08-07-2019 Current Affairs

Pipeline project on mangrove forest land gets Ministry nod.

• The Union Ministry of Environment, Forest and Climate Change (MoEFCC) has accorded stage II approval for laying 'sea water intake and outfall' pipelines through a stretch of mangrove forest land in Morepannai village in Ramanathapuram district for the 1,600 MW Uppur supercritical thermal power plant.

What is a "mangrove" or "Tidal forest" forest?

- These forests occur in and around the deltas, estuaries and creeks prone to tidal influences and as such are also known as <u>delta or swamp forests</u>. The delta of the Ganga- Brahmaputra has the largest tidal forest. The deltas of Mahanadi, Godavari and Krishna rivers are also known for tidal forests.
- Mangroves are a group of trees and shrubs that grows in coastal saline or brackish water. The term is also used for tropical coastal vegetation consisting of such species. Mangroves occur worldwide in the tropics and subtropics, mainly between latitudes <u>25° N and 25° S</u>.
- Many mangrove forests can be recognized by their dense tangle of prop roots that make the trees appear to be standing on stilts above the water.
- The roots also slow the movement of tidal waters, causing sediments to settle out of the water and build up the muddy bottom.
- Mangrove forests stabilize the coastline, reducing erosion from storm surges, currents, waves, and tides. The intricate root system of mangroves also makes these forests attractive to fish and other organisms seeking food and shelter from predators.
- They are adapted to the *low oxygen conditions* of waterlogged mud.

How mangrove forest are adapted to the low oxygen conditions?

• Red mangroves, which can survive in the most inundated areas, prop themselves above the water level with stilt roots and can then absorb air through pores in their bark (*lenticels*).

• Black mangroves live on higher ground and make many <u>pneumatophores</u> (specialized root-like structures which stick up out of the soil like straws for breathing) which are also covered in lenticels.

What are pneumatophores?

- These "breathing tubes" typically reach heights of <u>up to 30 cm</u>, and in some species, over 3 m.
- These specialized aerial roots enable plants to breathe air in habitats that have waterlogged soil. The roots may grow down from the stem, or up from typical roots.
- The surfaces of these roots are covered with lenticel (small pores) which takes up air into spongy tissue which in turn uses osmotic pathways to spread oxygen throughout the plant as needed. Pneumatophores <u>differentiate the Black mangrove and Grey mangrove from other mangrove</u> <u>species.</u>

What is the largest mangrove forest?

- <u>Sundarban</u> is the largest mangrove forest in the world. This forest is situated in the Ganges and Brahmaputra estuarine and extends across West Bengal of India.
- In 1997, the UNESCO recognized sundarban as World Heritage Site.

Book on Sangam-era names released at 10th Tamil World Conference.

- A compilation of 46,000 names from the Sangam era was recently released at the 10th Tamil World Conference in Chicago.
- The conference was organized by the International Association of Tamil Research (IATR), the Federation of Tamil Sangams of North America (FeTNA) and Chicago Tamil Sangam.
- The book, **Sootti Magizhvom Thamizh Peyargal**, was released by the Minister for Tamil Offi cial Language and Culture, 'Ma Foi' K. Pandiarajan.

Official title	Host city	Host country	Year	Arranged by
1st World Tamil Conference	Kuala Lumpur	Malaysia	1966	Thani Nayagam Adigalar
2nd World Tamil Conference	Chennai	India	1968	M. Bhaktavatsalam and C. N. Annadurai
3rd World Tamil Conference	Paris	France	1970	
4th World Tamil Conference	Jaffna	Sri Lanka	1974	
5th World Tamil Conference	Madurai	India	1981	M. G. Ramachandran
6th World Tamil Conference	Kuala Lumpur	Malaysia	1987	
7th World Tamil Conference	Port Louis	Mauritius	1989	
8th World Tamil Conference	Thanjavur	India	1995	J. Jayalalithaa
9th World Tamil Conference	Kuala Lumpur	Malaysia	2015	

Water recharge, clean energy projects nearing completion under Smart City Mission

- Six projects taken up under the Smart City Mission will be completed this month, which will result in improving groundwater recharge and promotion of clean energy
- The projects include restoration of 35 waterbodies, 15 temple tanks, pedestrianised streets, solar rooftop panels and street parking. Work on restoration of 85% of the 32 waterbodies has been completed at an estimated cost of ₹5.85 crores, Using Smart City funds.

Classification of Urban Settlements

- The definition of urban area varies from are country to another. Some of the common basis of classification is
 - ✓ Size of population
 - ✓ Occupational structure
 - ✓ Administration

Town

• Population more than 5000 people.

City

• Population more than 1,00,000

Mega city

- Population of more than 10 million people.
- A mega city can be a single metropolitan area.

Megalopolis

- Two or more large cities whose total population exceeds ten million.
- In India, Kolkata is the largest urban area which is a megalopolis. Gandhinagar, Surat, Vadodara, Rajput in Gujarat are the important megalopolis cities in India.

Conurbation

- A Conurbation is a region comprising of a number of cities, large town, and other urban areas that through population growth and physical expansion have merged to form one continuous urban (or) industrially developed area.
- The conurbation cities of India are
 - ✓ Mumbai in Maharashtra,
 - ✓ Gurgaon, Faridabad in Haryana,
 - ✓ Noida in Uttar Pradesh .

Satellite Town

• A satellite town is a town designed to house the over population of a major city, but is located well beyond the limits of that city. Satellite towns are generally located outside the rural urban fringe. In India most satellite towns are purely residential in character.

Smart City

- In an urban region, a city which is very much advanced in terms of infrastructure, real estate, communication and market availability is called a Smart City.
- The first ten smart cities of India are Bhubaneshwar, Pune, Jaipur, Surat, Ludhiana, Kochi, Ahmedabad, Solapur, New Delhi and Udaipur.
- Tamil Nadu has 12 major cities to be transformed as smart cities.
- They are Chennai, Madurai, Tirunelveli, Tiruchirappalli ,Thanjavur, Tiruppur, Salem, Vellore, Coimbatore, Thoothukudi, Dindigul and Erode.

Revised guidelines expected to boost coverage benefit from PMKISAN

• The Central government relaxing an important norm of the Pradhan Mantri Kisan Samman Nidhi (PMKISAN) to extend coverage to all farmers, irrespective of the size of the land they hold, around 45% of agriculturists in the State, or 35 lakh farmers, may be brought under the scheme. Aimed at providing income support, the scheme envisages an annual payment of ₹6,000 to beneficiaries in three instalments.

PM- KISAN Scheme:

- PM KISAN is a Central Sector scheme with 100% funding from Government of India
- It has become operational from <u>1.12.2018.</u>
- Definition of family for the scheme is husband, wife and minor children.
- The fund will be directly transferred to the bank accounts of the beneficiaries.

320 elephants 'leased' by Assam have not returned

- State's Wildlife Crime Prevention Unit (WCPU) report said corrective steps ought to have been taken for stopping such transfer or transportation and to bring back the captive elephants after the expiry of the permission.
- Elephants are sold in the guise of a lease, whose term is usually not mentioned.
- **The Wildlife (Protection) Act, 1972** is violated through this system that borders between legality and illegality.
- An elephant is sold for ₹10-15 lakh, depending on whether female, male and tusker.

What is **PROJECT ELEPHANT?**

- Project elephant was launched by the Government of India in the **year 1992** as a centrally Sponsored Scheme with following objectives:
 - 1. To protect elephants, their habitat & corridors
 - 2. To address issues of man-animal conflict
 - 3. Welfare of captive elephants.
- The Project is being mainly *implemented in 16 States / UTs*, viz. Andhra Pradesh, Arunachal Pradesh, Assam, Chhattisgarh, Jharkhand, Karnataka, Kerala, Maharashtra, Meghalaya, Nagaland, Orissa, Tamil Nadu, Tripura, Uttarakhand, Uttar Pradesh, West Bengal.

• The Ministry of Environment, Forest and Climate Change provides the financial and technical support to major elephant range states in the country through Project Elephant.

Wild life protection act (1972):

- Prior to Wildlife Protection Act of 1972, India only had five designated national parks. This was the *first umbrella act* which established schedules of protected plant and animal species. By this act, hunting or harvesting these species was largely outlawed.
- Extends to the whole of India, except the State of Jammu and Kashmir which has its own wildlife act.
- There are six <u>schedules</u> which give varying degrees of protection.
- <u>Schedule I and part II of Schedule II</u>: provide absolute protection and offences under these are prescribed the highest penalties.
- The penalties for <u>Schedule III and Schedule IV</u> are less and these animals are protected.
- <u>Schedule V</u> includes the animals which may be hunted. These are
 - 1. Common crow.
 - 2. Fruit bats.
 - 3. Mice.
 - 4. Rats.
- <u>Schedule VI</u> contains the plants, which are prohibited from cultivation and planting. These plants are as follows



Blue Vanda (Vanda soerulec)	
Kuth (Saussurea lappa)	
Ladies slipper orchids (Paphiopedilum spp.)	
Pitcher plant (Nepenthes khasiana)	
Red Vanda (Rananthera inschootiana)	

Kanpur drain plugged but Ganga still unfit for Bathing

- Seven months after the plugging of Kanpur's infamous Sisamau drain, which once drained nearly 140 million litres of untreated sewage into the Ganga and was a symbol of pollution in the river the river continues to be unfit for bathing or drinking.
- Water quality reports prepared by the Uttar Pradesh Pollution Control Board after the drain was completely tapped as follows

Month	DO	BDO	Total coliform
Oct. 2017	6.1	5.8	84,000
Nov. 2017	7.2	4.8	70,000
Dec. 2017	9.2	6.1	1,20,000
Oct. 2018	3.6	5.8	70,000
Nov. 2018	6.6	5	58,000
Dec. 2018	9	4.2	28,000
Jan. 2019	9.1	3.3	34,000
Feb. 2019	9.2	3.2	28,000
Mar. 2019	9.4	3.4	31,000
Apr. 2019	7.7	5.6	46,000
May 2019	6.5	5.5	54,000

Norms on acceptable water quality:

- The Central Pollution Control Board (CPCB) has defined norms with three attributes which constitutes acceptable river water quality.
- Three attributes that must conform to certain numbers are:
 - 1. Dissolved Oxygen (DO),
 - 2. Biological Oxygen Demand (BOD)
 - 3. Total Coliform Matter (TCM)

For Drinking:

- ✓ Dissolved Oxygen \ge 4 milligram/litre (or) more.
- ✓ BOD \leq 3 milligram/litre

✓ TCM / 100 ml \leq 5000 or less

For Bathing:

- ✓ Dissolved Oxygen \geq 5 milligram/litre (or) more.
- ✓ BOD \leq 3 milligram/litre
- ✓ TCM / 100 ml \leq 500 or less

What Are Total Coliforms Matter?

- Total coliforms is a term used to measure the amount of coliform bacteria in drinking water and other substances consumed by humans.
- Coliforms are a large class of micro-organisms that are found in human and animal fecal matter and are used to determine whether the drinking water or other substance may have other disease-causing organisms in it.
- Water with a high total coliform level has a high probability of contamination by protazoa, viruses and bacteria that may be pathogenic.

What is Biological Oxygen Demand?

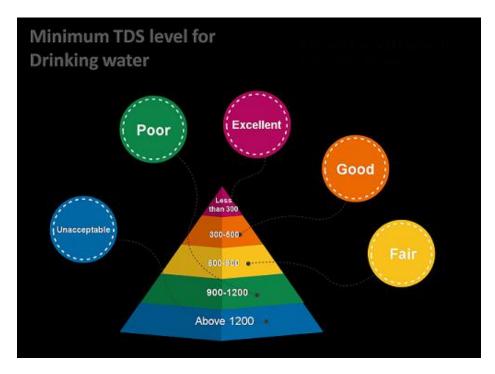
• Biochemical Oxygen Demand (BOD, also called Biological Oxygen Demand) is the amount of dissolved oxygen needed by aerobic biological organisms to break down organic material present in a given water sample at certain temperature over a specific time period.

What is Dissolved oxygen?

- It is molecular oxygen (O₂) dissolved in water, measured in parts per million or ppm
- Ocean water can hold 1-12 ppm of dissolved oxygen (below 3 is not healthy)
- The oxygen molecule in dissolved oxygen is separate from oxygen in H₂O

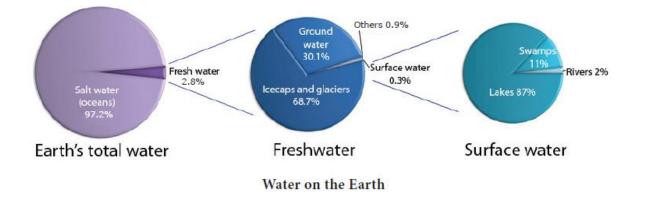
What is Total Dissolved Solids?

• TDS (Total Dissolved Solids) is an indicator of the hardness of water. For drinking purpose, low is a qualitative term.



Water on the Earth:

- About 71% of the earth's surface is covered by water.
- Most of the water on the earth is saline and is found in seas and oceans.
- The salt water constitutes about 97.2% and the fresh water is only about 2.8%.
- Out of this 2.8%, about 2.2% is available as surface water and the remaining 0.6% as groundwater.
- From this 2.2% of surface water, 2.15% is available in the form of glaciers and icecaps, 0.01% in lakes and streams and the remaining 0.04% is in other forms.



Odisha Chief Minister Naveen Patnaik urged to challenge HC order on tribal land transfer

 The High Court of Odisha in one of its judgments in April 2019 has made section 3 (B) of Odisha Scheduled Area Transfer of Immoveable Property (OSATIP) Regulation ineffective.

What is section 3 (B) of OSATIP?

- This section had been designed to restore land back to tribals which had been taken away from them through clever manipulation.
- Under sub-clause 3 of section 3(B) of the law, the sub-collector is empowered to make an enquiry about all land transactions from October 4, 1956 to September 4, 2002 and if he finds that a tribal has been defrauded, he can declare the transaction null and void.

Articles Related to Scheduled and Tribal Areas at a Glance:

Article	No. Subject-matter
244.	Administration of Scheduled Areas and Tribal Areas.
244A	Formation of an autonomous state comprising certain tribal areas in Assam and creation of local legislature or Council of Ministers or both therefore
339	Control of the Union over the administration of Scheduled Areas and the welfare of Scheduled Tribes

Tribal Areas at a Glance:

States	Tribal Areas
	The North Cachar Hills District.
Assam	The Karbi Anglong District.
	The Bodoland Territorial Areas District.

Meghalaya	Khasi Hills District. Jaintia Hills District. The Garo Hills District.
Tripura	Tripura Tribal Areas District
Mizoram	The Chakma District. The Mara District. The Lai District.

National Commission to Review the Working of the Constitution (NCRWC)

- The National Commission to Review the Working of the Constitution (NCRWC) was set up by a resolution of the Government of India in 2000.
- The 11-member Commission was headed by **M.N. Venkatachaliah**, the former Chief Justice of India. It submitted its report in 2002.
- NCRWC recommended, "All tribal areas **governed by the Fifth Schedule** of the Constitution should be transferred **to the Sixth Schedule**. Other tribal areas should also be brought under the Sixth Schedule."

What is sixth schedule?

• Provisions relating to the administration of tribal areas in the states of Assam, Meghalaya, Tripura and Mizoram under article 244 and 275.

09-07-2019 Current Affairs

INS VIKRANTH to be delivered by 2021

• INS VIKRANTH is an aircraft carrier which is currently being built at the cochin shipyard under the Indigenous Aircraft carrier project and is likely to be inducted very soon into the Indian Navy.

- The name Vikrant (Sanskrit vikrānta, literally "stepping beyond") means "courageous".
- The motto of the ship is "Jayema Sam Yudhi Sprdhah", which is taken from Rigveda and can be translated as "*I defeat those who fight against me*".



INS Vikrant during its launch in August 2013

INS Vikrant during its undocking in June 2015



Sovereign Gold Bond Scheme 2019 -20

• The Government of India, in consultation with the Reserve Bank of India (RBI), has decided to issue the Sovereign Gold Bonds. The Sovereign Gold Bonds will be issued every month from June 2019 to September 2019 as per the calendar specified below:

S.No.	Tranche	Date of Subscription	Date of Issuance
1	2019-20 Series I	June 03-07, 2019	June 11, 2019
2	2019-20 Series II	July 08–12, 2019	July 16, 2019
3	2019-20 Series III	August 05-09, 2019	August 14, 2019
4	2019-20 Series IV	September 09-13, 2019	September 17, 2019

- The Bonds will be sold through
 - ✓ Scheduled Commercial banks(except Small Finance Banks and Payment Banks),
 - ✓ Stock Holding Corporation of India Limited (SHCIL),
 - $\checkmark~$ Designated post offices, and
 - ✓ Recognised stock exchanges viz., National Stock Exchange of India Limited and Bombay Stock Exchange Limited.
- The features of the Bond are:

S1. No.	Item	Details
1	Product name	Sovereign Gold Bond 2019-20
2	Issuance	To be issued by Reserve Bank India on behalf of the Government of India.
3	Eligibility	The Bonds will be restricted for sale to resident individuals, HUFs, Trusts, Universities and Charitable Institutions.
4	Denomination	The Bonds will be denominated in multiples of gram(s) of gold with a basic unit of 1 gram.

6	Minimum size	Minimum permissible investment will be 1 gram of gold.
7	Maximum limit	The maximum limit of subscribed shall be 4 KG for individual, 4 Kg for HUF and 20 Kg for trusts and similar entities per fiscal (April-March) notified by the Government from time to time. A self-declaration to this effect will be obtained. The annual ceiling will include bonds subscribed under different tranches during initial issuance by Government and those purchased from the Secondary Market.
8	Joint holder	In case of joint holding, the investment limit of 4 KG will be applied to the first applicant only.
13	Sales channel	Bonds will be sold through Commercial banks, Stock Holding Corporation of India Limited (SHCIL), designated post offices (as may be notified) and recognised stock exchanges <i>viz.</i> , National Stock Exchange of India Limited and Bombay Stock Exchange, either directly or through agents.
14	Interest rate	The investors will be compensated at a fixed rate of 2.50 per cent per annum payable semi-annually on the nominal value.

Vice President releases book titled "Vivekadeepini".

- Vice President of India, Shri M. Venkaiah Naidu releases a book titled 'Vivekadeepini', a concise book of aphorisms (a memorable expression of a gener ral truth or principle) initially written by **Adi Shankaracharya**, one of India's greatest spiritual and literary geniuses.
- **About Vivekadeepini**: This short book is a summary of Prashnottara Ratnamalika written by Adi Shankaracharya.
 - ✓ It is a compilation of select 36 verses drawn from 67 verses of Prashnottara Ratnamalika which are written in Question-Answer format.

- ✓ The verses in this book contain universal truths and are the starting points for reflection.
- ✓ It contains glimpses of India's wisdom in most lucid language.
- **Languages:** The book has been translated into **ten languages** English, Hindi, Bengali, Kannada, Telugu, Tamil, Malayalam, Marathi Gujarati and Odia.
- Adi Shankaracharya: He is 8th century Indian philosopher and theologian. He consolidated the doctrine (or Philosophy) of Advaita Vedanta (Monism)
- Advaita Vedanta: states that Brahman is only reality and world is illusory (Maya), thus ignorance of reality is what causes suffering, and liberation can be obtained only by true knowledge of Brahman.

Operation Milap:

• The Delhi Police Crime Branch has rescued 333 children from the Capital. These children were missing since January 2019 from various parts of the country and found in the Capital.

What is operation Milap?

- The operation Milap, a **Delhi government project** under which children are rescued and rehabilitated was **launched in December 2014.**
- Under this project, the **Anti Human Trafficking Unit (AHTU) of the Delhi** Police develops information, rescues the trafficked or kidnapped person and arrests the kidnappers.

Similar project at National Level?

• **Operation Smile or operation Muskaan** was launched by Union ministry of Home Affairs to rescue/rehabilitate missing children who are highly vulnerable to Human Trafficking groups because they can be pushed into forced begging, prostitution, etc.,

Mr. Vaiko being found guilty of sedition strengthens the case to scrap Section 124A

• The conviction of prominent proLTTE Politician Vaiko on the charge of sedition, based on a typically impassioned speech he had made in

Chennai a decade ago, is a worrying development. Even though Section 124A, the IPC section that makes sedition an offence, attracts either a three year term or imprisonment for life, the trial court sentenced him to a somewhat lenient one year jail term.

What is Section 124A in The Indian Penal Code?

- Whoever, by words, either spoken or written, or by signs, or by visible representation, or otherwise, brings or attempts to bring into hatred or contempt, or excites or attempts to *excite disaffection towards, the Government established by law in India*, shall be punished
 - \checkmark With imprisonment for life, to which fine may be added, (or)
 - ✓ With imprisonment which may extend to three years, to which fine may be added.

Purpose of Sedition provision in India by British government?

- The concept of sedation was introduced in India by British Government through Indian Penal Code.
- The IPC was introduced in 1860 and section 124A was added to the IPC in 1870.
- It was introduced to curtail any form of political dissent.
- By using this controversial provision british government was clamping down on any activities which was critical of the government.
- This resulted in the violation of free speech, curving the right to free assembly, and mainly targeting the freedom of speech and expression of press
- So the main purpose of section 124A of IPC was to stifle India's National Movement.

The 12th ExtraOrdinary Summit of the African Union (AU) on July 8 at Niamey, the capital of the Niger Republic.

• 54 of 55 of its member states *signing the African Continental Free Trade Agreement (AfCFTA*) for goods and services.

Objective of AFCFTA:

- To create one of the world's largest common market by establishing the African Common Market.
- If this succeeded then it would be home to around 1.2 billion people and combined GDP of \$3.4 billion.

Aim of AFCFTA:

• To remove all tariff based barriers and non -tariff based barriers.

Hurdles in front of AU:

- The African union does not have an strong history of promoting successful partnerships, because history of AU shows that it had largely failed in addressing the challenges of the African Continent.
- Since the organization was established in 1963 it has failed to deal with the problems of
 - ✓ Decolonization
 - ✓ Underdevelopment
 - ✓ Curtail the spread of Islamic terrorism and
 - ✓ Impact of Arab spring
- Along with the internal problems there are few global challenges that the African union has to overcome if it has to ensure the success of the African continental free trade agreement.
 - ✓ The global challenges includes
 - \checkmark The general slowdown in the global economy
 - \checkmark The ongoing trade wars between U.S and China
 - ✓ The lightly impact of BREXIT
 - ✓ Negotiations at WTO and united nations conference on trade and development.

India and Pakistan not doing enough to resolve Kashmir situations, says that UN Commission on Human Rights (UNCHR)

- The UNCHR has brought a report on Jammu and Kashmir and it holds India and Pakistan responsible for not doing enough to uphold human rights in J & K and resolve the conflict.
- UNCHR ACCUSED India for violating Human rights in J & K and in turn India had rejected this report by saying that report was biased against Indian government and it was not taking ground realities into picture
- India states that UNCHR recognizes Jaishe Mohammed as "armed outfit", which is in contradiction to United Nations Security Council recognizes Jaishe Mohammed to be responsible for pulwama attack.
- According to India this is a biased and prejudiced attempt by UNCHR which continues to question India's sovereignty and territorial intergrity.

The National Human Rights Commission:

- The National Human Rights Commission is a statutory (and not a constitutional) body. It was **established in 1993** under a legislation enacted by the Parliament, namely, the Protection of Human Rights Act, 1993. This Act was **amended in 2006**.
- The commission is the watchdog of human rights in the country, that is, the rights relating to life, liberty, equality and dignity of the individual guaranteed by the Constitution or embodied in the international covenants and enforceable by courts in India.
- The specific objectives of the establishment of the commission are:
 - ✓ To strengthen the institutional arrangements through which human rights issues could be addressed in their entirety in a more focussed manner;
 - ✓ To look into allegations of excesses, independently of the government, in a manner that would underline the government's commitment to protect human rights; and
 - ✓ To complement and strengthen the efforts that has already been made in this direction.

Composition of the commission:

• The commission is a multi-member body consisting of a *chairman and four members*.

Chairman: should be a retired chief justice of India

- Members : 1) should be serving or retired judges of the Supreme Court
 - 2) A serving or retired chief justice of a high court
 - 3) Two persons having knowledge or practical experience with respect to human rights.
- In **addition to these fulltime members**, the commission also has four ex-officio members—
 - ✓ The chairmen of the National Commission for Minorities,
 - ✓ The National Commission for SCs,
 - $\checkmark~$ The National Commission for STs and
 - ✓ The National Commission for Women.

Appointment of chairman and members:

- The chairman and members are appointed by the president on the recommendations of a *six-member committee* consisting of
 - \checkmark The prime minister as its head,
 - ✓ The Speaker of the Lok Sabha,
 - ✓ The Deputy Chairman of the Rajya Sabha,
 - ✓ Leaders of the Opposition in both the Houses of Parliament,
 - ✓ The Central home minister.

Tenure of chairman and members:

• The chairman and members hold office for a term of *five years* or until they attain the *age of 70 years*, whichever is earlier.

FUNCTIONS OF THE COMMISSION

- The functions of the Commission are:
 - ✓ To inquire into any violation of human rights or negligence in the prevention of such violation by a public servant, either *suo motu* or on a petition presented to it or on an order of a court.

- ✓ To intervene in any proceeding involving allegation of violation of human rights pending before a court.
- ✓ To visit jails and detention places to study the living conditions of inmates and make recommendation thereon.
- ✓ To review the constitutional and other legal safeguards for the protection of human rights and recommend measures for their effective implementation.
- ✓ To review the factors including acts of terrorism that inhibit the enjoyment of human rights and recommend remedial measures.
- ✓ To study treaties and other international instruments on human rights and make recommendations for their effective implementation.
- \checkmark To undertake and promote research in the field of human rights.
- ✓ To spread human rights literacy among the people and promote awareness of the safeguards available for the protection of these rights.
- ✓ To encourage the efforts of non-governmental organisations (NGOs) working in the field of human rights.
- ✓ To undertake such other functions as it may consider necessary for the promotion of human rights.

ROLE OF THE COMMISSION

- From the above, it is clear that the functions of the commission are mainly *recommendatory in nature*. It has no power to punish the violators of human rights, nor to award any relief including monetary relief to the victim.
- Notably, its recommendations are not binding on the concerned government or authority. But, *it should be informed about the action taken on its recommendations within one month*.

State Human Rights Commission

• The Protection of Human Rights Act of 1993 provides for the creation of not only the National Human Rights Commission but also a State

Human Rights Commission at the state level1. Accordingly, **twenty five states** have constituted the State Human Rights Commissions through Official Gazette Notifications

- The states *which do not have SHR* are as follows
 - 1. Arunachal Pradesh
 - 2. Meghalaya
 - 3. Mizoram
 - 4. Nagaland
- A State Human Rights Commission can inquire into violation of human rights only in respect of subjects mentioned in the **State List (List-III)** and the **Concurrent List (List-III)** of the **Seventh Schedule** of the Constitution.
- However, if any such case is already being inquired into by the National Human Rights Commission or any other Statutory Commission, then the State Human Rights Commission does not inquire into that case.

Tamil Nadu's State Human Rights Commission:

• The State Human Rights Commission was constituted in the state of Tamil Nadu on **17.4.1997** in accordance with the powers conferred on the State under section-21 of the Protection of Human Rights Act, 1993.

Composition of the commission:

The State Human Rights Commission is a multi-member body consisting of a *chairperson and two members*.

Chairperson: should be a retired Chief Justice of a High Court

Members: 1) should be a serving

(**or**)

Retired judge of a High Court

(**or**)

A District Judge in the state with a minimum of **seven years** experience as District Judge

2) a person having knowledge or practical experience with respect to human rights.

HUMAN RIGHTS COURTS:

- The Protection of Human Rights Act (1993) also provides for the establishment of Human Rights Court in every district for the speedy trial of violation of human rights.
- These courts can be set up by the state government only with the concurrence of the Chief Justice of the High Court of that state.
- For every Human Rights Court, the state government specifies a public prosecutor or appoints an advocate (who has practiced for seven years) as a special public prosecutor.

Constitutional Body	Statutory Body	
The National Commission for Scheduled Castes (SCs) is a constitutional body in the sense that it	1) The National Commission for Women (1992)	
is directly established by <i>Article 338</i> of the Constitution	2) the National Commission for Minorities (1993),	
	 the National Commission for Backward Classes (1993), 	
	4) the National Human Rights Commission (1993) and	
	5) the National Commission for Protection of Child Rights (2007) are statutory bodies in the sense that they are established by acts of the Parliament.	

The Finance Bill, 2019 has inserted new section — 15HAA in Securities and Exchange Board of India (SEBI)

Why section 15HAA in SEBI?

- The WhatsApp leak case or even the NSE collocation matter deal with the data being leaked through electronic means and unauthorized access to exchange data, which forms the base in most regulatory probes.
- Hence a new section 15HAA has been inserted in the SEBI Act that says if a person tampers with information to obstruct or influence an investigation, destroys regulatory data or tries to access data in an unauthorized manner then the entity could be *penalised up to ₹10 crore or three times the unlawful gains*, whichever is higher.

'Utkarsh 2022' Three year road map to improve regulation, supervision of the central bank.

- The Reserve Bank of India (RBI) board, finalised a three year roadmap to improve regulation and supervision, among other functions of the central bank.
- This medium term strategy named Utkarsh 2022 is in line with the global central banks' plan to strengthen the regulatory and supervisory mechanism
- "Worldwide, all central banks strengthen the regulatory and supervisory mechanism, everybody is formulating a long term plan and a medium term plan. So, the RBI has also decided it will formulate a pragramme to outline what is to be achieved in the next three years,"

10-07-2019 Current Affairs

SAIL makes 'triple' offer on divestment of 3 units

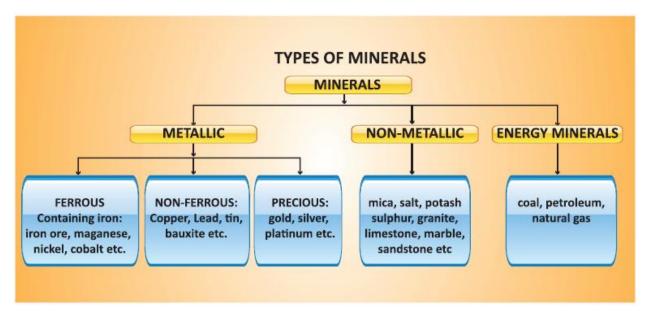
- The Steel Authority of India (SAIL) is offering lease of
 - \checkmark A limestone mine,
 - ✓ Forest clearance till 2030 and
 - ✓ 3,155 acres

as part of the strategic divestment programme for three of its special steel plants whose losses totaled ₹375 crore in 2018-19.

• The plants on offer are

PLANT	LOCATION
Alloy Steel Plant (ASP)	Durgapur
Salem Steel Plant (SSP)	Tamil Nadu
Visvesvaraya Iron and Steel Plant (VISP)	Karnataka

Minerals



- Mineral is a natural substance of organic or inorganic origin with definite chemical and physical properties.
- The process of extracting mineral from the earth is known as mining.
 - ✓ The mines near the earth crust are known as **open pit mines**.
 - ✓ The deep mines are known as *shaft mines*.
- The organizations associated with minerals in India are

Organisations	Headquarter
Geological Survey of India	Kolkata
Indian Bureau of Mines	Nagpur
Non-Ferrous Material Technology Development Centre (NFTDC)	Hyderabad

- The Ministry of Mines is responsible for the administration of all mines and minerals (*Development and Regulation Act, 1957*).
- Types of Minerals
 - a) Metallic Minerals
 - ✓ Iron ore
 - ✓ Manganese
 - ✓ Copper
 - ✓ Bauxite
 - b) Non-Metallic Minerals
 - ✓ Bauxite
 - ✓ Lime Stone
 - ✓ Gypsum

Iron ore

• **SAIL** (Steel Authority of India Limited): The Ministry of Steel is responsible for planning and development of iron and steel industry in India.



- Iron ore is the most widely distributed elements of the earth crust, rarely occurs in a free state.
- It enters into the composition of many rocks and minerals especially from *igneous and metamorphic rocks*.

• Iron ores are rocks and minerals from which metallic iron can be economically extracted. The ores are usually *rich in iron oxides* and vary in colour from dark grey, bright yellow, or deep purple to rusty red. The iron is usually found in following form.

Form of Iron ores	Iron Content (%)	
Magnetite	72% of pure Iron	
Hematite	70% of pure Iron	
Goethite	63% of pure Iron	
Limonite	50% of pure Iron	
Siderite	30% of pure Iron	

Rank	Country	Production (Metric Ton)	Share (%)
1	Australia	531,075,350	33.72
2	China	345,841,000	21.96
3	Brazil	271,275,900	17.22
4	India	124,852,650	7.93
5	Russia	55,550,000	3.53
	Others		15.64

- If the iron content is **less than 30%** in an ore, it is considered to be **uneconomical.**
- Haematite deposits
 - ✓ About 79% haematite deposits are found in Assam, Bihar, Chhattisgarh (Rajgarh and Bilaspur districts), Jharkhand (Singhbhum, Hazaribagh, Dhanbad and Ranchi districts), Odisha (Sundargarh, Mayurbhanj, Sambalpur and Keonjhar districts) and Uttar Pradesh.
- Magnetite deposits
 - ✓ About 93% magnetite deposits occur in Andhra Pradesh, Goa, Karnataka (Chikmangalur, Chitradurga, Shimoga and Dharwad districts), Kerala and Tamil Nadu.
 - ✓ *Karnataka* alone contributes about 72% of magnetite deposits of India.

Manganese

- India is the *fifth largest producer* of manganese *in the world*.
- Manganese is a silvery grey element.

- Manganese deposits occur mainly as *metamorphosed bedded sedimentary deposits.*
- It is a kind of Ferro-alloy used to manufacture the special quality steel.
- A little *manganese added to iron*, removes gases and acts as a '*Cleanser*' in the manufacturing process.
- It is very hard and brittle in nature. It is always available in combination with iron, laterite and other minerals.
- It is an important mineral used for making iron and steel and serves as basic raw material for alloying.
- Manganese is used for special quality steel making; it *makes steel anti corrosive, hard and clean*. It helps to increase toughness, strength and durability to resist oxidation in blast furnaces.
- Manganese Ore India Limited (MOIL): *state-owned* manganese-ore mining company *headquartered in Nagpur*. With a market share of 50%, it was the largest producer of manganese ore in India.
- The largest deposits of manganese is found in
 - ✓ Odisha (44%),
 - ✓ Karnataka (22%),
 - ✓ Madhya Pradesh (12%),
 - ✓ Maharashtra & Goa(7% each),
 - ✓ Andhra Pradesh (4%) and
 - ✓ Jharkhand (2%).

मॉयल MOIL

Copper

- Copper is the first metal that prehistoric man has started using for many purposes.
- Alloys of copper are

Alloy	Copper mixed with
Brass	zinc
Bronze	tin

- **Hindustan Copper Ltd:** is a *Government-owned*-corporation in the central public Enterprise under the Ministry of minies, India.
 - ✓ HCL is *the only vertically integrated copper producer* in India engaged in a wide spectrum of activities ranging from Mining, Beneficiation, Smelting, Refining and Continuous Cast Rod manufacturer.



- Major copper producing states in India are
 - ✓ Jharkand (Singhbhum and Hazaribagh districts) with 62%
 - ✓ Odisha with 50.2%
 - ✓ Rajasthan ranks third with 28% production.
- India holds **35th rank** and it produces only 0.15% of the world's production.

Bauxite

- The name has been derived after *the French word Le Baux*.
- Bauxite is also used in the manufacture of *cement and chemicals*.
- Bauxite is an important ore from which *aluminium is extracted*.

- ✓ Being light in weight and tough, aluminium is used in the manufacture of aircraft s and automobile engines.
- ✓ National Aluminium Company Limited, abbreviated as NALCO, (incorporated 1981) has units in Odisha at places like Angul and Damanjodi. It was incorporated as a public sector enterprise of the Ministry of Mines, Government of India in 1981.



BAUXITE (ORE)

Rank	Country	Production MT	Share in%
1	Australia	83,516,578	29.31
2	China	65,000,000	22.81
3	Brazil	39,244,200	13.77
4	Guinea	31,117,131	10.92
5	India	24,664,632	8.66
	Others		14.53

- It is found in the rock consisting mainly of *hydrated aluminium oxides*.
- Bauxite is widely distributed **as surface deposits in** the areas of **laterite soil.** Bauxite occurs quite near the surface and is generally mined by **open cast method**.
- The main bauxite deposits occur in
 - ✓ Odisha 50.2%,
 - ✓ Gujarat 15.8% (Junagadh, Amreli and Bhavnagar districts),
 - ✓ Jharkhand 11.9% (Ranchi and Gumila districts),
 - ✓ Maharashtra 9.9% (Sindhu durg and Ratnagiri),
 - ✓ Chhattisgarh 6.2% (Ballarpur and Durg districts), and
 - ✓ Tamil nadu 2.7%.

Hyundai rolls out fully electric SUV Kona (price tag at ₹25.3 lakh)

- India's first fully electric SUV, the Kona promises a drive range of 452 km on a single charge.
- The Kona electric, currently being assembled at the company's Chennai plant, will be initially launched in only in 11 cities due to charging constraints and demand expectations. The new vehicle can be charged in about six hours and can accelerate from 0-100 kmph in 9.7 seconds.



Renewable sources of Energy

- All regions of the world are facing the twin problems of fast increasing demand for energy and limited supplies and rapidly depleting conventional sources of energy.
- Under these circumstances, non conventional sources of energy are getting more importance. These sources are renewable, clean and non-polluting. They are solar, wind, geothermal, wave, tidal energy, bio-gas etc.

Hydel Power

- The *largest potential* of Hydel power: 1) China, 2) Brazil, 3) Indonesia,
 4) Canada and 5) Zaire.
- The *largest producer* of Hydro electricity: 1) China, 2)Canada.

Solar energy

- It is based on mechanical conversion of solar energy into electricity.
- USA is the major producer of solar cells at present.
- Noor Complex
 - ✓ Noor Complex is the world's largest concentrated solar power (CSP) plant, *located in the Sahara Desert*.
- The World's largest single solar power plant: "Kamuthi"
 - ✓ Kamuthi Solar Power Project is a photovoltaic power station spread over an area of 2,500 acres (10 km2) in *Kamuthi, Ramanathapuram district.*
 - ✓ The project was commissioned by Adani Power, With a generating capacity of 648 MW at a single location.



- ✓ The Kamuthi Solar Power Project was completed on 21 September 2016.
- ✓ Around 8,500 workers installed an average of 11 MW of capacity per day to complete the project within 8 months.
- ✓ The entire solar park is connected to a 400 kV substation of the Tamil Nadu Transmission Corp. The solar panels are cleaned daily by a self-charged robotic system.

Wind Energy

- Wind energy is now the second fastest growing source of electricity in the world. It fulfils about 5% of world's electricity demand.
- The world's largest wind farm is in Altamont pass in California.
- India is emerging as a major wind power producer of world. The important wind farms in India
 - ✓ 1st *Muppandal* in Kanyakumari District of *Tamil Nadu*
 - ✓ 2nd Jaisalmer wind park in **Rajasthan**.
- Based on the location of its generation it is classified into
 - ✓ Onshore wind energy: Energy generated from the plants located on the land.
 - ✓ Offshore wind energy: Energy generated from the plants located on seas and oceans.
 - ✓ London Array is the largest offshore wind farm in the world.
 - ✓ In India the *first offshore* wind farm is planned near *Dhanuskodi in Tamil Nadu*.

Tidal energy

- It is a renewable energy powered by the natural raise and fall of ocean water.
- The *first* tidal power station was located in *La Rance in France*.

- The *largest* tidal power station is at *Sihwa Lake in South Korea* and it is the largest tidal power producer in the world.
- India's first attempt to harness tidal power for generating electricity would be in the form of a 3MW plant at
 - ✓ The Durgaduani creek in sunderbans delta of West Bengal.
 - ✓ The Gulf of Kutch and Cambay in Gujarat and
 - ✓ the **Ganges delta** in **sunderbans**, the world's largest mangrove,

are the 3 sites identified as potential areas for tidal power generation in India.

Geo Thermal Energy

- Geo thermal energy is derived from the natural heat of the earth.
- The *largest* geothermal development in the world is *The Geysers north* of San Francisco in California, the U.S.
- In India, exploration and study of geothermal fields started in 1970.
- The GSI (Geological Survey of India) has identified **350** geothermal energy locations in the country.
- The most promising is in Puga valley of Ladakh.
- The estimated potential for geothermal energy in India is about 10000 MW.
- There are seven geothermal provinces in India:
 - ✓ The Himalayas,
 - ✓ Sohana,
 - ✓ West coast,
 - ✓ Cambay,
 - ✓ Son- Narmada-Tapti (SONATA),

- ✓ Godavari, and
- ✓ Mahanadi.

Gas-based Combined cycle power plants for Chennai

• In a suo motu statement in the Tamil Nadu Assembly, Chief Minister Edappadi K. Palaniswami said a Detailed Project Report will be prepared as part of the first phase of two gas-based Combinedcycle power plants *with a capacity of 730 MW* each at a cost of ₹5,000 crore to equip Chennai to meet the ever increasing demand for power and to ensure the provision of electricity infrastructure for the future.

Why gas -based combined cycle power plant?

• A combined-cycle plant works to produce electricity and *captures waste heat* from the gas turbine to *increase efficiency and electrical output*.

How a Combined-Cycle Power Plant Produces Electricity?

- A combined-cycle plant consists of three main parts, they are
 - 1. Gas turbine burns fuel.
 - 2. Heat recovery system captures exhaust.
 - 3. Steam turbine delivers additional electricity.
- Gas turbine burns fuel.
 - ✓ The gas turbine compresses air and mixes it with fuel that is heated to a very high temperature. The hot air-fuel mixture moves through the gas turbine blades, making them spin.
 - ✓ The fast-spinning turbine drives a generator that converts a portion of the spinning energy into electricity.
- Heat recovery system captures exhaust.
 - ✓ A Heat Recovery Steam Generator (HRSG) captures exhaust heat from the gas turbine that would otherwise escape through the exhaust stack.

- ✓ The HRSG creates steam from the gas turbine exhaust heat and delivers it to the steam turbine.
- Steam turbine delivers additional electricity.
 - ✓ The steam turbine sends its energy to the generator drive shaft, where it is converted into additional electricity

The Pradhan Mantri Shram Yogi Maandhan (PMSYM) remains a nonstarter in the State.

• As of July 7, less than 48,000 workers had joined the scheme despite the State having an estimated official overall figure of around 1 crore. R. Geetha, advisor, Unorganised Workes' Federation – Tamil Nadu, says the actual number is around 2 crore.

What is PMSYM?

- Pradhan Mantri Shram Yogi Maan-dhan (PM-SYM) was be rolled out by the Ministry of Labour and Employment on 15.02.2019
- The unorganised workers mostly engaged as home based workers, street vendors, mid-day meal workers, head loaders, brick kiln workers, cobblers, rag pickers, domestic workers, washer men, rickshaw pullers, landless labourers, own account workers, agricultural workers, construction workers, beedi workers, handloom workers, leather workers, audio- visual workers and similar other occupations *whose monthly income is Rs 15,000/ per month or less* and belong to the *entry age group of 18-40 years are eligible* for the scheme.
- **Minimum Assured Pension:** Each subscriber under the PM-SYM, shall receive minimum assured pension of **Rs 3000/- per month** after attaining the age of 60 years.
- They should not be covered under
 - ✓ New Pension Scheme (NPS),
 - ✓ Employees' State Insurance Corporation (ESIC) scheme
 - ✓ Employees' Provident Fund Organisation (EPFO).

 \checkmark Further, he/she should not be an income tax payer.

Why PMSYM is non-starter in state?

- The 'unattractive' features of the scheme and the presence of better welfare measures for unorganized workers in the State are the main factors behind the poor response, say Labour Department officials and activists.
- Director, Jesuit Migrant Service (JMS), Loyola College says there is a feeling among the workers that the scheme does not offer them "higher returns" when they turn 60.
- Another area of concern pertains to the rule on "uninterrupted payment". If there is a break in the payment, which is very likely given the nature of the work, the existing rules are "not beneficial" to the workers.
 - ✓ An official of the Labour Department says that in the event of a worker opting out of the scheme within 10 years, only his or her share of the contribution will be returned, along with the amount accrued at the savings bank interest rate.

DRDO gets clearance for missile test facility in Andhra Pradesh.

- The minister of environment Forest and Climate change (MoEFCC) has granted the required Environment clearance (EC) and Coastal Regulatory Zone (CRZ) clearance for DRDO to set up its second missile testing facility along *the coast of Bay of Bengal*.
- This could be the second missile facility of DRDO and it will come up at *Gullalamoda village in Krishna district, Andhra Pradesh*.
- Since the project is a strategic important and of National importance the environment ministry has waved off the process of public consultation before granting environmental clearance.
- This is very significant because under the *Environment Impact Assessment (EIA*) rules of 2016, conducting public consultation is mandatory but the process of public consultation can be exempted only for projects which are of strategic significance and national importance.

The DEDO already operates a missile test facility along the coast of Bay of Bengal and it is known as "*Integrated Test Range*", it is located on the *wheeler island* near *chandipur* which is in balasore district of *odisha* and recently the wheeler island was renamed as *A.P.J Abdul kalam island*.

• Defence Research & Development Organisation (DRDO)

- ✓ DRDO works under Department of Defence Research and Development of Ministry of Defence.
- ✓ DRDO dedicatedly working towards enhancing self-reliance in Defence Systems and undertakes design & development leading to production of world class weapon systems and equipment in accordance with the expressed needs and the qualitative requirements laid down by the three services.

✓ Vision

Make India prosperous by establishing world-class science and technology base and provide our Defence Services decisive edge by equipping them with internationally competitive systems and solutions.

✓ Mission

1) Design, develop and lead to production state-of-the-art sensors, weapon systems, platforms and allied equipment for our Defence Services.

2) Provide technological solutions to the Defence Services to optimise combat effectiveness and to promote well-being of the troops.

3) Develop infrastructure and committed quality manpower and build strong technology base.

• Integrated Test Range or Interim Test Range, (ITR)

✓ The Integrated Test Range, sometimes referred to as the Interim Test Range, is a missile testing facility composed of two complexes
 Launch Complex-IV (LC-IV) and Launch Complex-III (LC-III).

- ✓ Launch Complex-IV (LC-IV) should not be confused with the Launch Complex-III (LC-III), still occasionally used by the DRDO for ballistic missile tests.
- ✓ LC-III is located at *Chandipur-on-Sea*, about 75 kilometers north of *Wheeler Island*, which houses LC-IV. Together, the complexes are commonly referred to as the Integrated Test Range (or occasionally referred to as the Interim Test Range).



✓ The Integrated Test Range is a dedicated missile test site for ranges up to 5,000 km. Prithvi and Agni I-V ballistic missiles, Akash and Trishul surface-to-air missiles, the Nag anti-tank missile, and Advanced Air Defence (AAD) ballistic missile interceptors have all been tested here.

• Coastal Regulatory Zone (CRZ)

- ✓ Under the *Environment Protection Act, 1986* of India, notification was issued *in February 1991*, for regulation of activities in the coastal area by the Ministry of Environment and Forests (MoEF).
- \checkmark As per the notification,
- 1) The coastal land up to **500m** from the High Tide Line (HTL)

2) A stage of **100m** along banks of creeks, estuaries, backwater and rivers subject to tidal fluctuations

is called the Coastal Regulation Zone(CRZ).

- ✓ CRZ along the country has been placed in four categories.
- ✓ The above notification includes only the inter-tidal zone and land part of the coastal area and **does not include the ocean part**. The notification imposed restriction on the setting up and expansion of industries or processing plains etc. in the said CRZ.
- ✓ Coastal Regulation Zones(CRZ) are notified by the govt of India in 1991 for the first time. Under this coastal areas have been classified as CRZ-1, CRZ-2, CRZ-3, CRZ-4. And the same they retained for CRZ in 2003 notifications as well.
- ✓ CRZ-1: these are ecologically sensitive areas these are essential in maintaining the ecosystem of the coast. They lie between low and high tide line. Exploration of natural gas and extraction of salt are permitted
- ✓ CRZ-2: these areas are urban areas located in the coastal areas. Now under new coastal zone regulations 2018, the floor space index norms has been de-freezed.
- ✓ CRZ-3: rural and urban localities which fall outside the 1 and 2. Only certain activities related to agriculture even some public facilities are allowed in this zone
- ✓ CRZ-4: this lies in the aquatic area up to territorial limits. Fishing and allied activities are permitted in this zone. Solid waste should be let off in this zone. This zone has been changed from 1991 notification, which covered coastal stretches in islands of Andaman & Nicobar and Lakshdweep.

• Environment Impact Assessment (EIA) 2016:

✓ The Ministry of Environment, Forest and Climate change (MoEF&CC), on 9th December, 2016 amended the Environment Impact Assessment Notification, 2006. ✓ This has been done with a view to streamline the permissions for buildings and construction sector so that affordable housing can be provided to weaker sections in urban area under the scheme 'Housing for All by 2022'.

Supreme Court to decide "if illegal migrants can be given the status of refugees"

- A Bench, led by Chief Justice of India Ranjan Gogoi, was hearing petitions filed by two Rohingya men against the government's proposal to deport their 40,000strong Community to their native land of Myanmar, where "discrimination and possibly summary executions await them".
- **Solicitor General** Tushar Mehta said the primary prayers made in the petitions were to stop any proposed deportation and allow the community rights under the international law.
- **The Rohingya**, who fled to India after violence in the State of **Rakhine in Myanmar**, are settled in Jammu, Hyderabad, Haryana, Uttar Pradesh, DelhiNCR and Rajasthan.
- The petitions said the Centre's move violated the constitutional guarantee that the Indian State should "*protect the life and liberty of every human being, whether citizen or not*".
- India if proceeds to deport rohingiyas then it would violates its own constitution because under Indian Constitution article 21 which applies to not only to Indian Citizens but as well as for foreigners. It is fundamental right of life and lilberty whether person is Indian citizen or not.
- The National Human Rights Commission (NHRC) had also issued notice to the government on the proposed deportation.

Difference between Illegal migrant and Refugee?

Illegal Migrant	Refugee
The migration of people into a country in <i>violation of the immigration</i>	A person who has been forced to leave

<i>laws</i> of that country, or the continued	their country due to threats of
residence of people without the legal right to live in that country.	1. Discrimination
	2. Oppression
	3. Persecution
	4. Violence

- Refugees try to cross over another country and try to seek asylum, according to International law
- U.N's has a dedicated organization to protect the rights of the refugees. This is known as United Nations High Commission for Refugee (UNHCR).
- UNHCR in India has already recognized Rohingiyas as refugee and issued Refugee Identity Card.
- Under rights of this rules has been covered under International Convention known as **1951 Refugee Convention.**
- Under rights of 1951 refugee convention a refugee to seek asylum in another country has been protected and it also defines set of basic rights which has to be accorded to the refugees and it provides for a set of responsibilities for the member countries.
- Countries which are party of refugee convention they are expected to full fill responsibilities in order to basic rights which has to be accorded to the refugees
- This convention also provides for the definition of a very important principal known as "Principal on Non-Refoulement "
- According to this principal a refugee cannot be forcefully sent back to the country where he/she will continuous to face discrimination, oppression, etc.,
- So if a country plans to forcefully deport the refugee back to the place where they came from then that country violates the principal of Non-Refoulement which had been covered under 1951 refugee convention.

- In case of India, India has not signed or India is not a party to 1951 refugee convention. So does this mean that India does not have any obligation toward the principles of Non-Refoulement. Answer is NO.
- India is bound under International law to uphold the principle of Non-Refoulement because this principal is a part of customer International laws and more importantly the refugee convention is built on the universal declaration of human rights established in 1948 and India is a party to this universal declaration of human rights

Solicitor General

- In addition to the Attorney General (AG), there are other law officers of the Government of India.
- They are the solicitor general of India and additional solicitor general of India.
- **They assist the AG** in the fulfilment of his official responsibilities.
- It should be noted here that only the office of the AG is created by the Constitution. In other words, "Article 76" does not mention about the solicitor general and additional solicitor general.
- The AG is not a member of the Central cabinet. There is a separate law minister in the Central cabinet to look after legal matters at the government level

TEXT OF THE PREAMBLE

- "We, THE PEOPLE OF INDIA, having solemnly resolved to constitute India into a SOVEREIGN SOCIALIST SECULAR DEMOCRATIC REPUBLIC and to secure to all its citizens: JUSTICE, Social, Economic and Political; LIBERTY of thought, expression, belief, faith and worship; EQUALITY of status and of opportunity; and to promote among them all; FRATERNITY assuring the dignity of the individual and the unity and integrity of the Nation;
- IN OUR CONSTITUENT ASSEMBLY this twenty-sixth day of November, 1949, do HEREBY ADOPT, ENACT AND GIVE TOOURSELVES THIS CONSTITUTION".

Liberty

- The term 'liberty' means the absence of restraints on the activities of individuals, and at the same time, providing opportunities for the development of individual personalities.
- The Preamble secures to all citizens of India liberty of thought, expression, belief, faith and worship, through their Fundamental Rights, enforceable in court of law, in case of violation.
- Liberty as elaborated in the Preamble is very essential for the successful functioning of the Indian democratic system.
- However, liberty does not mean 'license' to do what one likes, and has to be enjoyed within the limitations mentioned in the Constitution itself.
- In brief, the liberty conceived by the Preamble or fundamental rights is not absolute but qualified.
- The ideals of liberty, equality and fraternity in our Preamble have been taken from the *French Revolution* (1789–1799).

Article which deals with life and personal liberty?

• Article 21 – deals with Protection of life and personal liberty

Protection of Life and Personal Liberty

- Article 21 declares that no person shall be deprived of his life or personal liberty except according to procedure established by law. This right is available to **both citizens and non-citizens**.
- In the famous **Gopalan case (1950),** the Supreme Court has taken a narrow interpretation of the Article 21. It held that the protection under Article 21 is available only against arbitrary executive action and not from arbitrary legislative action.
 - ✓ This means that the State can deprive the right to life and personal liberty of a person based on a law. This is because of the expression 'procedure established by law' in Article 21, which is different from the expression 'due process of law' contained in the American Constitution. Hence, the validity of a law that has

prescribed a procedure cannot be questioned on the ground that the law is unreasonable, unfair or unjust.

- But, in *Menaka case (1978)*, the Supreme Court *overruled its judgement in the Gopalan* case by taking a wider interpretation of the Article 21.
 - ✓ Therefore, it ruled that the right to life and personal liberty of a person can be deprived by a law provided the *procedure prescribed by that law is reasonable, fair and just.*
 - ✓ In other words, *it has introduced* the American expression '*due process of law*'.
- In effect, the protection under Article 21 should be available not only against arbitrary executive action but also against arbitrary legislative action.
- Further, the court held that the '*right to life*' as embodied in Article 21 is not merely confined to animal existence or survival but it includes within its ambit the right to live with human dignity and all those aspects of life which go to make a man's life meaningful, complete and worth living.
- It also ruled that the expression 'Personal Liberty' in Article 21 is of the widest amplitude and it covers a variety of rights that go to constitute the personal liberties of a man.

What is the difference between "due process of law" and "procedure established by law"?

- The difference between "due process of law" and "procedure established by law" is that
 - ✓ Under the American system, a law must satisfy the criteria of a liberal democracy.
 - ✓ In India "procedure established by law", on the other hand, means a law duly enacted is valid even if it's contrary to principles of justice and equity.

Fundamental Rights (FR) of Foreigners and citizens:

FR available only to citizens	
and not to foreigners	foreigners (except enemy aliens)
1. Prohibition of discrimination on	1. Equality before law and equal
grounds of religion, race, caste, sex	protection of laws (Article 14).
or place of birth (Article 15).	
2. Equality of opportunity in	2. Protection in respect of conviction
matters of public employment	for offences (Article 20).
(Article 16).	
3. Protection of six rights regarding	3. Protection of life and personal
freedom of :	liberty (Article 21).
(i) speech and expression,	
(ii) assembly,	
(iii) association,	
(iv) movement,	
(v) residence, and	
(vi) profession (Article 19).	
4. Protection of language, script	4. Right to elementary education
and culture of minorities	(Article 21A).
(Article 29).	
5. Right of minorities to establish	_
and administer educational	
institutions (Article 30).	(Article 22).
	6. Prohibition of traffic in human
	beings and forced labour
	(Article 23).
	7. Prohibition of employment of
	children in factories etc.,
	(Article 24).
	8. Freedom of conscience and free
	profession, practice and propagation of
	religion (Article 25).
	9. Freedom to manage religious affairs
	(Article 26).
	10. Freedom from payment of taxes for
	promotion of any religion
	(Article 27).

11. Freedom from attending religious
instruction or worship in certain
educational institutions (Article 28).

Features of directive principles of state policy:

- The Directive Principles constitute a very comprehensive economic, social and political programme for a modern democratic State.
- They aim at realizing the high ideals of justice, liberty, equality and fraternity as outlined in the Preamble to the Constitution.
- They embody the concept of a 'welfare state' and not that of a 'police state', which existed during the colonial era.
- In brief, they seek to establish economic and social democracy in the country.

Honour for 'Plan Bee' that helped to save jumbos

• The Northeast Frontier Railway (NFR) earned the best innovation award in Indian Railways for the 2018-19 fiscal, for its Plan Bee

What is Plan Bee?

• Plan Bee, an amplifying system *imitating the buzz of a swarm of Honey- Bee's* to keep wild elephants away from railway tracks.

Why Plan Bee?

- There are 29 earmarked elephant corridors with the operating zone of NFR spread across the north-eastern states and parts of Bihar and West Bengal.
- Trains are required to slow down at these corridors and adhere to speed specified on signs.
- "But elephants have ventured into the path of trains even in non-corridor areas, often leading to accidents resulting in elephant deaths.
- NFR's Rangiya Division and Forest Department field officials worked on certain deterrents and provide a solution to the problem".



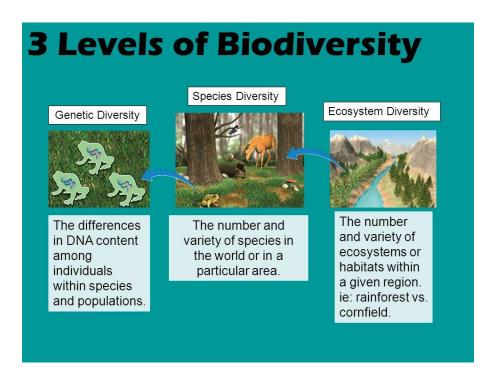
Forest dwellers and farmers are the best hope to preserve biodiversity and ensure food security

- The Dongria **Kondh tribe of Niyamgiri Hills** gains global popularity for their legal battle **against** vedantha which was looking to **mine bauxite** from sensitive region of niyamgiri gills in odisha.
- So by highlighting this example we can says that the traditional forest dwellers and tribal farmers they hold the key to protect and conserve our biodiversity
- Today biggest threat to our biodiversity is clearly come from Anthropogenic factors, these includes
 - 1. Modern agriculture
 - 2. Rapid industrialization urbanization
 - 3. The extent of pollution caused by above factors.
- So these anthropogenic factors are destroying our biodiversity and it is already resulting in extinction of number of species.

- So this is the fact which is already confirmed by IPBES report on biodiversity
- IPBES is U.N back panel which recently came out report which was titled as "Global assessment of Biodiversity", according to this report human induced factors will trigger a mass extinction of species and the same conclusion was drawn by report of Food and Agriculture Organization of United Nations.

Biodiversity:

- It is organized at three different levels
 - 1. Genetic biodiversity: (the basis of biodiversity)
 - 2. Species biodiversity
 - 3. Eco system biodiversity



- If there is enough genetic diversity within species it will promote diversity among species which in turn will provide diversity among eco system
- When there is lot of diversity at these three levels we can find that flora and fauna will be better able to resist all the threat to bio diversity which includes diseases, pests, disasters, etc.,

- So this would also mean that if there is a significant loss of bio diversity it will direct threaten the very existing of flora and fauna
- Because when more and more species become extinct because of anthropogenic factors it will result in loss of biodiversity and this in turn will make the flora and fauna more vulnerable to diseases, pests, and disasters
- So this is basically a vicious cycle. If they increase the extinction of species then it would further reduce the ability of flora and fauna that would bring threat to biodiversity
- This overall threat to biodiversity will post significant challenges to human development which would begin with questions over food security
- In the context of these threats it is high time to recognize the traditional role played by forest dwelling communities and tribal farmers in conserving our environment and biodiversity.

11-07-2019 Current Affairs

HC CJ, ex-CJI to get honorary doctorates

- The Tamil Nadu Dr. Ambedkar Law University has decided to confer honorary doctorates in law on
 - 2) Former Chief Justice of India and incumbent Governor of Kerala **P. Sathasivam**
 - 3) The senior most judge of the Supreme Court Justice **Sharad Arvind Bobde**
 - 4) The Chief Justice of Madras High Court Vijaya Kamlesh Tahilraman



P. Sathasivam

Sharad Arvind Bobde

Vijaya Kamlesh Tahilramani.

Fourteen bonded labourers rescued from Woodcutting unit in Nemili panchayat

- Fourteen bonded labourers, including eight children, were rescued from a woodcutting unit in Paruvamedu village of Nemili panchayat.
- The health of many women and children was poor owing to work exploitation, an official said. "The woodcutting Unit was found to be employing them for almost seven years under undesirable work condition.

RIGHT AGAINST EXPLOITATION

- *Article 23* prohibits traffic in human beings, *begar* (forced labour, bonded labour) and other similar forms of forced labour.
- Any contravention of this provision shall be an offence punishable in accordance with law.
- This right is available to both citizens and non-citizens. It protects the individual not only against the State but also against private persons.
- The expression 'traffic in human beings' include
 - (a) Selling and buying of men, women and children like goods;
 - (b) Immoral traffic in women and children, including prostitution;
 - (c) devadasis; and
 - (d) slavery.
- To punish these acts, the Parliament has made the *Immoral Traffic* (*Prevention*) Act, 1956.

- The word 'force' includes not only physical or legal force but also force arising from the compulsion of economic circumstances, that is, *working for less than the minimum wage*. In this regard,
 - 1. The Bonded Labour System (Abolition) Act, 1976;
 - 2. The Minimum Wages Act, 1948;
 - 3. The Contract Labour Act, 1970 and
 - 4. The Equal Remuneration Act, 1976 were made.
- Article 23 also provides for an exception to this provision.
 - ✓ It permits the State to impose compulsory service for public purposes, as for example, military service or social service, for which it is not bound to pay.
 - ✓ However, in imposing such service, the State is not permitted to make any discrimination on grounds only of religion, race, caste or class.

National human rights commission (1993)

- The National Human Rights Commission is a statutory (and not a constitutional) body. It was established in 1993 under a legislation enacted by the Parliament, namely, *the Protection of Human Rights Act, 1993.*
- This Act was amended in 2006.
- The commission is the *watchdog of human rights* in the country, that is, the rights relating to life, liberty, equality and dignity of the individual guaranteed by the Constitution or embodied *in the international covenants* and enforceable by courts in India.

RBI panel moots change in timings for foreign exchange market

• Since the central bank is in the process of reviewing and rationalising foreign exchange regulations to provide flexibility regarding products, participation and positions, both for residents and nonresidents, extension of market hours would complement these policy measures.

- An internal committee of the Reserve Bank of India (RBI), which was set up to review timings of different financial markets, suggested that the foreign exchange market could function from **9** *am to* **9** *pm*.
- At present, the currency market works from 9 am to 5 pm.

IAF to adopt ASRAAM missile for fighter fleet

- The Indian Air Force (IAF) is looking to adopt a new *European visual range air-to-air missile* across its fighter fleet.
- The Advanced Short Range Air-to-Air Missile of European *missile maker MBDA* has been approved for Jaguar jets.
- The IAF was looking to *integrate it on the Su30 MKIs* and the indigenous *Light Combat Aircraft*.
- About ASRAAM
 - ✓ ASRAAM is widely used as a Within Visual Range (WVR) air dominance missile with a range of over 25km.

ASRAAM:

- ✓ The Advanced Short Range Air-to-Air Missile (ASRAAM) of European missile-maker MBDA has been approved for fitting on Jaguar jets and the IAF was looking to integrating it on the Su-30MKIs and the indigenous Light Combat Aircraft (LCA) as well.
- ✓ The ASRAAM has been chosen for the Jaguar and is currently undergoing integration. The first firing is expected by year-end.
- ✓ It would be the first over the wing launched missile in the IAF inventory. All missiles are now fired from under the wing.
- ✓ ASRAAM is widely used as a Within Visual Range (WVR) air dominance missile with a range of over 25km.
- ✓ HAL had built about 145 Jaguars for the IAF, of which around 120 are in service, and 80 jets will continue till 2025-30.
- \checkmark A plan to get a new more powerful engine has been long delayed.

12-07-2019 Current Affairs

High Court says Govt. jobs can be denied to 'overqualified' candidates

- The Madras High Court held that applications of "overqualified" candidates can be rejected for public recruitment if the appointing authority had prescribed the maximum educational qualification expected of the applicants in view of the nature of the job for which they were to be recruited.
- Appointment of overqualified persons should be **construed as a violation of Articles 14** (right to equality) and **Article 16** (equality in matters of public employment) of the Constitution.
- "Equality among equals is the constitutional mandate. Un-equals cannot be treated equally,"

What is equality according to Indian constitution?

- The term 'equality' means the *absence of special privileges* to any section of the society, and the provision of adequate opportunities for all individuals without any discrimination.
- The Preamble secures to all citizens of India equality of status and opportunity. This provision embraces *three dimensions of equality*
 - ✓ Civic
 - ✓ Political
 - \checkmark Economic.
- The following provisions of the chapter on Fundamental Rights ensure *civic equality*:
 - (a) Equality before the law (*Article 14*).
 - (b) Prohibition of discrimination on grounds of religion, race, caste, sex or place of birth (*Article 15*).
 - (c) Equality of opportunity in matters of public employment (*Article 16*).

- (d) Abolition of untouchability (*Article 17*).
- (e) Abolition of titles (*Article 18*).
- There are *two provisions* in the Constitution that seek *to achieve political equality*.
 - ✓ One, no person is to be declared ineligible for inclusion in electoral rolls on grounds of religion, race, caste or sex (*Article 325*).
 - ✓ Two, elections to the Lok Sabha and the state assemblies to be on the basis of adult suffrage (*Article 326*).
- The *Directive Principles of State Policy (Article 39)* secures to men and women equal right to an adequate means of livelihood and equal pay for equal work.

Article 14:

• A fundamental right which is available to both Indian citizen and foreigner is Equality before law and equal protection of laws

What is Equality before Law and Equal Protection of Laws?

- The concept of '*equality before law*' is of *British origin*.
- The concept of '*equal protection of laws*' has been taken from the *American Constitution*.

Equality before law	Equal protection of laws
(a) The absence of any special	(a) The equality of treatment under
privileges in favour of any person,	equal circumstances, both in the
	privileges conferred and liabilities
(b) The equal subjection of all	imposed by the laws.
persons to the ordinary law of the	
land administered by ordinary law	(b) The similar application of the
courts, and	same laws to all persons who are
(c) No person (whether rich or poor,	similarly situated.
high or low, official or non-official)	(c) The like should be treated alike
is above the law.	without any discrimination.
It is a <i>negative concept</i>	It is a positive concept

However, both of them aim at establishing equality of legal status, opportunity and justice.

What is concept of equality before law?

- The concept of 'equality before law' is **an element of the concept of** 'Rule of Law', propounded by A.V. Dicey, the British jurist. His concept has the following **three elements or aspects**:
 - **1.** Absence of arbitrary power, that is, no man can be punished except for breach of law.
 - **2.** Equality before the law, that is, equal subjection of all citizens (rich or poor, high or low, official or non-official) to the ordinary law of the land administered by the ordinary law courts.
 - **3.** The primacy of the rights of the individual, that is, the constitution is the result of the rights of the individual as defined and enforced by the courts of law rather than the constitution being the source of the individual rights.
- The first and the second elements are applicable to the Indian System and the *third one is not applicable to the Indian system*. In the Indian System, the constitution is the source of the individual rights.

Exceptions to Equality

• The rule of equality before law is **not** absolute and there are constitutional and other exceptions to it. These are mentioned below:

1. The *President* of India and the *Governor* of States enjoy the following immunities (*Article 361*):

- I. The President or the Governor is **not answerable to any court** for the exercise and performance of the powers and duties of his office.
- II. **No criminal proceedings** shall be instituted or continued against the President or the Governor in any court during his term of office

- III. **No** process for the **arrest or imprisonment** of the President or the Governor shall be issued from any court during his term of office.
- IV. **No civil proceedings** against the President or the Governor shall be instituted during his term of office in any court in respect of any act done by him in his personal capacity, whether before or after he entered upon his office, until the expiration of two months next after notice has been delivered to him.

2. No person shall be liable to any civil or criminal proceedings in any court in respect of the publication in a newspaper (or by radio or television) of a substantially true report of any proceedings of either House of Parliament or either House of the Legislature of a State (*Article* **361-A**).

3. No Member of Parliament shall be liable to any proceedings in any court in respect of anything said or any vote given by him in Parliament or any committee thereof (*Article 105*).

4. No member of the Legislature of a state shall be liable to any proceedings in any court in respect of anything said or any vote given by him in the Legislature or any committee thereof (*Article 194*).

5. Article 31-C: is an exception to Article 14. It provides that the laws made by the state for implementing the Directive Principles contained in clause (b) or clause (c) of Article 39 cannot be challenged on the ground that they are violative of Article 14. The Supreme Court held that *"where Article 31-C comes in, Article 14 goes out"*.

6. The *foreign sovereigns* (rulers), ambassadors and diplomats enjoy immunity from criminal and civil proceedings.

7. *The UNO* and its agencies enjoy the diplomatic immunity.

Equality of Opportunity in Public Employment

• According to article 16, No citizen can be discriminated against or be ineligible for any employment or office under the State on grounds of only religion, race, caste, sex, descent, place of birth or residence.

- There are *three exceptions* to this general rule of equality of opportunity in public employment:
 - I. **Parliament can prescribe residence** as a condition for certain employment or appointment in a state or union territory or local authority or other authority. **As the Public Employment (Requirement as to Residence) Act of 1957 expired in 1974**.
 - ✓ There is no such provision for any state except Andhra Pradesh and Telangana. By virtue of Article 371D inserted by the 32nd Amendment Act of 1973 to Andhra Pradesh and 371D extended to Telangana by Andhrapradesh Reorganisation Act, 2014.
 - II. The **State can provide for reservation** of appointments or posts in favour of any backward class that is not adequately represented in the state services.
 - III. A law can provide that the incumbent of an office related to religious or denominational institution or a member of its governing body should belong to the particular religion or denomination.

Election Commission appointed "Expenditure observers" for the August 5 by-poll Vellore Lok Sabha seat

• Vellore Lok Sabha constituency, where the election was cancelled after the Election Commission deemed the atmosphere to be 'vitiated' following seizure of cash.

How is the Election Commission planning to check money distribution this time in Vellore?

• The Commission has appointed two election expenditure observers for Vellore —Indian Revenue Service (IRS) officers Vinay Kumar Singh and R.R.N. Shukla.

India can repeal Article 370 at will: Centre

• The government has informed Parliament that no foreign government or organisation has any locus standi in repealing Article 370 in Jammu and

Kashmir as matters relating to the Constitution of India are internal and only for the Indian Parliament to deal with.

Article 370:

- Article 370 of the Indian constitution is an article that gives autonomous status to the state of Jammu and Kashmir.
- The article is drafted in Part XXI of the Constitution: Temporary, Transitional and Special Provisions.
- The Constituent Assembly of Jammu and Kashmir, after its establishment, was empowered to recommend the articles of the Indian constitution that should be applied to the state or to abrogate the Article 370 altogether.
- After the J&K Constituent Assembly later created the state's constitution and dissolved itself without recommending the abrogation of Article 370, the article was deemed to have become a permanent feature of the Indian Constitution.

Article 35 A:

- Article 35A lets the J&K Legislature decide the "permanent residents" of the State, prohibits a non-J&K resident from buying property in the State and ensures job reservation for its residents.
- It decides who all are 'permanent residents' of the State and confer on them special rights and privileges in public sector jobs, acquisition of property in the State, scholarships and other public aid and welfare.
- The provision mandates that no act of the legislature coming under it can be challenged for violating the Constitution or any other law of the land.

Centre redefines child porn, moots stiff penalties

• In a bid to crack down heavily on child pornography, the Ministry of Women and Child Development has laid down a clear definition of what constitutes the offence and has included sexually explicit digital content involving children under its purview as per an amendment to the existing Protection of Children from Sexual Offences (POCSO) Act which is soon to be tabled before the Lok Sabha.

Details:

- The new Bill defines child pornography as: "any visual depiction of sexually explicit conduct involving a child which includes a photograph, video, digital or computer-generated image (that is) indistinguishable from an actual child."
- Additionally, "an image created, adapted, modified" to depict a child would also be treated as child pornography. This would also include cartoons, animated pictures, etc.,
- The Cabinet has also enhanced the fine for possessing child porn but not deleting or reporting it to 5,000 from the earlier proposal of Rs. 1,000. If a person stores such content for distributing it further, except for when presenting it in court as evidence, he could face a punishment of upto three years.
- Henceforth, there will be zero tolerance for child pornography.
- Some of these provisions were also contained in the Protection of Children from Sexual Offences (POCSO) Amendment Bill, 2019, but lapsed.

Significance:

- So far, there had been no definition of child pornography in Indian law.
- It was a big lacuna which could be used to evade the law.
- Neither Section 67 of the IT Act nor Section 293 of the Indian Penal Code define child pornography.
- Its definition derived from what constitutes pornography, which is defined as "any material which is lascivious or appeals to the prurient interests or if its effect is such as to tend to deprave or corrupt the minds of those who are likely to see, read and hear the same."
- "Child porn" has now been redefined to ensure that the punishment can be implemented properly.
- The amended law will also apply to pornographic content where adults or young adults pretend to be children.

Commission for Safai Karamcharis asks govt. to file report on sewer deaths

- The National Commission for Safai Karamcharis has directed the Chief Secretary of Delhi to file a report on sewer death cases continuing unabated in the Capital despite the government's claims of mechanisation.
- It has also sought a report on steps being taken by the government to stop such deaths resulting from the manual cleaning of sewers and septic tanks.
- It functions under the Ministry of Social Justice and Empowerment

Why Safai Karamcharis asks govt. to file report on sewer deaths?

- The direction comes in the background of recent report that highlights frequent deaths of sanitation workers in Delhi while manually cleaning sewers without protective gear.
- According to the Social Justice and Empowerment Ministry data, there have been 620 reported cases of deaths of sanitation workers while cleaning septic tanks and sewers since 1993, of which 88 occurred in the last 3 years.
- The Commission has gathered that government had procured 200 sewer cleaning machines to ensure mechanised system of sewer cleaning.
- It observed that the regular occurrence of sewer death cases in Delhi seems to betray the suggestion of mechanisation.
- Over 15 sewer deaths have been reported during last one-and-a-half-year in Delhi, which has dismayed the Commission and it is compelled to understand that mechanised system of sewer cleaning is still not being executed completely.

CBI teams search premises of Lawyers Collective

• The CBI has conducted searches at five places in Delhi and Mumbai in connection with a case of an alleged Foreign Contribution Regulation Act (FCRA) violation by the Lawyers Collective (LC), its president Anand Grover and others.

Foreign Contribution Regulation Act (FCRA):

- The FCRA was enacted in 1976 in order to maintain strict control over voluntary organisations and political associations that received foreign fundings.
- In the year 1984, an amendment was made to the act requiring all the Non-Governmental Organisations to register themselves with the Home Ministry.
- In 2010, the act was repealed and a new act with strict provisions was enacted. It is a consolidating act passed by the Government of India.
- It seeks to regulate the foreign contributions or donations and hospitality (air travel, hotel accommodation etc) to Indian organizations and individuals and to stop such contributions which might damage the national interest.
- It is an act passed for regulating and prohibiting the acceptance and utilization of foreign contribution or foreign hospitality by companies, associations or individuals for such activities that could prove to be detrimental to the national interest and for matters connected therewith or incidental thereto.
- Since the Act is internal security legislation, despite being a law related to financial legislation, it falls into the purview of Home Ministry and not the Reserve Bank of India (RBI).

SC panel asks Odisha to plug road safety gaps

- A Supreme Court-appointed committee on road safety has observed that Odisha lacks road signage, markings and traffic signals conforming to the Indian Road Congress specifications.
- The committee's observation becomes significant as there has been a rise of 11% in road accident fatalities in Odisha.
- The average growth in road accident fatalities in India has been below 1% in this period.
- The committee recommended that all the road signage, markings and traffic signals should conform to the IRC specifications.

• Although the IRTE conducted the survey in Bhubaneswar, the committee wanted the Odisha government to treat it as a sample study and implement the recommended actions throughout the State.

13-07-2019 Current Affairs

Trust Vote

- The Chief Minister stays in power as long as it retains the confidence of the state Assembly. The Trust Vote or Confidence Vote is proposed by the party in power in order to demonstrate that it still enjoys the support of the majority of MLAs.
- A trust vote is a motion through which the government of the day seeks to know whether it still enjoys the confidence of parliament or Assembly.
- A trust vote is sought either during the first session if it is not clear whether a party or a grouping of parties command a majority in the house, or at any time during the five-year tenure of the house if it becomes apparent that the government of the day has lost its majority.
- This initiative is often looked upon as a strategy of the state government to pre-empt a no-confidence motion by the opposition parties.

What Happens When The Government Loses Trust Vote?

- If the results of the trust vote don't appear to be in favour of the ruling party, the Governor of the state orders resignation of the Chief Minister and new Assembly elections are sought i.e. government would be expected to resign if it loses a trust vote.
- Karnataka Chief Minister HD Kumaraswamy said that he is ready to seek the trust vote to prove his majority on the floor of the assembly asked the Speaker to "fix a time".

India abstains from voting for LGBTQ rights

• India maintained its past position on LGBTQ rights by abstaining from voting at the UN Human Rights Council on a resolution moved by Latin American states seeking to renew the mandate of independent expert on

protection against violence and discrimination based on Sexual Orientation and Gender Identity (SOGI).

What was the resolution about?

- The Resolution numbered L10 Rev 1 granted an extension of three years to the Independent Expert to carry on reporting on incidents of violence against the LGBTQ community all over the world.
- The Resolution will help integrating the work of the crucial official into the larger body of global work by the United Nations.
- The text of the resolution specifically asked the U.N. for providing financial support to the official in implementing the mandate.

Abstention

- The resolution received support from most of the member countries at the Human Rights Council but India, Angola, Burkina Faso, Cameron, Congo, Hungary, Togo and Senegal **abstained** during the final voting.
- Pakistan, Saudi Arabia, China, Bangladesh, Bahrain, Qatar, Somalia **opposed** the resolution.
- India had also abstained during the 2016 vote on appointment of the Independent Expert.

Chandrayaan 2 Mission

- It is India's uncrewed Indian lunar mission which aims to get a **better understanding of the Moon's origin** and its evolution by conducting topographical studies and mineralogical analyses alongside a few other experiments on the Moon's Surface. According to ISRO, the mission Chandrayaan 2 will also **foster the findings of Chandrayaan 1**.
 - ✓ While a few mature models do exist, the Moon's origin still needs further explanations. Extensive mapping of the lunar surface will aid us in studying variations in its composition — an essential piece of information in tracing the Moon's origin and evolution.
- The Chandrayaan 2 mission will target a completely unexplored section of the Moon that is, its "South Polar region".

- ✓ The mission is being considered as a challenge as no space agency has ever thought of exploring the South Polar Region of the Moon
- The name Chandrayaan means Moon vehicle.

Why go to the Moon?

- The Moon is the **closest cosmic body** at which space discovery can be attempted and documented.
- It is also a promising test bed to demonstrate the technologies required for deep-space missions.

Launcher

• Geosynchronous Satellite Launch Vehicle Mark-III (GSLV Mk-III)

A look at the four key components of Chandrayaan 2 -Mission moon 2.0 launcher, orbiter, lander and rover Launcher — GSLV Mk-III | It will carry Chandrayaan 2 to its designated orbit. This three-stage vehicle is India's most powerful launcher to date, and is capable of launching 4-tonne class of satellites to the Geosynchronous Transfer Orbit ORBITER PB5 ft ND Weight: 2,379 kg Weight: 1,471 kg Weight: 27 kg SOURCE: ISRO Power generation 0 Power generation Power generation capability: 650 W capability: 50 W capability: 1,000 W Capable of communi-This 6-wheeled Named after Vikram cating with the Indian Sarabhai, the Father of robotic vehicle can the Indian space pro-Deep Space Network at travel up to 500 m gramme, it is designed Byalalu and the Vikram and uses solar energy lander. It will be placed to function for one for its functioning. It in a 100X100 km lunar lunar day, equivalent to can communicate only polar orbit about 14 earth days with the lander

Its components are:

✓ S200 solid rocket boosters

- ✓ L110 liquid stage
- ✓ C25 upper stage

Chandrayaan-2 is composed of three modules

- The **orbiter**, the Vikram **lander** (named after Vikram Sarabhai, the late father of India's space program) and the **Pragyan rover** (named after the Sanskrit word for wisdom).
- From orbit, instruments will create detailed three-dimensional maps of the surface, both to
 - \checkmark ascertain the safety of potential landing sites and
 - ✓ To track the distributions of water molecules, hydrated minerals and other materials of interest on and around the moon.
- If touchdown is successful, the **Vikram lander** will serve as **a listening station for seismic waves from moonquakes**, which could reveal more details about the structure of the lunar core, mantle and crust.
- Further studies are set to take place via the **Pragyan rover**, which is meant to drill into the surface to gather samples for additional mineralogical and chemical analysis.
- The orbiter, lander and rover will collectively **carry 14 scientific payloads**, including a **Laser Retroreflector Array from NASA** to provide precision measurements of the distance between Earth and the moon

Soft-Landing

- A soft-landing occurs when the rocket is designed to touch down as gently as possible.
- India would join the U.S., China and the former Soviet Union on the list of countries that have completed a "soft" moon landing, or a touchdown that doesn't result in a crash landing.

why Chandrayaan 2 is on a mission to explore the Moon's South Polar Region and why it's a huge challenge:

1. The Dark Side of the moon – the importance of exploring Moon's South pole

- Due to the moon's axis, few regions on the South Pole remains forever dark especially the craters and have higher chances of containing water.
- The bottom of the polar craters of remain under shadows permanently because of the low angular tilt of the axis (1.54-degree tilt in comparison to earth's 23.5 degrees).
- Hence the temperature at the poles remains frigid, hitting as low as -248 degree Celcius. That makes it among the lowest temperatures in the Solar System.
- The sunlight strikes at very low angles in the Polar Regions and thus the craters might have never received sunlight, thereby increasing the chances of presence of ice on such surfaces.
- The moon's South Pole is especially interesting because the lunar surface area at the south pole of the Moon that remains in shadow is much larger than that of its north pole. This increases the possibility of the presence of water in permanently shadowed areas around it.

2. Totally Uncharted Territory

- No one has ever explored the South Polar Region of the Moon. In all the space missions, be it manned or unmanned, no country has ever attempted to land a spacecraft in the polar regions of the moon.
- The South Polar Region is far from the equator and it is totally uncharted till now. This could give India a lead in space exploration on an international level.
- The South Pole region has craters that are cold traps and contain a fossil record of the early Solar System.

Chandrayaan-1 Vs Chandrayaan-2

Chandrayaan-1 was launched by India's Polar Satellite launch Vehicle

 PSLV-C11 in 2008 from the Satish Dhawan Space Centre, Sriharikota.

- ✓ On the other hand, Chandrayaan-2 will be launched by the GSLV Mk-III
- The **Chandrayaan-1 spacecraft** made more than 3,400 orbits around the Moon. Chandrayaan-1 was operational for 312 days till August 29, 2009.
 - ✓ Chandrayaan-2's orbiter will continue its mission for around a year.
- There were **11 scientific instruments** onboard the **Chandrayaan-1 spacecraft.** Five of them were Indian while the others were from European Space Agency (ESA), National Aeronautics and Space Administration (Nasa) and Bulgarian Academy of Sciences.
 - ✓ Chandrayaan-2's orbiter carries eight scientific payloads for mapping the lunar surface and to study the exosphere (outer atmosphere) of the Moon. The lander carries three scientific payloads to conduct surface and subsurface science experiments. The rover carries two payloads to enhance our understanding of the lunar surface. A passive experiment from Nasa will also be carried onboard Chandrayaan-2.
- **Chandrayaan-1** conclusively discovered traces of water on the Moon. This was a path-breaking discovery. Chandrayaan-1 also discovered water ice in the north polar region of the Moon. It also detected magnesium, aluminium and silicon on the lunar surface. Global imaging of the Moon is another achievement of Chandrayaan-1 mission.
 - ✓ Chandrayaan-2 aims to widen the scientific objectives of Chandrayaan-1 by way of soft landing on the Moon and deploying a rover to study the lunar surface.

Timeline of Chandrayaan-2 Mission

- September 18, 2008: Prime Minister Manmohan Singh approved the Chandrayaan-2 lunar mission.
- July 9, 2019: Launch window opens
- September 6, 2019: Chandrayaan-2 is expected to land on the Moon.

14-07-2019 Current Affairs

Xi-Modi meet in Varanasi on October 12

What's in the news?

- Chinese President Xi Jinping and Prime Minister Narendra Modi are set to hold their second informal summit in Varanasi on October 12th, 2019 as part of a fresh drive to energise ties following their meeting in Bishkek, Kyrgyzstan, on the sidelines of the Shanghai Cooperation Organisation (SCO) summit.
- A Chinese official said the decision to hold the second informal summit, following the Wuhan meeting in 2018, is in line with Beijing's decision to celebrate the 70th anniversary of China's diplomatic relations with India.
- Besides, it is based on the "consensus" between Mr. Xi and Mr. Modi to raise bilateral ties to a higher level, especially after the Doklam military stand-off in the summer of 2017.
- At the bilateral meeting in Bishkek on the sidelines of the Shanghai Cooperation Organisation (SCO) summit, President Xi stressed that the two countries must celebrate the 70th anniversary of their diplomatic ties befittingly after congratulating Mr. Modi once again on his victory in India's general election. It is important to note that India and China are ancient civilisational states, which will be the pillars of the multipolar world. This shapes the context of the meeting between the two leaders.
- External Affairs Minister S. Jaishankar is expected to visit Beijing in August, 2019 for the second meeting of the India-China high-level people-to-people exchanges mechanism with State Councillor and Foreign Minister Wang Yi.
- While the focus of this mechanism is on people-to-people exchanges and culture, all topics of ties, including the detailing of the Varanasi summit, will be covered, except for trade and commerce.
- Railways and Commerce Minister Piyush Goyal will also visit Beijing in August 2019 to address the nearly \$60-billion trade deficit between the two countries.

• As a matter of fact, India's participation in the Regional Comprehensive Economic Partnership is also expected to be discussed then.

India builds 250 homes in Myanmar to assist Rohingya

What's in the news?

- Two years after more than 700,000 Rohingya fled to camps in Bangladesh alleging ethnic cleansing by Myanmar forces, the Indian government says it is stepping up efforts to help them return to their villages.
- **Recently, India's Ambassador to Myanmar, Saurabh Kumar** handed over 250 completed pre-fabricated homes to the Myanmar government for use by the refugees when they return.

Part of 2017 pact:

- The project is part of an agreement signed by the two governments in 2017, under which the government had committed to spending \$25 million over five years.
- The houses, measuring 40 square metres each, are designed to survive quakes and cyclonic storms.
- The 250 houses, built in three clusters, are in the Shwe Zar, Kyein Chaung Taung and Nan Thar Taung areas that saw some of the worst cases of violence, including mass murder, gang-rape of women and children and burning of thousands of homes.
- They have cost about ₹10 crore.
- However, there are no signs yet that the Rohingya will return at any specific date.

The Sri Lanka Ports Authority (SLPA) is keen on enhancing connectivity with Indian ports using ferry services to facilitate easier trade and tourism.

• Experts point out that if the two countries can set up a ferry service connecting Kankesanthurai port (KKS) in Jaffna with Karaikal near

Puducherry, and similarly between Colombo and Tuticorin in south India, there is scope for increased trade activity and tourism.

- The ferry connection would primarily facilitate tourism and small-scale trade both ways.
- It will help especially with Buddhist tourism from the south of the island, and by extension people-to-people connections.
- Further, the KKS Port will facilitate increased trade opportunities for communities living in proximity to the port and reduce the cost of road and rail transport for bulk items such as cement.
- In 2011, India and Sri Lanka launched a ferry service between Tuticorin and Colombo, but it was soon terminated after private operators running it said it was not commercially viable.
- As a matter of fact, **the proposals fit into the SLPA's broader vision of developing Sri Lanka into a global logistics hub**, given its strategic location in the Indian Ocean, in close proximity to key, international sea routes.
- Sri Lanka is currently upgrading the KKS harbour with Indian assistance of \$45.27 million, through an agreement signed with the Export-Import Bank of India.

TIFR desalinates seawater without electricity

- Using gold nanoparticles that absorb sunlight over the entire visible region and even the near infrared light, researchers at the Tata Institute of Fundamental Research (TIFR), Mumbai, have been able to desalinate seawater to produce drinking water.
- Unlike the conventional reverse osmosis that is energy intensive, the gold nanoparticles require no external energy to produce potable water from seawater.
- Using 2.5 mg of gold nanoparticles, the team from TIFR's Department of Chemical Sciences was able to use sunlight to heat the water to 85 degree C and generate steam to produce drinking water from seawater.
- Since the temperature reached is high, about 10% of seawater becomes steam (and hence drinking water) in about 30 minutes.
- Alternatively, the gold nanoparticles can be used to convert carbon dioxide into methane.