangs, which primarily used to carry out extortion activities in their local areas, are being used for drug trafficking and gun running.

- Porous borders: Major trafficking of heroin in India takes place through Indo-Pakistan border. Trafficking of ganja in substantial quantities takes place across India-Nepal border.

- Use of technology: The use of drones to supply drugs and weapons across the border in Punjab has emerged as new phenomenon.

- o Darknet is being used for illicit drug trafficking. Darknet markets are disrupting traditional drug markets because of their anonymity and low risks.

Operation Samudragupta:

- Operation Samudragupt was launched by the NCB in January 2022, to intercept contraband that is brought into India through the marine channel.

- It is part of the Union government's plan to make India drug-free by 2047.

- o Cryptocurrency payments and doorstep deliveries, through courier services, have made darknet transactions attractive.

- Demand due to contrasting economic factors: Unemployment on the one hand, and the availability of easy money on the other — have led to the devastating rise of substance abuse and drug addiction in northwestern States.

THERMOBARIC BOMB

- Human rights group accused Myanmar's military of using thermobaric bomb (also called a vacuum or aerosol bomb - or fuel air explosive).

- A thermobaric bomb consists of a fuel container with two separate explosive charges.

- o When it hits its target, first explosive charge opens the container and widely scatters fuel mixture as a cloud.

o A second charge then detonates the cloud, resulting in a huge fireball, a massive blast wave and a vacuum which sucks up all surrounding oxygen.

- There are no international laws specifically banning their use.

EXERCISES IN NEWS

- **Samudra Shakti-23:** It is an India-Indonesia Bilateral exercise
- **Jal Rahat:** It is flood relief exercise that was jointly conducted by Indian Army, Sashastra Seema Bal, National and State Disaster Response Force (NDRF), District Disaster Management Authority (DDMA) and police representatives at Hagrama Bridge on Manas River in Assam.
- **Sudarshan Shakti 2023:** It was conducted by Sapta Shakti Command of the Indian Army along the western borders in Rajasthan and Punjab.
- **Maritime Exercise Al Mohed Al Hindi 23:** The bilateral exercise 'Al Mohed Al Hindi 23' is between Indian Navy and Royal Saudi Naval Force (RSNF).

WILD LIFE PROTECTION (WLP) ACT, 1972

- Ministry of Environment, Forest and Climate Change issued the notification to amend WLP Act, 1972.
- Now, all persons engaged in breeding in captivity or artificially propagating any scheduled specimen listed in Appendix I of Schedule IV of the Act are requested to make an application for a license.
 - o Appendix 1 of Schedule IV is endangered exotic animals (Red Panda, various species of dogs, wolves, cats, apes, chimpanzees, gibbons) and plants, and import rules are stricter for them.
 - o Earlier, Captive breeding of exotic species protected under CITES was not regulated.

BAOBABS

- Bhil tribe of Central India is opposing the forest department's decision to give permission for uprooting baobab trees for commercial use.
- Baobabs belongs to the genus Adansonia are native to mainland Africa, Madagascar, and Australia.
- They have unusual barrel-like trunks and are known for their extraordinary longevity (live up to 2,000 years) and ethnobotanical importance.
- The tree's unique pendulous flowers are pollinated by bats and bush babies.
- IUCN Status: endangered
- Madhya Pradesh government has applied for a Geographical Indication (GI) tag.

AMRIT AND MOONGA BLOCKS IN ARABIAN SEA

- ONGC has discovered crude oil and natural gas in two blocks named as Amrit and Moonga Blocks (Open Acreage Licensing Policy (OLAP) blocks) in Mumbai offshore on the Arabian Sea.
- OALP under Hydrocarbon Exploration and Licensing Policy (HELP), gives an option to a company looking for exploring hydrocarbons to select the exploration blocks on its own, without waiting for the formal bid round from the Government.

SEXUAL HARASSMENT AT WORKPLACE

Recently, the Supreme Court took the cognizance of "serious lapses" and "uncertainty" in the implementation of the **Protection of Women from Sexual Harassment (PoSH) Act, 2013**.

- The cognizance came in the backdrop of a newspaper survey revealing only 16 out of 30 national sports federations in the country had constituted Internal Complaints Committees (ICC) mandated under the 2013 Act.

- The **National Human Rights Commission (NHRC)** also issued notices to the erring sports bodies, Sports Authority of India (SAI) and the Board of Control for Cricket in India (BCCI) along with the Ministry of Youth Affairs and Sports.

Key Provisions of POSH Act 2013

- **Definition of Sexual harassment:** Sexual harassment includes anyone or more of the following unwelcome acts or behaviour (whether directly or by implication), namely:

- o Physical contact or advances;
- o A demand or request for sexual favours;
- o Making sexually coloured remarks;
- o Showing pornography;
- o Any other unwelcome physical, verbal, or non-verbal conduct of a sexual nature

- **Definition of workplace:** Any place visited by the employee arising out of or during the course of employment, including transportation provided by the employer for undertaking such a journey.”

- o A workplace covers both the organised and un-organised sectors.

- **Aggrieved woman:** Covers all women, irrespective of their age or employment status and whether in organized or unorganized sectors, public or private.

- o It also covers clients, customers and domestic workers as well.

- **Grievance redressal mechanism:**

Complaints Committee	<ul style="list-style-type: none">• Internal Complaints Committee (ICC) is mandatory in every private or public organisation that has 10 or more employees.<ul style="list-style-type: none">o The ICC needs to have a minimum of four members and at least half of them women of whom one shall be an external member.o The ICC has powers similar to those of a civil court.
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	<ul style="list-style-type: none"> • District Officer to constitute Local Committee to receive complaints from organisations with less than 10 workers or if complaint is against the employer itself.
Procedure of filing complaint	<ul style="list-style-type: none"> • Any aggrieved victim or her legal heir may file a complaint for the ICC to take action. • The complaint must be made “within three months from the date of the incident”. <ul style="list-style-type: none"> ○ However, the ICC can extend the time limit.
Conciliation	<ul style="list-style-type: none"> • The ICC may, before inquiry, and at the request of the aggrieved woman, take steps to settle the matter between her and the respondent through conciliation. <ul style="list-style-type: none"> ○ However, “no monetary settlement” shall be made as a basis of conciliation.
Inquiry	<ul style="list-style-type: none"> • The ICC may either forward the victim’s complaint to the police, or it can start an inquiry that has to be completed within 90 days. <ul style="list-style-type: none"> ○ When the inquiry is completed, the ICC must provide a report of its findings to the employer within 10 days.
Action against the perpetrator	<ul style="list-style-type: none"> • If the allegations of sexual harassment are proved, the ICC will recommend to the employer to take action “in accordance with the provisions of the service rules” of the company.
Appeal	<ul style="list-style-type: none"> • If either the aggrieved woman or the respondent is not satisfied, they may appeal in court within 90 days.
False complaint	<ul style="list-style-type: none"> • The ICC “may recommend” to the employer that it take action against the woman, or the person who has made the complaint, in “accordance with the provisions of the service rules”.
Ensuring privacy	<ul style="list-style-type: none"> • The identity of the woman, respondent, witness, any information on the inquiry, recommendation and action taken, should not be made public

POSHAN BHI, PADHAI BHI (PBPB) SCHEME

- Union Ministry of Women and Child Development (WCD) launched PBPB Scheme.
- PBPB will focus on Early Childhood Care and Education (ECCE) (first six years of children) at *anganwadis* across the country.
- Key Highlights of the Scheme:
 - It envisages training of *anganwadi* workers through the National Institute of Public Cooperation and Child Development (NIPCCD).
 - It targets children’s development in every domain mentioned in the National Curriculum Framework, like physical and motor development, cognitive development etc.

THREE PARENT BABY

Recently, a baby has been born using three people's DNA in the UK with help of Mitochondrial Donation Treatment (MDT) procedure.

About Mitochondrial Donation Treatment (MDT)

- MDT is a technique in which a child is conceived from IVF (in vitro fertilization) using the genetic material of the parents and the mitochondrial material of a donor.
- It works on the principle in which the diseased mitochondria are replaced by healthy mitochondria in order to avoid transfer of mitochondrial diseases from the mother to the offspring.
 - o Passing on mitochondrial diseases from parent to child can be prevented by MDT either before or after IVF of the egg.
- It is also known as **Mitochondrial Replacement Therapy (MRT)** and **Three-parent babies Process** (due to involvement of three persons).

SUPER COMPUTERS

India's AI supercomputer AIRAWAT has been ranked 75th in the Top 500 Global Supercomputing List, announced at the International Supercomputing Conference held in Germany.

What is a supercomputer?

- A supercomputer is a high-performance computing system that delivers exceptional processing power and computational capacity compared to a general-purpose computer.
- Performance of a supercomputer is measured in **floating-point operations per second (FLOPS)** instead of million instructions per second (MIPS).
- Supercomputers contain tens of thousands of processors and can perform billions and trillions of calculations or computations per second.
- Since information moves quickly between processors in a supercomputer (compared to distributed computing systems) they are ideal for real-time applications

Other Indian supercomputers in the Top 500 list

- There are **three** other supercomputers in the Top 500 list. These include:
 - **PARAM Siddhi-AI supercomputer** ranked at No. 131. It is installed at C-DAC, Pune.
 - **Pratyush supercomputer** ranked at No. 169: It is installed at the Indian Institute of Tropical Meteorology.
 - **Mihir supercomputer** at No. 316. It is installed at the National Centre for Medium Range Weather Forecasting.

Top 5 supercomputers in the Top 500 list

Super computer	Country
Frontier	USA
Supercomputer Fugaku	Japan
LUMI	Finland
Leonardo	Italy
Summit	USA

NAVIC (NAVIGATION BY INDIAN CONSTELLATION)

- Indian Space Research Organisation (ISRO) launched next-generation navigational satellite NVS – 01.
- NVS-01 is first of the India's second-generation satellites envisaged for NavIC (Navigation by Indian Constellation) services.

Key highlights of NVS-01:

- NVS-01, weighing 2,232 kg satellite - heaviest in constellation, was launched using Geosynchronous Satellite Launch Vehicle (GSLV) rocket.
- It'll have indigenously developed Rubidium atomic clock to provide accurate locations.
- It would provide real-time positioning and timing services over India and a region approximately 1,500 km around mainland.
- NavIC, earlier known as **Indian Regional Navigation Satellite System (IRNSS)**, is designed with constellation of seven satellites.
 - Three satellites are placed in geostationary orbit and four satellites are placed in inclined geosynchronous orbit.

THALASSEMIA BAL SEWA YOJANA (TBSY)

- Union Minister of State for Health and Family Welfare launched third phase of TBSY.
- Ministry of Health and Family Welfare has been implementing TBSY since 2017 under National Health Mission.
- Thalassaemia is an inherited (i.e., passed from parents to children through genes) blood disorder caused when body doesn't make enough of a protein called haemoglobin (enables red blood cells to carry oxygen).
 - o Thalassaemia can cause anemia.

TRANS-FAT

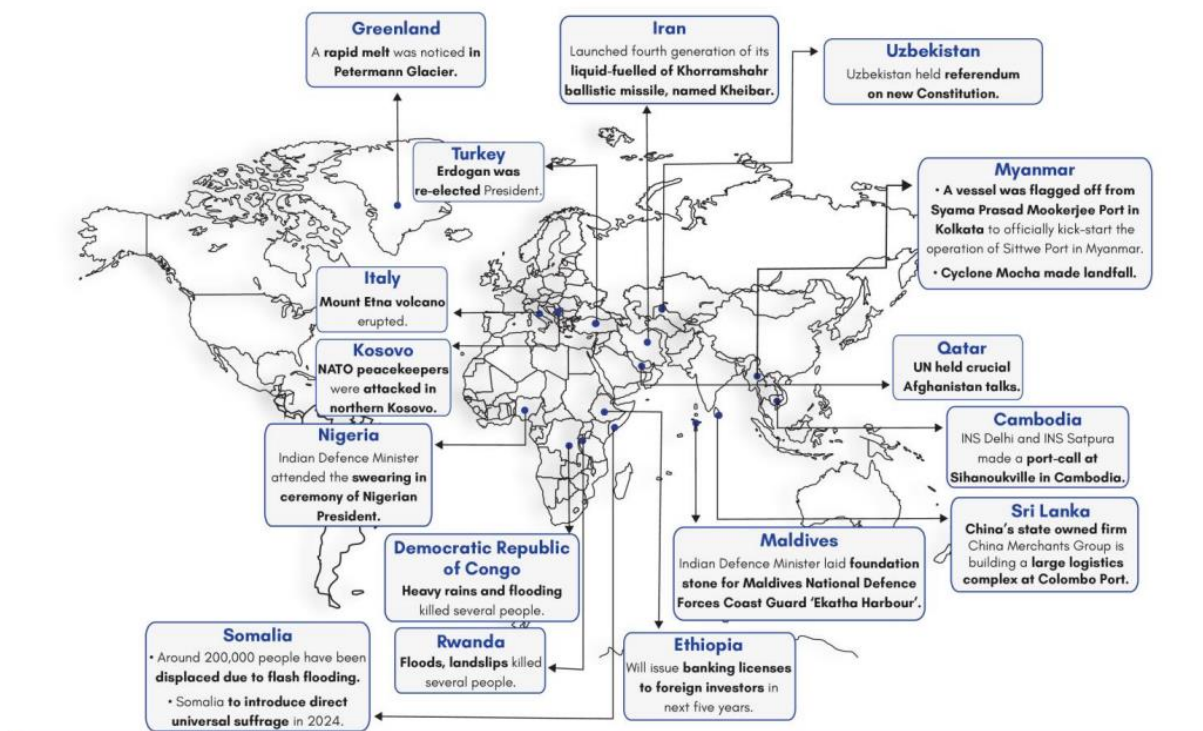
- World Health Organization's (WHO's) trans- fat elimination validation programme open for country applications.
- Trans fats are unsaturated fats produced from vegetable oils and are commonly used in preparation of margarine and commercially baked or fried foods.
 - o There are two forms of trans- fat i.e.,
 - ✓ Naturally-occurring trans- fats, occurs naturally in some dairy and meat products.
 - ✓ Industrially produced trans-fat add hydrogen to liquid vegetable oils to make them more solid. It is found in packaged foods, baked goods, cooking oils and spreads.
- Trans fats are source of non-communicable disease and associated with increased risk of heart attacks and death from coronary heart disease.

RICE FORTIFICATION

- According to United Nations report, India's pilot project on rice fortification had led to a significant drop in prevalence of anaemia among school- children.
 - o Four large-scale pilots in different parts of country were done - three in school lunch and one in Integrated Child Development Scheme.

- o After witnessing success and feasibility of pilot project, in 2021 government announced that all rice distributed through food-based social assistance programmes would be fortified by 2024.
- Fortification is the practice of deliberately increasing the content of one or more micronutrients (i.e., vitamins and minerals) in food or condiments (supplemental food) to improve nutritional quality of food supply.
- o Food fortification is regulated under Food Safety Standards (Fortification of Foods) Regulation, 2018.
- o Under Rice fortification, micronutrients such as iron, Vitamin B12 and folic acid are added for nutritional boost.

Places in News: World



Places in News: India

