



**Monthly Current Affairs
for UPSC & PCS Exams**
March 2019

Daily Current Affairs for UPSC IAS Preparation

01.03.2019

1. **Pradhan Mantri JI-VAN yojana**

- The Cabinet Committee on Economic Affairs has approved the "Pradhan Mantri JI-VAN (Jaiv Indhan-Vatavaran Anukool fasal awashesh Nivaran) Yojana" for providing financial support to Integrated Bioethanol Projects using lignocellulosic biomass and other renewable feedstock.
- Under this Yojana, 12 Commercial Scale and 10 demonstration scale Second Generation (2G) ethanol Projects will be provided with a Viability Gap Funding (VGF) support in two phases:
 - a) Phase-I (2018-19 to 2022-23): wherein six commercial projects and five demonstration projects will be supported.
 - b) Phase-II (2020-21 to 2023-24): wherein remaining six commercial projects and five demonstration projects will be supported.
- The scheme focuses to incentivise 2G Ethanol sector and support this nascent industry by creating a suitable ecosystem for setting up commercial projects and increasing Research & Development in this area.
- The ethanol produced by the scheme beneficiaries will be mandatorily supplied to Oil Marketing Companies (OMCs) to further enhance the blending percentage under the EBP Programme.

Ethanol Blended Petrol (EBP) Programme

- The government launched the Ethanol Blended Petrol programme in 2003.
- It will help in blending of ethanol in Petrol to address environmental concerns due to fossil fuel burning, provide remuneration to farmers, subsidize crude imports and achieve forex savings.

- Under Ethanol Blended Petrol Programme, Oil Marketing Companies are to blend upto 10% of ethanol in Petrol.
- The present policy allows procurement of ethanol produced from molasses and non-food feedstock like celluloses and lignocelluloses material including petrochemical route.

Topic- GS Paper 3 –Energy

Source-PIB

2. **NDMA to conduct a national workshop on heat wave risk reduction**

The National Disaster Management Authority (NDMA) conducted a two-day national workshop on heat wave risk reduction on 27-28 February 2019 Heatwave

- **ve** has emerged as one of the major severe weather events around the globe in recent years.
- Climate change is driving temperatures higher as well as increasing the frequency and severity of heat waves.
- India too is experiencing increased instances of heat waves every year.

Related Information

Heatwaves

- The Indian Meteorological Department (IMD) has given the following criteria for Heat Waves:
 - (a) Heat Wave need not be considered till the maximum temperature of a station reaches at least 40°C for Plains and at least 30°C for Hilly regions
 - (b) When normal maximum temperature of a station is less than or equal to 40°C Heat Wave Departure from normal is 5°C to 6°C Severe Heat Wave Departure from normal is 7°C or more
 - (c) When normal maximum temperature of a station is more than 40°C Heat Wave Departure from normal is 4°C to 5°C Severe Heat Wave Departure from normal is 6°C or more

(d) When actual maximum temperature remains 45°C or more irrespective of normal maximum temperature, heat waves should be declared.

Health Impacts of Heat Waves

- Heat Cramps
- Heat Exhaustion
- Heat Stroke

Topic- GS Paper 3 –Disaster Management

Source- Indian Express

3. Scheme for Development of Knitting and Knitwear Sector

- Union Minister of Textiles launched a comprehensive scheme for Development of Knitting and Knitwear Sector under **PowerTex India** which will be in operation upto March 31, 2020.
- The scheme envisages the creation of new service centres on public-private partnership (PPP) model by industry and association in the knitting and knitwear clusters.
- It also entails modernisation and upgradation of existing power loom service centres and institution run by Textile Research Associations and Export Promotion Councils Association in knitting and knitwear clusters.
- It is important to highlight that 27 percent of India's total cloth production comes from the knitwear industry and knitwear presently comprises 15 percent of the total apparel exports.

Main components of the scheme

- Modernization and upgradation of existing power loom service Centers (PSCs) and institution run by Textile Research Associations (TRAs) and Export Promotion Councils (EPCs) Association in knitting and knitwear clusters.
- Group work shed scheme.
- Yarn bank scheme.
- Common facility centre scheme.
- Pradhan mantra Credit Scheme.
- Solar Energy Scheme.
- Facilitation, IT, awareness, studies, surveys, market development and publicity for knitting and knitwear units.

Related Information

Knit Wear Sector

- Knitting is a major segment in the entire textile value chain.
- Some of the major clusters in the knitted garment sector are Tirupur in Tamil Nadu, Ludhiana in Punjab, Kanpur in Uttar Pradesh and Kolkata in West Bengal.
- Tirupur is the most important export cluster, followed by Ludhiana.

Topic- GS Paper 2 –Important Scheme

Source- The Hindu

4. 'Banglar Shiksha' web portal launched by West Bengal Government

- West Bengal government unveiled a web portal, "Banglar Shiksha".
- This portal is first of its kind in the country and it should come into commencement by May, 2019.
- It will provide real-time data on state-run and aided schools.
- The will also address many issues like attendance of students and teachers.

Topic- GS Paper 2 –Governance

Source- Business Standard

5. AIIB and INDIA sign US\$ 455 Million Loan to improve Rural Connectivity in State of Andhra Pradesh

- The Asian Infrastructure Investment Bank (AIIB) and the Government of India signed a USD 455 million loan in New Delhi to finance the Andhra Pradesh Rural Roads Project.
- The objective of the Project is to improve road transport connectivity in previously unserved communities by providing all-weather rural roads in all 13 Districts of the State of Andhra Pradesh.

Asian Infrastructure Investment Bank (AIIB)

- It is a Multilateral Development Bank, headquartered in Beijing, which began operations in January 2016.
- It aims to support the building of infrastructure in the Asia Pacific region.
- It is an initiative of the government of China.
- China is the largest shareholder with 26.06% voting shares.

- India is the second largest shareholder with 7.5% voting shares followed by Russia (5.93%) and Germany (4.5%)

Topic- GS Paper 3 –Infrastructure development

Source-PIB

6. SATAT scheme

- Minister of Petroleum and Natural Gas has handed over the 100th Letter of Intent (LOI) to the **Compressed Bio-Gas (CBG) Entrepreneur (producer)** under the **Sustainable Alternative Towards Affordable Transportation (SATAT) scheme.**

Objectives of the SATAT scheme:

- Utilizing more than 62 million metric **tonnes of waste** generated every year in India
- Cutting down import dependence
- Supplementing job creation in the country
- Reducing vehicular emissions and pollution from burning of agricultural/organic waste

Related Information

Compressed Bio-Gas

- Bio-gas is produced naturally through a process of anaerobic decomposition from waste/biomass sources like agriculture residue, cattle dung, sugarcane press mud, municipal solid waste, sewage treatment plant waste, etc.
- After purification, it is compressed and **called CBG, which has pure methane content of over 90%.**
- Compressed Bio-Gas is exactly similar to the commercially available natural gas in its composition and energy potential.
- CBG can be used as an **alternative, renewable automotive fuel.**

Topic- GS Paper 2 –Governance

Source- Times of India

7. Khelo India App

- Prime Minister launched the Sports Authority of India's (SAI) first-of-its-kind mobile application, '**Khelo India App**' in order to create awareness about sports and fitness in the country.
- The application, developed by SAI as part of the Khelo India Scheme.

Khelo India App

- The app helps **create awareness about sports and fitness**, especially among youngsters.
- The emphasis is on developing the sporting **ecosystem in India** and turning the country into a global sporting superpower in the years to come.
- The App has three features which will help identify potential champions among children, across the country.

It has three section

- The first section gives information about the basic rules and regulations of **18 sports disciplines.**
- The second section includes data of sporting facilities across the country.
- The third section has eight tests which can be taken to ascertain a young athlete's level of fitness.

Topic- GS Paper 2 –Governance

Source- Indian Express

8. Rhinos without borders is conservation credo

- The New Delhi Declaration adopted at the second meeting of the Asian rhino range countries underscored trans-boundary collaboration among India, Nepal, and Bhutan for the conservation and protection of the greater one-horned rhino.
- The plan said the single population of rhinos in Sukla-Phanta (Nepal), Valmiki Tiger Reserve (India) and Chitwan National Park (Nepal) and Dudhwa (India) is separated by the political boundary between the two countries.
- There are no rhinos in Bhutan, but some from the Manas National Park in adjoining Assam or Buxa Tiger Reserve in West Bengal are known to cross over occasionally.

Rhino Global Scenario

- The current global population of the Indian one-horned rhinoceros is 3,584.
- Assam's Kaziranga National Park has the bulk of 2,938 rhinos in India while Nepal 646.
- Indonesia and Malaysia are the other Asian countries where the last of the rhinos live.

- Once ranging from China to Bangladesh, the Javan and Sumatran rhinos are nearing extinction.

One-horned rhinoceros

- One-horned rhinoceros is the largest of the Asian Rhinos.
- They are found in Kaziranga, Orang, Pobitara, Jaldapara (in Assam), Dudhwa (UP) National Park. Kaziranga National Park hosts two-thirds of the world's Great One-horned rhinoceros.
- It has been listed as Vulnerable on the IUCN Red List of Threatened Species

Note: The Sumatran rhino, the smallest of all rhino species and the only Asian rhino with two horns, became extinct in the wild in Malaysia.

Topic- GS Paper 3 –Environment

Source- The Hindu

9. SC on FRA: 11.8 lakh forest dwellers can 'stay' put

- The Supreme Court, on February 28, 2019, accepted the Union government's appeal, stayed its two-week-old order and permitted 21 states to temporarily withhold eviction of lakhs of forest dwellers, whose claim to the land had been rejected.

Background

- The apex court on February 13, 2019, under the Scheduled Tribes and Other Forest Dwellers (Recognition of Forest Rights) Act 2006 (Forests Rights Act), asked state governments to file affidavits about the action taken against encroachments on forest lands.
- More than 11 lakh Schedule Tribes and other forest-dwelling tribes were affected by this order.

Related Information

Forest Rights Act (FRA)

- The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, is a key piece of forest legislation passed in India on 18 December 2006.
- It has also been called the Forest Rights Act, the Tribal Rights Act, the Tribal Bill, and the Tribal Land Act.
- Eligible People-

(a) Those who "primarily reside in forests" and who depend on forests and forest land for a livelihood.

(b) Either the claimant must be a member of the Scheduled Tribes scheduled in that area or must have been residing in the forest for 75 years.

Rights have given under the Forest Rights Act

(a) Title rights

- Ownership - to land that is being farmed by tribal or forest dwellers as on 13 December 2005, subject to a maximum of 4 hectares
- ownership is only for land that is actually being cultivated by the concerned family as on that date, meaning that no new lands are granted.

(b) Use rights

- To minor forest produce (also including ownership), to grazing areas, to pastoralist routes, etc.

(c) Relief and development rights

- To rehabilitation in case of illegal eviction or forced displacement and to basic amenities, subject to restrictions for forest protection.

(d) Forest management rights

- To protect forests and wildlife

Topic- GS-2- Vulnerable Groups

Source- Down to Earth

04.03.2019

1. 3rd March: World Wildlife Day

- World Wildlife Day is observed on 3rd March every year to spread awareness about wildlife.
- The theme for World Wildlife Day 2019 is '**Life below water: for people and planet**', which corresponds to the **Sustainable Development Goals- 14** of which is- Life below water.
- On this day, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) was signed.
- This is the first World Wildlife Day in the history which focuses on life below water.

Topic- GS Paper 3- Environment

Source- TOI

2. AK-203 rifles from Russia will help Indian security agencies

- The AK-203 rifle, which will soon be manufactured in Korwa area of Amethi.
- This is a new joint venture between India and Russia to manufacture the Kalashnikov assault rifles' 200 series will be able to fulfil Indian security agencies' requirement for small arms.

AK-203 rifles

- The rifles will progressively replace the Army's in-service INSAS and AK-47 rifles.
- The 200-series of AK rifles represents the next generation and evolution of the 100-series of AKs.
- The AK103 has plastic folding buttstock that ensures convenience on the march, during transportation and landing operations.
- The AK103 can carry a 40-mm under-barrel grenade launcher or a knife-bayonet.

Topic- GS Paper 3- Defence

Source- TOI

3. India shares Pakistan F-16 missile details with the US

- Indian armed forces show evidence of parts AMRAAM missile which can only be fired from Pakistani F-16 to target Indian military installations.
- The US, which sold the fighter jets to Pakistan, does not allow these platforms to be used in an offensive role.

AMRAAM missile

- The AIM-120 Advanced Medium-Range Air-to-Air Missile or AMRAAM is a modern American beyond-visual-range air-to-air missile (BVRAAM) capable of all-weather day-and-night operations.
- It employing active transmit-receive radar guidance instead of semi-active receive-only radar guidance.
- Also known as a fire-and-forget weapon.

Topic- GS Paper 3- Defence

Source- The Hindu

4. Anthem on 'plastic-free India' launched in seven languages

- An anthem "Plastic Waste-Free India" which has been composed and produced by Pandit Deendayal Upadhyaya Smriti Manch (PDUSM).
- PDUSM is a non-profit organisation which works in the field of social and environmental issues was launched by Union Minister for Science & Technology, Earth Sciences and Environment, Forest & Climate Change.

Related Information

- It is a part of an initiative which aims to turn India into a plastic-free nation by 2022.
- It aims at supporting and improving the plastic waste management and recycling ecosystem in the country.
- It has been launched in seven languages – Hindi, Marathi, Gujarati, Tamil, Telegu, Malayalam & Kannada.

Topic- GS Paper 3- Environment

Source- Indian Express

5. Hanoi Summit 2019: United States (US) and North Korea held a summit

- A second summit between U.S. President Donald Trump and North Korean leader Kim Jong-un, in Vietnam, was cut short after they failed to reach a deal on the extent of sanctions relief North Korea would get in exchange for steps to give up its nuclear programme.
- The Hanoi summit came eight months after Mr. Trump and Mr. Kim met for the first time in Singapore and agreed to establish new relations and peace in exchange for a North Korean commitment to work toward complete denuclearisation of the Korean peninsula.

Hanoi Summit 2019

- The Summit was held in Hanoi, Vietnam.
- This was the second summit between the US and North Korea after the Singapore Summit in June 2018.
- Reason for failure of talks was that North Korea had demanded complete relief from economic sanctions in exchange for only partial denuclearization. But, the US wants North Korea to give up all its weapons.

- During the Singapore Summit in 2018, the US and North Korea have signed an agreement committing to the complete denuclearisation of the Korean peninsula.

Topic- GS Paper 2- International Relation

Source- Indian Express

6. Kanyashree Prakalpa Scheme Need to revise: Experts

- Experts working with the NGO's on the issue said trafficking is a complex problem and one scheme (Kanyashree), which provides impetus to girls to remain in school, cannot put an end to trafficking.
- Moreover, they also feel that under the K1 scheme (part of Kanyashree) the benefit of ₹750 annually is hardly a deterrent to trafficking.

Kanyashree Prakalpa

- The scheme was launched in 2013 which is an initiative taken by the Government of West Bengal to improve the life and the status of the girls by helping economically backward families with cash so that families do not arrange the marriage of their girl child before eighteen years because of the economic problem.
- The Scheme has been given international recognition by the United Kingdoms Department of International Development and the UNICEF.
- The Kanyashree scheme has two categories of benefits.
 - Under the first category or K1 category, ₹750 is paid annually to the girls in the age group of 13 to 18;
 - Under the K2 group, a one-time grant of ₹25,000 is paid after a girl turns 18, provided that she was engaged in the academic or occupational pursuit and was unmarried.
- Kanyashree is an overarching scheme apart from several other schemes aimed at combating trafficking.

Other Schemes initiated by West Bengal Government

Swayangsiddha scheme

- In September 2018, West Bengal government rolled out Swayangsiddha scheme to prevent trafficking.
- Under the scheme (which means self-reliance) complaint boxes have been installed in the schools where girls can submit any complaint of stalking or harassment faced by them or any of their friends.

Topic- GS Paper 2- Governance

Source- The Hindu

7. Restaurants can no longer reuse cooking oil: FSSAI

- According to the latest circular by FSSAI, all food business operators whose consumption of edible oil for frying is more than 50 litres per day are liable to maintain the records and dispose of used cooking oil to agencies authorized by FSSAI from time to time.
- The rule has been brought into effect as per Section 16 (5) of the Food Safety and Standards Act, 2006.
- This new rule will prohibit them from using the same cooking oil for more than three times.
- The new circular has also set the maximum permissible limit of Total Polar Compound (TPC) in edible oil at 25 Percent.
- Repeated frying and usage of edible oil changes its physiochemical and nutrition properties and leads to the formation of TPC, which makes it unfit for human consumption.
- It is a step towards improving the health conditions of people in the country. The idea is to eradicate the practice of reusing the oil and understanding its harmful effects
- Karnataka is the first State to have a BioEnergy Development Board and re-used cooking oil is being collected from big chains of restaurants by biodiesel manufacturing units, the main issue is regarding the registration of such units and empanelment of aggregators collecting Repurpose Used Cooking Oil (RUCO).

Related Information

Repurpose Used Cooking Oil (RUCO)

- The Food Safety and Standards Authority of India (FSSAI) launched RUCO (Repurpose Used Cooking Oil), an initiative that will enable the collection and conversion of used cooking oil to bio-diesel.
- FSSAI also look at introducing regulations to ensure that companies that use large quantities of cooking oil hand it over to registered collecting agencies to convert it into biofuel.
- Reducing the re-use of cooking oil in the food industry will have positive public health outcomes and its conversion into Bio-ATF will help the aviation sector reduce its carbon footprint

Topic- GS Paper 2- Governance

Source- Economic Times

8. PM announces 'April 2019-March 2020' as Construction-Technology year

- PM declared 'April 2019-March 2020' as Construction-Technology year and stressed on use of advanced technology to meet the increasing demand for housing in the country caused by rapid urbanisation.
- He also sought the support of the private sector in fulfilling the government's mission of providing a brick house to every Indian by 2022.

Related Information

Global Housing Technology Challenge

- It is an initiative by the Ministry of Housing and Urban Affairs, Govt. of India.
- With an aim to identify, evaluate and shortlist a basket of proven & potential innovative technologies from across the globe and subsequently mainstream them in the Indian construction sector that is sustainable, green, disaster resilient.

GHTC-India has the following three components:

- **Component 1** - Conduct of EXPO-Cum-Conference
- **Component 2** - Identifying Proven Demonstrable Technologies: Inducting suitable established technologies from across the globe to the Indian market through shortlisting and actual construction of Light House Projects.

- **Component 3** - Establishment of Affordable Sustainable Housing Accelerators India (ASHA-India) for Indian technologies which have potential but not market ready yet.

Topic- GS Paper 2- Governance

Source- Indian Express

9. Gram Samridhi Yojana

- India's food processing ministry is working on a new scheme — Gram Samridhi Yojana — to bolster the unorganised food processing sector concentrated in rural areas.
- The Rs 3,000 crore scheme funded by the World Bank and the centre will help cottage industry, farmer producers' organisation and individual food processors to increase capacity, upgrade technology besides skill improvement, entrepreneurship development and strengthening the farm-to-market supply chain.
- It will **ensure doubling of farmers' income by 2022** and employment opportunities in rural areas, we are coming with this scheme for food processing enterprises.
- About 66% of unorganised food processing units are in rural areas and of these, 80% were family run.
- The maximum cap of subsidy to be given to a unit will be Rs 10 lakh, apart from interest subsidy, if they avail of loans.
- There is a provision for getting a subsidy on bank interest by 3% to 5%.
- The scheme aims at the development of modern infrastructure to encourage entrepreneurs to set up food processing units, upgrade service technology in the existing unit, improve management of the units and give technical support.
- In the initial phase the scheme will be run in Uttar Pradesh, Andhra Pradesh, Maharashtra and Punjab for a five-year period and thereafter replicated in other states.

Topic- GS Paper 2- Important Scheme

Source- TOI

05.03.2019

1. **ISRO launched 'Yuva Vigyani Karyakram' for school children**

- ISRO has launched a special programme for School Children called **"Young Scientist Programme" "Yuva Vigyani Karyakram"**.
- The Program is primarily aimed at imparting basic knowledge on Space Technology, Space Science and Space Applications to the younger ones with the intent of arousing their interest in the emerging areas of Space activities.
- ISRO has chalked out this programme to "Catch them young".
- It is proposed to select 3 students each from each State/ Union Territory to participate in this programme every year covering CBSE, ICSE and State syllabus.
- Those who have finished 8th standard and currently studying in the 9th standard will be eligible for the programme.

Topic- GS Paper 2 – Governance

Source-PIB

2. **PM launched 'One Nation One Card'**

- Prime Minister launched the indigenously-developed **National Common Mobility Card**.
- The Indigenous Automatic Fare Collection System based on One Nation One Card Model i.e. National Common Mobility Card (NCMC) is the first of its kind in India.
- It will enable people to streamline payments of multiple kinds of transport charges.
- Dubbed as 'One Nation One Card', the inter-operable transport card would allow the holders to pay for their bus travel, toll, parking, retail shopping and money withdrawal.
- India's First Indigenously Developed Payment Eco-system for transport consisting of NCMC Card, SWEEKAR (Swachalit Kiraya: Automatic Fare Collection System) and SWAGAT (Swachalit Gate) is based on NCMC Standards.

Related Information

Automatic Fare Collection System (AFC)

- AFC System (gates, readers/validators, backend infrastructure etc.) is the core of any transit operator to automate the fare collection process.
- The major challenge associated with AFC system implementation in India till now is the lack of indigenous solution provider.
- Till now, AFC systems deployed at various Metros are from foreign players.

Topic- GS Paper 3- Science and Technology

Source- The Hindu

3. **BOLD-QIT project**

- The Union Home Minister inaugurated the project **BOLD-QIT** (Border Electronically Dominated QRT Interception Technique) under CIBMS (Comprehensive Integrated Border Management system) on India-Bangladesh border in Dhubri District of Assam.

Related Information

- BOLD-QIT is the project to install technical systems under the Comprehensive Integrated Border Management System (CIBMS).
- It will enable BSF to equip Indo-Bangla borders with different kind of sensors in the unfenced riverine area of the Brahmaputra and its tributaries.

Comprehensive Integrated Border Management System (CIBMS)

- After the Pathankot attack, the government planned to stop infiltration on 2900 kilometres western border with Pakistan under the name Comprehensive Integrated Border Management System (CIBMS).
- Later they decided to implement it in other borders also.
- It involves deployment of a range of state-of-the-art surveillance technologies such as:
 - (a) Thermal Imagers.
 - (b) Infra-red and laser-based intruder alarms that form an invisible land fence
 - (c) Aerostats for aerial surveillance.

(d) Unattended ground sensors that can help detect intrusion bids through tunnels, radars, sonar systems to secure riverine borders.

(e) Fibre-optic sensors and a command and control system that shall receive data from all surveillance device in real time.

Topic- GS Paper 3 – Defence

Source- Indian Express

4. Crop burning raises the risk of respiratory illness threefold: IFPRI study

- The burning of agricultural residue — a contributor to north India’s winter pollution — increases the risk of respiratory illnesses threefold.
- It may also be responsible for an annual \$30 billion (approximately ₹2 trillion) loss in terms of days of work lost in States affected by crop burning, according to a study by the IFPRI.

International Food Policy Research Institute (IFPRI)

- It provides research-based policy solutions to sustainably reduce poverty and end hunger and malnutrition in developing countries.
- It is situated in USA.
- Its mission is to provide research-based policy solutions that sustainably reduce poverty and end hunger and malnutrition.
- IFPRI’s builds on the strong base of work developed under the Institute’s 2013–2018 strategy and focuses on five strategic research areas:
 1. Fostering Climate-Resilient and Sustainable Food Supply
 2. Promoting Healthy Diets and Nutrition for All
 3. Building Inclusive and Efficient Markets, Trade Systems, and Food Industry
 4. Transforming Agricultural and Rural Economies
 5. Strengthening Institutions & Governance

Note:

- The Global Hunger Index was initially published by the International Food Policy Research Institute (IFPRI) and Welthungerhilfe.

Topic- GS Paper 3 – Environment

Source- The Hindu

5. India to tie-up with 4 nations to save rhinos

- India will collaborate with **Bhutan, Nepal, Indonesia and Malaysia** to increase the population of three species of Asian rhinos, including the Greater one-horned rhinoceros found in the Indian sub-continent.
- The five rhino range nations signed a declaration ‘**The Declaration on Asian Rhinos 2019**’ for the conservation and protection of the species at the recently held Second Asian Rhino Range Countries meeting.

How declarations help Rhino?

- The declaration was signed to conserve and review the population of the Greater one-horned, Javan and Sumatran rhinos every four years to reassess the need for joint actions to secure their future.
- The declaration includes undertaking studies on health issues of the rhinos, their potential diseases and taking necessary steps; collaborating and strengthening wildlife forensics and strengthening of transboundary collaboration among India, Nepal and Bhutan for the conservation of the Greater one-horned rhino.

Topic- GS Paper 3 – Biodiversity

Source- The Hindu

6. **Asmita scheme**

- A year after the Asmita scheme failed to garner a good response due to complaints of poor quality sanitary napkins, the rural department has floated new tenders.
- However, this time, the pads will be rolled out only after government officials try them and give their nod.

About the Scheme

- It was launched by in Maharashtra government to provide sanitary napkins at subsidised rates to rural girls and women.
- The scheme covers adolescent girls aged between 11 and 19 years in Zila Parishad schools and rural women.
- The government followed the Bureau of Indian Standards to fix requirements for sanitary napkins in 2018.

- Asmita cards have been made for schoolgirls to buy subsidised sanitary napkins.

Topic-GS Paper 2–Women Empowerment

Source- Indian Express

7. Centre for Disability Sports

- The Union Cabinet has approved the proposal for setting up of a Centre for Disability Sports at Gwalior in Madhya Pradesh.

Centre for Disability Sports

- The Centre of Disability Sports would be registered under the Societies Registration Act, 1860.
- The centre would create an improved sports infrastructure to ensure effective participation of persons with disabilities in sports activities and also enable them to compete at national and international levels.
- It will cover under Section 30 of the Rights of Persons with Disabilities (RPwD) Act, 2016 which enjoins the Government to take measures to ensure effective participation of Persons with Disabilities in sports activities which inter-alia, includes a provision of infrastructural facilities for sports activities for them.

Topic- GS Paper 2 – Governance

Source- The Hindu

8. Rice Knowledge Bank: a web portal

- Rice Knowledge Bank: a web portal launched under World-bank funded Assam Agribusiness & Rural Transformation (APART) project.
- An agriculture web portal dedicated to enhancing knowledge on rice production techniques and technologies, best production practices and state agriculture facts.
- It will help to bridge the gap between research and on-field rice production practices, this website is a digital extension service providing practical knowledge solutions, especially for small-scale farmers in Assam.
- Assam Rice Knowledge Bank (RKB-Assam) showcases rice production techniques, agricultural technologies and best farming practices based on the pool of knowledge from research findings, learning and media resources from AAU and IRRI.

- It serves to address the challenges for agricultural development by supporting fast and effective transfer of technologies and knowledge from the research laboratory to farmer's fields.

- In the North East Regions (NER) of India, rice occupies nearly 85% of the cropped area, and thus reliance on rice crop for boosting welfare in Assam is high.

Topic- GS Paper 2 – Governance

Source- Economics Times

9. Gurugram world's most polluted, 4 other NCR cities in top 10: IQAir AirVisual 2018 World Air Quality Report

- India's national capital region (NCR) emerged as the most polluted region in the world in 2018, a new pollution report says, with Gurugram, Ghaziabad, Faridabad, Noida, and Bhiwadi in the top six worst-affected cities.
- The report compiled and analysed by IQ AirVisual, a software company that tracks pollution worldwide, and Greenpeace, an environmental NGO found.
- Air pollution is likely to cause the death of an estimated seven million lives globally in the next year while costing the world's economy nearly \$ 225 billion.
- The situation is increasingly grim for South Asia.
- Of the 20 most polluted cities in the world last year, 18 were in India, Pakistan, and Bangladesh.
- Delhi is ranked 11th in the list; the only non-Indian city in the top five in Pakistan's Faisalabad.
- Beijing, once considered the most polluted city in the world, has shown remarkable improvement in air quality and ranked 122nd in the list last year.

Related Information

- The National Clean Air Programme (NCAP) recently launched by Ministry of Environment and Forest in India seems to be improving on the data availability and transparency among other things which is another key aspect which helped Beijing fight the battle to reduce air pollution levels.

- The NCAP is a programme in the form of a report launched by the ministry of environment and forest (MOEF&CC) on January 10, 2019.
- This NCAP aims to reduce pollution levels by 20-30% till 2024 compared to 2017 levels in 102 non-attainment cities (identified by CPCB, Central Pollution Control Board based on older data till 2015).

06.03.2019

1. **Pradhan Mantri Shram Yogi Maan-Dhan (PM-SYM) Scheme**

- Prime Minister launched Pradhan Mantri Shram Yogi Maan-Dhan (PM-SYM) Scheme in Ahmedabad, Gujarat.

About the scheme

- It is a central sector scheme open to unorganised workers, whose monthly income is Rs 15000/- or below and who have an Aadhar number as well as savings bank account.
- It is a voluntary and contribution based scheme under which the subscriber gets an assured minimum monthly pension of Rs 3000/- from the age of 60 years onwards.
- The minimum age for joining the scheme is 18 years and the maximum is 40 years.
- The contribution of a subscriber ranges from Rs 55/- to Rs 200/- depending on his entry age which is 18 to 40.
- Under the scheme, the Central Government will also give a matching contribution towards the beneficiary's pension account.
- Further, it has a unique feature that in case of an exit, the subscriber would be returned his entire contribution.
- It will be implemented through the Common Service Centre (CSC) across the country.

Benefits

- It is estimated to benefit 42 crore workers in the unorganized sector constituting around 85% of the total Labour force of the country.

**Topic- GS Paper 2 –Important Scheme
Source-PIB**

2. **AL NAGAH 2019 – Military Exercise between India and Oman**

- Exercise Al Nagah III, third in the series of bilateral joint military exercise between India and Oman to be held at Jabel Al Akhdar Mountains in Oman.
- The exercise will see both the armies exchanging expertise and experience in tactics, weapon handling and firing, with an aim to enhance interoperability in counterterrorist operations in semi-urban mountainous terrain.
- Exercise Al Nagah III follows the first two joint exercises that were held in Oman in January 2015 and India in March 2017 respectively.

Topic- GS Paper 3 –Defence

Source-PIB

3. **National Annual Rural Sanitation Survey (NARSS) 2018-19**

- The Survey is conducted by an Independent Verification Agency under the World Bank support project to the Swachh Bharat Mission Grameen (SBM-G).

Finding of the Survey

- It has found that 96.5% of the households in rural India who have access to a toilet use it.
- The survey has also re-confirmed the Open Defecation Free (ODF) status of 90.7% of villages which were previously declared and verified as ODF by various districts and states.

Related Information

- The government claims that since its Swachh Bharat Mission programme started in October 2014, 500 million people have stopped defecating in the open, down from 550 million at the beginning of the programme to less than 50 million today.
- Over 9 crore toilets have been built across rural India under the Mission.
- Over 5.5 lakh villages and 615 districts have been declared ODF, along with 30 ODF States and Union Territories, as per the government.

**Topic- GS Paper 2 –Governance
Source- Business Standard**

4. National Rural Economic Transformation Project

- The World Bank and the GOI signed a \$250 Million Agreement for the National Rural Economic Transformation Project (NRETP).
- The project will help women in rural households shift to a new generation of economic initiatives by developing viable enterprise for farm and non-farm products.
- The Project will be to promote women-owned and women-led farm and non-farm enterprises across the value chain.
- It will also enable them to build businesses that help them access finance, markets and networks; and generate employment.
- The NERTP will support enterprise development programs for rural poor women and youth by creating a platform to access finance including start-up financing options to build their individual and/or collectively owned and managed enterprises.
- It will also support youth skills development, in coordination with the Deen Dayal Upadhyaya Grameen Kaushalya Yojana.
- The Project is currently being implemented across 13 states.

Topic- GS Paper 2 –Governance

Source- Economics Times

5. Seven banks fined for SWIFT violation

- The Reserve Bank of India (RBI) has slapped penalties on seven more commercial banks for not adhering to regulatory directions relating to global messaging platform SWIFT.

SWIFT (Society for Worldwide Interbank Financial Telecommunication)

- The SWIFT is a global member-owned cooperative that is headquartered in Brussels, Belgium.
- It was founded in 1973 by a group of 239 banks from 15 countries which formed a co-operative utility to develop a secure electronic messaging service and common standards to facilitate cross-border payments.

- SWIFT neither holds funds on its own nor manages external client accounts.
- Its core role is to provide a secure transmission channel so that Bank A knows that its message to Bank B goes to Bank B and no one else.
- Bank B, in turn, knows that Bank A, and no one other than Bank A, sent, read or altered the message in route.
- Banks, of course, need to have checked in place before actually sending messages.

Related Information

What happened in the PNB case?

- SWIFT established the customer security programme (CSP) in early 2016 to support customers in the fight against a growing cyberthreat.
- In the PNB case, one of its biggest failures was the missing link between SWIFT and the bank's backend software.
- This allowed fraudulent use of a key credit instrument — letters of understanding or a loan request to another bank through the SWIFT network — to transfer funds.

Topic- GS Paper 3 –Economics

Source- Economics Times

6. Transport and Marketing Assistance (TMA) Scheme

- Department of Commerce of the Ministry of Commerce & Industry has notified a scheme for Transport and Marketing Assistance (TMA) for Specified Agriculture Products.

About the Scheme

- The scheme aims to provide assistance for the international component of freight and marketing of agricultural produce which is likely to mitigate disadvantage of higher cost of transportation of export of specified agriculture products due to trans-shipment and to promote brand recognition for Indian agricultural products in the specified overseas markets.
- The scheme would be suitably included in the Foreign Trade Policy (2015-20).

- All exporters, duly registered with relevant Export Promotion Council as per Foreign Trade Policy, of eligible agriculture products, shall be covered under this scheme.
- The assistance shall be admissible only if payments for the exports are received in Free Foreign Exchange through normal banking channels.
- The scheme shall be admissible for the exports made through EDI (Electronic Data Exchange) ports only.
- The scheme covers freight and marketing assistance for export by air as well as by sea (both normal and reefer cargo).

**Topic- GS Paper 2 –Important Scheme
Source- TOI**

7. Fall Armyworm (FAW) has infested crops in over 50 countries

- In order to counter and combat the outbreak of FAW, the government is creating awareness among and distributing chemicals to farmers.
- In early 2016, strains of FAW were first spotted in Nigeria.
- FAW damages economically important cultivated grasses such as maize, millet, wheat, potato, soybean, cowpea, peanuts, sorghum, rice, sugarcane and even vegetables and cotton.
- FAW thrives due to climate change. Its entire life cycle is completed in 30 days during warm weather. It can take up to 90 days during cooler weather.

Fall Armyworm (FAW)

- It is an insect that is native to tropical and subtropical regions of the Americas.
- In the absence of natural control or good management, it can cause significant damage to crops.
- FAW was first detected in Central and Western Africa in early 2016 and has quickly spread across virtually all of Sub-Saharan Africa.
- In July 2018 it was confirmed in India and Yemen.

07.03.2019

1. Govt amended hazardous and other wastes rules

- Ministry of Environment, Forest and Climate Change has amended the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016.
- It will help in strengthening the implementation of environmentally sound management of hazardous waste in the country,

Salient features of Amendment Rules, 2019

1. Solid plastic waste has been prohibited from import into the country including in Special Economic Zones (SEZ) and by Export Oriented Units (EOU).
2. Exporters of silk waste have now been given exemption from requiring permission from the MoEFCC.
3. Electrical and electronic assemblies and components manufactured in and exported from India if found defective can now be imported back into the country, within a year of export, without obtaining permission from the MoEFCC.
4. Industries which do not require consent under Water (Prevention and Control of Pollution) Act 1974 and Air (Prevention and Control of Pollution) Act 1981, are now exempted from requiring authorization also under the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016, provided that hazardous and other wastes generated by such industries are handed over to the authorized actual users, waste collectors or disposal facilities.

Topic- GS Paper 3 – Disaster Management

Source-PIB

2. Indore gets cleanest city Swachh Survekshan awards 2019

- Swachh Survekshan Awards are given by the Union Ministry of Housing and Urban Affairs based on the survey which covered all urban local bodies in the country.

- The Survey was the largest such cleanliness survey in the world.

Swachh Survekshan awards 2019

- Indore was adjudged India's cleanest city for the third year in a row in the Centre's 'Cleanliness Survey'.
- The second and third positions were bagged by Ambikapur in Chhattisgarh and Mysuru in Karnataka.
- The New Delhi Municipal Council was given an award for the 'Cleanest Small City' award.
- Uttarakhand's Gauchar bagged the 'Best Ganga Town'.
- Ahmedabad has been awarded 'Cleanest Big City' and Raipur is the 'Fastest Moving Big City'.
- Mathura-Vrindavan bagged the tag of the 'Fastest Moving Medium Cities'.

Topic- GS Paper 2 – Important Report

Source- The Hindu

3. Quality Assurance Scheme for Basic Composite Medical Laboratories

- NABL has launched a voluntary scheme called Quality Assurance Scheme (QAS) for Basic Composite (BC) Medical Laboratories.

About the Scheme

- The scheme will help to bring quality at the grass root level of India's health system where laboratories follow the imperatives of quality in all their processes.
- The laboratories performing only basic routine tests like blood glucose, blood counts, rapid tests for common infections, liver & kidney function tests and routine tests of urine will be eligible to apply under this scheme.
- Successful laboratories will be issued a certificate of compliance to QAS BC scheme by NABL.
- And they will be allowed to use a distinct symbol on the test reports as a mark of endorsement to the basic standard for a defined time frame before which they will have to transition to full accreditation as per ISO 15189.

Benefits

- It will help organize the sector of diagnostics in the states where the Clinical Establishment Act has been implemented.

- It will enhance the intent of Ayushmaan Bharat Yojana of universal access to quality healthcare for the majority of citizens especially those residing in villages and small towns by providing them access to quality diagnostics.

National Accreditation Board for Testing and Calibration Laboratories (NABL)

- It is a constituent board of Quality Council of India (QCI) under the Ministry of Commerce and Industry, Government of India.
- NABL is Mutual Recognition Arrangement (MRA) signatory to International bodies like International Laboratory Accreditation Co-operation (ILAC) and Asia Pacific Accreditation Co-operation (APAC) for accreditation of Testing including Medical and Calibration laboratories.
- Thus NABL accredited laboratory results are accepted across more than 80 economies around the world.

Topic- GS Paper 2 – Health Issue

Source-PIB

4. **Annual UN report recognises the threats posed by nitrogen pollution**
 - The annual Frontiers report 2019 published by the United Nations (UN), has included a chapter on nitrogen pollution in its latest edition.
 - The report, released by the United Nations Environmental Assembly (UNEA) in Nairobi on March 2019.

Highlights of the Reports

- The growing demand on the livestock, agriculture, transport, industry and energy sector has led to a sharp growth of the levels of reactive nitrogen — ammonia, nitrate, nitric oxide (NO), nitrous oxide (N₂O) — in our ecosystems."
- N₂O is 300 times more potent as a greenhouse gas than carbon dioxide (CO₂).
- The overuse of Nitrogen in agriculture in the form of fertilisers and other fields have made this important element more bane than boon.

- Only 33 per cent of the nitrogen that is applied to rice and wheat through fertilisers is taken up by the plants in the form of nitrates (NO₃). This is called Nitrogen Use Efficiency or NUE.

Nitrogen Pollution

- Pollutant Gases like ammonia (NH₃) and nitrogen dioxide (NO₂) are produced from chemical fertilizers, livestock manure, and burning fossil fuels and is connected to air pollution, biodiversity loss, the pollution of rivers and seas, ozone depletion, health, economy and livelihoods.
- Gases like Ammonia and nitrogen dioxide can aggravate respiratory and heart conditions.
- Nitrous oxide is a greenhouse gas that depletes the ozone layer.
- Nitrate from chemical fertilisers, manure and industry pollutes rivers and seas, poses a health risk for humans, fish, coral and plant life.

Topic- GS Paper 3 – Environment

Source- Down to Earth

5. Earth Museum

- India is home to a vast treasury of geological and palaeontological specimens that contain a wealth of scientific information about the planet and its history so to conserve them the government is planning to form an '**Earth Museum**'.

Features of the Museum

- The museum will be modelled on the American Museum of Natural History or the Smithsonian museum in the U.S.
- The museum, which will be set up as a public-private partnership, would be located somewhere in Delhi, Noida or Gurugram.

Related Information

- India has a rich geological history and fossils dating back to the breaking up of the Gondwanaland super-continent nearly 150 million years ago.
- Prominent fossils include the jaw of an extinct ape, Gigantopithecus bilaspurensi, dinosaur eggs so large they were mistaken for cannon balls, and the skeleton of a horned carnivore, Rajasaurus narmadensis, or the royal Narmada dinosaur.

Topic- GS Paper 2 – Governance

Source- The Hindu

6. ISRO, French agency seal agreement on maritime security

- ISRO and its French counterpart CNES sealed an agreement to set up a joint maritime surveillance system in the country.
- The two nations will explore putting up a constellation of low-Earth orbiting satellites that will identify and track the movement of ships globally – and in particular, those moving in the Indian Ocean region where France has its Reunion Islands.
- The two agencies have put up two climate and ocean weather monitoring satellites Megha-Tropiques (of 2011) and SARAL-Altika (2013) that is considered a model.
- They also augmented with the launch of Oceansat-3-Argos mission in 2020 along with a joint infrared Earth-observation satellite.

Topic- GS Paper 3 – Defence

Source- Indian Express

7. HRD Ministry launched Rs 250 crore scheme 'STARS' to fund science projects

- HRD Ministry launched **STARS – Scheme for Translational and Advanced Research in Science** to fund science projects.
- The ministry has approved funds worth Rs 250 crore for the scheme.
- These funds will be utilised to sponsor about 500 science projects.
- The selection of these projects would be done on the basis of competitions.
- The project will be coordinated by the Indian Institute of Science (IISc), Bangalore.

Related Information

SHREYAS – Scheme for Higher Education Youth for Apprenticeship and Skills

- The HRD Ministry in collaboration with the National Skill Ministry and Labour and employment Ministry collaboratively launched **SHREYAS – Scheme for Higher Education Youth for Apprenticeship and Skills** to empower non-technical courses.

- SHREYAS is a programme conceived for students in degree courses, primarily non-technical, with a view to introduce employable skills into their learning, promote apprenticeship as integral to education and also amalgamate employment facilitating efforts of the Government into the education system.

Topic- GS-2- Government Schemes

Source- Indian Express

8. **CCR5-delta 32: The rare mutation that could help stop HIV**
 - Recently a person suffering from HIV has been treated in London called 'London Patient' and become the second person to be free of the HIV virus after a bone marrow transplant.
 - He has been cured with CCR5-delta 32 technique, which is based on a stem cell transplant involving CCR5-delta 32 homozygous donor cells.

Related Information

- Timothy Ray Brown is considered to be the first person cured of HIV.
- He was treated in Berlin and to preserve his identity, later he came to be known as "The Berlin Patient"

How do these techniques work?

- CCR5-delta 32 locks 'the door' which prevents HIV from entering the cell.
- In simple terms, HIV uses the CCR5 protein to enter immune cells, but it can't latch on to cells that carry the Delta 32 mutations.
- The transplanted immune cells are now resistant to HIV.
- They seem to have fully replaced his vulnerable cells.

Topic- GS Paper 2 -Science and technology

Source- Indian Express

08.03.2019

1. **WHO announces 'sweeping reforms'**

- WHO announced "sweeping reforms" to "modernize and strengthen" itself.
- The United Nations agency put out a seven-point agenda to achieve its "triple-billion targets" — core to its strategic plan for the next half a decade.

- The public health agency said it would align its "processes and structures" with the triple-billion targets:
 - (a) One billion more people benefitting from universal health coverage
 - (b) One billion more people better protected from health emergencies
 - (c) One billion more people enjoying better health and well-being
- Its new structure and operating model would also align with the UN Sustainable Development Goals -SDG-3 which is Good Health and Well-being.
- WHO would now have four structural pillars:
 - (a) **Programmes** — to back universal health coverage and healthier populations
 - (b) **Emergencies** — for critical health security (to respond to crises and help countries prepare)
 - (c) **External Relations and Governance** — to centralise and harmonise resource mobilisation and communication
 - (d) **Business Operations** — to ensure more "professionalized" delivery of budgeting, finance, human resources and supply chain

World Health Organisation (WHO)

- It was set up on April 7, 1948, after its constitution was signed by 61 countries in 1946 at the first meeting of the World Health Assembly.
- It's headquartered in Geneva.
- It has six regional offices and 194 members currently are members of it.

Topic-GS Paper 2-International Institution

Source-PIB

2. **Cabinet approves renewable status for large hydropower projects**
 - According to the new policy, large hydro projects will also be designated as renewable energy projects.
 - Until now only smaller projects of less than 25 MW in capacity were categorised as renewable energy.
 - With the removal of this distinction, large hydro projects will be included as a separate category under the non-solar renewable purchase obligation policy.

- Under this policy, power purchasers will have to source a portion of electricity from large hydro projects.
- The new policy had increased the debt repayment period for hydro projects to 18 years from the current 12 years with the provision to introduce an escalating tariff of 2%.

Related Information

- It will provide a stable grid considering 160 GW capacity addition by 2022 from infirm sources of power like solar and wind.

Topic- GS Paper 3 – Environment

Source- The Hindu

3. **Government clears scheme to rebate central, state embedded taxes for textiles sector**
 - The Union Cabinet approved a scheme for the rebate of all state and central embedded levies for apparel and made-up textile segments, which would make shipments zero-rated, thereby boosting the country's competitiveness in export markets.
 - The decision was needed as incentives for apparel and made-ups under the Merchandise Exports from India Scheme (MEIS) were not WTO compatible anymore.
 - The MEIS scheme offered 4 per cent support which was not available beyond December 31.
 - The extended rebate up to March 31, 2020, will greatly benefit apparel & made-ups manufacturers/exporters.
 - The apparel and made-ups have a combined share of 55 per cent (around USD 21 billion) in the total Indian textile export basket.
 - Currently, Remission of State Levies (RoSL), which is to offset indirect taxes levied by states such as stamp duty, petroleum tax, electricity duty and mandi tax that were embedded in exports, is provided to textiles exporters.
 - RoSL have been revised upwards for garments and made-ups, and centrally embedded levies outside the ambit of GST have been added to the scheme, which will "more than offset" incentives not available under MEIS for apparel and made-ups.

Note: The made-up segment of textiles includes products like bed sheets, blankets and curtains.

Topic- GS Paper 2 – Governance

Source- Economics Times

4. **Cabinet approves Continuation of Atal Innovation Mission**
 - The Union Cabinet has approved Continuation of Atal Innovation Mission (AIM) till 2019-20.

Atal Innovation Mission (AIM)

- The Mission has been set up under NITI Aayog.
- AIM including Self-Employment and Talent Utilization (SETU) is Government of India's endeavour to promote an ecosystem of innovation and entrepreneurship across the country at school, university, research institutions, MSME & industry levels.
- Its objective is to serve as a platform for the promotion of world-class Innovation Hubs, Grand Challenges, Start-up businesses and other self-employment activities, particularly in technology driven areas.
- State of the art Atal Tinkering Labs (ATLs) are being established in thousands of schools, world-class Atal Incubation Centres (AIC) and Atal Community Innovation Centers (ACIC) are being established for universities and industry.
- Promotion of product development in areas of national relevance and social importance is being supported through Atal New India Challenges (ANICs).

Topic- GS Paper 2 – Governance

Source-PIB

5. **Flood Management and Border Areas Programme (FMBAP)**
 - The Union Cabinet has approved the "FMBAP" for Flood Management Works in the entire country and River Management Activities and works related to Border Areas for the period 2017-18 to 2019-20.

Salient features

- The Scheme "FMBAP" has been framed by merging the components of two continuing XII Plan schemes titled "Flood Management Programme (FMP)" and "River Management Activities and Works related to Border Areas (MBA)".
- The aim of the Scheme is to assist the State Governments to provide a reasonable degree of protection against floods in critical areas by adopting an optimum combination of structural and non-structural measures and enhancing capabilities of State/ Central Government officials in related fields.
- The works under the scheme will protect valuable land from erosion and flooding and help in maintaining peace along the border.
- The Scheme aims at the completion of the on-going projects already approved under FMP.
- Further, the scheme also caters to Hydro-meteorological observations and Flood Forecasting on common rivers with the neighbouring countries.
- The Scheme also includes survey and investigations, preparation of DPR etc. of water resources projects on the common rivers with neighbouring countries like Pancheshwar Multipurpose Project, Sapta Kosi-Sun Kosi Projects in Nepal which would benefit both countries.

Benefits

- The FMBAP Scheme will be implemented throughout the country for effective flood management, erosion control and anti-sea erosion.
- The catchment area treatment works will help in reduction of sediment load into rivers.

Topic- GS Paper 3-Disaster Management Source-PIB

6. **Google launched "Bolo app" to help children in India with reading, comprehension skills**
- Google India has unveiled an app-Bolo which focuses on improving the reading and comprehension skills of

students, especially the ones in rural areas.

- Bolo has an in-built reading companion called '**Diya**' whose primary task is to encourage, aid, explain and correct the users as they read aloud.

Topic- GS Paper 2 – Governance

Source- Economics Times

7. **Teachers entitled to gratuity**

- The Supreme Court altered its judgment and said teachers were entitled to claim gratuity under the Payment of Gratuity Act.

Background

- The court had frozen the implementation of the court's January 7 verdict which erroneously held that a teacher is not an 'employee' under the Payment of Gratuity Act 1972.
- The amendment had a retrospective effect dating back to 1997.

Payment of Gratuity Bill 2018

The key amendments in the Payment of Gratuity Act, 1972 presented in the Payment of Gratuity Bill, 2018 are as follows:

- The Payment of Gratuity (Amendment) Bill, 2018 ensures harmony amongst employees in the private sector and Public Sector Undertakings/Autonomous Organizations under Government who are not covered under CCS (Pension) Rules.
- These employees will be entitled to receive a higher amount of gratuity at par with their counterparts in the Government sector.
- The Bill seeks to make formal sector workers eligible for tax-free Rs 20 lakh gratuity in line with the implementation of the 7th Central Pay Commission.
- Earlier the formal sector workers were eligible for Rs 10 lakh tax-free gratuity after leaving the job or at time of superannuation.
- After the Amendment bill comes to force, the government may raise the limit of Rs. 20 lakh further to increase the cap in gratuity amount as and when the need arises without having to change the law.

- The Bill also envisages to amend the provisions relating to calculation of continuous service for the purpose of gratuity in case of female employees who are on maternity leave from 'twelve weeks' to such period as may be notified by the Central Government from time to time.

Payment of Gratuity Act, 1972

- The Payment of Gratuity Act was passed by the Indian Parliament on 21 August 1972.
- Under Section 4, payment of gratuity is mandatory.
- The general principle underlying the gratuity scheme is that by service over a long period the employee is entitled to claim a certain amount as a retirement benefit. ir.

Topic- GS Paper 2 – Social Security

Source- The Hindu

8. India, Russia sign deal on a nuclear submarine

- India deals with Russia for leasing a nuclear-powered attack submarine for the Indian Navy for a period of 10 years.
- Under the pact, Russia will have to deliver the Akula class submarine, to be known as Chakra III, to the Indian Navy by 2025.
- It will be the third Russian submarine to be leased to the Navy.

Related Information

- India had earlier leased first Akula-II class nuclear attack submarine (SSN) for a period of 10 years from Russia.
- Akula-class submarines are considered one of the most silent SSNs in service.
- These are capable of sailing at speeds up to 35 knots.
- They are nuclear powered but are armed with conventional land attack missiles.

Topic- GS Paper 3 – Defence

Source- The Hindu

9. AstroSat discovers a new group of stars in globular cluster NGC 2808

- This new cluster was observed by the team of researchers using the UltraViolet Imaging Telescope (UVIT) on-board AstroSat.
- Globular clusters are collections of thousands to millions of stars, moving as one unit.

- These stars are tightly held together by the gravity of the cluster itself and are believed to have formed together at roughly the same time.
- NGC 2808 is one of the most massive globular clusters that we know of and is located at a distance of 47,000 light years from us.
- NGC2808 is special since optical observations tell us that it may have at least five different populations of stars.

ASTROSAT

- ASTROSAT is India's first dedicated multi-wavelength space observatory.
- This scientific satellite mission endeavours for a more detailed understanding of our universe.
- One of the unique features of ASTROSAT mission is that enables the simultaneous multi-wavelength observations of various astronomical objects with a single satellite.
- ASTROSAT observes the universe in the optical Ultraviolet, low and high energy X-ray regions of the electromagnetic spectrum, whereas most other scientific satellites are capable of observing a narrow range of wavelength band.
- ASTROSAT with a lift-off mass of about 1513 kg was launched into a 650 km orbit inclined at an angle of 6 deg to the equator by PSLV-C30.

Topic-GS Paper 3–Science & Technology

Source- Down to Earth

10. Malaysia joins the International Criminal Court

- Malaysia has become the 124th member of the International Criminal Court (ICC).

Related Information

International Criminal Court

- It is the only permanent international judicial body to try individuals for genocide, crimes against humanity and war crimes.
- The Court is completely independent having been established by international treaty, the Rome Statute.
- And it can only prosecute crimes that occurred from 2002 onwards – the date of its establishment.
- It is in Hague, Netherlands.

11.03.2019

1. **MP: Ancient tribal language Gond to be taught in tribal districts**

- Madhya Pradesh Chief Minister declared that Gond language will be included in the primary education curriculum of the state's tribal-dominated districts.
- The status of this tribal language is declining very rapidly in the number of people who speak that tongue.

Related Information

Gond Tribe

- The Gond or Gond people are Adivasi (indigenous people) of India listed as a Scheduled Tribe.
- They are spread over the states of Madhya Pradesh, eastern Maharashtra (Vidarbha), Chhattisgarh, Uttar Pradesh, Telangana, Andhra Pradesh, Bihar and Odisha.

Note: The United Nations General Assembly decided that the International Day of the World's Indigenous Peoples shall be observed on 9 August every year.

Topic- GS Paper 1 – Art and Culture

Source- AIR

2. **India Cooling Action Plan (ICAP)**

- The overarching goal of ICAP is to provide sustainable cooling and thermal comfort for all while securing environmental and socio-economic benefits for the society.
- It provides an integrated vision towards cooling across sectors encompassing inter alia reduction of cooling demand, refrigerant transition, enhancing energy efficiency and better technology options with a 20-year time horizon.
- The India Cooling Action seeks to
 - (i) Reduce cooling demand across sectors by 20% to 25% by 2037-38,
 - (ii) Reduce refrigerant demand by 25% to 30% by 2037-38,
 - (iii) Reduce cooling energy requirements by 25% to 40% by 2037-38,
 - (iv) Recognize "cooling and related areas" as a thrust area of research under the national S&T Programme,
 - (v) Training and certification of 100,000 servicing sector technicians by 2022-23, synergizing with Skill India Mission

Environmental benefits

- Thermal comfort for all – provision for cooling for EWS and LIG housing
- Sustainable cooling – low GHG emissions related to cooling
- Doubling Farmers Income – better cold chain infrastructure – the better value of products to farmers, less wastage of produce
- Skilled workforce for better livelihoods and environmental protection
- Make in India – domestic manufacturing of air-conditioning and related cooling equipment's
- Robust R&D on alternative cooling technologies – to provide a push to innovation in the cooling sector

Topic- GS Paper 2 – Governance

Source-PIB

3. **Model Code of Conduct**

- Elections to the 17th Lok Sabha will be conducted in seven phases across the country from April 11 to May 19.

What is the Model Code of Conduct?

- The Model Code of Conduct is a set of guidelines issued by the Election Commission of India to regulate the conduct of political parties and their candidates during elections mainly with respect to speeches, polling day, polling booths, election manifestos, processions and general conduct.
- Its aim to ensure free & fair elections.
- The Model Code of Conduct **comes into force immediately on the announcement of the election schedule by the commission.**
- Election Commission as announced that Model Code of Conduct comes into force immediately in states where legislative assemblies have been dissolved prematurely.
- The Code remains in force until the date that results are out.

Background

- The Commission issued the code for the first time in **1971** (5th Election) and revised it from time to time.
- This set of norms has been evolved with the consensus of political parties who have consented to abide by the principles embodied in the said code and also binds them to respect and observe it in its letter and spirit.

Legal Status

- The code does not have any specific statutory basis.
- The MCC is not enforceable by law.
- However, certain provisions of the MCC may be enforced through invoking corresponding provisions in other statutes such as the Indian Penal Code, 1860, Code of Criminal Procedure, 1973, and Representation of the People Act, 1951.

Topic- GS Paper 2 – Governance

Source- The Hindu

4. **NASA captures first air-to-air images of supersonic shockwaves**
 - NASA has captured unprecedented photos of the interaction of shockwaves from two supersonic aircraft, part of its research into developing planes that can fly faster than sound without thunderous “sonic booms”.

When this waves Produced?

- When an aircraft crosses that threshold — around 1,225 km per hour at sea level — it produces waves from the pressure it puts on the air around it.

Related Information

What is a Sonic boom?

- The sonic boom is a common name for the loud noise that is created by the ‘shock wave’ produced by the air-plane that is travelling at speeds greater than that of sound (speed of sound is approximately 332 m/s or 1195 km/hr.
- These speeds are called supersonic speeds, hence this phenomenon is sometimes called the supersonic boom.
- The Sonic booms can be sometimes quite loud. For a commercial supersonic transport plane (SST), it can be as loud as 136 decibel.

Topic-GS Paper 3–Science & Technology

Source- The Hindu

5. **Marayur Jaggery and Erode turmeric gets GI tag**
 - Marayur Jaggery and Erode turmeric got a Geographical Indication (GI) tag from the Geographical -Indication Registry.

Erode Turmeric

- Erode Turmeric has been granted tag because of its uniqueness in terms of its size, colour, quality and its resistance to pests after boiling.
- This turmeric cultivated in some districts of Erode, parts of Coimbatore and whole of Tirupur (Tamil Nadu) will be recognised for its unique qualities derived from its place of origin.
- It is grown in hot moist conditions with temperature ranging from 20 degrees to 37.9 degrees Celsius with an average of 600 to 800 mm rainfall in a year.

Marayur Jaggery

- The Marayur Jaggery largely produced in the regions of Marayur and Kanthallur Gram panchayats of Kerala.
- Marayur Jaggery Marayoor in the Idukki district of Kerala is known for its intensive sugarcane cultivation.
- The distinct features of the Marayur Jaggery are high sweetness with less saltiness, high content of Iron and less Sodium.
- The produce is free of impurities and the sugar cane fields are free of chemical pesticides and fertilisers.

Related Information

Geographical Indication (GI)

- It is a sign used on products that have a specific geographical origin and possess qualities or a reputation that are due to that origin.
- In order to function as a GI, a sign must identify a product as originating in a given place.

GI tags – a requirement of TRIPS agreement

- India, as a member of the World Trade Organization (WTO), enacted the Geographical Indications of Goods (Registration & Protection) Act, 1999 has come into force with effect from 15th September 2003.
- Darjeeling Tea was the first Indian product to get the geographical indication tag.

Recently Awarded GI Tag

Name	Commodity/handicraft/food item	Place
Alphonso	Food	Konkan (Western Indian states of Maharashtra, Goa, and the South Indian state of Karnataka)
Kadaknath chicken	Food (meat)	Madhya Pradesh
Shahi litchi	food	Bihar
Patola Sarees	Handicraft	Rajkot (Gujarat)
Boka Chaul	food	Assam
Katarni Rice	food	Bihar
Pethapur Printing Blocks	Handicraft/textile making	Gujarat
Tulapanji rice	food	Bengal
Pochampally Ikat	Handicraft	Telangana
Durgi Stone Carvings	Handicraft	Guntur District (Andhra Pradesh)
Chakshesang Shawl	Handicraft	Nagaland
Etikoppaka Toys	Handicraft	Andhra Pradesh
Sangli Turmeric	Food item	Maharashtra

Topic- GS Paper 3 – Economics

Source- Indian Express

6. Official Secrets Act

- The most recent conviction under the Act came in 2018, when a Delhi court held former diplomat Madhuri Gupta, who had served at the Indian High Commission in Islamabad, guilty under the OSA.
- The secrecy law broadly deals with two aspects:
 - (a) Spying or espionage, which is dealt with in Section 3 of the Act, and
 - (b) disclosure of other secret information of the government, which is dealt with in Section 5.

The Official Secrets Act

- The Official Secrets Act has its roots in the British colonial era.
- Its predecessor law, The Indian Official Secrets Act, 1904 was enacted during the time of Lord Curzon, Viceroy of India from 1899 to 1905.
- It was an amended and more stringent version of The Indian Official Secrets Act (Act XIV) of 1889, brought in at a time when a large number of

powerful newspapers had emerged in several languages across India.

- One of the main purposes of the Act was to muzzle the voice of nationalist publications.
- In April 1923, a newer version of the Official Secrets Act was notified. The Indian Official Secrets Act (Act No XIX of 1923) replaced the earlier Act, and was extended to all matters of secrecy and confidentiality in governance in the country.

Which has primacy between the RTI Act and OSA?

- It has often been argued that the law is in direct conflict with the Right to Information Act (RTI), 2005.
- RTI Act provides for its primacy vis-a-vis provisions of other laws, including OSA.
- This gives the RTI Act an overriding effect.
- If there is any inconsistency in OSA about the furnishing of information, it will be superseded by the RTI Act.

- However, under Sections 8 and 9 of the RTI Act, the government can refuse information.
- Effectively, if the government classifies a document as secret under OSA, that document can be kept outside the ambit of the RTI Act.

Topic- GS Paper 2 – Governance

Source- The Hindu

7. Cloud Seeding: Karnataka set to tap the clouds yet again

- Karnataka government is hoping to influence the upcoming monsoon and capture as much water as possible from the rain clouds.

Related Information

Cloud seeding

- Cloud seeding or weather modification is an artificial way to induce moisture in the clouds so as to cause rainfall.
- In this process, the chemical used as **silver iodide, Potassium iodide and dry ice (solid carbon dioxide)** is dumped onto the clouds by using an aircraft or an artillery gun which leads to a rain shower.
- After some research, hygroscopic materials like table salt are being increasingly used.
- Water managers are also seeing cloud seeding as one way of increasing winter snowfall.

Note: **Varshadhare - Cloud Seeding Project was launched by Karnataka.**

Topic-GS Paper 3–Science & Technology

Source- The Hindu

8. Cabinet approves Transformative Mobility and Battery Storage mission

- The Union Cabinet has approved the National Mission on Transformative Mobility and Battery Storage.
- The Mission will have an Inter-Ministerial Steering Committee chaired by CEO, NITI Aayog to promote clean, connected, shared, sustainable & holistic mobility initiatives.
- The Mission will finalise and implement strategies for transformative mobility and Phased Manufacturing Programmes (PMP) for electric vehicles, their components and batteries.

- A phased roadmap to implement battery manufacturing at giga-scale will be an initial focus on the large-scale module and pack assembly plants by 2019-2020. This will be followed by integrated cell manufacturing by 2021-2022.

Topic- GS-2- Government Policies

Source- Business Line

9. India asks Saudi to invest in strategic oil storage

- India is seeking investment from Saudi Arabia to build emergency crude reserves that will act as a buffer against volatility in oil prices and supply disruptions for the third-largest oil consumer.

Related Information

Strategic Petroleum Reserve (India)

- The Indian Strategic Petroleum Reserve (ISPR) is an emergency fuel store of a total of 5.33 MMT (million metric tons) of strategic crude oil enough to provide 9.5 days of consumption.
- It is maintained by the Indian Strategic Petroleum Reserves Limited
- Strategic crude oil storages are at three underground locations in Mangalore, Visakhapatnam and Padur (Udupi, Karnataka).

Topic- GS Paper 2 – Governance

Source- The Hindu

12.03.2019

1. PINAKA guided weapons system

- DRDO successfully test fired the PINAKA guided WEAPON rocket system from Pokhran range in Rajasthan.

Related Information

PINAKA

- PINAKA Guided is indigenously developed by DRDO.
- The initial version of the Pinaka rocket was Mark I, with a range of 40 km. It was used in the 1999 Kargil War.
- It was further developed into Pinaka Mark II, which has an enhanced range of 70 to 80 km
- The weapon system is equipped with state-of-the-art guidance kit comprising of an advanced navigation and control system.

- The weapon systems impacted the intended targets with high precision and achieved desired accuracies.

Topic- GS Paper 3 – Defence

Source-PIB

2. DRDO develops 'combat drugs' to reduce casualties

- DRDO's medical laboratory- Institute of Nuclear Medicine and Allied Sciences has come up with a range of 'combat casualty drugs.'
- According to the study about 90 Percent of gravely wounded security personnel succumbing to injuries within a few hours these drugs can extend the golden hour till the trooper are shifted to hospital.
- The chances of survival and minimum disability are highest when effective first aid care is given within the golden hour.
- These medicines will ensure soldiers do not suffer from unwanted blood loss while being taken to better healthcare from war zones.
- The drugs include bleeding wound sealants, super absorptive dressings and glycerinated saline, all of which can save lives in the event of warfare in the jungle and high altitude areas as well as in terror attacks.

Topic- GS Paper 3 – Science and Technology

Source- AIR

3. Scientists transform black soot into a boon for water purification

- The Indian scientists have come up with a new process which promises to help utilise black carbon soot, which is a major air pollutant, for treating industrial waste containing highly poisonous organic dyes.
- The scientists have developed two techniques
 1. to convert black soot into graphene nanosheets.
 2. to utilise the nanosheets to remove organic dyes such as crystal violet, rhodamine B, and methylene blue from industrial waste.

Related Information

Black Carbon

- Black carbon is a component of fine particulate matter which is $PM \leq 2.5 \mu m$.
- It is formed through the incomplete combustion of fossil fuels, biofuel, and biomass, and is emitted in both anthropogenic and naturally occurring soot.
- It is known to be highly carcinogenic.
- Black carbon warms the Earth by absorbing sunlight and heating the atmosphere and by reducing albedo when deposited on snow and ice.
- Black carbon stays in the atmosphere for only several days to weeks, whereas carbon dioxide (CO₂) has an atmospheric lifetime of more than 100 years.

Note: **Soot** is a mass of impure carbon particles resulting from the incomplete combustion of hydrocarbons

Topic- GS Paper 3 – Environment

Source- Down to Earth

4. Wood snake

- A species of wood snake that wasn't seen for 140 years has resurfaced in a survey conducted by scientists in the Meghamalai Wildlife Sanctuary.
- The species, endemic to the Meghamalai forests and the Periyar Tiger Reserve landscape.

Related Information

Meghamalai Wildlife Sanctuary

- Meghamalai Wildlife Sanctuary is situated in the Western Ghats in Theni district, Tamil Nadu.
- It can be an excellent buffer to the Periyar Tiger Reserve and Grizzled Squirrel Wildlife Sanctuary.
- It is the home of rare great Indian hornbills.
- The sanctuary is also home to the endangered, arboreal Grizzled giant squirrel.

Topic- GS Paper 3 – Biodiversity

Source- The Hindu

5. India is world's 2nd largest arms importer

- According to a report published by the SIPRI, India was the world's second largest importer of major arms in 2014-18 and accounted for 9.5% of the global total.

- Saudi Arabia stands first which accounted for 12% of the total imports during the period.
- Russia is biggest supplier to India followed by US and Israel.
- Russia accounted for 58% of Indian arms imports in 2014–18, compared with 76% in 2009-13.
- However, the Russian share in Indian imports is likely to sharply go up for the next five-year period as India signed several big-ticket deals recently, and more are in the pipeline.
- These include S-400 air defence systems, four stealth frigates, AK-203 assault rifles, a second nuclear attack submarine on the lease, and deals for Kamov-226T utility helicopters, Mi-17 helicopters and short-range air defence systems.
- Pakistan stood at the 11th position accounting for 2.7% of all global imports.

Stockholm International Peace Research Institute (SIPRI)

- It is an international institute based in Sweden, dedicated to research into conflict, armaments, arms control and disarmament.
- It provides data, analysis and recommendations, based on open sources, to policymakers, researchers, media and the interested public.

Topic- GS Paper 3 – Defence

Source- Indian Express

6. **India ranks 11th in gold holding'**
 - India, which is the world's largest consumer of gold, has the 11th largest gold reserve, with the current holding pegged at 607 tonnes, as per the latest report by the World Gold Council (WGC).

World Gold Council

- The World Gold Council is the market development organisation for the gold industry.
- It works across all parts of the industry, from gold mining to investment & their aim is to stimulate and sustain demand for gold.
- They have also launched various products such as SPDR GLD and gold

accumulation plans in India and China.

- It helps to support its members to mine in a responsible way and developed the Conflict-Free Gold Standard.
- It is headquartered in London, United Kingdom.

Topic- GS Paper 3 – Economics

Source- The Hindu

7. **WHO launched a strategy to fight flu pandemics**
 - WHO launched a strategy to protect people worldwide over the next decade against the threat of influenza.
 - WHO's new strategy, for 2019 through 2030, aims to prevent seasonal influenza, control the virus's spread from animals to humans and prepare for the next pandemic.
 - WHO recommends annual flu vaccines as the most effective way to prevent the spread of the disease, especially for healthcare workers and people at higher risk of influenza complications.

Related Information

What is Influenza?

- Influenza is an acute viral infection of the respiratory tract which is considered to be one of the life-threatening infectious diseases.
- The virus can be transmitted by direct contact with infected individuals, via contaminated objects (also called fomites) and by inhalation of virus-laden aerosols.
- Human influenza viruses are single-stranded RNA viruses.
- Infectivity of influenza virus particles depends on the pH, temperature and salinity of the water, as well as the UV irradiation.

Topic-GS Paper 3-Science & Technology

Source- The Hindu

8. **UNNATEE- National Energy Efficiency Strategy Plan 2031**
 - BEE has developed a national strategy document "UNNATEE" for accelerating energy efficiency in India.
 - This exercise is first of its kind, clearly delineating the energy efficiency targets for the respective demand sectors up to the state levels.

- The document describes a plain framework and implementation strategy to establish a clear linkage between energy supply-demand scenarios and energy efficiency opportunities.
- The document offers a comprehensive roadmap to address India's environmental and climate change mitigation action through energy efficiency measures.

Related Information

Bureau of Energy Efficiency (BEE)

- The BEE is a statutory body under the Ministry of Power, Government of India.
- It assists in developing policies and strategies with the primary objective of reducing the energy intensity of the Indian economy.
- BEE coordinates with designated consumers, designated agencies, and other organizations to identify and utilize the existing resources and infrastructure, in performing the functions assigned to it under the Energy Conservation Act 2001.

Topic- GS Paper 2 -Important Institution

Source-PIB

9. Social Institutions and Gender Index (SIGI) Report 2019

- The OECD Development Centre's Social Institutions and Gender Index (SIGI) is a cross-country measure of discrimination against women in social institutions (formal and informal laws, social norms, and practices) across 180 countries.
- The fourth edition (2019) of the SIGI ranks 120 economies included in the classification below. The remaining 60 countries are not ranked due to missing data for one or more indicators.
- This 2019 global report provides an overview of the main outcomes and recommendations of the SIGI in relation to women and the family, their physical integrity, access to productive and financial resources and their civic rights.
- The Index is topped by Switzerland.

13.03.2019

1. ITU to open its first ever innovation centre in India

- The United Nations' telecom body ITU plans to set-up its first ever innovation centre in India to incorporate technologies from South Asian countries and emerging economies in standards for technologies.
- The innovation centre is expected to give an opportunity to Indian technology firms to make their case for being part of global standards, which has been largely influenced by companies from developed countries and have a huge influence on telecom businesses globally.

Related Information

International Telecommunication Union

- It is one of the oldest among all the 15 specialized agency of the United Nations deals with information and communication technologies.
- ITU is an intergovernmental public-private partnership organization since its inception.
- It facilitates international connectivity in communications networks, it allocates global radio spectrum and satellite orbits, develops the technical standards that ensure networks and technologies seamlessly interconnect, and strive to improve access to ICTs to underserved communities worldwide.
- It is based in Geneva, Switzerland.
- It is also a member of the United Nations Development Group and has 12 regional and area offices in the world.
- India got elected as a member of ITU Council for another 4-year term - from 2019 to 2022.

Topic-GS Paper 2-Important Institution Source- The Hindu

2. India ranks 16th ranks among the countries with the highest number of impacted species

Highlights of Study

- Human impacts on species occur across 84% of the earth's surface found in the study.

- Malaysia ranks first among the countries with the highest number of impacted species (125).
- India ranks 16th in such human impacts, with 35 species impacted on average.
- Southeast Asian tropical forests including those in India are the Western Ghats, Himalayas and north-east are among the 'hotspots' of threatened species.
- The Study shows that roads and croplands are extensive in India and conversion of habitat for such activities could be the main threat.

Related Information

Hot Spots

- Hot spots are the richest and most threatened reservoirs of plant and animal life of the earth.
- They have a maximum number of endemic species.
- To qualify as a hot spot, a region must meet two strict criteria:
 - (a) **Species endemism:** the region must contain at least 1,500 species of vascular plants (> 0.5% of the world's total) as endemics, and
 - (b) **Degree of threat:** the region has to have lost at least 70% of its original habitat.
- Each biodiversity hot spot represents a remarkable universe of extraordinary floral and faunal endemism struggling to survive in rapidly shrinking ecosystems.

Indian Biodiversity Hot Spots

- There are 4 biodiversity hot spots present in India. They are:
 - (a) The Eastern Himalayas [Arunachal Pradesh, Bhutan, Eastern Nepal]
 - (b) Indo-Burma and [Purvanchal Hills, Arakan Yoma, Eastern Bangladesh]
 - (c) The Western Ghats and Sri Lanka
 - (d) Sundaland: Includes Nicobar group of Islands (and Indonesia, Malaysia, Singapore, Brunei, Philippines).

Note :

- **Cool-spots'** are the world's last refuges where high numbers of threatened species still persist.

- Cool-spots could be the result of protection or because of intact habitat.

Topic- GS Paper 3 – Biodiversity

Source- The Hindu

3. **Centre defers bid deadline for OALP-II**

Related Information

Open Acreage Licensing Policy (OALP)

- OALP gives an option to a company to select the exploration blocks on its own, without waiting for the formal bid round from the Government.
- Under OALP, a bidder intending to explore hydrocarbons may apply to the Government seeking exploration of any new block which was not already covered by exploration.
- The Government will examine the interest and if it is suitable for the award, then the government will call for competitive bids after obtaining necessary environmental and other clearances.
- OALP was introduced as part of the new fiscal regime in the exploration sector called **Hydrocarbon Exploration and Licensing Policy (HELP)**.
- It will enable a faster survey and coverage of the available geographical area which has a potential for oil and gas discovery.
- Successful implementation of OALP requires the building of National Data Repository on geo-scientific data.

Topic- GS Paper 2 – Governance

Source- The Hindu

4. **Indian Sundarbans became 'Wetland of International Importance'**

- The Indian Sundarban was accorded the status of 'Wetland of International Importance' under the Ramsar Convention recently.

How did it qualify?

- The Indian Sundarban met four of the nine criteria required for the status of 'Wetland of International Importance.
 - (a) Presence of rare species and threatened ecological communities
 - (b) Biological diversity

- (c) Significant and representative fish
- (d) Fish spawning ground and migration path.

Why is this important?

- The Convention on Wetlands of International Importance, better known as the Ramsar Convention, is an international agreement promoting the conservation and wise use of wetlands.
- It is the only global treaty to focus on a single ecosystem.
- The convention was adopted in the Iranian city of Ramsar in 1971 and came into force in 1975.

Related Information

Sundarban

- The Indian Sundarban, also a UNESCO world heritage site and home of the Royal Bengal Tiger.
- It is the home of a large number of "rare and globally threatened species, such as
 - (a) Critically endangered northern river terrapin
 - (b) Endangered Irrawaddy dolphin
 - (c) Vulnerable fishing cat
- The Sundarbans comprises hundreds of islands and a network of rivers, tributaries and creeks in the delta of the Ganga and the Brahmaputra at the mouth of the Bay of Bengal in India and Bangladesh.
- Indian Sundarban constitutes over 60% of the country's total mangrove forest area.
- **It is the 27th Ramsar Site in India and the largest protected wetland in the country.**

Topic- GS Paper 3 – Environment

Source- Indian Express

5. Gene therapy scientists move closer to 'cure' for sickle cell

Related Information

Sickle-Cell Disease (SCD)

- It is a group of blood disorders typically inherited from a person's parents.
- The most common type is known as sickle-cell anaemia (SCA).
- It results in an abnormality in the oxygen-carrying protein haemoglobin (haemoglobin S) found in red blood cells.

- This leads to a rigid, sickle-like shape under certain circumstances.

Topic- GS Paper 3 – Science and Technology

Source- DD News

6. Developing countries emerging as the biggest users of chemicals

- As per the second Global Chemicals Outlook report, chemical production across the world will double by 2030.
- Chemical industry is the world's second largest manufacturing sector.
- Currently, the world has the capacity to produce 2.3 billion tonne chemicals.
- According to the World Health Organization (WHO), 1.6 million lives were lost in 2016 due to diseases related to chemicals.
- As of 2018, more than 120 countries did not implement the globally harmonised system of classification and labelling of chemicals.

Background

- The first Global Chemicals Outlook report (GCO-I) was released in 2013.
- Since then, instead of reducing the use of chemicals to meet the agreed target, its use has gone up.

Related Information

- In 2015 the world adopted the Sustainable Development Goals (SDGs) — 17 of these goals relate to chemicals and its waste management.
- SDG Target 12.4 mandates, "By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimise their adverse impacts on human health and the environment."
- China estimated to account for almost 50 per cent of global sales of chemicals by 2030.

Topic- GS-Paper 3-International Conventions

Source- Down to Earth

7. Sirsi Supari got GI tag

- Sirsi Supari is an arecanut grown in Sirsi, Siddpaur and Yellapur taluks of Uttara Kannada district in Karnataka.

- Sirsi Supari' is medium sized and round in shape, it has a somewhat ash coloured hard seed.
- 'Sirsi Supari' is unique in taste from areca nuts grown in other parts of the country due to the differences in the chemical composition of different areca nuts.

Topic- GS Paper 1 – Art and Culture

Source- TOI

8. CERC mulls regional power market for South Asia

- CERC is in favour of setting up a regional market for power trade across South Asian countries.
- This will be an extension of proposals for facilitating cross-border power trade.
- Bangladesh is the largest buyer of Indian power.
- India signed a memorandum of understanding for establishing grid interconnection between the members of the BIMSTEC.

Central Electricity Regulatory Commission (CERC)

- It is a statutory body functioning under section-76 of the Electricity Act 2003.

Functions:

- to regulate the tariff of generating companies.
- to determine tariff and regulate the inter-State transmission of electricity.
- to issue licenses to persons to function as transmission licensee and electricity trader with respect to their inter-State operations.

Topic- GS Paper 3 – Sectors of Indian Economy

Source- The Hindu Business line

14.03.2019

1. 6th edition of the Global Environmental Outlook (GEO)

- The report is prepared by the United Nations Environment Programme.

Highlights of Report

- A report six years in the making from the UN's Global Environment Outlook (GEO) revealed a quarter of all premature deaths and diseases worldwide are due to pollution and environmental damage.

- India could save trillions in healthcare costs if it implemented policy initiatives consistent with ensuring that the globe didn't heat up beyond 1.5 degrees Celsius by the turn of the century.

- India's stated commitment is (a) to lower emissions intensity of its GDP by 33-35% compared to 2005 levels by 2030;

(b) increase the total cumulative electricity generation from fossil-free energy sources to 40% by 2030, and (c) create additional carbon sink of 2.5 to 3 billion tons through additional forest and tree cover.

- India is on track to achieve two of these goals — of emissions intensity and electricity generation.

- However, these actions are only enough — and provided other countries too live up to their commitments — to limit temperature rise to 2 degrees.

Related Information

Paris Climate Agreement

- It is an agreement within the United Nations Framework Convention on Climate Change (UNFCCC) dealing with greenhouse gas emissions mitigation, adaptation and finance starting in the year 2020.
- The agreement was adopted by consensus on 12 December 2015.
- The contributions that each individual country should make in order to achieve the worldwide goal are determined by all countries individually and called "nationally determined contributions" (NDCs).
- India was 62nd country to ratify it.

Aims of the Agreement:

- Keep the global temperature rise this century well below 2 degrees Celsius above the pre-industrial level.
- Pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius.

Topic- GS Paper 3– Environment

Source- The Hindu

2. **West Nile fever**

- Recently a seven-year-old boy from Malappuram district has been diagnosed with West Nile fever, a relatively unknown viral infection.

Related Information

West Nile fever

- West Nile fever is spread by Culex mosquitoes.

West Nile Virus

- It is a single-stranded RNA virus that causes West Nile fever.
- It is a member of the family Flaviviridae, specifically from the genus Flavivirus, which also contains the Zika virus, dengue virus, and yellow fever virus.
- West Nile virus is primarily transmitted by mosquitoes, mostly species of the genus Culex, but ticks have also been found to carry the virus.
- The primary hosts of WNV are birds, so that the virus remains within a "bird-mosquito-bird" transmission cycle.

Topic- GS Paper 2- Health Issue

Source- The Hindu

3. **India gets first TIR shipment via Chabahar Port from Afghanistan**

- The first shipment under the United Nations TIR convention arrived in India from Afghanistan through Iran's Chabahar Port.

Related Information

Transports Internationaux Routiers (TIR)

- The TIR agreement applies to the transport of goods between a customs office of departure in one country and the office of destination in another country.
- TIR The Customs Convention on International Transport of Goods under Cover of TIR Carnets, 1975 (TIR Convention) is an international customs transit system under the auspices of the United Nations Economic Commission for Europe (UNECE) with the widest geographical coverage.
- The TIR is managed and developed by International Road Transport Union (IRU) which is the world road transport organisation.

- The TIR procedure facilitates the movement of goods under customs control across international borders without the payment of the duties and taxes.
- India had joined the TIR Convention (the United Nations Customs Convention on International Transport of Goods under cover of TIR Carnets) on June 15, 2017.
- This convention will help boost India's exports and enable greater participation in the global value chains.

Topic-GS Paper 3-Important Convention Source- The Hindu

4. **Cabinet approved the proposal for the accession of India to Nice Agreement, Vienna Agreement & Locarno Agreement**

- The Nice Agreement concerning the International Classification of Goods and Services for the purposes of registration of marks.
- The Vienna Agreement establishing an International Classification of the figurative elements of marks.
- The Locarno Agreement establishing an International classification for industrial designs.

Benefits

- Accession to the Nice, Vienna and Locarno Agreements will help the Intellectual Property Office in India to harmonise the classification systems for examination of trademark and design applications, in line with the classification system followed globally.
- It would give an opportunity to include Indian designs, figurative elements and goods in the international classification systems.
- The accession is expected to instil confidence in foreign investors in relation to the protection of IPs in India.
- The accession would also facilitate in exercising rights in decision-making processes regarding review and revision of the classifications under the agreement.

Topic-GS Paper 3-Intellectual Property Right

Source-PIB

5. **Cabinet approves Promulgation in Union Territories**

- The Union Cabinet has approved Promulgation of the Daman and Diu Civil Courts (Amendment) Regulation, 2019 and the Dadra and Nagar Haveli (Civil Courts and Miscellaneous Provisions) Amendment Regulation, 2019.
- It will be done under Article 240 of the Constitution.

Benefits:

- The move will be helpful in bringing uniformity in Judicial Service.
- It will also help overcome the difficulties being faced by the litigants in travelling to Mumbai for filing appeals due to existing limited pecuniary jurisdiction.
- Enhanced pecuniary jurisdiction will accelerate the justice delivery system, besides making access easier for litigants without having to travel outside the Union Territory.

Topic- GS Paper 2 – Governance

Source-PIB

6. **Honey as a biomarker for pollution**

- Honey from urban areas can be used as biomarker to identify polluted localities.
- The results showed that areas with heavy vehicle movement and industrial activity had increased concentration of lead in honey.

Related Information

- Similarly, another study of the aquatic plant called water hyacinth, or Eichhornia crassipes, found that these can be used as biomarkers.
- This plant is commonly found in tropical countries and is known for its ability to absorb nutrients and other elements from water.

Biomarker

- It is defined as “a change in biological response, ranging from molecular through cellular and physiological responses to behavioural changes, which can be related to exposure to or toxic effects of environmental chemicals.

Topic- GS-3- Environment

Source- Down To Earth

7. **Starry Dwarf Frog**

- A starry dwarf frog which sports pale blue spots and brilliant orange thighs has been found in Wayanad district, Kerala.
- The frog has distinct physical characteristics such as its triangular finger- and toe tips, which closely resembled frogs in South America and Africa.
- The frog species is named as *Astrobatrachus kurichiyana* in the honour of Kurichiya tribal community of Kerala.
- The frog is not only a new species but different enough to be assigned to a new ‘subfamily’.

Topic- GS Paper 3 – Biodiversity

Source- The Hindu

8. **Blue holes’ in Silam waters**

- Blue holes are roughly circular, steep-walled depressions.
- It was named blue for the dramatic contrast between the dark blue, deep waters of their depths and the lighter blue of the shallows around them.
- It has developed in a bank or island composed of a Carbonate bedrock (limestone or coral reef).
- The deep blue colour is caused by the high transparency of water and bright white carbonate sand.
- Their water circulation is poor and they are commonly anoxic below a certain depth, this environment is unfavourable for most sea life, but nonetheless can support large numbers of bacteria.
- Blue holes are distinguished from Cenotes in that the latter are inland voids usually containing fresh groundwater rather than seawater.

Some of the significant blue holes are

- Dragon Hole - South China Sea
- Great Blue Hole – Belize
- Dean’s Blue Hole - Bahamas

Topic- GS Paper 3 – Environment

Source- Indian Express

15.03.2019

1. **Man-Portable Anti Tank Guided Missile (MPATGM)**

- DRDO successfully test fired indigenously developed, low weight, fire and forget Man Portable Anti-Tank Guided Missile (MPATGM) for the second time in the ranges of Rajasthan desert.
- MPATGM is incorporated with advanced features including state-of-the-art Imaging Infrared Radar (IIR) Seeker with integrated avionics.
- Fitted with a high-explosive anti-tank (HEAT) warhead, the MPATGM reportedly boasts a top attack capability and has a maximum engagement range of about 2.5 kilometres.
- This low-weight MPATGM will complement the Spike Anti-Tank Guided Missile to be procured from Israel.

Topic- GS Paper 3– Defence

Source-PIB

2. **India Energy Modelling Forum (IEMF)**

- The NITI Aayog and the United States Agency for International Development (USAID) organized the first workshop on the development of the IEMF.
- It has been envisaged as a pan-stakeholder platform for debating ideas, scenario-planning & discussing the India's energy future.
- The IEMF seeks to provide a platform for leading experts and policymakers to study important energy and environmental issues and ensure the induction of modelling and analysis in an informed decision-making process.
- It aims to improve cooperation and coordination between modelling teams, the Government of India, knowledge partners and think-tanks, build the capacity of Indian institutions, and identify issues for joint modelling activities and future areas of research.

Topic- GS Paper 3– Energy Sector

Source- The Hindu

3. **Climate Vulnerability index for India**

- Indian scientists from the Department of Science and Technology have developed a common framework for assessment of climate change vulnerability in all the 12 states in the Himalayan region.
- These States are Assam, Manipur, Meghalaya, Mizoram, Nagaland, Tripura, Arunachal Pradesh, Sikkim, Himachal Pradesh, Uttarakhand, Jammu and Kashmir and hilly districts of West Bengal.
- Climate Vulnerability index have developed on the basis of socio-economic factors, demographic and health status, sensitivity of agricultural production, forest-dependent livelihoods and access to information, services and infrastructure.

Highlights of the Index

- The index is ranging on a scale between 0-1.
- 1 indicating the highest possible level of vulnerability and 0 show the least vulnerability.
- The vulnerability index is the highest for Assam (0.72) and Mizoram (0.71) and Sikkim is the least vulnerable state with the index being 0.42.
- Districts within a state face different degrees of vulnerability based on the difference in geographic, climatic, socio-economic and demographic conditions.

Related Information

- In the year 2018, U.N. climate change conference in Poland found that 12 Himalayan States such as Assam, Arunachal Pradesh, and Uttarakhand etc. are vulnerable to climate change.

Topic- GS Paper 3– Important Index

Source- The Hindu

4. **Absentee ballot**

- This refers to a vote cast by someone who is unable to go to the polling station to help increase voter turnout.
- In some countries, the voter is required to give a reason for not going to the polling station, before participating in an absentee ballot.
- In India, a postal ballot is available to only some citizens.

- The Representation of the People Act, 1950 allows heads of states and those serving in the armed forces to vote through postal means.
- The Lok Sabha recently passed a Bill to allow proxy voting for NRIs.
- However, domestic migrants and absentee voters in India cannot cast postal votes.

Note:

- Proxy voting is a form of voting whereby a member of a decision-making body may delegate his or her voting power to a representative, to enable a vote in absence.
- The representative may be another member of the same body, or external. A person so designated is called a "proxy" and the person designating him or her is called a "principal"

Topic- GS Paper 2– Governance

Source- The Hindu

5. **Pink bollworm is out of control in India**
 - Pink bollworm is destroying the fiber crop across India, particularly in the West, Central and Southern parts.
 - Pink bollworm has developed resistance to Cry1Ac and Cry2Ab, the two biotech solutions currently available in India to tackle pink bollworm
 - Researchers have suggested ways to deal with Pink Bollworm like shortening cotton season, destroying crop residues, deep summer ploughing, crop rotation, mating disruption, insecticides.

Related Information

Pink bollworm

- It is an insect known for being a pest in cotton farming.
- The pink bollworm is native to Asia but has become an invasive species in most of the world's cotton-growing regions.
- The female moth lays eggs in a cotton boll, and when the larvae emerge from the eggs, they inflict damage through feeding.

Topic- GS Paper 3– Science and Technology

Source- The Hindu Business line

6. **Africa-India Joint Field Training Exercise (AFINDEX-19)**

- It is conducted between the Indian Army and 16 African nations.
- AFINDEX-19 aims to train the participating contingents in Humanitarian Mine Assistance (HMA) and Peace Keeping Operations (PKO) under the United Nations Charter through practical and comprehensive discussions and tactical exercises.
- The joint exercise will also focus on achieving interoperability, learning each other's methodologies and tactics through synchronised operational level planning and tactical level training.

Topic- GS Paper 3– Defence

Source- Indian Express

7. **Fresh Liquidity Infusion through Forex Swaps Announced By RBI**

- RBI has decided to use a new tool for the first time to enhance liquidity in the system using which it will buy \$5 billion from the banks in a swap deal that is capable of injecting around Rs. 35,000 crores into the system.

Related Information

Foreign exchange swap

- In finance, a foreign exchange swap or FX swap is a simultaneous purchase and sale of identical amounts of one currency for another with two different value dates (normally spot to forward) and may use foreign exchange derivatives.
- An FX swap allows sums of a certain currency to be used to fund charges designated in another currency without acquiring foreign exchange risk.
- It permits companies that have funds in different currencies to manage them efficiently.

Topic- GS Paper 3– Economics

Source- Economics times

8. **What is the bomb cyclone blitzing across the US?**

- A powerful storm system expected to turn into a "bomb cyclone" is forecast to slam the central U.S. with hurricane force winds and heavy precipitation.

Related Information

What is a 'bomb cyclone'?

- A storm is considered a 'bomb' when the pressure drops rapidly — at least 24 millibars in 24 hours.
- Bomb cyclones also draw air from Polar Regions after it weakens. This explains the Arctic air freezing parts of the US.
- The Bomb cyclone is essentially a storm caused by a collision of warm air and cold air which develop into rotating storm-like pattern and lead to an explosive deepening of pressure.

Topic- GS Paper 3- Environment

Source- Down to Earth

18.03.2019

1. India's first Lokpal

- Former Supreme Court judge and current member of the National Human Rights Commission (NHRC), Pinaki Chandra Ghose, are likely to be India's first anti-corruption ombudsman or Lokpal.
- The Lokpal Act, which was passed in 2013 after a nationwide anti-corruption movement, provides for setting up of **Lokpal at the Centre and Lokayuktas in the States.**

Related Information

Who appoints the Lokpal?

- A five-member panel comprising the Prime Minister, the Lok Sabha Speaker, the Leader of the Opposition, the Chief Justice of India and an eminent jurist nominated by the President, select the Lokpal.

Salient features of Lokpal Act 2013?

- The Act allows setting up of anti-corruption ombudsman called Lokpal at the Centre and Lokayukta at the State-level.
- The Lokpal will consist of a chairperson and a maximum of eight members.
- The Lokpal will cover all categories of public servants, including the Prime Minister and Chief Ministers
- The Act also incorporates provisions for attachment and confiscation of property acquired by corrupt means, even while the prosecution is pending.

- The States will have to institute Lokayukta within one year of the commencement of the Act.
- It has been made mandatory for public servants to declare their assets and liabilities along with that of their spouse and dependent children.

What are the powers of Lokpal?

- The Lokpal will have the power of superintendence and direction over any investigation agency including CBI for cases referred to them by the ombudsman.
- Any officer of the CBI investigating a case referred to it by the Lokpal, shall not be transferred without the approval of the Lokpal.

Note: The armed forces do not come under the ambit of Lokpal.

Topic- GS Paper 2- Governance

Source- The Hindu

2. Scorpene submarine Khanderi

- The Navy is set to induct the second Scorpene submarine Khanderi this year.

Related Information

- Under the Project 75 six scorpion submarines being indigenously built at Mazagon Dock Limited (MDL), Mumbai with help of French naval defence and Energy Company DCNS.
- The entire project is expected to be completed by 2020.
- The name of the Submarines are :
(a) The first submarine of the class Kalvari joined service in December 2017.
(b) The second submarine of the class Khanderi May 2019
(c) The third in the Scorpene series Karanj.
(d) The last two submarines are Vagir and Vagsheer.

Salient features

- These are diesel-electric attack submarines equipped with an anti-ship missile.
- The first four submarines will be conventional, while the last two will be equipped with the Air Independent Propulsion system, which will enable them to stay underwater for a longer duration.

Note: The Navy had last inducted a conventional diesel-electric submarine, INS Sindhushastra, procured from Russia in July 2000.

Topic- GS Paper 3 – Defence

Source- The Hindu

3. **Bannerghatta eco-sensitive zone curtailed**

- ESZ Expert Committee of the Ministry of Environment and Forests (MOEF) has recommended the reduction of nearly 100 sq. km in the Eco-Sensitive Zone of Bannerghatta National Park.
- It Provides a regulated buffer zone around protected areas.
- There is a Supreme Court ruling prohibiting quarrying and mining activities within 1km of protected areas irrespective of the ESZ distance.
- Therefore, the 'safe zone' of 1 km around protected areas is already in place across the country.

Eco-Sensitive Zone (ESZ)

- ESZ or Ecologically Fragile Areas are areas notified by the Ministry of Environment, Forests and Climate Change.
- The Eco-Sensitive Zone has a minimum extent of 100 metres and a maximum extent of up to 4 km from the Park boundary.
- The objective of notifying Eco-Sensitive Zones is to create a buffer as further protection around Protected Areas (PAs) such as National Parks and Wildlife sanctuaries.
- They also act as a transition zone from areas of high protection to areas involving lesser protection

Bannerghatta National Park

- The Bannerghatta National Park is located near Bangalore in Karnataka.

Topic- GS Paper 3 – Environment

Source- The Hindu Business Line

4. **Cyclone Idai**

- Intense Tropical Cyclone Idai is the strongest tropical cyclone to strike Mozambique since Jokwe in 2008.
- Mozambique, Zimbabwe and Malawi have been hit by cyclone Idai.
- According to the Global Facility for Disaster Reduction and Recovery (GFDRR), Mozambique is the third most at-risk country in Africa when it comes to extreme weather.

Related Information

Global Facility for Disaster Reduction and Recovery

- It is a global partnership that helps developing countries better understand and reduce their vulnerability to natural hazards and climate change.
- It was established in 2006 as a global partnership of the World Bank, UN agencies and bilateral donors, located in World Bank headquarters in Washington, DC.
- It also contributes to the implementation of the Sendai Framework for Disaster Risk Reduction.
- It provides countries to integrate disaster risk management and climate change adaptation into development strategies and investment programs and recover from disasters quickly and effectively.

Topic-GS Paper 3–Disaster Management
Source- Indian Express

5. **Country-by-Country (CbC) Reports between India and the USA**

- India and the US can now exchange country-by-country (CbC) reports filed by the ultimate parent corporations based in either of the countries.
- According to Income-tax Act, 1961 requires that a **constituent entity of an international group, resident in India**, other than a parent entity or an alternate reporting entity of an international group, resident in India, shall furnish the Country-by-Country (CbC).
- That is, the Companies headquartered in the US but having operations and taxability in India now need not file country-by-country (CbC) reports in India.
- For such international companies, filing CbC reports in the US would be sufficient.
- This provides the I-T Department with a better operational view of such companies, primarily with regards to revenue and income tax paid.

- The provision was a part of the Base Erosion and Profit Shifting (BEPS) action plan, and later incorporated in I-T Act also.

Related Information

Base Erosion and Profit Shifting (BEPS)

- It is an initiative of Organisation for Economic Co-operation and Development approved by the G20, to identify ways of providing more standardised tax rules globally.
- It is a term used to describe tax planning strategies that exploit mismatches and gaps that exist between the tax rules of different jurisdictions.
- It is done to minimise the corporation tax that is payable overall, by either making tax profits 'disappear' or shift profits to low tax jurisdictions where there is little or no genuine activity.
- It is a major significance for developing countries due to their heavy reliance on corporate income tax, particularly from multinational enterprises.

Topic- GS Paper 2 – International Relation

Source-PIB

6. 4th Session of the United Nations Environment Assembly

- India piloted resolutions on two important global environmental issues relating to Single-use Plastics and Sustainable Nitrogen management at the **fourth session of United Nations Environment Assembly (UNEA) held in Nairobi.**
- The theme of the 4th UNEA is **Innovative Solutions for environmental challenges & sustainable production & consumption.**

Significance

- The global nitrogen use efficiency is low, resulting in pollution by reactive nitrogen which threatens human health ecosystem services, contributes to climate change and stratospheric ozone depletion.
- Only a small proportion of the plastics produced globally are recycled with most of it damaging the environment and aquatic biodiversity.

Related Information

United Nations Environment Assembly (UNEA)

- It is the governing body of the UN Environment Program.
- It is the world's highest-level decision-making body on the environment.
- The Environment Assembly meets biennially to set priorities for global environmental policies and develop international environmental law.
- It was created in June 2012, during the United Nations Conference on Sustainable Development, also referred to as RIO+20.

Topic-GS Paper 3–Important Organisation

Source- PIB

7. Operation Sunrise

- The Indian and Myanmar's armies have, in a coordinated operation called **Operation Sunrise** and destroyed at least 10 camps belonging to an insurgent group in Myanmar, which had become a threat to India's mega Kaladan Project in the neighbouring country.

Related Information

Kaladan Multimodal Transit Transport Project

- The Project is a part of 'Look East policy.
- In this project, connectivity has a major priority between north-eastern States and the ASEAN region.
- India is developing the Sittwe port in Myanmar and has also entered into a framework agreement with Myanmar in April 2008 to facilitate the implementation of the Kaladan Multimodal Transit Transport Project.
- Sittwe Port, located at the estuary of Kaladan River in the troubled Rakhine province of Myanmar, for improving connectivity with Mizoram in the North East.
- A river terminal at Palletwa is part of the larger project.

Topic- GS Paper 3 - Defence

Source- Indian Express

8. Microsoft launched Project 'Sangam' to boost India's Swachh Bharat Mission

- **Microsoft** has announced that it has **partnered with The Ministry of Housing and Urban Affairs** to promote its Project 'Sangam' which

is developed to accelerate **Swachh Bharat Mission (SBM)** in India.

- The aim of the project to train functionaries and officers across India on Swachh Bharat e-Learning Portal.
- Microsoft's Project Sangam is a **cloud-hosted, mobile-first community learning platform.**

Topic- GS Paper 2 – Governance

Source- TOI

9. RBI categorises IDBI as a private bank, kept SBI, ICICI and HDFC as D-SIBs

- IDBI Bank has been categorised as a private sector bank by the Reserve Bank of India, with effect from January 21, 2019.
- The move comes following the acquisition by Life Insurance Corporation of India (LIC). LIC acquiring 51 per cent of the total paid-up equity share capital of the bank.
- RBI said the State Bank of India, ICICI Bank and HDFC Bank will continue to be identified as Domestic Systemically Important Banks (D-SIBs). D-SIB means that a bank is 'too big to fail'.

Note: At present, there are 20 Public Sector Banks.

Related Information

- Following the global **financial crisis of 2008**, it was observed that problems faced by certain large and highly interconnected financial institutions hampered the orderly functioning of the financial system, which in turn, negatively impacted the real economy.
- It was decided to identify such institutions and prescribe them higher capital requirements.
- The RBI has adopted a system by which banks are plotted into four buckets based on a lender's systemic importance scores in ascending order.
- The banking regulator prescribes higher capital requirements-in terms of additional Common Equity Tier 1 (CET 1) capital-for such entities.
- RBI had started listing D-SIBs from August 2015.
- The framework requires the central bank to disclose the names of banks designated as D-SIBs starting from 2015 and place these banks in appropriate buckets depending upon their Systemic Importance Scores (SISs).

19.03.2019

1. Two-third of the world population lives in water-scarce areas: WaterAid Report

- Around 4 billion people in the world live in physically water-scarce areas, and 844 million don't have access to clean water close to home, according to the latest report by WaterAid.
- This number is expected to go up to 5 billion by 2050.
- The report, Beneath the Surface: The State of the World's Water 2019, will be launched on March 22, 2019 – World Water Day – addressing water footprint for sustainable production and sensible consumption.
- The world's water crisis is getting worse, yet globally we use six times as much water today as we did 100 years ago, driven by population growth and changes in diets and consumer habits.
- India is also suffering from the worst water crisis, with one billion people living in water scarcity during at least one part of the year, and around 600 million living in areas of high to extreme water stress.

Groundwater depletion rampant in India

- At 24 Percent, India uses the most groundwater drawn out globally – more than that of China and the US combined.
- The rate of groundwater depletion has increased by 23 Percent between 2000 and 2010.
- Also, India is the third largest exporter of groundwater – 12 Percent of the global total.
- India is currently ranked 120 among 122 countries in the water quality index, with 75 per cent of households that lack drinking water supply in their premises.
- As the Indian government committed to the United Nations Sustainable Development Goal 6— which promises that by 2030 everyone will have access to clean water – decent sanitation and good hygiene.

Topic- GS-3- Environment

Source- Down TO Earth

2. India on the brink of a dry eye disease epidemic

- In a study which had undertaken across 200 locations in Telangana, Andhra Pradesh, Orissa and Karnataka between 2010 and 2018 found that India is on the verge of a dry eye disease epidemic.
- The prevalence of dry eye disease will be about 40% of the urban population by 2030.

Highlights of the Study

- The study found the onset of dry eye disease is early in men than in women.
- In men, the age of disease onset is the early 20s and 30s compared with 50s and 60s in women.
- Hormonal imbalance could be a likely reason for higher cases in women in their 50s and 60s.

Related Information

Dry eye disease

- Dry eye disease could occur due to inadequate tear production (aqueous deficient), tear film instability due to evaporation or mixed type.
- Dry eye is a common and often chronic problem, particularly in older adults.
- The most common form of dry eyes occurs when the water layer of tears is inadequate. This condition, called keratoconjunctivitis sicca (KCS), is also referred to as dry eye syndrome.

Topic-GS Paper 3–Science & Technology Source- The Hindu

3. International Workshop on Disaster Resilient Infrastructure

- An International Workshop on Disaster Resilient Infrastructure (IWDRI) is being organised by the National Disaster Management Authority (NDMA) in collaboration with United Nations Office for Disaster Risk Reduction (UNISDR), and in partnership with the Global Commission on Adaptation, United Nations Development Programme and the World Bank.

The workshop aims to:

1. Identify good practices of disaster risk management in key infrastructure sectors,

2. Identify specific areas and pathways for collaborative research on DRI (Transport, Energy, Telecom and Water),
3. Discuss and co-create the broad contours of the Coalition for Disaster-Resilient Infrastructure (CDRI) as well as a notional roll-out plan for the next three years, and
4. Build a forum for members to work on areas of common interest and make specific commitments.

Related Information

- The Sendai Framework for Disaster Risk Reduction (SFDRR), 2015-2030, which is the first major agreement of the post-2015 development agenda, identifies investing in Disaster Risk Reduction (DRR) for resilience and to build back better in reconstruction as priorities for action towards reducing disaster risk.
- Similarly, Goal 9 of the Sustainable Development Goals (SDGs) recognizes disaster resilient infrastructure as a crucial driver of economic growth and development.
- The first International Workshop on Disaster Resilient Infrastructure (IWDRI 2018) was held in January 2018.
- India announced the creation of a CDRI soon after the Asian Ministerial Conference on Disaster Risk Reduction, which was held in New Delhi in 2016.

Topic-GS Paper 3– Disaster Management Source-PIB

4. TAVR - A viable alternative to open-heart surgery

- A multicenter clinical trial has found that transcatheter aortic valve replacement (TAVR) performed better than open-heart surgery in low-risk patients with severe aortic stenosis.
- The rate of death, stroke, or rehospitalization was significantly lower with TAVR than with surgery.
- In open heart surgery, the chest is surgically separated (open) for the procedure whereas in the TAVR procedures it can be done through very small openings that leave all the chest bones in place.

- The recovery time of TAVR is less for the patient and also has lower risks of disabling strokes and death, compared to open-heart surgery.

Related Information

Aortic valve disease

- Aortic valve disease is a condition in which the valve between the main pumping chamber of the heart (left ventricle) and the main artery of the body (aorta) doesn't work properly.
- Aortic valve disease may be a condition present at birth (congenital heart disease), or it may result from other causes.
- The arteries are the blood vessels that deliver oxygen-rich blood from the heart to the tissues of the body.
- Whereas with the exception of Pulmonary Arteries which carry oxygen-poor blood from the heart to the lungs under low pressure, making these arteries unique.

Topic-GS Paper 3-Science & technology

Source- The Hindu

5. New hydro policy to help meet renewable target

- Union Cabinet approved a new hydroelectricity policy that, among other things, included large hydro projects within the ambit of renewable energy.

Related Information

Renewable Energy Sector

- According to the data released by Central Electricity Authority, India's renewable energy sector had an installed capacity of 75,055.92 MW as of February 2019.
- The share of Renewable Energy before February 2019:

How the hydro policy has changed India's energy mix numbers		
Installed Capacity		
	Before policy	After policy
Renewable sources (in MW)	75,055.92	1,20,455.14
Renewable sources (% share in energy mix)	21.43	34.40
Share within renewables (In %)		
Source	Before policy	After policy
Hydro	6.03	41.45
Wind	47.02	29.30
Bio-power	12.28	7.65
Solar	34.68	21.61

SOURCE: CENTRAL ELECTRICITY AUTHORITY, GOVERNMENT OF INDIA

- This reclassification will immediately help India achieve its target of 175 GW by 2022.
- Another benefit from the policy could be a positive impact on the stock prices of State-run hydroelectric companies such as Sutlej Jal Vikas Nigam (SJVN)

Topic- GS Paper 3- Sector of Energy

Source- The Hindu

6. Fishing and coral reef degradation threaten parrotfish in Andaman

- In Study, it is found that Coral cover protection along the existing protected marine areas in Andaman and Nicobar islands is necessary for the conservation of the endangered Bumphead parrotfish.

Related Information

Bumphead (hump head) parrotfish

- Bumphead parrotfish is an important component of the coral reef ecosystem but is highly endangered globally.
- It is categorized as 'vulnerable' in the Red List of the International Union for Conservation of Nature (IUCN).
- This fish is a highly prized resource but is threatened due to limited knowledge about its distribution and abundance in Indian waters.

Topic- GS Paper 3- Environment

Source- Down to Earth

7. Pollution: 6 States told to submit an action plan

- National Green Tribunal (NGT) has directed six States to submit by April 30 action plans for bringing air quality standards within the prescribed norms.
- NGT Chairperson Justice Adarsh Kumar Goel ordered the Chief Secretaries of Assam, Jharkhand, Maharashtra, Punjab, Uttarakhand and Nagaland governments to submit their plan within the stipulated time.
- The tribunal warned that if action plans are not executed within the specified timeline, the defaulting States will be liable to pay environmental compensation and may also be required to furnish performance guarantee for execution of plans in the extended timeline as

per recommendations received from the Central Pollution Control Board (CPCB).

- The direction came after the CPCB informed the green panel that out of 102 cities, an action plan has been received from 83 cities, while 19 have not submitted it.

Related information

- Concerned over the threat posed to limited natural resources due to their overuse, the tribunal has directed the assessment of carrying capacity of 102 cities, including Delhi, where the air quality does not meet the national ambient air quality standards.
- The concept of "carrying capacity" addresses the question as to how many people can be permitted into any area without the risk of degrading the environment there.

Topic- GS-3-Environment

Source- The Hindu

20.03.2019

1. **Mitra shakti-VI: Indo-Sri Lanka joint Military Exercise**

- Exercise MITRA SHAKTI is conducted annually as part of military diplomacy and interaction between armies of India & Sri Lanka.
- The aim of the exercise is to build and promote close relations between armies of both the countries and to enhance the ability of joint exercise commander to take military contingents of both nations under command.
- The exercise will involve tactical level operations in an international Counter Insurgency and Counter Terrorist environment under United Nations mandate.

Topic- GS Paper 3- Defence

Source-PIB

2. **Abel Prize**

- The Abel Prize in mathematics was awarded to Karen Uhlenbeck of the U.S, the First woman who won this award for her fundamental work in geometric analysis and gauge theory.

Related Information

Able Prize

- Abel Prize It is awarded annually by Norwegian Academy of Science and Letters to one or more outstanding mathematicians.
- It is named after 19th-century Norwegian mathematician Niels Henrik Abel.
- It is one of the world's top prizes in mathematics and is considered to be maths equivalent of Nobel Prize, which has no prize for mathematics.

Topic- GS Paper 2- Important Prizes

Source- The Hindu

3. **33rd Edition of Ind-Indo Corpat Commences at Port Blair**

- 33rd edition of India-Indonesia coordinated patrol was held in Port Blair.
- Under it, ships and aircraft from both countries undertook to patrol on respective sides of 236 nautical miles long International Maritime Boundary Line.

Related Information

- Under the strategic partnership, navies of both countries have been carrying out coordinated patrolling twice a year since 2002 near the International Maritime Boundary Line in an effort to keep the Indian Ocean region safe and secure for commercial shipping and international trade.
- It is also a part of Central Government's vision of SAGAR (Security and Growth for All in the Region) and 'Act East policy' Indian Navy has increasingly deployed to address maritime concerns of the Indian Ocean Region

Note- The 33rd IND-INDO CORPAT, also coinciding with 70 years of India-Indonesia diplomatic ties, will contribute towards the Indian Navy's efforts to consolidate interoperability and forge strong bonds of friendship across the seas.

Topic- GS Paper 3- Defence

Source-PIB

4. **Delimitation**

- Delimitation is commonly used in the context of drawing boundaries for Assembly and Lok Sabha constituencies based on the recent census.

- According to Article 82 of the Constitution, Parliament by law enacts a Delimitation Act after every census.
- The Commission demarcates the boundaries of parliamentary constituencies as per the provisions of the Act.
- The present delimitation of constituencies has been done on the basis of 2001 census figures and has been in use since the 2009 parliamentary elections.
- According to a 2002 Constitutional Amendment, there will be no further delimitation of constituencies till the first census after 2026.
- The current allocation of seats in the Lok Sabha to the States is frozen on the basis of the 1971 census.

Topic- GS Paper 2- Governance

Source- The Hindu

5. Solar Tsunami Would Trigger The Sun's Sunspot Cycle

- Recently a group of solar physicists suggests that a "solar tsunami" is at work that triggers the new sunspot cycle after the old one ends.
- It is believed that the "solar dynamo" a naturally occurring generator which produces electric and magnetic fields in the sun is linked to the production of sunspots.

Related Information

About Solar Tsunami

- Solar tsunamis were discovered in 1997 by the Solar and Heliospheric Observatory.
- Solar tsunamis pose no direct threat to Earth, but they are important to study to diagnose conditions on the Sun.
- Sun has a toroidal magnetic field, from which sunspots get generated.
- Holding these fields in their place requires extra mass (plasma mass) from higher latitudes for storing a big mass of plasma a magnetic dam is formed.
- At the end of a solar cycle, this magnetic dam can break, releasing huge amounts of plasma cascading like a tsunami towards the poles.
- These tsunami waves travel at high speeds of about 1,000 km per hour

carrying excess plasma to the mid-latitudes.

- There they give rise to magnetic flux eruptions and these are seen as the bright patches that signal the start of the next cycle of sunspots.

Sunspots

- Sunspots are temporary phenomena on the Sun's photosphere that appear as spots darker than the surrounding areas.
- They are regions of reduced surface temperature caused by concentrations of magnetic field flux that inhibit convection.
- According to the model developed by Scientist, the next Sunspot cycle can be expected to begin in 2020.
- Similar phenomena indirectly observed on stars other than the Sun are commonly called Star spots.

Atmosphere of the Sun

Above the surface of the sun is its atmosphere, which consists of three parts-

- **Photosphere-** The innermost part of the sun's atmosphere and the only part we can see.
- **Chromosphere-** The area between the photosphere and the corona. It is hotter than the photosphere.
- **Corona-** The extremely hot outermost layer, extending outward several million miles from the chromosphere.

Topic-GS Paper 3-Science & Technology

Source- Indian Express

6. Sary-Arka-Antiterror 2019: Joint anti-terrorism exercise of SCO

- India, Pakistan and the other Members States of the Shanghai Cooperation Organisation will take part in a joint anti-terrorism exercise Sary-Arka-Antiterror in 2019.
- The decision to hold the joint exercise 'Sary-Arka-Antiterror 2019' was announced during the 34th meeting of the SCO's Regional Anti-Terrorist Structure (RATS) council held in Tashkent.

Related Information

Shanghai Cooperation Organisation (SCO)

- It is a Eurasian political, economic, and security organisation.

- The Shanghai Five grouping was created 26 April 1996 with the signing of the Treaty on Deepening Military Trust in Border Regions in Shanghai, China, Kazakhstan, Kyrgyzstan, Russia and Tajikistan.
- In 2001, the annual summit was held in Shanghai. There the five-member nations admitted Uzbekistan in the Shanghai Five mechanism (thus transforming it into the Shanghai Six).
- India and Pakistan have joined SCO as full members on 9 June 2017 in Astana, Kazakhstan.

Topic-GS Paper 2-International Relation
Source- TOI

7. Mizoram passes bill to detect "illegal migrants"

- The Mizoram Assembly has passed The Mizoram Maintenance of Household Registers Bill, 2019.
- The Bill seeks to detect foreigners illegally residing in the north-eastern State as this has remained a serious concern for several decades.

Features of the bill

- It defines "citizens" as a person registered as such, or having requisite qualification as prescribed under the Citizenship Act, 1955.
- The household register will be maintained by designated officials as well as village councils, municipal bodies and town committees.
- The registers which will be updated every three months will have two categories,
 - (a) One for Citizen residents and
 - (b) One for non-citizen residents of the village.
- This will develop a comprehensive database in respect of all the residents of Mizoram — whether in villages or in towns and whether permanent or temporary — and will ensure its updation and maintenance

Topic- GS Paper 2- Governance

Source- Indian Express

8. MGNREGA scheme failed on many counts: report

- In the last five years, the average person days of work generated per household under MGNREGA scheme remained less than 50 across years,

states a report published by the Centre for Policy Research (CPR).

- The report also highlights the fact that the average person days of work being generated has been declining in the last five years.
- The decline began from 2013-14 and is continuing. It's because there is no money in the programme.
- At the same time, material costs and daily wage is also increasing. This is the reason for the decline in person-days of work generated per household under MGNREGS.

Related Information

MGNREGA (Mahatma Gandhi National Rural Employment Guarantee Act)

- National Rural Employment Guarantee Act 2005 (NREGA), later renamed as the "MGNREGA".
- It is Indian labour law and social security measure.
- Launched on 2nd February 2006.
- It provided the guarantee for 'right to work'.
- Provides at least 100 days of wage employment in a financial year.
- To every household whose adult members volunteer to do unskilled manual work.
- It is the largest scheme run by the Ministry of Rural Development (MoRD).
- It is to be implemented mainly by gram panchayats (GPs).

Topic- GS-2- Government Schemes

Source- Down to Earth

22.03.2019

1. World Happiness Report 2019

- The United Nations Sustainable Development Solutions Network has released the World Happiness Report 2019.

Highlights of the report

- India secured 140th rank by slipping 7 spots since last year.
- Finland has been declared as the happiest country in the world followed by Denmark, Norway.
- Pakistan ranked 67th, Bhutan 95th, China 93rd, Bangladesh 125th and Sri Lanka 130th while South Sudan ranked last in the World Happiness Report

- The report notes that there has been an increase in negative emotions, including worry, sadness and anger across the world and the overall world happiness has fallen over the past few years.
- The World Happiness Report offers the world's governments and individuals the opportunity to rethink public policies and individual life choices, to raise happiness and well-being.
- The report ranks countries on six key variables that support well-being:
 1. Income
 2. Freedom
 3. Trust
 4. Healthy Life expectancy
 5. Social support
 6. Generosity

Topic- GS Paper 3- Important Index

Source- The Hindu

2. **SpiceJet joins global airlines' grouping IATA**
 - SpiceJet became the first Indian budget carrier to join the IATA which has over 290 airlines as members.

Related Information

International Air Transport Association (IATA)

- It is the trade association for the world's airlines which contribute about 82% of total air traffic.
- Its headquarterd in Montreal, Canada.
- Its aims to improve understanding of the air transport industry among decision makers and increase awareness of the benefits that aviation brings to national and global economies.
- It helps airlines to operate safely, securely, efficiently, and economically under clearly defined rules.
- It also provides professional support is provided to all industry stakeholders with a wide range of products and expert services.
- It helps in providing environmentally friendly aviation services in which all members of the IATA agreed to improve their airlines more fuel efficient on the basis of the resolution of the 69th annual general meeting in

Cape Town, South Africa on "Implementation of the Aviation Carbon-Neutral Growth (CNG2020) Strategy."

Topic- GS Paper 2- Governance

Source- The Hindu

3. **RBI Governor bats for Permanent Status to Finance Commission**
 - RBI governor Shaktikanta Das called for permanent status to Finance Commission.
 - He is also the member of the 15th finance Commission.

Why is the necessity of the Permanent Status?

- There is a need to ensure consistencies between finance commissions so that there is some certainty in the flow of funds to states.
- The permanent status will also provide for the finance commission to function as a leaner entity in the intervening period until the next finance commission is set up in a full-edged manner.
- The permanent status will also enable it to address issues arising from the implementation of the recommendations of the Finance Commission during the intervening period.

Related Information

Finance Commission

- It has been established by the President of India in 1951 under Article 280 of the Indian Constitution.
- It defines the financial relations between the Central government of India and the individual state governments.
- The Commission is appointed every five years.
- It consists of a Chairman and four other members.
- The Chairman of the 15th finance commission is chaired by N. K.Singh, a former member of the Planning Commission.

Topic- GS Paper 3- Economics

Source- Economics Times

4. **IBBI and SEBI sign pact for Effective Implementation of IBC**

- The Insolvency and Bankruptcy Board of India (IBBI) has signed an MoU with the Securities and Exchange Board of India (SEBI).

The MoU provides for:

- Sharing of information between the two parties.
- Periodic meetings to discuss matters of mutual interest, including regulatory requirements that impact each party's responsibilities, enforcement cases, research and data analysis, information technology and data sharing, or any other matter that the parties believe would be of interest to each other in fulfilling their respective statutory obligations;
- Capacity building of insolvency professionals and financial creditors;
- Joint efforts towards enhancing the level of awareness among financial creditors about the importance and necessity of swift insolvency resolution process of various types of borrowers in distress under the provisions of the Code, etc.

Related Information

Bankruptcy

- Bankruptcy is a legal status of a person or other entity that cannot repay the debts it owes to creditors.

Insolvency and Bankruptcy Code 2016

- The 2016 Code applies to companies and individuals.
- It provides for a time-bound process to resolve insolvency.
- When a default in repayment occurs, creditors gain control over debtor's assets and must take decisions to resolve insolvency within a 180-day period.
- To ensure an uninterrupted resolution process, the Code also provides immunity to debtors from resolution claims of creditors during this period.
- The Code also consolidates provisions of the current legislative framework to form a common forum for debtors and creditors of all classes to resolve insolvency.

IBBI (The Insolvency and Bankruptcy Board of India)

- IBBI is the regulator for overseeing insolvency proceedings and entities like Insolvency Professional Agencies (IPA), Insolvency Professionals (IP) and Information Utilities (IU) in India.
- It covers Individuals, Companies, Limited Liability Partnerships and Partnership firms.
- It handles the cases using **two tribunals like NCLT (National company law tribunal) and Debt recovery tribunal.**

Topic- GS Paper 3- Economics

Source- The Hindu

5. **Voluntary Code of Ethics for the 2019 General Election**

- The Social Media Platforms and Internet and Mobile Association of India presented a "Voluntary Code of Ethics for the General Election 2019".
- The "Code of Ethics" has been developed to ensure free, fair & ethical usage of Social Media Platforms to maintain the integrity of the electoral process for the General Elections 2019.
- It would remain operational during the election.
- The Platforms have committed to processing any violations reported under Section 126 of RP Act, 1951 within three hours as per Sinha Committee recommendations.
- The Platforms have also agreed to create a high priority dedicated reporting mechanism for the ECI and appoint dedicated teams during the period of General Elections for taking expeditious action on any reported violations.
- The Code of Ethics also promises to facilitate transparency in paid political advertisements.

Topic- GS Paper 2- Governance

Source-PIB

6. **Kazakhstan renames capital 'Nursultan' after ex-President**

- Kazakhstan has renamed its capital Astana to Nursultan to honour outgoing leader Nursultan Nazarbayev.

Kazakhstan

- Kazakhstan is the world's largest landlocked country, and the ninth largest in the world.
- It is a transcontinental country largely located in Asia; most western parts are in Europe.

Topic-GS Paper 2- International relation Source- The Hindu business line

7. India Post released: Special Stamp on Ice Stupa

- The Indian Department of Post has released a 'special stamp cover on Ice Stupa'.
- The special stamps aim to create awareness about depleting glaciers and affect the ecology around the Himalayas.

Related Information

- The idea of the Ice Stupa project was conceptualised by HIAL founder Sonam Wangchuk to reduce problems of Ladakhi farmers in spring.
- Ice Stupa is the stream water vertically in the form of huge ice towers or cones of 30 to 50 m height that look very similar to the local sacred mud structures called Stupa or Chorten.
- These ice mountains can be built right next to the village itself where the water is needed.
- It will help to maintain the water level.
- Water is made to fall from that height in cold Ladakhi winter nights when it is -30 to -50°C outside (with wind chill factor).
- The water would freeze by the time it reaches the ground and slowly form a huge cone or Ice Stupa roughly 30 to 50m high.
- Since these ice cones extend vertically upwards towards the sun, they receive fewer of the sun's rays per the volume of water stored.
- Hence, they will take much longer to melt compared to an artificial glacier of the same volume formed horizontally on a flat surface.

Topic- GS Paper 2- Governance

Source- The Hindu

8. Evidence of water, particle plumes found on asteroid Bennu: NASA

- A NASA's OSIRIS-Rex mission spacecraft discovered plumes erupting from the cosmic body's surface among numerous other findings including evidence of water-bearing minerals.

Related Information

- Bennu is a carbonaceous asteroid in the Apollo group and is a potentially hazardous object.
- Asteroid Bennu is expected to contain unaltered material from the very beginning of our solar system.
- Bennu has a more rugged surface than expected.
- Few of the particles ejected out of Bennu orbited it as satellites before returning to the asteroid's surface.

OSIRIS-Rex Mission

- The mission is aimed at studying Bennu Asteroid and Osiris-Rex mission began orbiting the asteroid last year.
- The Osiris-Rex mission is expected to return samples to Earth in 2023 and before attempting to obtain a sample from the asteroid, it will map out Bennu's surface in detail and orbit the asteroid to calculate its mass.

Topic-GS Paper 3-Science & technology Source- The Hindu

25.03.2019

1. World Water Development Report 2019

- The United Nations published the World Water Development Report (WWDR) 2019.
- It is a comprehensive review that gives an overall picture of the state, use and management of the world's freshwater resources and aims to provide decision-makers with tools to formulate and implement sustainable water policies.
- Every year on 22nd March World observes World Water Day.
- **"Leaving No One Behind"** is the theme of this year.
- The 2019 theme reinforces the commitments made by the UN Member States in adopting the 2030 Agenda for Sustainable Development (**SDG-6**) and in recognizing the

human rights to safe drinking water and sanitation

Highlights of the report

- Approximately 2.1 billion people do not have access to clean and readily available drinking water.
- Half of the world's population with inadequate access to safe drinking water lives in Africa and that only 24 Percent of the population in sub-Saharan Africa have access to safe drinking water.
- By the year 2050, 45 Percent of global gross domestic product and 40 Percent of global grain production will be threatened by environmental damage and lack of water resources.

Groundwater Crisis in India

- At 24 Percent, India uses the most groundwater drawn out globally — more than that of China and the US combined.
- The rate of groundwater depletion has increased by 23 Percent between 2000 and 2010.
- Also, India is the third largest exporter of virtual water (groundwater that is used to grow export-oriented, water-intensive crops)— 12 Percent of the global total.
- India is currently ranked 120 among 122 countries in the water quality index, with 75 per cent of households that lack drinking water supply in their premises.
- As the Indian government committed to the United Nations Sustainable Development Goal 6 — which promises that by 2030 everyone will have access to clean water — decent sanitation and good hygiene.

Topic- GS Paper 3 – Environment

Source- The Hindu

2. eMulya: An intelligent blockchain

- Intain Fintech, an Artificial Intelligence and blockchain-based software products firm, will be launching eMulya.
- eMulya is an intelligent blockchain that facilitates efficient, secure and trustworthy asset securitisation transactions for Non-Banking Financial Company in India by end-2019.

- eMulya will utilize Artificial Intelligence to onboard authenticated loans and asset data to the platform and allows investors originators issuers rating agencies and services to manage the securitization life cycle in complete trust and transparency.

Related Information

Non-Banking Financial Company

- It is a company registered under the Companies Act, 1956 of India.
- The working and operations of NBFCs are regulated by the Reserve Bank of India within the framework of the Reserve Bank of India Act, 1934.

Topic- GS Paper 3 – Science and Technology

Source- The Hindu

3. Microsoft successfully translates digital information into DNA

- Microsoft and researchers from the University of Washington translated digital information into DNA.
- The prototype device converted the word 'Hello' into DNA.
- The device first encoded the bits (1's and 0's) into DNA sequences (A's, C's, T's, and G's).
- It then synthesized the DNA and stored it as a liquid.
- It read by a DNA sequencer, and a software translated the sequences back into bits.

Related Information

Deoxyribonucleic acid (DNA)

- It is a molecule that encodes an organism's genetic blueprint.
- DNA was discovered in 1868 by Swiss physician Friedrich Miescher.
- DNA is a linear molecule composed of four types of smaller chemical molecules called nucleotide bases: adenine (A), cytosine (C), guanine (G), and thymine (T).
- Segments of DNA that carry genetic information are called genes, and they are inherited by offspring from their parents during reproduction.
- In 1953, Francis Crick and James Watson described the molecular shape of DNA as a "double helix."

Topic-GS Paper 3–Science & Technology

Source- Indian Express

4. United States to recognize Israel's sovereignty over Golan Heights

- US President Donald Trump announce to recognize Israel's sovereignty over the Golan Heights.

Related Information

Issue related to Golan Height

- Golan Heights was part of Syria until 1967.
- Israel occupied the Golan Heights during the Six Day war (Third Arab Israeli war) held in 1967.
- Israel annexed the region unilaterally in 1981.
- This unilateral annexation was not recognised by the international community and the Golan Heights was seen as Occupied Syrian Territory.

Golan Heights

- The Golan Heights is a rocky plateau with an area of 1,800km² on the border between Israel and Syria in south-western Syria.
- Syria tried to retake the Golan Heights during the 1973 Middle East war. Syria was defeated in its attempt.
- Both countries signed an armistice in 1974 and a UN observer force has been in place on the ceasefire line since 1974.
- India has also not recognized Golan heights as Israel territory and has called for the return of Golan Heights to Syria.

Topic-GS Paper 2-International relation **Source- TOI**

5. India's first forest-certification scheme gets global recognition

- A Geneva-based non-profit organization decided to endorse the Certification Standard for Sustainable Forest Management (SFM) developed by Network for Certification and Conservation of Forests (NCCF), an Indian non-profit.
- India now has a globally recognised forest-certification scheme developed specifically for Indian forests.

Related Information

Forest Certification

- Forest certification is a global movement initiated in the 1990s after the Rio Earth Summit.

- It is a market-based non-regulatory conservation tool designed to promote sustainable management of forests and trees outside forests by an independent third party.
- Forest certification has been accepted as an effective tool for forest management world over.
- The scheme aimed to improve India's forest management regime that is often criticised for various issues ailing the sector such as forest rights, forest degradation, biodiversity losses, encroachments, lack of manpower, etc.

Network for Certification and Conservation of Forests (NCCF)

- It was set up in 2015 by representatives of forest-based industries, non-profits, forest auditors and government forest departments with an aim to set standards for certifying India's forests, their products and their sustainable management.

Topic- GS Paper 3 – Environment

Source- Down to Earth

6. Unlawful Activities (Prevention) Act, 1967

- Ministry of Home Affairs has banned separatist Yasin Malik's Jammu and Kashmir Liberation Front (JKLF) under the anti-terror law, Unlawful Activities (Prevention) Act, 1967 (UAPA).

Related Information

Unlawful Activities (Prevention) Act

- Unlawful Activities (Prevention) Act is an Indian law aimed at effective prevention of unlawful activities associations in India.
- Its main objective was to make powers available for dealing with activities directed against the integrity and sovereignty of India on the,
 1. Freedom of Speech and Expression;
 2. Right to Assemble peaceably and without arms
 3. Right to Form Associations or Unions.
- The Act makes it a crime to support any secessionist movement or to support claims by a foreign power to what India claims as its territory.

- The UAPA, framed in 1967, has been amended twice since first in 2008 and then in 2012.

Topic- GS Paper 2 – Governance

Source- The Hindu

7. Italy set to become the first G7 country to join 'Belt and Road'

- Italy became the first member of the Group of Seven (G7) major industrialised nations to join China's "Belt and Road" infrastructure project (BRI), which is inspired by historic, centuries-old trade routes.

Related Information

Look Further

OBOR (One Belt and One Road Initiative)

- It is a development strategy proposed by China's paramount leader **Xi Jinping**.
- It focuses on connectivity and cooperation between Eurasian countries, primarily the People's Republic of China (PRC), the land-based Silk Road Economic Belt (SREB) and the oceangoing Maritime Silk Road (MSR).

CPEC (China-Pakistan Economic Corridor)

- It is one of the corridors of OBOR (One Belt and One Road Initiative).
- China-Pakistan Economic Corridor (CPEC) is a collection of infrastructure projects that are currently under construction throughout Pakistan.
- Originally valued at \$46 billion, the value of CPEC projects is now worth \$62 billion.
- On 13 November 2016, CPEC became partly operational when Chinese cargo was transported overland to Gwadar Port for onward maritime shipment to Africa and West Asia.

G7

- The Group of 7 (G7) is a group consisting of Canada, France, Germany, Italy, Japan, the United Kingdom and the United States.
- The European Union is also represented within the G7.
- These countries are the seven major advanced economies as reported by the International Monetary Fund.

Topic- GS-3- International Organization

Source- The Hindu

8. European Vega rocket Successfully Launched Italian Earth Observation Satellite "PRISMA"

- A European Vega rocket carried a new Earth-observation satellite "PRISMA" into orbit for the Italian Space Agency.
- The PRISMA Earth observation satellite lifted off from South America's Guiana Space Center in Kourou, French Guiana.
- The satellite will operate in a sun-synchronous orbit, meaning that it circles the Earth in such a way that the sun is always in the same position as the satellite takes pictures of the planet below.

About Satellite

- PRISMA (an Italian acronym for Hyperspectral Precursor of the Application Mission) is designed to provide information about environmental monitoring, resources management, pollution and crop health.
- The satellite includes a medium resolution camera that can view across all visual wavelengths, as well as a hyperspectral imager that can capture a wider range of wavelengths between 400 and 2500 nanometers.

Topic- GS-3- Science & Technology

Source- Space.com

26.03.2019

1. Nyuntam Aay Yojana (Minimum Income Scheme)

- Congress president has announced that 20% of the poorest families in the country would be annually given ₹72,000 each under the Nyuntam Aay Yojana (NYAY) or minimum income guarantee scheme.
- This scheme is seen as modelled loosely on universal basic income, a concept attracting growing interest around the world.
- The scheme will benefit individuals earning less than Rs. 12,000 per month which is also the minimum income line.

Related Information

Rythu Bandhu scheme

- The Rythu Bandhu scheme of Telangana to provide a cash grant of Rs 4,000 per acre to all farmers (which is essentially a UBI for all farmers, rich or poor)

Pradhan Mantri Kisan Samman Nidhi

- Under this programme, vulnerable landholding farmer families, having cultivable land upto 2 hectares, will be provided direct income support at the rate of Rs. 6,000 per year.
- This income support will be transferred directly into the bank accounts of beneficiary farmers, in three equal instalments of Rs. 2,000 each.

Universal Basic Income (UBI)

- Universal Basic Income is a periodic, unconditional cash transfer to every citizen in the country without any consideration of social or economic positions of the individual.
- It is a form of social security UBI will help in reducing inequality and eliminating poverty. Thus it ensures security and dignity for all individuals.
- In less developed countries, it is being conceived as a general anti-poverty measure.
- But in advanced industrial economies, it is being seriously considered as a possible initiative to take care of the unemployed as job insecurity is rising due to rapid technological progress.

Topic- GS Paper 2-Important Scheme

Source- The Hindu

2. PSLV-C45/EMISAT MISSION

- ISRO will launch 29 satellites including the primary payload EMISAT, on April 01, 2019.
- Polar Satellite Launch Vehicle, PSLV-C45 will take off from Satish Dhawan Space Centre in Sriharikota tentatively carrying the satellites onboard.
- In this mission ISROs attempt first time to placing payloads in three different orbits.
- EMISAT has been developed for monitoring radar network by India.
- EMISAT, weighing 436 kg, is intended for electromagnetic spectrum measurement. It will be placed in an orbit of about 753 km altitude.

- The customer payloads are from Lithuania, Spain, Switzerland and the US. They will be hurled into space at an altitude of about 505 km.
- The project will also carry IIST payload which is an Advanced Retarding Potential Analyser for Ionospheric Studies (ARIS).
- ARIS will study the structure and composition of the ionosphere.
- After all the satellites are put into orbits, the fourth stage of the rocket will be propelled to a different elevation and will be used as a platform for different experiments by Indian institutions, including ISRO.
- Indian Institute of Space Science (IISc) and the Radio Amateur Satellite Corporation are the other two institutions that will have their devices on the experimental platform.

Topic- GS Paper 3-Science and Technology

Source- ISRO + AIR

3. Yield curve doesn't signal recession'

- Former U.S. Federal Reserve Chair Janet Yellen said the U.S. Treasury yield curve may signal the need to cut interest rates at some point, but it does not signal a recession.
- The yield curve inverted recently for the first time since mid-2007, a shift that has in the past signalled the risk of recession.

Related Information

What is the Yield curve?

- The yield curve shows the relation between the (level of) interest rate (or cost of borrowing) and the time to maturity.
- In a pure financial literature sense, the yield is the rate of return we are getting from security.
- Yield applies to returns from various types of securities including shares, bonds, bills and insurance products.
- But it is mostly and more specifically used to describe the return on bonds and debentures.
- Yields are different types – coupon yield, yield to maturity etc.

Topic- GS Paper 3-Economics

Source- The Hindu

4. **60% chance of El Nino during monsoon: US**

- US weather agencies have forecast a 60% chance of El Nino continuing through summer. The forecast, if it holds, could cast a shadow over India's rainy season.
- A weak El Nino was finally declared to have set in over the Pacific Ocean in February by several weather agencies.

Related Information

- El Niño is the warm phase of the El Niño–Southern Oscillation (ENSO).
- It is associated with a band of warm ocean water that develops in the central and east-central equatorial Pacific including the area off the Pacific coast of South America.
- The warmer waters of the Pacific Ocean cause the winds in various regions to reverse, like the trade winds that come towards India.
- This change of wind direction leads to warmer winters and summers and a decrease in rainfall during the monsoon. Most of the time, it also leads to drought.

Effects of El Nino

- The warmer waters had a devastating effect on marine life existing off the coast of Peru and Ecuador.
- Fish catches off the coast of South America were lower than in the normal year (Because there is no upwelling).
- Severe droughts occur in Australia, Indonesia, India and southern Africa.
- Heavy rains in California, Ecuador, and the Gulf of Mexico.

Topic- GS Paper 3–Environment

Source- Indian Express

5. **Fall Armyworm attack: Low maize yield reduces cattle feed**

- The attack of Fall Armyworm on maize crop in Andhra Pradesh has not just affected farmers, but also cattle.
- The state, which produces the most maize in the country, is unable to generate enough fodder after the pest attack.

Related Information

Fall Armyworm

- Fall Armyworm is an insect that is native to tropical and subtropical regions of the Americas.
- In the absence of natural control or good management, it can cause significant damage to crops.
- It prefers maize but can feed on more than 80 additional species of crops, including rice, sorghum, millet, sugarcane, vegetable crops and cotton.
- FAW was first detected in Central and Western Africa in early 2016 and has quickly spread across virtually all of Sub-Saharan Africa.
- The Karnataka finding is the first report of the pest in Asia in July 2018.
- The life cycle of the worm can range from 30 to 45 days. In winter, the cycle can extend up to even 90 days.

Topic-GS Paper 3–Science & Technology

Source- Down to Earth

6. **AUSINDEX exercise**

- It is a bilateral naval exercise between India and Australia.
- The exercise will focus on anti-submarine warfare as the two countries look at deepening defence cooperation especially in the Indian Ocean.
- It also helps to enhance the ability to undertake regional joint and/or combined operations such as Humanitarian Assistance and Disaster Relief.

Topic- GS Paper 3–Defence

Source- Indian Express

7. **Radiation plants planned to increase the shelf life of potatoes**

- The Atomic Energy Commission (AEC) is planning to set up low-dose micro-radiation plants in the Gujarat where they can get their Potatoes irradiated.
- This will improve the shelf life of potatoes, and help farmers get higher returns, as it cuts the cost of using currently available options of cold storage.

Issues with the Potatoes

- The farmer used cold storage to increase the shelf life of Potatoes where the chemical Chlorpropham is used.

- Chlorpropham is reported to have ill effects on the human body.
- The European Union is going to ban these chemicals due to their harmful residue which is not good for the health.
- The irradiated food does not leave any residue, nutritionally everything has been tested and the United Nations's best regulatory agencies like the World Health Organisation, International Institute of Agriculture and Food and Agriculture Organisation have approved this.

Topic-GS Paper 3-Science & Technology
Source- Down to Earth

8. **IAF inducts Chinook choppers**
- Indian Air Force has inducted four CH47 Chinook heavy-lift choppers from US.
 - These helicopters will be deployed in the Northern and Eastern regions of India.

Related Information

Salient features of the chopper

- It is a multi-mission heavy-lift transport helicopter which is used to move troops, artillery, ammunition, barrier materials, supplies and equipment on the battlefield.
- They can also be used for medical evacuation, disaster relief, search and recovery, fire-fighting and civil development.
- Chinook is an advanced multi-mission helicopter that will provide Indian Air Force with unmatched strategic airlift capability across the full spectrum of combat & humanitarian missions.
- It has a fully integrated digital cockpit management system.
- Once inducted, the choppers will help to lift M-777 ultra-light howitzers of the Indian armed forces.

Topic- GS Paper 3-Defence

Source- The Hindu

9. Ooty's muon detection facility measures the potential of a thundercloud

- For the first time in the world, researchers at the GRAPES-3 muon telescope facility in Ooty have measured the electrical potential, size and height of a thundercloud.

- Clouds have negative charges along with their lower side and positive charges on top and can be several kilometres thick.
- **Muons** and other particles are produced when cosmic rays bombard air particles surrounding the earth. The muons produced can have a positive or negative charge. When a positively charged muon falls through a cloud, it loses energy. If its energy falls below 1 giga electron volt (GeV), which is the threshold of detection of the GRAPES-3 muon telescope, it goes undetected.
- On the contrary, a negatively charged muon gains energy when falling through the cloud and gets detected.
- Since there are more positive than negative muons produced in nature, the two effects don't cancel out, and a net change in intensity is detected.

Why do we not use balloon method to detect the potential of a thundercloud?

- If balloons are used to measure the potential difference between the top and bottom, they will take hours to traverse the distance.
- Unfortunately, thunderstorms last only for about 15-20 minutes, and this method fails.

Topic- GS-3- Science & Technology

Source- The Hindu

27.03.2019

1. **Mission Shakti: India successfully tested an anti-satellite missile**
- India has become 4th space superpower in the world after successfully testing of an anti-satellite missile.
- India shot down a Low Earth Orbit (LEO) satellite by an anti-satellite weapon called A-SAT which was a pre-determined target conducted under **Mission Shakti**.
- The action was not directed against any country and the satellite was a pre-determined target orbiting at an altitude of 300 km.

Related Information

Anti-satellite weapon

- Anti-satellite weapons (ASAT) are space weapons designed to incapacitate or destroy satellites for strategic military purposes.
- Only, the United States of America, Russia (using MSB expertise), China and India have demonstrated this capability successfully.

Different Type of Orbits in Space

Geostationary Orbit

- often referred to as a GEO orbit, circles the Earth above the equator from west to east at a height of 36 000 km.
- As it follows the Earth's rotation, which takes 23 hours 56 minutes and 4 seconds, satellites in a GEO orbit appear to be 'stationary' over a fixed position.
- This makes it an ideal orbit for telecommunications or for monitoring continent-wide weather patterns and environmental conditions.
- It also decreases costs as ground stations do not need to track the satellite.

Low Earth Orbit (LEO)

- It is normally at an altitude of less than 1000 km and could be as low as 160 km above the Earth.
- In general, these orbits are used for remote sensing, military purposes and for human spaceflight as they offer close proximity to the Earth's surface for imaging and the short orbital periods allow for rapid revisits.
- The International Space Station is in low Earth orbit.

Medium Earth Orbit (MEO)

- This orbit takes place at an altitude of around 1000 km and is particularly suited for constellations of satellites mainly used for telecommunications.

Polar Orbits

- Polar orbits pass over the Earth's polar regions from north to south.
- The orbital track of the satellite does not have to cross the poles exactly for an orbit to be called polar, an orbit which passes within 20 to 30 degrees of the poles is still classed as a polar orbit.

- These orbits mainly take place at low altitudes of between 200 to 1000 km.
- Polar orbits are used for reconnaissance and Earth observation.

Sun Synchronous Orbit

- These are polar orbits which are synchronous with the Sun.
- A satellite in a sun-synchronous orbit would usually be at an altitude of between 600 to 800 km.
- Generally, these orbits are used for Earth observation, solar study, weather forecasting and reconnaissance, as ground observation is improved if the surface is always illuminated by the Sun at the same angle when viewed from the satellite.

Topic- GS Paper 3- Science and Technology

Source- TOI + ESA

2. National Security Act by the Madhya Pradesh police in cases of suspected cow slaughter was wrong

- Madhya Pradesh government told that the use of the National Security Act (NSA) by the Madhya Pradesh police in cases of suspected cow slaughter was wrong and will not be repeated.

Related Information

National Security Act

- It is a stringent law that allows preventive detention for months, if authorities are satisfied that a person is a threat to national security or law and order.
- The person does not need to be charged during this period of detention.
- The goal is to prevent the individual from committing a crime.
- Under the National Security Act, an individual can be detained without a charge for up to 12 months; the state government needs to be intimated that a person has been detained under the NSA.
- A person detained under the National Security Act can be held for 10 days without being told the charges against them.

- The detained person can appeal before a high court advisory board but they are not allowed a lawyer during the trial.

Topic- GS Paper 2– Governance

Source- The Hindu

3. India's carbon dioxide emissions up 5%: IEA Report 2019

- According to the report released by the International Energy Agency India emitted 2,299 million tonnes of carbon dioxide in 2018, a 4.8% rise from the previous year.

Highlights of the Report

- India's emissions growth was higher than that of the United States and China (the two biggest emitters in the world) due to a rise in coal consumption.
- China, the United States, and India together accounted for nearly 70% of the rise in energy demand.
- India's per capita emissions were about 40% of the global average and contributed 7% to the global carbon dioxide burden.
- Higher electricity demand was responsible for over half of the growth in energy needs.
- The U.S., the largest emitter, was responsible for 14%.

India's Commitment

- As per its commitments to the United Nations Framework Convention on Climate Change, India has promised to reduce the emissions intensity of its economy by 2030, compared to the 2005 levels.
- It has also committed to having 40% of its energy from renewable sources by 2030 and, as part of this, installs 100 GW of solar power by 2022.

International Energy Agency (IEA)

- It is a Paris-based autonomous intergovernmental organization.
- It was established in the framework of the Organisation for Economic Co-operation and Development (OECD) in 1974 in the wake of the 1973 oil crisis.
- The IEA was initially dedicated to responding to physical disruptions in the supply of oil, as well as serving as an information source on statistics

about the international oil market and other energy sectors.

- The IEA acts as a policy adviser to its member states, but also works with non-member countries, especially China, India, and Russia.
- The Agency's mandate has broadened to focus on the "3Es" of effectual energy policy:
 - (a) energy security
 - (b) economic development
 - (c) environmental protection.
- The IEA has a broad role in promoting alternate energy sources (including renewable energy), rational energy policies, and multinational energy technology co-operation.

Topic- GS Paper 3– Environment

Source- The Hindu

4. Govt. notifies new rules for drugs, clinical trials

- The Union Health Ministry has notified the Drugs and Clinical Trials Rules, 2019 which aimed to promoting clinical research in the country.

Highlights

- The rules will apply to all new drugs, investigational new drugs for human use, clinical trials, bio-equivalence studies and ethics committees.
- The notification reduces the time for approving applications which has now come down to 30 days for drugs manufactured in India and 90 days for those developed outside the country.
- When in case of no communication from Drugs Controller General of India, the application will be deemed to have been approved.
- As per the new rule, the requirement of a local clinical trial may be waived for approval of a new drug if it is approved and marketed in any of the countries (EU, U.K., Australia, Japan and U.S.) specified by the Drugs Controller General with the approval of the government.

Drug Controller General of India

- Drug Controller General of India under the gamut of Central Drugs Standard Control Organization is responsible for approval of licences of specified categories of drugs such as blood and

blood products, IV fluids, vaccines and sera in India.

- It comes under the Ministry of Health & Family Welfare

Topic- GS Paper 2- Governance

Source- The Hindu

5. LIMA-19

- Indian Navy's frontline ASW corvette, INS Kadmat participated in Langkawi International Maritime and Aerospace Exhibition (LIMA)-19 which was held in Langkawi, Malaysia.

Related Information

INS Kadmat

- INS Kadmat is Indian Navy's frontline Anti-Submarine Warfare (ASW) corvette.
- It is an indigenous stealth anti-submarine warfare commissioned into the Indian Navy in January 2016 which Corvette fitted with state of the art weapons, sensors and machinery.
- INS Kalvari and INS Kandheri is two other Anti-Submarine Warfare Corvette of Indian Navy.

Topic- GS Paper 3- Defence

Source-PIB

6. Trade Receivables e-Discounting System (TReDS)

- In the recently concluded FinTech Conclave-2019, the RBI Governor termed Invoice trading as another nascent area of fintech application in India.
- The RBI has set up the TReDs) which is a financing arrangement where technology is leveraged for discounting bills and invoices which assists MSMEs to deal with working capital and cash flow problems due to delayed payments.

Trade Receivables Discounting System (TReDs)

- TReDs is an electronic platform for financing trade receivables.
- It facilitates the discounting of both invoices as well as bills of exchange. The three direct participants in the system are the SME (sellers), Corporate Entities (buyers) and the Financiers.
- TReDS provides a level playing field where all the participants work together for facilitating, accepting, discounting, and settling invoices.

- As per the guidelines of the RBI, only micro, small, and medium enterprises (MSMEs) can participate as sellers while NBFCs, banks and factoring companies are financiers.
- It has been set up under the regulatory framework set up by RBI under the Payment and Settlement Systems Act 2007.

Topic- GS Paper 3- Economics

Source- Economics Times

7. Global Energy Transition index 2019

- Global Energy Transition index has been released by Geneva-based World Economic Forum.

Highlight of the Index

- India has moved up two places to rank 76th on a global energy transition index (earlier 78th)
- Sweden remains on the top on this annual list which is followed by Switzerland and Norway.
- India is amongst the countries with high pollution levels and has a relatively high CO2 intensity in its energy system.
- The WEF said its index considers both the current state of the countries' energy system and their structural readiness to adapt to future energy needs.

Related Information

Other Reports released by the World Economic Forum(WEF)

1. Inclusive growth & Development Report
2. Environmental Performance Index
3. Global Competitive Index
4. Global Energy Architecture Performance Index Report
5. Global Gender Gap Report
6. Global Information Technology Report
7. Human Capital Report
8. Outlook on Global Agenda
9. The Global Risk Report

Topic- GS Paper 3- Environment Important Index

Source- The Hindu

8. Pakistan Approves Plan to Open Sharda Temple Corridor

- The Pakistan government approved a proposal to establish a corridor that will allow Hindu pilgrims from India to visit Sharda Peeth, an ancient Hindu

temple and cultural site in Pakistan-occupied Kashmir.

- The Sharda Peeth corridor, when opened, will be the second religious tract after Kartarpur corridor in Pakistan-controlled territory that will connect the two neighbouring nations.

Related Information

Sharda Temple

- Established in 237 B.C. during the reign of Emperor Ashoka, the 5,000-year-old Sharada Peeth is an abandoned temple and ancient centre of learning dedicated to the Hindu goddess of learning.
- Between the 6th and 12th centuries C.E, Sharada Peeth was one of the foremost temple universities of the Indian subcontinent.
- It is also one of the three famous holy sites for Kashmiri Pandits, the other two being the Martand Sun Temple in Anantnag and the Amarnath temple.

Topic- GS-1- Art and Culture

Source- News 18

28.03.2019

1. Sharks closer to extinction than feared: Red List

- Of the 58 shark species, 17 are now facing extinction, the Shark Specialist Group of the International Union for the Conservation (IUCN) said in an update of the Red List of threatened animals and plants.
- The Red List includes the shortfin mako whose cruising speed of 40 km/h makes it the fastest of all sharks.
- Makos are highly prized for their flesh and fins, considered a delicacy in Chinese and other Asian culinary traditions.
- Mexico has made a proposal to list the shortfin Mako on Appendix II of CITES, the Convention on International Trade in Endangered Species.
- An Appendix II status would not ban fishing or trade but would regulate it.

Related Information

CITES

- CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora) is an international agreement between governments.
- Its aim is to ensure that international trade in specimens of wild animals and plants does not threaten their survival.
- All import, export, re-export and introduction from the sea of species covered by the Convention has to be authorized through a licensing system.
- According to the degree of protection they need, the species covered by CITES are listed in three Appendices.

Appendix I:

- It includes species threatened with extinction.
- Trade in specimens of these species is permitted only in exceptional circumstances.

Appendix II

- It includes species not necessarily threatened with extinction, but in which trade must be controlled in order to avoid utilization incompatible with their survival.

Appendix III

- It contains species that are protected in at least one country, which has asked other CITES Parties for assistance in controlling the trade.

Topic- GS Paper 3- Biodiversity

Source- The Hindu

2. NOTA (None Of The Above)

- NOTA is an option given to voters to exercise a negative vote by not choosing any of the candidates who are contesting in a local, Assembly or general election.
- It came into force in 2013.
- The NOTA symbol is of a ballot paper with a black cross mark. While the Supreme Court envisaged it as a way of cleansing the political system, NOTA's scope remains limited at the State and national level.
- Even if the maximum number of votes cast in a constituency is for NOTA, the candidate winning the next highest number of votes is declared the winner.

- At the local level, there have been attempts to expand its scope — last year, the Maharashtra and Haryana State Election Commissions announced that if NOTA garners the most number of votes, then none of the candidates would be declared the winner and a fresh election would be held instead.
- In the 2014 general election, 1.08% of the electorate chose the NOTA option.

Topic- GS Paper 2- Governance

Source- The Hindu

3. Outer Space Treaty

- India just conducted its first test using anti-satellite (ASAT) missile weapon called 'Mission Shakti'.
- The Outer Space Treaty, formally the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, does not address the use of ASATs either.

Related Information

- Outer Space Treaty is a legal entity and came in 1966 as a legal document towards the General Assembly.
- The Treaty was opened for signature by the three depository Governments (the Russian Federation, the United Kingdom and the United States of America) in January 1967, and it entered into force in October 1967.
- The Outer Space Treaty bars states from placing weapons of mass destruction in orbit of Earth, installing them on the Moon or any other celestial body, or otherwise stationing them in outer space.
- In Article IV of this treaty, it is mentioned that the use of the Moon and other celestial bodies to peaceful purposes and expressly prohibits their use for testing weapons of any kind, conducting military manoeuvres, or establishing military bases, installations, and fortifications.
- However, the Treaty does not prohibit the placement of conventional weapons in orbit.

Note: India is party to Outer Space Treaty.

Topic- GS Paper 3- Defence

Source- The Hindu

4. India in a pact to ease U.S. firms' compliance

- India and the U.S. signed an inter-government agreement for the automatic exchange of country-by-country (CbC) reports.
- It will reduce the compliance burden for Indian subsidiary companies of U.S. parent companies.
- This is a key step in making India compliant with the Base Erosion and Profit Shifting (BEPS) project, of which it is an active participant.

Related Information

What is a CbC report?

- A CbC Report has aggregated country-by-country information relating to the global allocation of income, the taxes paid, and certain other indicators of an MNE group.
- This information will enable an enhanced level of assessment of tax risk by both tax administrations.

Benefits

- This Agreement for Exchange of CbC Reports, along with the Bilateral Competent Authority Arrangement between the two Competent Authorities.
- It will enable both the countries to automatically exchange CbC Reports filed by the ultimate parent entities of Multinational Enterprises ("MNEs") in the respective jurisdictions, pertaining to the years commencing on or after 1st January 2016.
- It would also obviate the need for Indian subsidiary companies of US MNEs to do local filing of the CbC Reports, thereby reducing the compliance burden.

Topic- GS Paper 2- International Report
Source-PIB

5. Creating hydrogen fuel from water

- Scientists have identified more cost-effective and efficient ways of producing hydrogen fuel by splitting water.
- Researchers in the US showed that nanoparticles composed of nickel and iron are better alternatives than more costly materials when used as catalysts.

- The team demonstrated that using nanocatalysts composed of nickel and iron increases the efficiency of water electrolysis, the process of breaking water atoms apart to produce hydrogen and oxygen and combining them with electrons to create hydrogen gas.
- Water electrolysis is the process of breaking water atoms apart to produce hydrogen and oxygen and combining them with electrons to create hydrogen gas.
- This marks a step toward making water electrolysis a more practical and affordable method for producing hydrogen fuel.
- Current methods of water electrolysis are too energy-intensive to be effective.

Topic- GS Paper 3- Science and Technology

Source- NDTV

6. Cabinet clears creation of additional posts in NCLAT

- Six additional posts of judicial and technical members will be created in the National Company Law Appellate Tribunal (NCLAT).

Related Information

NCLAT

- It was constituted under Section 410 of the Companies Act, 2013 for hearing appeals against the orders of National Company Law Tribunal(s) (NCLT), with effect from 1st June 2016.
- It is also the Appellate Tribunal for hearing appeals against the orders passed by NCLT(s) under Section 61 of the Insolvency and Bankruptcy Code, 2016.
- It is also the Appellate Tribunal to hear and dispose of appeals against any direction issued or decision made or order passed by the Competition Commission of India.

Composition:

- After consultation with the Chief Justice of India, the President of the Tribunal and the Chairperson and Judicial Members of the Appellate Tribunal shall be appointed.

National Company Law Tribunal (NCLT)

- It is a quasi-judicial body in India that adjudicates issues relating to Indian companies.
- The NCLT was established under the Companies Act 2013 and was constituted on 1 June 2016 by the government of India & is based on the recommendation of the Justice Eradi committee on the law relating to insolvency and winding up of companies.

Topic- GS-2- Indian Polity

Source- Livemint

7. First Indian Army Mountaineering Expedition to Mt Makalu

- First Indian Army Mountaineering Expedition to Mt Makalu which will be launching in Mar-May 2019.

Related Information

Mt Makalu

- It is the fifth highest mountain in the world at 8,485 metres.
- It is located in the Mahalangur Himalayas 19 km southeast of Mount Everest, on the border between Nepal and Tibet, China.
- Its shape is a four-sided pyramid.

Topic- GS Paper 1- Art and Culture

Source-Livemint

29.03.2019

1. **Blockchain-based coffee e-marketplace**
 - The Commerce Ministry launched a blockchain-based coffee e-marketplace.
 - It to help farmers integrate with markets so that they can realise fair prices for the commodity.
 - This initiative will help in creating a brand image for Indian Coffee through traceability in reducing grower's dependency an intermediary by having direct access to buyers for a fair price for their produce.
 - It will help in finding the right coffee suppliers for exporters and within the stipulated time to meet the growing demands.
 - It will also reduce the number of layers between coffee growers and buyers and help farmers double their income by the end of 2022.

Related Information

- Coffee production in India is dominated in the hill tracts of South Indian states, with Karnataka accounting for 71%, followed by Kerala with 21% and Tamil Nadu 5%.
- In Indian two well-known species of coffee grown these are the Coffee Arabica and Robusta.

Topic- GS Paper 3- Science and Technology

Source-PIB

2. **UN Security Council sanctions regime**
 - The U.S. took the lead in bringing sanctions against Jaish-e-Mohammad (JeM) chief Masood Azhar at the United Nations by circulating a draft resolution among Security Council members.

Related Information

- The Security Council can take action to maintain or restore international peace and security under Chapter VII of the UN Charter.
- Sanctions measures under Article 41 encompass a broad range of enforcement options that do not involve the use of armed forces.

1267 SANCTIONS COMMITTEE LIST OF UN

- The UNSC resolution 1267 was adopted unanimously on October 15, 1999.
- It is a consolidated list of people and entities it has determined as being associated with Al Qaeda or the Taliban, and laws which must be passed within each member nation to implement the sanctions.
- Masood Azhar has been linked to Osama bin Laden and, hence, can be sanctioned under the 1267 sanctions committee.

1267 SANCTIONS COMMITTEE CHAIR

- There are 14 ongoing sanctions regimes, which focus on supporting the political settlement of conflicts, nuclear non-proliferation and counterterrorism.

- Each regime is administered by a sanctions committee chaired by a non-permanent member of the UNSC.
- Indonesia is the current chair of 1267 Sanctions Committee and will continue until the end of 2019.

Topic- GS Paper 2- International Organization

Source- The Hindu

3. **Global Multidimensional Poverty Index 2018**
 - India's poverty rate has shown a drastic decrease in 10 years, from 55% to 28% in accordance with the 2018 global Multidimensional Poverty Index (MPI).
 - The index has shown that, in the years between 2005-06 and 2015-16, 271 million people are moved out of poverty in India.

Highlights of the Report

- Apart from the huge progress, India is still home to the highest number of MPI poor comprising 364 million poor in 2015-16.
- According to the report Bihar was the poorest state in 2015-16, with more than half its population in poverty.
- The four poorest states of India according to the report are Bihar, Jharkhand, Uttar Pradesh, and Madhya Pradesh.
- Across the 640 districts in India, the poorest district is Alirajpur in Madhya Pradesh, where 76.5 Percent of people are MPI poor.
- Among states, Jharkhand had the greatest improvement.

Multidimensional Poverty Index 2018

- The index is prepared by the United Nations Development Programme (UNDP) and the Oxford Poverty and Human Development Initiative.
- MPI uses three dimensions and ten indicators which are:
 - (a) Education: Years of schooling and child enrollment (1/6 weightage each, total 2/6);
 - (b) Health: Child mortality and nutrition (1/6 weightage each, total 2/6);

(c) Standard of living: Electricity, flooring, drinking water, sanitation, cooking fuel and assets (1/18 weightage each, total 2/6)

- A person is multidimensionally poor if she/he is deprived in one third or more (means 33% or more) of the weighted indicators (out of the ten indicators).
- Those who are deprived in one half or more of the weighted indicators are considered living in extreme multidimensional poverty.
- The global MPI covers 105 countries.

Note: SDG-1 (End poverty in all its forms everywhere)

Topic- GS Paper 2- Important Index

Source- The Hindu Business Line

4. Election deposit

- A deposit is the sum of money that a candidate for an elected office, such as a seat in a legislature, is required to pay to an electoral authority before she is permitted to stand for election.
- If the candidate is not elected, and the valid votes polled by her do not exceed one-sixth of the total number of valid votes polled by all the candidates, the deposit is forfeited.
- In India, candidates who stand for parliamentary elections have to pay a deposit of ₹25,000.
- If the candidate is a member of a Scheduled Caste or a Scheduled Tribe, the amount is ₹12,500.
- For Assembly elections, the amount is ₹10,000 and for SC and ST candidates, it is ₹5,000.

Topic- GS Paper 2- Governance

Source- The Hindu

5. Turing Award 2018: The 'Nobel Prize of computing

- Three researchers, Bengio, Hinton, and LeCun, have won the 2018 Turing Award, known as the 'Nobel Prize of computing'.
- They got this award for conceptual and engineering breakthroughs in artificial intelligence that demonstrated the practical advantages of deep neural networks.
- Neural networks are the electronic engines that power tasks such as facial and speech recognition, areas

where computers have made enormous strides over the past decade.

- Such neural networks are also a critical component of robotic systems that are automating a wide range of other human activity, including driving.
- This deep learning technology can be used to transcribe human speech or recognise a person's face in different photographs.

Related Information

Turing Award

- It is an annual prize given by the Association for Computing Machinery for individuals who have contributed a lasting and major technical importance to the computer field.

Topic- GS Paper 2- Awards

Source- TOI

6. Telangana State GlobalLinker: A Digital portal for MSMEs

- Telangana government has launched a digital business networking portal for MSMEs – Telangana State GlobalLinker (ts-msme.globallinker.com).
- This networking portal will digitise millions of MSMEs of the State which would connect them to the global economy.
- The core objective of the portal is to make the business growth of MSMEs simpler, more profitable & enjoyable.

Topic- GS Paper 2- Governance

Source- The Hindu

7. Island protection zone (IPZ) 2019

- The Union environment ministry has notified island protection zone (IPZ) 2019 for Andaman and Nicobar.
- The changes will align with the Niti Aayog's proposal for holistic development in the Islands which help in the sustainable harnessing of ocean resources.

Change in Island Protection Zone

- It will allow eco-tourism projects 20 metres from the high tide line (HTL) in smaller islands like Baratang, Havelock and Car Nicobar, and at 50 metres in larger ones.
- Previously, IPZ 2011 stipulated a no-development zone of 200 meters from the HTL for all islands.

- This brings the norms for Andaman and Nicobar at par with coastal regulation zone (CRZ) norms for other islands close to the mainland and backwater islands where an NDZ only 20 metres from HTL has been stipulated.
- Only pipelines, transmission lines, trans-harbour links to be laid in the eco-sensitive zone were permitted. Now road construction is allowed.

Related Information

High Tide Line (HTL)

- High tide line is defined as the line up to which highest high tide reaches in spring tides.
- It is delineated by walking over or remote sensing data or by helicopter survey.

Low Tide Line (LTL)

- The Low Tide Line is the limit up to which the lowest low tide recedes during spring tide.

Topic- GS Paper 3- Environment

Source- The Hindu

8. The Grand Order of the King of Tomisla: Croatia's highest civilian order:

- President Ram Nath Kovind is honoured with Croatia's highest civilian order – **The Grand Order of the King of Tomislav**.
- President is awarded because of their important contribution towards the development of state relations between Croatia and their respective countries.

Related Information

- The Grand Order of King Tomislav is the highest civilian order of Croatia.
- It is named after King Tomislav of Croatia.

Topic- Important Facts

Source- The Hindu

9. Women's labour force participation in India among the world's lowest: Oxfam

- The gender pay gap was 34 percent in India, that is, women get 34 per cent less compared to men for performing the same job with same qualifications.
- The report, which based its estimates on employment unemployment survey (EUS) 2011-12, done by the National Sample Survey Organisation (NSSO), International Labour

Organization (ILO) studies, and also builds on the first inequality report launched by Oxfam in 2018.

- The wage difference is lesser for more skilled workers and more for semi-skilled or unskilled workers.
- The report stresses that while inequality in jobs has increased, inequality in education has decreased between boys and girls.

Topic-GS-2-Social Issues

Source- Down To Earth

10. Mini frogs of Madagascar: New species discovered

- Madagascar, an island in the Indian Ocean that's a little larger than mainland France.
- It has more than 350 frog species, giving it possibly the highest frog diversity per square kilometre of any country in the world.
- Scientists discovered three new frog species which are:
 - (a) Mini group: Mini mum, Mini scule, and Mini ature
 - (b) The other two new species, Rhombophryne proportionalis and Anodonthyla eximia, are also just 11–12 mm, and are much smaller than their closest relatives.
- Mini mum is from Manombo in eastern Madagascar. It is one of the smallest frogs in the world.
- Mini scule from Sainte Luce in southeastern Madagascar is slightly larger and has teeth in its upper jaw.
- Mini ature from Andohahela in southeast Madagascar is larger than its relatives but is similar in build.
- Rhombophryne proportionalis from Tsaratanana in northern Madagascar. This is very unusual among tiny frogs, which usually have large eyes, big heads, and other characters that are "baby-like"; so-called "paedomorphisms".
- Anodonthyla eximia from Ranomafana in eastern Madagascar is distinctly smaller than any other Anodonthyla species. Maybe getting really small makes it hard to stay up in the trees.

Topic- GS-3- Environment

Source- Down To Earth

UPSC & State PCS Exams

IAS, UPPSC, RAS,
MPPSC, MPPSC

